

**Appendix H**

George Nordby, Barrett – Interview and Deposition Transcripts

Pipeline Rupture and Fire  
Bellingham, Washington  
June 10, 1999  
DCA-99-MP-008

UNITED STATES OF AMERICA  
NATIONAL TRANSPORTATION SAFETY BOARD

IN RE: **OLYMPIC PIPELINE COMPANY**;  
Pipeline Rupture and Fire, June  
10, 1999, Bellingham, WA

DCA-99-WP-008

**INTERVIEW UNDER OATH**  
OF  
**GEORGE NORDBY**

July 14, 1999

**A P P E A R A N C E S :**

**MR. ALLAN C. BESHORE**, NTSB Pipeline Investigator, 490 L-  
Enfant Plaza East, SW, Washington, D.C. 20594-2000;

**MR. JOE SUBSITS**, Department of Ecology, Spills Program,  
P. O. Box 47600, Olympia, WA 98504;

**MR. DOUGLAS D. BEU**, Operations Manager, Olympic Pipeline  
Company, P. O. Box 1800, Renton, WA 98057;

**MR. TERENCE J. SCANLAN**, 1301 Fifth Avenue, Suite 3401,  
Seattle, WA 98101-2605.

**ALLEN R. EMERSON & ASSOCIATES**  
**COURT REPORTERS**  
1226 McGarigle  
Sedro-Woolley, WA 98284  
(360) 856-2618/Skagit County  
(360) 734-2262/Whatcom County

ORIGINAL

1 Interview under oath of Mr. George Nordby, a witness  
2 in the above-entitled matter, taken at the instance of the  
3 National Transportation and Safety Board, at the Cascade  
4 Conference Room of the Best Western Lakeway Inn, City of  
5 Bellingham, County of Whatcom, State of Washington, before  
6 Allen R. Emerson & Associates, commencing at the hour of  
7 9:00 o'clock a.m. on Wednesday, July 14, 1999;

8 WHEREUPON, the following proceedings were had, to-  
9 wit:

10 **GEORGE NORDBY**

11 Being duly sworn as a witness in this matter,  
12 testified on his oath, as follows:

13 **DIRECT EXAMINATION**

14 MR. BESHORE:

15 Q For the record my name is Allan Beshore and I am the  
16 investigator in charge for the National Transportation  
17 and Safety Board investigating into the pipeline  
18 rupture and fire that happened in Bellingham on June  
19 10<sup>th</sup>. I thank you for coming in and talking with us  
20 today and I have some questions for you and since there  
21 are other people here that will have an opportunity  
22 when I am finished to ask you questions I want them to  
23 introduce themselves on the record so you know who they  
24 are.

25 MR. BEU: Doug Beu, Olympic Pipeline Company,

1 operations manager.

2 MR. SUBSITS: Joe Subsits, Department of Ecology.

3 MR. BESHORE: And George you have a  
4 representative with you today and we will have him  
5 introduce himself.

6 MR. SCANLAN: My name is Terry Scanlan with the  
7 law firm of Skellenger & Bender and we represent Earth  
8 Tech.

9 MR. BESHORE:

10 Q Just for the record, would you state your full name?

11 A George Roy Nordby.

12 Q And you are employed by whom?

13 A Earth Tech.

14 Q And tell us who you were employed by at the time of the  
15 accident.

16 A Barrett Consulting Group.

17 Q And how long had you been with that employer?

18 A Over fifteen (15) years.

19 Q And your title for them George?

20 A Senior project manager.

21 Q So I would just kind of go back to I guess the time  
22 frame and early to middle nineties when this water  
23 treatment plant project was getting started for the  
24 city. Maybe you could start out by - and this is kind  
25 of a general broad question, outline for us the

1 scenario of events leading up to your involvement in  
2 the project.

3 A Okay the EPA and therefore the Department of Health  
4 enacted what is called the CT Product Requirement and  
5 it has to do with the disinfection and treatment of  
6 drinking water and the city needed to greatly increase  
7 their time of contact with this disinfection so that  
8 was all we were doing, treatment design analysis for  
9 increasing their ability to provide that treatment  
10 situation and that is what resulted in that large  
11 sixteen million gallon reservoir that is in the back of  
12 the pipeline corridor, the water treatment plant. Now  
13 once it was decided to have that structure designed and  
14 built that caused some resulting chemical feed changes,  
15 significant chemical feed changes in the water  
16 treatment plant itself and I think you are probably  
17 aware that part of the project also involved some major  
18 upgrade in the water treatment plant, pH adjustment,  
19 chemical feed, chlorine and so on. In addition to that  
20 the conference plan and modeling that the city had done  
21 showed what they called a new high pressure zone for  
22 future needs to have a significant increase in pumping  
23 capacity and at that time a new pump station was  
24 followed into that whole project so that all of that  
25 work within the agenda for the water treatment plant

1 site would be taken care of at one time. There were two  
2 contracts, one was for the Whatcom Falls Reservoir, a  
3 steel tank called one and then a new pump station and  
4 adjacent to the water treatment plant with another  
5 contract.

6 Q So when did this project kind of get started, kicked  
7 off, do you recall, the design phase of it?

8 A I think we started designing in '93 because I know the  
9 construction started in '94 and completed in '95.

10 Q And you said there were two different contracts, I want  
11 to make sure I understand. There was the pump station  
12 and reservoir and then a large diameter pipe, that was  
13 one of the contracts?

14 A Well the piping that went to Whatcom Falls two and  
15 connected to piping that went out to that, that was all  
16 associated with the new pump station contract and then  
17 the other part of that contract was another contractor.

18 Q But that was up at the water treatment plant area? I  
19 guess there would be no activity associated with that  
20 contract around the pump station?

21 A Correct, the contractor that constructed the Whatcom  
22 Falls two reservoirs was on the site of that.

23 Q So we just have one contractor working in the vicinity?

24 A Yes.

25 Q Now do you remember when those contracts were let, as

1 far as '93?

2 A No I honestly don't remember. The city engineering,  
3 they handled that, worked with the consultants and they  
4 handled all the contractual paper work, meaning that  
5 normally there was a communications consultant that  
6 often was asked to actually tabulate bids and  
7 everything and Bellingham handled all that themselves  
8 and so we would not even touch that construction  
9 contract paper work when you were working with them so  
10 it was not part of our files or anything.

11 Q So the contractor was working directly with the City of  
12 Bellingham?

13 A Yes.

14 Q And the city had a contract then with your firm to  
15 oversee the process, assisting them?

16 A They employed us to assist them to the maximum extent  
17 possible to see that the contractor was in fact  
18 building in conformance with the plans and  
19 specifications.

20 Q So you had somewhat of a contract management oversight  
21 role would that be fair?

22 A John Hatch who will testify after myself had the role  
23 of managing and Tom Franklin was the inspector resident  
24 person on site and John, I mean his role was to kind of  
25 moderate the weekly meetings that were held with the

1 contractor and all of the different parties  
2 including the city. He was kind of I guess you  
3 would say the reporter for the meeting minutes and  
4 so on. It is where the contractor must say I have  
5 a problem with the schedule or so on and that was  
6 John's role, he had that kind of role.

7 Q So what was your role through the construction  
8 phase of the project?

9 A My role as the manager of the design would be if there  
10 was some problem occurring that Tom could not just  
11 readily with the contractor and the city make a  
12 decision on the field. He would then call John and if  
13 John wouldn't make a decision or felt this needed some  
14 other view then I would be asked to look over their  
15 shoulder and get involved with the decision on what to  
16 do or how to resolve some problem.

17 Q Did you go out and visit the site on a regular basis?

18 A No, just occasionally not regular at all. I did visit  
19 the site on a few occasions but that was not part of  
20 what I am supposed to be doing. John made weekly  
21 visits.

22 Q Did they have contact of any kind - well, let me back  
23 up. Did you ever have any interaction with Olympic  
24 Pipeline during the project?

25 A During the design it seems to me that actually one of



1           our subconsultants which was Christianson Engineering  
2           here in Bellingham did our surveying, at least some of  
3           it. I believe the city early on did some surveying too  
4           but Christianson Engineering did surveying and along  
5           the way they - of course we were wanting to find out  
6           about all existing utilities and at that point we have  
7           a form of communication back and forth with Olympic  
8           Pipeline about location and things, their requirements  
9           for crossing and paralleling their facilities and so  
10          on.

11        Q     Do you remember who that contact person was?

12        A     He was a right-of-way person, that type of a title and  
13           I am going to say it was like Bob or Bud Burnett. I  
14           think Bud Burnett.

15        Q     Did you have conversations with this guy?

16        A     I do not recall. In some of the notes that I have seen,  
17           just in looking at some of our records here recently I  
18           believe that my design staff - there is a letter that  
19           shows where they were communicating back and forth,  
20           getting information. I honestly don't know if I talked  
21           on the phone and/or had any information.

22        Q     Can you just kind of in general recall what their  
23           requirements were in terms of how they related to you  
24           in any way?

25        A     What I remember because there is on the plan a specific

1 communication of a minimum of one foot of crossing  
2 clearance with a water pipeline and a gas line and I  
3 know on our plans there was an instance where  
4 apparently we felt this could be close and indicated on  
5 there that that should be a minimum of one foot  
6 clearance between this pipeline and the water line,  
7 just to flag that through the contractor.

8 Q Does anything else come to mind?

9 A You mean contact with Olympic?

10 Q Yeah contact with Olympic during the design phase  
11 anyway.

12 A In addition to acquiring Olympic's spacing  
13 requirements, any consideration like that, we retained  
14 a subconsultant Intermountain Corrosion to provide the  
15 design input for protection of the city's, the plant's  
16 and facilities. They I know had, I believe, not just  
17 one or two but I would say a rather significant contact  
18 back and forth with Olympic Pipeline staff because I  
19 believe Olympic's line was the current type of  
20 protection, which means the city's facilities could  
21 not, so when you look at the plans you realize it's a  
22 passive or field type of system to protect the cities  
23 and I know that the Intermountain staff were back and  
24 forth and I believe were even involved in some kind of  
25 synergy on the test, reviewing test data to determine

1           that there would not be any conflict between the two  
2           systems.

3    Q    Okay let's go forward into the construction phase of  
4           the project. You mentioned that you would get involved  
5           if there were changes that needed to be made. Do you  
6           recall if anything needed to be modified as a result of  
7           either Olympic Gas Pipeline or anything that comes to  
8           mind there?

9    A    No -

10                 MR. SCANLAN: Wait a minute could we make that  
11           into two questions and address Olympic first because I  
12           don't want us to get all over the place.

13                 MR. BESHORE: Sure.

14    Q    Do you remember any modification as a result of Olympic  
15           Pipeline being located?

16    A    No I don't. And the reason I say that is there was  
17           during the design a good effort put forth to locate  
18           Olympic's plans and there is one sheet in the plans  
19           sent that is on either end of the - I call it the  
20           envelope, the piping there, in and out of that station  
21           that shows two elevations on the crown of the Olympic  
22           Gas Pipeline and those were required so that in fact we  
23           would know really what the elevations were as opposed  
24           to relying on as-built drawings provided by Olympic. I  
25           do recall that we got drawings from Olympic and I think

1 at one juncture it was determined that we better do  
2 some field checking here and actually have that  
3 information on the plans and so that is the way it was.

4 Q So they didn't have any problem as far as you know in  
5 meeting that one foot clearance restriction?

6 A No.

7 Q Now let's go then to the other modification, major  
8 modifications you might recall from the project. The  
9 seventy-two (72) inch supply line to the Whatcom Falls  
10 Two reservoir, that vertical alignment was changed a  
11 bit is that correct?

12 A I believe that was due to the actual location of the  
13 city sixteen (16) inch new transmission pipeline. I  
14 believe that resulted in seventy-two (72) being listed  
15 in the profile to get over that sixteen (16) inch line.  
16 That in turn, like a domino effect, resulted in a  
17 conflict with the vacant new pump station twenty-four  
18 (24) inch discharge pipeline per the plan. Secondly,  
19 because of the nature of the construction, a lot of  
20 silt and sand stowed in that area that I am sure you  
21 are aware of and control density fill was used under  
22 those large pipelines and so secondly the contractor  
23 then said, you know, we have to make this vertical  
24 adjustment with that twenty-four (24) to get under the  
25 seventy-two (72). Secondly, I would be forced to

1           actually kind of tunnel through this CDF, control  
2           density fill, maybe low strength, still not like  
3           digging dirt. So that led to a field change to move  
4           that discharge pipeline and keep it on the pump station  
5           side of the seventy-two (72) inch pipeline.

6    Q    Do you remember any other major modifications?

7    A    I don't remember any pipeline. I do not remember any  
8           other pipeline shift horizontally or vertically from  
9           the plan that would be of any significance. On the  
10          section pipeline station, EMCO, I think started digging  
11          that trench and it was determined that he was off the  
12          alignment and so he kind of shifted the alignment but  
13          that was before the pipeline was installed, I do recall  
14          that.

15   Q    I want to make sure I understand on the twenty-four  
16          (24) inch modification. Was the design to be on the  
17          other side of the seventy-two (72) inch?

18   A    It was designed to be on the south side.

19   Q    So the actual design was to be on the south side to tie  
20          into the sixteen (16) inch?

21   A    Yes.

22   Q    And shifted over to -

23   A    The north.

24   Q    Where it is currently located?

25   A    Yes.

1 Q Now on any of your site visits do you recall Olympic  
2 Pipeline ever being exposed?

3 A I don't think I was there during any of those  
4 activities. I don't think I was. I don't recall being  
5 there during any of those excavations.

6 Q Do you recall any discussions or any communications  
7 that there might have been damage to the Olympic pipe  
8 or anything like that, that you can recall?

9 A I do recall specifically that the Olympic Pipeline  
10 staff were there at the time when the contractor was  
11 working in the areas of these crossings and made it  
12 clear during the design that he will be notified and we  
13 will be there and so we wanted to be there and our  
14 specifications clearly require that the contractor was  
15 to coordinate his work with all utilities and I believe  
16 there was a huge telephone run through there and the  
17 pipeline was named and the city utilities were named, I  
18 think those were all city utilities and those two other  
19 utilities, Olympic and I don't remember the telephone  
20 company and my recollection is that we had very little  
21 to do and the contractor was in fact calling in  
22 utilities at those times and coordinating with them and  
23 I am sure you will be asking John and Tom and they will  
24 be prepared to say more than I can.

25 Q Under the terms of the contract and specifications if

1           they were to hit or strike that line what would they  
2           have to do under those contract specifications, terms,  
3           do you recall?

4    A    Well I would need to look at the language before I  
5           could comment. I think the word in that requirement  
6           section, that falls on the responsibility of the  
7           contractor if he does something to some of the  
8           utilities. The owner says hey, you do what they want  
9           you to do.

10   Q    Well I guess my question is, I was wondering if you  
11           would expect them to report that to you or if they  
12           would deal directly with the company. I was kind of  
13           wondering how that reporting would go.

14   A    Well I would expect something like that would have come  
15           up in the weekly meetings and have been recorded there.  
16           I don't recall a conflict with the contractor except  
17           for the telephone. They did damage or sever I think the  
18           telephone utility once or twice but I don't recall that  
19           with Olympic.

20   Q    Do you remember if they damaged any other pipes as they  
21           were excavating or does anything come to mind?

22   A    They damaged one of the city's water pipelines very  
23           early on in the construction.

24   Q    Let's go back to the section line. You mentioned there  
25           was a section line, where would that line be in

1 relationship to the other piping, the seventy-two (72)  
2 inch maybe?

3 A Clear at the office at the site of the pump station,  
4 this is the pump station and the seventy-two (72) is  
5 here and the section line is tied in over here.

6 Q So that is on the north side of the pump station out  
7 from the seventy-two (72) inch?

8 A Yes.

9 MR. BESHORE: That's all I have. Doug do you  
10 have any questions?

11 MR. BEU: No.

12 MR. BESHORE: Joe?

13 MR. SUBSITS: Yes.

14 MR. SUBSITS:

15 Q Your responsibility is the design of this project?

16 A Yes.

17 Q And in terms of what that entails in terms of  
18 excavation work, that required the installation of how  
19 many lines?

20 A I started with the water treatment plant and you go  
21 through and there is the seventy-two (72) inch supply  
22 line from the water treatment plant to Whatcom Falls  
23 Reservoir Two which provides CT treatment function and  
24 the contract with chlorine gas. Then out of that  
25 reservoir coming over towards the treatment plant and



1 in front of the vacant new pump station is a sixteen  
2 (16) inch pipeline and there is a large three meter in  
3 a section of that pipe just beyond, west of the vacant  
4 new pump station. There is a sixteen (16) inch that  
5 continues onto the north then turns to the west and  
6 ties into the existing pipeline, transmission pipeline  
7 that goes into the city. Off of that sixteen (16) inch  
8 is a section line, a twenty-four (24) inch section line  
9 for the pump station which came off northerly of the  
10 pump station and kind of comes into the north at a five  
11 degree angle into the pump station and then out of the  
12 pump station is a twenty-four (24) inch discharge  
13 pipeline that went a short distance southerly and then  
14 turns basically northerly and then came down an  
15 existing sixteen (16) inch transmission line that went  
16 both south and north to the vacant new tie-in, vacant  
17 new distribution system. Those would be the pressure  
18 pipes. In addition there is an overflow pipe from the  
19 city treatment, water treatment plant that was  
20 northerly of the vacant new pump station and that  
21 overflow ties in with the pipeline corridor to the  
22 waste - water treatment which really tied into the city  
23 waste water treatment. Then there are two what we call  
24 utility ducts and one is sixteen (16) inch in diameter  
25 PVC pipe and the other is a twelve (12) inch and they

1 are in the vicinity of the pump station and they were  
2 used to convey a small diameter PVC chemical line,  
3 sample line and so on.

4 Q And then the electrical conduit?

5 A The electrical conduit came from the water treatment  
6 plant and that is in the rather large dump tank with CD  
7 placed around there that goes directly out from what  
8 would be the east, westerly into the vacant new pump  
9 station. I know there has to be some power that goes  
10 out to the Whatcom Falls Two reservoir and I don't  
11 recall, you know, it goes out that way but I don't  
12 recall where that was.

13 Q Well then in terms of what the work called for, what  
14 type of work was actually done in the area? I notice a  
15 concrete pour, what type of heavy work was done in that  
16 area?

17 A Are you speaking in addition to excavation?

18 Q In addition to excavation.

19 A Well specifications had very specific bedding - we will  
20 start with the bedding. There would be say foundation  
21 specification requirements and then the actual bedding  
22 around the pipes and the backfill that involved a type  
23 of material and the levels, percent of compaction from  
24 under the pipe right on up the side moving on up to the  
25 ground.

1 Q Was there some concrete work also?

2 A All those pipes, thirty-six (36) inch pipes on up to  
3 seventy-two (72) was all welded steel so those pipes  
4 did not - I mean they provided thrust restraint because  
5 of the welded ends. I believe there was a thrust block  
6 poured at this pump station discharge connection to a  
7 sixteen (16) inch thrust block poured there at that  
8 location where it tied to a sixteen (16) inch city  
9 block.

10 Q Do you recall any time constraints on the project?

11 A There was a certain amount of work day provided in the  
12 original contract.

13 Q Were the contractors under any pressure to get this  
14 project done within a certain time period?

15 A Well the contract of course specified months or work  
16 days or something and I don't recall if it abutted up  
17 against that or not, I don't recall that.

18 Q We saw some reference to Cascade Pipeline. Is there a  
19 natural gas line there?

20 A No. I believe that was in Tom Franklin's report. I  
21 noted that, I looked through some things recently and  
22 the only gas line that I am aware of was the Olympic  
23 line in that area.

24 Q So in terms of reference it is possible you could have  
25 been referring to the Olympic Pipeline?

1 A I would think you could ask Tom on that.

2 Q Can you recall what the crew hours were in terms of  
3 working eight hour days or longer than that?

4 A I don't know if they were working four tens or five  
5 eights. I don't believe they were long work hours, I  
6 think it was in the normal work activity.

7 MR. SUBSITS: Thank you, that's all.

8 MR. BEU: I have just a couple.

9 MR. BEU:

10 Q Were there any facilities that were demolished or  
11 removed as part of the project that might have been  
12 there to start with that are no longer there? And I am  
13 talking about the area right there, that immediate  
14 area.

15 A I am quite certain there was nothing at all in the  
16 vicinity of the vacant new pump station or to the  
17 south, north or west. There was of course a city plant  
18 parking area but the park was demolished and had to be  
19 rebuilt, reconfigured also next to the plant, right up  
20 near the plant. There was, seems to me there was  
21 something there right adjacent to the clear well wall  
22 that had to be changed, some structural work there as I  
23 recall, but this is a different area, kind of in the  
24 vicinity but not where the pump station was.

25 Q Did EMCO do the excavation themselves or did they

1 subcontract that out do you know?

2 A I would have to say I don't know. I can't really say  
3 definitively on that.

4 MR. BEU: I don't think I have any further  
5 questions.

6 MR. BESHORE: If there are no further  
7 questions we will go off the record.

8 (Off the record discussion)

9 MR. BESHORE: Back on.

10 MR. BESHORE:

11 Q I wanted to ask George if he can think of anything else  
12 that might assist us as we are putting this together,  
13 anything else you recollect that might help us out?

14 A Other than to say to inquire of the contractors'  
15 activities and you're talking to us as designers, I am  
16 sure you are talking to other folks and that is the  
17 only thing I would have.

18 MR. BESHORE: Thank you.

19 (WITNESS EXCUSED at 9:50 o'clock a.m. on 7-14-99)

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24

25

STATE OF WASHINGTON)  
 )  
COUNTY OF SKAGIT )

D E C L A R A T I O N

Pursuant to the laws of the State of Washington,  
I declare under penalty of perjury that the following to be  
true:

I have read my interview under oath and the same  
is true and accurate save and except for any corrections as  
made by me on the correction page, herein.

Signed at \_\_\_\_\_, Washington  
on the \_\_\_\_\_ day of \_\_\_\_\_, 2000.

\_\_\_\_\_  
MR. GEORGE NORDBY

1 STATE OF WASHINGTON)  
2 COUNTY OF SKAGIT )

C-E-R-T-I-F-I-C-A-T-E

3

4

5 I, **ALLEN R. EMERSON**, a Notary Public in and for  
6 the **State of Washington**, do hereby certify that the  
7 interviews under oath before the National  
8 Transportation & Safety Board were reported in a  
9 verbatim manner stenographically before me and reduced  
10 typewritten form under my direction;

11 I further certify that the interviews under oath  
12 before the National Transportation and Safety Board are  
13 full true and correct transcript of the proceedings  
14 reported by me.

15 **IN WITNESS WHEREOF**, I have hereunto set my hand  
16 and affixed my Official Seal this 22 day  
17 of Jan., 2000.

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25

  
NOTARY PUBLIC in and for the  
State of Washington, residing  
at Sedro Woolley. My  
Commission expires 6/27/2000.

Page 1

1 IN THE SUPERIOR COURT OF THE STATE OF WASHINGTON  
 2 IN AND FOR THE COUNTY OF WHATCOM

3 -----  
 4 KATHERINE DALEN, Individually  
 5 and as the Personal  
 6 Representative of the Estate  
 7 of STEPHEN M. TSIORVAS, and  
 8 as Guardian ad Litem for  
 9 ANDREW R. TSIORVAS and GEORGE  
 10 K. TSIORVAS,  
 11 Plaintiffs,  
 12 vs. No. 99-2-01468-1  
 13 OLYMPIC PIPE LINE COMPANY, a  
 14 foreign corporation, EQUILON  
 15 PIPELINE COMPANY LLC, a  
 16 foreign corporation, and  
 17 EQUILON ENTERPRISES, LLC, a  
 18 foreign corporation, and FRED  
 19 CROGNALE, FRANK HOFF, RON  
 20 BRENTSON and JOHN DOES,  
 21 Defendants.  
 22 OLYMPIC PIPE LINE COMPANY, a  
 23 foreign corporation,  
 24 Third-Party Plaintiff,  
 25 vs.  
 26 IMCO GENERAL CONSTRUCTION  
 27 CO., a domestic corporation,  
 28 Third-Party Defendant.

29 -----  
 30 DEPOSITION UPON ORAL EXAMINATION OF  
 31 GEORGE NORDBY  
 32 -----  
 33 June 20, 2000  
 34 Loraine Hohnstein  
 35 Court Reporter  
 36 HOHNSL15230J

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Page 2

1 FRANK S. KING, as the  
 2 Personal Representative of  
 3 the Estate of WANDA B. KING,  
 4 and FRANK S. KING and MARY L.  
 5 KING, Individually, and TRACY  
 6 K. BELLI, Individually, and  
 7 JASON KING, Individually,  
 8 Plaintiffs,  
 9 vs. No. 99-2-01467-3  
 10 OLYMPIC PIPE LINE COMPANY, a  
 11 foreign corporation, EQUILON  
 12 PIPELINE COMPANY, LLC, a  
 13 foreign corporation, and  
 14 EQUILON ENTERPRISES, LLC, a  
 15 foreign corporation, and FRED  
 16 CROGNALE, FRANK HOFF, RON  
 17 BRENTSON and JOHN DOES,  
 18 Defendants.  
 19 OLYMPIC PIPE LINE COMPANY, a  
 20 foreign corporation,  
 21 Third-Party Plaintiff,  
 22 vs.  
 23 IMCO GENERAL CONSTRUCTION CO.,  
 24 a domestic corporation, and  
 25 JOHN DOE DEFENDANTS ONE  
 THROUGH FOUR,  
 Third-Party Defendants.

26 -----  
 27 DEPOSITION OF GEORGE NORDBY  
 28 -----  
 29 9:41 a.m.  
 30 June 21, 2000  
 31 1201 Third Avenue, Suite 2760  
 32 Seattle, Washington  
 33 Loraine Hohnstein, Court Reporter

Page 5

1 APPEARANCES  
 2  
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 20 Seattle, WA 98101  
 21  
 22  
 23  
 24  
 25



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1 GEORGE NORDBY: Witness herein, having  
 2 been duly sworn by the  
 3 Notary, testified as follows:  
 4  
 5  
 6 EXAMINATION  
 7 BY MR. ALLEN:  
 8 Q. Mr. Nordby, I introduced myself earlier,  
 9 I'm Dick Allen, I'm going to be asking you questions  
 10 today, propounding them on behalf of my client  
 11 Olympic Pipe Line Company, one of the defendants in  
 12 this action.  
 13 And if you don't understand the questions  
 14 at any time, will you be sure to tell me that you  
 15 don't understand the question and I will try to  
 16 rephrase it.  
 17 Are you represented by counsel here today?  
 18 A. Yes.  
 19 Q. And who is that?  
 20 A. Terry Scanlan.  
 21 Q. And he is seated on your left?  
 22 A. Yes.  
 23 Q. The deposition may go on for some time.  
 24 If at any time you need to take a break or would  
 25 like to take a break, just tell us and we'll stop

Page 10

1 A. Oh, specifications and contract plans and  
 2 maybe pieces of correspondence.  
 3 Q. Were they documents, whether  
 4 correspondence or plans or specifications, relating  
 5 to the Dakin-Yew Pump Station project for the City  
 6 of Bellingham?  
 7 A. Yes.  
 8 Q. Were all the documents you were shown in  
 9 the course of that interview documents generated by  
 10 Barrett Consulting Group? Or were there other  
 11 documents?  
 12 A. There were other documents.  
 13 Q. What sort of other documents, as you  
 14 recall?  
 15 A. Project correspondence from the various  
 16 involved parties.  
 17 Q. In preparation for the deposition, have  
 18 you reviewed, did you review any photographs?  
 19 A. No.  
 20 Q. Let me just ask you to state your full  
 21 name?  
 22 A. George Roy Nordby.  
 23 Q. And what is your residence address, Mr.  
 24 Nordby?  
 25 A. [REDACTED]

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1 and unhook ourselves from these microphone cords and  
 2 we'll have a break.  
 3 It's also necessary when a deposition is  
 4 going forward that you allow me to finish the  
 5 question before you begin your answer. That way we  
 6 both aren't talking at the same time and the court  
 7 reporter is able to take down the testimony. Do you  
 8 understand that rule?  
 9 A. Yes.  
 10 Q. Have you ever given a deposition before?  
 11 A. Yes.  
 12 Q. On how many occasions?  
 13 A. Once.  
 14 Q. In what sort of a proceeding?  
 15 A. I was involved with a design and work for  
 16 a wastewater treatment facility, City of Moses Lake,  
 17 and there was a dispute between the contractor and  
 18 the city.  
 19 Q. About how long ago was that?  
 20 A. Mid '80's.  
 21 Q. And do you recall in what court the  
 22 dispute was being litigated?  
 23 A. No.  
 24 Q. Do you recall where you gave the  
 25 deposition?

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1 [REDACTED]  
 2 Q. How long have you lived at that address?  
 3 A. Seven years.  
 4 Q. And where did you reside before?  
 5 A. Hollywood Hills south of Woodinville.  
 6 Q. How long were you living south of  
 7 Woodinville?  
 8 A. About twenty years.  
 9 Q. What is your date of birth?  
 10 A. [REDACTED]  
 11 Q. And by whom are you currently employed?  
 12 A. Earth Tech.  
 13 Q. And what is your job designation, if you  
 14 have one, at Earth Tech?  
 15 A. Senior project manager.  
 16 Q. How long have you been employed by Earth  
 17 Tech or a predecessor company?  
 18 A. Essentially all my life. There have been  
 19 acquisitions and name changes.  
 20 Q. And at the time of the Dakin-Yew project,  
 21 was the company name by which you were employed  
 22 Barrett Consulting Group?  
 23 A. Yes.  
 24 Q. About when did Barrett Consulting Group  
 25 merge into Earth Tech?

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1 A. Here in Seattle.  
 2 Q. Have you looked at any documents in  
 3 preparation for this deposition today?  
 4 A. I looked at documents associated with the  
 5 interviews with NTSB Board and Justice Department  
 6 and in discussions with my attorney.  
 7 Q. Okay, what sort of documents did you look  
 8 at?  
 9 A. Project files.  
 10 Q. Where were those files located when you  
 11 looked at them?  
 12 A. In our office.  
 13 Q. And about how long ago was it that you  
 14 looked at the records?  
 15 A. The NTSB interviews I think were in the  
 16 end of '99, I believe.  
 17 Q. Is it possible it was in July or August of  
 18 '99?  
 19 A. Okay, I don't recall, but.  
 20 Q. All right?  
 21 A. And then the Justice Department of course  
 22 presented quite a few documents when they  
 23 interviewed me.  
 24 Q. And what sort of documents did the Justice  
 25 Department present to you?

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1 A. I believe it was '94 or '95 that Earth  
 2 Tech purchased Barrett Consulting Group.  
 3 Q. Did you have any ownership in either  
 4 Barrett Consulting Group or Earth Tech?  
 5 A. No.  
 6 Q. Approximately when did you give a  
 7 statement or appear before the Department of Justice  
 8 investigators?  
 9 A. I think it was in April or May of 2000.  
 10 Q. Aside from the National Transportation  
 11 Safety Board and the Department of Justice, have you  
 12 been interviewed by any other persons with respect  
 13 to the Dakin-Yew Pump Station project since the June  
 14 10, 1999 incident in Bellingham?  
 15 A. No.  
 16 MR. SCANLAN: We should be clear for the  
 17 record that the interviews done by the US Attorney  
 18 were done as I mentioned yesterday with several  
 19 representatives of various agencies present.  
 20 MR. ALLEN: And would they have been the  
 21 same representatives that were stated on the record  
 22 yesterday?  
 23 MR. SCANLAN: Right, and that would be  
 24 true for John Hatch as well.  
 25 Q. Mr. Nordby, when did you first become

Page 13

1 involved with the Dakin-Yew Pump Station project for  
 2 the City of Bellingham?  
 3 A. I don't know the exact year but it would  
 4 have been early '90's when the preliminary design  
 5 work was commenced, and we worked on that on behalf  
 6 of the city.  
 7 Q. What was the nature of the preliminary  
 8 design work that was done?  
 9 A. It was to establish the size in gallons  
 10 per minute pumping rate and pressure that the  
 11 station would, should supply for future demands and  
 12 also just location with respect to the water  
 13 treatment plant.  
 14 Q. In the course of the preliminary design  
 15 phase, was attention given in the design work to the  
 16 location of underground utilities?  
 17 A. Yes.  
 18 Q. In what manner was the location of  
 19 underground utilities to be determined during the  
 20 design phase?  
 21 A. Each of the utility owners were contacted  
 22 which would involve city, I believe -- city meaning  
 23 they had wastewater, water, storm drain lines in the  
 24 vicinity. Second would be, I believe it was USWest,  
 25 they had a fiber optics cable in the vicinity.

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1 Thirdly would be Olympic Pipe Line because of the  
 2 16-inch high pressure gas pipeline. That's what  
 3 comes to my mind at this moment.  
 4 Q. What was your own role with respect to the  
 5 Dakin-Yew Pump Station project?  
 6 A. As manager of the project, I had the  
 7 responsibility to manage the staff to produce the  
 8 plans and specifications and manage staff effort  
 9 with respect to the project budgets and schedule.  
 10 Q. During the entire project from the  
 11 preliminary design phase to completion of  
 12 construction, where were you working from, what was  
 13 your --  
 14 A. Our Bellevue office.  
 15 Q. And the address of that office?  
 16 A. 10800 108th Avenue Northeast, Bellevue.  
 17 Q. Does that remain the address of Earth  
 18 Tech?  
 19 A. Yes.  
 20 Q. Did you retain or cause to be retained the  
 21 services of any other group to assist in site survey  
 22 and location of utilities?  
 23 A. Yes.  
 24 Q. And what company was that?  
 25 A. Christenson Engineering.

Page 15

1 Q. Who was your principal contact at  
 2 Christenson Engineering?  
 3 A. That name escapes me.  
 4 Q. Okay, what was the role that Christenson  
 5 Engineering was to play in the preliminary design  
 6 phase of the Dakin-Yew project?  
 7 A. They established vertical and horizontal  
 8 locations of various project features and  
 9 underground utilities.  
 10 Q. And aside from the utilization of  
 11 Christenson Engineering services, was Barrett  
 12 Consulting in direct contact with any of the  
 13 underground utilities?  
 14 A. Yes, we made contact with the  
 15 representatives of USWest and Olympic Pipe Line.  
 16 Q. Off the record for a moment.  
 17 THE VIDEOGRAPHER: Going off the record,  
 18 the time is approximately 9:56 a.m.  
 19 (Discussion held off the record.)  
 20 THE VIDEOGRAPHER: Back on the record, the  
 21 time is approximately 9:59 a.m.).  
 22 (Exhibit No. 104 marked for  
 23 identification.)  
 24 Q. Mr. Nordby, I'm handing you what has been  
 25 marked as Exhibit 104 and this is ET 0007745 through

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1 ET 0007786. It's a file that has been produced to  
 2 us from Earth Tech's records and the file tab is  
 3 shown on the first page. And I will ask you if you  
 4 recognize this as a file that was maintained by  
 5 Barrett Consulting Group in 1994. You can take a  
 6 moment to look through it.  
 7 A. Shall I look at these?  
 8 Q. Yes.  
 9 A. I recall these documents but not  
 10 specifically each letter and memo, but I recall this  
 11 information being produced.  
 12 Q. What is the purpose of maintaining a  
 13 utilities coordination file from the point of view  
 14 of a design engineer?  
 15 A. There are several. One is associated with  
 16 the contractor. The better underground conditions  
 17 are defined in the plans and specifications and the  
 18 more unknowns are eliminated, then the contractor  
 19 can more accurately bid with construction activities  
 20 associated with that project. Related to that, it  
 21 reduces the risk to the owner for having change  
 22 order costs and surprises during construction which  
 23 owners are loathe to have.  
 24 And from our standpoint, it's for our best  
 25 interests to make sure that we are to the maximum

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1 extent possible not creating potential for unknowns  
 2 during the construction process.  
 3 Q. In the Dakin-Yew project -- strike that.  
 4 Looking at Exhibit 104 just for a moment, do you see  
 5 a communication from Olympic Pipe Line with respect  
 6 to its requirements in that file?  
 7 A. I noted that as I was leafing through.  
 8 Q. And is one of those requirements that was  
 9 furnished, well, strike that.  
 10 Does your file indicate who it was at  
 11 Olympic Pipe Line that furnished those materials to  
 12 you and approximately when they were furnished?  
 13 A. We received a memo from Olympic Pipe Line  
 14 December 11, 1992 signed by R. G. Burnett attaching  
 15 the right of way stipulations and requirements.  
 16 Q. Were you also furnished a map of the  
 17 Olympic Pipe Line right-of-way?  
 18 A. Yes.  
 19 Q. And is that map also in your utilities  
 20 coordination file?  
 21 A. Yes.  
 22 Q. We'll come back to this file, Exhibit 104,  
 23 later.  
 24 Mr. Nordby, after the preliminary design  
 25 phase of a project, if that design is accepted, what

Page 18

1 information is put together in this instance in  
 2 respect to the Dakin-Yew project for the use of the  
 3 person's contractors who would bid the project?  
 4 A. In the specifications, there was, I don't  
 5 recall if you call it the paragraph or section, but  
 6 in the specifications there was instructions to the  
 7 bidder regarding the USWest fiber optic cable and  
 8 Olympic Pipe Line pipeline and that the contractor,  
 9 they were assigned the responsibility to be  
 10 coordinating all aspects of their work with that  
 11 utility.  
 12 And then on the plans, there were at least  
 13 two that I recall actual determinations of the crown  
 14 of the Olympic Pipe Line pipe that went right  
 15 through the heart of this construction area so the  
 16 contractor would not only know the horizontal  
 17 location but would know the vertical location.  
 18 Q. We are jumping ahead a bit but I'm going  
 19 to have another document marked --  
 20 (Exhibit No. 105 marked for  
 21 identification.)  
 22 Q. -- and provided to you. This has been  
 23 marked as Exhibit 105 and it's captioned: Project  
 24 Manual, Dakin-Yew Pump Station, Reservoir Pipelines,  
 25 and Chemical Feed. It says Barrett Consulting

Page 19

1 Group, Project No. 454-B.  
 2 Can you tell me what this document  
 3 represents?  
 4 A. These are the technical specifications for  
 5 the subject project.  
 6 Q. Do they include some project rules called  
 7 project requirements which the contractor would  
 8 accept as the rules for performance of the work on  
 9 the project?  
 10 A. Yes, this document does have the project  
 11 requirements.  
 12 Q. And is project requirement 14 the project  
 13 requirement that addresses the subject of  
 14 coordination with underground utilities?  
 15 MR. SCANLAN: Counsel, do you have a  
 16 specific page he can refer to?  
 17 MR. ALLEN: I don't.  
 18 THE WITNESS: I'm nearly there.  
 19 MR. SCANLAN: George, why don't you for  
 20 the record tell us the Bates number using this  
 21 number.  
 22 A. Paragraph 14, Existing Utility  
 23 Coordination and Relocation.  
 24 Q. The second number, yes?  
 25 A. ET 0009985. And it's titled in the

Page 22

1 that memo?  
 2 A. Would you, I'm not sure I understand your  
 3 question.  
 4 Q. What activity did you understand would  
 5 occur in order to locate the Olympic Pipe Line  
 6 Company gasoline products pipeline?  
 7 A. That Olympic Pipe Line representative  
 8 would be on site working with Christenson  
 9 Engineering and the city in locating and making sure  
 10 that there was no damage done to the facility.  
 11 Q. Okay, was that work going to require  
 12 potholing at certain locations along the Olympic  
 13 Pipe Line right-of-way?  
 14 A. Yes.  
 15 Q. What is the purpose of potholing?  
 16 A. It's a term used to dig down to locate  
 17 something and then enable you to physically locate  
 18 it horizontally and vertically.  
 19 Q. After the hole is dug, is a marker of some  
 20 sort put in place?  
 21 A. There's no set -- I mean yes and no.  
 22 Q. Okay, and do you have any knowledge of  
 23 whether a marker of some sort was put in place with  
 24 respect to the location of the Olympic Pipe Line  
 25 petroleum products pipeline?

Page 20

1 specifications project page 20.  
 2 Q. Is there advice with respect to  
 3 coordination specifically with Olympic Pipe Line  
 4 Company?  
 5 A. Yes.  
 6 Q. What does the project requirement say in  
 7 respect to the Olympic Pipe Line Company gas line?  
 8 A. Do you want me to read --  
 9 Q. If you could look at it and tell us?  
 10 A. It says that all work performed by the  
 11 contractor adjacent to or in the vicinity of the  
 12 existing utility shall be performed in accordance  
 13 with all requirements of the utility owners.  
 14 Contractor shall anticipate that the requirements  
 15 imposed by the utility owners may hinder, delay or  
 16 complicate execution of the work.  
 17 That's just an excerpt from that  
 18 paragraph.  
 19 Q. If you will put that aside for the moment  
 20 and we'll come back to it.  
 21 (Exhibit No. 106 marked for  
 22 identification.)  
 23 Q. Mr. Nordby, handing you what has been  
 24 marked as Exhibit 106, it's Bates stamped 5006483.  
 25 I will ask you if you have seen that document before

Page 23

1 A. I don't recall.  
 2 Q. Okay.  
 3 Q. Next is 5006484 and 6485.  
 4 MR. BENINGER: Did we make 106 just the  
 5 top page?  
 6 MR. ALLEN: Yes.  
 7 MR. BENINGER: Okay, sorry.  
 8 MR. ALLEN: Yes.  
 9 (Exhibit No. 107 marked for  
 10 identification.)  
 11 MR. BENINGER: Okay, sorry. And Exhibit  
 12 107, is that a two-page document?  
 13 MR. ALLEN: Yes.  
 14 Q. (Mr. Allen) Mr. Nordby, have you seen what  
 15 has been marked as Exhibit 107 before?  
 16 A. I don't specifically recall it. This is  
 17 written by one of the staff working on the project.  
 18 Q. And who is it that writes the memo that is  
 19 the first page of Exhibit 107?  
 20 A. Ron Dorn.  
 21 Q. And for whom did Mr. Dorn work?  
 22 A. He was working under my direction for the  
 23 project.  
 24 Q. Mr. Nordby, I'm going to hand you what was  
 25 marked as Exhibit 72 yesterday during Mr. Franklin's

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1 and specifically whether your handwriting appears on  
 2 it?  
 3 A. I created the letter of transmittal.  
 4 Q. And what was being transmitted by that  
 5 letter of transmittal?  
 6 A. It was a copy of the location of the  
 7 reservoir and locations requiring horizontal and  
 8 vertical pipeline locations. That is, wanting  
 9 certain facilities and pipelines located in the  
 10 field.  
 11 Q. And who would be doing the work of  
 12 locating the pipeline or the facilities to be  
 13 located in the field?  
 14 A. Christenson Engineering was going to be  
 15 providing the actual survey of this vertical and  
 16 horizontal location of facilities but the city  
 17 provided a staff and backhoe to work with  
 18 Christenson Engineering in this utility location  
 19 work.  
 20 Q. And according to Exhibit 106, is among the  
 21 projects that Christenson Engineering was going to  
 22 accomplish was the Olympic gas line location?  
 23 A. Yes.  
 24 Q. And how was that location going to be  
 25 determined as you understood at the time you wrote

Page 24

1 deposition and that is a, well, could you tell us  
 2 what it is?  
 3 A. This is an organization chart of key  
 4 personnel associated with the project which included  
 5 the City of Bellingham, Barrett Consulting Group and  
 6 Imco Construction.  
 7 Q. And who does it show as the principal  
 8 engineer with respect to the design of the project?  
 9 A. You used the term and would you clarify,  
 10 please.  
 11 Q. In respect to Barrett Consulting Group,  
 12 who does it show as director of engineering?  
 13 A. Dirk Van Woerden.  
 14 Q. What was Mr. Van Woerden's role in the  
 15 design of the Dakin-Yew Pump Station project?  
 16 A. This project that I managed, as well as  
 17 the other, the water and wastewater project in the  
 18 office all come under Mr. Van Woerden's  
 19 responsibility.  
 20 Q. And you have told us what your role was as  
 21 project engineer. How did that relate to Mr. Van  
 22 Woerden's role?  
 23 A. His role in the project was primarily one  
 24 of review and asking the tough questions of staff.  
 25 Q. Who was in charge of the design of the

Page 25

1 project itself in the preliminary design stage?  
 2 A. I was.  
 3 Q. Who are the other personnel shown on  
 4 Exhibit 72 with respect to the, which is titled Key  
 5 Personnel Organization Chart, who are the other  
 6 Barrett Consulting Group personnel?  
 7 A. Ron Dorn, he was a project engineer which,  
 8 his role primarily was associated with the actual  
 9 design of the pumping facilities for the Dakin-Yew  
 10 Pump Station.  
 11 John Hatch is listed as a construction  
 12 services manager. Once the project was bid and the  
 13 city awarded the construction contract to Imco  
 14 Construction, John functioned with oversight over  
 15 the construction activities. And two individuals  
 16 assisted him with that work in the field, Tom  
 17 Franklin and Bob Morley.  
 18 Q. First let me go back and let me ask, is  
 19 Mr. Dorn still employed by Earth Tech?  
 20 A. Yes.  
 21 Q. And is he at the Bellevue office?  
 22 A. Yes.  
 23 Q. Has he been continuously employed by Earth  
 24 Tech since, or Barrett Consulting Group since the  
 25 1994 project?

Page 26

1 A. Yes.  
 2 Q. And may I ask the same question about Mr.  
 3 Morley. Has he been, is he still employed by Earth  
 4 Tech?  
 5 A. No.  
 6 Q. When was he last employed by Barrett  
 7 Consulting or Earth Tech as you recall it?  
 8 A. I think he resigned in I'm going to say  
 9 '96 or thereabouts.  
 10 Q. Do you know where he is located now?  
 11 A. I believe he still resides in the Seattle  
 12 area.  
 13 Q. Do you happen to know by whom he is  
 14 employed now?  
 15 A. I don't believe he is employed.  
 16 Q. During the construction phase of the  
 17 Dakin-Yew Pump Station project, was Mr. Morley  
 18 officed in Bellingham or in Bellevue, where did he  
 19 work from?  
 20 A. His home office was the Bellevue office.  
 21 And he, my recollection is that he had a minor role  
 22 in this project.  
 23 Q. Was Mr. Dorn officed throughout the  
 24 project in the Bellevue office?  
 25 A. Yes.

Page 27

1 Q. Who was on site on a continuing basis in  
 2 Bellingham during the project?  
 3 A. Tom Franklin.  
 4 Q. When Mr. Franklin was off shift, ill or on  
 5 vacation, who was on site?  
 6 A. I believe Mr. Morley subbed for him on  
 7 some of those occasions.  
 8 Q. What was Mr. Franklin's assignment on the  
 9 job?  
 10 A. Well, to be the representative, to observe  
 11 construction activities on behalf of the owner, to  
 12 provide coordination with the contractor and some  
 13 level within the project activities to assure the  
 14 owner that, to the maximum extent possible, the  
 15 terms and plans of the specifications were in fact  
 16 being accomplished in the field.  
 17 Q. Would it be fair to say that Mr. Franklin  
 18 was the owner's representative at the job site?  
 19 A. Yes.  
 20 Q. In respect to the job during the  
 21 construction phase, with whom at the City of  
 22 Bellingham did you coordinate?  
 23 A. Wan Huang.  
 24 Q. What was Mr. Huang's job at the city as  
 25 you understood it?

Page 28

1 A. He would have been in a similar position  
 2 that I had with the consultant, he had with the  
 3 city, he was the project manager.  
 4 Q. Was there a written contract between  
 5 Barrett Consulting Group and the City of Bellingham  
 6 with respect to the services Barrett was to provide  
 7 during the construction phase of the project?  
 8 A. Yes.  
 9 Q. Let's take those documents aside for the  
 10 moment. I will probably give you some more.  
 11 (Exhibit No. 108 marked for  
 12 identification.)  
 13 Q. Have you seen Exhibit 108 before?  
 14 A. Yes.  
 15 Q. What is it?  
 16 A. It is a site survey, a topographical map  
 17 of the subject site.  
 18 Q. And who drew that map?  
 19 A. Christenson Engineering.  
 20 Q. And was that the result of your request to  
 21 Christenson to provide specific services?  
 22 A. Yes.  
 23 Q. And when was that site survey map  
 24 provided?  
 25 A. December 16, 1992.

Page 29

1 Q. In respect to the construction phase of  
 2 the project, would that exhibit have been, that map  
 3 have been provided to the contractors who bid on the  
 4 job?  
 5 A. Not this map physically. The appropriate  
 6 areas of this map, that is, the topo and all of the  
 7 associated information was transferred to the  
 8 construction plans.  
 9 Q. I see. And those plans then were provided  
 10 to the contractors who bid on the job?  
 11 A. Yes.  
 12 Q. I have no more questions concerning that  
 13 document.  
 14 (Exhibit No. 109 marked for  
 15 identification.)  
 16 Q. 109 is the February 22 Christenson  
 17 Engineering letter. Mr. Nordby, what is Exhibit  
 18 109?  
 19 A. It is a scope and fee proposal from  
 20 Christenson Engineering to Barrett Consulting Group.  
 21 Q. And for what services?  
 22 A. To provide the required topographic  
 23 mapping of the area, survey information associated  
 24 with the proposed 72-inch water transmission  
 25 pipeline to and from the plant, the staking required

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1 for a new 16-million gallon reservoir which is  
 2 located about 800 feet distant from the subject pump  
 3 station. And the horizontal and vertical locations  
 4 associated with the referenced 18 proposed potholes  
 5 of existing utility lines.  
 6 I just kind of summarized from items one  
 7 through four enumerated in their letter.  
 8 Q. And again, who would have carried out the  
 9 potholing for the 18 proposed potholes of utility  
 10 lines?  
 11 A. As I indicated earlier, my recollection is  
 12 that the City of Bellingham provided staff and  
 13 backhoe equipment for that effort.  
 14 (Exhibit No. 110 marked for  
 15 identification.)  
 16 Q. I will hand you what has been marked as  
 17 Exhibit 110 and ask you if you have seen that  
 18 document before.  
 19 MR. VERWOLF: Is that the April 12?  
 20 MR. ALLEN: April 12.  
 21 A. This is a scope of services and fee  
 22 proposal letter from Christenson Engineering to  
 23 Barrett Consulting Group for additional services  
 24 following on from Exhibit 109.  
 25 Q. And what is the date of that letter?

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1 A. April 12, 1993.  
 2 Q. And among the services that are discussed  
 3 in that letter is the location of the Olympic Pipe  
 4 Line petroleum products pipe or utility; is that  
 5 correct?  
 6 A. That's correct.  
 7 Q. And what information is Christenson  
 8 providing to you in respect to the location of the  
 9 Olympic Pipe Line pipe?  
 10 A. Item three in the subject letter says that  
 11 they're to place on their base map the location of  
 12 the Olympic pipeline, of the 16-inch Olympic  
 13 pipeline.  
 14 Q. Would you go back to the prior exhibit  
 15 again and look at item four that Christenson is  
 16 quoting a fee estimate in respect to. And it  
 17 discusses potholing, does it not?  
 18 A. Yes.  
 19 Q. And does it indicate when the utilities  
 20 are located through the potholing effort, how they  
 21 are to be marked?  
 22 A. It does.  
 23 Q. And what does it require?  
 24 A. It asks, well, they are proposing to leave  
 25 wooden markers extending from the top of the

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1 one-tenth of one foot?  
 2 A. Yes.  
 3 Q. Off the record. I'm going to take a  
 4 minute to get some plans out of the stack of  
 5 yesterday's exhibits.  
 6 THE VIDEOGRAPHER: Going off the record,  
 7 the time is approximately 10:40 a.m.  
 8 (Discussion held off the record.)  
 9 THE VIDEOGRAPHER: Back on the record, the  
 10 time is approximately 10:56 a.m.  
 11 (Exhibit No. 113 marked for  
 12 identification.)  
 13 Q. Mr. Nordby, I'm going to hand you what has  
 14 been marked as Exhibit 113.  
 15 MR. ALLEN: And counsel, this same exhibit  
 16 or the same chart, Pump Station Site Plan, was put  
 17 in evidence twice yesterday as exhibits in possibly  
 18 slightly varied forms, 85 and 79.  
 19 Q. And I will ask you if you recognize that  
 20 document?  
 21 A. Yes.  
 22 Q. And what does it show, what is it?  
 23 A. It's a site plan showing the existing  
 24 water treatment plant and all of the new piping  
 25 associated with the Dakin-Yew Pump Station as well

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1 potholed utility line to above the ground surface.  
 2 Q. Okay, and is that to locate the position  
 3 of the underground utility within a certain  
 4 tolerance?  
 5 A. Yes, yes.  
 6 Q. And does it indicate that it should give a  
 7 vertical accuracy of plus or minus one-tenth of a  
 8 foot?  
 9 A. Yes.  
 10 Q. Did you authorize Christenson to proceed  
 11 with those items including the one we just  
 12 discussed?  
 13 A. Yes.  
 14 (Exhibit No. 111 marked for  
 15 identification.)  
 16 Q. 111 is 0008285, I'm going in order here.  
 17 And have you seen this document before?  
 18 A. I believe I have. I don't recall seeing  
 19 it but it's addressed to me.  
 20 Q. Does the sender's name refresh your  
 21 recollection as to the person you dealt with at  
 22 Christenson Engineering?  
 23 A. Yes.  
 24 Q. So you dealt with Pete Harrison?  
 25 A. Yes.

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1 as the location of the Dakin-Yew Pump Station  
 2 itself.  
 3 Q. Now I'm going to ask you to take a pink  
 4 highlighter or marker and trace, if you would, the  
 5 location of the Olympic Pipe Line petroleum products  
 6 pipe in the vicinity of the project. In fact,  
 7 wherever it's depicted on the exhibit?  
 8 A. (Witness complies.)  
 9 Q. And essentially that pipeline then runs  
 10 north to south, west of the pump station facility;  
 11 is that correct?  
 12 A. Yes.  
 13 Q. And is there an existing 16-inch waterline  
 14 shown on the exhibit?  
 15 A. Yes.  
 16 Q. Could you take the blue marker and mark  
 17 the existing 16-inch waterline?  
 18 A. (Witness complies.)  
 19 Q. Do you know whether that waterline passed  
 20 over or under the Olympic Pipe Line petroleum  
 21 products pipeline at the place they intersected?  
 22 A. It passed over.  
 23 Q. And do you know approximately in what year  
 24 the 16-inch water line had been put in that  
 25 position?

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1 Q. Has Barrett Consulting Group or Earth Tech  
 2 used the services of Christenson Engineering on  
 3 other projects than the Bellingham water project?  
 4 A. I have no knowledge of other use.  
 5 Q. Does that indicate that you haven't dealt  
 6 with Christenson Engineering except on this one  
 7 project?  
 8 A. That's correct.  
 9 (Exhibit No. 112 marked for  
 10 identification.)  
 11 Q. Would you help us by reading the ET Bates  
 12 stamp number and seven digits for that document?  
 13 A. 0008271.  
 14 Q. And is this a letter you have seen before?  
 15 A. I have to assume I have, I don't recall it  
 16 but it's addressed to me.  
 17 Q. And again does it reflect the fact that  
 18 potholing was going to be undertaken to determine  
 19 the location of underground utilities or other  
 20 objects?  
 21 A. Item three indicates that they are going  
 22 to locate and show nine more or less proposed  
 23 potholes of existing utility lines.  
 24 Q. And again does it show the, they're to be  
 25 taken with a vertical accuracy of plus or minus

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1 A. No.  
 2 Q. Did you understand that it was some years  
 3 before this project?  
 4 A. Yes.  
 5 Q. I'm going to ask you to use a yellow  
 6 highlighter and show us the location of the pump  
 7 station itself?  
 8 A. (Witness complies.)  
 9 Q. Green highlighter, and show us the 72-inch  
 10 water main that was to be installed to cross the  
 11 Olympic Pipe Line petroleum products pipeline?  
 12 A. (Witness complies.)  
 13 Q. Now there has been discussion in earlier  
 14 depositions of 24-inch pipes. Is there more than  
 15 one 24-inch pipe leading into or out of the  
 16 Dakin-Yew Pump Station?  
 17 A. There are two.  
 18 Q. And where are those located?  
 19 A. One comes in in a, basically from the  
 20 north kind of southerly, crossing the Olympic  
 21 pipeline into the Dakin-Yew Pump Station.  
 22 Q. Okay?  
 23 A. That is a supply line to the pumps. And  
 24 then --  
 25 Q. Could that also be termed a suction line?

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1 A. Yes.  
 2 Q. Would you draw that in orange?  
 3 A. (Witness complies.)  
 4 Q. Okay.  
 5 MR. BENINGER: And the orange refers to  
 6 which one?  
 7 THE WITNESS: The suction.  
 8 MR. ALLEN: It's the suction line.  
 9 Q. Does that suction line cross as it was  
 10 planned when this exhibit was prepared?  
 11 Let me just skip back and ask you when was  
 12 this exhibit prepared in the form you see it?  
 13 A. October 1993.  
 14 Q. Is this essentially the arrangement of  
 15 pipes and lines on which the contractors bid when  
 16 the project was placed to bid in January of 1994?  
 17 A. Yes.  
 18 Q. Is there another 24-inch line?  
 19 A. Yes.  
 20 Q. And I will ask you to trace it on that  
 21 site plan using the same yellow marker that you used  
 22 to mark the pump station itself?  
 23 A. (Witness complies.)  
 24 Q. And as designed, what is the purpose of  
 25 that line?

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1 bidding the project and the contractor who actually  
 2 performed the project?  
 3 A. Yes.  
 4 Q. Would both the plan view and the elevation  
 5 location of the Olympic pipeline be significant  
 6 information to the contractor who was bidding the  
 7 job?  
 8 A. Yes.  
 9 Q. To what degree did the work done by  
 10 Christenson Engineering relate to the locating of  
 11 the Olympic Pipe Line pipe on Exhibit 113 and  
 12 Exhibit 84?  
 13 A. On Exhibit 113, I see two of the several  
 14 pothole locations over the Olympic pipeline. It  
 15 shows these horizontally where the potholing  
 16 occurred and then on this exhibit, the elevation of  
 17 the crown of the Olympic pipeline is shown. That  
 18 is, the elevation of the crown of that pipe.  
 19 Q. I'm going to ask you to mark those two  
 20 locations in blue pen where the potholing is  
 21 indicated?  
 22 A. (Witness complies.)  
 23 MR. BENINGER: Would you mind showing that  
 24 to the camera, the whole thing, just have the  
 25 witness do it, if you could.

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1 A. That's the pump station discharge to the  
 2 distribution system.  
 3 Q. And it ties into the preexisting 16-inch  
 4 waterline that you have drawn, colored in by request  
 5 in blue; is that correct?  
 6 A. Yes.  
 7 Q. And was that junction of the 24-inch  
 8 discharge line and the 16-inch waterline to be a  
 9 T-pipe fitting?  
 10 A. Yes.  
 11 Q. And where is that, where was that fitting  
 12 to be located in respect to the Olympic Pipe Line  
 13 petroleum products pipeline?  
 14 A. East, east thereof.  
 15 Q. And about how far east, if it's possible  
 16 to tell?  
 17 A. I think it was about 20 feet.  
 18 Q. In any case, it was not going to pass over  
 19 the Olympic pipeline as the project was planned at  
 20 the end of 1993 when it was ready to be bid; is that  
 21 correct?  
 22 A. You are speaking of the 24-inch discharge?  
 23 Q. The 24-inch discharge line and the  
 24 T-intersection?  
 25 A. That's correct.

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1 Q. Do you want to hold that up toward the  
 2 camera so we can see what has been done. I was  
 3 thinking the scale might be too small.  
 4 MR. BENINGER: They'll just zero in on it.  
 5 THE VIDEOGRAPHER: Would you like me to  
 6 zero in on it?  
 7 MR. FINEGOLD: Please.  
 8 MR. SCANLAN: Do you want me to point to  
 9 the two circles?  
 10 MR. BENINGER: That would be great. The  
 11 two circles that he's pointing to represent the  
 12 circles you drew where the potholing of the Olympic  
 13 pipeline was; is that correct?  
 14 THE WITNESS: Yes.  
 15 MR. BENINGER: And the pipeline itself,  
 16 you draw in in the pink color.  
 17 THE WITNESS: Yes.  
 18 MR. BENINGER: And you made the kind of  
 19 yellow color was the Dakin-Yew Pump Station?  
 20 THE WITNESS: Yes.  
 21 MR. ALLEN: And the 24-inch discharge  
 22 line.  
 23 THE WITNESS: Yes.  
 24 MR. BENINGER: And then up above you drew  
 25 in the what you called the 24-inch suction line,

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1 Q. Just for a moment I'm going to ask you to  
 2 look at Exhibit 84 which was placed in evidence in  
 3 an earlier deposition which is titled drawing number  
 4 C3 72-inch inlet pipeline plan and profile.  
 5 For what purpose was this document  
 6 prepared?  
 7 A. It's a companion drawing with Exhibit 113.  
 8 Q. And what does it show?  
 9 A. It shows a plan view of the 72-inch  
 10 pipeline from the water treatment plant to the new  
 11 16-million gallon reservoir and the associated  
 12 pipeline profile.  
 13 Q. Will you take a moment and tell us whether  
 14 the Olympic petroleum products pipeline is shown on  
 15 that plan?  
 16 A. It is shown.  
 17 Q. Okay, and in what manner is it shown and  
 18 can you sort of direct us to it?  
 19 A. It is shown in the plan view as it crosses  
 20 or as the 72-inch crosses it, it's shown in plan  
 21 view where that crossing occurs. And then in the  
 22 profile, it is shown in relationship to the crossing  
 23 of the 72-inch pipe over the Olympic pipeline.  
 24 Q. Was that exhibit one of the documents that  
 25 was made available to contractors who would be

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1 correct?  
 2 THE WITNESS: Yes.  
 3 MR. BENINGER: And the blue color  
 4 represents the 16-inch waterline; is that right?  
 5 THE WITNESS: Yes.  
 6 MR. BENINGER: Thank you.  
 7 MR. SCANLAN: And the pink.  
 8 MR. BENINGER: The pink is the pipeline,  
 9 correct?  
 10 MR. SCANLAN: Yes.  
 11 THE WITNESS: The Olympic petroleum  
 12 products pipeline.  
 13 MR. WEIGEL: Can I ask a question by way  
 14 of clarification?  
 15 MR. ALLEN: Yes.  
 16 MR. WEIGEL: The two elevations circled in  
 17 blue pen, do those represent two areas where  
 18 potholing occurred? Or are those the only two  
 19 areas?  
 20 THE WITNESS: I believe it's --  
 21 THE VIDEOGRAPHER: Please pull the sheet  
 22 back about a foot, it's focused on where your head  
 23 is. Yes, that's it, okay.  
 24 (Discussion held off the record.)  
 25 MR. ALLEN: Mr. Weigel, you had a

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1 question.  
 2 MR. WEIGEL: My question was are those  
 3 areas where the potholing occurred? Or are those  
 4 the only areas where potholing occurred?  
 5 MR. ALLEN: With respect to the Olympic  
 6 Pipe Line petroleum products pipeline?  
 7 MR. WEIGEL: Correct.  
 8 THE WITNESS: I believe it's two of three  
 9 or four.  
 10 MR. BENINGER: Thank you, Mr. Nordby.  
 11 Q. (Mr. Allen) In respect to the manner in  
 12 which files were maintained at Barrett and Earth  
 13 Tech, can you tell me whether there were any of the  
 14 materials kept electronically, that is, in computer  
 15 memory as opposed to paper records?  
 16 A. I don't believe there were any electronic  
 17 files at that time.  
 18 Q. Were any of the plans with respect, or  
 19 drawings with respect to this project done by  
 20 computerized systems for design?  
 21 A. The plans were computer aided drafting,  
 22 used computer aided drafting software.  
 23 Q. Were there within that system a mechanism  
 24 for keeping records of those plans that were drafted  
 25 by computer assistants in a computerized form, in

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1 electronic form of any kind?  
 2 A. Well, these plans are all plotted with a  
 3 computer driven plotter. So yes, in order to draft  
 4 them, they are, there's electronic digital record  
 5 and you plot them.  
 6 Q. I guess what I'm trying to find out is  
 7 whether there is existing today any computer memory  
 8 or electronic record of this design project?  
 9 A. That I don't know.  
 10 Q. Who within your company would we turn to  
 11 to find out that information?  
 12 A. Our drafting CAD technicians.  
 13 Q. And by name, is there a person that comes  
 14 to mind that might have that information?  
 15 A. Mike Nonas.  
 16 Q. How is his surname spelled?  
 17 A. N-O-N-A-S.  
 18 Q. And he's at the Bellevue office of Earth  
 19 Tech?  
 20 A. Yes.  
 21 Q. Who was the successful bidder for the  
 22 Dakin-Yew Pump Station project?  
 23 A. Imco Construction.  
 24 Q. Did you have any direct dealings with Imco  
 25 Construction Company?

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1 A. Yes.  
 2 Q. What was the nature of those dealings?  
 3 A. Discussing typically issues that involved  
 4 maybe cost or some interpretation of the plans and  
 5 specifications that the company's field  
 6 representatives maybe couldn't agree on or something  
 7 of this nature.  
 8 Q. Typically who was your contact at Imco  
 9 General Construction Company?  
 10 A. The names do not come to mind. They may  
 11 but they aren't now.  
 12 Q. Was there a preconstruction meeting  
 13 between the city and Barrett and Imco and possibly  
 14 other interested parties?  
 15 A. It wasn't called a preconstruction meeting  
 16 but there was what was called a partnering event.  
 17 Q. Were you invited to the partnering event?  
 18 A. Yes.  
 19 Q. And did you attend it?  
 20 A. Yes.  
 21 Q. Were any representatives of the Olympic  
 22 Pipe Line Company invited to that meeting, the  
 23 partnering event?  
 24 A. I don't know.  
 25 Q. Do you recall any being in attendance?

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1 A. I don't know.  
 2 Q. Were there, following that partnering  
 3 meeting, were there project meetings from the outset  
 4 of the project?  
 5 A. Yes.  
 6 Q. Were they on a weekly basis?  
 7 A. Typically, yes.  
 8 Q. Did you attend those weekly project  
 9 meetings routinely?  
 10 A. No.  
 11 Q. Do you recall attending any of them?  
 12 A. Yes.  
 13 Q. And what would be the basis of your  
 14 attendance rather than nonattendance, as it were?  
 15 A. Throughout the project periodically I  
 16 would go to the site for a whole host of reasons.  
 17 And sometimes it would work out that I could  
 18 schedule my visit when there was an on-site weekly  
 19 meeting.  
 20 Q. Did you receive copies of the weekly  
 21 meeting minutes during the course of the project?  
 22 A. I believe I did.  
 23 Q. I'm going to hand you what has been marked  
 24 as Exhibit 103 and represent that it appears to be a  
 25 compilation of weekly meeting minutes and ask you if

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1 that appears to be a document that you have, a set  
 2 of documents that you have seen before and which you  
 3 have reviewed in the course of this project?  
 4 A. I recall these meeting minutes. I'm  
 5 unprepared to say that I was given or reviewed all  
 6 of them but I would expect I did.  
 7 Q. I'm going to call your attention first to,  
 8 I think it's the second of those sets of meeting  
 9 minutes which is dated March 29, 1994. Do you have  
 10 that in hand?  
 11 A. Yes.  
 12 Q. I do not see your name on the list of  
 13 attendees at that meeting. Who were the  
 14 representatives of your company who were there?  
 15 A. John Hatch and Tom Franklin.  
 16 Q. And Mr. Hatch's role again?  
 17 A. He provided the direct, I'll call it  
 18 liaison between our office and the field activities  
 19 and Tom Franklin who worked under John.  
 20 Q. I want you to just look through that  
 21 meeting minute and see if it says anything about the  
 22 location of buried or underground utilities?  
 23 A. I see under a heading schedule where it  
 24 indicates that it's been reported that all utility  
 25 locators have been to the site and a Greg will be

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1 potholing for certain pipelines, 60 and 48-inch  
 2 water pipeline, he will dig up where Imco plans to  
 3 make final connection to the 48-inch line.  
 4 Q. To whom does the first name Greg refer, if  
 5 you know? Can you look at the list of attendees and  
 6 see if there's a Greg?  
 7 A. Oh, Greg was the employee of Imco.  
 8 Q. Do you know whether or not he was the Imco  
 9 foreman on that job?  
 10 A. I do not, I don't recall if he was a  
 11 foreman.  
 12 Q. Did you ever meet Greg Burress during the  
 13 course of the project if you recall?  
 14 A. I don't specifically have recollection.  
 15 Q. I want you to look at the April 5, 1994  
 16 minutes. Again I'll ask you if you attended that  
 17 meeting?  
 18 A. No.  
 19 Q. Can I take a look at that.  
 20 Again under item 6.4 which is captioned  
 21 Schedule, there's a comment which I will ask you to  
 22 read in the record and then I will ask you another  
 23 question about "Paul warned Bill." Do you see where  
 24 that refers to?  
 25 A. Paul warned Bill to be prepared for line

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1 breakage since there's always a risk when digging.  
 2 Q. Do you know who Paul was in that context?  
 3 A. That's Paul Krakenberg.  
 4 Q. And do you know what his role was in the  
 5 project?  
 6 A. Yes, for a certain portion of the project,  
 7 he was the superintendent.  
 8 Q. And who was Bill, if it's indicated?  
 9 A. By the context of the statement and  
 10 looking at the attendance list, I believe that's  
 11 Bill Evans who is the water treatment plant  
 12 superintendent for the city.  
 13 Q. Were there any Olympic Pipe Line  
 14 representatives at any of these weekly project  
 15 meetings so far as you know?  
 16 A. I don't know.  
 17 Q. Were there any Olympic Pipe Line  
 18 representatives in attendance at the weekly project  
 19 meetings that you attended, to your recollection?  
 20 A. No.  
 21 Q. Do you recall being advised during the  
 22 course of the project that the contractor had struck  
 23 underground utilities of any kind?  
 24 A. Would you state that again, please, did I?  
 25 Q. Were you advised during the course of the

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1 the time is approximately 11:31 a.m.  
 2 (Exhibit No. 114 marked for  
 3 identification.)  
 4 THE VIDEOGRAPHER: Back on the record, the  
 5 time is approximately 11:34 a.m.  
 6 Q. I'll ask you, Mr. Nordby, if again this is  
 7 a memorandum you have seen before?  
 8 A. Yes.  
 9 Q. It's copied to you; is that correct?  
 10 A. Yes.  
 11 Q. And it discusses a revised alignment of  
 12 the 24-inch Dakin-Yew Pump Station discharge so that  
 13 it does not cross the 72-inch pipeline.  
 14 Why was it necessary that in the view of  
 15 the contractor that the 24-inch discharge line did  
 16 not cross the 72-inch line? That is, as originally  
 17 shown on Exhibit 113 where you have colored the  
 18 24-inch discharge line in yellow, it crosses over  
 19 the green 72-inch line?  
 20 MR. WEIGEL: Object to the form of the  
 21 question.  
 22 MR. SCANLAN: You still answer.  
 23 A. Exhibit 113 shows the 24-inch pump station  
 24 discharge pipeline going underneath the new 72-inch  
 25 pipeline.

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1 project at any time that the contractor Imco General  
 2 Construction Company had struck buried utilities in  
 3 the course of excavation or digging at the project  
 4 site?  
 5 A. I have a recollection that early in the  
 6 project that a water pipeline was hit.  
 7 Q. Do you have any knowledge of telephone  
 8 utility lines being hit?  
 9 A. I don't have any specific recollection.  
 10 Q. Do you have any recollection of more than  
 11 one waterline having been hit in the course of the  
 12 project?  
 13 A. Nothing that specifically comes to mind.  
 14 Q. Now during the course of the project, was  
 15 any alteration in general design made in respect to  
 16 the location of the pipes entering or leaving the  
 17 Dakin-Yew Pump Station?  
 18 A. Yes.  
 19 Q. And do you recall approximately when a  
 20 change was made? And first, was there more than one  
 21 change of substance in the location of the pipes  
 22 after the project began?  
 23 A. Are you speaking of what I would call  
 24 major pipelines like eight inch or larger?  
 25 Q. Yes, I'm not talking about small household

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1 And, excuse me, what was your question  
 2 again?  
 3 Q. Why was it requested that it not cross --  
 4 and I said over and I should have said under -- the  
 5 72-inch pipeline?  
 6 A. If one looks at Exhibit 84 which shows a  
 7 profile of the 72-inch pipeline and the other  
 8 pipelines crossing over or under that particular  
 9 facility, it shows that one would be required to dig  
 10 within just a few feet of the bottom of that 72-inch  
 11 pipeline in order to install the 24-inch pump  
 12 station discharge pipeline.  
 13 My understanding at the time was that Imco  
 14 said, look, it is more difficult for us to install  
 15 the pipeline as designed and they asked if the owner  
 16 and our office would consider revising the location  
 17 to eliminate the need to go under that new 72-inch  
 18 pipeline.  
 19 Q. And what is the date of the document, the  
 20 memorandum saying that revision is going to be made?  
 21 A. May 3, '94.  
 22 Q. Was a drawing of the relocated 24-inch  
 23 discharge line produced by Barrett Consulting Group?  
 24 A. Yes.  
 25 Q. And it would have been produced sometime

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1 water pipes or anything of that sort?  
 2 A. No, just one.  
 3 Q. Just one?  
 4 A. That I recall.  
 5 Q. Okay, and as you recall it, what was that  
 6 change?  
 7 A. Excuse me?  
 8 Q. As you recall it, what was that change in  
 9 the layout of the pipes?  
 10 A. The contractor requested that they be  
 11 permitted to change the location of the pump station  
 12 discharge pipeline connection to the existing  
 13 16-inch waterline.  
 14 Q. And who undertook the redesign work in  
 15 respect to the relocation of the junction, is that  
 16 the T-intersection of the 24-inch discharge line and  
 17 the 16-inch waterline?  
 18 A. That would have been our office.  
 19 Q. And under whose supervision was that done?  
 20 A. Mine.  
 21 Q. Specifically, who did the design work?  
 22 A. I don't recall.  
 23 Q. Go off the record for just a moment and I  
 24 will find a document.  
 25 THE VIDEOGRAPHER: Going off the record,

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1 after May 3, 1994; is that correct?  
 2 A. Yes.  
 3 MR. BENINGER: Is that 97?  
 4 MR. ALLEN: 97.  
 5 Q. I'm going to hand you what has been marked  
 6 in an earlier deposition as Exhibit 97 which again  
 7 is a Pump Station site plan, and would you tell me  
 8 the date of that plan?  
 9 A. Would you clarify --  
 10 Q. As revised?  
 11 A. Oh, per the revised pipe discharge?  
 12 Q. Yes?  
 13 A. I mean discharge pipe.  
 14 Q. Maybe we'll need a magnifying glass?  
 15 A. It's something 13 '94. But that month  
 16 digit I cannot read on this.  
 17 MR. SCANLAN: Let me see.  
 18 Q. Okay, I'll try to get a better copy in a  
 19 moment.  
 20 THE VIDEOGRAPHER: Mr. Scanlan, would you  
 21 put the mic on your tie in case I need that.  
 22 MR. SCANLAN: Sure.  
 23 THE VIDEOGRAPHER: Thanks.  
 24 Q. (Mr. Allen) Is the 24-inch discharge line  
 25 shown in its newly designed or redesigned location?



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1 A. Yes.  
 2 MR. SCANLAN: Just for clarification,  
 3 you're referring to Exhibit 97?  
 4 MR. ALLEN: 97, isn't it?  
 5 MR. SCANLAN: Thank you.  
 6 MR. ALLEN: Exhibit 97, yes.  
 7 Q. (Mr. Allen) And in respect to the location  
 8 of the Olympic pipeline, where is exhibit -- where  
 9 is the T-intersection relocated?  
 10 A. It's located northerly of the new 72-inch  
 11 pipeline so that crossing under it was eliminated.  
 12 Q. And where is the relocated T-intersection  
 13 placed then in respect to the existing Olympic Pipe  
 14 Line petroleum products pipeline?  
 15 A. Over it.  
 16 Q. So that the T-intersection then is to be  
 17 relocated directly over the Olympic pipeline; is  
 18 that correct?  
 19 A. Yes.  
 20 Q. Does Exhibit 97 actually show the location  
 21 of the T-intersection and the 24-inch discharge line  
 22 and 16-inch waterline as it was built?  
 23 A. No.  
 24 Q. Was there then a further change?  
 25 A. Yes.

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1 Q. And what was the nature of that further  
 2 change?  
 3 A. The construction of the 72-inch pipeline  
 4 coming out of the water treatment plant and going to  
 5 this new reservoir resulted in some very significant  
 6 excavation. And the project plans and specs  
 7 required the contractor to utilize what is called  
 8 low-strength material which is really a very lean  
 9 low-strength concrete. So the area underneath that  
 10 pipeline was filled with this low-strength concrete  
 11 essentially up to the bottom and around up to what  
 12 is called the spring line of the pipe essentially --  
 13 Q. Referring to the 72-inch pipe?  
 14 A. Yes. Given the nature of excavating  
 15 trenches and doing work in the real world, that fill  
 16 material, that low-strength concrete really always  
 17 extends out a bit beyond the sides of the pipe  
 18 you're placing it under. So when the contractor dug  
 19 up close to the 72-inch pipeline, they found that  
 20 the revised design would have caused them to remove  
 21 a bit of that fill, concrete fill material in order  
 22 to locate the T per the revised design. So they  
 23 asked and permission was granted to move it slightly  
 24 further to the north, it was a foot or two or  
 25 something like that.

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1 Q. Could it have been two or three feet  
 2 further north?  
 3 A. I do not know.  
 4 Q. Okay, and was that further field change in  
 5 the location of the T-intersection between the  
 6 16-inch waterline and the 24-inch discharge line  
 7 permitted or agreed?  
 8 A. It was permitted.  
 9 Q. Do you know whether or not some additional  
 10 excavation had to be accomplished in order to move  
 11 that intersection that two or three feet?  
 12 A. I don't believe so.  
 13 Q. If the daily inspection reports indicated  
 14 to the contrary, would you think they were correct?  
 15 A. Yes.  
 16 Q. I'm going to hand you what has been marked  
 17 as Exhibit 94 in Mr. Franklin's deposition and I'll  
 18 ask you if you are familiar with that document?  
 19 A. Yes.  
 20 Q. And what is it? There are two pages, what  
 21 is the first page?  
 22 A. The first page is a contract clarification  
 23 request made by Greg V. something from Imco General  
 24 Construction. And it has my response to that  
 25 request.

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1 Q. What is the date of the request for  
 2 modification?  
 3 A. July 7, '94.  
 4 Q. Do you have any recollection of the date  
 5 in '94 in which the placement of the T-intersection  
 6 between the 16-inch waterline and 24-inch discharge  
 7 was to be put in place?  
 8 A. Would you say that again, please.  
 9 Q. That's probably a very bad question.  
 10 Do you have any recollection of the date  
 11 that was scheduled in the project schedule for the  
 12 placement of the T-joint in the 16-inch waterline?  
 13 A. No.  
 14 Q. I'm going to ask you to go back to the  
 15 project minutes, if you would, and look at the  
 16 minutes for June 21 of 1994. And if there is a  
 17 schedule attached, look at the schedule. If not,  
 18 just see if there is some reference there as to the  
 19 date on which the tie in between, or the date on  
 20 which the T-joint is to be placed in the 16-inch  
 21 water line?  
 22 A. Under status and clarifications, there's  
 23 an item 15.3 which says that the tie-in of the  
 24 24-inch T into the 16 line will be postponed to the  
 25 seventh of July.

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1 THE VIDEOGRAPHER: We have got five  
 2 minutes left on the tape before we need to move to  
 3 the next one.  
 4 MR. ALLEN: I think we'll use two or three  
 5 minutes and take a break at that point.  
 6 Q. So that the date of the memorandum we were  
 7 just looking at -- if you will tell me the exhibit  
 8 number, I would appreciate it.  
 9 MR. SCANLAN: Are you referring to the --  
 10 Q. -- memorandum, Exhibit 94.  
 11 -- is the very day that the T-joint is to  
 12 be put in place in the 16-inch water main; is it  
 13 not?  
 14 A. (Nods).  
 15 Q. You will have to make an audible answer?  
 16 A. Yes.  
 17 Q. Was the date of some concern in scheduling  
 18 in part because the city water service was affected  
 19 to some degree by having to shut the 16-inch line  
 20 down?  
 21 A. Would you state the question again.  
 22 MR. ALLEN: Could you read that back, I've  
 23 forgotten what I've said.  
 24 (The record was read back by the  
 25 reporter.)

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1 A. I'm sorry, I don't understand the question  
 2 about scheduling.  
 3 Q. Would the 16-inch waterline at that  
 4 location have to be shut in order to put the T-joint  
 5 in place?  
 6 A. Yes.  
 7 Q. And would the city water department have  
 8 to schedule that in advance as you understand the  
 9 project?  
 10 A. They would dictate when the line could be  
 11 shut down.  
 12 Q. When did you respond to the request that  
 13 you received dated the seventh?  
 14 A. Well, it looks like I responded to it the  
 15 same day.  
 16 Q. Do you note that the date of the response  
 17 to have initially been written as July 10, 7/10, and  
 18 then the ten was crossed out and seven put in?  
 19 A. Yes.  
 20 Q. Do you know what the explanation is for  
 21 that change?  
 22 A. I don't have any notion.  
 23 Q. Okay, we'll take a break.  
 24 THE VIDEOGRAPHER: This is the end of tape  
 25 number one in the deposition of George Nordby. The

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1 time is approximately 11:53 a.m., going off the  
 2 record.  
 3 MR. ALLEN: Change the tape and start up  
 4 after lunch.  
 5 (Luncheon recess taken.)  
 6  
 7  
 8  
 9  
 10  
 11  
 12  
 13  
 14  
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 16  
 17  
 18  
 19  
 20  
 21  
 22  
 23  
 24  
 25

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1 Exhibit 97?  
 2 A. Pump Station Site Plan.  
 3 Q. Does this document show the design change  
 4 of location of the T-intersection between, or the  
 5 T-joint between the 24-inch discharge line and the  
 6 16-inch waterline?  
 7 A. Yes.  
 8 Q. Do you know who would have drawn this  
 9 section with the sort of cloud motif around it?  
 10 A. No.  
 11 Q. Okay, what does that sort of cloud motif,  
 12 that is, a series of semi circles or arcs bordering  
 13 a portion of the drawing, indicate to you?  
 14 A. The cloud encircles a revision to the  
 15 contract drawings. That revision is noted by the  
 16 little circle arrow graphic with a "3" in it. And  
 17 in the lower left-hand corner of Exhibit 97, you  
 18 will notice that it gives, there's a revision block  
 19 where it gives date, number of revision and  
 20 description and who it was by. And the item number  
 21 three signifies this is revised pump station  
 22 discharge pipe.  
 23 Q. And who did that revision?  
 24 A. Well, I signed, my initials are there  
 25 meaning I had direct responsibility for that

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1  
 2  
 3 AFTERNOON SESSION  
 4  
 5  
 6 THE VIDEOGRAPHER: Back on the record.  
 7 This is the beginning of tape number two in the  
 8 deposition of George Nordby, the time is  
 9 approximately 1:19 p.m.  
 10  
 11 EXAMINATION (Cont'd)  
 12 MR. ALLEN:  
 13 Q. Mr. Nordby, before we broke for lunch, we  
 14 were talking about the change of the location of the  
 15 T-joint to the 16-inch waterline from the 24-inch  
 16 discharge line. And as I understand it, the design  
 17 or the redesign started in May of 1994 and the  
 18 actual work was done about July 7. Does that accord  
 19 with your recollection, having looked at the  
 20 documents?  
 21 A. I believe the construction would have  
 22 occurred something subsequent to July 7, is my  
 23 understanding.  
 24 Q. Okay, do you recall looking at the  
 25 memorandum minutes of the meeting of July, the

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1 revision.  
 2 Q. Referring to Exhibit 115 and taking a pink  
 3 marker, would you mark the location of Olympic Pipe  
 4 Line's pipeline, that is, the petroleum products  
 5 pipeline?  
 6 A. (Witness complies.)  
 7 Q. As relocated then, does the T-intersection  
 8 as designed sit above the Olympic Pipe Line  
 9 petroleum products pipeline?  
 10 A. Yes.  
 11 Q. Was consideration given to that factor  
 12 during the relocation phase?  
 13 A. Yes.  
 14 Q. What coordination, if you know, was  
 15 carried out with Olympic Pipe Line in respect to  
 16 locating its pipeline at the position where the  
 17 T-joint was relocated?  
 18 A. I don't recall.  
 19 Q. Who would have had the obligation in your  
 20 view, or the duty, of contacting or coordinating  
 21 with Olympic Pipe Line in respect to this revision  
 22 in the project design?  
 23 A. I'm going to answer that in two parts.  
 24 Number one, due to the fact, due to the information  
 25 that Christenson Engineering provided to us during

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1 weekly project meeting of July 21?  
 2 MR. WEIGEL: June 21?  
 3 MR. ALLEN: June 21, excuse me.  
 4 Q. June 21.  
 5 A. Regarding?  
 6 Q. Regarding the scheduling of the date for  
 7 the T-joint being put in place?  
 8 A. The postponement noted in the minutes up  
 9 to July 7?  
 10 Q. Yes?  
 11 A. Yes.  
 12 Q. Do you have any reason to believe that the  
 13 work was done on any other date by July 7?  
 14 A. I have no recollection.  
 15 (Exhibit No. 115 marked for  
 16 identification.)  
 17 Q. Have you seen the document that's been  
 18 marked as Exhibit 115 before?  
 19 A. I assume that this is a portion of one of  
 20 the contract drawings for the project.  
 21 Q. Handing you Exhibit 97, does it appear to  
 22 represent a portion of the area depicted in the  
 23 drawing that is Exhibit 97?  
 24 A. Yes.  
 25 Q. And once again, what is the title of

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1 the predesign topographic mapping and the potholing  
 2 and locating elevations and horizontal location of  
 3 utilities, we knew that the Olympic pipeline was  
 4 measurably below this location of the 16-inch  
 5 water.  
 6 So in terms of design, we knew there was  
 7 no conflict. The second part of my response is that  
 8 with respect to the actual digging and coordinating  
 9 construction activities, that would have been Imco's  
 10 responsibility based upon the specifications that we  
 11 earlier referenced this morning.  
 12 Q. At that time in 1994 that this  
 13 repositioning of the T-joint was permitted, did you  
 14 undertake any coordination with Olympic Pipe Line  
 15 concerning the repositioning?  
 16 A. Are you saying earlier in the project?  
 17 Q. In 1994, between May and July when this  
 18 redesign was being contemplated and then put in  
 19 effect, did you contact Olympic Pipe Line concerning  
 20 the repositioning of the T-joint?  
 21 A. I don't recall any contact.  
 22 Q. Do you know whether anyone else at Barrett  
 23 might have done so, or would have done so?  
 24 A. I don't recall any.  
 25 Q. Did you undertake to determine whether the

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1 contractor Imco General Construction Company made  
 2 any contact with Olympic Pipe Line concerning the  
 3 relocation of the T-joint?  
 4 A. No, I don't recall any.  
 5 Q. You testified this morning that you did go  
 6 to Bellingham on occasion during the progress of  
 7 this project?  
 8 A. Yes.  
 9 Q. Did you go to Bellingham at the time of  
 10 this revision in the piping design?  
 11 A. No.  
 12 Q. Did you have any discussions with the City  
 13 of Bellingham representatives concerning this  
 14 modification in design?  
 15 A. I don't recall any specifics, any specific  
 16 communication.  
 17 Q. I'll ask you to look through Exhibit 104  
 18 again which is the utilities coordination file and  
 19 see if there is any reference there to this  
 20 modification in the way of the Olympic pipeline  
 21 location.  
 22 A. You are asking if there is any reference  
 23 to this relocation?  
 24 Q. Reference to this relocation in your  
 25 company's files.

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1 Q. And do I understand that you never saw the  
 2 ruptured gas pipe in location?  
 3 A. No.  
 4 Q. You did not see it?  
 5 A. I did not see it.  
 6 Q. What were the events that during the  
 7 project took you to Bellingham?  
 8 A. I can only answer it in general. There  
 9 were just periodic times when periodically I would  
 10 just go up and discuss things with Tom Franklin  
 11 and/or John Hatch, the city, the contract, just to  
 12 keep in touch with the project as opposed to being  
 13 in the Bellevue office.  
 14 Q. And I take it then you would on occasion  
 15 have gone out to the project site?  
 16 A. Yes.  
 17 Q. Would you have looked at the locators for  
 18 various utilities, did you observe those while you  
 19 were there?  
 20 A. I recall the, these like four-by-fours or  
 21 two-by-fours that were placed in the potholes. I  
 22 mean they're sticking up early on in construction, I  
 23 remember seeing them.  
 24 Q. Aside from being vertical pieces of lumber  
 25 coming out of the ground, were there any markers of

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1 MR. SCANLAN: Are you asking any reference  
 2 with respect to the City of Bellingham or just in  
 3 general?  
 4 Q. In general.  
 5 A. I only see correspondence in the file that  
 6 dates '93 and earlier. So the answer would be no.  
 7 Q. And earlier we discussed the change even  
 8 to this redesign that shifted the location of the  
 9 T-joint another two feet or so north along the  
 10 Olympic Pipe Line right-of-way; do you recall that?  
 11 A. Yes.  
 12 Q. And was it your testimony that you didn't  
 13 know whether or not further excavation had to be  
 14 accomplished in order to accommodate that two to  
 15 three-foot shift?  
 16 A. Your question is did I comment on whether  
 17 there was additional excavation?  
 18 Q. Do you know whether or not additional  
 19 excavation was required in order to accommodate that  
 20 two to three-foot shift in the T-joint location?  
 21 A. I don't know.  
 22 Q. In the instance of that field change in  
 23 position, would there have had to be, to have been  
 24 coordination with Olympic Pipe Line, in your view?  
 25 MR. SCANLAN: Object to the question as

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1 any sort on them?  
 2 A. That I don't recall.  
 3 Q. And do you recall seeing any flags or  
 4 signs along pipeline or buried utility courses?  
 5 A. I don't.  
 6 Q. When you went to Bellingham shortly after  
 7 the June 10 incident, who did you speak to while you  
 8 were there?  
 9 A. City staff.  
 10 Q. Who on the city staff, if you recall?  
 11 A. Ken Thomas, Tom Rosenberg, Rory Routhie,  
 12 Kay Powers, Jeff Smith, Bill Evans, Ray Bailey, and  
 13 there's another gentleman whose name is escaping me  
 14 now.  
 15 Q. Did you have discussions with those  
 16 individuals or any of those individuals concerning  
 17 the excavations which had occurred during the 1994  
 18 project?  
 19 A. Yes, I believe at some point in time they  
 20 were wondering, everyone was wondering, what had  
 21 happened. So in that context, there was discussions  
 22 from A to Z.  
 23 Q. And what was the substance of the  
 24 discussion as you recall it as to what had happened?  
 25 A. Well, no one knew. I mean it was just, it

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1 vague. Are you referring to the two-foot shift or?  
 2 Q. The two-foot shift.  
 3 MR. SCANLAN: Strike the objection.  
 4 A. That shift was a horizontal shift which  
 5 would not have brought the construction any closer  
 6 or further away from the Olympic pipeline.  
 7 Q. Do you know what the vertical distance was  
 8 between the bottom of the T-joint and the top of  
 9 Olympic Pipe Line's 16-inch petroleum product pipe?  
 10 A. I cannot recite to you an exact distance  
 11 but I believe it was one to two feet.  
 12 Q. Did you go to the site after the June 10,  
 13 1999 incident?  
 14 A. Yes.  
 15 Q. Were you there during the period of  
 16 excavation of the pipe in the location of the  
 17 rupture in the pipe?  
 18 A. No.  
 19 Q. When did you go there?  
 20 A. I believe I was, I was going to say I was  
 21 there June 11 but it might have been a day or two  
 22 later.  
 23 Q. Had any of the excavation of the pipe  
 24 commenced at that time?  
 25 A. No.

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1 was just, what happened? No one knew what happened.  
 2 Q. How did the 1994 excavation for the  
 3 project factor into that discussion, what was said  
 4 about it?  
 5 A. My recollection is that everyone on site  
 6 acknowledged that there was this construction  
 7 activity and could it be something associated with  
 8 the construction activity.  
 9 Q. During the progress of the project, during  
 10 the late spring and summer of 1994, was there  
 11 friction between the contractor and Barrett as  
 12 consultant and to the city, and the city?  
 13 A. The only thing that I specifically recall  
 14 is that some of Imco's field staff felt that they  
 15 were not getting good office support, that is,  
 16 staffing support and the degree of support they  
 17 wished they had from their home office.  
 18 Q. Was there any concern about the project  
 19 completion date manifested during that summer?  
 20 A. I don't recall.  
 21 Q. Thank you, Mr. Nordby, I have no further  
 22 questions.  
 23 MR. BENINGER: I'll be more than happy to  
 24 ask a few questions unless somebody else wants to  
 25 jump in.

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1  
2 EXAMINATION  
3 MR. BENINGER:  
4 Q. Mr. Nordby, my name is --  
5 THE VIDEOGRAPHER: Let's get you on mic,  
6 sir.  
7 Q. I represent the plaintiffs in this matter,  
8 the families of the two boys. And I have a few  
9 questions I want to ask you. I want to back up and  
10 get a big picture, if I could, and ask you what was  
11 the purpose of the two different contracts that were  
12 going on, one was for a new reserve tank and the  
13 other one was for the pump station, why was this  
14 being done?  
15 A. Oh, the 16-million gallon reservoir, the  
16 city needed that facility for two reasons. One, to  
17 provide a level of treatment that has to do with the  
18 time of contact of a disinfectant with the water to  
19 kill bacteria, protozoa and cysts and so on.  
20 Coupled with that, they have had a problem with  
21 being able to run their treatment plant at a  
22 constant rate due to insufficient storage out in the  
23 system. So this additional 16-million gallons now  
24 allows them to set their plant at a fixed rate and  
25 run that plant 24 hours, 48, whatever, at a constant

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1 A. Both the Dakin and Yew zones are higher in  
2 elevation so that water has to be pumped from the  
3 main zone that downtown is on, up to these higher  
4 hills. And that's the purpose of the station.  
5 Q. And so when we have an inflow and a  
6 discharge line, it's really to give extra power or  
7 pump through --  
8 A. Well, raise water to a higher elevation.  
9 Q. Was that pump station, what was used  
10 before the pump station was in place to pump that  
11 water?  
12 A. There was an in-plant pump station.  
13 Q. In the treatment plant itself?  
14 A. That was physically located in the  
15 treatment plant.  
16 Q. And was the Dakin-Yew Pump Station to  
17 replace that in-plant pump station?  
18 A. Yes.  
19 Q. And the water, the treated water would  
20 then flow through the Dakin-Yew Pump Station in  
21 order to be transported?  
22 A. Yes.  
23 Q. And it wouldn't be treated or mixed or  
24 tampered with at all when it was through the pump  
25 station?

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1 rate, which makes the treatment efficiency better  
2 than if you have to change the rate of the  
3 throughput through the plant.  
4 Q. So would the water that's in the new tank  
5 be treated or untreated water?  
6 A. That's treated water. Well, --  
7 Q. And is it treated in the tank?  
8 A. The disinfection treatment is in the  
9 tank. The treatment plant is removing the dirt and  
10 turbidity out of the water. But the tank is  
11 disinfection only.  
12 Q. So is the first step that the water would  
13 come through the treatment plant itself?  
14 A. Yes.  
15 Q. And then after that, it would be  
16 transported over to the two storage tanks in order  
17 to have the disinfectant applied?  
18 A. Just the 16-million gallon tank. The  
19 second steel tank further to the west, that tank is  
20 connected downstream of this 16-million gallon tank.  
21 Q. And what is the purpose of the second  
22 tank, to --  
23 A. It's just storage. I mean it's just  
24 storage as we see storage tanks throughout cities,  
25 just another storage tank.

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1 A. No.  
2 Q. One of the discussions that we had earlier  
3 with Mr. Franklin had to do with the -- let me back  
4 up. In the Dakin-Yew Pump Station, there was what I  
5 will call a north 24-inch line and a south 24-inch  
6 line coming into and out of the plant, correct?  
7 A. Yes.  
8 Q. And we had some discussion with Mr.  
9 Franklin as to which one of those was the discharge  
10 and which one was the input line. Do you understand  
11 there's been some discussion on that?  
12 A. Yes.  
13 Q. Have you been able to clear that up at  
14 all?  
15 A. Do you mean with Mr. Franklin?  
16 Q. How about with us, could you clear it up  
17 with us as to which line is the discharge and which  
18 line is the input?  
19 A. Okay, the 24-inch pipeline that goes  
20 through the pipe that was relocated through this  
21 subject T that's been under discussion, that is the  
22 discharge of the pump station.  
23 Q. So south --  
24 A. To the south.  
25 Q. -- of the pump station itself would be

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1 Q. Is it storing the water that has already  
2 been disinfected --  
3 A. Yes.  
4 Q. -- by the 16 million, and then it goes to  
5 the smaller tank to be stored there; is that right?  
6 A. Yes.  
7 Q. Now we have talked about the 16-inch line  
8 which passed over the Olympic Petroleum pipeline and  
9 where the 24-inch discharge line was connected to,  
10 correct?  
11 A. Yes.  
12 Q. What was carried, what product was carried  
13 in that 16-inch line?  
14 A. The T that we have been talking about  
15 connects to a 16-inch line. If you go one  
16 direction, it goes up to what is called the Dakin  
17 area or Alabama Hill area. And if it goes the other  
18 direction, it goes to the Yew Street area, the other  
19 hill to the I think that's the southwest.  
20 Q. Water is being carried --  
21 A. Yes, treated water.  
22 Q. And that's my next question. It was  
23 already treated water; is that right?  
24 A. Yes.  
25 Q. What purpose did the pump station serve?

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1 what we could call a discharge line?  
2 A. Yes.  
3 Q. And that is what we have talked an awful  
4 lot about, that's where it connects with the 16-inch  
5 line, correct?  
6 A. Yes.  
7 Q. And then north would be the input line?  
8 A. Yes.  
9 Q. And would that feed also off the 16-inch  
10 or what would that feed off of?  
11 A. No, that's a 24-inch suction or input line  
12 was coming off of the line, I believe a 48-inch  
13 diameter line that goes into town and serving their  
14 entire service area.  
15 Q. There's also a line that we haven't talked  
16 about very much but there was a utility duct line  
17 that was in the general area. And why don't I do  
18 this, if you wouldn't mind looking at Exhibit No.  
19 115, you have yours there, do you see what is  
20 labeled as the 12-inch PVC utility duct?  
21 A. Yes.  
22 Q. Would you mind labeling that, use the  
23 orange marker if you could, and label that for us,  
24 please.  
25 A. (Witness complies.)

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1 Q. Have you labeled the 12-inch PVC utility  
 2 duct line?  
 3 A. Yes.  
 4 Q. What product did that carry?  
 5 A. That carried chlorine solution from the  
 6 chlorine disinfection feed system in the treatment  
 7 plant to the, I think it was called the, this isn't  
 8 the exact name but it was a chlorine vault which  
 9 transmitted that solution to diffusers in the  
 10 16-million gallon reservoir.  
 11 Q. So is this 12-inch PVC utility duct line a  
 12 new line that was going to be added during this  
 13 project?  
 14 A. Yes.  
 15 Q. And the product was exclusively chlorine  
 16 or was there other chemicals involved?  
 17 A. No, there were other -- I believe there  
 18 were, well, I'm not going to say. There were, I  
 19 believe there were some sample lines traversing that  
 20 utility duct, meaning the city has little pumps that  
 21 would pump samples so they can test at various  
 22 locations in their system.  
 23 Q. Now the 12-inch PVC utility duct line,  
 24 that would transverse or cross the Olympic pipeline  
 25 as well?

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1 A. Yes.  
 2 Q. And the 24-inch discharge line that made a  
 3 T into the 16-inch waterline also crossed the  
 4 Olympic pipeline, correct?  
 5 A. Yes.  
 6 Q. You mentioned earlier but can you tell me  
 7 approximately what the vertical clearance between  
 8 the T of the 24 and 16-inch discharge line was from  
 9 the Olympic petroleum pipeline, vertical clearance?  
 10 A. Well, I don't recall the actual distance  
 11 other than to say I believe I indicated, my  
 12 recollection is that it was one to two feet of  
 13 clearance.  
 14 Q. And how does that correspond with the  
 15 requirements that Olympic Pipe Line gave you all at  
 16 the beginning of the project for clearance in  
 17 crossing their petroleum pipeline?  
 18 A. I don't recall that number.  
 19 Q. I have read through part of your interview  
 20 that you did under oath with the NTSB and I was  
 21 looking, I guess it was page nine, well, I guess it  
 22 started on page eight. And it was talking about the  
 23 general requirements as to how they related, in fact  
 24 let me just show you. I will give you the bottom of  
 25 page eight and the top of page nine, see if that

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1 refreshes your recollection as to the requirements  
 2 that were provided by Olympic Pipe Line for  
 3 clearance, the vertical clearance between the pipe  
 4 that you would be installing and their pipeline?  
 5 MR. SCANLAN: Counsel, do you remember  
 6 that we have that exhibit here today?  
 7 MR. BENTINGER: Oh, did we mark that?  
 8 MR. SCANLAN: Yes, that was in the packet  
 9 prepared this morning in the utilities file, the  
 10 document is there.  
 11 MR. ALLEN: Oh, okay.  
 12 Q. Go ahead and read it and see if that  
 13 refreshes your recollection.  
 14 A. Line one on page nine refers to a minimum  
 15 of one foot of clearance.  
 16 Q. And is that your recollection as to what  
 17 the requirements were from Olympic as to the  
 18 clearance between the piping you were putting in and  
 19 the piping out there?  
 20 A. I can only say it was then. I have no  
 21 reason to change it.  
 22 Q. What was the vertical clearance between  
 23 the 12-inch PVC utility duct line and the Olympic  
 24 petroleum pipeline?  
 25 A. I believe that duct was way above, I mean

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1 much farther removed from the Olympic pipeline  
 2 because that was just a shallow, I believe that was  
 3 a shallow line.  
 4 Q. Do you know how many feet or do you have  
 5 any recollection at all?  
 6 A. No, I would have to look at the plans.  
 7 Q. What was the horizontal distance between  
 8 the location where the T-intersection between the 16  
 9 and 24-inch actually was placed in, and the 12-inch  
 10 PVC line?  
 11 A. Would you state that again, please.  
 12 Q. Sure, I want to know how far apart  
 13 horizontally the 12-inch PVC line was from the  
 14 T-intersection between the 16 and 24-inch lines?  
 15 A. Based upon the scale of Exhibit 97, and I  
 16 don't have a scale with me but just looking at it, I  
 17 believe that it's probably 10 to 15 feet.  
 18 Q. And that would then be reduced by the two  
 19 feet that you ended up moving it further towards,  
 20 further north or further towards the 12-inch line in  
 21 actuality as the as-built, correct?  
 22 A. Yes.  
 23 Q. And when the 12-inch PVC line was placed  
 24 in, did you take any steps to help locate the  
 25 Olympic pipeline?

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1 A. I do not know.  
 2 Q. Do you know if the I'm going to call it  
 3 the trench or the Olympic petroleum pipeline was  
 4 exposed the entire distance between where the  
 5 T-intersection was and all the way up to the 12-inch  
 6 PVC line?  
 7 A. The photos I have seen would indicate that  
 8 the excavation did not extend to the 12-inch utility  
 9 duct.  
 10 Q. Do you know when the water treatment plant  
 11 itself was built?  
 12 A. I believe it came on line in 1966.  
 13 Q. Do you know if they were doing  
 14 construction on the water treatment plant before or  
 15 after the Olympic petroleum pipeline was placed?  
 16 A. I have been told that the Olympic pipeline  
 17 had been constructed prior to the city building the  
 18 treatment plant and that due to some critical  
 19 parameters on locating for pressure and getting the  
 20 water in and out of the plant, that the plant really  
 21 needed to be over the Olympic pipeline and that that  
 22 is why today we see the line coming from the north,  
 23 it turns 90 degrees and goes to the west, and then  
 24 turns south and then curves around the southern  
 25 corner of the plant. And that that accommodation,

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1 that line was relocated so that the water treatment  
 2 plant could be built where it needed to be built due  
 3 to hydraulic requirements.  
 4 Q. Do you know between 1966 and 1994, was  
 5 there work that was done out and around the water  
 6 treatment plant that would have caused any piping to  
 7 crisscross the Olympic pipeline?  
 8 A. I'm not aware of any that our office  
 9 designed.  
 10 Q. In going through the design that you did,  
 11 did you have to do some historical search to see  
 12 what was out there and what had been done?  
 13 A. Yes.  
 14 Q. Did you come across any other construction  
 15 activity from the time that the water treatment  
 16 plant was first put in in approximately 1966 up  
 17 until the construction or reconstruction that you  
 18 were doing in 1993 and '94 and '95?  
 19 A. I don't recall any, I think all that work  
 20 had been performed in the '40's, '50's, '60's.  
 21 Q. Did the mapping that Olympic Pipe Line  
 22 gave you in doing the design, did you feel that was  
 23 adequate?  
 24 A. I'm going to answer the question by saying  
 25 that it's kind of moot because we rely on the field

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1 location of utilities and not a map.  
 2 Q. Is one of the reasons that you had to do  
 3 the field location of the utilities is because the  
 4 mathematical information supplied by Olympic Pipe  
 5 Line was inadequate?  
 6 A. I recall seeing that in some memo but I  
 7 don't recall any, I don't recall any details about  
 8 that.  
 9 Q. That's all I have, thank you, sir.  
 10 (Discussion held off the record.)  
 11  
 12 EXAMINATION  
 13 MR. VERWOLF:  
 14 Q. Mr. Nordby, my name is Nick Verwolf, I  
 15 represent Equilon Enterprises and Equilon Pipeline  
 16 Company in this matter. I only have a few questions  
 17 for you. Were you ever on site on the project when  
 18 the excavation was being done for the 24 to 16-inch  
 19 T south of the pump station?  
 20 A. No.  
 21 Q. So you observed nothing about that  
 22 excavation?  
 23 A. No. That's correct.  
 24 Q. I would like you, I believe it's Exhibit  
 25 103.

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1 MR. SCANLAN: I'm sorry, Exhibit?  
 2 MR. VERWOLF: 103.  
 3 A. Oh, here it is.  
 4 Q. That's not the one I want, I'm sorry.  
 5 114, I guess it is.  
 6 A. 114, I've got it right here.  
 7 Q. Yes. Referring you to what has been  
 8 marked Exhibit 114, there is a bullet point that  
 9 says revise vertical alignment of 72-inch pipeline  
 10 to clear existing 16-inch waterline.  
 11 Why did that have to be done?  
 12 A. Right off the top, I don't know. I would  
 13 need to refresh my memory.  
 14 Q. Had the 16-inch waterline been located by  
 15 this Christenson Engineering prior to you preparing  
 16 the design plans?  
 17 A. Excuse me?  
 18 Q. Had the 16-inch waterline been located for  
 19 purposes of preparing your drawings, by Christenson  
 20 Engineering?  
 21 A. Yes.  
 22 Q. Were there errors in the locations in  
 23 Christenson Engineering's information?  
 24 A. That's what I do not recall.  
 25 Q. Who would have done this revision?

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1 A. Our office would have made the revision.  
 2 Q. What are you looking for, sir?  
 3 A. The exhibit that has the profile, the  
 4 72-inch plan and profile, I'm not seeing that  
 5 exhibit.  
 6 Q. I think it's 84. Yes, look at Exhibit 84,  
 7 do you have that?  
 8 A. Not yet, it's coming.  
 9 Q. Okay, the 72-inch inlet pipeline plan and  
 10 profile. Now is there anything on that that would  
 11 indicate why there would be a need for a revision?  
 12 A. I am drawing a blank on this but have this  
 13 to offer. On Exhibit 84, in the profile, you'll  
 14 notice there is a, between station four and five,  
 15 there is a note on the 16-inch water that says  
 16 relocate as required. Because that line is right  
 17 smack dab in the middle of the 72-inch.  
 18 Q. So the initial plans contemplated moving  
 19 the 16-inch waterline?  
 20 A. Yes.  
 21 Q. And instead you moved the 72-inch  
 22 pipeline?  
 23 A. Well, that's what this -- I don't know,  
 24 there's some revision that occurred to the 72-inch  
 25 pipeline to clear the existing water. That's, I do

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1 not recall anything more than these words.  
 2 Q. Would there be some drawing that would  
 3 indicate this revision?  
 4 A. I don't recall any.  
 5 Q. How would the contractor know how to  
 6 revise the alignment if there wasn't some other  
 7 drawings done?  
 8 A. Well, there would either be a drawing or  
 9 some field directive or memo to communicate to the  
 10 contractor. I've not seen it here today.  
 11 Q. If you would look at what was marked  
 12 Exhibit 115. 115, if I'm correct, indicates the  
 13 revision made with regard to the 24-inch discharge  
 14 line?  
 15 A. Yes.  
 16 Q. Was there any potholing done or probing  
 17 done at that point to determine the location of that  
 18 in conjunction with the OPL pipeline?  
 19 A. I'm not aware of any.  
 20 Q. Do you know whether there was any  
 21 directive to do such?  
 22 A. No, I don't.  
 23 Q. Did you issue any sort of directive to  
 24 assure clearances at that point?  
 25 A. I don't recall any.

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1 Q. So after this redesign, did you or anyone  
 2 you know of at BCG direct Imco to notify Olympic  
 3 regarding the new area of excavation?  
 4 A. I don't recall me giving a directive and I  
 5 do not know if Hatch or Franklin gave such  
 6 directive. I would not expect them to because an  
 7 owner needs to be careful of what to direct the  
 8 contractor to do.  
 9 Q. I'm sorry, I don't follow that?  
 10 A. Well, I mean a contractor runs his  
 11 operation, he's responsible for certain things. And  
 12 the design engineer usually does not tell the  
 13 contractor how to run his ship.  
 14 Q. Well, you were aware when you did the  
 15 redesign that you were placing this T immediately  
 16 over the Olympic pipeline, correct?  
 17 A. Yes.  
 18 Q. And in conjunction with that, did you see  
 19 any responsibility to advise the contractor or  
 20 remind the contractor of his duty to advise Olympic  
 21 of this?  
 22 A. Well, I know that the awareness was there  
 23 because I had been told by Mr. Franklin that at the  
 24 time they were digging, they stopped using a backhoe  
 25 when they got down to the 16-inch waterline. And

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1 then Imco used shovels to dig around the pipe and  
 2 prepare for the installation of the T to take  
 3 efforts to avoid getting near to the Olympic  
 4 pipeline.  
 5 Q. When did Mr. Franklin tell you that?  
 6 A. My first recollection was during the  
 7 course of construction, and he recently mentioned  
 8 that again to me.  
 9 Q. You say he recently said that again to  
 10 you. How recently, when?  
 11 A. I think in the context of our scheduling  
 12 for these depositions.  
 13 Q. Prior to his deposition? His deposition  
 14 started yesterday?  
 15 A. Yeah.  
 16 Q. So was it sometime prior to his  
 17 deposition?  
 18 MR. SCANLAN: You can say so, it's all  
 19 right.  
 20 A. I think it was. I'm pretty sure because  
 21 yesterday was Monday.  
 22 Q. Right?  
 23 A. Yes, it had to be before.  
 24 Q. Okay. Do you recall when it was before?  
 25 Last week, week before that?

1 A. It would have been, yes, it would have  
 2 been very recently.  
 3 MR. SCANLAN: Just half a minute.  
 4 (Sotto voce discussion between witness and  
 5 counsel.)  
 6 A. Okay. Terry reminds me it was when Terry  
 7 was meeting with us to discuss the deposition  
 8 process.  
 9 Which was last week, I believe.  
 10 MR. SCANLAN: (Nods).  
 11 Q. And it was during the course of this that  
 12 Mr. Franklin was describing to you what took place  
 13 during the excavation?  
 14 A. (Nods).  
 15 Q. You have to say yes?  
 16 A. Yes.  
 17 Q. And did you say you -- do you have a  
 18 present recollection of him telling you the same  
 19 thing during the construction?  
 20 A. Yes, I have a recollection.  
 21 Q. And what is that recollection?  
 22 A. Well, I remember something about digging,  
 23 being careful, stopping the backhoe, and then Imco  
 24 used mud sticks to do some work around that T  
 25 connection area.

1 was July 14, had you been interviewed by the NTSB or  
 2 any other federal investigator?  
 3 A. No.  
 4 Q. After July 14 and before you had a meeting  
 5 with some folks who have been described as the  
 6 Department of Justice, did you have any discussions  
 7 with any federal investigators, either Office of  
 8 Pipeline Safety, EPA, US Attorneys Office, any  
 9 federal officials?  
 10 A. No.  
 11 Q. Do you recall specifically when your  
 12 meeting with the federal officials was? I think you  
 13 said May of this year, possibly?  
 14 A. Yes.  
 15 THE WITNESS: Terry, I don't remember the  
 16 month, it was in the last month or two --  
 17 MR. SCANLAN: I couldn't tell you.  
 18 Q. So either April or May of 2000?  
 19 A. Yes, this spring.  
 20 Q. And where did the meeting take place?  
 21 A. It occurred in their temporary location.  
 22 MR. SCANLAN: US Attorneys Office.  
 23 A. Yes, downtown here.  
 24 Q. And you had only one meeting?  
 25 A. It seems to me I had to come two days,

1 Q. Do you recall something about a 4-inch  
 2 drain line being installed at the T to drain the  
 3 16-inch waterline as part of the installation  
 4 project?  
 5 A. No, I do not.  
 6 Q. Were there actual as-builts done for the  
 7 project after it was completed?  
 8 A. Yes, I'm quite, I believe we did that as  
 9 part of our work for the city.  
 10 Q. Those would have been provided to the  
 11 city?  
 12 A. Yes.  
 13 Q. You indicated in response to Mr. Beninger  
 14 that you had seen some photos. What photos were you  
 15 referring to that you had seen?  
 16 A. Well, our inspectors like Mr. Franklin,  
 17 they take hundreds of pictures during a project of  
 18 this nature. So I'm referring to just our file  
 19 photos.  
 20 Q. I have nothing further.  
 21  
 22 EXAMINATION  
 23 MR. FINEGOLD:  
 24 Q. Mr. Nordby, my name is Larry Finegold. I  
 25 represent Ron Brentson who is a defendant in this

1 didn't I. Yes, because you had an afternoon  
 2 appointment.  
 3 MR. SCANLAN: (Nods).  
 4 A. So we could only go in the morning and  
 5 came back, it was rescheduled later.  
 6 Q. And in the, was it in the Federal  
 7 Courthouse or in their offices?  
 8 A. No, in their office.  
 9 Q. And subsequent to the second day of  
 10 meetings, did you have any further contact or have  
 11 you had any contact with federal officials?  
 12 A. No.  
 13 Q. Can you tell us approximately how long the  
 14 first of those two sessions lasted?  
 15 A. About two hours.  
 16 Q. And the second session?  
 17 A. I'm going to say about another two hours,  
 18 possibly three.  
 19 Q. And how many days apart were those two  
 20 meetings?  
 21 A. I think about ten days, two weeks.  
 22 Q. I have no other questions. Thank you.  
 23  
 24 EXAMINATION  
 25 MR. WEIGEL:

1 case. Did you speak with Mr. Franklin last evening  
 2 after he completed his testimony?  
 3 A. No.  
 4 Q. Did you speak with him this morning?  
 5 A. Yes.  
 6 Q. Did you discuss with him the kinds of  
 7 questions you were asked and answers he gave?  
 8 A. He made a comment, something like it was  
 9 kind of what he expected.  
 10 Q. Did he talk specifically about any  
 11 particular questions that were asked and how he  
 12 answered them?  
 13 A. He did mention about this discharge and  
 14 suction piping. And I said, well, you've got it  
 15 mixed up.  
 16 Q. Okay, did he talk anything about the  
 17 placement of the T over the waterline -- or the  
 18 Olympic pipeline, excuse me?  
 19 A. It seems to me he said that he felt that  
 20 the questioning was just getting to that point.  
 21 Q. Sir, you have indicated that sometime in  
 22 1999, I think in July, you testified before the  
 23 NTSB?  
 24 A. (Nods).  
 25 Q. And prior to that appearance which I think

1 Q. Mr. Nordby, my name is Doug Weigel, I'm  
 2 here on behalf of Imco General Construction. I'm  
 3 going to ask you a series of follow-up questions  
 4 with regard to some of these exhibits and the  
 5 testimony that you have given thus far today.  
 6 I'll start with Exhibit No. 97, this is  
 7 the Pump Station Site Plan showing the third  
 8 revision, the revision of the 24-inch discharge  
 9 line.  
 10 A. 97?  
 11 Q. Exhibit 97. And while you're looking at  
 12 that, if I could also have you refer to Exhibit No.  
 13 84 which is the 72-inch inlet pipeline plan and  
 14 profile. Do you have those both in front of you?  
 15 A. Yes.  
 16 Q. Was it your understanding that a profile  
 17 was to be prepared at each location where the  
 18 Olympic pipeline was to be crossed?  
 19 A. No, I don't know anything about that -- I  
 20 don't recall anything about that.  
 21 Q. In going through the project plans, I've  
 22 only come across I think a couple of these pipeline  
 23 profiles. How is it determined at which location  
 24 the pipeline profiles would be drafted?  
 25 A. Oh, the profiles are drafted where,

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1 literally in the center line of all the new lines.  
 2 So there is the 72-inch profile and there also is an  
 3 accompanying profile that I have not seen here today  
 4 for the 60-inch pipeline.  
 5 Q. I think it's Exhibit 78.  
 6 So there was no reason to prepare a  
 7 profile with regard to the pump station site plan in  
 8 Exhibit 97; am I understanding correctly?  
 9 A. I'm not sure that I understand your  
 10 question.  
 11 Q. I guess the first question should be, was  
 12 a profile ever prepared at the location where the  
 13 revised 24-inch discharge line ties into the 16-inch  
 14 waterline?  
 15 A. Okay, I believe that I saw something here  
 16 that was attached to one of these exhibits, it was  
 17 an 8 1/2 by 11.  
 18 MR. ALLEN: It may be there.  
 19 A. Exhibit 94.  
 20 Q. Okay.  
 21 A. I don't know, I don't know what sheet or  
 22 what this is from, I just am commenting that I  
 23 recalled seeing this this morning attached to  
 24 Exhibit 94.  
 25 Q. Looking at page two of Exhibit 94, I see

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1 center of the page of 256, is that 256 feet?  
 2 A. Yes.  
 3 Q. And is that elevation based on the survey  
 4 work done by Christenson?  
 5 A. Yes.  
 6 Q. Following the Olympic pipeline to the  
 7 south, I see another elevation that indicates, it  
 8 looks like 253.6?  
 9 A. Yes.  
 10 Q. Is that also based on survey work done by  
 11 Christenson?  
 12 A. Yes.  
 13 Q. Is your understanding that the change in  
 14 elevation of the Olympic pipeline is constant so  
 15 that the elevation at any particular point can be  
 16 interpolated?  
 17 A. I think I mentioned earlier that Exhibit  
 18 97 shows two of the Olympic pipeline elevations.  
 19 There is some other exhibit, I believe it was one of  
 20 the survey documents that Christenson provided,  
 21 showed four, one further to the north, one further  
 22 to the south. And therefore those elevations and  
 23 the distance between, one was able to determine how  
 24 that pipeline was traveling in a, you know, up, I  
 25 mean a grade direction.

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1 where the existing 16-inch waterline is noted. Is  
 2 there any representation for the Olympic Pipe Line  
 3 gas pipeline on that drawing?  
 4 A. I don't see any.  
 5 Q. Is that something that you would expect to  
 6 see in that area?  
 7 A. From it being attached to this memo to  
 8 Greg where we're talking about the alignment of the  
 9 pipe and the fittings and all, this is depicting the  
 10 fittings that they needed for this revised  
 11 connection. That's all I think it's depicting.  
 12 Along with, as referenced in the memo itself, this  
 13 potential conflict with this pump station retaining  
 14 wall.  
 15 Q. Okay, I believe you testified earlier that  
 16 in addition to this 24-inch discharge pipe revision  
 17 which is shown in Exhibit 97, that the 24-inch  
 18 discharge line as installed was actually located  
 19 approximately one to two feet to the north of the  
 20 position as shown?  
 21 A. Yes.  
 22 Q. And I believe you also testified that was  
 23 simply a horizontal change, it didn't affect the  
 24 elevation of the --  
 25 A. Correct.

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1 Q. I'm looking at what has been marked as  
 2 Exhibit 108, it's the site survey prepared by  
 3 Christenson. There's a cover sheet on it, it says  
 4 site survey?  
 5 A. Here, I think this is it. 108?  
 6 Q. Correct.  
 7 MR. ALLEN: For the record, I removed that  
 8 sheet that says site survey.  
 9 Q. That's what I had marked 108. Mark my  
 10 site survey.  
 11 Mr. Nordby, if I could direct your  
 12 attention to the Olympic pipeline on this drawing,  
 13 how many locations on that pipeline are shown to  
 14 have been potholed?  
 15 A. I see three.  
 16 Q. Do you know how those pothole locations  
 17 were selected? Was it at your direction?  
 18 A. I don't recall if it was at my direction.  
 19 It would probably be more in the design staff, we  
 20 said, hey, where do we want those, how many do we  
 21 want, and let's have one here because it's near the  
 22 72-inch and let's have one here because it's near  
 23 the 24-inch suction and let's have one here to see  
 24 if the thing is going up or down. And that's trying  
 25 to get a good representation of the location of that

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1 Q. -- of the 24-inch discharge line or the T?  
 2 A. Correct.  
 3 Q. Correct me if I'm wrong here but I believe  
 4 you said the distance between the T-joint, and I  
 5 assume that you are referencing the bottom of the  
 6 T-joint, and the Olympic pipeline, the gas pipeline,  
 7 and I assume you are referencing the crown of the  
 8 pipeline, is somewhere between one and two feet?  
 9 A. That's my recollection. I do not recall  
 10 the feet dimensions that were acquired post June 10,  
 11 '99. That information of course is available.  
 12 Q. Do you know what that recollection is  
 13 based on? You indicated that when you were out  
 14 there after the rupture that it was prior to  
 15 excavation so you didn't observe it in the field.  
 16 Is there any drawing that you can point to?  
 17 A. Well, based upon the elevations of the,  
 18 based upon the elevations, pothole elevations on  
 19 Olympic pipeline and the pothole elevations on the  
 20 16-inch water is what my recollection is based on.  
 21 Q. Actually, that leads me to another  
 22 question. I believe it is shown on Exhibit 97, I  
 23 see two elevations here on the Olympic pipeline?  
 24 A. Yes.  
 25 Q. There's an elevation in the box at the top

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1 facility, that's the purpose.  
 2 Q. Do you know if this is the final site  
 3 survey that was prepared for Barrett Consulting by  
 4 Christenson?  
 5 A. Well, yes, I know this is not the final  
 6 because we are, we have noted on here we want, "Find  
 7 vertical and horizontal locations of top of pipes,"  
 8 I believe that's Tom Collins' handwriting there.  
 9 And this was I believe sent to Christenson, I think,  
 10 this was asking them in one of those memos to  
 11 locate, get the elevations on these. So they would  
 12 have come back with that elevation information for  
 13 us.  
 14 Q. And that's why I assume that this  
 15 particular site survey doesn't have any elevations  
 16 listed by the three pothole locations --  
 17 A. Correct, we're asking for them.  
 18 Q. -- on the Olympic pipeline, okay. So is  
 19 it your understanding that somewhere in your  
 20 documents there should be a site survey identical to  
 21 this but with additional information?  
 22 A. Or a memo with a xerox of a certain  
 23 portion showing that information.  
 24 MR. WEIGEL: Mr. Allen, I apologize, I  
 25 wasn't here yesterday so I'm not sure whether or not



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1 that was introduced into evidence. Do we have that  
 2 in evidence?  
 3 MR. ALLEN: I wasn't here either.  
 4 MR. BENINGER: I don't recall, not that I  
 5 recall.  
 6 MR. SCANLAN: Unless it was in one of the  
 7 bundles.  
 8 (Discussion held off the record.)  
 9 Q. (Mr. Weigel) With regard to the potholing  
 10 that was performed by Christenson Engineering at the  
 11 direction of Barrett Consulting, do you have any  
 12 recollection as to how that potholing, I guess the  
 13 physics of that potholing, how that occurred, what  
 14 was involved?  
 15 A. I was not on site so I can't comment as to  
 16 the specifics for this project.  
 17 Q. Typically in your experience, how is this  
 18 potholing performed?  
 19 A. The backhoe operator and staff that are  
 20 going to do this, they first have someone associated  
 21 with the utility to say okay, horizontally here it  
 22 is. And from as-built drawings or something  
 23 similar, determine this is two feet deep or ten feet  
 24 deep. And then dig with a backhoe measuring as they  
 25 go. And as they get near to where they think the

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1 excavation and the relocation of the 24-inch  
 2 discharge line. Actually I should say relocation  
 3 and then excavation of the discharge line.  
 4 And you answered that in two parts.  
 5 First, I believe you commented on the information  
 6 provided by Christenson and that you knew that the  
 7 pipeline was measurably below the location of the  
 8 16-inch waterline. When you say measurably below  
 9 the location, could you be a little more specific;  
 10 what does that mean to you?  
 11 A. Adequate clearance to make the  
 12 installation without damage to the Olympic pipeline  
 13 is what I, would have been a better way to say it.  
 14 Q. And the second part of that answer I was a  
 15 little unclear on. You said with regard to the  
 16 digging that this would have been the contractor's  
 17 responsibility?  
 18 A. Yes.  
 19 Q. Could you elaborate on that, please.  
 20 A. I would refer to the specifications,  
 21 Exhibit 105, that I quoted from into the record  
 22 earlier this morning.  
 23 MR. ALLEN: I believe then you were  
 24 looking at project requirement 14.  
 25 MR. SCANLAN: It was page 20 or 21.

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1 utility is, then they typically work very gingerly  
 2 from there on. And do a little probing until they  
 3 find the utility.  
 4 Q. Do you know if anyone from Barrett  
 5 Consulting Group was present when Christenson and/or  
 6 the city performed this potholing?  
 7 A. I can't say for sure but I don't think so.  
 8 Q. If somebody from Barrett was present  
 9 during this potholing, who might that be?  
 10 A. Who might it be?  
 11 Q. Right. And I'm not asking you to  
 12 speculate, but?  
 13 A. It could have been Tom Collins. I don't  
 14 know. It would be sheer speculation. I don't think  
 15 anybody was, it's not normally something we would be  
 16 there for.  
 17 Q. Do you know if anyone from Olympic Pipe  
 18 Line was present for that potholing?  
 19 A. I don't know. I cannot say that someone  
 20 was.  
 21 Q. Do you know if anyone from Olympic Pipe  
 22 Line was notified by anybody from Barrett that the  
 23 potholing was going to take place?  
 24 A. I believe, it seems to me that Olympic  
 25 Pipe Line was involved with the location of their

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1 A. Project requirements, page 20.  
 2 Q. Okay.  
 3 A. It's about this much in.  
 4 Q. What is the Bates number on the bottom of  
 5 that page?  
 6 A. 0009985.  
 7 MR. BENINGER: 9985 you said?  
 8 THE WITNESS: Yes.  
 9 Q. Are you referring to paragraph two of  
 10 section 14?  
 11 A. Well, in general, the entire paragraph 14  
 12 was written to just communicate to the bidders  
 13 wherein the owner was placing, what responsibility  
 14 was being given to the bidder -- to the contractor,  
 15 I should say.  
 16 Q. I think I just have one last question. In  
 17 response to a question by Mr. Beninger, he was  
 18 referring to excavation between the T-joint and the  
 19 utility line. Do you have any recollection that the  
 20 Olympic pipeline was exposed in any location between  
 21 the T-joint and the utility duct?  
 22 MR. VERWOLF: Objection, no foundation.  
 23 MR. ALLEN: Objection, form of the  
 24 question.  
 25 MR. SCANLAN: Go ahead and answer.

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1 utility. But I, that's only I guess a vague  
 2 recollection.  
 3 Q. Looking now at Exhibit 104, it's your  
 4 utilities coordination file. In that file, Bates  
 5 numbered -- it's got two numbers on it -- ET 05544  
 6 and 0007749. It's the Ferndale to Portland products  
 7 pipeline drawing?  
 8 A. Yes.  
 9 Q. Do you know if Olympic provided Barrett  
 10 with any additional information regarding the  
 11 elevation of their pipeline in the vicinity of  
 12 Whatcom Creek?  
 13 A. No, I do not.  
 14 Q. And I believe you testified earlier that  
 15 the elevations that were used in the project plans  
 16 were based on field observations?  
 17 A. Yes.  
 18 Q. And not on representations made by  
 19 Olympic?  
 20 A. That's correct.  
 21 Q. In response to a question posed to you by  
 22 Mr. Allen when he was asking you about, I believe he  
 23 asked you who from Barrett would have been  
 24 responsible for contacting or coordinating with  
 25 Olympic Pipe Line. And this was with regard to the

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1 Q. (Mr. Weigel) I'll rephrase the question.  
 2 Do you have any personal knowledge of the Olympic  
 3 pipeline being exposed at the location where the  
 4 24-inch discharge line ties into the 16-inch  
 5 existing waterline?  
 6 A. Meaning was I personally there to observe  
 7 the excavation?  
 8 Q. Were you personally there or did you have  
 9 any conversations with your personnel that were  
 10 there as to whether or not the Olympic pipeline was  
 11 exposed at that location?  
 12 A. I was not personally there, number one.  
 13 And to my recollection at the time of construction,  
 14 there was no, I don't even recall any comment about  
 15 the Olympic pipeline.  
 16 Q. So you don't have any recollection?  
 17 A. Yeah, no recollection of it being observed  
 18 or uncovered.  
 19 Q. Actually I do have one more question. You  
 20 were asked a question twice today and you answered  
 21 it slightly different each time. This had to do  
 22 with again the 24-inch discharge line and the  
 23 modification and the subsequent construction of that  
 24 line a couple feet off from where it's shown in  
 25 Exhibit 97.

1 And the question has to do with whether or  
 2 not additional excavation was required when that  
 3 24-inch discharge line was moved. Is it your  
 4 recollection -- or I'm sorry, strike that.  
 5 Is it your testimony that you don't  
 6 recall? Or you don't have any specific recollection  
 7 whether any excavation, any additional excavation  
 8 was required?  
 9 A. Is your question one of, since the  
 10 two-foot shift in the location of the T required  
 11 like a two-foot shift northerly of the whole? Or  
 12 are you speaking of vertical digging?  
 13 Q. I'm speaking of horizontal digging first?  
 14 A. I don't have any recollection.  
 15 Q. Again because you weren't there?  
 16 A. I wasn't there. To my recollection, there  
 17 were no questions or anything from the field.  
 18 Q. And same with the vertical digging?  
 19 A. Yes. Only in the vertical, there would be  
 20 no reason for additional digging because the  
 21 pipeline was horizontal.  
 22 Q. Okay, I don't have any further questions.  
 23 MR. ALLEN: No questions.  
 24 MR. BENNINGER: Thank you, Mr. Nordby.  
 25 (Deposition adjourned at 2:41 p.m.)

1 I further certify that each witness  
 2 before examination was by me duly sworn to testify  
 3 the truth, the whole truth and nothing but the  
 4 truth;  
 5 I further certify that the deposition, as  
 6 transcribed, is a full, true and accurate transcript  
 7 of the testimony, including questions and answers,  
 8 and all objections, motions, and exceptions of  
 9 counsel made and taken at the time of the foregoing  
 10 examination;  
 11 I further certify that I am sending the  
 12 deposition with the title of the above cause  
 13 thereon; and marking "Deposition" with the name of  
 14 each witness, and promptly delivering the same to  
 15 the proper party.  
 16 Unless otherwise requested, all records  
 17 pertaining to this deposition will be discarded  
 18 three years from today's date.  
 19 WITNESS MY HAND AND SEAL this 27th day of  
 20 June, 2000.  
 21  
 22 LORANE HOHNSTEIN  
 23 Notary Public, in and for the State  
 24 of Washington, residing at Vashon.  
 25 My commission expires 1/29/03.

1 AFFIDAVIT  
 2  
 3  
 4 STATE OF WASHINGTON }  
 5 COUNTY OF KING } ss  
 6  
 7  
 8 I have read my within deposition, and  
 9 the same is true and accurate, save and except for  
 10 changes and/or corrections, if any, as indicated by  
 11 me on the CORRECTIONS page hereof,  
 12  
 13 GEORGE NORDBY  
 14  
 15  
 16 SUBSCRIBED AND SWORN to before me this  
 17 day of , 2000.  
 18  
 19 Notary Public, in and for the  
 20 State of Washington, residing at  
 21  
 22 My commission expires  
 23  
 24 Lorraine Hohnstein  
 25 Court Reporter

1 CERTIFICATE  
 2 STATE OF WASHINGTON }  
 3 COUNTY OF KING } ss  
 4 I, the undersigned Notary Public in and  
 5 for the State of Washington, do hereby certify:  
 6 That the annexed and foregoing deposition  
 7 of each witness named herein was taken  
 8 stenographically before me and reduced to  
 9 typewriting under my direction;  
 10 I further certify that the deposition was  
 11 submitted to each said witness for examination,  
 12 reading and signature after the same was  
 13 transcribed, unless indicated in the record that the  
 14 parties and each witness waive the signing;  
 15 I further certify that all objections  
 16 made at the time of said examination to my  
 17 qualifications or the manner of taking the  
 18 deposition, or to the conduct of any party, have  
 19 been noted by me upon said deposition;  
 20 I further certify that I am not a  
 21 relative or employee or attorney or counsel of any  
 22 of the parties to said action, or a relative or  
 23 employee of any such attorney or counsel, and that I  
 24 am not financially interested in the said action or  
 25 the outcome thereof;

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