

**Appendix B**

**Dakin-Yew Water Treatment Plant Modification Records**

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

## PRECONSTRUCTION MEETING AGENDA

CITY OF BELLINGHAM  
DAKIN-YEW PUMP STATION, ET AL  
January 25, 1994

69  
Witness Franklin DATE 6-19-00  
Susan Cannon  
Court Reporter  
622-5110

1. Introduction of attendees.
  - o Name/roll in project
2. Establish lines of communications.
  - o Important to have good lines of communication to avoid misunderstandings or incorrect information
  - o All project management communications and correspondence through Chris Hart (IMCO) and John Hatch (BCG)
  - o Field communications through Greg Burress (IMCO) and Tom Franklin (BCG)
  - o Emergency contact/phone number for City, IMCO, and BCG
3. Coordination with other utilities (PR 14).
  - o U.S. West Communications
    - Contact person/phone number/emergency phone number
    - Coordination for relocation of telephone conduit
    - Determine date required for relocation
  - o Olympic Pipeline Company
    - Contact person/phone number/emergency phone number
    - Requirements for protection of pipeline
    - Notification when working in pipeline right of way

ET 04518

ET 0006723

4. Review initial construction schedule.
  - o Establish Day 1 of Contract
  - o Mobilization
5. Review time of completion (PR 1) and maintenance of operation (PR 12)
  - o Clearwell work completed by April 30, 1994
  - o Completion of yard piping and connections by September 30, 1994
  - o Shutdowns per PR 12. Coordinate with Tom Franklin and Bill Evans
6. Construction Site access (PR 8).
  - o Use cemetery access whenever possible, subject to approval of Baugh Industrial
  - o Restrict use of Silver Beach Road
  - o Staging and storage area per PR 8
7. Construction staking (PR 7)
  - o Owner provide:
    - Clearing limits
    - Two TBMs
    - Pipeline centerline staking
    - Two Pump Station corners
8. Coordination with other project (PR 10).
  - o Meet with Baugh Industrial
  - o Additional Contractor for Waste Site closure

ET 04519

ET 0006724

9. Processing of Project Data (PR 6).
  - o Submit to BCG using forms provided earlier
  - o Submit only items specifically listed in Technical Specs
  - o IMCO must review prior to submitting to BCG
10. Progress Payments (GR 1-09.9) (PR 11).
  - o Establish cutoff date 25th
  - o Periodic quantities determined in the field
  - o Material on hand must be on site with invoice
  - o Lump Sum price breakdown
11. Other items

ET 04520  
ET 0006725

U.S. WEST.

WHO GETS BILLED. EST. \$5061

CITY PROVIDES TRENCH

Call Emulsion

1 WEEK NOTICE FOR PAVEMENT RESOLUTION

2-3 DAYS IN CITY TRENCH

OLYMPIC HAS DELIVERED POWDER TO IMCO.

FEBRUARY IS NTP

IMCO WILL WORK 4 TRENCH 7:00 - 5:30

CITY WILL HAVE 23 GATE/DOOR KEYS

PARKS WANT ABOUT 15,000 CY OF WASTE - JOHN VORNY

ET 04521

ET 0006726

**PRECONSTRUCTION MEETING ATTENDEES**

CITY OF BELLINGHAM  
 DAKIN-YEW PUMP STATION, ET AL  
 January 25, 1994

NAME	COMPANY	ADDRESS	PHONE
Tam Franklin	Barrett		9151665
Roy KATRER	TRAVIS ELEC.		671-3000
Chris Hart	IMCO		671-3936
PAUL KRAKENBERG	IMCO		671-3936
Joel Miller	US West		739-1232 - Cell, 676-7932 - Office
STEVE SKUHRA	US WEST	1201 W. FOREST BELLINGHAM 98225	676-7955
Guy Bunsell			671-3936
Dean Jarvin			739-0339 MOBILE 671-3936 OFFICE
Bill McCourt			676-6850
WAN HUNG			676-6761
Bill Evans	City of Bellingham		676-6592
RAY BILLY	"	"	676 6937

77 DATE 6-19-00  
Franklin  
Susan Cannon  
Court Reporter  
822-3110

MEMORANDUM

To: Chris Hart, IMCO General Construction  
From: John Hatch, Barrett Consulting Group  
Date: May 3, 1994  
Proj. No: 14324120  
Subject: City of Bellingham  
Dakin-Yew Pump Station, et al  
Pending Changes

The following is a tabulation of contract changes which are currently under design. This is provided for your information.

- Revise vertical alignment of 72-inch pipeline to clear existing 16-inch waterline.
- Revise alignment of 24-inch Dakin-Yew Pump Station discharge so it does not cross the 72-inch pipeline.
- Revise Manifold Vault to prevent flotation and infiltration due to high groundwater.
- Revise alignment of 60-inch pipeline in the Pipeline Corridor to avoid conflict with actual location of existing pipelines.

When the design is completed for each item, a request for a cost proposal with appropriate documents will be sent to you. This list does not contain some minor modifications which will be identified in separate letters.

cc: Wan Huang, City of Bellingham  
Bill Evans, City of Bellingham  
George Nordby  
Ron Dorn  
Tom Franklin

ET 03984

ET 0006189

Meeting Minutes

DAKIN YEW WEEKLY PROJECT MEETING #11  
MAY 10, 1994

ATTENDANCE:

Chris Hart	IMCO
Paul Krakenberg	IMCO
Greg Burress	IMCO
Jane Campbell	IMCO
John Hatch	Barrett Consulting Group
Tom Franklin	Barrett Consulting Group
Bill Evans	City of Bellingham
Wan Huang	City of Bellingham

ISSUES AND ACTION ITEMS

11.1 Tom asked if IMCO got any results from the backfill inspection? Paul replied yes it passed at all levels.

10.1 The contractor will make contact with Anvil from now on for compaction testing. John will straighten out with Anvil the routes of the results. Anvil should give the results to Barrett. IMCO may have a copy as well.

SUBMITTALS.

*Imco Has Electrical Submittals For BARRETT.*

STATUS OF CLARIFICATIONS

WORK QUALITY

The issue of payment for C.D.F. came up and it was determined that Barrett would pay by truck ticket.



### SCHEDULE

9.3 The daily meetings have been taking place between Bill, Tom and Greg.

11.2 The delivery dates for pipe sections are: 2 on Wednesday, 2 on Thursday and 3 on Friday. Barrett will have their corrosion people spot checking the pipe coating.

### SAFETY

10.3 Bill suggested putting plywood along side the soda ash pile along the wall to keep the bags from falling over. IMCO will be doing so today.

11.3 Tom asked if the fence shouldn't be bolted at top for rigidity? Greg replied yes, the bolts have not been put in yet.

11.4 Barrett called to have L & I come out and inspect the Pump Station excavation. It is their policy to call L & I whenever they don't feel the site is safe. IMCO complied with L & I regulations and had a P.E. inspect and design our slopes. It was asked that in the future more notice is given to IMCO about Barrett's concerns. IMCO would also like the opportunity to call L & I on their own.

### IMPACTS ON PLANT OPERATIONS

*Basement Floor Needs to Be cleaned up.*

### COSTS, BUDGETS AND PAY ESTIMATES

11.5 John asked IMCO if they have the breakdowns ready? Paul replied he will have them for John next Tuesday.

## COMMENTS

- 5.8 The power bill was sent to the Guide Meridian office.
- 9.9 The cemetery arch will be down for approximately 4 months. IMCO will re-install.
- 10.7 Paul will have an updated organizational chart next Tuesday. Dianne Kilwein will not be replacing Wan for this project since he is staying in his current position.
- 10.8 Chris asked if it would be a problem if IMCO needed to work an extra day? Bill replied no if you give sufficient warning so he can arrange to have the gate closed after the working day.
- 11.6 John said the last shutdown was successful but he noticed the door was installed backwards. It was shown to have been installed according to the plans. IMCO will provide a way for the door to be opened from the east side.
- 11.7 Chris raised the issue of markups, he said accounting produces the overhead figures and they will be provided. John Hatch will look at them.
- 11.8 John expressed his concerns regarding the final grading requirements. Greg said he has a worker leveling out on a dozer today. John said the upper bench is higher than it is suppose to be. Paul asked if IMCO is responsible for all waste materials? John replied IMCO is only responsible for the material it disposes of.
- 11.9 Greg asked John if the Gas company is O.K. about the CDF? John said he spoke to Steve at Olympic Pipe Line and their main concerns are cathodic protection and excavating again.



EXH. 116 DATE 6-22-00  
Witness Franklin  
Court Reporter  
622-9110

**Barrett Consulting Group**

Offices throughout the Western United States  
and the Pacific Islands

10800 Northeast 8th Street  
Seventh Floor  
Bellevue, Washington 98004  
206 455-9494  
Fax 206 453-9470

Civil and  
Environmental  
Engineers  
Planners  
Surveyors

May 16, 1994

Mr. Chris Hart  
IMCO General Construction, Inc.  
4509 Guide Meridian  
Bellingham, WA 98226

14324120

Re: City of Bellingham  
Dakin-Yew Pump Station, et al.  
Piping Modifications  
Serial Letter No. 14

Dear Chris:

We have revised the connection point for the 24-inch discharge line from the Dakin-Yew Pump Station from south of the 72-inch pipeline to north of it. This revision was made at your request to avoid crossing under the 72-inch line. It also allows more flexibility in when the connection to the existing 16-inch pipe is made. We believe this modification will result in a reduction in installation and material cost.

We have also revised the vertical alignment of the 72-inch pipeline from Station 3+95 to Station 4+64. This was done at your request to avoid the need to relocate the existing 16-inch waterline, as indicated on the plans. We believe this modification will also result in a reduction in installation and material cost.

Because of interference with the existing pipelines, we have revised the alignment of the 60-inch pipeline from Station 5+95 to the connection with the existing 48-inch waterline. We believe this modification will result in no change to installation and material cost.

Two copies of the following drawings are enclosed. These drawings reflect the above revisions.

- Drawing No. C-1, Revision No. 2
- Drawing No. C-2, Revision No. 2
- Drawing No. C-3, Revision No. 3
- Drawing No. C-4, Revision No. 2
- Drawing No. C-5, Revision No. 2
- Drawing No. C-10, Revision No. 3
- Drawing No. P-1, Revision No. 3
- Drawing No. P-9, Revision No. 2
- Drawing No. P-10, Revision No. 2
- Drawing No. P-11, Revision No. 2

14324120.024



IMC 0002445



Mr. Chris Hart  
May 16, 1994  
Page 2

In addition, two copies of a sketch titled Partial Profile, Pump Station Discharge is enclosed for your use. This sketch is intended to clarify the new vertical alignment of the 24-inch pipeline.

Please provide a credit cost proposal for the above modifications. Your proposal must include a detailed breakdown of labor, materials, and equipment.

Please submit your proposal as soon as possible. If accepted by the City, this adjustment to the Contract will be included in the next Contract Change Order.

If you have any additional questions, please call.

Sincerely,

John Hatch  
Construction Services Manager

cc: Wan Huang, City of Bellingham  
Tom Franklin

Meeting Minutes

DAKIN YEW WEEKLY PROJECT MEETING #16  
JUNE 14, 1994

ATTENDANCE:

Paul Krakenberg	IMCO
Greg Burress	IMCO
Jane Campbell	IMCO
John Abb	IMCO
John Hatch	Barrett Consulting Group
Tom Franklin	Barrett Consulting Group
Wan Huang	City of Bellingham
Bill Evans	City of Bellingham

ISSUES AND ACTION ITEMS

SUBMITTALS.

16.1 John asked if Paul had heard anything else regarding the MCC issue. Paul said Triad is going to stay with Allan Bradley. John asked to see the layout drawings Paul said he would get them from Triad.

STATUS OF CLARIFICATIONS

15.3 The tie in of the 24" tee into the 16th line will be the 22nd of this month at 9:00 a.m. The operation will take approximately 4-6 hours. 80% of work will be done on the ground.

WORK QUALITY

16.2 John said there is structural damage done to the building. There are cracks in the walls and floor. These damages are caused by omitting to do the shoring shown on the plans before demo done on upper floor. Greg asked if Barrett has any immediate suggestions. John wants to get with Jim Lutz before advising any action.

ET 02371

ET 0004577

### SCHEDULE

13.3 IMCO will do 2 shifts starting the 20th. John asked for a schedule of these shifts.

16.3 John asked if IMCO would be outside of the safety zone by the end of next week. Paul said we would be excavating back from the tank toward the creek. IMCO will have no problem being far enough away from Baugh by the 28th deadline.

### SAFETY

16.4 The temporary fence was knocked down by kids last night. It will be put back today. Nothing is missing from the site. John Abb will be walking around the site today and will give us his input.

### IMPACTS ON PLANT OPERATIONS

16.5 Bill asked when he will have his lights back. IMCO needs access to the conduits still hanging in the slab. Once the debris is cleared Triad will hook the power back up. John suggested perhaps temporary lighting would work. There are 3 doors, 2 do not lock. Signs and tape may blow away. John Abb will look into it.

### COSTS, BUDGETS AND PAY ESTIMATES

### COMMENTS

SOM GN

ET 02372

ET 0004578

# IMCO GENERAL CONSTRUCTION, Inc.

4503 Guide Meridian □ Bellingham WA 98226  
(206) 671-3336 □ Fax: (206) 671-8308

June 15, 1994

Field Serial Letter No. 5

John Hatch  
Barrett Consulting Group  
10800 N.E. 8th Street, 7th Floor  
Bellevue, WA 98004

Re: Dakin/Yew Pump Station  
"Response to Serial Letter No. 14"

Dear John:

The following is in response to your serial letter number 14. The vertical realignment of the 72" pipe was a mutually beneficial proposal. The 16" line was found to be lower than shown on the plans. IMCO suggested altering the 72" layout to clear the 16" line. Barrett was able to make the necessary design changes. IMCO worked the change into California Pipe Fabricators production schedule. This cooperative effort made it possible for the City to better plan for shutting down the 16" line. The impact to IMCO was that in waiting for a revised plan we had to reschedule our work. In having to pull off and then restart we lost production that cannot be made up. The small material savings is more than offset by this loss in production.

The revised connection point for the 24" discharge line is a direct result of the 72" realignment. This work still remains in the scope of the contract and has not altered substantially. The labor and equipment costs have not changed and the material difference is a wash. It is true that the lineal footage has decreased but the number of fittings increased. The fittings are very expensive and by adding more of them there is no material savings that necessitates a credit.

It was our understanding that these changes were made to accommodate field discrepancies from the plans as well as to allow the City to plan for the shutdown. All things considered these changes equal out between the benefits and impacts.

ET 02368

EXH 151  
DATE 6/26/00  
Witness: Court Reporters & Assoc.  
Court Reporter  
622-3110

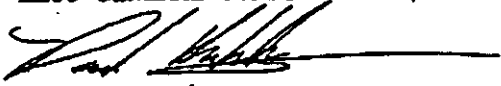
ET 0004574

Barrett Consulting Group  
Field Letter Number 5  
June 15, 1994  
Page 2

I hope this clears up this matter and that we can continue to resolve problems in such a cooperative way.

Sincerely,

IMCO GENERAL CONSTRUCTION, INC.



Paul Krakenberg  
Project Manager

PK:cb

c: 1313/00061

ET 02369

ET 0004575



89 DATE 6-19-00  
Franklin  
Susan Cannon  
Court Reporter  
622-3110

MEMORANDUM

To: Wan Huang, City of Bellingham  
From: John Hatch, Barrett Consulting Group *John Hatch*  
Date: June 16, 1994  
Proj. No: 14324120  
Subject: Dakin-Yew Pump Station, et al  
Pump Station Discharge Connection

Based on discussions with Paul Krakenberg and Bill Evans on Tuesday, I'd like to modify the action outlined in my June 13 memo to you.

IMCO is planning to install the new Pump Station discharge connection to the existing 16-inch waterline on July 7, 1994. Please note that this is a different date than discussed at our June 14 meeting. While IMCO has the materials on hand, they are concerned about having sufficient labor available to complete the work in a timely manner.

In order to complete this connection, the line must be taken out of service. A discussion will be made on July 5 as to when the work can be performed, i.e. during the day or at night. The work required includes draining the line, cutting the line and installation of the new tee, and filling the line. The following is a discussion of each activity and action necessary to complete that activity.

- Based on information previously provided to us, we believed the closest valves were in Lakeway Drive, Iowa Street, and near the Screen House. After reviewing a map recently provided to Bill, it appears the closest valves are near the plant and to the north across Whatcom Creek. If this is the case, our concern regarding the magnitude of work required to drain the lines has been satisfied. IMCO has installed a 4-inch tap on the 16-inch Dakin-Yew line. This tap can be used to drain the line. With the relatively small quantity of water to be drained, it would appear that the services of the Fire Department are not necessary. Also the air release taps recommended in our June 13 memo will not be required.

We recommend reviewing this shutdown with Sarah. She can provide a contingency plan to feed the Dakin Zone in case of an emergency, such as a fire.

We also recommend that the isolation valves be exercised prior to the scheduled shutdown. This will verify that the valves are operating properly, and will not cause a problem during the cut in operation.

Operations staff will need to operate the line valves to isolate the connection. We agreed to close the valves at 9:00am. Opening of the valves will depend on how fast IMCO can perform the connection work. Please coordinate with Operations for appropriate personnel.

- We will discuss installation of the tee/valve assembly with IMCO prior to the work being performed to verify that everything is ready.

cc: Paul Krakenberg, IMCO General Contractors  
Tom Franklin

ET 04508  
ET 0006713

DATE 6-19-00  
Franklin  
Susan Cannon  
Cost Reporter  
620-3110

CONTRACT  
CLARIFICATION/INTERPRETATION REQUEST

REQUEST NO. 45

DATE 7/7/94

PROJECT: Darin yem

PROJECT NO. 1313

CONTRACTOR: Emco general const.

CLARIFICATION/INTERPRETATION REQUESTED BY: Greg Buresh

REGARDING: PLAN SHEET 25 OF 66 DEC SECTION: 2600

RESPOND BY: \_\_\_\_\_

DESCRIPTION: 2' (66) profile for 24"

per my conversation with George Madly on the 24" discharge line we decided due to the fact the CDF next to the 72" conflicted with the RR24T the 24" would be roughly 10' away from pump station instead of the 12' shown & be very close to the retaining wall ftg where it stepped up ~~the~~ this didn't seem to be a problem even if it skinned shown. But if the 24" ended up close to the pump station & passed under the lower retaining wall ftg. we were to run the 24" flat ~~to~~ until the pipe was past the wall then 45° up to the 90° outside the 5'kg please see attached drawings & respond if this is your feeling of what came out of the conversation.

Thank you Greg Buresh

Greg Buresh  
PREPARED BY  
DATE 7/7/94

RESPONSE ASSIGNED TO:

PROJECT MANAGER  PROJECT DESIGN MANAGER

It is OK to move piping 2' closer to end of retaining wall. If this does not work the pipe can be laid flat under the retaining wall and a 45° fitting added as suggested. Note: The desired option is to provide clearance by moving the pipe closer to the footing. If necessary chip away a bit of the CDF to make room for the connection fittings.

Henry R. [Signature]  
DATE 7/21/94

ET 02977



# Inspection Report

Report No. 55

Page \_\_\_\_\_ of \_\_\_\_\_

Date 5-9-94

Project Dakin-Yew Pump Station BCG Project No. B152412

Owner City of Bellingham Contract No. 454-B

Contractor IMCO General Construction Co. Sup't/Foreman Gregg Burress

Crew Size 2 m. 4 labor Subcontractor(s) None

Day: (M) T W Th F Sa S Time Start 7:00 Time Stop 5:30

Site Condition Good Weather Fair Temperature 45-70°

Equipment	Equipment	Equipment
Excavator	Hyster Z90B fork-lift	2 and dump truck 3 hr. ea.
Hitachi EX400CS back-lee	air compressor	
JD 792 back-lee	Cat 950 loader	
JD 410 B back-lee	Kubota KX41	

REPORT (including discussions with Contractor)

Excavation continuing for pump station. Vertical faces are being exposed up to ~15' on all sides within rock strata. I asked Chris but if any shoring will be placed and he said no. After discussing with John Hatch, I called Wash. State L & I representative Darrell Keith, 428-1350 at Mt. Vernon, to arrange a consultation.

I talked to L & I and arranged for inspector to come to site at 9 AM, wednesday 5-11-94. I told him excavation nearly complete but that nobody would go into hole until consultation. I informed Gregg Burress and he will comply. He plans to pour C.D.F tomorrow if possible.

Excavation this PM to expose 16" water and H.P. gas line within 72" pipe alignment. It was done with Cascade Pipeline inspector present. The gas pipe was resting on rock and only native material around pipe was removed.

I contacted Intermountain Corrosion Service to arrange holiday testing of pipe comming to site later this week. Specifics will be arranged today.

1/2

# Inspection Report

Report No. 58

Page \_\_\_\_\_ of \_\_\_\_\_

Date 11-12-94

Project Dakin-Yew Pump Station BCG Project No. B152412

Owner City of Bellingham Contract No. 454-B

Contractor IMCO General Construction Co. Sup't/Foreman Gregg Burress

Crew Size 1 fore, 2 carp, 4 labor Subcontractor(s) None

Day: M T W (Th) F Sa S Time Start 7:00 Time Stop 5:30

Site Condition Good Weather PC Temperature 46-60°

Equipment	Equipment	Equipment
Eric Crane	Hyster Z90B forklift	2 end dump trucks
Hitachi EX400LS back-hoe	air compressor	
JD 792 back-hoe with laser	Cat 950 loader	
JD 410B back-hoe		

### REPORT (including discussions with Contractor)

Continued haul and excavation of 60" x 72" trenches from creek diversion pipe toward pump station.

Kyle Robinson of Intermountain Corrosion Service Holiday tested the two pieces on site. Both have passed Holiday test, but both have mechanical damage, and the piece delivered today, the first all ball + spigot and has a sharp bend at one end, does not have minimum coating, needing 80 mil. minimum, but in the low 70s. I informed Gregg of the unacceptable thickness.

Pour of bottom slab for pump station began ~ 9:30. The only problems remaining when pour began was setting water stop and moving east wall dowels to proper location. The water stop was fixed during pour, but new dowels will be needed as their too close to inside wall face. During the pour, the box placed to block-out for sump floated ~ 2". I informed Gregg and what can be done will be today.

The concrete pour finished at 12 noon. Continued floating and final positioning of water stop took more time. By 1:30, the floor hardener, ~~Sur flex~~ Sur flex by Euclid, and Res-seal cure compound was applied. 10 bags @ 50# and 10 gallons of compound applied.

Once one of the pipe cradles could support the flange/spigot section, CDF was delivered and placed during the PM. No excavation this PM, because the

BCG Field Representative Tom [Signature]

# Inspection Report

Report No. 58

Page \_\_\_\_\_ of \_\_\_\_\_

Date 11-12-94

Project Dakin-Yew Pump Station

BCG Project No. B152412

### CONTINUATION OF REPORT

CDF truck to crane movement superceded. Both the gas line and 16" water line are covered with CDF. Two cradles are in place and CDF delivery lasted till 5:30 PM, placing 96 C.Y. Only minor amount was required.

Much grit from ~~hardening~~ was creating a non-skid surface, rather than smooth surface. The power finisher was used to flatten rough areas. This after the cure/sealer was applied. Several hundred flies were attracted to the acrylic sealer and became part of the finish.

I talked to Gregg Burvess about damage to coating on pipe. It needs to be taken down to metal, reprimed and coated as discussed in the repair specifications.

Empty lined area for additional report content.

# Inspection Report

Report No. 95

Page \_\_\_\_\_ of \_\_\_\_\_

Date 7-5-94

Project Dakin-Yew Pump Station BCG Project No. B152412

Owner City of Bellingham Contract No. 454-B

Contractor IMCO General Construction Co. Sup't/Foreman Gregg Burrese

Crew Size 2 op, 3 sup, 3 labor Subcontractor(s) None

Day: M(T)W Th F Sa S Time Start 7:00 Time Stop 5:30

Site Condition Good Weather PC Temperature 55-70°

Equipment	Equipment	Equipment
<u>Same as 7-1-94</u>		

REPORT (including discussions with Contractor)

Cooper's pour of second level pump station began at 8:10 AM and joint placement procedure went well. Tremies used and ±3' lifts with vibration progressed till a 11:30 completion. The wall top was covered with wet burlap and rebar straightened.

Assembly of ductile pipe Tee for Thursday's 20" pump station tie-in to 16" existing line. Testing will be performed prior to insertion.

Clean-up of sala ash bin foundation from wall removal last week. A minor electrical fire has shut down the Cat 950 loader. No pour tomorrow.

Pump out of large diameter pipe excavation and began wrapping the joints of welded pipe. Rodney Staples is on site this PM, beginning welding of last 6 joints on 2 pipe. Butt strap welding detail indicates a 2" minimum lap at either end of joints, and testing hole drilled. Dewatering and concentrating on bottoms to keep water out is first priority.

# Inspection Report

Report No. 76

Page \_\_\_\_\_ of \_\_\_\_\_

Date 7-6-94

Project Dakin-Yew Pump Station BCG Project No. B152412

Owner City of Bellingham Contract No. 454-B

Contractor IMCO General Construction Co. Sup't/Foreman Eregg Burress

Crew Size 4 carp 2 iron 3 p. Subcontractor(s) None Harbor Mechanical - 2 welders

Day: M T W Th F Sa S Time Start 7:00 Time Stop 5:30

Site Condition Good Weather D/C - Fair Temperature 55-75°

Equipment	Equipment	Equipment
Hitachi back hoe	Hyster fork lift	
JD 792 with bucket	JD 410 B back-hoe	
Cat 956 loader	Free Crane	
Cat 966 loader	air compressor	

REPORT (including discussions with Contractor)

Carpenters working to prepare soda ash foundation for pour this AM, setting 11 AM to start. The concrete showed up at 11 AM but foundation not ready, with half the anchor bolts not set and drain pipe not positioned. It took till 11:35 to arrange everything and begin pouring concrete by wheel barrow. Providing good clearances on steel mats took adjustments and ~~the~~ drain wasn't low enough to be in the concrete. It was lowered, and cement hardener applied, then acrylic compound.

Excavation of 24" between pump station and large diameter pipe begun, with Olympic Pipeline representative on site during excavation near line. Move work tomorrow. Efforts this PM on exposing 16" water line for tomorrow's water line tie-in, and 4" top to drain to storage pipe system.

Welding continuing on but strap welds, and others left, including the 72" but strap. The 60" was manipulated to obtain the 2" minimum lap required by taking excess from joint next to west pipe anchor. A second welder was added today, with this activity holding up back-fill. Requested copy of welder's certification.



# Inspection Report

Report No. 97 1/2

Page \_\_\_\_\_ of \_\_\_\_\_

Date 7-7-94

Project Dakin-Yew Pump Station BCG Project No. B152412

Owner City of Bellingham Contract No. 454-B

Contractor IMCO General Construction Co. Sup't/Foreman Gregg Burress

Crew Size \_\_\_\_\_ Subcontractor(s) \_\_\_\_\_

Day: M T W (Th) F Sa S Time Start 5:00 Time Stop 5:30

Site Condition Good Weather Fair Temperature 55-78°

Equipment	Equipment	Equipment
<u>Same as 7-6-94</u>		

REPORT (including discussions with Contractor)

City personnel on site and began closing valves on 16" to isolate work at 5:05 AM and completed at 5:40. I notified Gregg. Three man crew was working on removing material from beneath the 16" line. I asked Gregg about connecting hose to 9" tap and he didn't have flange. He planned to pump water. I asked about all the sediment and he will line the drainable area with Visqueen. This plan was changed and the use of 55 gallon can to catch water from Tee and pump from there. Removal of water began at 6:40 and it took 1 hour.

Problems arose when hole for tee was not positioned properly and the plan to tap into 16" was abandoned today with reshuffle tomorrow. Revisions to the distance of 90' elbow from 12' to ~~12'~~ 9' so edge of reducers are notice CDF when tee is inserted. The pipe still needs to pass beneath the second wall footing.

Water pressure was restored ~ 8:30 by City personnel. Some of the hole dug for today's work was back-filled and area excavated to fit tee in near the CDF placement. Work begins at valve shut-off, ~ 4 AM.

Excavation continued and was complete for 24" pipe, to be placed beneath Olympic line to connect pump station to loop system installed previously.

Carpenters assembling parts and bolting some of the iron for beams inside.

2/2

# Inspection Report

Report No. 97

Page \_\_\_\_\_ of \_\_\_\_\_

Date 7-7-94

Project Dakin-Yew Pump Station

BCG Project No. B152412

### CONTINUATION OF REPORT

the filtration plant to support second level silo ash floor. There are some electrical conduit on south wall (2), and black 1" pipe on flume concrete face where the south west w14x38 beam is to be attached. These appear to require relocation but will confirm with Ray Bailey tomorrow.

Harbor Mechanical welders are continuing their work, completing the outside welds and beginning work inside. They may finish tomorrow, if not over the weekend.

# Inspection Report

Report No. 98

Page \_\_\_\_\_ of \_\_\_\_\_

Date 7-8-84

Project Dakin-Yew Pump Station BCG Project No. B152412

Owner City of Bellingham Contract No. 454-B

Contractor IMCO General Construction Co. Sup'v/Foreman Gregg Burress

Crew Size \_\_\_\_\_ Subcontractor(s) \_\_\_\_\_

Day: M T W Th  F Sa S Time Start 7:00 Time Stop 5:30

Site Condition Good Weather Fair Temperature 53-75°

Equipment	Equipment	Equipment
Hitachi back-hoe	Cat 950 loader	
Eric Crane	Hyster fork-lift	
JD 792 with rain bar		
JD 410 B back-hoe		

### REPORT (including discussions with Contractor)

City of Bellingham water value crew began closing the 16" water line down at 4 AM and Imco personnel on site at 5:15 AM to begin draining line for tee insertion for 20" pump station connection. The connecting area has been excavated near 72" pipe CDF insulation by bulk and Imco began cutting pipe ~ 6 AM. The pipe was mostly drained by 6:30.

Ray Bailey came to site and observed progress. I asked him to look at utilities in filtration plant which obstruct installation of floor beams in soda ash silo vicinity. The black pipe connected to flume is old soda ash connection and water pipe painted blue with insulation is heat source. Both will be removed Monday, as Ray will send City personnel to aid in removal. Triad electrician will be here Monday to seek resolution to wiring conflicts Monday as well.

I asked Gregg to accomplish repair of 16" near 60/48" tie in that was damaged in late May. This was under lock while work on Tee was in progress.

Carpenters are installing expansion anchors for beam attachment in soda ash vicinity. Core drilling bits only down to 1" require 1" instead of 1/8" anchor bolts. This was approved by John Hatch.

Replacement of gasket for bell of 16" near the repaired pipe that

BCG Field Representative Tom Drablich

2/2

# Inspection Report

Report No. 98

Page \_\_\_\_\_ of \_\_\_\_\_

Date 7-8-94

Project Dakin-Yew Pump Station

BCG Project No. B152412

### CONTINUATION OF REPORT

one foot spot replaced in existing system. A 5" section of pipe was cut, which included hole punched in it by Imco. This work was completed and water turned on ~11 AM.

Work assembling 24" D.I. from pump station to loop connection was started.

Removal of bracing on wall forms of pump station begun. No form removal till tuesday, when cure is off.

1/2

# Inspection Report

Report No. 103

Page \_\_\_\_\_ of \_\_\_\_\_

Date 7-18-94

Project Dakin-Yew Pump Station BCG Project No. B152412

Owner City of Bellingham Contract No. 454-B

Contractor IMCO General Construction Co. Sup't/Foreman Gregg Burress

Crew Size 3 carp 3 op 3 labo Subcontractor(s) Triack - 2 electricians

Day: (M) T W Th F Sa S Time Start 700 Time Stop 530

Site Condition Good Weather Fair Temperature 55-75

Equipment	Equipment	Equipment
Hitachi EX150 back-hoe	JD 400 B back-hoe	
JD 792 with hoe pack	Hyster fork lift	
JD 95 Cat loader	air compressor	
Line crane		

### REPORT (including discussions with Contractor)

Carpenters working on forms for roof at pump station, determining slopes of vent and hatch top as well as locations of curb and any rebar too high, so it can be lowered. A pipe will be placed on three #6 bar at NE corner ~1 1/2" too high to bend around, 3" dia.

Shoring for roof is transmitted directly thru second floor beams where shoring is in middle of structure. Both long walls have bolts embedded drilled for shoring support. Beams will be formed from bottom to false roof forms.

Back-filling of 60" and 72" pipes is progressing well. About 2/3 of distance is being covered and remainder completed by tomorrow at this rate. Anvil on site testing and densities are ranging from 90% to 97%. I talked to Gregg about material above the 90% density requirements. There's 1.5' above the pipe, which will require 96% test results. Piping on the south side and middle of pipes require excavation and increment of material. Once these trenches are back-filled a roller will attain the required densities.

Trial personnel is unloading chlorination equipment and beginning preparation for chlorine start-up. Action Concrete Carbon site drilling holes in chlorine room floor for placing conduits.

Excavation for 24" D.I. connecting pump station to 60" was begun,

2/2

# Inspection Report

Report No. 103

Page \_\_\_\_\_ of \_\_\_\_\_

Date 7-18-94

Project Dakin-Yew Pump Station

BCG Project No. B152412

### CONTINUATION OF REPORT

again, as trench did not run true to line and error made in layout, which made connection impossible. A widened trench was dug to the north and past the gas line (with Gas Co. personnel present) to allow pipe placement. This work will proceed tomorrow.

Back-filling large diameter pipe is going faster than I expected. Truck and trailer access to corridor aids the process and less rehauling is needed.

Lined area for handwritten report continuation.

# Inspection Report

Report No. 107

Page \_\_\_\_\_ of \_\_\_\_\_

Date 7-25-94

Project Dakin-Yew Pump Station BCG Project No. B152412

Owner City of Bellingham Contract No. 454-B

Contractor IMCO General Construction Co. Sup't/Foreman Gregg Burgess

Crew Size 2 op 3 labor 3 carp Subcontractor(s) Trial - 2 electricians Action Conc. Cutting - 1 Norton - 2 laborers

Day: (M) T W Th F Sa S Time Start 7:00 Time Stop 5:30

Site Condition Good Weather O/C Temperature 55-70°

Equipment	Equipment	Equipment
Erie Crane	<del>JD</del> Cat 950 loader	
JD 792 back-hoe pack	Hitachi EX150 backhoe	
JD 410 B back-hoe		
Hyster fork-lift		

REPORT (including discussions with Contractor)

Action Concrete Cutting is on site drilling core holes in chlorine room for sensor passages and penetrations thru floor.

Cure of roof concrete using sprinkler on burlop to keep roof concrete wet.

The second layer of plastic to be placed around 24" suction line to pump station will receive wrapping that's been cut for ease of application. John Hatch approved the method of sealing.

Excavation of trench for PVC pipe along corridor from Hannah Creek to the chlorine vault done this AM. The pipe will be placed ~1.7' above 72" top, before raising above Hannah Creek pipe anchors.

Norton personnel on site this PM to continue annode installation. A C/I by Norton thru Imco pertained to problems with welding bond cable to megadyne. That will be answered by Intermountain Corrosion Service. Kyle Robinson of Intermountain came to site to observe activities. No problems at this time.

Back-filling area near 24" tee and retaining wall footings. Forms being constructed for first wall pattern, and dowels being epoxy placed into SW pump station corner. Once back-fill is ~2' above pipe, broad compacting ended and hoe pack used. ~96% densities were obtained by hand compaction.

BCG Field Representative Tom Drakell

# Inspection Report

Report No. 107<sup>7</sup>

Page \_\_\_\_\_ of \_\_\_\_\_

Date 7-25-94

Project Dakin-Yew Pump Station

BCG Project No. B152412

### CONTINUATION OF REPORT

I talked to Bill Robinson at I. C. S. about pipe connections at reservoir and why anode wiring runs to sta. 2100 then back to anode beds. The test station needs to be at sta. 2100 to be far enough from reservoir.

Bill Robinson also verbally approved C/I sent 7-21-94 about welding to mega-lugs. I informed Norton personnel and Gregg.

I talked to Gregg about wet back-filling conduits and 4" DI in road from Hannah Creek to reservoir. I asked him to wait due to letter being delivered by John Hatch tomorrow about pipe out of round. He will hold up back-fill.

Only two anode holes drilled this PM, as borings took a lot of time. Penetration in rock strata is hard. A question arose about anode line running along north side of 60" ~~to (delete) of~~



1/2

# Inspection Report

Report No. 120

Page \_\_\_\_\_ of \_\_\_\_\_

Date 8-11-94

Project Dakin-Yew Pump Station BCG Project No. B152412

Owner City of Bellingham Contract No. 454-B

Contractor IMCO General Construction Co. Sup'v/Foreman Gregg Burress

Crew Size 1 op. 5 labor Subcontractor(s) Triad- 2 electricians

Day: M T W (Th) F Sa S Time Start 7:00 Time Stop 5:30

Site Condition Good Weather Fair Temperature 56-80°

Equipment	Equipment	Equipment
Same as 8-10-94		

### REPORT (including discussions with Contractor)

Imco earthwork activity includes completing back-fill of 4" water line and areas in pump station vicinity. Excavation of chlorine manifold vault and drainage items from wetlands which flow to Hannah Creek.

Completion of annode bed near reservoir and back-filling as other bed was done, using detail of revised drawing provided by I.C.S. Splicing is being covered with wraps of electrical tape, 1/2" thick layers.

Work on soda ash silos continuing today. Welding legs to east silo and installing more steel beams for floor support are planned. I talked to Rodney Staples and Imco people about gap in existing floor to the botto top of beam. That gap is being filled upon beam placement.

The question about whether the inside of pump station gets sealed came up. The specification indicates sealer is applied, but not pigment sealer inside the structure. A letter requesting C.O. and costs will be sent.

Excavation of pump station using ram hoe and Hitachi back hoe is taking several hours. About 2/3 of day, the operator is back and forth using both pieces of equipment. 1/3 of time both pieces are used. Confining space is an obvious reason in duration. The excavated material is choking the site.

Con. [Signature]

2/2

# Inspection Report

Report No. 120

Page \_\_\_\_\_ of \_\_\_\_\_

Date 8-11-94

Project Dakin-Yew Pump Station

BCG Project No. B152412

## CONTINUATION OF REPORT

The telephone conduit in front of SW pump station corner 15' from the 72" line was damaged severely by Imco loader. It was only ~1.5' below grade at the time. About half the wires were cut. U.S. West personnel on site repairing wires.

2 people from noon on working on wires.

Imco continuing sacking of pump station interior, upper and lower rooms.

Excavation of Chlorine Vault was discussed by Gregg and me. The rock excavation depth is 7 feet and 2 feet is extra. When the work is done, times of active use by operators of equipment - vs - standby time will be determined.

Empty lined area for additional report content.

1/2

# Inspection Report

Report No. 125

Page \_\_\_\_\_ of \_\_\_\_\_

Date 8-18-94

Project Dakin-Yew Pump Station BCG Project No. B152412

Owner City of Bellingham Contract No. 454-B

Contractor IMCO General Construction Co. Sup'v/Foreman Gregg Burress

Crew Size 1 op. 6 laborers Subcontractor(s) Triad - 2 people

Day: M T W (Th) F Sa S Time Start 700 Time Stop 530

Site Condition Good Weather Fair Temperature 58-75°

Equipment	Equipment	Equipment
Hitachi EX150 back-hoe	Hyster SD fork-lift	
Cat 950 loader	air compressor	
JD 792 with hoe pack		
Hyster 290B fork-lift		

REPORT (including discussions with Contractor)

Imco personnel beginning excavation for 4" drain line from man holes in front of pump station to sump of pump station. The excavation is all in structure back-fill and pipe has been laid to the air gap man hole from pump station.

Filling the 20" DI pipe and electrical/CDF from metered 72" Man Hole to pump station so that pump station and parking lot will be completed. Densities will be taken.

The fourth section for soda ash silos was moved into room this AM on its side. All of the floor beams are in position. A temporary plastic film wall is being built to the east of the walk thru area.

Damage to the telephone cable occurred just before noon, near treated water meter man hole. The back-hoe struck it and took ~ 1/2 the wires.

Grouting begun on 60" within pipe corridor, from butterfly valve / 29" back to 48" connection vicinity. I asked a steel brush be used before vacuum cleaning. Patch mix as described in Appendix A of AWWA C-205.

Damage to fiberglass stairway during shipment. Several structural pieces rejected. I asked Gregg to do as much to Hannah Creek as possible, ASAP.

I told Paul that subgrade stakes placed by Gregg are not a problem, build as planned.

BCG Field Representative Tom Frank

2/2

# Inspection Report

Report No. 125

Page \_\_\_\_\_ of \_\_\_\_\_

Date 8-18-94

Project Dakin-Yew Pump Station

BCG Project No. B152412

### CONTINUATION OF REPORT

Imco carpenter is forming walls for electrical vault near pump station within parking lot. The inside wall forms are in place and steel placed for a pour next week.

Since Bill Evans isn't here to coordinate, I made sure that soda ash supply will be taken care of, using same schedule as last weekend.

Haul of excavated material including boulders continues off site the stock-pile is more than 1/2 gone.

The fourth silo piece has been wrestled nearly into position today. Plans to prepare second floor slab ~~and~~ for concrete pour will begin next week.

# Inspection Report

Report No. 130

Page \_\_\_\_\_ of \_\_\_\_\_

Date 8-25-94

Project Dakin-Yew Pump Station BCG Project No. B152412

Owner City of Bellingham Contract No. 454-B

Contractor IMCO General Construction Co. Supv/Foreman Paul Krakenberg

Crew Size 1 cop, 1 sup, 4 labor Subcontractor(s) Triad - 2 people

Day: M T W Th F Sa S Time Start 700 Time Stop 530

Site Condition Good Weather PC Temperature 52-70°

Equipment	Equipment	Equipment
Hitachi EX150 back-hoe	Hyster 290B forklift	
JD 792 with backhoe	Hyster 3D forklift	
JD 410B back-hoe		
Cat 950 loader		

REPORT (including discussions with Contractor)

Removal of CDF forms and back-filling trench of electrical conduits west of pump station.

Excavation to begin on 20" DI pipe from air gap manhole to outwash pipe manhole. I had talked to Ron Down about profile of DI pipe and he said minimum 2% slope is needed and a drop manhole connection could be used at manhole. If not using drop connection, the invert could be raised up to 3 feet. I told Paul Krakenberg and he opted the 2-3 foot invert rise.

Work continuing in side ash silo room completing form placement placing floor drain and establishing edge of slab removal near pilot filters. Welding remaining to be done on beam placed Wednesday as well as clips at beam ends.

Excavation to expose utilities between air gap manhole and back-wash pipe caused damage to City power to reservoir #1 and Bough power source. Efforts by Triad to provide power occurred between ~12:50 AM and 2:45 when power restored.

I contacted Jim Buttz about base plate anchor bolts for silo. The east side SW corner leg anchor bolts are 2" from plum position radially. Jim said the key was a pump column. The holes for this leg can be moved the two inches.

*Tom Tranter*

15-Aug-00

Department of Public Works  
Operations Division

Work Order Summary

Work Order #: X

Date Originated: 021293

**Work Order Detail**

WO #: X01817

WO Title: WHATCOM FALLS PARK

Equip ID: NEW WATER M	Standing WO:	Priority: 3	Authorization:
Reference Doc:		Dates	Planning:
Dept Job Code: X-WF	Originated: 021293		Engineering:
Repetitive Job #:	Time Originated: 110439		Materials:
Cost Center: 4495	Needed: 031893		Shutdown:
Planner: BH	st Completion: 000000		Craft:
Supervisor: JAY	ompleted: 032393		Schedule:
Reimbursable: DONE	pproved: 000000		In Progress:
Hrs Down: 0	Last History: 032393		Cancel:

**Narrative Detail**

REQUEST FROM WAN HUNG TO POTHOLE OLYMPIC PIPELINE MAIN
TO GET ELEVATIONS FOR FUTURE INSTALLATION OF WATER MAIN
UPDATED REQUEST TO POTHOLE ALL WATER MAINS IN THE AREA
PER PAUL SIMPLOT BILL PROJECT # WA-454

Compete: Y

Cause: R

Bill Code:

Item 2:

Item 3:

Item 4:

YTD Total Cost: 0

Total Cost To Date: 1718

**Equipment Detail**

MTD Cost: 0

Cost TD: 447

Date:	Equip #	Description:	Hours:	Unit Cost:	Total Cost:
19930219	X203		1	\$8.00	8
19930218	X215		8	\$8.00	64
19930219	X215		8	\$8.00	64
19930302	X215		5.5	\$8.00	44
19930218	X704		8	\$13.00	104
19930219	X709		6	\$13.00	78
19930302	X709		6.5	\$13.00	85

**Material Detail**

MTD Cost: 0

Estimated Cost: 0

Cost TD: 0

Date	MR #:	Description	Unit	Qty Issued:	Unit Cost:	Total Cost
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Description

**Contractor Detail**      MTD Cost: 0      Estimated Cost: 0      Cost TD: 0  
 W/O:      Contractor Code:      Description:      Unit      Qty Issued:      Unit Cost:      Total Cost:

**Labor Detail**      MTD Cost: 0      Estimated Cost: 0      Cost TD: 1271  
 Call in Hrs: 0      MTD Hrs: 0      YTD Labor Hrs: 0      Hrs TD: 62.5

Employee Name: FUCHS, JOHN      No: X29494      Time Card Date: 930219

Regular	Call In:	Time and 1/2:	Double Time:	Total Overtime:	Shift Bonus:
Hours: 1	0	0	0	0	0
Rate: \$15.94	\$0.00	\$0.00	\$0.00		

Employee Name: FUCHS, JOHN      No: X29494      Time Card Date: 930302

Regular	Call In:	Time and 1/2:	Double Time:	Total Overtime:	Shift Bonus:
Hours: 6.5	0	0	0	0	0
Rate: \$15.94	\$0.00	\$0.00	\$0.00		

Employee Name: HALING, BILL      No: X33878      Time Card Date: 930218

Regular	Call In:	Time and 1/2:	Double Time:	Total Overtime:	Shift Bonus:
Hours: 8	0	0	0	0	0
Rate: \$22.82	\$0.00	\$0.00	\$0.00		

Employee Name: HALING, BILL      No: X33878      Time Card Date: 930219

Regular	Call In:	Time and 1/2:	Double Time:	Total Overtime:	Shift Bonus:
Hours: 8	0	0	0	0	0
Rate: \$22.82	\$0.00	\$0.00	\$0.00		

Employee Name: HALING, BILL      No: X33878      Time Card Date: 930302

Regular	Call In:	Time and 1/2:	Double Time:	Total Overtime:	Shift Bonus:
Hours: 6.5	0	0	0	0	0
Rate: \$22.82	\$0.00	\$0.00	\$0.00		

Employee Name: JERNS, DOUG      No: X46216      Time Card Date: 930218

Regular	Call In:	Time and 1/2:	Double Time:	Total Overtime:	Shift Bonus:
Hours: 8	0	0	0	0	0
Rate: \$21.44	\$0.00	\$0.00	\$0.00		

Employee Name: JERNS, DOUG      No: X46216      Time Card Date: 930219

Regular	Call In:	Time and 1/2:	Double Time:	Total Overtime:	Shift Bonus:
Hours: 1	0	0	0	0	0
Rate: \$21.44	\$0.00	\$0.00	\$0.00		

Employee Name: KNUTSEN, LYNN

No: X50020

Time Card Date: 930219

Regular	Call In:	Time and 1/2:	Double Time:	Total Overtime:	Shift Bonus:
Hours: 2	0	0	0	0	0
Rate: \$16.45	\$0.00	\$0.00	\$0.00		

Employee Name: PRICHARD, BILL

No: X71912

Time Card Date: 930218

Regular	Call In:	Time and 1/2:	Double Time:	Total Overtime:	Shift Bonus:
Hours: 8	0	0	0	0	0
Rate: \$19.10	\$0.00	\$0.00	\$0.00		

Employee Name: PRICHARD, BILL

No: X71912

Time Card Date: 930219

Regular	Call In:	Time and 1/2:	Double Time:	Total Overtime:	Shift Bonus:
Hours: 6	0	0	0	0	0
Rate: \$19.10	\$0.00	\$0.00	\$0.00		

Employee Name: PRICHARD, BILL

No: X71912

Time Card Date: 930302

Regular	Call In:	Time and 1/2:	Double Time:	Total Overtime:	Shift Bonus:
Hours: 6.5	0	0	0	0	0
Rate: \$19.10	\$0.00	\$0.00	\$0.00		

Employee Name: PRICHARD, BILL

No: X71912

Time Card Date: 930322

Regular	Call In:	Time and 1/2:	Double Time:	Total Overtime:	Shift Bonus:
Hours: 1	0	0	0	0	0
Rate: \$19.10	\$0.00	\$0.00	\$0.00		