

**Lee County Board of County Commissioners  
Agenda Item Summary**

Blue Sheet No. 20051547-UTL

**1. Action Requested/Purpose:**

Approve Change Order No. 1 to Contract No. 2978 Three Oaks WWTP Deep Injection Well (RFQ-04-01), with Youngquist Brothers, Inc. for an additional contract amount of \$55,000.00 and 30 additional contract days. The purpose is to provide temporary equipment and facilities to conduct the short-term injection test.

**2. What Action Accomplishes:**

Provides funding and formal approval for additional unforeseen activities needed to complete construction and conduct the short-term injection test of the deep injection well.

**3. Management Recommendation:**

Approval.

**4. Departmental Category:** 10 - Utilities

**CIOB**

**5. Meeting Date:**

**11-29-2005**

**6. Agenda:**

- Consent
- Administrative
- Appeals
- Public
- Walk-On

**7. Requirement/Purpose (specify)**

- |                                     |                    |                 |
|-------------------------------------|--------------------|-----------------|
| <input type="checkbox"/>            | <b>Statute</b>     |                 |
| <input type="checkbox"/>            | <b>Ordinance</b>   |                 |
| <input checked="" type="checkbox"/> | <b>Admin. Code</b> | <b>AC-4-4</b>   |
| <input checked="" type="checkbox"/> | <b>Other</b>       | <b>Approval</b> |

**8. Request Initiated:**

<b>Commissioner</b>	
<b>Department</b>	<b>Public Works</b>
<b>Division</b>	<b>Utilities</b>
<b>By:</b>	<b>11/10/05</b> <b>Rick Diaz, P.E., Director</b>

**9. Background:**

The BOCC approved entering into the Three Oaks WWTP Deep Injection Well construction Contract No. 2978 with Youngquist Brothers, Inc. on December 7, 2004, for a lump-sum amount of \$4,191,800.00 based on 270 days to substantial completion and 300 days to final completion. This contract included a qualifier that Youngquist Brothers would perform short-term injection testing through a permanent wellhead, piping and pumping facility to be constructed by others. This permanent facility is to be constructed as part of the Three Oaks WWTP Expansion, which is still under design by the design-build firm.

Construction of the deep injection well and associated dual zone monitoring well by Youngquist Brothers is complete. However, the permanent wellhead, piping and pumping facility by others is not yet constructed.

(CONT'D.)

**10. Review for Scheduling**

Department Director	Contracts	Human Res.	Other	County Attorney	Budget Services				County Manager / P.W. Director
					Analyst	Risk	Grants	Mgr.	
<i>J. Lavender</i> Date: 11-10-05	<i>C. Logan</i> Date:	N/A Date:	<i>YAD</i> B. Dearborn Date: 11/10/05	<i>S. Covert</i> Date: 11/10/05	<i>Analyst</i> 11/10/05	<i>Risk</i> 11/12/05	<i>Grants</i> 11/15/05	<i>Mgr.</i> 11/15/05	<i>J. Lavender</i> Date: 11-10-05

**11. Commission Action:**

- Approved
- Deferred
- Denied
- Other

RECEIVED BY  
COUNTY ADMIN: *PA*  
11-15-05  
11:35  
COUNTY ADMIN  
FORWARDED TO:  
11-17-05  
*9Am*

Rec. by CoAtty  
Date: 11/14/05  
Time: 3:52pm  
Forwarded To:  
*Admin*  
11/15/05

LEE COUNTY CONSTRUCTION CONTRACT  
CHANGE ORDER

(A Change Order Requires Approval by the Department Director for Expenditures Under \$25,000 or Approval by the County Manager for Expenditures Between \$25,000 and \$50,000 or Approval by the Board of County Commissioners over \$50,000)

CONTRACT/PROJECT NAME: Three Oaks WWTP Deep Injection Well  
CONTRACTOR: Youngquist Brothers, Inc. PROJECT NO.: 7280  
CONTRACT NO.: 2978 BID NO.: RFQ-04-01 ACCOUNT NO.: 207280 48713.506540  
CHANGE REQUESTED BY: Tom Mamott, LCU DATE OF REQUEST: 9/23/05

Upon the completion and execution of this Change Order by both parties to the Contract, the Contractor is authorized to and shall proceed to make the following changes in the Contract Documents:

Description: Provide temporary equipment and facilities to conduct short-term injection test of deep injection well as required by the FDEP UIC Permit.

Purpose of Change Order: Enable performance of short-term injection test of the deep injection well

Attachments: (List documents supporting change) See Attached Scope of Work dated 6/16/05

<b>CHANGE IN CONTRACT PRICE:</b>	<b>CHANGE IN CONTRACT TIME:</b>
Original Contract Price <u>\$ 4,191,800.00</u>	Original Contract Time <u>300</u> Calendar Days
Previous Change Orders No. <u>0</u> to No. <u>    </u> <u>\$ 0</u>	Net Change from previous Change Orders <u>0</u> Calendar Days
Contract Price prior to this Change Order <u>\$ 4,191,800.00</u>	Contract Time prior to this Change Order <u>300</u> Calendar Days
Net Increase (Decrease) of this Change Order <u>\$ 55,000.00</u>	Net Increase (Decrease) of this Change Order <u>30</u> Calendar Days
Contract Price with all approved Change Orders <u>\$ 4,246,800.00</u>	Contract Time with all approved Change Orders <u>330</u> Calendar Days

It is understood and agreed that the acceptance of this modification by the CONTRACTOR constitutes an accord and satisfaction, and represents payment in full (both time and money) for all costs arising out of, or incidental to, the above mentioned change.

RECOMMENDED:

By: [Signature] 10/25/05  
Consultant (if applicable) Date

By: [Signature] 11-10-05  
Department Director Date

By: [Signature] 11/1/05  
Contracts Management Date

APPROVED: \_\_\_\_\_  
County Attorney's Office Date

ACCEPTED:

By: [Signature]  
Contractor

EDWARD McCULLERS  
Print Name (Contractor)

Date Accepted: 10/25/05

Corporate Seal

COUNTY APPROVAL:

By: \_\_\_\_\_  
Department Director (Under \$25,000)

Date Approved: \_\_\_\_\_

By: \_\_\_\_\_  
County Manager (Under \$50,000)

Date Approved: \_\_\_\_\_

By: \_\_\_\_\_  
Chairman (Over \$50,000)  
Board of County Commissioners

Date Approved: \_\_\_\_\_

## **THREE OAKS WWTP – DEEP INJECTION WELL**

### **SHORT TERM INJECTION TEST**

#### **SUMMARY OF WORK**

##### **INJECTION TEST (Refer to specification in Attachment A)**

1. Provide all necessary pipe and facilities for the following:
2. 24-hour injection test at 5,200 gpm
3. During test the following shall be recorded continuously:
  - Injection well wellhead pressure
  - Injection well annular pressure
  - Injection well injection zone pressure and temperature
  - Upper and Lower monitor well pressures
  - Injectate temperature
  - Atmospheric pressure at injection wellhead
4. The above shall be measured for 48-hours prior to the test, during the test and for 48-hours following the test.
5. Water for the test shall be available from the Three Oaks WWTP reuse wastewater system adjacent to the well. For connection point refer to drawings.

Ref. Specification Section Excerpt 02633 (Revised)  
Annotated Drawings C-3 and M-9

Proposal should include the following:

- Lump Sum price for item 1 above
- Schedule for conducting the work
- Information requirements
- Alternative proposals to specified work

## THREE OAKS WWTP – DEEP INJECTION WELL

### SHORT TERM INJECTION TEST

#### Excerpt from Section 02633 (Revised) – Class I Injection Well

- G. **Injection Tests (Injection Well):** After completion of construction of the injection well and dual zone monitor well, an injection test shall be run for a period of 24 hours. The injection rate shall be approximately 5,200 gpm.
1. The CONTRACTOR will be required to provide a flow meter for use in the injection test, as described in Part 3, 3.1 H. Meters. It is also the responsibility of the CONTRACTOR to provide a temporary stripper-head to allow for access and placement of a bottom hole transducer in the well.
  2. The CONTRACTOR shall provide the services of a company to supply a bottom hole transducer and data logging system that can measure and record the bottom hole pressure to the resolution of  $\pm 0.01$  psi to record pressures during testing and temperature to  $\pm 0.01$  degrees Celsius. The equipment should provide a hard copy of the data accessible throughout the test, and a disk copy upon completion in ASCII format.
  3. A period of 48 hours of pre-test readings shall be collected from all instrumentation, and following the 24 hours of injection testing, 48 hours of recovery. During this recovery period, no activity must occur in the injection well.
  4. Readings shall be collected on a schedule to be supplied by the ENGINEER prior to the start of injection testing. At a minimum, the equipment should be capable of recording readings on a schedule of variable intervals from one reading per 10 seconds to one reading per hour.
  5. The CONTRACTOR shall provide the services of a company to supply a transducer and data logging system to measure and record the wellhead and annular pressure on the injection well and upper and lower monitor zone pressures to the resolution of  $\pm 0.01$  psi during the test. Injectate temperature and atmospheric pressure shall also be measured and recorded at the wellhead of the injection well during the injection test, 48 hours before the test and 48 hours after the test.

#### Part 3, 3.1 Meters

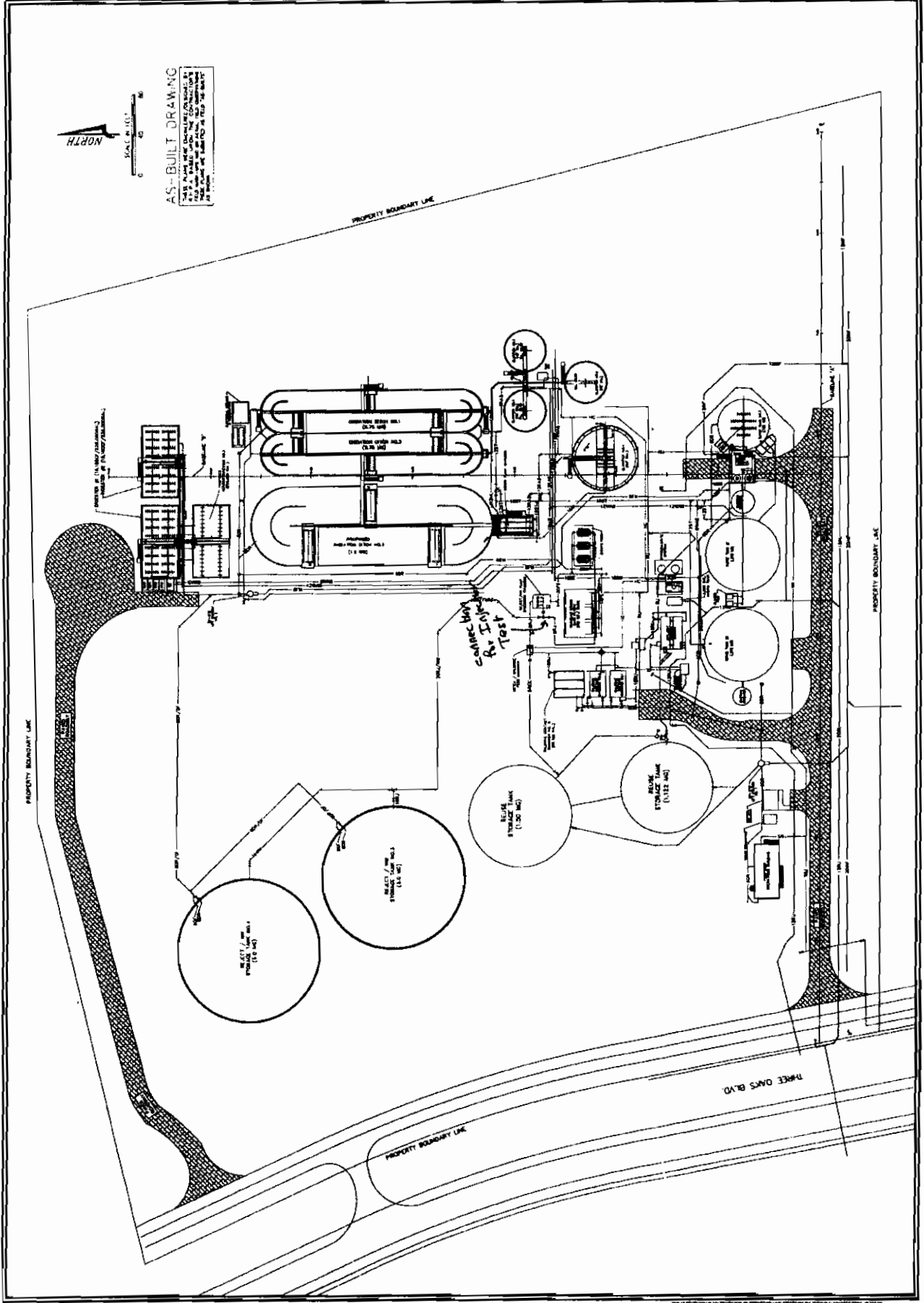
- H. **Meters:** The CONTRACTOR shall supply flowmeters and other meters for use in testing the wells. The flow meter for use in the injection test shall have a scale from 0 to 10,000 gpm with major gradations of 500 gpm and minor gradations of 50 gpm. All flow meters shall be calibrated before use and calibration records shall be submitted to the ENGINEER prior to use, as described in the section SUBMITTALS. Flow meter accuracy shall be 1/4 of 1 percent of full scale.

DATE	DESCRIPTION

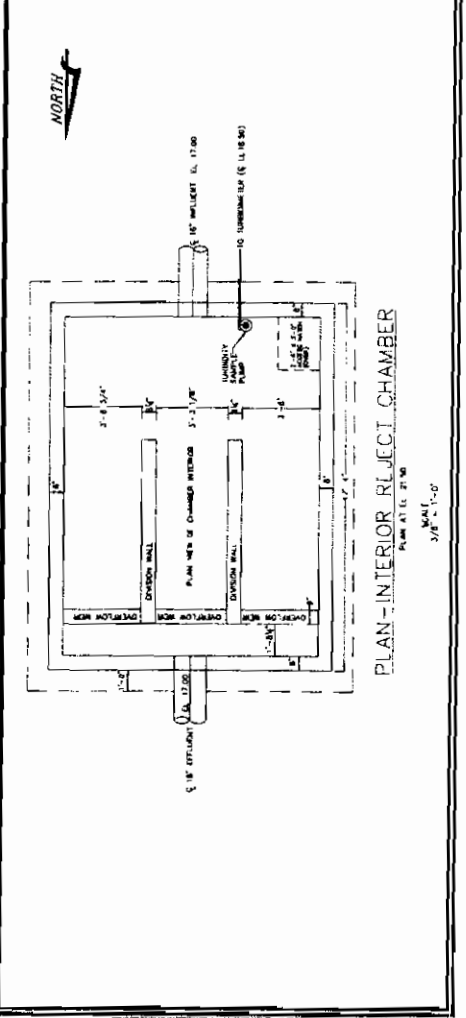
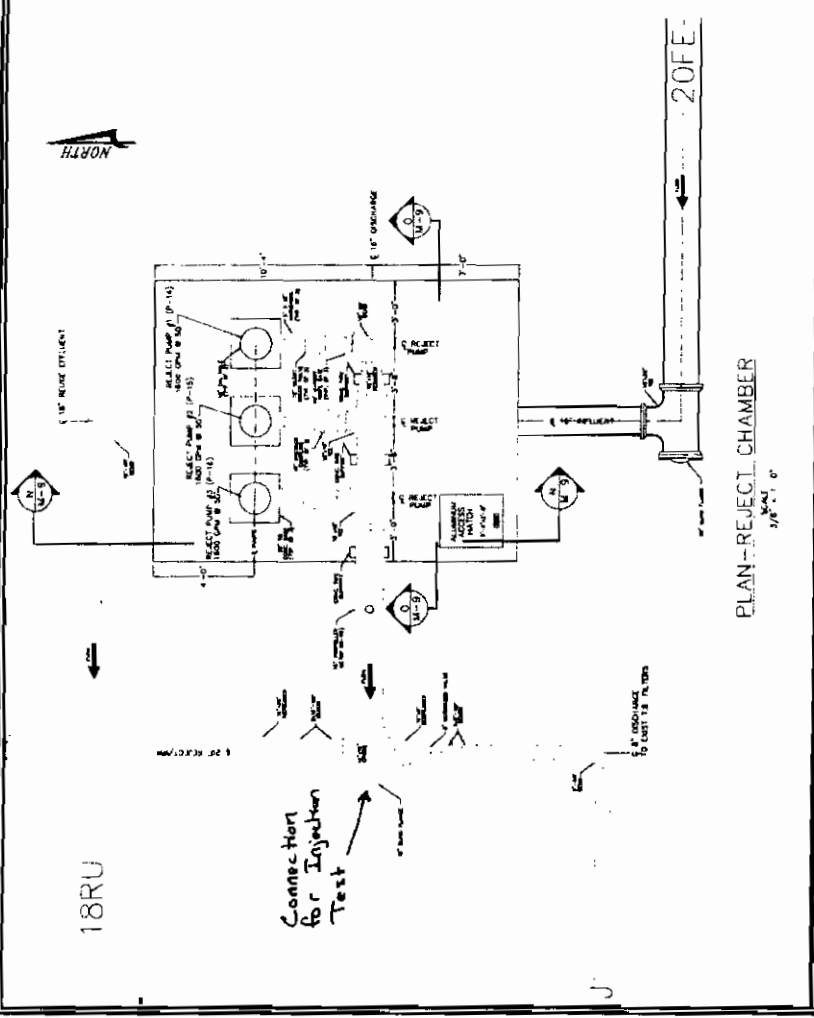
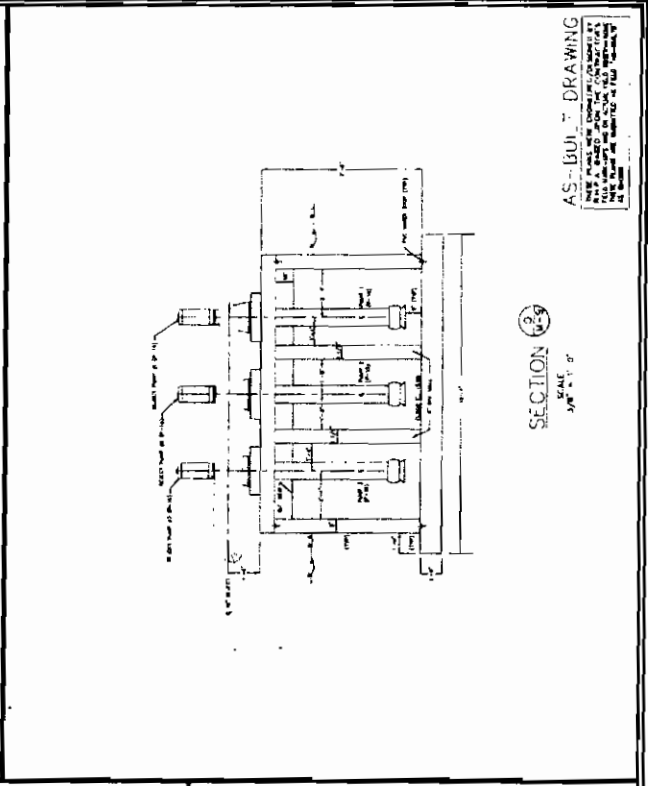
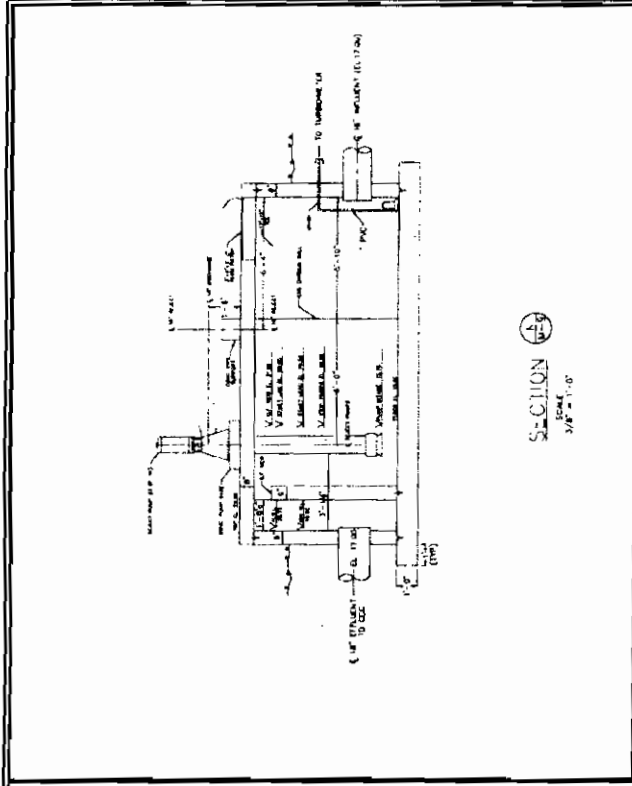
PROJECT NO. C-3  
 SHEET NO. C-3  
 DATE: 01/22/04  
 DRAWN BY: C.M.K.  
 CHECKED BY: J.R.S.  
 SCALE: AS SHOWN



**AS-BUILT DRAWING**  
 THIS DRAWING IS AN AS-BUILT DRAWING OF THE  
 TREATMENT FACILITY AND DOES NOT REPRESENT THE  
 ORIGINAL DESIGN OR CONSTRUCTION. THE ORIGINAL  
 DESIGN AND CONSTRUCTION SHALL BE REFERRED TO THE  
 ORIGINAL CONTRACT DOCUMENTS AND THIS DRAWING  
 SHALL BE USED FOR REFERENCE ONLY.  
 SCALE: AS SHOWN  
 NORTH



NO.	DATE	BY	CHKD	DESCRIPTION
1	03/20/84	AS-S/D	AS-C	AS-BUILT DRAWING
2	03/20/84	AS-S/D	AS-C	AS-BUILT DRAWING
3	03/20/84	AS-S/D	AS-C	AS-BUILT DRAWING
4	03/20/84	AS-S/D	AS-C	AS-BUILT DRAWING
5	03/20/84	AS-S/D	AS-C	AS-BUILT DRAWING



AS-BUILT DRAWING  
THIS DRAWING IS THE PROPERTY OF R.H.P.A.  
IT IS TO BE USED ONLY FOR THE PROJECT  
AND NOT BE REPRODUCED OR COPIED  
WITHOUT THE WRITTEN PERMISSION  
OF R.H.P.A.

SECTION 2  
SCALE 3/8"=1'-0"

PLAN-REJECT CHAMBER  
SCALE 3/8"=1'-0"

PLAN-INTERIOR REJECT CHAMBER  
SCALE 3/8"=1'-0"

18RU

Connection for Injection Test

20FE

