



## **INFORMATION TO PROPOSERS**

for

**(C3) RFP No. E21-130**

### **DESIGN SERVICES for AUKE BAY TREATMENT PLANT CATHODIC PROTECTION and PLANT UPGRADES**

**ISSUED BY:**

City and Borough of Juneau  
ENGINEERING DEPARTMENT  
155 South Seward Street  
Juneau, Alaska 99801

**Date Issued: October 14, 2020**

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The following information is posted online. Please refer to the CBJ Engineering Contracts Division webpage at: [http://www.juneau.org/engineering\\_ftp/contracts/Contracts.php](http://www.juneau.org/engineering_ftp/contracts/Contracts.php). This is **not** an addendum.

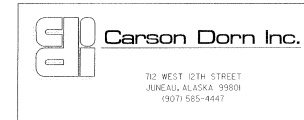
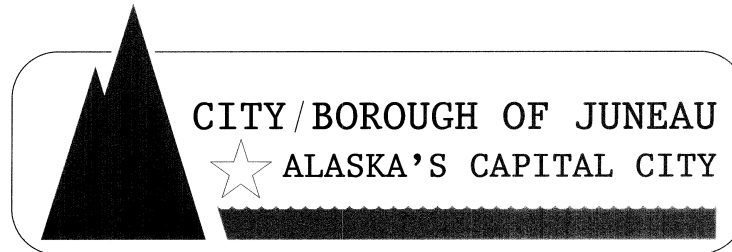
- ❖ Information about the site can be found by selecting “Auke Bay Treatment Facility” on the following webpage:  
<https://juneau.org/engineering-public-works/utilities-division/wastewater-utility-division>
- ❖ The As-Built document for Contract E97-003, Auke Bay Wastewater Treatment Plant Expansion, is attached.

# JUNEAU SEWER SYSTEM

## AUKE BAY WASTEWATER TREATMENT PLANT EXPANSION

CITY AND  
BOROUGH  
OF JUNEAU

ENGINEERING  
DEPARTMENT



CONTRACT No. E97-003  
C.I.P. No. U484-53



APPROVED BY:	
DIRECTOR OF PUBLIC WORKS	
SIGNATURE	DATE
CHIEF ENGINEER	
SIGNATURE	DATE

AS-BUILT

CDIJOB. No. 97005.010

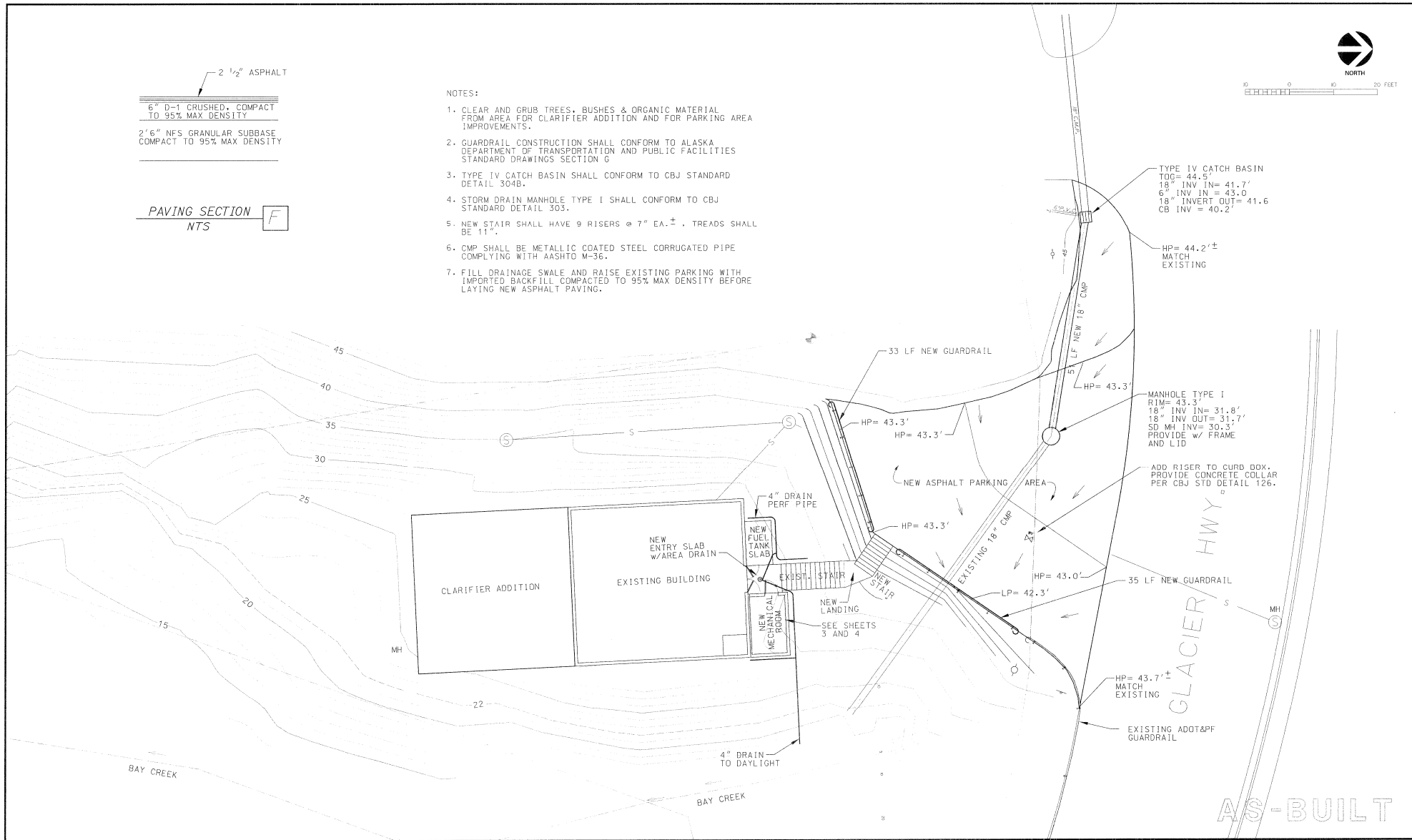


- 2 1/2" ASPHALT
- 6" D-1 CRUSHED, COMPACT TO 95% MAX DENSITY
- 2' 6" N-5 GRANULAR SUBBASE COMPACT TO 95% MAX DENSITY

PAVING SECTION F  
NTS

NOTES:

1. CLEAR AND CRUB TREES, BUSHES & ORGANIC MATERIAL FROM AREA FOR CLARIFIER ADDITION AND FOR PARKING AREA IMPROVEMENTS.
2. GUARDRAIL CONSTRUCTION SHALL CONFORM TO ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES STANDARD DRAWINGS SECTION G
3. TYPE IV CATCH BASIN SHALL CONFORM TO CBJ STANDARD DETAIL 304B.
4. STORM DRAIN MANHOLE TYPE I SHALL CONFORM TO CBJ STANDARD DETAIL 303.
5. NEW STAIR SHALL HAVE 9 RISERS @ 7" EA. ±, TREADS SHALL BE 11"
6. CMP SHALL BE METALLIC COATED STEEL CORRUGATED PIPE COMPLYING WITH AASHTO M-36.
7. FILL DRAINAGE SWALE AND RAISE EXISTING PARKING WITH IMPORTED BACKFILL COMPACTED TO 95% MAX DENSITY BEFORE LAYING NEW ASPHALT PAVING.

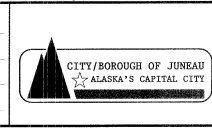


AS-BUILT

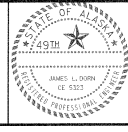
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 Time Plotted: 10:45 AM  
 Date Printed: 03-03-98  
 Plotter: HP DesignJet 500

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GRAPHIC	DRAWN: [Signature]
DATE PLOTTED:	CHECKED: TGC
	DATE: 03-03-98



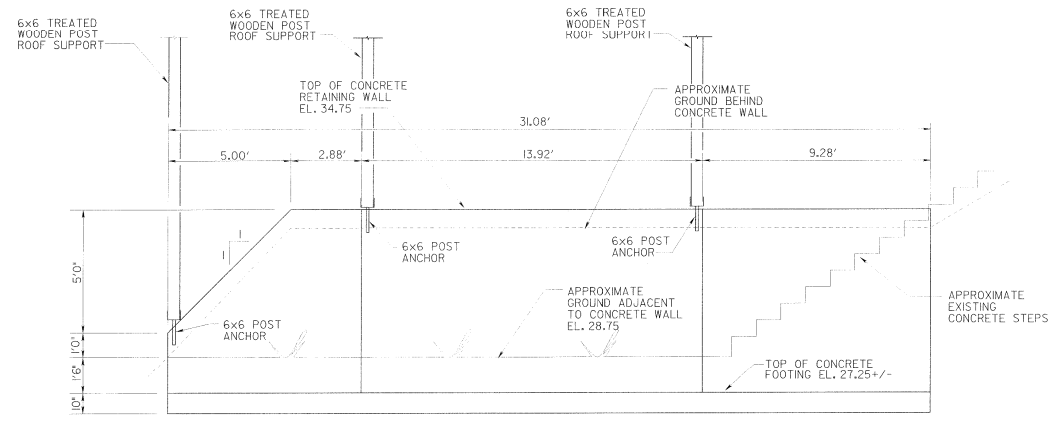
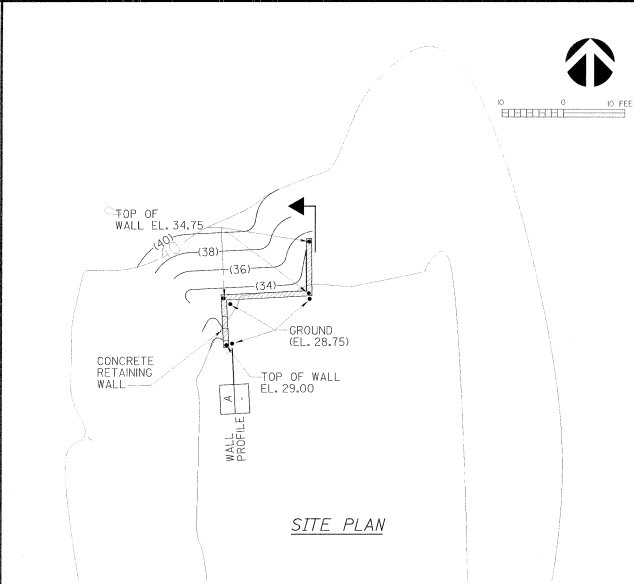
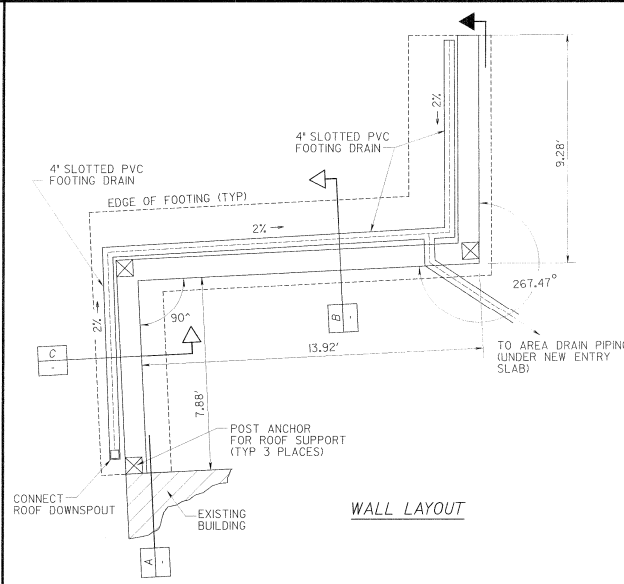
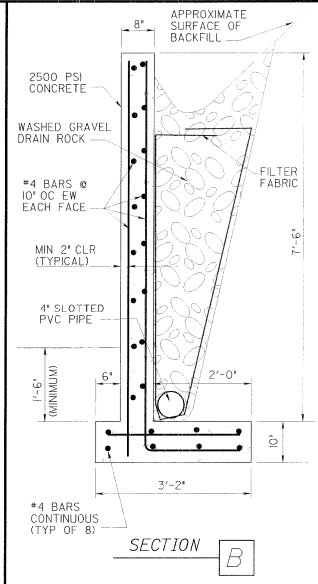
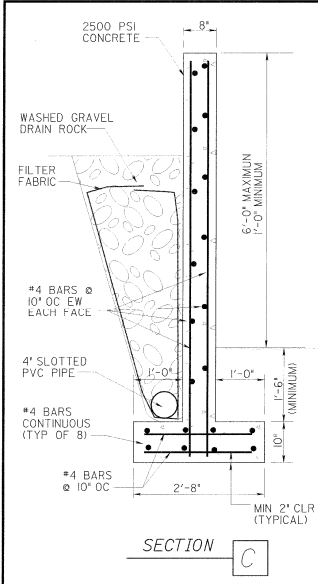
CITY AND BOROUGH OF JUNEAU  
**AUKE BAY**  
 WASTEWATER TREATMENT PLANT  
 EXPANSION  
 CONTRACT No. E97-003



**CD Carson Dorn Inc.**  
 712 WEST 12TH STREET  
 JUNEAU, ALASKA 99801  
 19071 586-4441

ADDENDUM 2  
**PARKING IMPROVEMENTS**

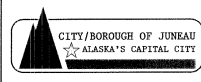
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SHEET No.	1 of 4



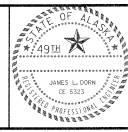
AS-BUILT

1	DEC99	RAS	AS-BUILT

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CITY AND BOROUGH OF JUNEAU  
**AUKE BAY WASTEWATER TREATMENT PLANT EXPANSION**  
 CONTRACT No. E97-003

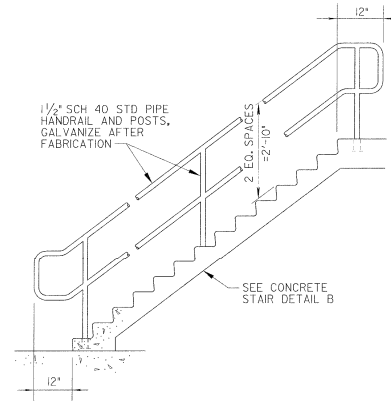
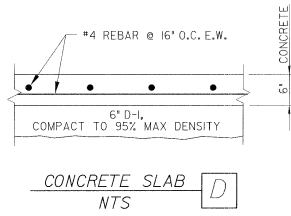


**Carson Dorn Inc.**  
 712 WEST 12TH STREET  
 JUNEAU, ALASKA 99901  
 (907) 586-4447

RFP No.12  
**CONCRETE RETAINING WALL**

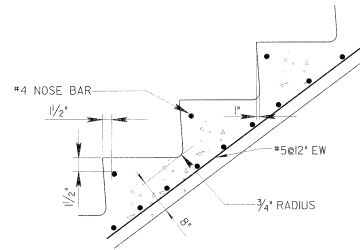
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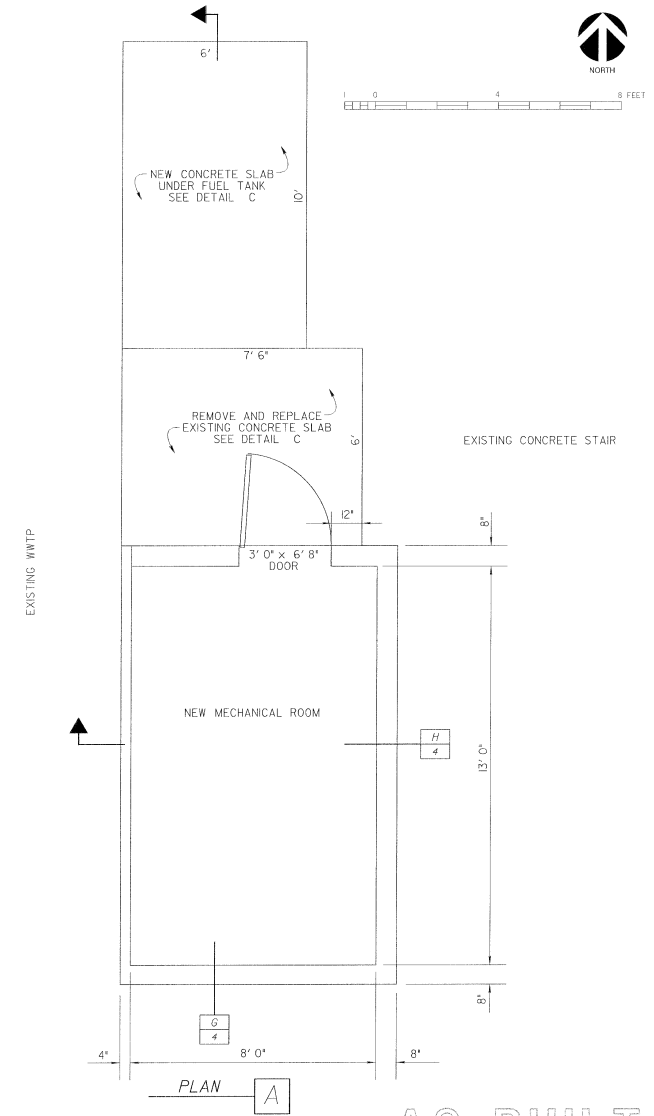


GALVANIZED STEEL HANDRAIL  
 NTS

TREAD SHALL RECEIVE A STEEL  
 TROWEL FINISH, IMMEDIATELY  
 THEREAFTER, THE SURFACE  
 SHALL BE SLIGHTLY ROUGHENED  
 BY DRAWING A STIFF BRUSH  
 OVER THE SURFACE AT A RIGHT  
 ANGLE TO THE DIRECTION OF  
 TRAFFIC TO PRODUCE A NON-  
 SKID SURFACE



CONCRETE STAIR  
 NTS

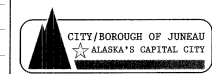


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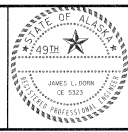
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GRAPHIC:	DRAWN: ETD
DATE PRINTED:	CHECKED: TGC
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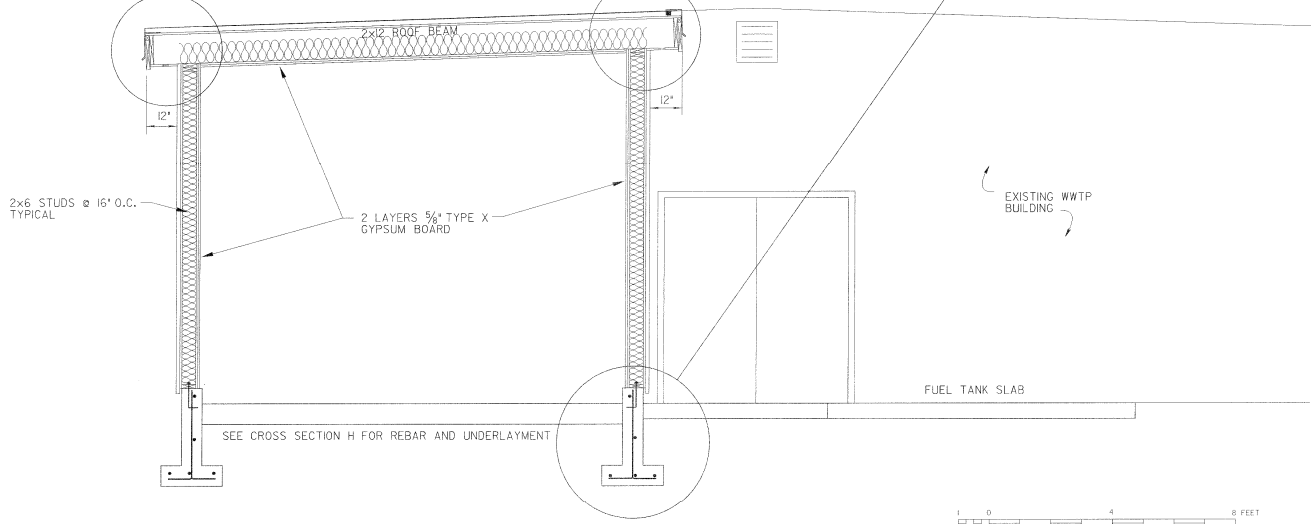
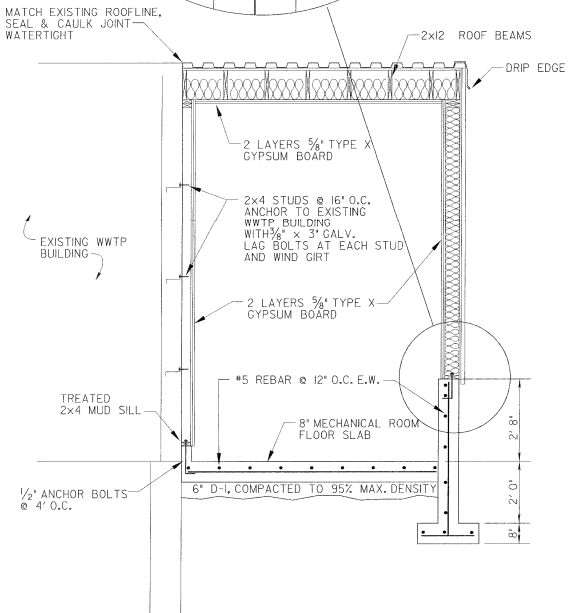
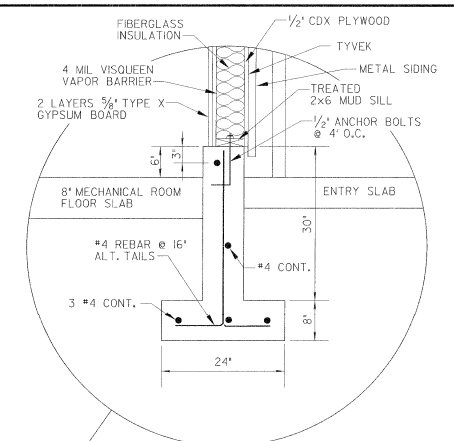
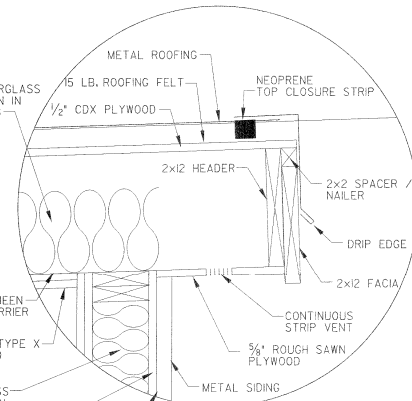
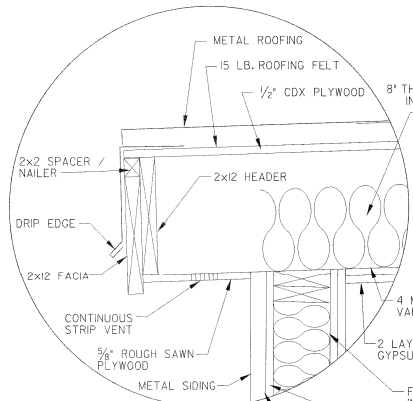
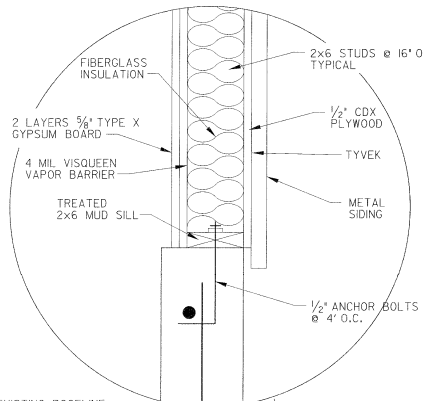
CITY AND BOROUGH OF JUNEAU  
 AUK BAY  
 WASTEWATER TREATMENT PLANT  
 EXPANSION  
 CONTRACT No. E97-003



**CDI** Carson Dorn Inc.  
 712 WEST 12TH STREET  
 JUNEAU, ALASKA 99801  
 (907) 586-4447

ADDENDUM 2  
 MECHANICAL ROOM  
 PLAN AND DETAILS

DRAWING	-
SHEET No.	3 of 4



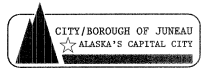
CROSS SECTION **H**

LONGITUDINAL SECTION **G**

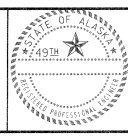
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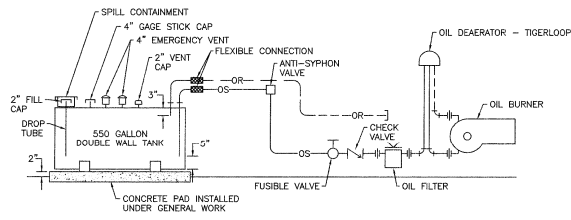
CITY AND BOROUGH OF JUNEAU  
**AUKE BAY**  
 WASTEWATER TREATMENT PLANT  
 EXPANSION  
 CONTRACT No. E97-003



**CD Carson Dorn Inc.**  
 712 WEST 12TH STREET  
 JUNEAU, ALASKA 99801  
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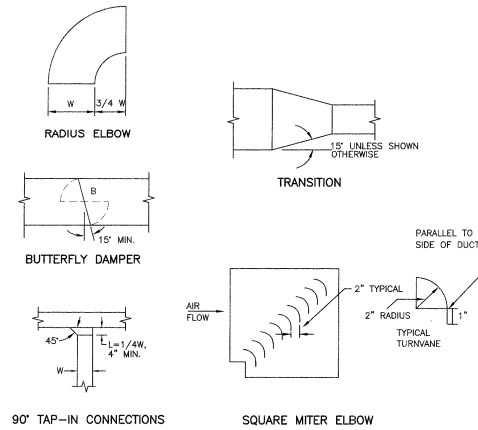
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 MECHANICAL ROOM  
 SECTIONS AND DETAILS

DRAWING	-
SHEET No.	4 of 4



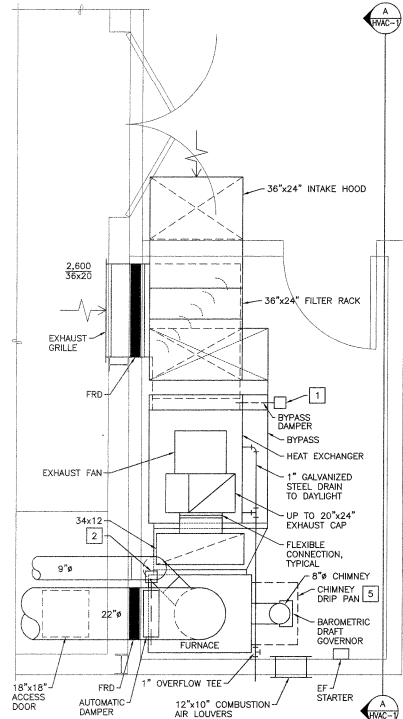
**OIL PIPING DIAGRAM**

NO SCALE



**TYPICAL DETAILS OF DUCT CONSTRUCTION**

NO SCALE



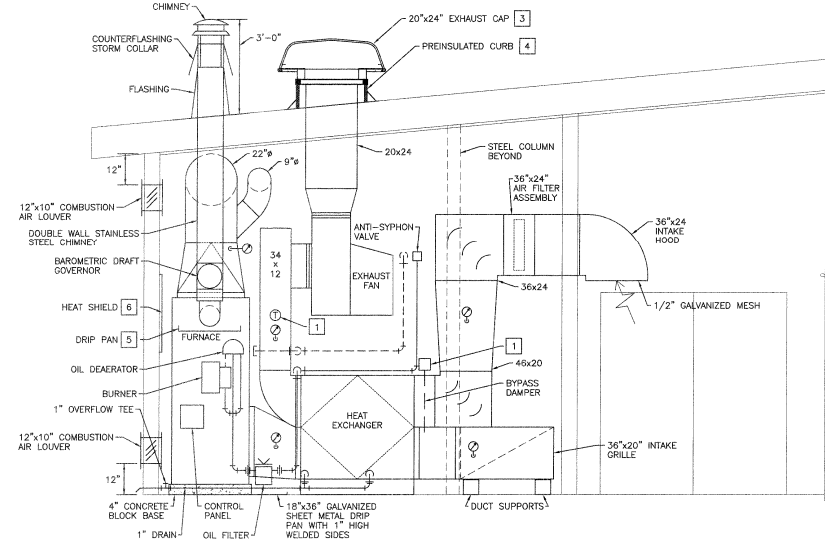
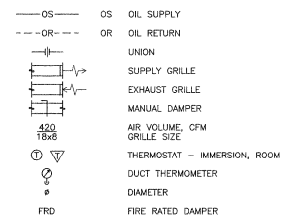
**MECHANICAL ROOM PLAN**

0 1 2 3 4 5 FEET

**CONSTRUCTION NOTES:**

- 1 BYPASS DAMPER ACTUATOR, THERMOSTAT, AND CONTROLLER PROVIDED WITH FURNACE. SEE SPECIFICATIONS.
- 2 AUTOMATIC DAMPER ACTUATOR AND CONTROLLER PROVIDED WITH FURNACE. SEE SPECIFICATIONS.
- 3 SECURED TO PREINSULATED CURB PER MANUFACTURER'S RECOMMENDATIONS.
- 4 PREINSULATED CURB INSTALLED AND FLASHED UNDER GENERAL WORK.
- 5 SHEET METAL DRIP PAN SECURED TO FURNACE. PAN TO PREVENT DEBRIS FROM SETTLING ON TOP OF BURNER AND CONTROLS. DIMENSIONS TO COVER WIDTH OF FURNACE AND PROJECTION OF BURNER. COORDINATE WITH INSTALLED FURNACE.
- 6 22 GAGE FLANGED SHEET METAL HEAT SHIELD, SECURED TO WALL ADJACENT TO SINGLE WALL BREECING. DIMENSIONS VERIFIED WITH ACTUAL INSTALLATION, TO BE MINIMUM OF 18\"/>

**SYMBOLS**



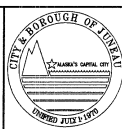
**SECTION A - A**

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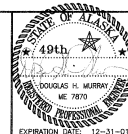
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SCALE:	DESIGNED: JR
GRAPHIC:	DRAWN: WN, JR
DATE PRINTED:	CHECKED: DM
	DATE: 3-5-98



CITY AND BOROUGH OF JUNEAU  
**AUKE BAY**  
 WASTEWATER TREATMENT PLANT  
 EXPANSION  
 CONTRACT No. E97-003



**CD Carson Dorn Inc.**  
 712 WEST 12TH STREET  
 JUNEAU, ALASKA 99801  
 (907) 586-4447

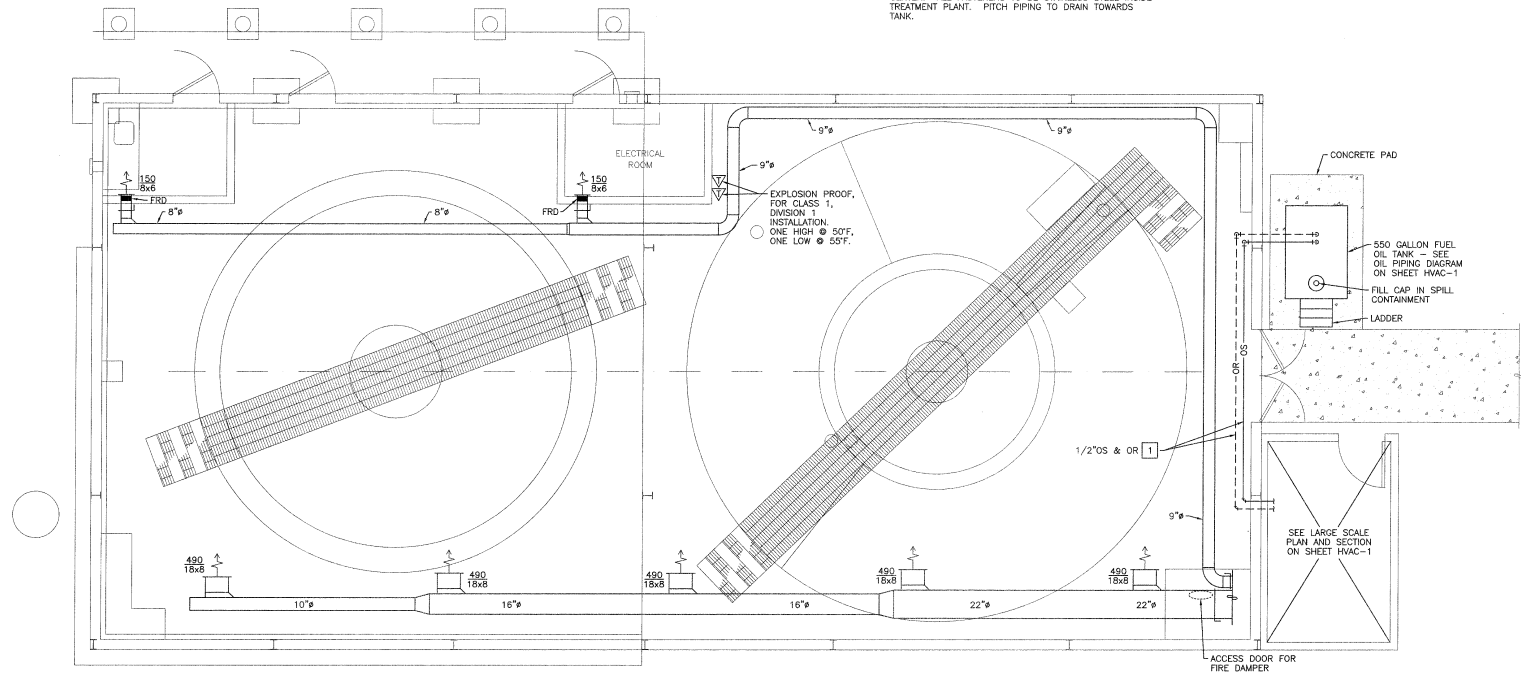
**MURRAY & ASSOCIATES, P. C.**  
 CONSULTING ENGINEERS  
 P O BOX 21081 TEL 907 586-8622  
 JUNEAU, ALASKA 99802 FAX 907 586-8686

**MECHANICAL ROOM**  
 ADDENDUM NO. 2

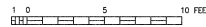
DRAWING  
**HVAC-1**  
 SHEET No.

**CONSTRUCTION NOTE:**

- 1 OIL SUPPLY AND OIL RETURN PIPING SUPPORTED FROM GALVANIZED 1-1/2" CHANNEL FRAMING AT 6"-0" ON CENTER. CHANNEL FRAMING BOLTED TO BUILDING STRUCTURAL MEMBERS AT A MAXIMUM OF 10'-0" ON CENTER. ALL FASTENERS TO BE STAINLESS STEEL INSIDE TREATMENT PLANT. PITCH PIPING TO DRAIN TOWARDS TANK.



PLAN



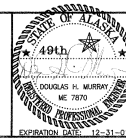
AS-BUILT

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DATE PRINTED:	CHECKED: DM
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CITY AND BOROUGH OF JUNEAU  
**AUKE BAY**  
**WASTEWATER TREATMENT PLANT**  
**EXPANSION**  
 CONTRACT No. E97-003



**Carson Dorn Inc.**  
 712 WEST 12TH STREET  
 JUNEAU, ALASKA 99801  
 (907) 586-4447

**MURRAY & ASSOCIATES, P. C.**  
 CONSULTING ENGINEERS  
 P O BOX 21081  
 JUNEAU, ALASKA 99802

TEL: 907 586-8622  
 FAX: 907 586-8686

**CLARIFIER BUILDING**  
 ADDENDUM NO. 2

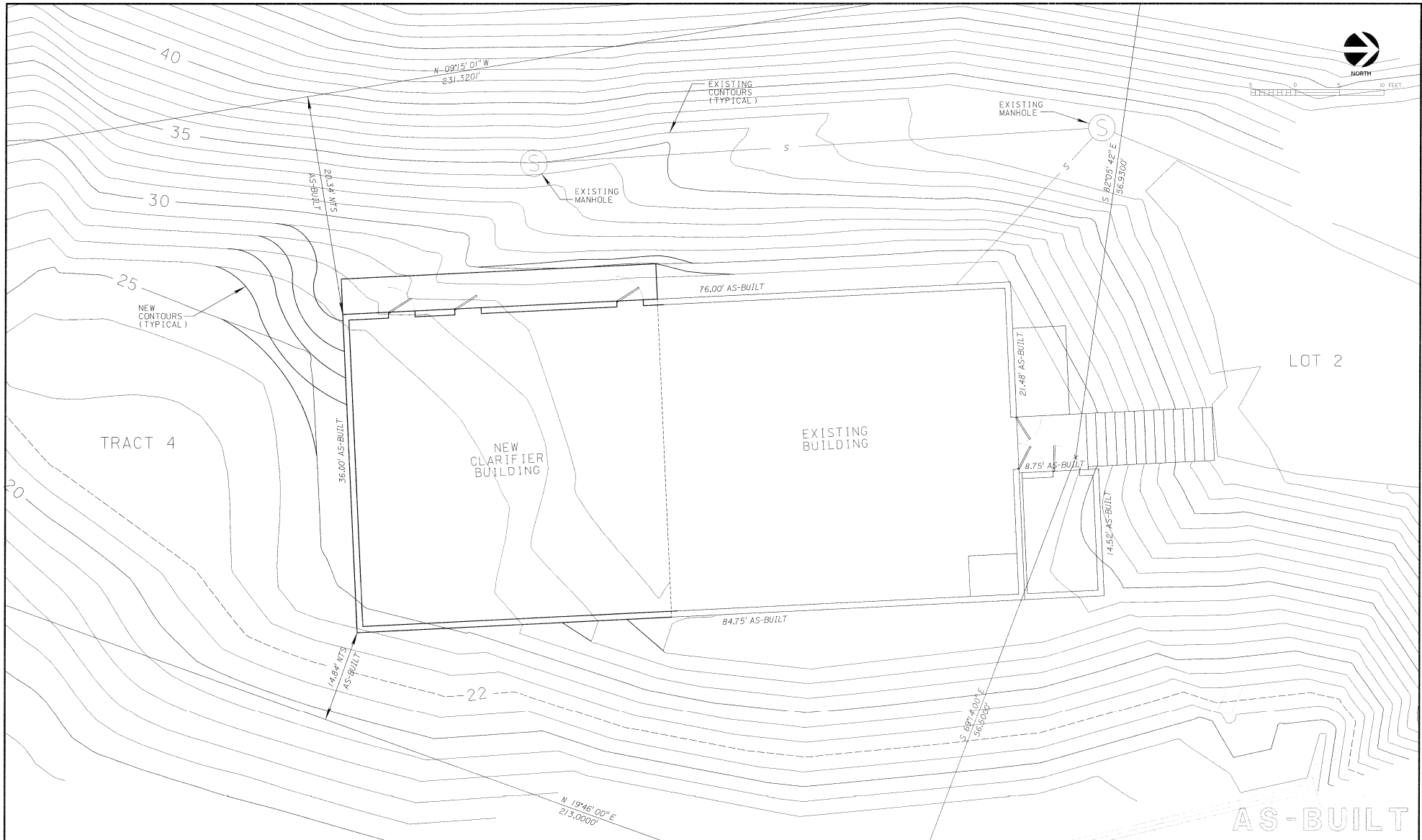
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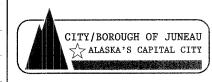
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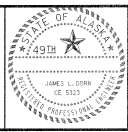
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SCALE:	DESIGNED:	SS
GRAPHIC:	DRAWN:	ETD
DATE PRINTED:	CHECKED:	TGC
	DATE:	10-16-98



CITY AND BOROUGH OF JUNEAU  
**AUKE BAY  
 WASTEWATER TREATMENT PLANT  
 EXPANSION**  
 CONTRACT No. E97-003



**CD Carson Dorn Inc.**  
 712 WEST 10TH STREET  
 JUNEAU, ALASKA 99801  
 19071 586-4447

**SITE PLAN**

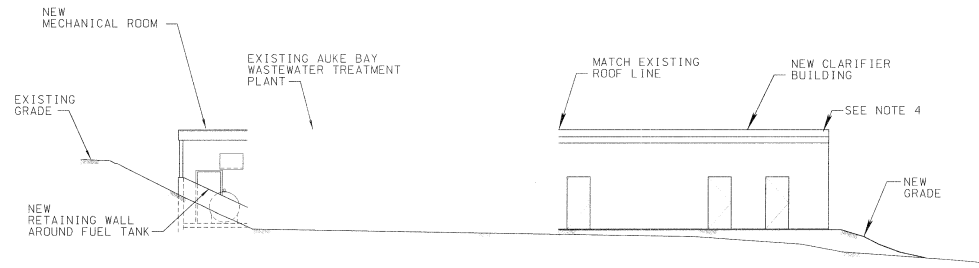
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**C-2**

SHEET No.  
**5 of**

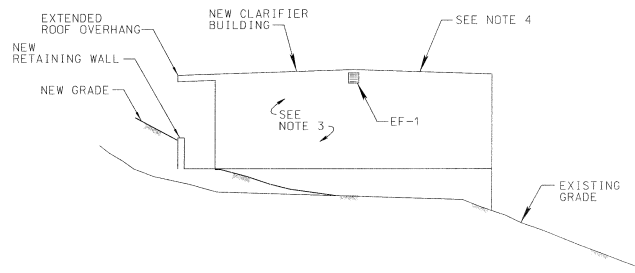


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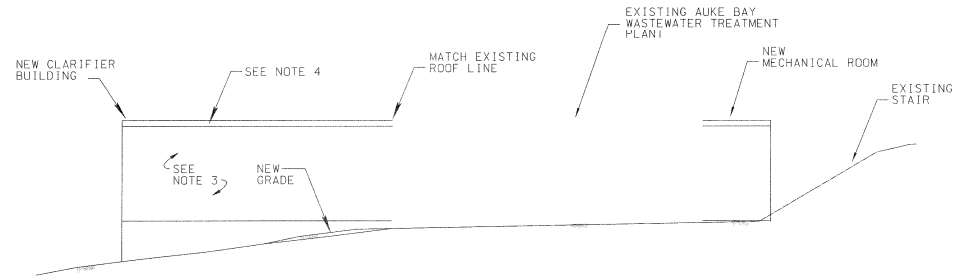
1. FLASH AND SEAL CONNECTION BETWEEN BUILDINGS W/ CAULK AND METAL FLASHING MATCHING EXISTING BUILDING SIDING.
2. EXISTING AUKU BAY WASTEWATER TREATMENT PLANT BUILDING WAS MANUFACTURED BY *KIRBY*.
3. NEW SIDING TO MATCH LIGHT-GREEN COLOR AND PATTERN OF EXISTING SIDING.
4. NEW ROOFING TO MATCH OFF-WHITE COLOR AND PATTERN OF EXISTING ROOFING.



WEST ELEVATION



SOUTH ELEVATION



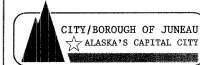
EAST ELEVATION

1 0 5 10 15 20 FEET

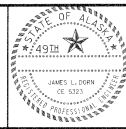
AS-BUILT

REV.	DATE	BY	DESCRIPTION
1	DEC99	RAS	AS-BUILT

SCALE:	DESIGNED: SS
GRAPHIC	DRAWN:
DATE PRINTED:	CHECKED: TOC
	DATE: 10-16-98



CITY AND BOROUGH OF JUNEAU  
**AUKU BAY  
WASTEWATER TREATMENT PLANT  
EXPANSION**  
CONTRACT No. E97-003



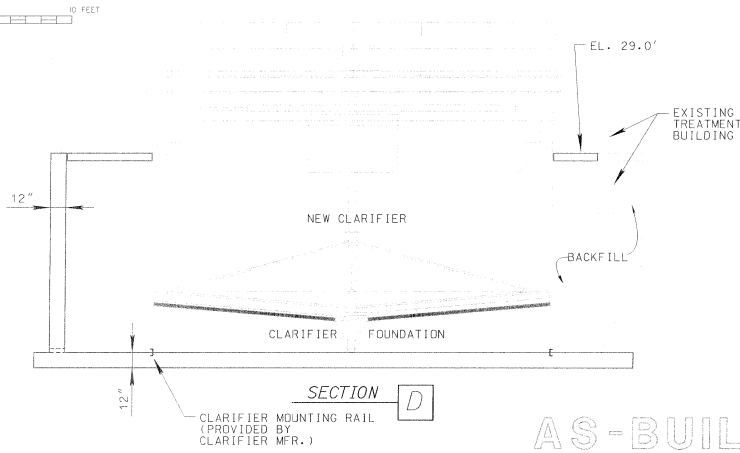
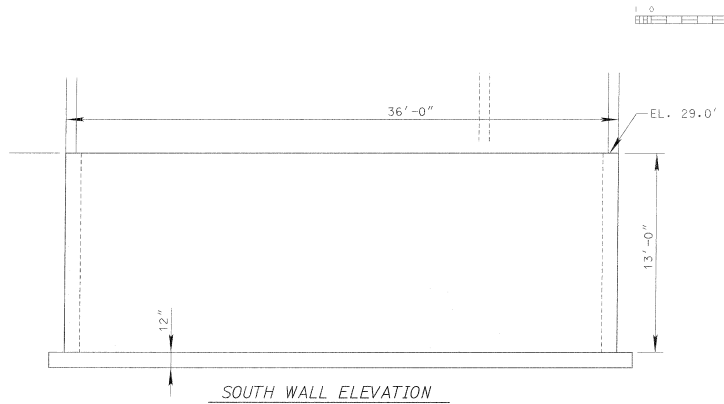
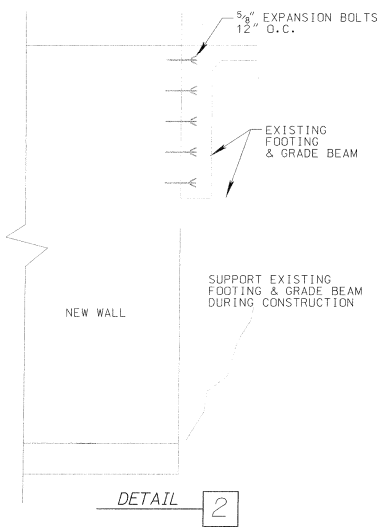
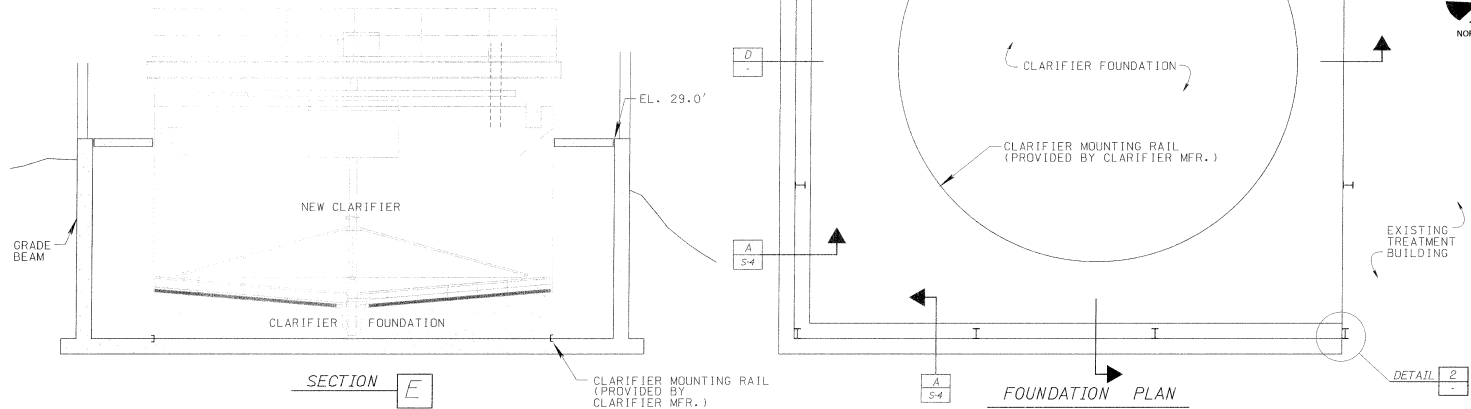
Carson Dorn Inc.  
702 WEST 12TH STREET  
JUNEAU, ALASKA 99801  
(907) 586-4441

**BUILDING ELEVATIONS**

DRAWING
<b>S-2</b>
SHEET No.
8 of

Date Plotted: 3/13/01 Time Plotted: 10:15 AM  
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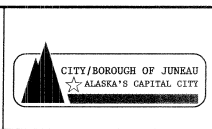
NOTE:  
 1. EXCAVATE TO BEDROCK FOR CLARIFIER BUILDING FOUNDATION. BACKFILL WITH IMPORTED BACKFILL COMPACTED TO 95% OF MAX. DENSITY IN 6" LIFTS. BEDROCK ESTIMATED TO RANGE BETWEEN 3' & 7' BELOW BOTTOM OF CLARIFIER FOUNDATION.



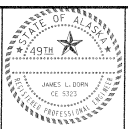
AS-BUILT

1	DEC99	RAS	AS-BUILT

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	DATE:	10-16-98



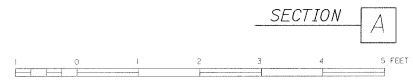
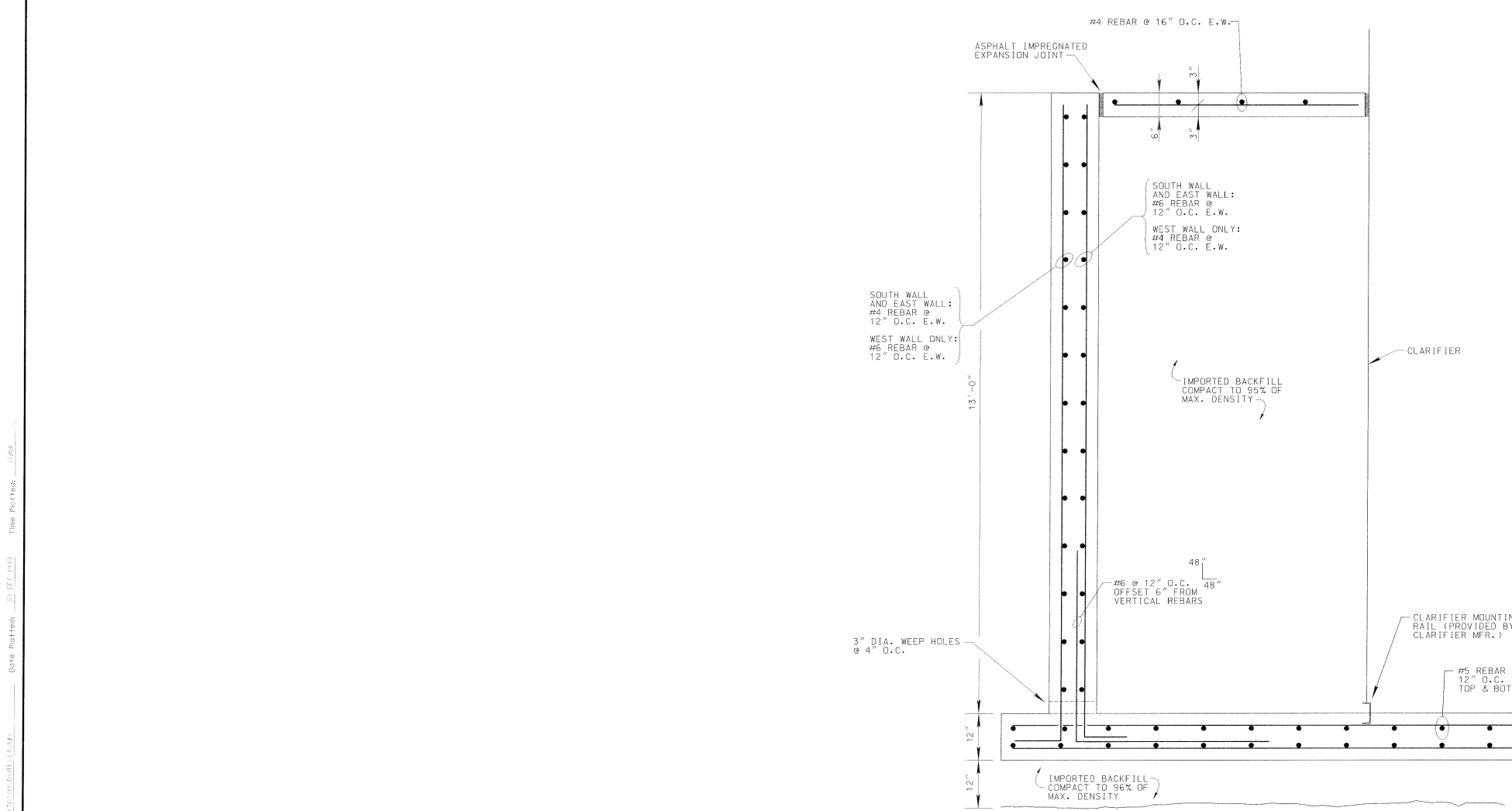
CITY AND BOROUGH OF JUNEAU  
 AUKE BAY  
 WASTEWATER TREATMENT PLANT EXPANSION  
 CONTRACT No. E97-003



**CDI** Carson Dorn Inc.  
 710 WEST 12TH STREET  
 JUNEAU, ALASKA 99801  
 (907) 586-4447

FOUNDATION PLAN AND SECTIONS

DRAWING  
 S-3  
 SHEET No.  
 9 of



**AS-BUILT**

REV	DATE	BY	DESCRIPTION
1	DEC98	RAS	AS-BUILT

SCALE: GRAPHIC

DESIGNED: SS

DRAWN: [Signature]

CHECKED: TGC

DATE: 10-16-98

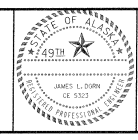
CITY AND BOROUGH OF JUNEAU

**AUKE BAY**

**WASTEWATER TREATMENT PLANT**

**EXPANSION**

CONTRACT No. E97-003

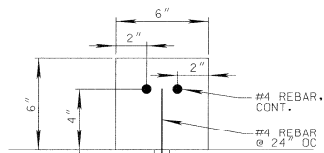
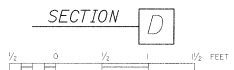
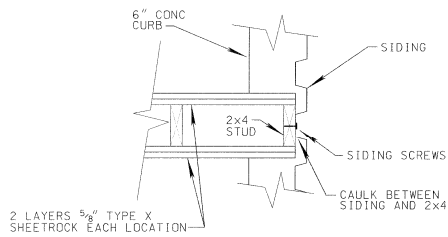
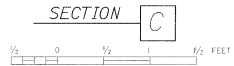
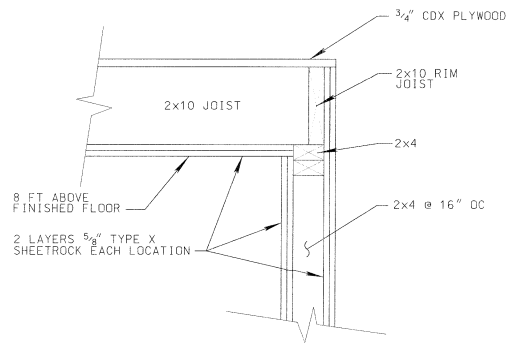


712 WEST 12TH STREET  
JUNEAU, ALASKA 99801  
19071 596-4447

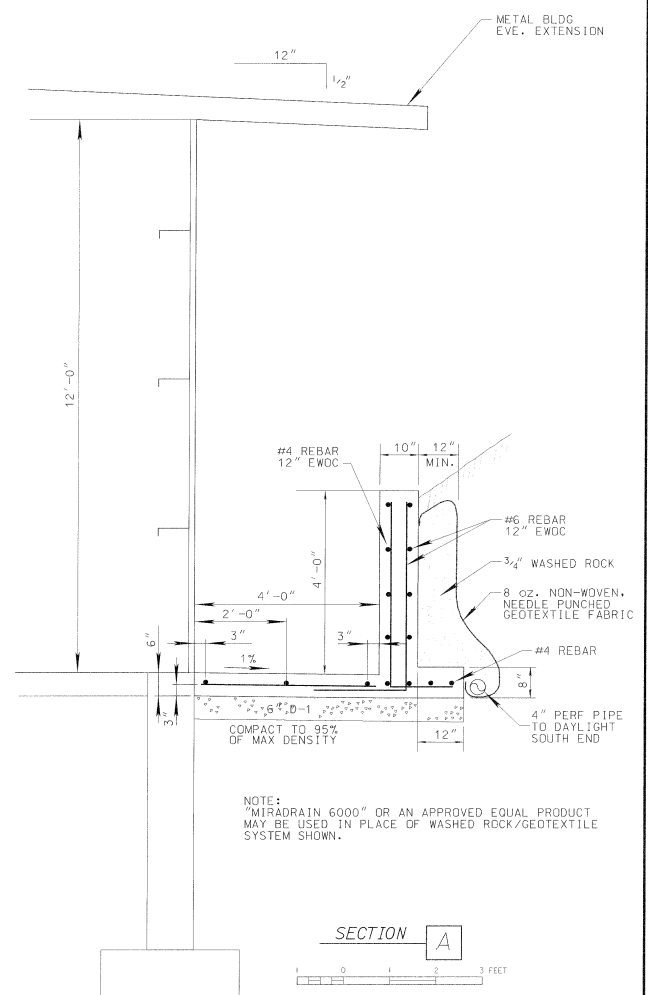
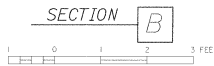
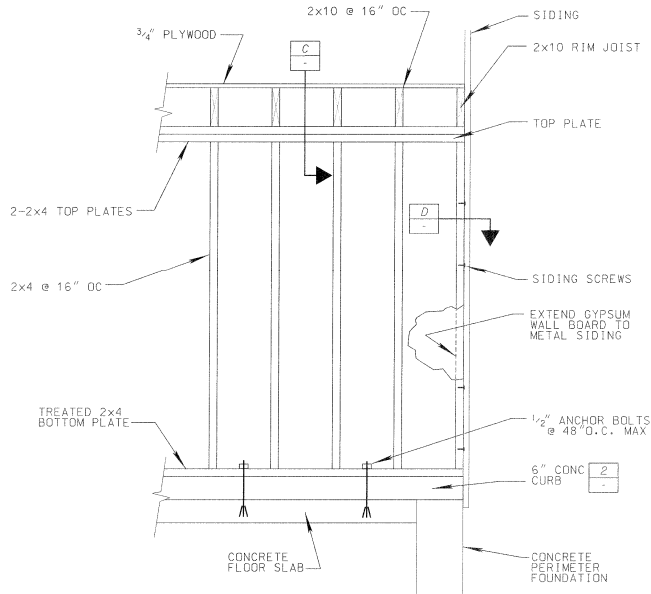
**FOUNDATION DETAILS**

DRAWING: **S-4**

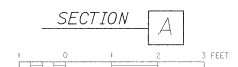
SHEET No. **10 of 10**



NOTE:  
PROVIDE CURB AROUND  
ENTIRE EXTERIOR  
PERIMETER OF NEW  
CLARIFIER BUILDING.



NOTE:  
"MIRADRAIN 6000" OR AN APPROVED EQUAL PRODUCT  
MAY BE USED IN PLACE OF WASHED ROCK/GEOTEXTILE  
SYSTEM SHOWN.

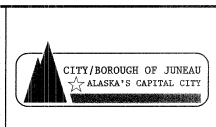


AS-BUILT

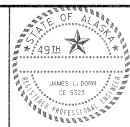
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REV	DATE	BY	DESCRIPTION
1	10/15/98	SS	AS-BUILT

SCALE:	DESIGNED:	SS
GRAPHIC	DRAWN:	ETI
CHECKED:	TQC	
DATE:	10-15-98	



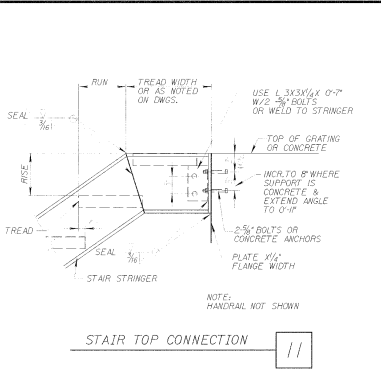
CITY AND BOROUGH OF JUNEAU  
**AUKE BAY**  
 WASTEWATER TREATMENT PLANT  
 EXPANSION  
 CONTRACT No. E97-003



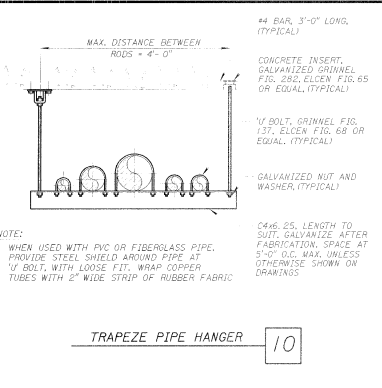
**CDI** Carson Dorn Inc.  
 70 WEST 12TH STREET  
 JUNEAU, ALASKA 99801  
 (907) 586-4447

STRUCTURAL DETAILS

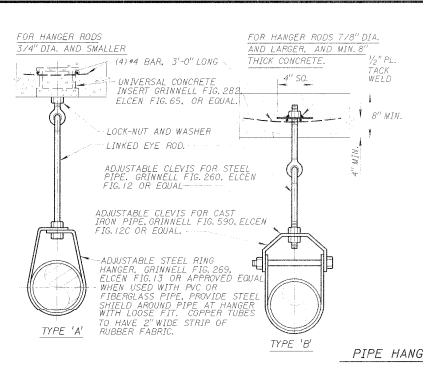
DRAWING  
**S-5**  
 SHEET No.  
 11 of 11



STAIR TOP CONNECTION 11



TRAPEZE PIPE HANGER 10

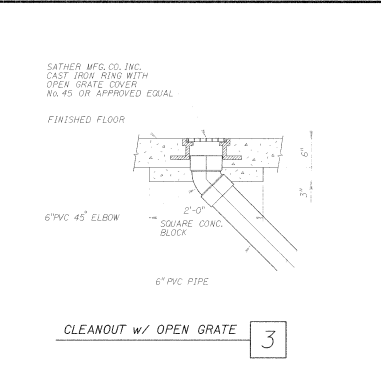


PIPE HANGER RODS AND SUPPORT SPACING

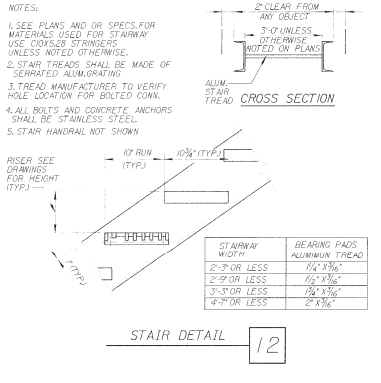
PIPE DIA. (INCHES)	ROD DIA. (INCHES)	MAX. SUPPORT SPACING (FEET)	STL. PIPE C.I. PIPE	TYPE 'A'	TYPE 'B'	WEIGHT LIMIT (LBS.)
8 SMALLER	3/8	6	5	610	1700	
1 1/4 TO 2	3/8	9	5	610	1700	
2 1/2 TO 3 1/2	1/2	12	5	1130	3200	
4 TO 5	5/8	14	5	1430	3600	
6, 8	3/4	16	5	1430	3800	
10, 12	7/8	18	5	1430	5800	
14, 16	1	20	5	1430	5800	

NOTES:  
 1. GALVANIZE ALL PARTS AFTER FABRICATION.  
 2. ALL HANGERS AND SUPPORT DETAILS SHALL BE MODIFIED BY THE CONTRACTOR AS NEEDED TO CONNECT TO AVAILABLE STRUCTURAL MEMBERS (I.E., WOOD, STEEL OR CONCRETE).

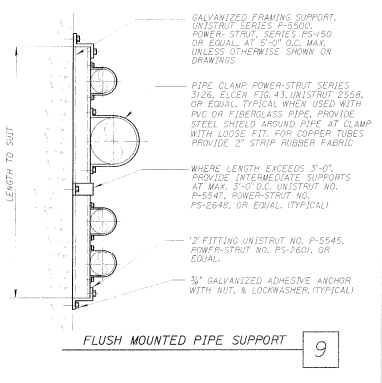
PIPE HANGER 4



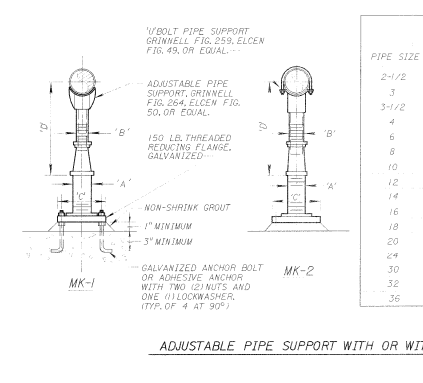
CLEANOUT w/ OPEN GRATE 3



STAIR DETAIL 12



FLUSH MOUNTED PIPE SUPPORT 9

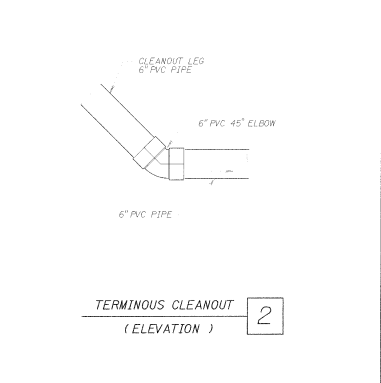


ADJUSTABLE PIPE SUPPORT WITH OR WITHOUT 'U' BOLT 5

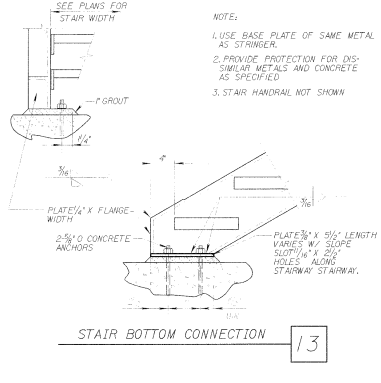
ADJUSTABLE PIPE SUPPORT APPROXIMATE DIMENSIONS IN INCHES

PIPE SIZE	'A'	'B'	'C'	'D' MINIMUM	'D' MAXIMUM
2-1/2	2-1/2	1-1/2	9	8	11-1/2
3	2-1/2	1-1/2	9	8-1/4	11-3/4
3-1/2	2-1/2	1-1/2	9	8-1/2	12
4	3	*2-1/2	9	10-1/4	14
6	3	*2-1/2	9	11-5/8	15-1/4
8	3	*2-1/2	9	13-5/8	16-1/2
10	3	*2-1/2	9	14-5/8	18-1/4
12	3	*2-1/2	9	15-5/8	19-3/4
14	4	3	11	18-7/8	20-3/4
16	4	3	11	19-7/8	22-1/4
18	6	3-1/2	13-1/2	21-1/4	24
20	6	3-1/2	13-1/2	23-1/4	25-1/2
24	6	4	13-1/2	26-1/4	28-1/4
30	6	4	13-1/2	29-5/8	31-1/2
32	6	4	13-1/2	30-5/8	32-3/4
36	6	4	13-1/2	32-5/8	34-3/4

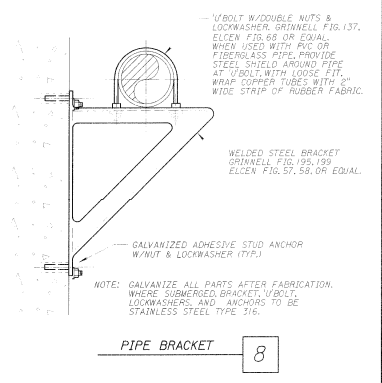
\* SEE WFR.



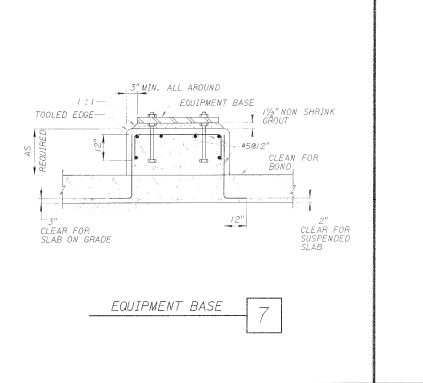
TERMINOUS CLEANOUT (ELEVATION) 2



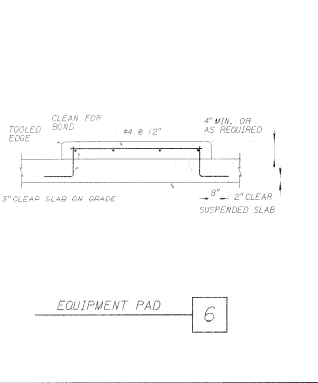
STAIR BOTTOM CONNECTION 13



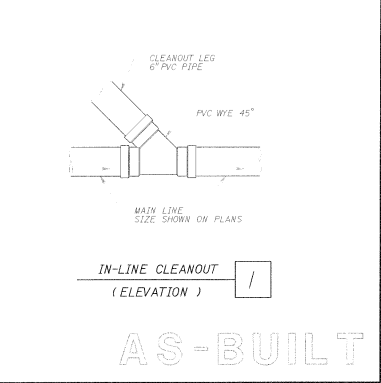
PIPE BRACKET 8



EQUIPMENT BASE 7



EQUIPMENT PAD 6



IN-LINE CLEANOUT (ELEVATION) 1

AS-BUILT

REVISIONS

REV.	DATE	BY	DESCRIPTION

SCALE: NONE

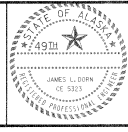
DESIGNED: SS

DRAWN: EHI

CHECKED: TGC

DATE: 10-16-98

CITY AND BOROUGH OF JUNEAU  
 AUKE BAY  
 WASTEWATER TREATMENT PLANT  
 EXPANSION  
 CONTRACT No. E97-003



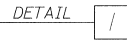
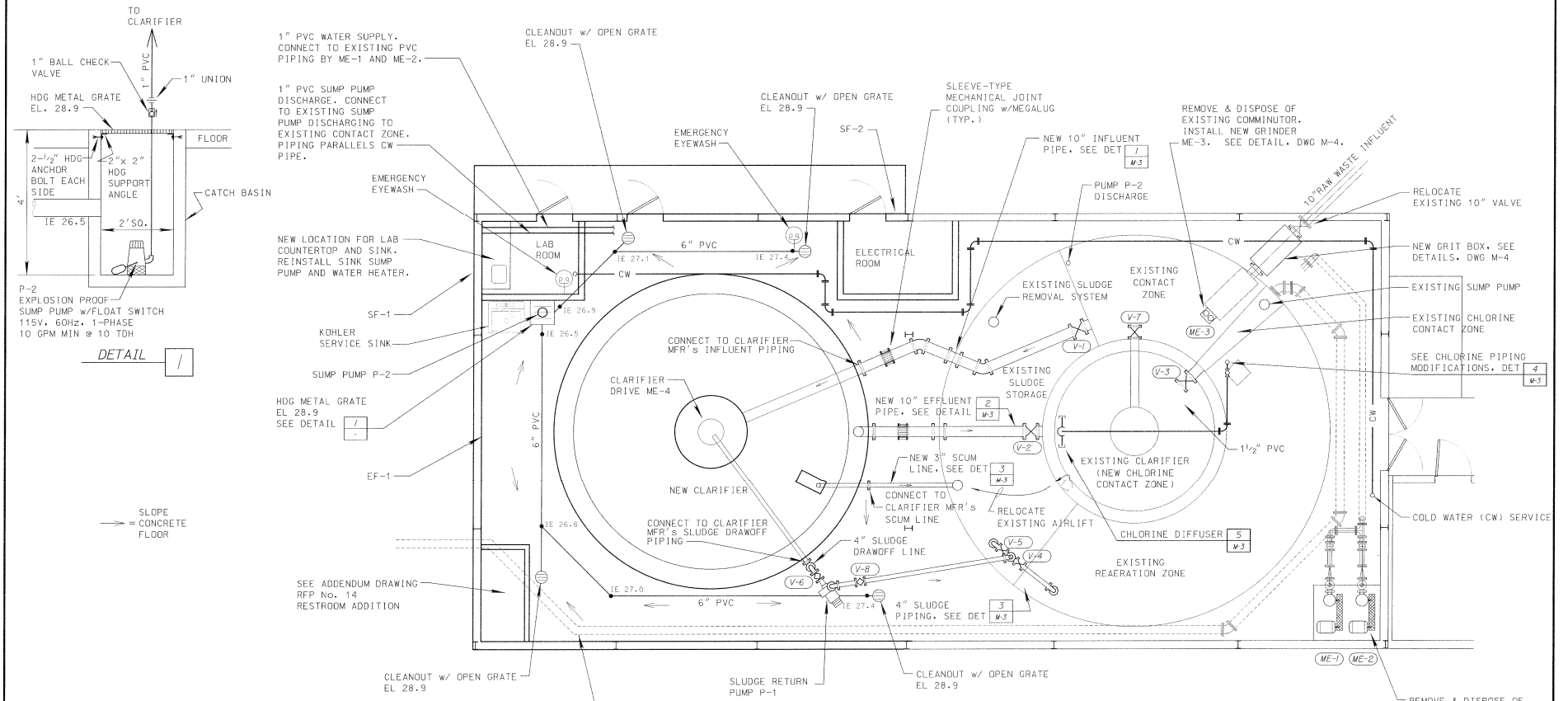
70 WEST 12TH STREET  
 JUNEAU, ALASKA 99801  
 (907) 586-6447

STRUCTURAL DETAILS

DRAWING S-6

SHEET No. 12 of





**VALVE SCHEDULE**

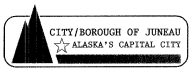
ID	SIZE	DESCRIPTION
V-1	10"	GATE VALVES w/ HANDWHEEL OPERATORS EXTENDED TO PLATFORM LEVEL
V-2	10"	
V-3	10"	
V-4	4"	ECCENTRIC PLUG VALVES w/ OPERATORS
V-5	4"	
V-6	4"	
V-7	8"	GATE VALVE BOLTED TO EXISTING LINE IN EXISTING CLARIFIER
V-8	4"	ECCENTRIC PLUG VALVE w/ OPERATORS

- NOTES:**
1. MOUNT EXHAUST FAN EF-1 @ TOP OF WALL, NEAR ROOF.
  2. MOUNT SUPPLY FANS SF-1 & SF-2 @ 7' AFF.
  3. PROTECT AND MAINTAIN EXISTING SUMP PUMP IN EXISTING CHLORINE CONTACT ZONE.
  4. PROTECT AND MAINTAIN EXISTING SLUDGE REMOVAL SYSTEM IN EXISTING SLUDGE STORAGE.

1 0 5 10 FEET  
 AS-BUILT

1	DEC-99	RAS	AS-BUILT

SCALE:  
 DESIGNED: SS  
 GRAPHIC: [Symbol]  
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 CHECKED: TGC  
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 DATE: 10-16-98

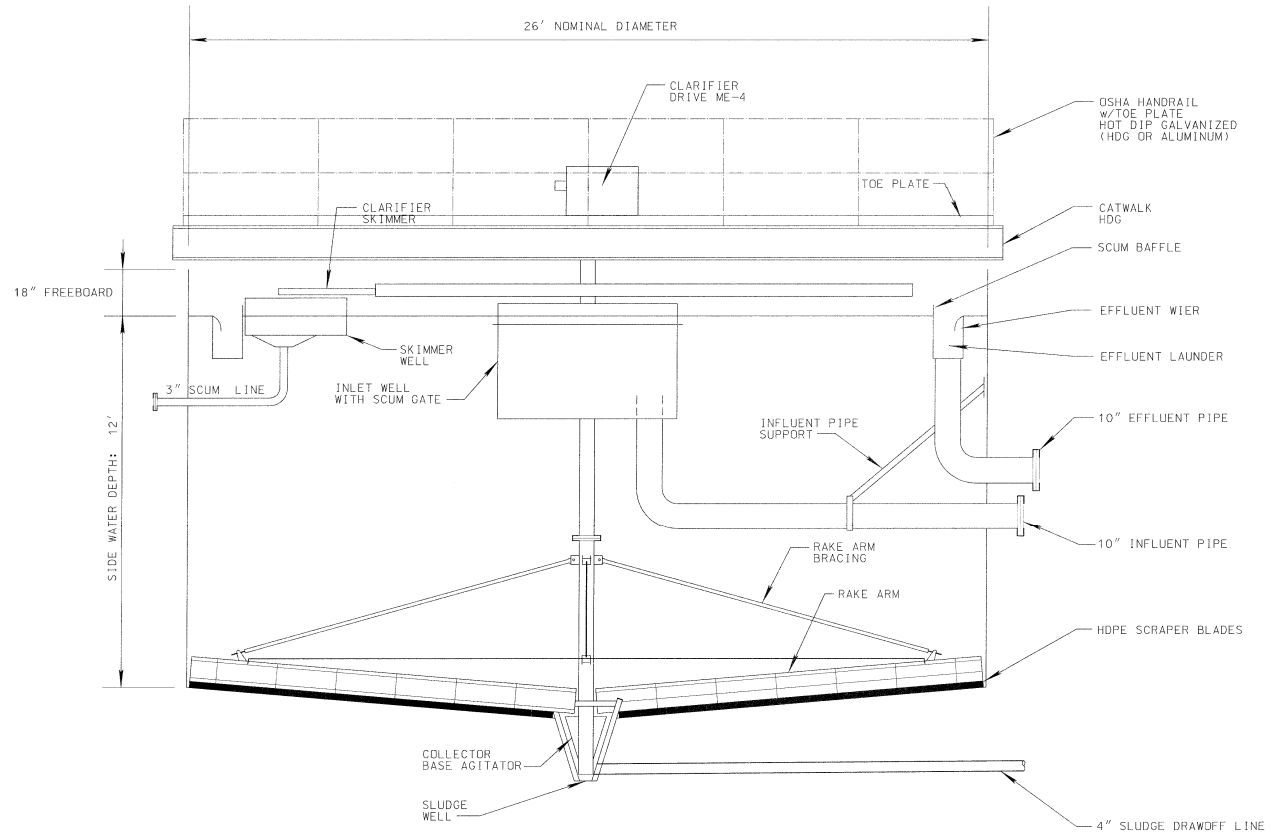


CITY AND BOROUGH OF JUNEAU  
**AUKE BAY**  
 WASTEWATER TREATMENT PLANT  
 EXPANSION  
 CONTRACT No. E97-003

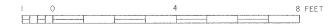


**CD Carson Dorn Inc.**  
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 JUNEAU, ALASKA 99801  
 (907) 586-4447

**CLARIFIER BUILDING PIPING**  
 DRAWING  
**M-1**  
 SHEET No.  
 13 of



NOTE:  
FEATURES ROTATED ABOUT VERTICAL  
CENTERLINE FOR CLARITY.

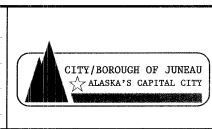


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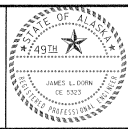
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 Date Plotted: 03/01/2009 Time Plotted: 09:53:01  
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REV.	DATE	BY	DESCRIPTION
1	DEC-98	RAS	AS-BUILT

SCALE:	DESIGNED:	SS
GRAPHIC	DRAWN:	ETH
DATE PERIOD:	CHECKED:	TGC
	DATE:	10-16-98



CITY AND BOROUGH OF JUNEAU  
**AUKE BAY**  
**WASTEWATER TREATMENT PLANT**  
**EXPANSION**  
 CONTRACT No. E97-003

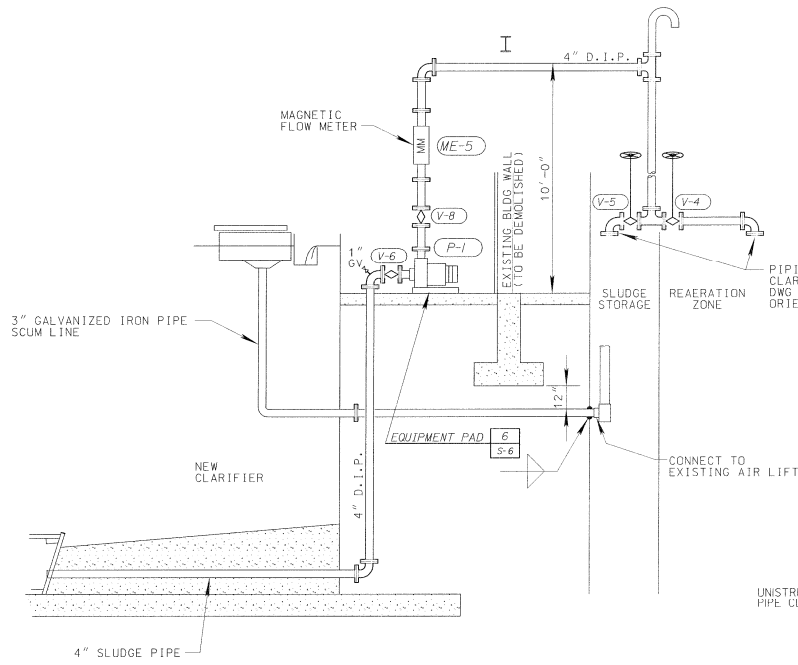


**CD Carson Dorn Inc.**  
 712 WEST 12TH STREET  
 JUNEAU, ALASKA 99801  
 (907) 586-4447

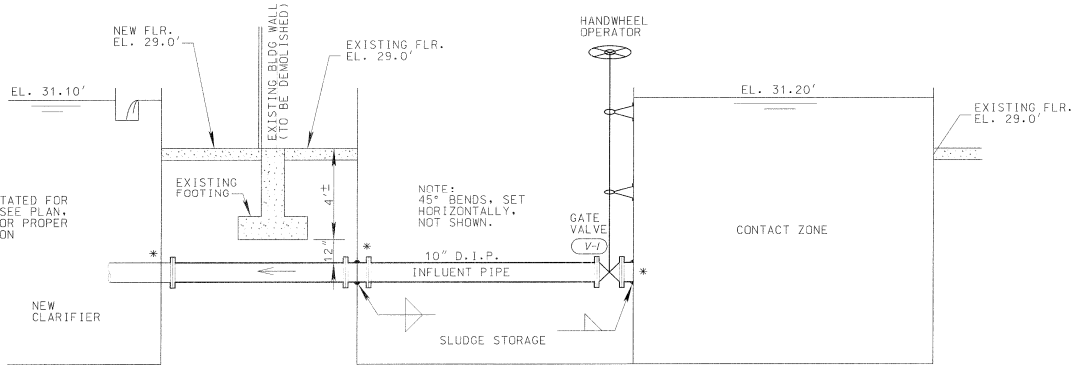
**CLARIFIER FEATURES**

DRAWING  
**M-2**  
 SHEET No.  
 14 of

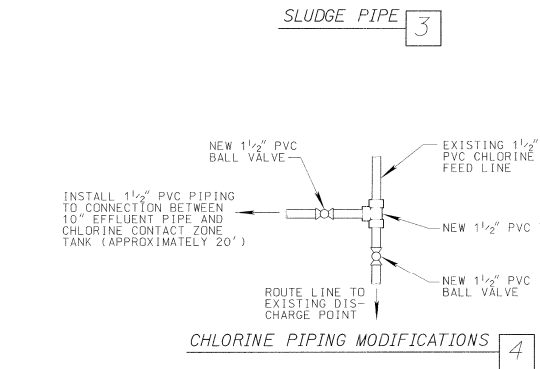
\* PENETRATIONS OF ALL TANK (CLARIFIER) WALLS AND PARTITIONS TO BE MADE PERPENDICULAR TO THE TANK WALL. WELD ALL CONNECTIONS TO EXISTING TANK & PAINT WELDS WITH COAL TAR EPOXY OR EQUAL.



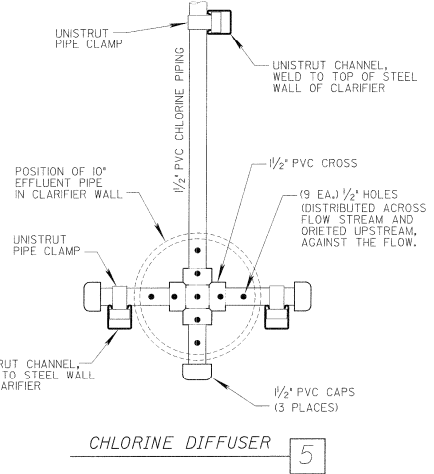
CLARIFIER INFLUENT PIPE 1



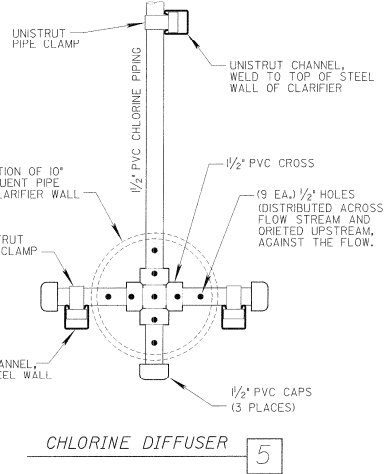
CLARIFIER EFFLUENT PIPE 2



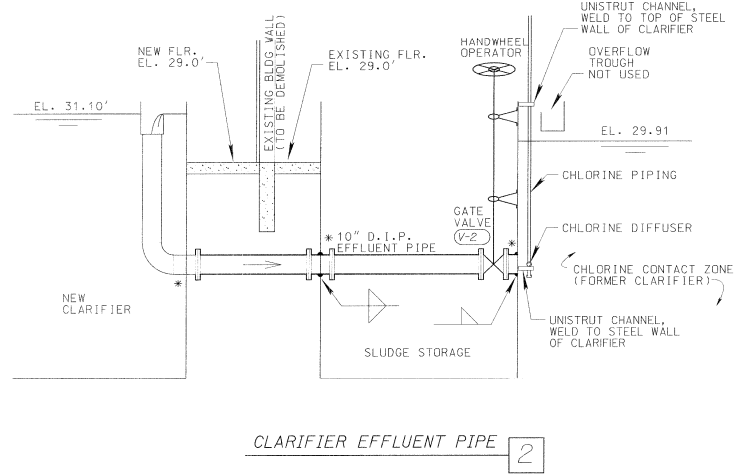
SLUDGE PIPE 3



CHLORINE PIPING MODIFICATIONS 4



CHLORINE DIFFUSER 5

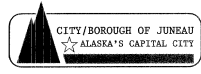


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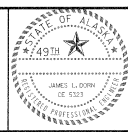
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REV	DATE	BY	DESCRIPTION
1	DEC 98	RAS	AS-BUILT

SCALE:	DESIGNED:	SS
NONE	DRAWN:	CHD
DATE PERMITTED:	CHECKED:	TGC
	DATE:	10-16-98



CITY AND BOROUGH OF JUNEAU  
**AUKE BAY**  
 WASTEWATER TREATMENT PLANT  
 EXPANSION  
 CONTRACT No. E97-003



**CDI** Carson Dorn Inc.  
 712 WEST 12TH STREET  
 JUNEAU, ALASKA 99801  
 (907) 586-4447

DRAWING  
**PIPING DETAILS & ELEVATIONS**  
 M-3  
 SHEET No.  
 15 of



PLANT DESIGN LOADINGS

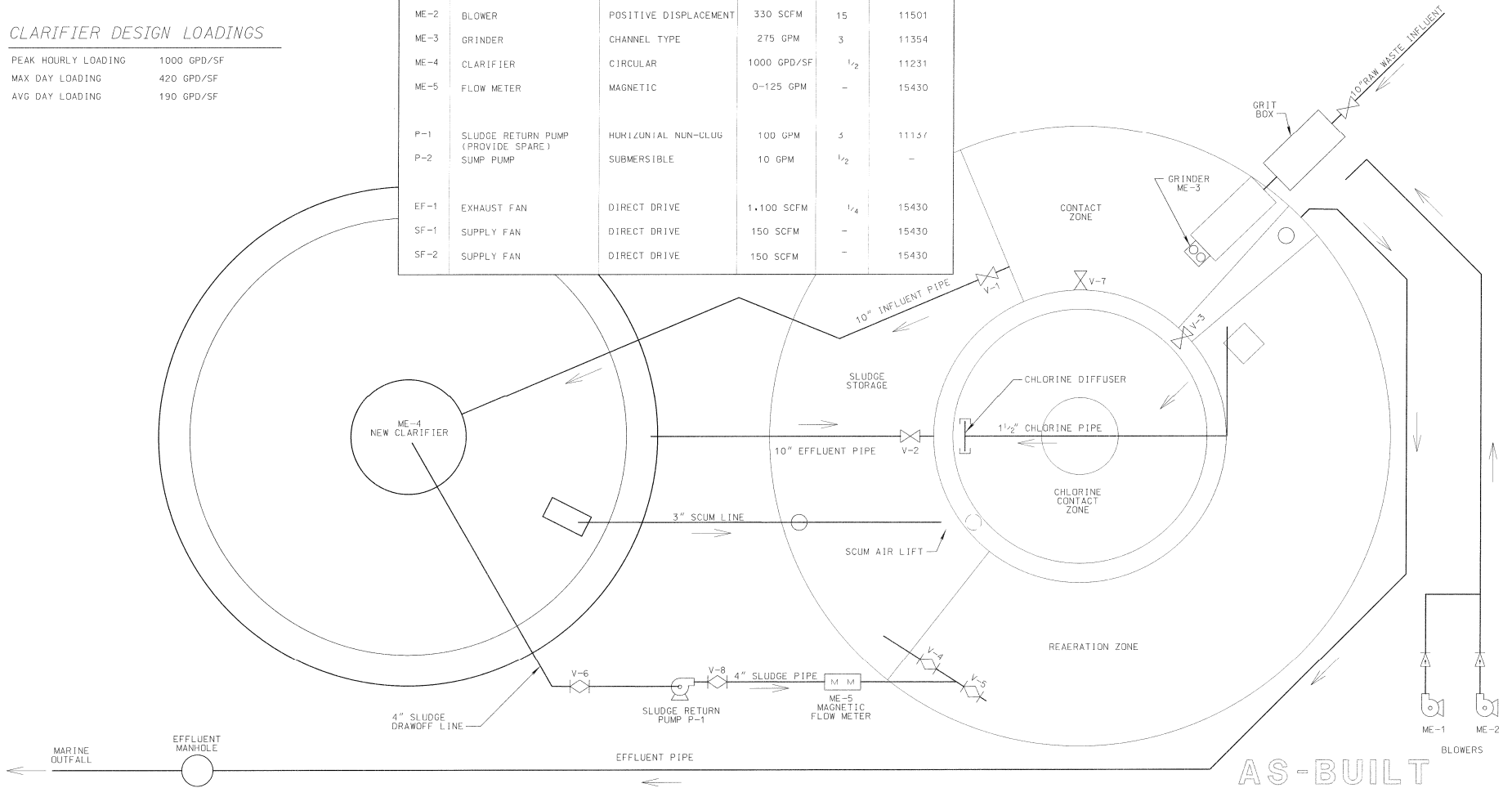
AVERAGE DAILY FLOW	101,000 GPD (70 GPM)
MAXIMUM DAILY FLOW	222,000 GPD (154 GPM)
PEAK HOURLY FLOW	533,000 GPD (370 GPM)

CLARIFIER DESIGN LOADINGS

PEAK HOURLY LOADING	1000 GPD/SF
MAX DAY LOADING	420 GPD/SF
AVG DAY LOADING	190 GPD/SF

MECHANICAL EQUIPMENT SCHEDULE

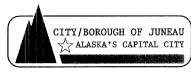
NO.	NAME	TYPE	CAPACITY	H.P.	SPECIFICATION SECTION
ME-1	BLOWER	POSITIVE DISPLACEMENT	330 SCFM	15	11501
ME-2	BLOWER	POSITIVE DISPLACEMENT	330 SCFM	15	11501
ME-3	GRINDER	CHANNEL TYPE	275 GPM	3	11354
ME-4	CLARIFIER	CIRCULAR	1000 GPD/SF	1/2	11231
ME-5	FLOW METER	MAGNETIC	0-125 GPM	-	15430
P-1	SLUDGE RETURN PUMP (PROVIDE SPARE)	HORIZONTAL NON-CLUG	100 GPM	3	11137
P-2	SUMP PUMP	SUBMERSIBLE	10 GPM	1/2	-
EF-1	EXHAUST FAN	DIRECT DRIVE	1,100 SCFM	1/4	15430
SF-1	SUPPLY FAN	DIRECT DRIVE	150 SCFM	-	15430
SF-2	SUPPLY FAN	DIRECT DRIVE	150 SCFM	-	15430



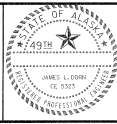
Party/Job Name: JUNEAU WASTEWATER TREATMENT PLANT EXPANSION  
 Date Plotted: 11/16/98  
 Time Plotted: 10:51 AM

REV	DATE	BY	DESCRIPTION
1	DEC 99	RAS	AS-BUILT

SCALE:	NONE
DESIGNED:	SS
DRAWN:	ETD
CHECKED:	TOC
DATE PRINTED:	10-16-98



CITY AND BOROUGH OF JUNEAU  
**AUKE BAY**  
**WASTEWATER TREATMENT PLANT**  
**EXPANSION**  
 CONTRACT No. E97-003

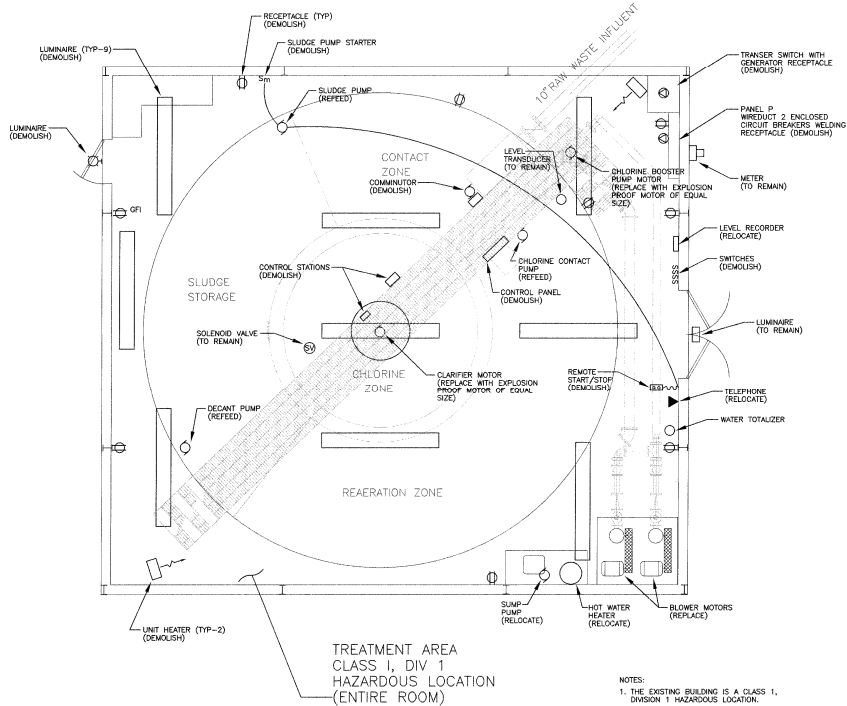
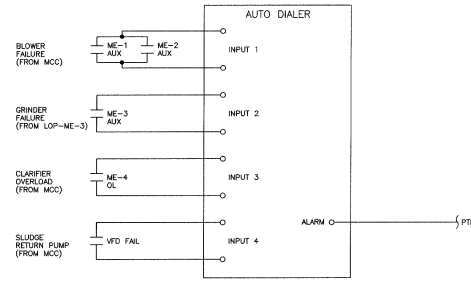


**CDI** Carson Dorn Inc.  
 110 WEST 13TH STREET  
 JUNEAU, ALASKA 99801  
 (907) 586-4447

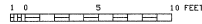
PROCESS FLOW DIAGRAM  
**M-5**  
 SHEET No. 17 of 17



Path/File Name: F:\127\110\Drawg\A\B\1102.dwg Date Plotted: 10 DEC 1999 Time Plotted: 15:00:00



DEMOLITION PLAN



- NOTES:
- 1. THE EXISTING BUILDING IS A CLASS 1, DIVISION 1 HAZARDOUS LOCATION.
  - 2. DEMOLISH ALL EXISTING ELECTRICAL EQUIPMENT IN THE EXISTING BUILDING, EXCEPT AS NOTED.

AS-BUILT

1	DEC99	SFS	AS-BUILD

SCALE:	DESIGNED: TSM
1/4" = 1'-0"	DRAWN: _____
DATE PRINTED: _____	CHECKED: TSM
	DATE: 10-16-98



CITY AND BOROUGH OF JUNEAU  
AUKE BAY  
WASTEWATER TREATMENT PLANT  
EXPANSION  
CONTRACT No. E97-003



**Carson Dorn Inc.**  
CONSULTING ENGINEERS  
**HAICHT & MCLAUGHLIN, INC.**  
CONSULTING ENGINEERS  
418 Harris Street, Juneau, Alaska 99801 (907) 588-9788

TREATMENT PLANT  
DEMOLITION PLAN AND  
ALARM RISER DIAGRAM

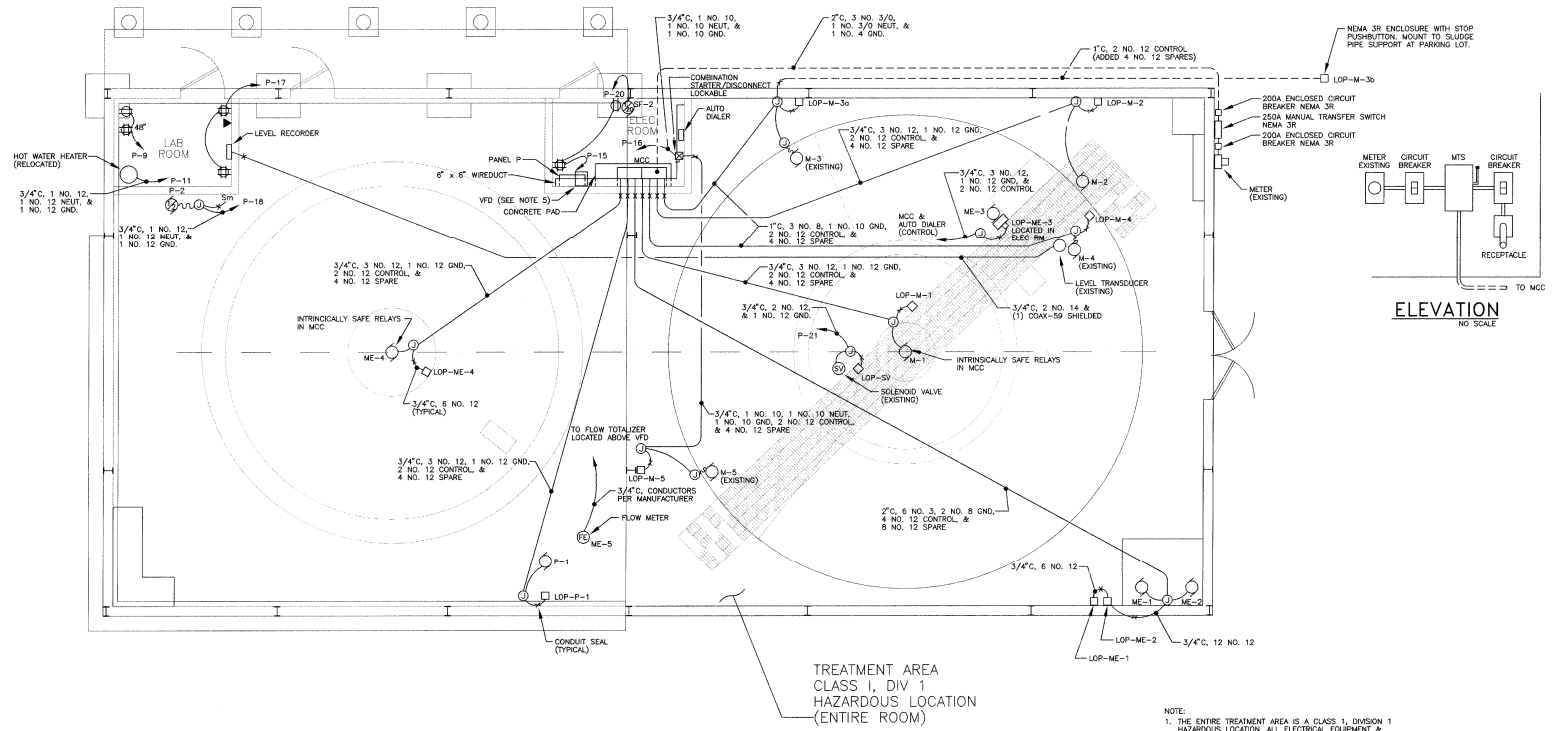
DRAWING
E-2
SHEET No.
E-2 of 5

15/00/00

10 DEC 1999

Rev: 1003.dwg

10-16-98



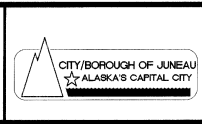
**ELEVATION**  
NO SCALE

- NOTE:**
1. THE ENTIRE TREATMENT AREA IS A CLASS 1, DIVISION 1 HAZARDOUS LOCATION. ALL ELECTRICAL EQUIPMENT & WIRING MUST COMPLY WITH NEC REQUIREMENT FOR CLASS 1, DIVISION 1 LOCATION.
  2. CONNECTIONS TO MOTORS IN TREATMENT AREA SHALL BE EXPLOSION PROOF FLEX.
  3. PROVIDE A TWO STAGE, REMOTE BULB THERMOSTAT FOR CONTROLLING THE UNIT HEADERS IN THE TREATMENT AREA. STAGE 1 WILL CONTROL UH-1 & UH-4, STAGE 2 WILL CONTROL UH-2 & UH-3. LOCATE THE REMOTE BULB IN THE TREATMENT AREA.
  4. PROVIDE GALVANIZED RIGID STEEL (GRS) CONDUIT FOR THE TREATMENT AREA. THE MINIMUM SIZE CONDUIT IN THE TREATMENT AREA SHALL BE 3/4\".

**AS-BUILT**

1	DEC99	SFS	AS-BUILT

SCALE:	DESIGNED:	TSM
1/4" = 1'-0"	DRAWN:	TSM
DATE PRINTED:	CHECKED:	TSM
	DATE:	10-16-98



CITY AND BOROUGH OF JUNEAU  
**AUKE BAY  
WASTEWATER TREATMENT PLANT  
EXPANSION**  
CONTRACT No. E97-003

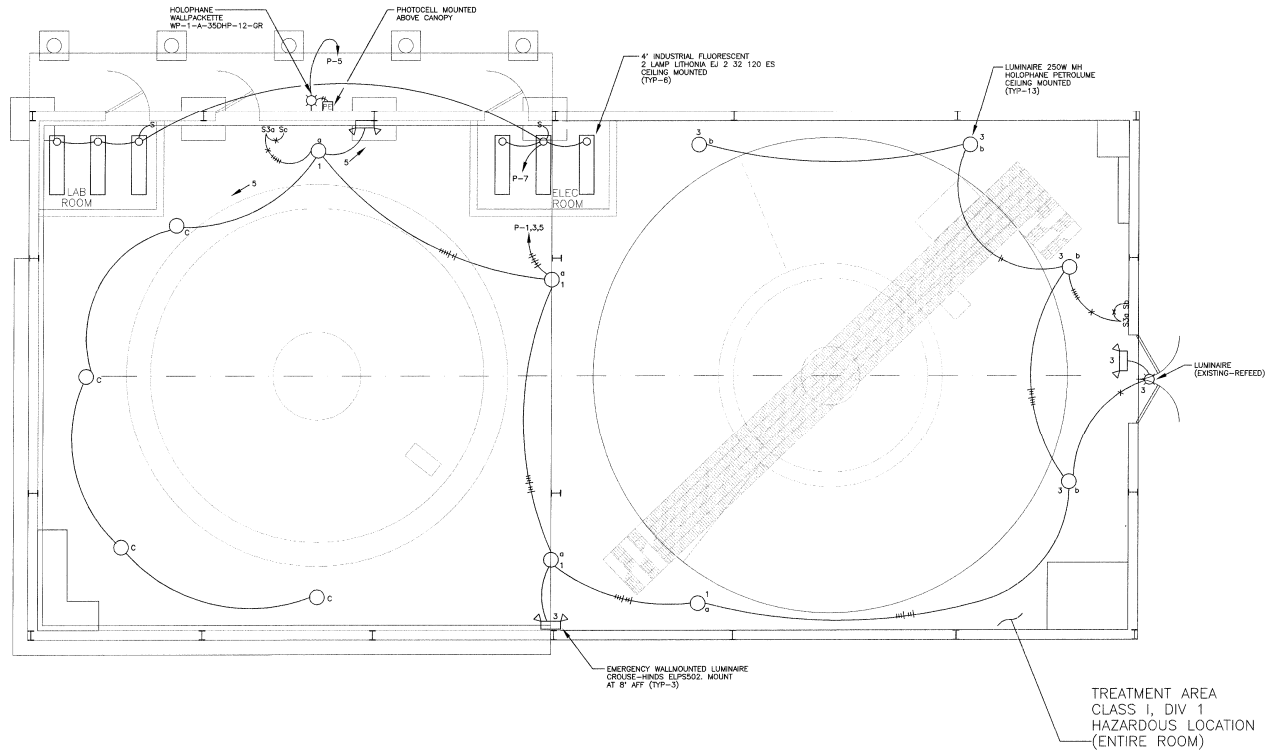


**TREATMENT PLANT  
POWER AND SIGNAL**

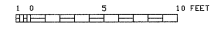
DRAWING	<b>E-3</b>
SHEET No.	E-3 of 5



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PLAN



- NOTES:
1. PROVIDE NEW LIGHTING FOR ENTIRE BUILDING, AS SHOWN.
  2. THE ENTIRE TREATMENT AREA IS A CLASS 1, DIVISION 1 HAZARDOUS LOCATION. ALL ELECTRICAL EQUIPMENT & WIRING MUST COMPLY WITH NEC REQUIREMENT FOR CLASS 1, DIV. 1 LOCATION.

AS-BUILT

1 DEC99 SPS   AS-BUILT		SCALE: 1/4" = 1'-0"	DESIGNED: TSM DRAWN: CHECKED: TSM DATE: 10-16-98	CITY/BOROUGH OF JUNEAU ALASKA'S CAPITAL CITY	CITY AND BOROUGH OF JUNEAU <b>AUKE BAY          WASTEWATER TREATMENT PLANT          EXPANSION</b> CONTRACT No. E97-003	Carson Dorn Inc. CONSULTING ENGINEERS	<b>TREATMENT PLANT          LIGHTING PLAN</b>	DRAWING <b>E-4</b> SHEET No. E-4 of 5
REV. DATE BY DESCRIPTION	DATE PRINTED:	DESIGNED:	CHECKED:	STATE OF ALASKA 49th T.S. McLAUGHLIN EE 8499 JUNEAU REGIONAL OFFICE	<b>HAIGHT &amp; McLAUGHLIN, INC.</b> CONSULTING ENGINEERS 418 Harris Street, Juneau, Alaska 99901 (907) 588-9788	TREATMENT AREA CLASS 1, DIV 1 HAZARDOUS LOCATION (ENTIRE ROOM)	LUMINAIRE (EXISTING-REFEED)	

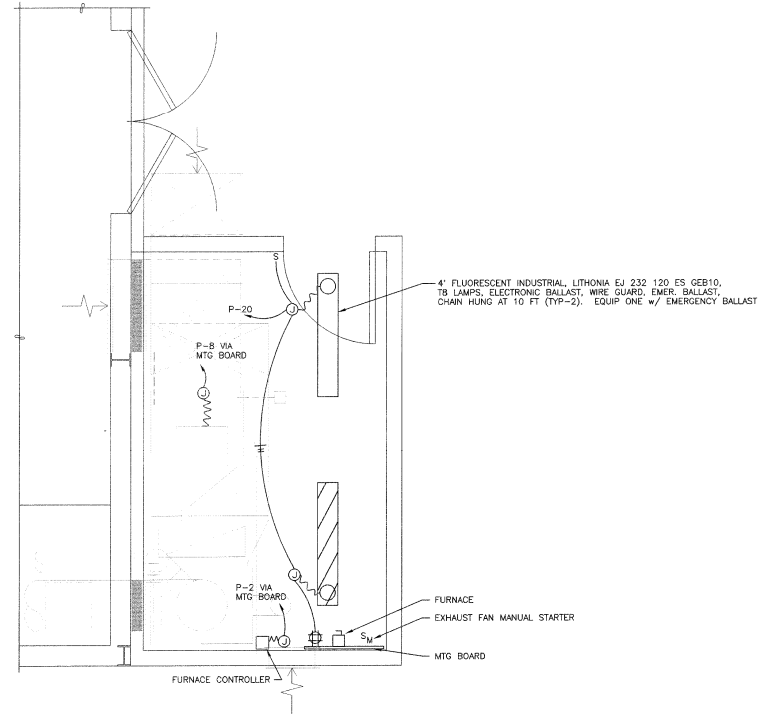
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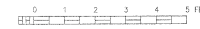
Date Plotted: 10 DEC 1999

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PANEL P		SIZE		VOLTS/PHASE			MAIN		LOCATION		MOUNT
C. NO.	DESCRIPTION	225 AMPS		120/208V, 3ø			150A		ELECTRICAL ROOM		SURFACE
		BREAKER AMP/POLE	CTKT	AØ	BØ	CØ	CTKT	AMP/POLE	DESCRIPTION		
1	TREATMENT AREA	LTG	20/1	1.5	2.5		1.0	15/3		FURNACE	2
3	TREATMENT AREA			1.3		2.3	1.0	---	---		4
5	TREATMENT AREA			1.3			2.3	1.0	---		6
7	ELEC ROOM & LAB			0.4	0.8		0.4	15/3		EXHAUST FAN	8
9	LAB ROOM OUTLETS			0.5		0.9	0.4	---	---		10
11	HOT WATER HEATER			1.7			2.1	0.4	---		12
13	SPARE			0.0	0.0		0.0	20/1		SPARE	14
15	ELEC ROOM RECEPTACLES			0.5			1.4	20/1		DECANT PUMP	16
17	LAB ROOM RECEPTACLES			1.2			2.0	0.8	20/1	SUMP PUMP P-2	18
19	AUTO DIALER			0.1	0.8		0.7	20/1		SUPPLY FAN SF-2 & FURNACE RM RECEPT/LTG	20
21	FLOW METER, SOLENOID VALVE, MISC. CONTROL			0.2			0.2	0.0		SPACE	22
23	SPACE										24
25											26
27											28
29											30
31											32
33											34
35											36
37											38
39											40
41											42
TOTAL CONNECTED LOAD = 15.8 KVA / 53 AMPS				4.1	5.3	6.4					



MECHANICAL ROOM PLAN



AS-BUILT

REV	DATE	BY	DESCRIPTION
1	DEC99	SPS	AS-BUILT

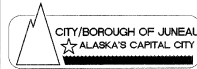
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DESIGNED: TSM

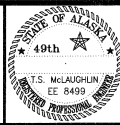
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CHECKED: TSM

DATE: 10-16-98



CITY AND BOROUGH OF JUNEAU  
 AUK BAY  
 WASTEWATER TREATMENT PLANT  
 EXPANSION  
 CONTRACT No. E97-003



**Carson Dorn Inc.**

**HAIGHT & McLAUGHLIN, INC.**  
 CONSULTING ENGINEERS  
 418 Huron Street, Juneau, Alaska 99801 (907) 588-9788

MECHANICAL ROOM  
 ADDENDUM #2

DRAWING  
 E-5

SHEET No.  
 E-5 of 5