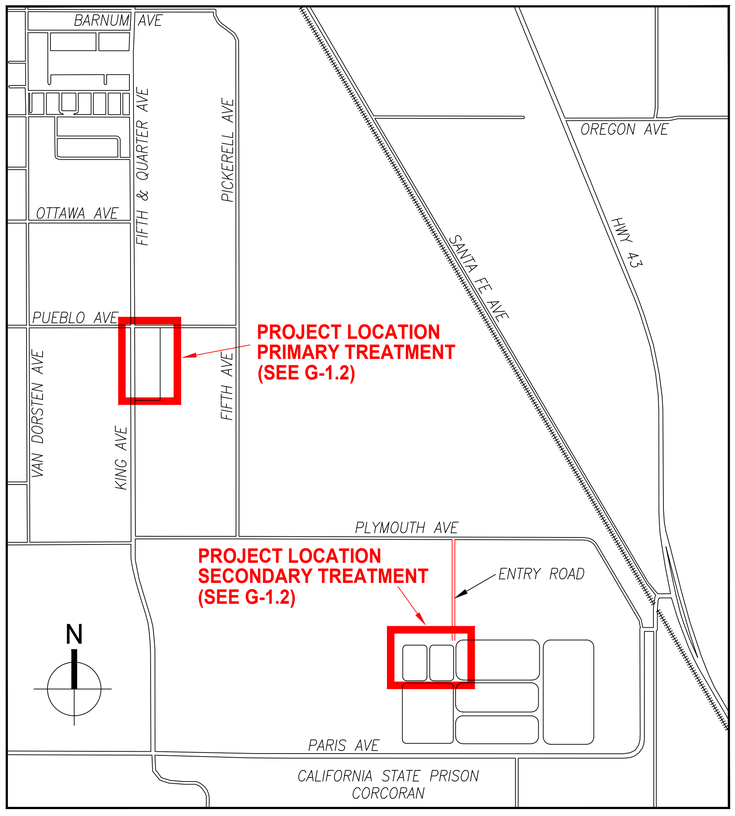
CITY OF CORCORAN

COUNTY of KINGS — STATE of CALIFORNIA

State Community Development Block Grant 17-CDBG-12093

2020 WASTEWATER TREATMENT PLANT MODIFICATIONS



LOCATION MAP

SCALE: N.T.S.

UTILITY COMPANY ADDRESSES

1 CITY OF CORCORAN PUBLIC WORKS DEPARTMENT
1033 CHITTEDEN AVENUE CORCORAN, CA 93212
ATTENTION: JOE FAULKNER 559-992-2151 EXT 262

2 PACIICFIC GAS & ELECTRIC COMPANY
208 WEST "D" STREET LEMOORE, CA 93245
ATTENTION: IAN SMITH 559-347-5070 IPS2@PGE.COM

GENERAL NOTES:

1 ALL LABOR, MATERIALS, AND WORKMANSHIP SHALL CONFORM WITH THE REQUIREMENTS OF AWWA STANDARDS THE UNIFORM PLUMBING CODE, THE NATIONAL ELECTRIC CODE, THE LOCAL HEALTH DEPARTMENT, SPECIFICATIONS AND STANDARDS OF THE CITY OF CORCORAN, EXCEPT WHERE SPECIFICALLY NOTED ON THESE PROJECT PLANS AND SPECIFICATIONS.
2 CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY AND ALL CONFLICTS BETWEEN CONTRACT DRAWINGS AND THE ACTUAL SITE CONDITIONS PRIOR TO COMMENCING ANY WORK IN QUESTION.
3 CONTRACTOR SHALL PROVIDE PEDESTRIAN, VEHICLE, WORKER AND TREE PROTECTION AS NECESSARY FOR THE FULL DURATION OF THE PROJECT.
4 CONTRACTOR SHALL MAINTAIN DUST CONTROL ABOUT THE SITE OF WORK AS SPECIFIED BY THE SAN JOAQUIN VALLEY APCD.
5 CONTRACTOR SHALL BE LICENSED AS CLASS 'A' GENERAL ENGINEERING CONTRACTOR ACCORDANCE WITH THE PROVISIONS OF CHAPTER 9, DIVISION 3 OF THE BUSINESS AND PROFESSIONAL CODE.
6 CONTRACTOR SHALL PERFORM ALL WORK NECESSARY TO COMPLETE THE CONTRACT IN SATISFACTORY MANNER PROVIDING ALL MATERIALS, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK UNLESS SPECIFIED OTHERWISE.
7 CONTRACTOR SHALL NOTIFY THE APPROPRIATE AGENCY AT LEAST 7 DAYS PRIOR TO COMMENCING WORK SO THAT SAID AGENCY MAY PRESERVE MONUMENTS AND BENCH MARKS, WHICH MAY NOT BE DISTURBED WITHOUT AGENCY CONSENT.
8 CONTRACTOR SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS THE CITY, ITS ENGINEER AND CONSULTANTS, THEIR OFFICERS, EMPLOYEES ADN AGENTS, FROM ANY AND ALL LIABILITY CLAIMS, LOSSES OR DAMAGES ARISING OR ALLEGED FROM THE PERFORMANCE OF THE WORK DESCRIBED ON THESE PLANS, NOT INCLUDING SOLE NEGLIGIENCE ON THE PART OF THE CITY.
9 CONTRACTOR SHALL EXPOSE ALL EXISTING PIPELINES OR OTHER UNDERGROUND OBSTRUCTIONS TO VERIFY THAT THERE ARE NO GRADE CONFLICTS PRIOR TO LAYING AND GRAVITY PIPELINES UPSTREAM OF SAID PIPELINES OR OBSTRUCTIONS.
10 LOCATION AND RELOCATION OF ULTILITY POLES SHALL BE COORDINATED WITH THE AFFECTED UTILITY COMPANY.
11 THE LOCATION OF UNDERGROUND UTLITIES AS SHOWN ON THESE PLANS ARE BASED ON THE BEST AVAILABLE INFORMATION; HOWEVER, THE CITY OF CORCORAN AND THE ENGINEER ASSUME NO RESPONSIBLITY FOR THE ACCURACY OF THE INFORMATION SHOWN, OR FOR THE INADVERTENT OMISSION OF ANY SUCH INFORMATION, THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY COMPANIES AND OTHER CONTRACTORS WORKING WITHIN THE LIMITS OF THIS PROJECT.
12 THE CONTRACTOR SHALL PROVIDE POLYETHYENE ENCASEMENT FOR ALL BURIED VALVES AND FITTINGS AND DUCTILE IRON PIPE.
13 ANY EXISTING IMPROVEMENTS OR UTILITY REMOVED, DAMAGED, OR UNDERCUT BY CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE APPROPRIATE PUBLIC AGENCY OR UTILITY AT THE CONTRACTOR'S EXPENSE.
14 CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINOUSLY AND NOT BE LIMITED TO NORMAL; WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
15 THE CONTRACTOR SHALL CONTACT THE "USA" LOCATOR SERVICE 1-800-642-2444, 48 HOURS PRIOR TO EXCAVATION.
16 CONTRACTOR SHALL COORDINATE ALL WORK WITH CITY OF CORCORAN WWTP OPERATIONS SO THAT NOT TO INTERFERE WITH THE TREATMENT PROCESS AND OPERATIONS.
17 UNAUTHORIZED CHANGES AND USES: THE ENGINEER PREPARING THESE PLANS SHALL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS BY OTHERS. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER ANY PROPOSED MODIFICATIONS AND/OR CHANGES TO THE PLANS AND SPECIFICATIONS IN WRITING WITH SUFFICIENT DETAILED INFORMATION AND TIME TO ALLOW THE ENGINEER TO CONDUCT AN ANALYSIS OF THE PROPOSED CHANGE AND PREPARE A WRITTEN RESPONSE TO THE CONTRACTOR. APPROVED CHANGES AND/OR MODIFICATIONS TO THE PLANS AND SPECIFICATIONS SHALL BE ISSUED BY THE ENGINEER PRIOR TO START OF WORK.
18 THESE PLANS ARE PROPERTY AND COPYRIGHT OF THE ENGINEER AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY WRITTEN AGREEMENT WITH THE ENGINEER. WRITTEN DEMINSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND FIELD DIMENSIONS SHALL BE VERIFIED ON THE JOB SITE. ANY DECREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO START OF ANY WORK.

BENCH MARK

B.M. CHISELED "X" IN CONCRETE TRANSFORMER PAD. POINT 102 ELEV=206.42'

BASIS OF BEARING

STATE PLANE COORDINATES ADJUSTED TO GROUND DISTANCE.
CALIF. COORDINATE SYSTEM OF 1983, CCS83, ZONE IV.
PT101-REBAR 20' W OF MCC N-190683.254, E 6400563.153
PT102 CUT "X" IN TRANSFORMER PAD N 1908708.891, E 6400607.545

SHEET INDEX

APPROVED BY:

JOSEPH FAULKNER, PUBLIC WORKS DIRECTOR

DATE

ORFIL MUNIZ, CITY ENGINEER RCE 88165

DATE

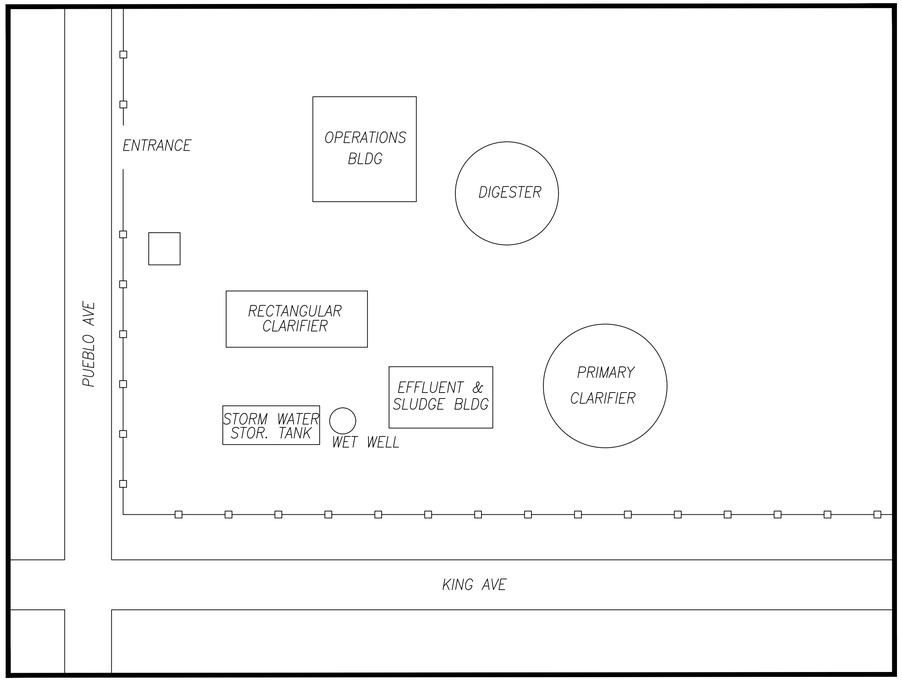
REGISTERED PROFESSIONAL ENGINEER — TERRY M. SCHROEPFER — No. 26,386 — Civil — STATE OF CALIFORNIA

REVISION	DATE	INITIALS	DESCRIPTION
1	.	.	.

CITY OF CORCORAN
2020 WASTEWATER TREATMENT PLANT MODIFICATIONS
COVER SHEET

W3i ENGINEERING WATER WASTEWATER INFRASTRUCTURE
661-319-3648
tschroepfer@W3ieng.com

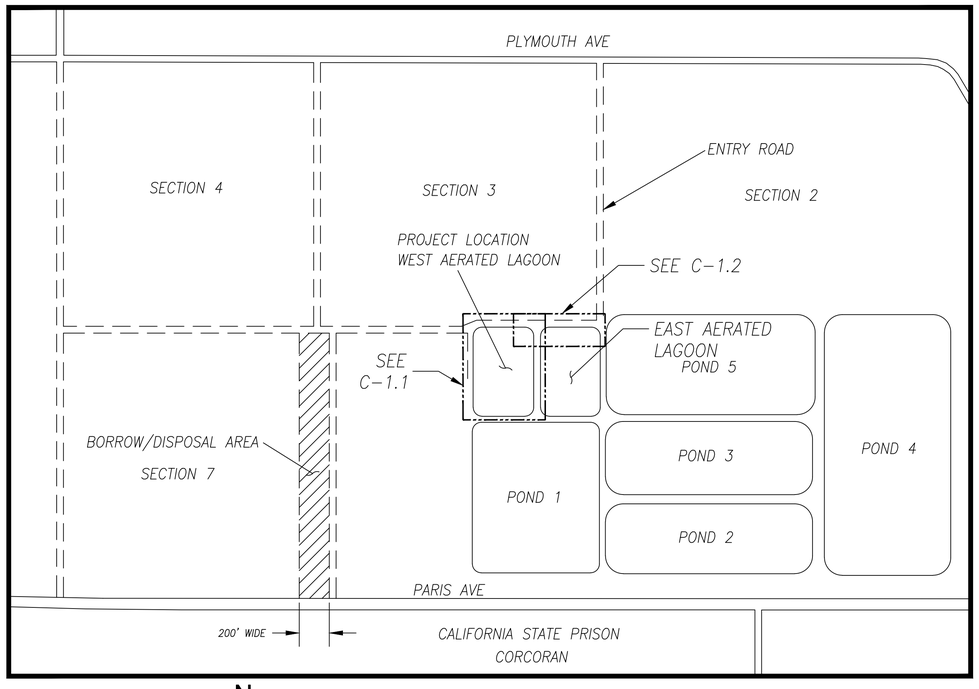
DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386
DRAWN BY: JCF
DATE: .
PROJ NO: CORC01-20
FILE NO: CORC-cover.dwg
SCALE: 0 1"
SHEET: G-1.1
1 OF 1



N

KEY MAP - PRIMARY TREAMENT

SCALE: N.T.S.



N

KEY MAP - SECONDARY TREAMENT

SCALE: N.T.S.

ABBREVATIONS

AG BASE	AGGREGATE BASE
APPROX	APPROXIMATE
BF	BLIND FLANGE
BM	BENCHMARK
C	CONDUIT
CONC	CONCRETE
CV	CHECK VALVE
DIP	DUCTILE IRON PIPE
E	ELECTRICAL
(E)	EXISTING
ea.	EACH
EF	EACH FACE
EFF	EFFLUENT
EL or ELEV	ELEVATION
EW	EACH WAY
EXPAND or EXP	EXPANSION BOLT
FF	FINISH FLOOR
FG	FINISH GRADE
FLG	FLANGE
FM	FORCE MAIN
FT	FEET
G	GAS
GALV	GALVANIZED
GCP	GROUND CONTROL POINT
GB	GRADE BREAK
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE
INV	INVERT
IRRIG	IRRIGATION
MAX	MAXIMUM
MCC	MOTOR CONTROL CENTER
MIN	MINIMUM
MJ	MECHANICAL JOINT
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OC	ON CENTER
OG	ORIGINAL GROUND
PL	PLACES
PRIM	PRIMARY
PSI	POUNDS/SQUARE INCH
PV	PLUG VALVE
PVC	POLYVINYL CHLORIDE
REQ'D	REQUIRED
SD	STORM DRAIN
SS	SANITARY SEWER
SS or ST STL	STAINLESS STEEL
SSFM	SANITARY SEWER FORCE MAIN
THD	THREADED
TYP	TYPICAL
UG	UNDERGROUND
UP	UTILITY POLE
w/	WITH
WS	WATER SURFACE
WWM	WELDED WIRE MESH

NOTES - BORROW AREA

1 STRIP AND STOCKPILE MINIMUM OF 3" TOP SOIL TO EXPOSE CLEAN FILL MATERIAL.
2 UNIFORMLY MOISTURE CONDITION AND EXCAVATE TO DEPTH NO MORE THAN 4 FT DEEP TO OBTAIN CLEAN FILL MATERIAL.
3 STOCKPILE UNSUITABLE SOIL FROM POND BOTTOM AND EMBANKMENTS IN BORROW/DISPOSAL AREA.
4 WHEN EXCAVATION IS COMPLETE, SPREAD STOCKPILED SOIL UNIFORMLY IN BORROW AREA. GRADE UNIFORMLY.
5 MAXIMUM SIDE SLOPE IN BORROW AREA IS 3:1.

TOPOGRAPHIC SURVEY

TOPOGRAPHIC SURVEY WAS COMPLETED BY QK, INC. WITH UNMANNED AERIAL VEHICLES (UAV) OCTOBER 2019. SEE SHEET T-1.1

REVISION	DATE	INITIALS	DESCRIPTION
1	.	.	.

CITY OF CORCORAN
2020 WASTEWATER TREATMENT PLANT MODIFICATIONS
PROJECT AREA MAP

W3i ENGINEERING WATER WASTEWATER INFRASTRUCTURE
661-319-3648
tschroepfer@W3ieng.com

DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386
DRAWN BY: JCF
DATE: .
PROJ NO: CORC01-20
FILE NO: CORC-cover.dwg
SCALE: 0 1"
SHEET: G-1.2
1 OF 1

REGISTERED PROFESSIONAL ENGINEER TERRY W. SCHROEPFER No. 26,386 CIVIL STATE OF CALIFORNIA

DATE

SEE SHEET C-1.2

EAST AERATED LAGOON

475.57'

228'

247.57'

CELL A

CELL B

CELL C

CELL D

BAFFLE 1

BAFFLE 2

BAFFLE 3

14"ø DIP (E)

14"ø CIP

208.0'

209.0'

206.0'

206.1'

206.0'

BLOWER BLDG PAD
ELEV 208.5'

112
× 197.49
GCP

115
× 206.10
GCP

REMOVE
SHOTCRETE

REMOVE
SHOTCRETE

SEE DETAIL 6 C-1.4

B
C-1.3

C
C-1.3

D

A
C-1.3

12'

3:1

PLACE 4" AG BASE
SURFACING

14" (E)
INV 201'

14" (E)
INV 201'

14" (E)
INV 201'

192.1'

190.1'

8'x12'
PIPE CONC. APRON

4
C-1.4

G.B.

66'

10'

91.5'

RAMP S=18%

RAMP S=15.7%

101'

192.2'

REMOVE 14" PIPE
AND INSTALL 90° ELL
AT INV 201.0'

190.1'

190.2'

REMOVE/DISPOSE EXISTING
BARBED WIRE FENCING

3" C. (E)

5'

A

332'

330'

POND 5

BOTTOM 192.0'

BOTTOM 190.0'

15'

12" PVC (E)

3" C. (E)

CONSTRUCT 14" PVC F.M.
INV 202.0'
S=0.0

14" PVC
OULET (E)
INV 203.26'

T.O.C.
WEIR
202.75' (VERIFY)

TOP OF
CONC WALL
206.27'

INV 16" = 201.0'

INV 16" = 193.0'

16" P.V.

8'x12'
PIPE CONC. APRON

4
C-1.4

3
C-1.4

16" DIP

14" INLET (E)

14"ø DIP (E)

CONSTRUCT
10'x10'x6"
CONC. APRON

CONTRACTOR TO POTHOLE
& VERIFY EXISTING INVERT
& CONNECTION TYPE PRIOR
TO PLACEMENT OF
90° EL & 14" PVC PIPE
INV 202'±

REMOVE
BOLLARD

REMOVE
BOLLARD

207.0'

206.5'

75'

66'

2" C. (E)

246'

116
200.56
GCP

A REMOVE/DISPOSE EXISTING ANCHOR POSTS/BOLLARDS AND ELECTRICAL PAD

N

GRADING PLAN

SCALE: 1"=20'-0'
0 20'

REVISION	DATE	INITIALS	DESCRIPTION

CITY OF CORCORAN

2020 WASTEWATER TREATMENT PLANT MODIFICATIONS

GRADING PLAN

W3i ENGINEERING
WATER WASTEWATER INFRASTRUCTURE
661-319-3648
tschroepfer@W3ieng.com

DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386

DRAWN BY: JCF

DATE: .

PROJ NO: CORC01-20

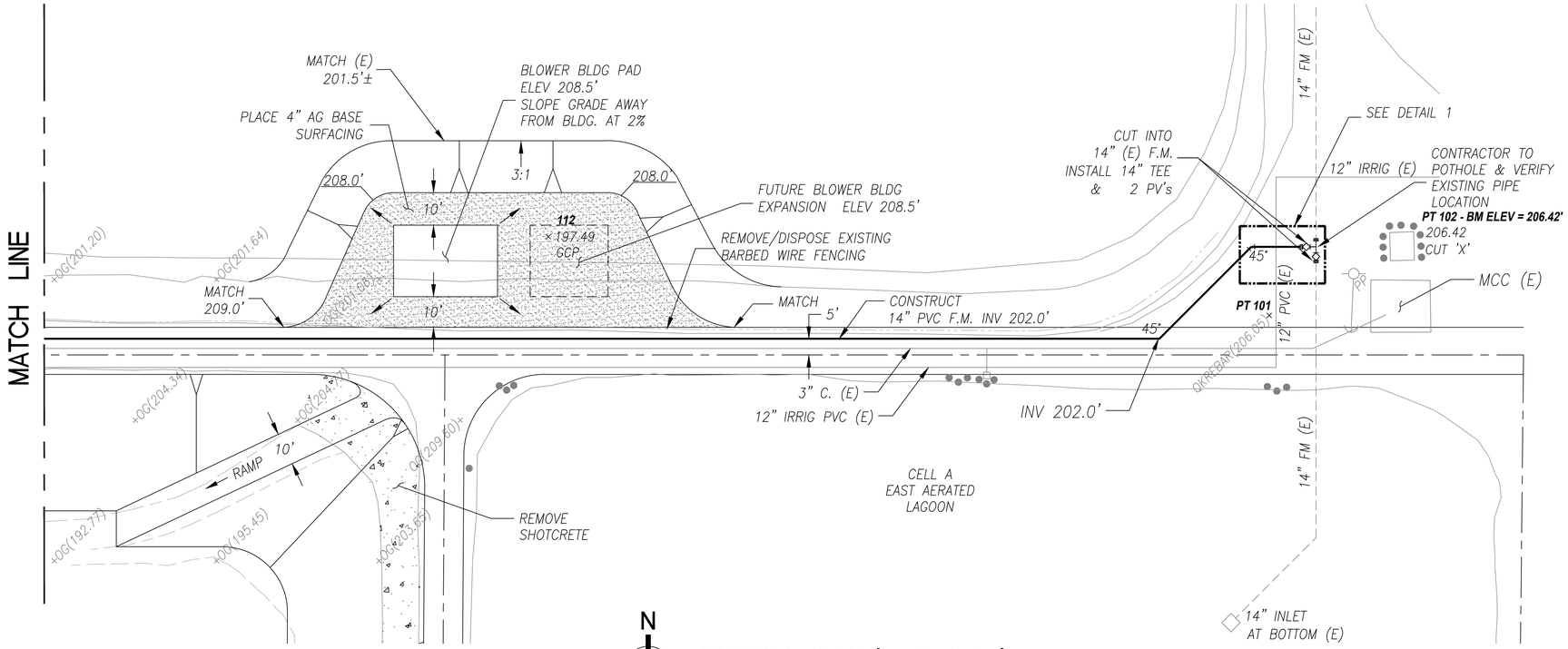
FILE NO: CORC-grade.dwg

SCALE: 0 1"

SHEET: C-1.1
. OF .

REGISTERED PROFESSIONAL ENGINEER
TERRY W. SCHROEPFER
No. 26,386
Civil
STATE OF CALIFORNIA

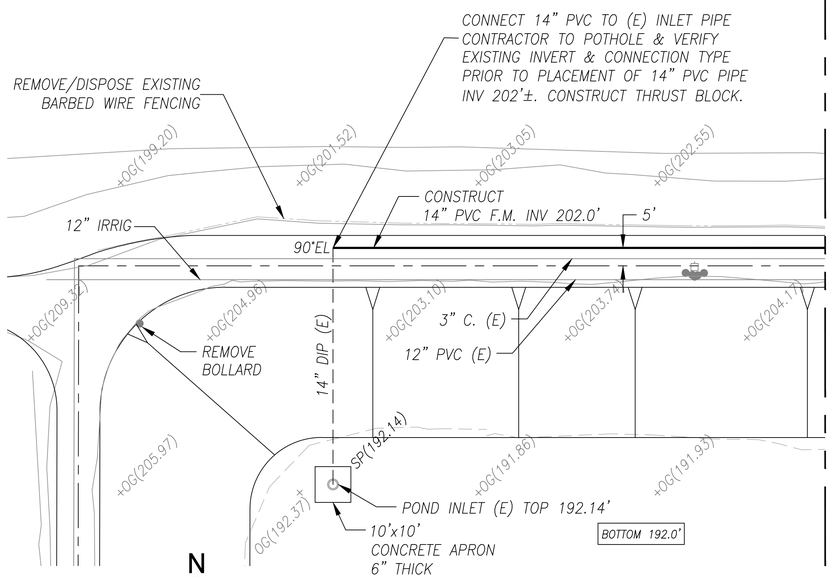
DATE



GRADING PLAN (EAST SIDE)

SCALE: 1"=20'-0'

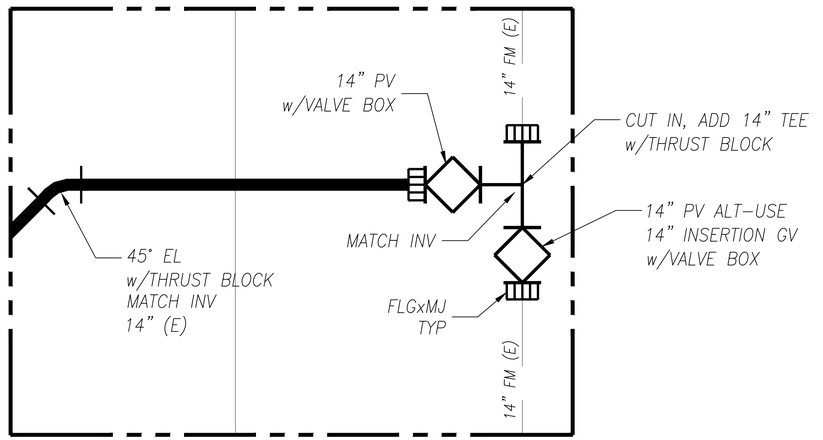
0 20'



GRADING PLAN (WEST SIDE)

SCALE: 1"=20'-0'

0 20'



DETAIL 1

SCALE: N.T.S.

CITY OF CORCORAN

2020 WASTEWATER TREATMENT PLANT MODIFICATIONS

GRADING PLAN

REVISION	DATE	INITIALS	DESCRIPTION
1	.	.	.

W3i ENGINEERING WATER WASTEWATER INFRASTRUCTURE
661-319-3648
tschroepfer@W3ieng.com

DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386

DRAWN BY: JCF

DATE: .

PROJ NO: CORC01-20

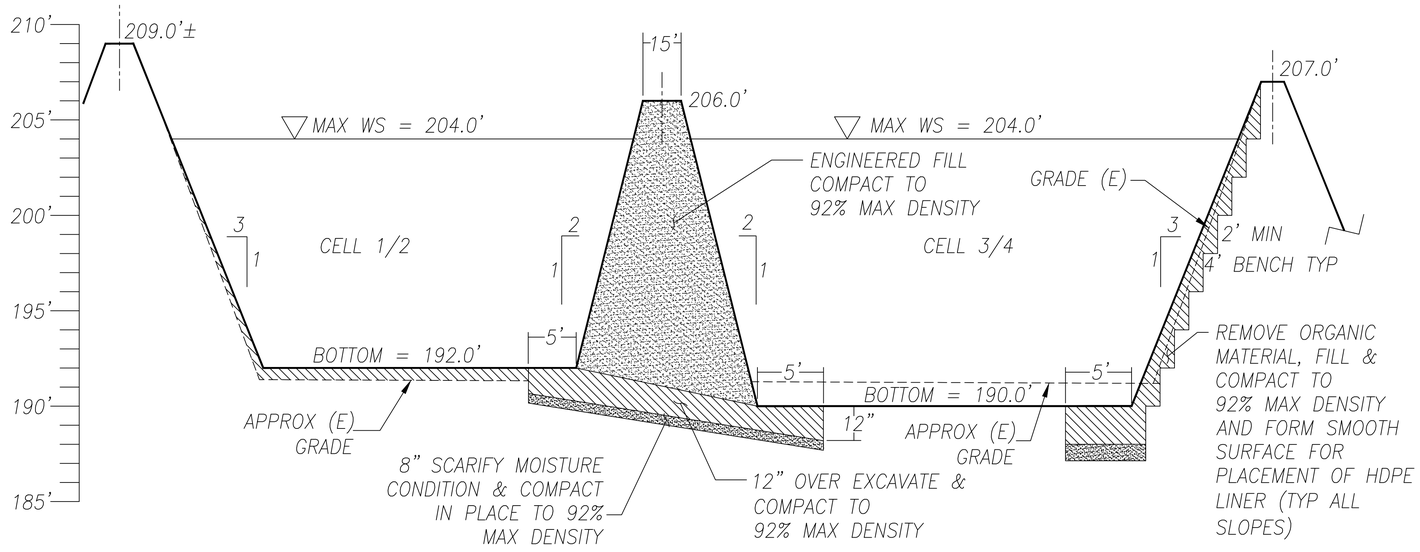
FILE NO: CORC-grade.dwg

SCALE: 0 1"

SHEET: C-1.2 . OF .

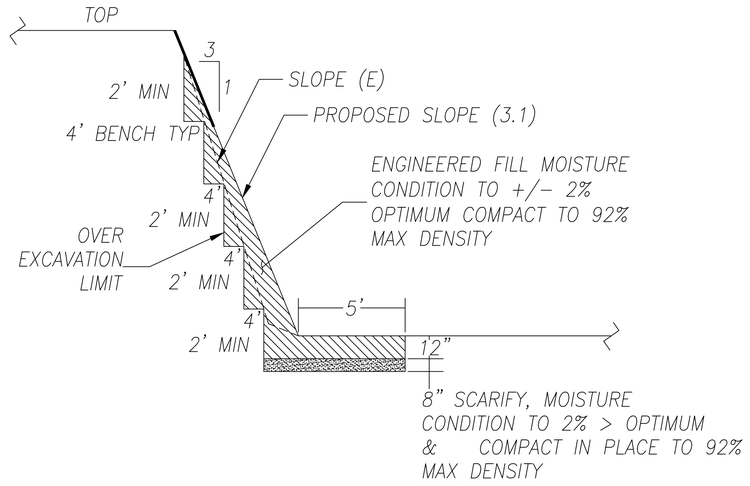
TERRY W. SCHROEPFER No. 26,386 CIVIL STATE OF CALIFORNIA

DATE



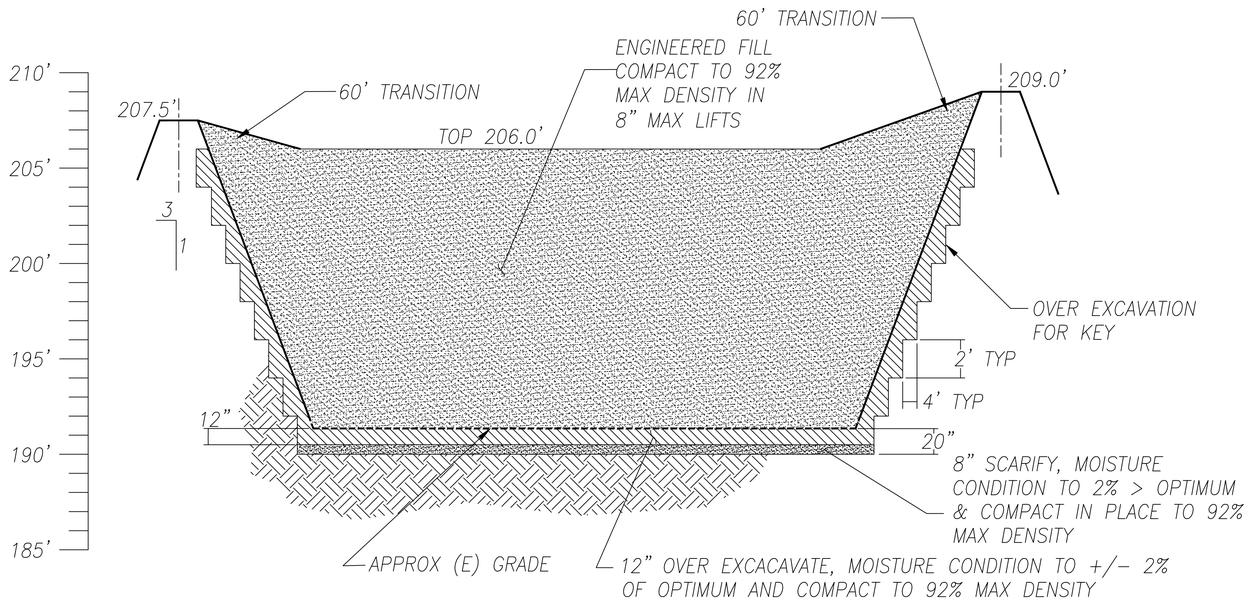
SECTION A-A

SCALE: N.T.S.



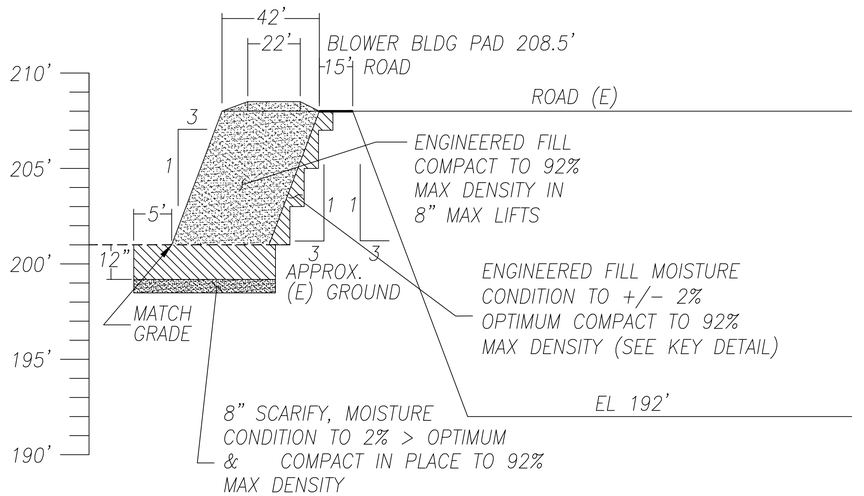
OVER EXCAVATION KEY DETAIL

(TYPICAL ALL BANKS)
SCALE: N.T.S.



SECTION B-B

SCALE: N.T.S.



SECTION C-C

SCALE: N.T.S.

REVISION	DATE	INITIALS	DESCRIPTION
1	.	.	.

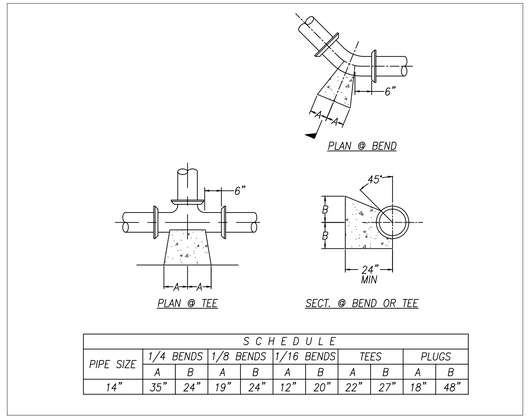
CITY OF CORCORAN
2020 WASTEWATER TREATMENT PLANT MODIFICATIONS
POND SECTIONS

W3i ENGINEERING WATER WASTEWATER INFRASTRUCTURE
661-319-3648
tschroepfer@W3ieng.com

DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386
DRAWN BY: JCF
DATE: .
PROJ NO: CORC01-20
FILE NO: CORC-gradsect.dwg
SCALE: 0 1"
SHEET: C-1.3
. OF .

REGISTERED PROFESSIONAL ENGINEER
TERRY A. SCHROEPFER
No. 26386
Civil
STATE OF CALIFORNIA

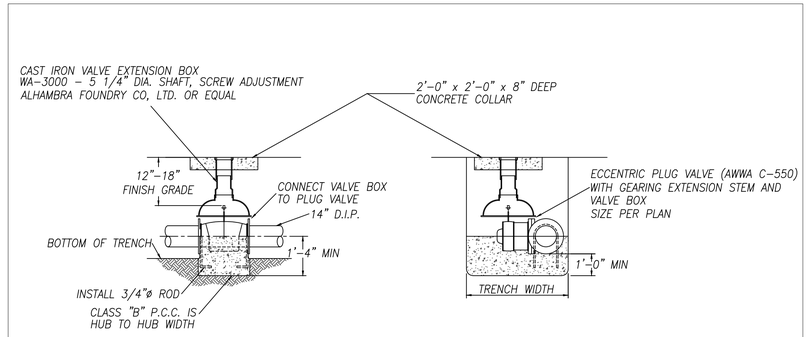
DATE



SCHEDULE										
PIPE SIZE	1/4 BENDS		1/8 BENDS		1/16 BENDS		TEES		PLUGS	
	A	B	A	B	A	B	A	B	A	B
14"	35"	24"	19"	24"	12"	20"	22"	27"	18"	48"

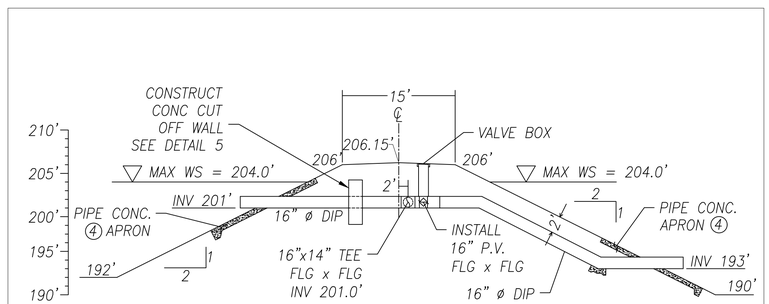
DETAIL 1 - THRUST BLOCKS FOR PIPING

SCALE: N.T.S.



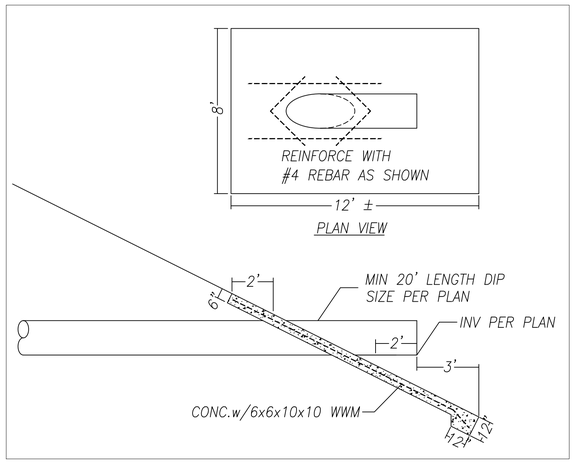
DETAIL 2 - PLUG VALVE-EXT. BOX, GEARING and BLOCKING

SCALE: N.T.S.



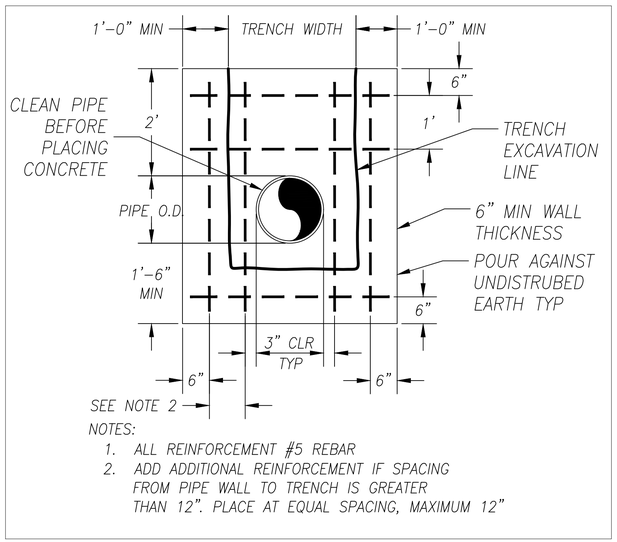
DETAIL 3 - POND TRANSFER PIPE - SECTION E-E

SCALE: N.T.S.



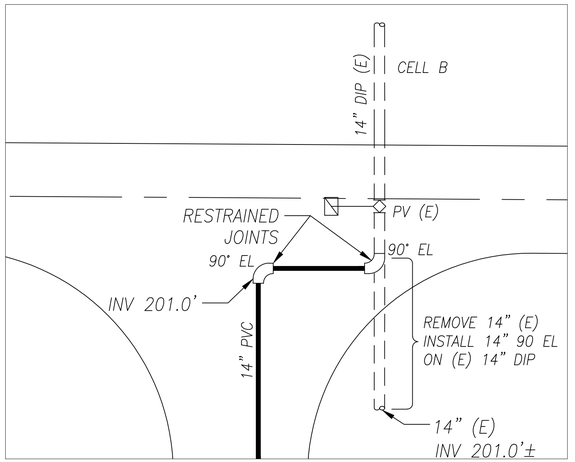
DETAIL 4 - PIPE CONCRETE APRON

SCALE: N.T.S.



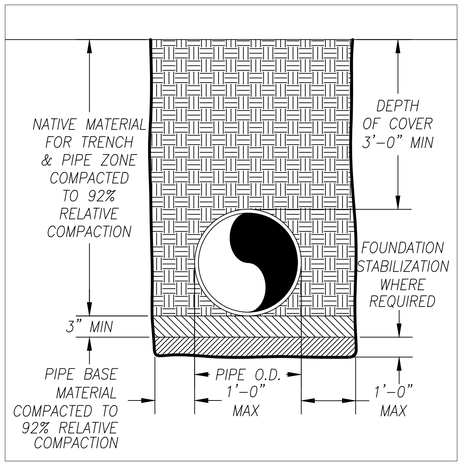
DETAIL 5 - CUT-OFF WALL

SCALE: N.T.S.



DETAIL 6 - CELL B

SCALE: 1/8" = 1'-0"



DETAIL 7 - POND PIPING TRENCH

SCALE: N.T.S.

REVISION	DATE	INITIALS	DESCRIPTION
1	.	.	.

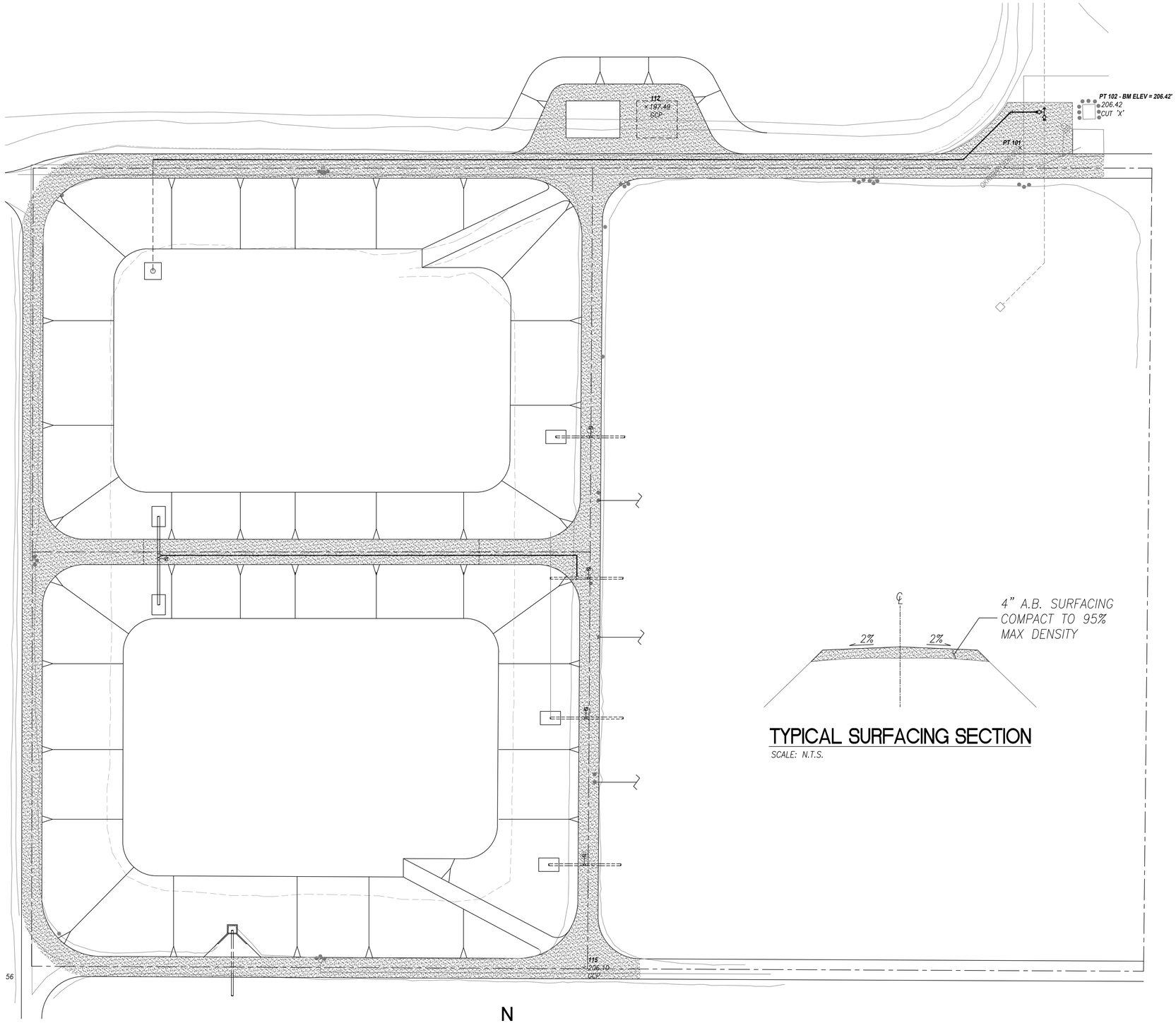
CITY OF CORCORAN
2020 WASTEWATER TREATMENT PLANT MODIFICATIONS
DETAILS

W3i ENGINEERING WATER WASTEWATER INFRASTRUCTURE
661-319-3648
tschroepfer@W3eng.com

DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386
DRAWN BY: JCF
DATE: .
PROJ NO: CORC01-20
FILE NO: CORC-linerdet.dwg
SCALE: 0 1"
SHEET: C-1.4
. OF .

REGISTERED PROFESSIONAL ENGINEER
TERRY W. SCHROEPFER
No. 26,386
CIVIL
STATE OF CALIFORNIA

DATE



LEGEND

4" A.B. SURFACING

N

GRADING PLAN

SCALE: 1"=30'-0'

0 30'

TYPICAL SURFACING SECTION

SCALE: N.T.S.

DATE

REVISION	DATE	INITIALS	DESCRIPTION
1	.	.	.

CITY OF CORCORAN

2020 WASTEWATER TREATMENT PLANT MODIFICATIONS

POND SURFACING PLAN

W3i ENGINEERING
WATER WASTEWATER INFRASTRUCTURE
661-319-3648
tschroepfer@W3ieng.com

DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386

DRAWN BY: JCF

DATE: .

PROJ NO: CORC01-20

FILE NO: CORC-grade.dwg

SCALE: 0 1"

SHEET: C-1.5

. OF .

EAST AERATED LAGOON

LINER TRENCH
2.5' FROM ROAD EDGE

CELL A

CELL B

CELL C

CELL D

SEE DETAIL (TYP)
2
C-2.5

LINER TRENCH
2.5' FROM ROAD EDGE

14"ø (E)

BAFFLE 1 (E)

14"ø (E)

BAFFLE 2 (E)

14"ø (E)

BAFFLE 3 (E)

14"ø (E)

NEW
BLOWER
BLDG

12" PVC (E)

3" C. (E)

CONSTRUCT 14" PVC F.M.

BAFFLE
WINDOW

BAFFLE CURTAIN #1

BAFFLE CURTAIN #2

CELL 1

CELL 2

CELL 3

CELL 4

1/4"ø VINYL COATED
SS AIRCRAFT CABLE (TYP)

1/4"ø VINYL COATED
SS AIRCRAFT CABLE (TYP)

1/4"ø VINYL COATED
SS AIRCRAFT CABLE (TYP)

1/4"ø VINYL COATED
SS AIRCRAFT CABLE (TYP)

BOTTOM = 192.0'

BOTTOM = 190.0'

LATERAL BAFFLE
BOLLARD
CONNECTION

LATERAL BAFFLE
CONNECTION
5
C-2.4

LATERAL BAFFLE
BOLLARD CONNECTION

LATERAL BAFFLE
CONNECTION
5
C-2.4

LATERAL BAFFLE
BOLLARD
CONNECTION

ATTACH LINER TO
OUTLET (E)
USING DETAIL 5/C-2.5

14"ø (E)

NO LINER

SEE VENT DETAIL
6/C-3.2

3
C-2.5

144'

110'

152.5'

14"ø PVC

10'x10'x6"
CONCRETE APRON
BELOW LINER

14"ø INLET
W/RIPE BOOT

14"ø DIP

16"ø DIP

158'

SEE DETAIL 8/C-2.5 (TYP)
AND 6/C-3.4 (TYP)

116'

LEGEND

VENT

60 MIL HDPE LINER

NOTE: SEE SHEET C-3.1 FOR LOCATION OF AERATION SYSTEM, BOLLARDS AND AIR PIPING

N

LINER and BAFFLE LAYOUT

SCALE: 1"=20'-0"
0 20'

REVISION	DATE	INITIALS	DESCRIPTION

CITY OF CORCORAN

2020 WASTEWATER TREATMENT PLANT MODIFICATIONS

LINER and BAFFLE LAYOUT

W3i ENGINEERING WATER WASTEWATER INFRASTRUCTURE
661-319-3648
tschroepfer@W3ieng.com

DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386

DRAWN BY: JCF

DATE: .

PROJ NO: CORC01-20

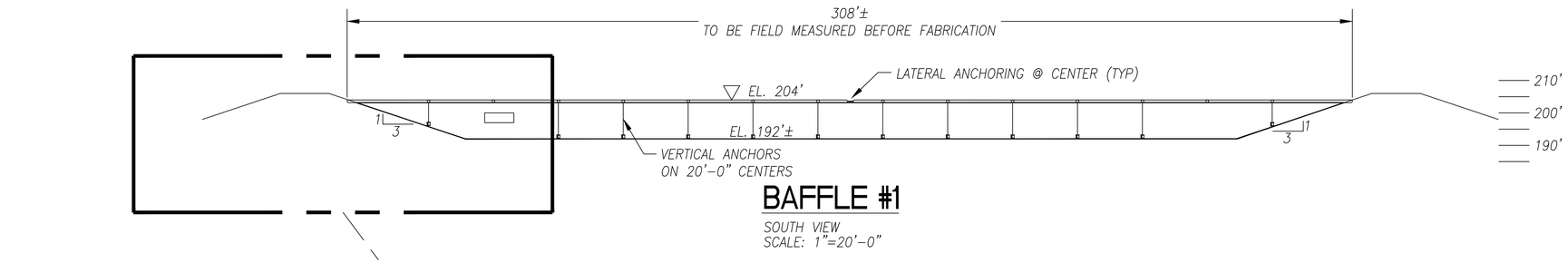
FILE NO: CORC-liner.dwg

SCALE: 0 1"

SHEET: C-2.1
. OF .

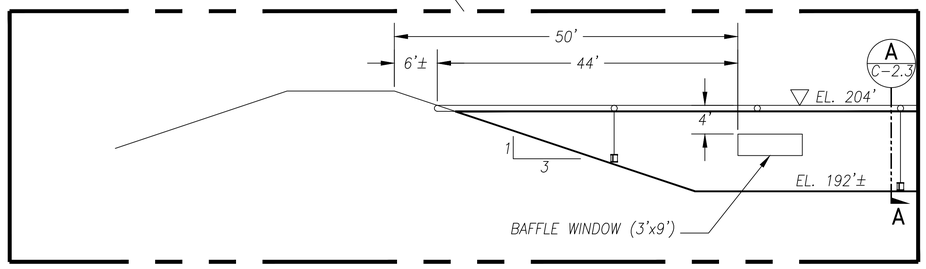
REGISTERED PROFESSIONAL ENGINEER
TERRY R. SCHROEPFER
No. 26,386
CIVIL
STATE OF CALIFORNIA

DATE

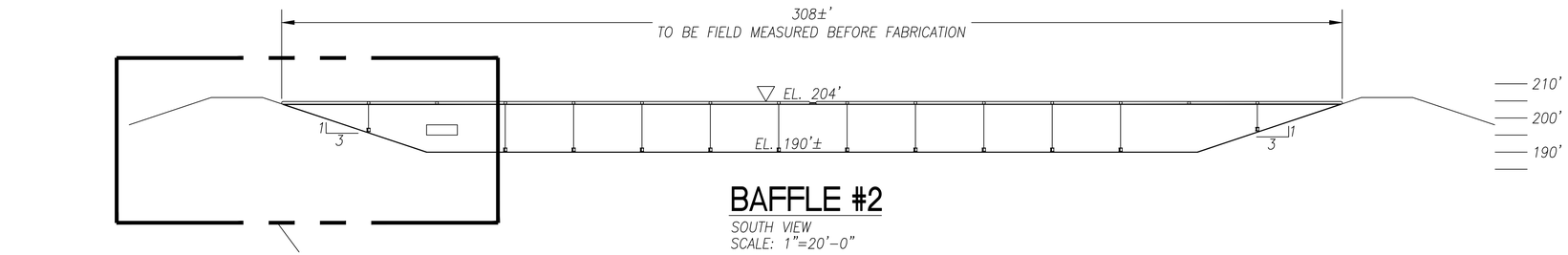


BAFFLE #1

SOUTH VIEW
SCALE: 1"=20'-0"

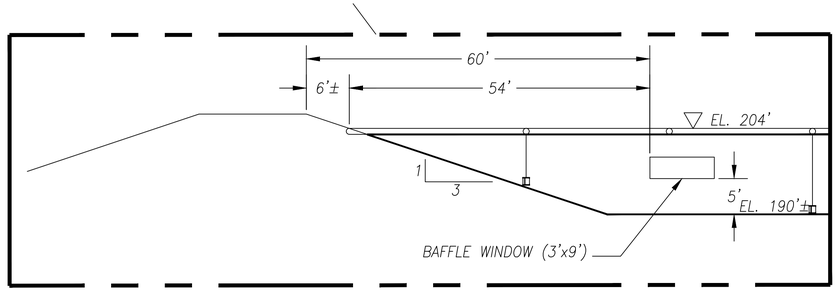


SCALE: 1"=10'-0"



BAFFLE #2

SOUTH VIEW
SCALE: 1"=20'-0"



SCALE: 1"=10'-0"

NOTES:

1. BAFFLE TO BE FABRICATED FROM A 30 MIL POLYESTER REINFORCED POLYMERIC 3 PLY MEMBRANE MATERIAL.
2. ALL METALS SHALL BE GALVANIZED STEEL OR STAINLESS STEEL AS NOTED.
3. ALL THERMOPLASTIC SEAMS TO BE DIELECTRIC OR HEAT SEAMED, AS REQUIRED.
4. BOTTOM ANCHORS TO BE SPACED AT 20'-0" O.C. SEE DETAIL.

REGISTERED PROFESSIONAL ENGINEER
TERRY R. SCHROEPFER
No. 26,386
Civil
STATE OF CALIFORNIA

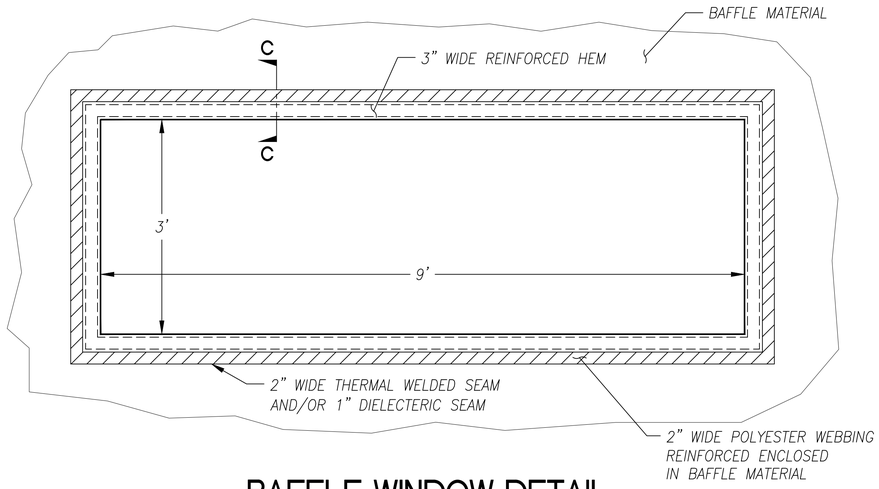
DATE

REVISION	DATE	INITIALS	DESCRIPTION
1	.	.	.

CITY OF CORCORAN
2020 WASTEWATER TREATMENT PLANT MODIFICATIONS
BAFFLE SECTIONS

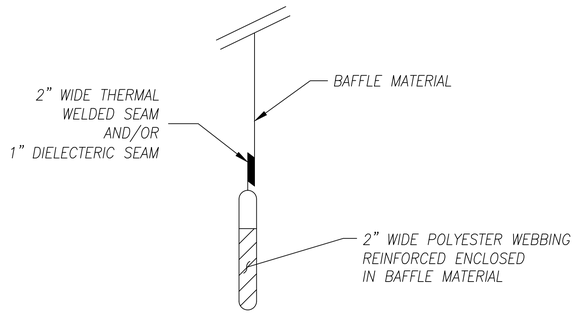
W3i ENGINEERING WATER WASTEWATER INFRASTRUCTURE
661-319-3648
tschroepfer@W3ieng.com

DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386
DRAWN BY: JCF
DATE: .
PROJ NO: CORC01-20
FILE NO: CORC-baffdet.dwg
SCALE: 0 1"
SHEET: C-2.2
. OF .



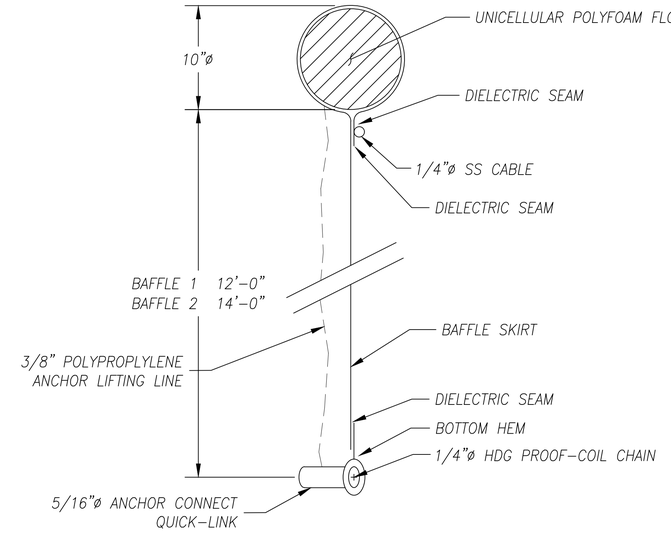
BAFFLE WINDOW DETAIL

SCALE: 1"=1'-0"



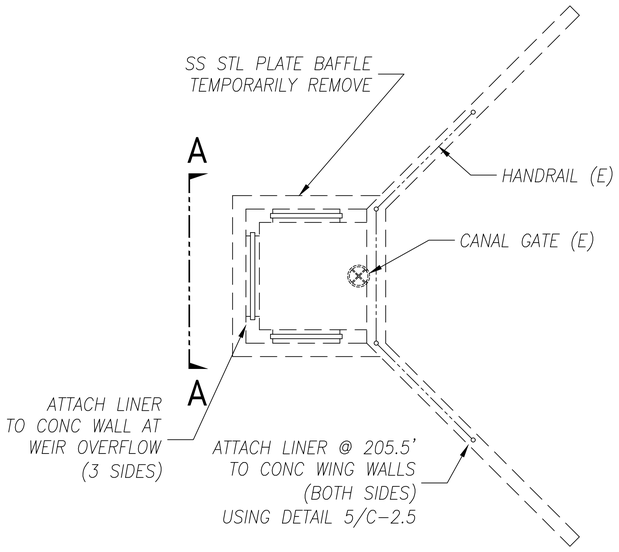
SECTION C-C

SCALE: N.T.S.



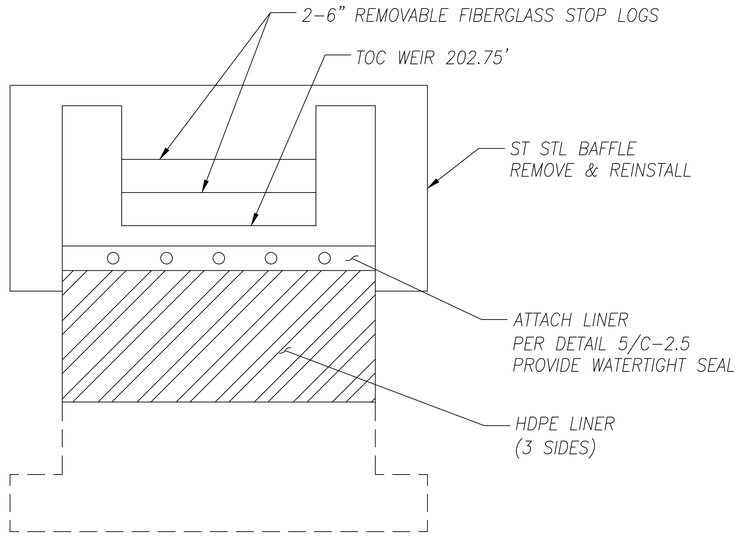
SECTION A-A

SCALE: N.T.S.



WEST OUTLET WEIR

SCALE: 3/8"=1'-0"



SECTION A-A

SCALE: N.T.S.

REVISION	DATE	INITIALS	DESCRIPTION
1	.	.	.

CITY OF CORCORAN

2020 WASTEWATER TREATMENT PLANT MODIFICATIONS

BAFFLE DETAILS

W3i ENGINEERING WATER WASTEWATER INFRASTRUCTURE
661-319-3648
tschroepfer@W3ieng.com

DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386

DRAWN BY: JCF

DATE: .

PROJ NO: CORC01-20

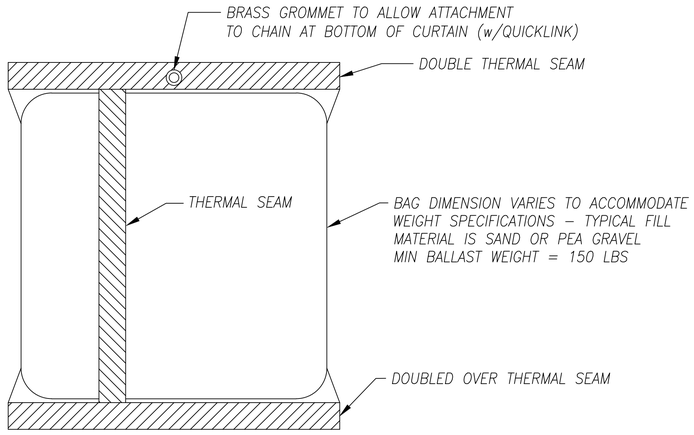
FILE NO: CORC-baffdet.dwg

SCALE: 0 1"

SHEET: C-2.3
? OF ?

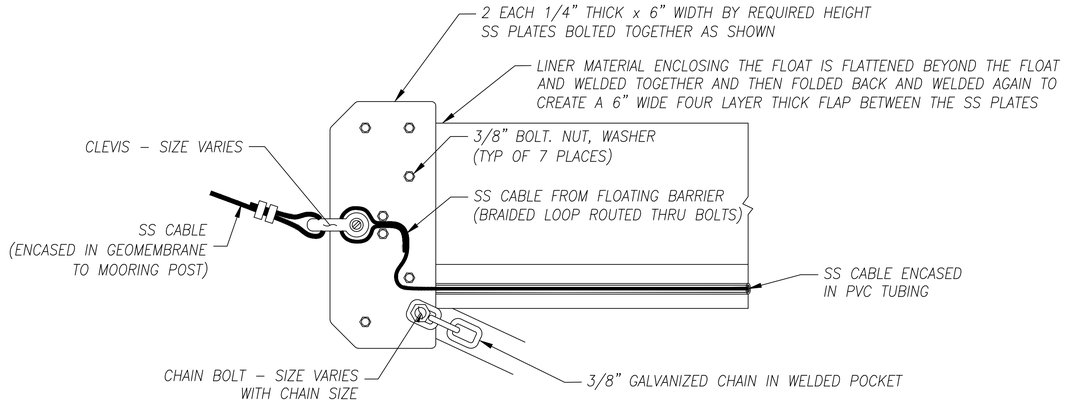
REGISTERED PROFESSIONAL ENGINEER
TERRY W. SCHROEPFER
No. 26,386
Civil
STATE OF CALIFORNIA

DATE



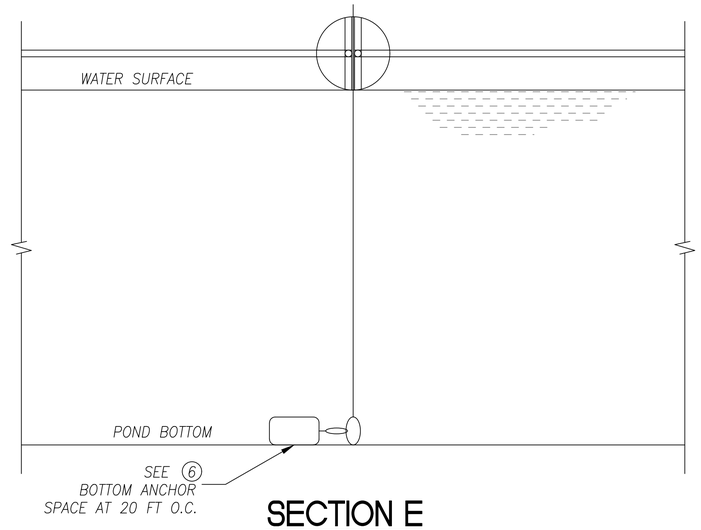
⑥ BOTTOM ANCHOR DETAIL

SCALE: N.T.S.



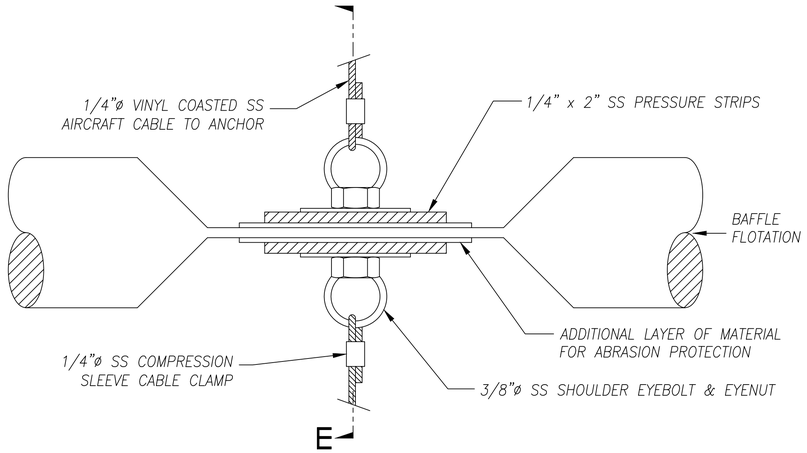
BAFFLE END CONNECTOR DETAIL

SCALE: N.T.S.



SECTION E

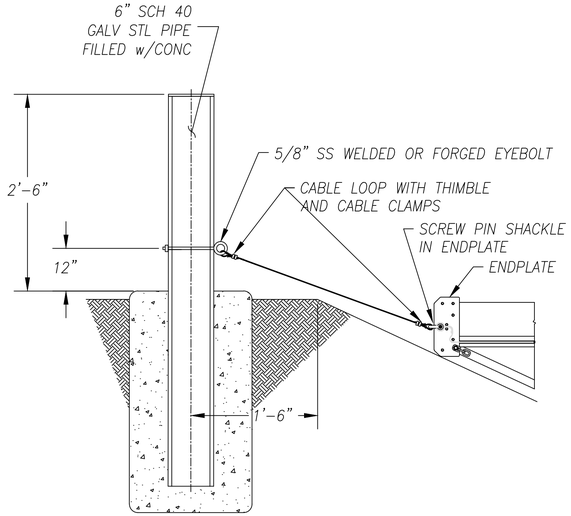
SCALE: N.T.S.



⑤ LATERAL MID BAFFLE WIND ANCHORING DETAIL

PLAN VIEW

SCALE: N.T.S.



⑦ MOORING POST CONNECTION

SCALE: N.T.S.

NOTE: FOR BOLLARD DETAIL SEE 6/C-3.4

REVISION	DATE	INITIALS	DESCRIPTION
	.	.	.

CITY OF CORCORAN

2020 WASTEWATER TREATMENT PLANT MODIFICATIONS

BAFFLE DETAILS

W3i ENGINEERING WATER WASTEWATER INFRASTRUCTURE
661-319-3648
tschroepfer@W3Ieng.com

DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386

DRAWN BY: JCF

DATE: .

PROJ NO: CORC01-20

FILE NO: CORC-baffdet.dwg

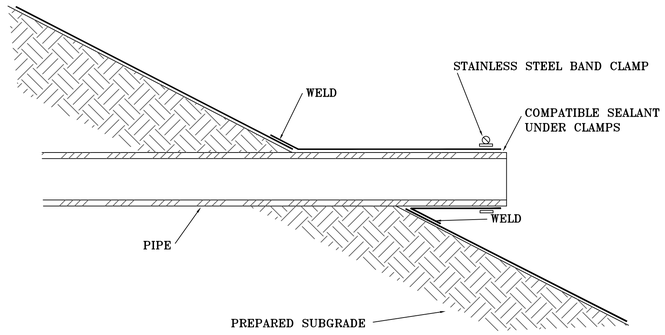
SCALE: 0 1"

SHEET: C-2.4

. OF .

REGISTERED PROFESSIONAL ENGINEER
TERRY W. SCHROEPFER
No. 26,386
CIVIL
STATE OF CALIFORNIA

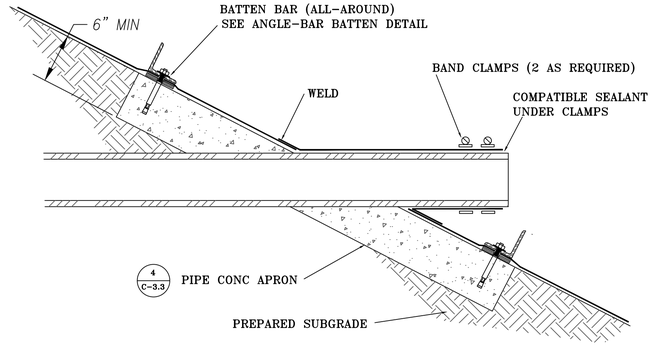
DATE



SMALL DIAMETER PIPE BOOT CONNECTION ≤8"

SCALE: N.T.S.

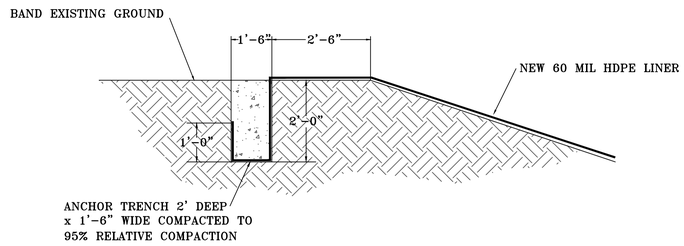
1



LARGE DIAMETER PIPE BOOT CONNECTION >8"

SCALE: N.T.S.

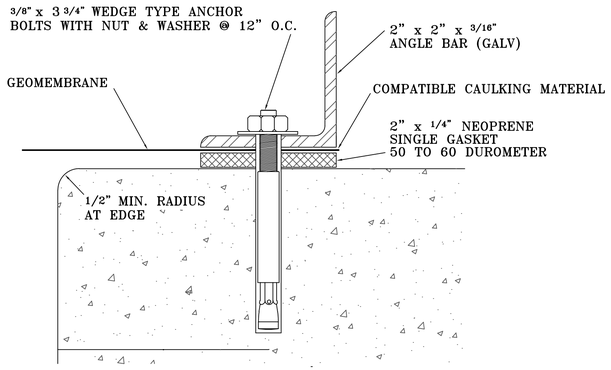
2



HDPE LINER ANCHOR TRENCH

SCALE: N.T.S.

3

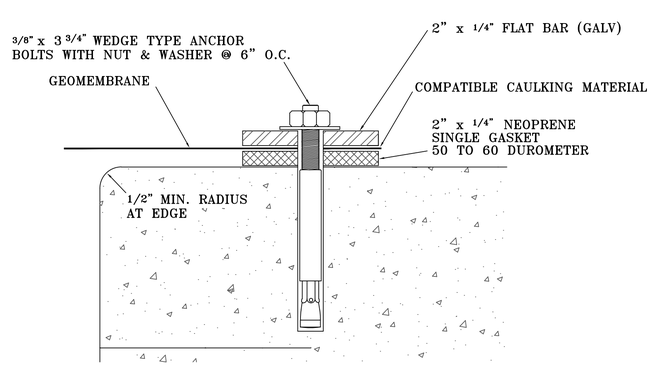


ANGLE BAR DETAIL

(STANDARD)

SCALE: N.T.S.

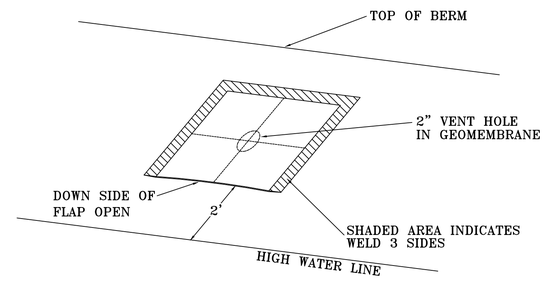
4



FLAT BAR DETAIL

SCALE: N.T.S.

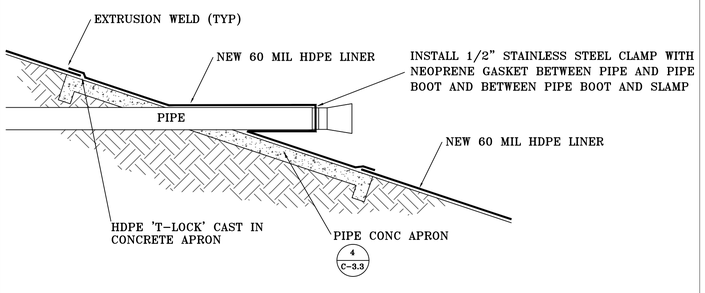
5



EXPOSED GEOMEMBRANE VENT DETAIL

SCALE: N.T.S.

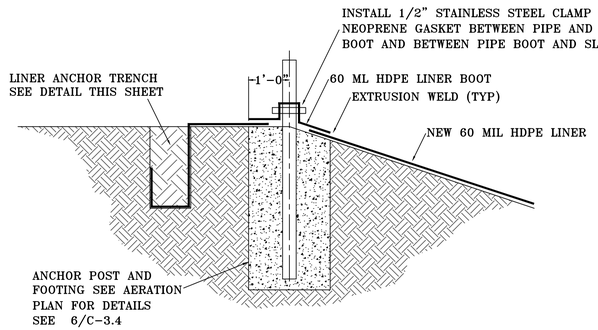
6



HDPE LINER BOOT FOR PIPES

SCALE: N.T.S.

7



HDPE LINER AT ANCHOR POST LOCATIONS

SCALE: N.T.S.

8

CITY OF CORCORAN

2020 WASTEWATER TREATMENT PLANT MODIFICATIONS

LINER DETAILS

REVISION	DATE	INITIALS	DESCRIPTION
1	.	.	.

W3i ENGINEERING WATER WASTEWATER INFRASTRUCTURE
661-319-3648
tscfroepfer@W3ieng.com

DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386

DRAWN BY: JCF

DATE: .

PROJ NO: CORC01-20

FILE NO: CORC-linerdet.dwg

SCALE: 0 1"

SHEET: C-2.5
. OF .

REGISTERED PROFESSIONAL ENGINEER
TERRY L. SCHROEPFER
No. 26,386
CIVIL
STATE OF CALIFORNIA

DATE

AERATION CHAIN CONNECTION ASSEMBLY SEE C-2.3

AIR CHAIN ASSEMBLY SEE SHEET C-3.2

EAST AERATED LAGOON

CELL A

CELL B

CELL C

CELL D

A C-3.2

B C-3.2

C C-3.2

D C-3.3

E C-3.3

BAFFLE 1

BAFFLE 2

BAFFLE 3

6" STUB w/B.F. FOR FUTURE

BAFFLE CURTAIN #2 ℄ OF BASIN SEE SHEET C-3.2

END CAP

NEW BLOWER BLDG

14"ø AIR DIP
ADD ALTERNATE
16"ø DIP

ADD ALTERNATE
12"ø DIP

14"ø AIR

10"ø AIR DIP

18"

14"x10" REDUCER

BAFFLE CURTAIN #1

BAFFLE CURTAIN #2

CELL 1
BOTTOM = 192.0 FT

CELL 2

CELL 3
BOTTOM = 190.0 FT

CELL 4

14"ø PVC

16"ø DIP

LEGEND

① CHAIN NUMBER

AERATION CHAIN LAYOUT

SCALE: 1"=20'-0"

0 20'

N

7' A B 18' 22' 22' 22' 22' 22' 11' C D 15' 19' 36' E 7.5' 32' 38.13' 76.25' 38.13' 76.25' 48' 6'

228' 246'

CITY OF CORCORAN

2020 WASTEWATER TREATMENT PLANT MODIFICATIONS

AERATION CHAIN LAYOUT

REVISION	DATE	INITIALS	DESCRIPTION
	.	.	.

W3i ENGINEERING
WATER WASTEWATER INFRASTRUCTURE
661-319-3648
tschroepfer@W3ieng.com

DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386

DRAWN BY: JCF

DATE: .

PROJ NO: CORC01-20

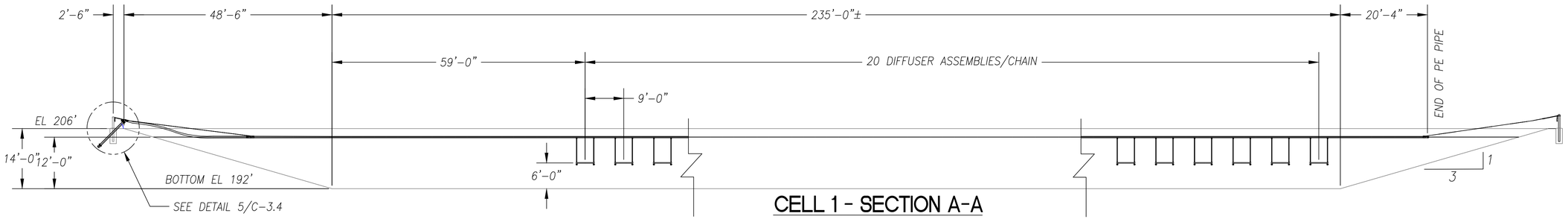
FILE NO: CORC-aerate.dwg

SCALE: 0 1"

SHEET: C-3.1
. OF .

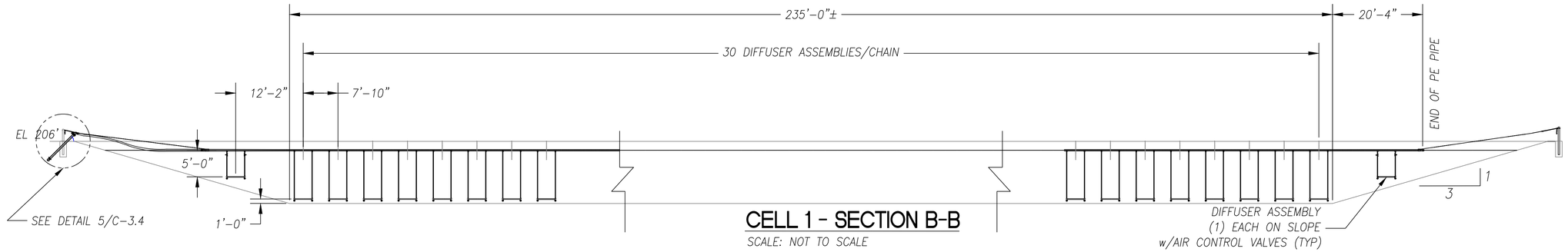
REGISTERED PROFESSIONAL ENGINEER
TERRY W. SCHROEPFER
No. 26,386
CIVIL
STATE OF CALIFORNIA

DATE



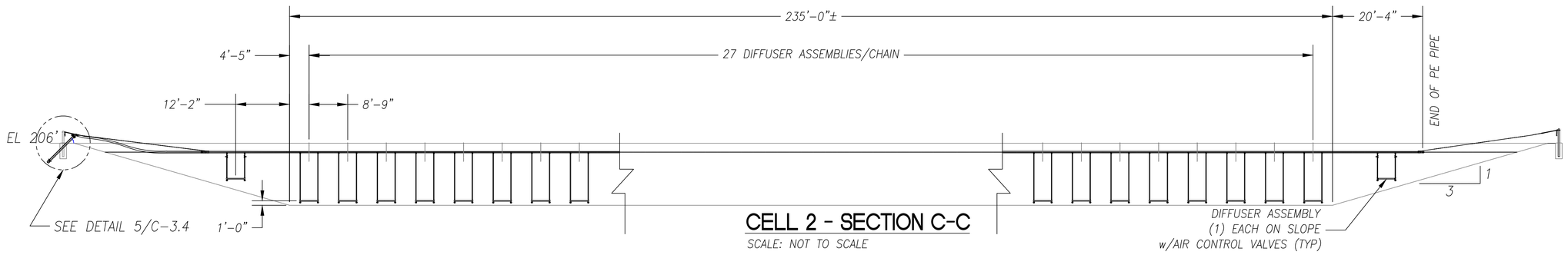
CELL 1 - SECTION A-A

SCALE: NOT TO SCALE



CELL 1 - SECTION B-B

SCALE: NOT TO SCALE



CELL 2 - SECTION C-C

SCALE: NOT TO SCALE

REVISION	DATE	INITIALS	DESCRIPTION
1	.	.	.

CITY OF CORCORAN

2020 WASTEWATER TREATMENT PLANT MODIFICATIONS

AERATION CHAIN SECTIONS

W3i ENGINEERING WATER WASTEWATER INFRASTRUCTURE
661-319-3648
tschroepfer@W3Ieng.com

DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386

DRAWN BY: JCF

DATE: .

PROJ NO: CORC01-20

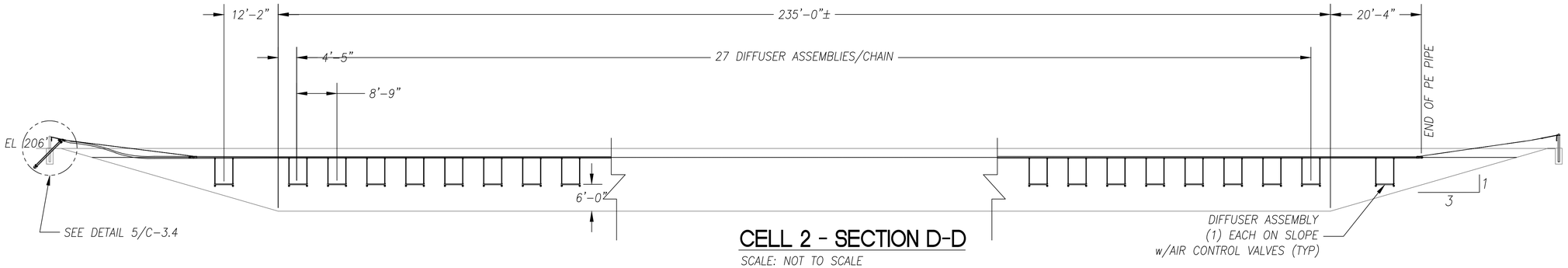
FILE NO: CORC-aerate.dwg

SCALE: 0 1"

SHEET: C-3.2
. OF .

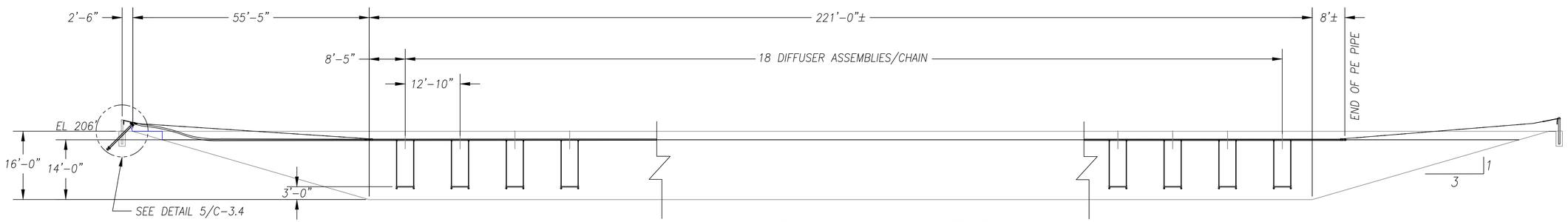
REGISTERED PROFESSIONAL ENGINEER
TERRY W. SCHROEPFER
No 26,386
Civil
STATE OF CALIFORNIA

DATE



CELL 2 - SECTION D-D

SCALE: NOT TO SCALE



CELL 3 and 4 - SECTION E-E

SCALE: NOT TO SCALE

NO.	REVISION	DATE	INITIALS	DESCRIPTION
		.	.	.

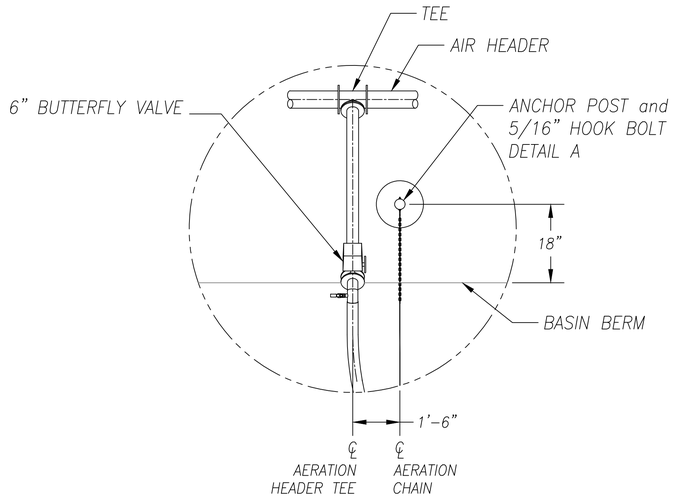
CITY OF CORCORAN
2020 WASTEWATER TREATMENT PLANT MODIFICATIONS
AERATION CHAIN SECTIONS

W3i ENGINEERING
WATER WASTEWATER INFRASTRUCTURE
661-319-3648
tschroepfer@W3ieng.com

DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386
DRAWN BY: JCF
DATE: .
PROJ NO: CORC01-20
FILE NO: CORC-aerate.dwg
SCALE: 0 1"
SHEET: C-3.3
. OF .

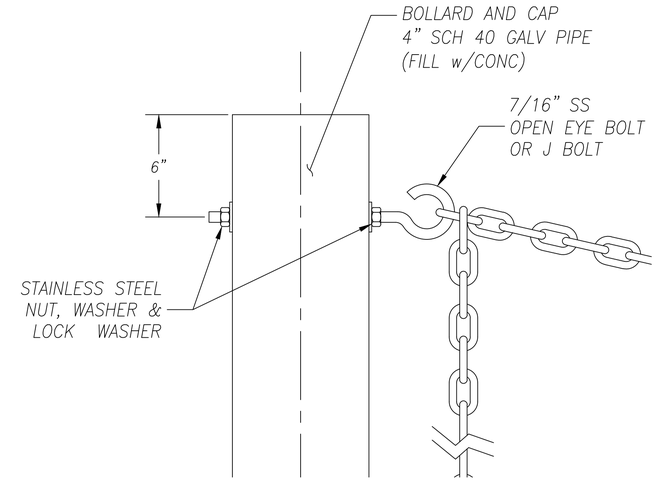
REGISTERED PROFESSIONAL ENGINEER
TERRY R. SCHROEPFER
No. 26,386
Civil
STATE OF CALIFORNIA

DATE



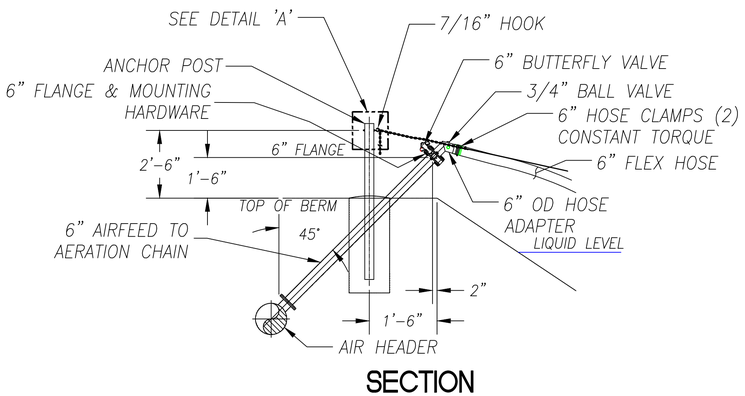
PLAN VIEW

SCALE: N.T.S.



DETAIL A

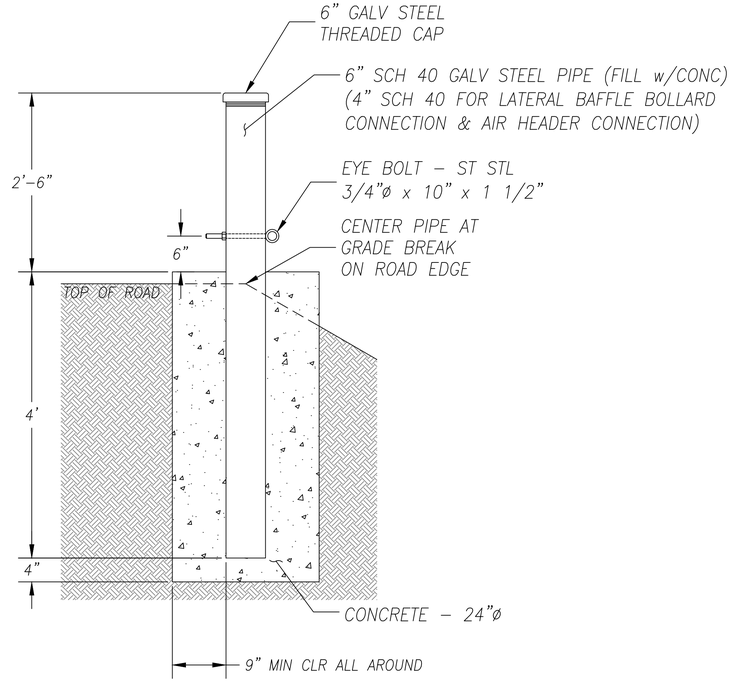
SCALE: N.T.S.



SECTION

⑤ AIR HEADER/AERATION CHAIN and CONNECTION DETAIL

SCALE: N.T.S.



⑥ BAFFLE ANCHOR POST DETAIL

SCALE: 1" = 1'-0"

REVISION	DATE	INITIALS	DESCRIPTION
1	.	.	.

CITY OF CORCORAN

2020 WASTEWATER TREATMENT PLANT MODIFICATIONS

DETAILS

W3i ENGINEERING WATER WASTEWATER INFRASTRUCTURE
661-319-3648
tschroepfer@W3ieng.com

DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386

DRAWN BY: JCF

DATE: .

PROJ NO: CORC01-20

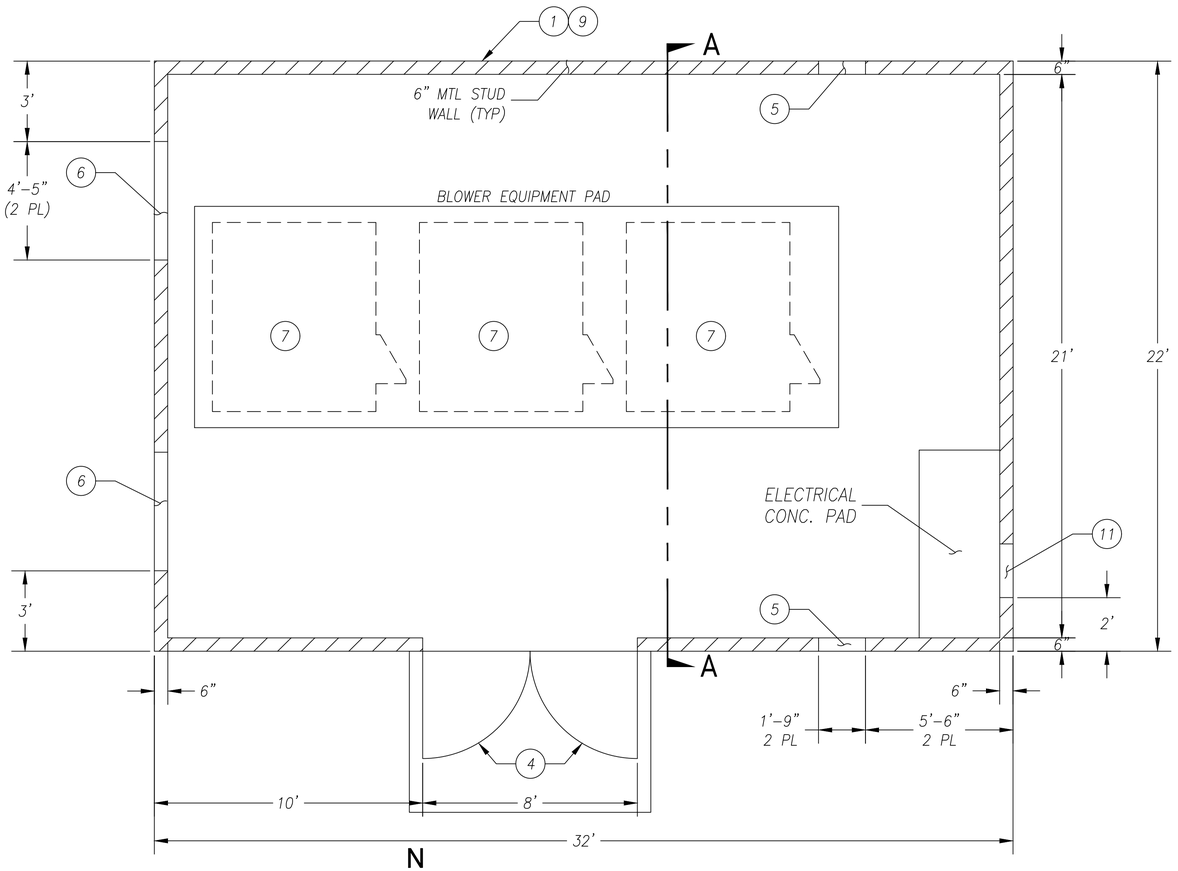
FILE NO: CORC-linerdet.dwg

SCALE: 0 1"

SHEET: C-3.4
. OF .

REGISTERED PROFESSIONAL ENGINEER
Terry B. SCHROEPFER
No. 26,386
Civil
STATE OF CALIFORNIA

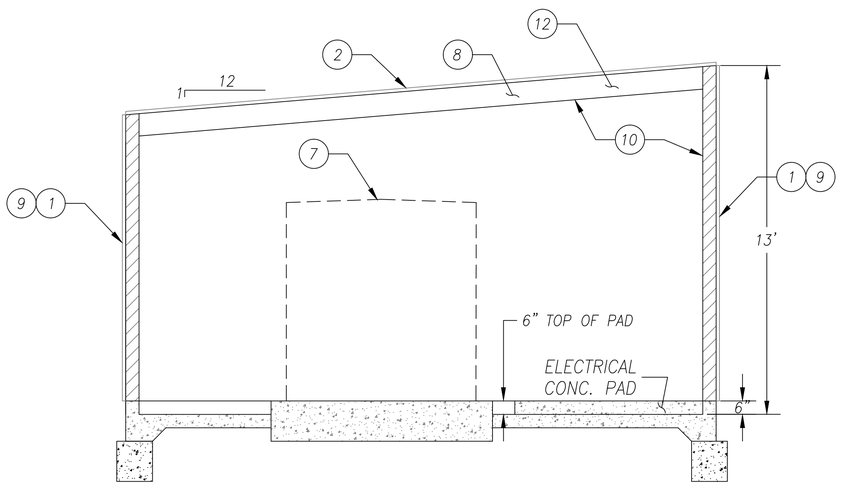
DATE



BLOWER BLDG. - PLAN VIEW

SCALE: 3/8" = 1'-0"

0 5'



SECTION A-A

SCALE: 3/8" = 1'-0"

0 5'

KEYNOTES:

1. PRE-FINISHED MTL. WALL PANEL SIDING SYSTEM
2. PRE-FINISHED MTL. ROOF PANEL SYSTEM
3. "SCULPTURED RAKE" TRIM BY METAL ROOFING AND SIDING MFR.
4. DOOR & FRAME ASSEMBLY
5. WALL MOUNTED EXHAUST FAN
6. WALL LOUVERS - 60" HIGH x 53" WIDE
7. BLOWER EQUIPMENT - SEE SHEET M-1.1
8. ROOF RAFTERS - SEE STRUCTURAL (S100)
9. 1" THICK POLY ISO RIGID INSULATION UNDER WALL PANEL
10. 5/8" GYP BOARD - MUD, TAPE AND PAINT
11. WALL LOUVER - 24"x24"
12. R-19 BATT INSULATION IN CEILING

LEGEND

6" MTL STUD WALL. SEE STRUCTURAL (S100)
PROVIDE 5/8" GYP BOARD & INTERIOR SIDE
INSTALL 1" POLY-ISO RIGID INSULATION OVER EXTERIOR FACE OF STUDS W/ CONT. HORIZ. 'Z' FURRING ON 24" O.C. TYP.
SEE DETAIL (1)

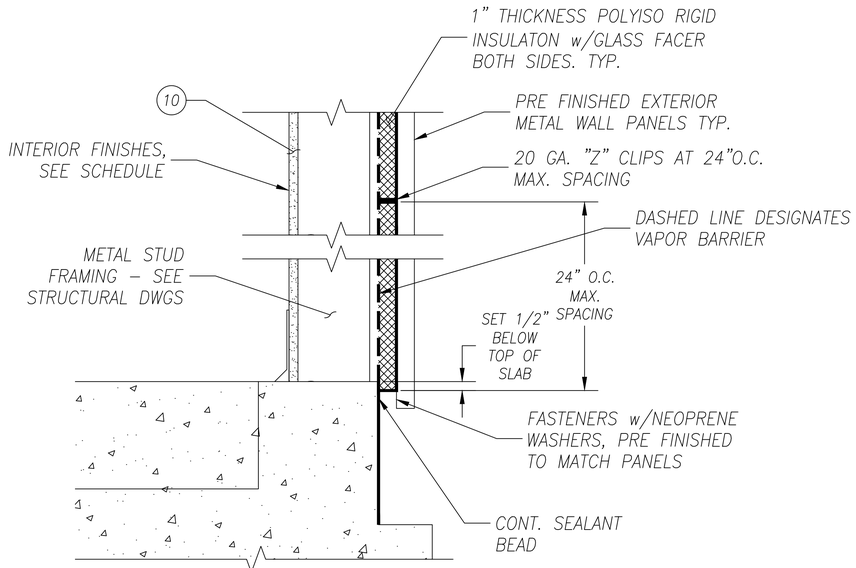
GENERAL NOTES:

A KEYNOTES APPLY TO THIS DRAWING ONLY

B VERIFY DIMENSIONS & NOTATIONS IN FIELD.

C FOR GENERAL BUILDING NOTES, REFER TO SHEET A-1.3

D PROVIDE 5/8" THK GYP BOARD @ WALLS AND CEILING BLOWER ROOM.



(1) EXTERIOR WALL TO CONC.

SCALE: 3" = 1'-0"

0 4"

REVISION	DATE	INITIALS	DESCRIPTION
	.	.	.

CITY OF CORCORAN

2020 WASTEWATER TREATMENT PLANT MODIFICATIONS

BLOWER BLDG. - PLAN VIEW

W3i ENGINEERING WATER WASTEWATER INFRASTRUCTURE

661-319-3648

tschroepfer@W3ieng.com

DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386

DRAWN BY: JCF

DATE: .

PROJ NO: CORC01-20

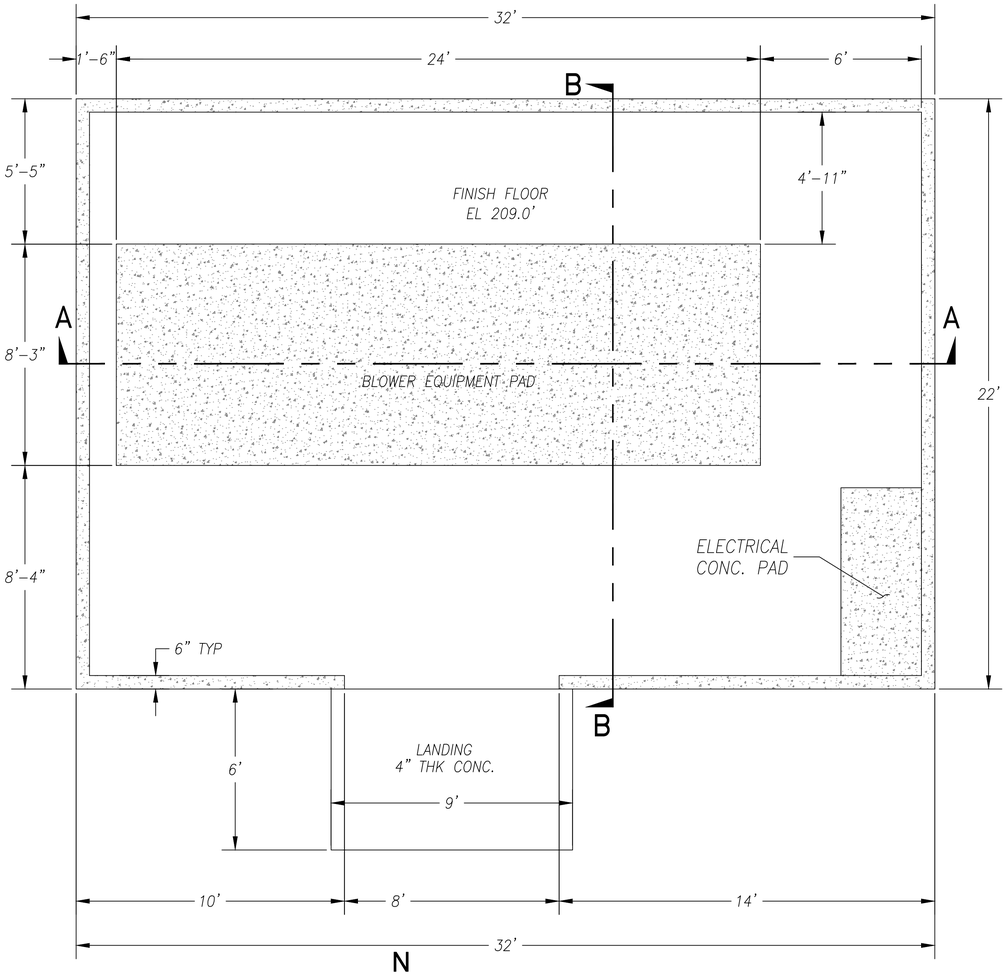
FILE NO: CORC-bldg2.dwg

SCALE: 0 1"

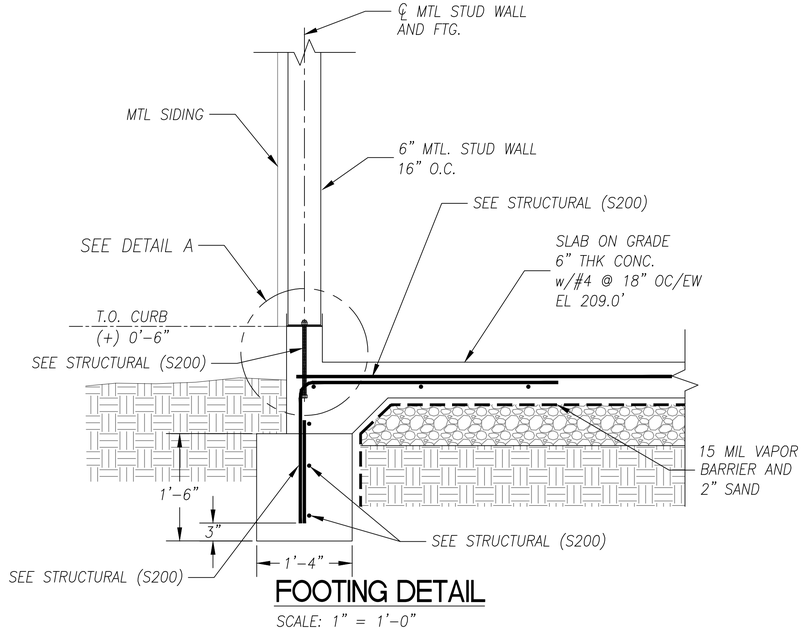
SHEET: A-1.1

. OF .

DATE

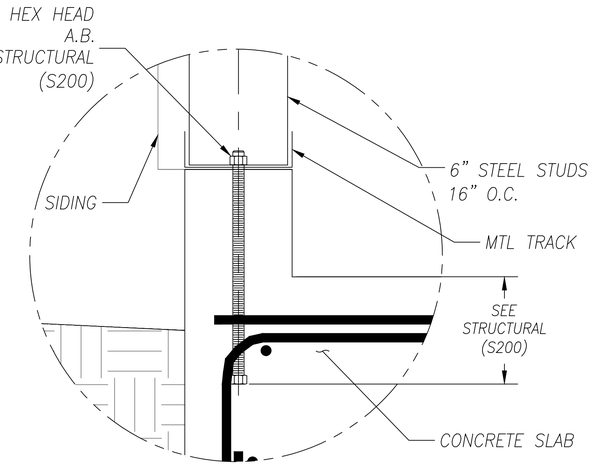


PLAN VIEW



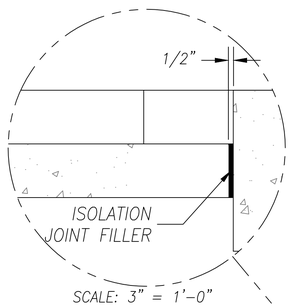
FOOTING DETAIL

SCALE: 1" = 1'-0"

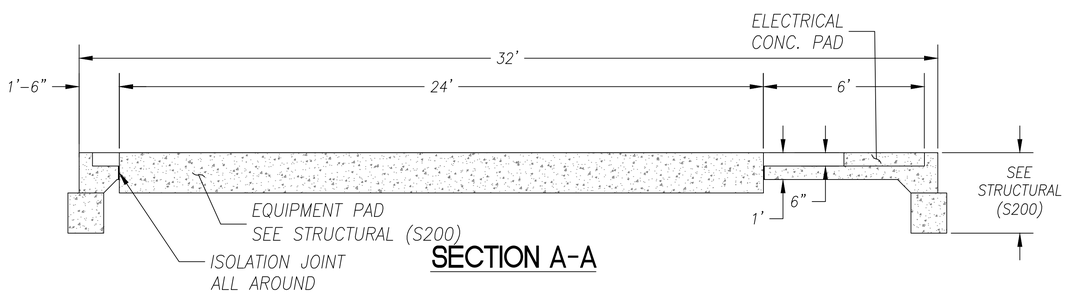


DETAIL A

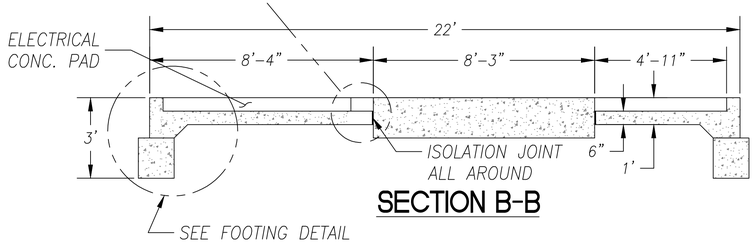
SCALE: 3" = 1'-0"



SCALE: 3" = 1'-0"



SECTION A-A



SECTION B-B

BLOWER BLDG. FOUNDATION PLAN

SCALE: 3/8" = 1'-0"

0 5'

DESCRIPTION	INITIALS	DATE	REVISION
	.	.	1

CITY OF CORCORAN

2020 WASTEWATER TREATMENT PLANT MODIFICATIONS

BLOWER BLDG. – FOUNDATION PLAN

W3i ENGINEERING WATER WASTEWATER INFRASTRUCTURE
661-319-3648
tschroepfer@W3ieng.com

DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386

DRAWN BY: JCF

DATE: .

PROJ NO: CORC01-20

FILE NO: CORC-bldg2.dwg

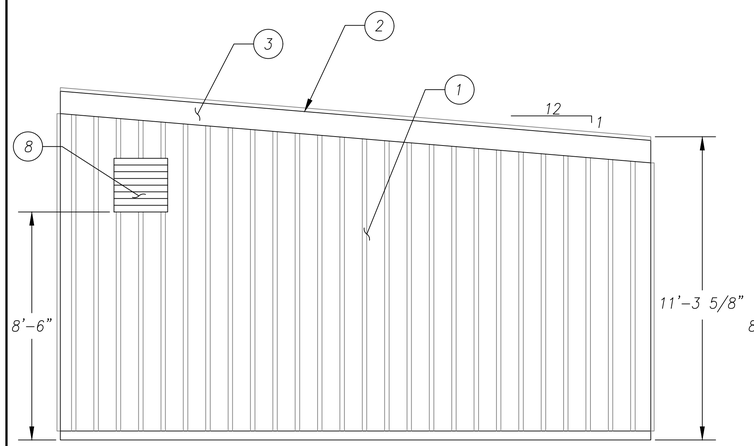
SCALE: 0 1"

SHEET: A-1.2

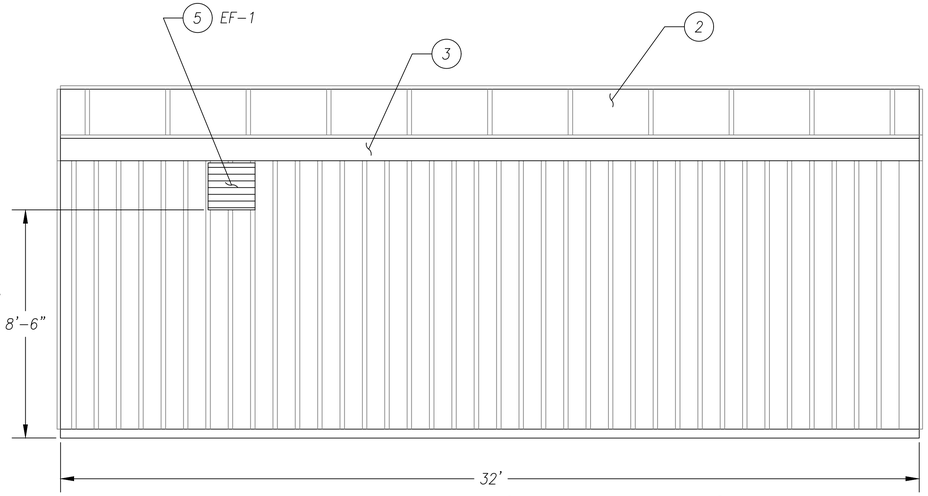
. OF .

REGISTERED PROFESSIONAL ENGINEER
TERRY W. SCHROEPFER
No. 26,386
CIVIL
STATE OF CALIFORNIA

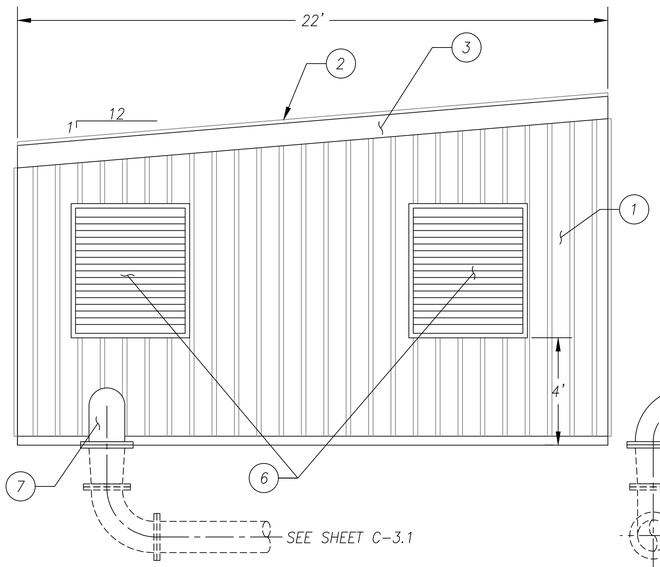
DATE



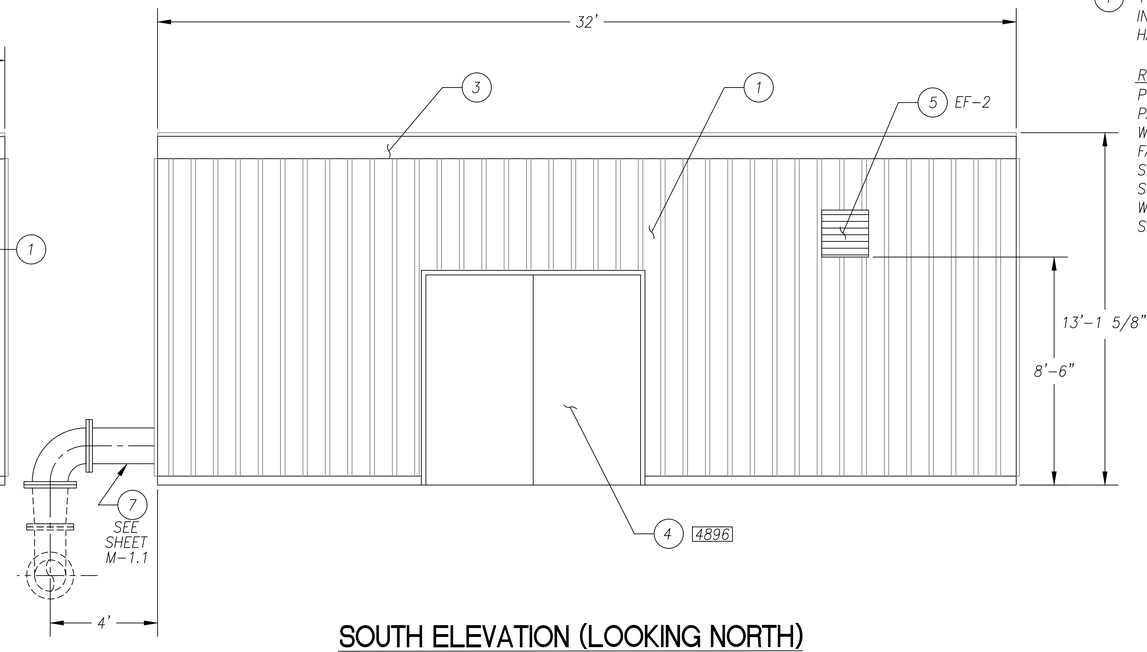
EAST ELEVATION (LOOKING WEST)



NORTH ELEVATION (LOOKING SOUTH)



WEST ELEVATION (LOOKING EAST)



SOUTH ELEVATION (LOOKING NORTH)

BLOWER BLDG. - ELEVATIONS

SCALE: 3/8" = 1'-0"

0 5'

KEYNOTES:

1. PRE-FINISHED MTL. WALL PANEL SIDING SYSTEM
2. PRE-FINISHED MTL. ROOF PANEL SYSTEM
3. "SCULPTURED RAKE" TRIM BY METAL ROOFING AND SIDING MFR.
4. DOOR & FRAME ASSEMBLY
5. WALL MOUNTED EXHAUST FAN WITH SHUTTERS.
6. WALL LOUVERS, STATIONARY ACOUSTICAL GALV STEEL
7. BLOWER EQUIPMENT PIPE THROUGH WALL.
8. STATIONARY LOUVER

GENERAL NOTES:

A KEYNOTES APPLY TO THIS DRAWING ONLY

B VERIFY DIMENSIONS & NOTATIONS IN FIELD.

EXHAUST FANS EF-1, EF-2
SHUTTER MOUNTED, 2400 CFM @ 0.125" S.P., 1/4 HP, 120 V DIRECT DRIVE, GALV STEEL FRAME

LOUVERS

6 RUSKIN ACL 645 STATIONARY GALV STEEL ACOUSTICAL LOUVER 6" DEEP x 60" x 53" WIDE. MESH SCREEN ON OUTSIDE FACE

8 RUSKIN ELF 6375x STATIONARY LOUVER, EXTRUDED ALUMINUM

DOOR

4 4'-0"x8'-0" HOLLOW METAL DOUBLE DOOR AND FRAME. PROVIDE INSIDE PANIC HARDWARE AND COMMERCIAL GRADE DOOR LOCK AND HANDSET.

ROOF

PRE-FINISHED 24 GA. GALV STANDING SEAM METAL ROOF SYSTEM - PANELS SHALL BE CONTINUOUS LENGTH 24" WIDE SNAP LOCK PANELS WITH 3" HIGH RIBS AND CONCEALED FASTENERS INSTALLED OVER FACTORY RECOMMENDED SELF-ADHEARED UNDERLAYMENT AND SLIP-SHEET OVER PLYWOOD SHEATHING SUBSTRATE - INSTALLATION SHALL COMPLY WITH 2019 CBC SECTION 1507.4 AND MANUFACTURER'S WRITTEN INSTALLATION GUIDELINES TYP. U.O.N. - COLOR TO BE SELECTED BY OWNER.

REVISION	DATE	INITIALS	DESCRIPTION
	.	.	.

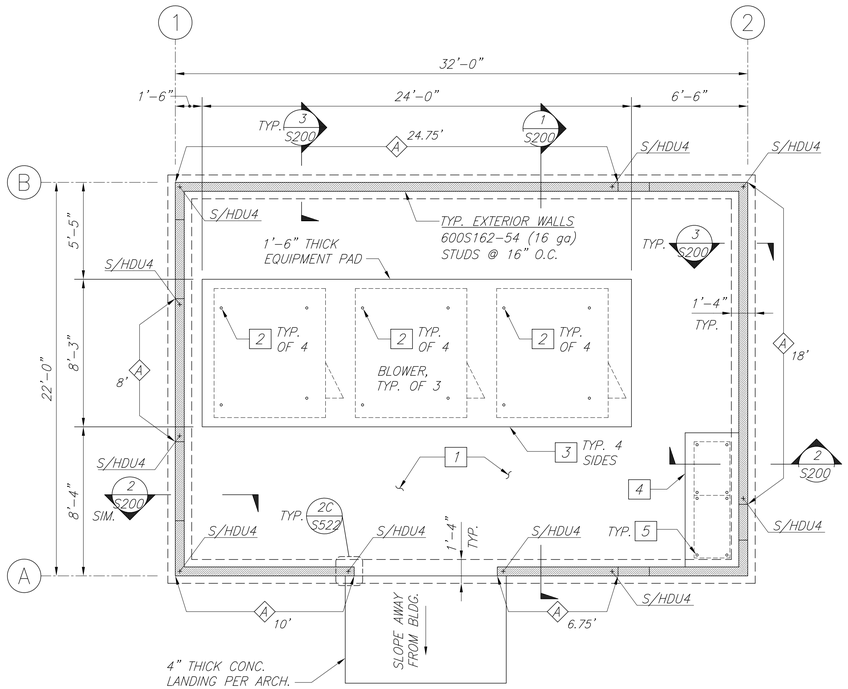
CITY OF CORCORAN
2020 WASTEWATER TREATMENT PLANT MODIFICATIONS
BLOWER BLDG. - ELEVATIONS

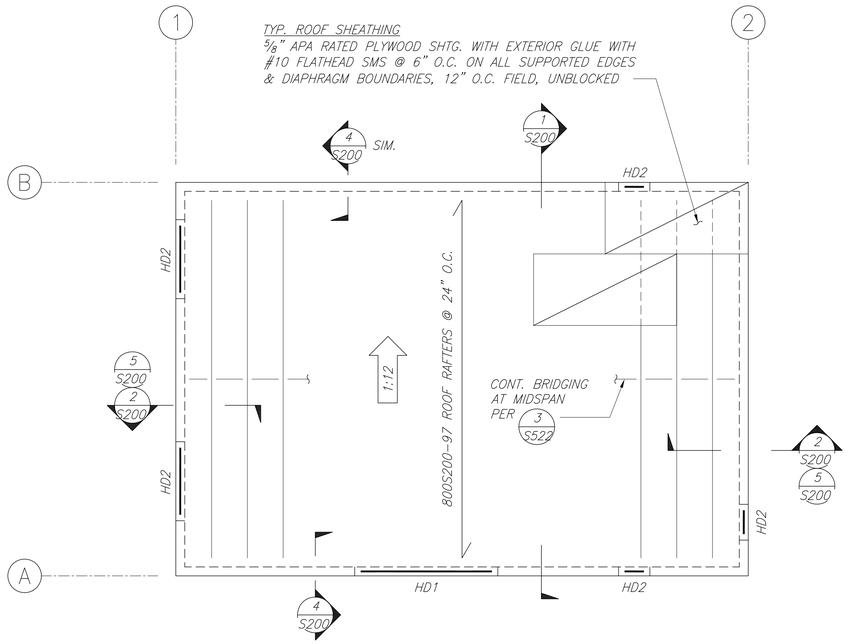
W3i ENGINEERING WATER WASTEWATER INFRASTRUCTURE
661-319-3648
tschroepfer@W3Ieng.com

DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386
DRAWN BY: JCF
DATE: .
PROJ NO: CORC01-20
FILE NO: CORC-bldg2.dwg
SCALE: 0 1"
SHEET: A-1.3
. OF .

TERRY S. SCHROEPFER No. 26,386 Civil STATE OF CALIFORNIA

DATE





HEADER SCHEDULE

TYPE	BOX HEADER	SILL	JAMB	REMARKS
HD1	600T150-54 T&B & 800S162-54 EA. SIDE	N/A	2-600S162-54	DTL. 1/S520
HD2	600T150-54 T&B & 600S162-54 EA. SIDE	600T150-54	2-600S162-54	DTL. 1/S520

SHEAR WALL SCHEDULE

TYPE	EDGE FASTENERS	FIELD FASTENERS	SILL BOLTS
A	#8 SMS @ 6"	#8 SMS @ 12"	5/8"ø x 18" @ 32" O.C.

1. ALL SHEAR PANELS SHALL BE MIN. 7/16" APA RATED SHEATHING WITH EXTERIOR GLUE WITH ALL EDGES ATTACHED TO FRAMING MEMBERS OR FLAT STRAPPING. PANELS SHALL BE ATTACHED TO STRAPPING AS REQ'D FOR PANEL EDGES. STRAPPING SHALL BE CONT. 2" WIDE x 16 ga STRAP.

2. SHEAR WALLS MORE THAN ONE VERTICAL PANEL IN HEIGHT SHALL HAVE STAGGERED SPLICED JOINTS.

3. TYPICALLY, FULL 4'X8' PANELS SHALL BE USED FOR SHEAR PANELS. NO PANEL LESS THAN 24" WIDE SHALL BE USED IN ANY SHEAR PANEL.

4. A MINIMUM OF 2 SILL BOLTS PER SHEAR PANEL IS REQUIRED.

5. LENGTH SHOWN NEXT TO SHEAR WALL TYPE IS THE MINIMUM SHEAR WALL LENGTH. + INDICATES HOLDOWN TYPE PER DETAIL 3/S521.

6. FOR SHEAR WALL DETAIL, SEE 2/S521.

7. FOR EXTERIOR WALLS WHERE SHEAR PANELS ARE NOT REQUIRED, PROVIDE TYPE A SHEAR PANELS W/ SILL BOLTS @ 48" O.C.

LEGEND

SYMBOL	DESCRIPTION	REMARKS
	6" HIGH CURB AT EXTERIOR WALLS. COORDINATE WITH ARCH.	SEE DTL. 3/S200

KEYNOTES

1: 6" CONC. SLAB W/ #4 @ 18" O.C. E.W. OVER 2" SAND ON MIN. 15 MIL VAPOR BARRIER

2: DRILL & EPOXY ½"ø THREADED ROD (ASTM F1554, GR. 36), MIN. 4" EMBEDMENT WITH HILTI HIT-RE 500 V3 ADHESIVE (ICC ESR-3814), TYP. OF 4 PER BLOWER UNIT. MIN. CONC. EDGE DISTANCE IS 12". USE STD. FLAT WASHER AT EA. ROD.

3: ½" ISOLATION JOINT FILLER BETWEEN EQUIPMENT PAD AND SLAB – ALL 4 SIDES

4: 3'-0"x7'-6" (VERIFY) x 6" THICK HOUSEKEEPING PAD FOR MAIN SWITCHBOARD (MSB)

5: DRILL & EPOXY ½"ø THREADED ROD (ASTM F1554, GR. 36), MIN. 4" EMBEDMENT WITH HILTI HIT-RE 500 V3 ADHESIVE (ICC ESR-3814). MIN. CONC. EDGE DISTANCE IS 6".

N

FOUNDATION PLAN

1/4"=1'-0"

FOUNDATION PLAN NOTES:

1. VERIFY AND COORDINATE ALL DIMENSIONS WITH ARCH.
2. REFER TO ALL S500s DRAWINGS FOR GENERAL NOTES AND TYPICAL DETAILS.
3. REFER TO CIVIL PLANS FOR DRAINAGE AROUND THE BUILDING.
4. PROVIDE CONTROL JOINTS IN CONC. SLAB @ 10' O.C. E.W. PER DETAIL 3/S510.

ERECTION OF STRUCTURAL METAL STUD WALLS

THE METHOD OF ERECTING THE METAL STUD WALLS IS THE RESPONSIBILITY OF THE CONTRACTOR. THE DRAWINGS SHOW THE FINAL CONDITION OF THE CONSTRUCTION. METAL STUDS SHALL BE TIGHT FITTED AGAINST THE TOP AND BOTTOM TRACKS.

N

ROOF FRAMING PLAN

1/4"=1'-0"

ROOF FRAMING NOTES:

1. VERIFY AND COORDINATE ALL DIMENSIONS AND ELEVATIONS WITH ARCH.
2. REFER TO ALL S500s DRAWINGS FOR GENERAL NOTES AND TYPICAL DETAILS.
3. NO PUNCHOUTS IN ROOF RAFTERS. MAX. 1 ½" DIAMETER HOLES MAY BE DRILLED AT THE CENTERLINE OF THE WEB FOR ELEC. CONDUITS AS NEEDED. HOLES SHALL BE SPACED AT MIN. 24" O.C. AND LOCATED AT LEAST 24" AWAY FROM EA. END OF RAFTERS.

Signed 06-23-20

REGISTERED PROFESSIONAL ENGINEER
DAVID K. KOO
No. 4020
STRUCTURAL
STATE OF CALIFORNIA

Exp. Date 06-30-22

DAVIDKOO

REV.	DATE	DESCRIPTION	BY

FOUNDATION PLAN AND ROOF FRAMING PLAN

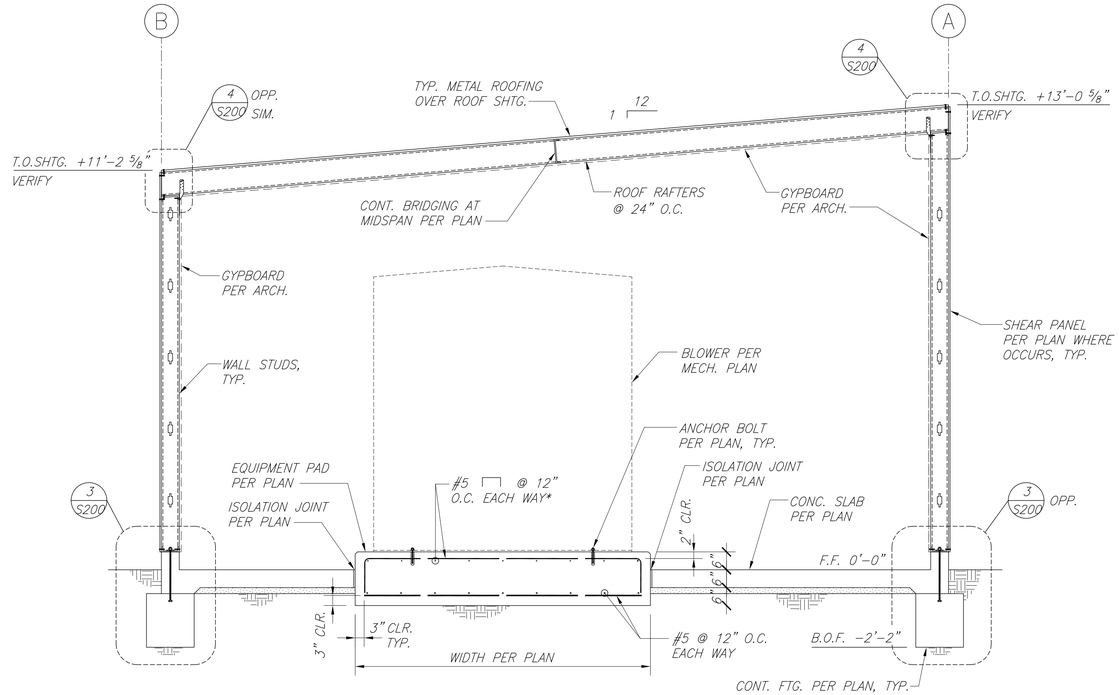
CITY OF CORCORAN
2020 WASTEWATER TREATMENT PLANT MODIFICATIONS
BLOWER BUILDING

DAVID KOO
ENGINEERING
Structural & Civil Engineer
4317 Appleton Way
Bakersfield, CA 93311
Phone: 661-487-7162
Email: dkoo@mskaengineering.com

DKE

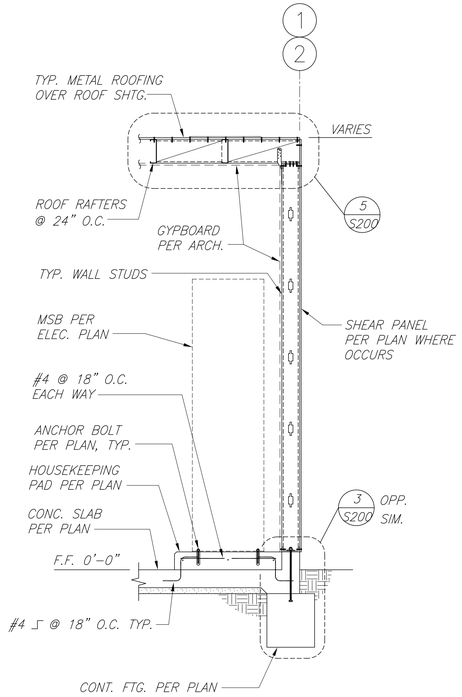
DATE 06-23-20
JOB NO. 20-0504
DRAWN DKoo
DESIGNED DKoo
CHECKED DKoo
David Koo
APPROVED

SHEET
S100



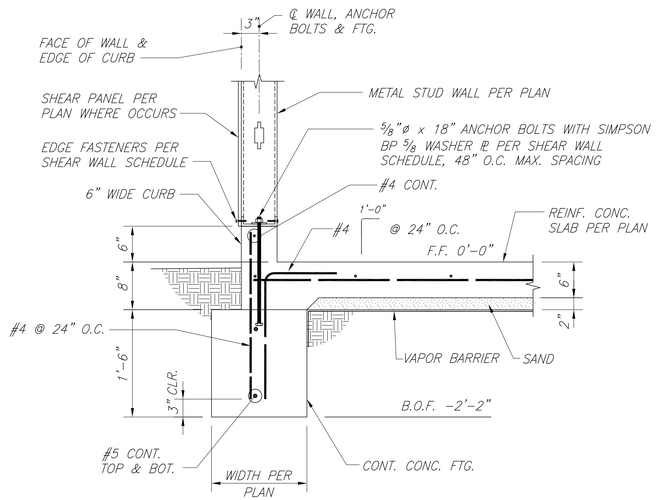
NOTE:
* ADJUST LOCATIONS OF TOP LAYER OF REINFORCING BARS AS REQUIRED TO AVOID INTEFERENCES WITH DRILLED ANCHOR BOLTS.

1 S200 SECTION 1/2"=1'-0"

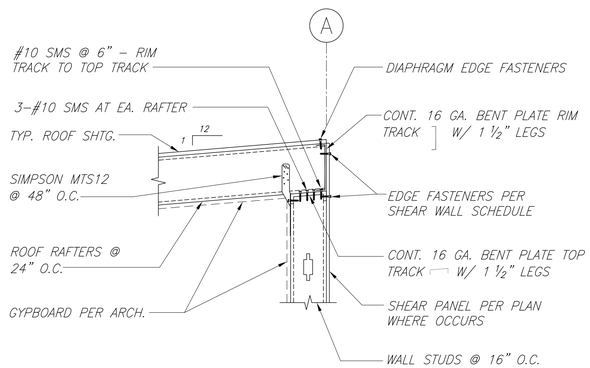


NOTE: SEE 1 S200 FOR NOTES NOT SHOWN.

2 S200 SECTION 1/2"=1'-0"

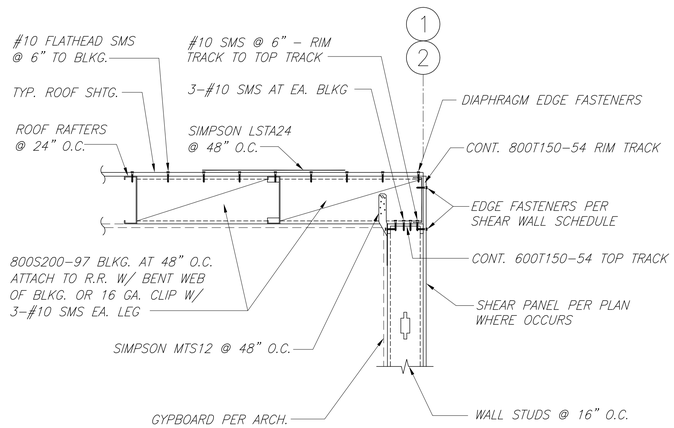


3 S200 TYPICAL FOOTING DETAIL 1"=1'-0"



NOTE:
LOCATE RAFTERS TO LINE UP WITH STUDS IN WALL @ 48" O.C.

4 S200 DETAIL 1"=1'-0"



5 S200 DETAIL 1"=1'-0"

Signed 06-23-20

REGISTERED PROFESSIONAL ENGINEER
DAVID K. KOO
No. 4020
STRUCTURAL
STATE OF CALIFORNIA

Exp. Date 06-30-22

DAVIDKOO

REV.	DATE	DESCRIPTION	BY

SECTIONS AND DETAILS

CITY OF CORCORAN
2020 WASTEWATER TREATMENT PLANT
MODIFICATIONS
BLOWER BUILDING

DAVID KOO
ENGINEERING
Structural & Civil Engineer
4317 Appleton Way
Bakersfield, CA 93311
Phone: 661-487-7162
Email: dkoo@mskaengineering.com

DKE

DATE 06-23-20
JOB NO. 20-0504
DRAWN DKoo
DESIGNED DKoo
CHECKED DKoo
David Koo
APPROVED

SHEET
S200

GENERAL NOTES AND SPECIAL INSPECTIONS

BUILDING CODE

Design and construction shall conform to 2019 California Building Code (CBC).

SITE LOCATION

Latitude: 36.068949° N; Longitude: 119.545986° W

LIVE LOADS

Roof Live Load . . . . . 20 psf (reducible)

SEISMIC DESIGN LOADS

Site Class D
Seismic Design Category D
Ss = 0.771g; S1 = 0.281g
SDS = 0.613g; SD1 = 0.382g
Analysis Procedure: Equivalent Lateral Force Procedure

Seismic Force Resisting System: Light-frame (cold-formed steel) walls sheathed with wood structural panels rated for shear resistance
Seismic Importance Factor, Ie = 1.25 for Risk Category III
R = 6.5, Ωo = 2.5, Cd = 4.0
V = Cs W = 0.118 W

WIND DESIGN LOADS

Basic Design Wind Speed, V = 100 mph
Allowable Stress Design Wind Speed, Vasd = 77 mph
Risk Category III
Wind Exposure Category C
Internal Pressure Coefficient, GCpi = +/-0.55

CONCRETE

Minimum Ultimate Compressive Strength at 28 Days: . . . . . 3000 psi

Minimum Cement: . . . . . 517 lbs/C.Y. (5.5 sacks/C.Y.)

Maximum Water: . . . . . 6.20 Gallons/Sack of Cement (w/c = 0.55 Max.)

Maximum Slump: . . . . . 4"

Cement: . . . . . Type V or Type II Low Alkali meeting physical requirements for Type V

Water Reducing Admixture: . . . . . Master Builders MasterPozzolith 322 or Grace WRDA with HYCOL conforming to ASTM C494, Type A

Aggregates: . . . . . A.S.T.M. C33., Max. 1" Aggregate. Aggregates shall be "innocuous" when tested per ASTM C289.

Vibration: . . . . . High frequency electric vibration is required for all concrete.

Curing Compound: . . . . . Spray type required. Two heavy coats. ASTM C309 Curing Compound shall not be of wax base and not impair in any way the application of floor toppings where occur.

Chamfers: . . . . . Provide ¾" chamfer at corners of exposed concrete unless noted otherwise.

REINFORCING STEEL

A.S.T.M. No.

Deformed Bars: . . . . . A615, Grade 60

Continuous Steel Lap Splice Length: . . . . . See Detail 1/S510

Where not specifically detailed otherwise, all reinforcing steel shall be lap spliced as noted above.

Concrete Coverage For Reinforcement:
Foundations Poured Against Earth . . . . . 3" Clear, U.N.O.
Foundations Poured Against Forms . . . . . 2" Clear, U.N.O.

STEEL STUDS

Steel studs shall be:
12 ga (97 mils) . . . . . ASTM A653 Gr. 50 (Fy=50 ksi)
14 ga (68 mils) . . . . . ASTM A653 Gr. 50 (Fy=50 ksi)
16 ga (54 mils) . . . . . ASTM A653 Gr. 50 (Fy=50 ksi)

18 ga (43 mils) . . . . . ASTM A653 Gr. 33 (Fy=33 ksi)
20 ga (33 mils) . . . . . ASTM A653 Gr. 33 (Fy=33 ksi)
22 ga (27 mils) . . . . . ASTM A653 Gr. 33 (Fy=33 ksi)

Finish . . . . . G60 Galvanized per ASTM A924

Track (1 ½" flange min.) . . . . . 16 Gage Min., U.N.O.

Sheet Metal Fasteners . . . . . Wafer-head self-drilling screws, U.N.O.

Weld Electrodes . . . . . AWS E70XX

Welders shall be certified and work done in accordance with the Structural Welding Code-Sheet Steel A.W.S. D1.3.

Steel studs shall comply with the California Building Code and with "Product Technical Information" published by the Steel Stud Manufacturers Association (SSMA).

Sheet metal screws shall be ITW Buildex Teks screws per ICC ESR-1976 or approved equal. The screws shall be wafer-head self-drilling type at framing and flat-head self-drilling type at sheathing, U.N.O.

For screws, minimum center-to-center spacing is 3 times the nominal diameter. Minimum edge distance is 1.5 times the nominal diameter. Screws shall penetrate a minimum of 3 threads beyond the metal substrate.

VAPOR BARRIER

Provide 15 mil min. vapor barrier under the interior floor slabs. It is not required under the exterior slabs on grade.

Lap all joints at least 6", and provide continuous cement or tape at each lap to seal the vapor barrier.

Turn the vapor barrier edges down along the footings at least 6" for the interior floor slabs, U.N.O. on the plans.

FOUNDATION NOTES

Geotechnical Report: by BSK Associates, Project No. G19-168-11F, dated June 19, 2020

Soils Type: Silty Sand, Sandy Silt and Sandy Clay

Allowable Soils Pressures: 2200 psf (Continuous Ftg.), 2500 psf (Isolated Ftg.) for Dead + Live Load; ⅓ Increase for Total including Wind or Seismic Loads

Bottom of Footing Elevation: As shown on drawings

Place Footings Only on Firm Bearing, not on loose soil or uncompacted fill.

Compacted Fill Requirements: Placement & compaction per soils report

CONTRACTOR RESPONSIBILITIES

The Contractor shall coordinate the work and cooperate with the Owner and occupants to minimize disruptions.

The Contractor shall ensure that proper precautions and practices are employed during the work to maintain the safety of the workers and occupants in accordance with applicable laws and regulations.

The Contractor is responsible for the stability and integrity of all structures during construction. Provide temporary shoring and/or bracing as required.

The Contractor is responsible for the clean up of all debris, dust, etc. resulting from the contractor's activities at the end of each work shift and at the end of the project.

WEATHER PROTECTION

Exterior wall coverings and roof coverings shall be installed per manufacturer's instructions and 2019 CBC Chapters 14 and 15, respectively. All coverings, water-resistive barrier, flashing, etc. shall be properly installed to provide weather protection for the building. All penetrations, openings, joints, etc. shall be properly flashed, caulked, and sealed.

GENERAL NOTES

All Design and Construction shall conform to the 2019 California Building Code.

Typical Details & General Notes apply in all cases unless specifically shown otherwise on the drawings.

Where No Detail is Shown, construction shall be as shown for other similar work.

No Deviations from the Design Drawings are permitted without the permission of the Engineer.

Contractor Shall Be Responsible for verifying all existing building elements and dimensions shown on the drawings.

If Field Conditions Are Not as Shown on the Drawings, or if interferences to construction are discovered, Contractor shall notify Engineer before proceeding with the work.

OSHA Requirements and local codes for all regulatory agencies or bodies shall be strictly adhered to.

Means and Methods and Job Site Safety are the sole responsibility of the Contractor.

ABBREVIATIONS

@	At
A.F.F.	Above Finish Floor
ARCH.	Architectural
BLK.	Block
BLKG.	Blocking
BM.	Beam
B.O.	Bottom of
B.O.D.	Bottom of deck
C.J.	Ceiling Joist or Construction Joint
℄	Centerline
CLR.	Clear
CONC.	Concrete
CONT.	Continuous
(E)	Existing
EA.	Each
E.F.	Each Face
ELEC.	Electrical
ELEV.	Elevation
EMBED.	Embedment
EQUIP.	Equipment
E.W.	Each Way
EXIST.	Existing
F.F.	Finish Floor
F.G.	Finish Grade
FIN.	Finish
F.J.	Floor Joist
FLR.	Floor
F.O.C.	Face of Concrete
F.O.S.	Face of Stud
F.S.	Far Side
Ftg.	Footing
H.S.	High Strength
JST.	Joist
MAX.	Maximum
M.B.P.	Metal Building Plans
MECH.	Mechanical
MIN.	Minimum
(N)	New
N.S.	Near Side
O.C.	On Center
PL	Plate
P.N.	Plywood Nailing
REQ'D.	Required
R.R.	Roof Rafter
S.M.S.	Sheet Metal Screw
STIFF.	Stiffener
THK.	Thick or Thickness
T.O.	Top of
T.O.D.	Top of Deck
T.O.P	Top of Parapet
T.O.S.	Top of Steel
T.O.Shtg.	Top of Sheathing Elevation
TYP.	Typical
U.N.O.	Unless Noted Otherwise
W/	With
ø	Diameter

SPECIAL INSPECTIONS

The following items require Special Inspections per CBC Chapter 17:

SOILS PER CBC TABLE 1705.6		
Verification and Inspection Task	Continuous	Periodic
1. Verify materials below shallow foundations are adequate to achieve the design bearing capacity.	-	X
2. Verify excavations are extended to proper depth and have reached proper material.	-	X
3. Perform classification and testing of compacted fill materials.	-	X
4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill.	X	-
5. Prior to placement of compacted fill, observe subgrade and verify that site has been prepared properly.	-	X

Note: Structural design of footing was based on concrete compressive strength of 2500 psi. Special inspections for concrete are not required per CBC 1705.3 Exception 2.3, except for post-installed anchors.

CONCRETE PER CBC TABLE 1705.3		
Verification and Inspection Task	Continuous	Periodic
1. Inspection of anchors post-installed in hardened concrete members.	-	X

STRUCTURAL OBSERVATION DURING CONSTRUCTION

Structural observation shall be provided by the responsible Structural Engineer or his designee in accordance with the 2019 California Building Code, Sec. 1704.6.

Signed 06-23-20

REGISTERED PROFESSIONAL ENGINEER
DAVID K. KOO
No. 4020
STRUCTURAL
STATE OF CALIFORNIA

Exp. Date 06-30-22

DAVID KOO

REV.	DATE	DESCRIPTION	BY

GENERAL NOTES AND SPECIAL INSPECTIONS

CITY OF CORCORAN
2020 WASTEWATER TREATMENT PLANT MODIFICATIONS
BLOWER BUILDING

DAVID KOO ENGINEERING
Structural & Civil Engineer
4317 Appleton Way
Bakersfield, CA 93311
Phone: 661-487-7162
Email: dkoo@mskaengineering.com

DKE

DATE 06-23-20
JOB NO. 20-0504
DRAWN DKoo
DESIGNED DKoo
CHECKED DKoo
David Koo
APPROVED

SHEET
S500

CONCRETE: BAR LAP SPLICE LENGTHS (CLASS "B")

f'_c = 3,000 psi ; f_y = 60,000 psi ; 2" CONC. COVER

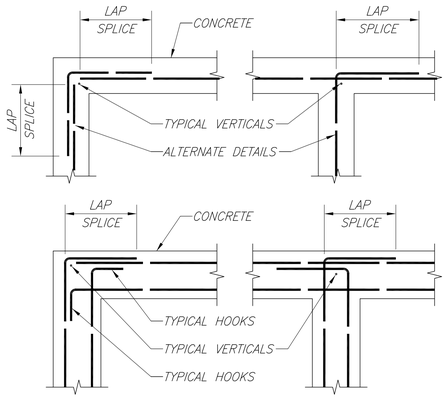
BAR NO.	#3	#4	#5	#6	#7	#8	#9	#10	#11
TOP BARS*	1'-5"	1'-11"	2'-4"	2'-10"	4'-1"	4'-8"	5'-9"	7'-1"	8'-6"
OTHER BARS	1'-4"	1'-5"	1'-10"	2'-2"	3'-2"	3'-7"	4'-5"	5'-6"	6'-7"

*HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE CAST IN MEMBER BELOW BAR
NOTE: FOR LIGHTWEIGHT CONCRETE, MULTIPLY SPLICE LENGTHS BY A FACTOR OF 1.3.

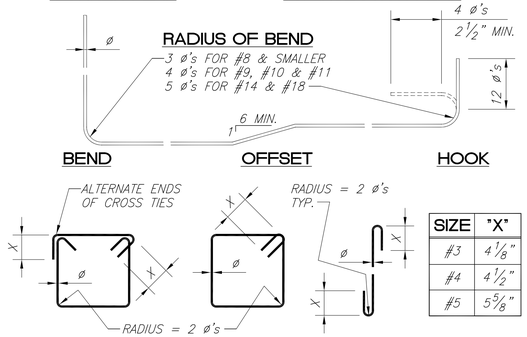
CONCRETE: STANDARD HOOK DEVELOPMENT LENGTHS

f'c = 3000 psi; fy = 60,000 psi; 2 ½" SIDE COVER; 2" END COVER

BAR NO.	#3	#4	#5	#6	#7	#8	#9	#10	#11
DEVELOPMENT LENGTH	6"	8"	10"	1'-0"	1'-2"	1'-4"	1'-6"	1'-8"	1'-10"



CORNER PLAN INTERSECTION PLAN



SIZE	"X"
#3	4 1/8"
#4	4 1/2"
#5	5 5/8"

BEND OFFSET HOOK

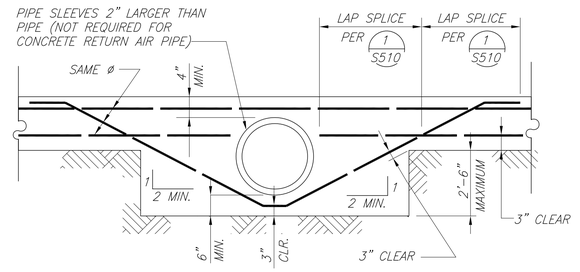
TWO-PIECE HOOP ONE-PIECE HOOP

TIE OR STIRRUP STIRRUP

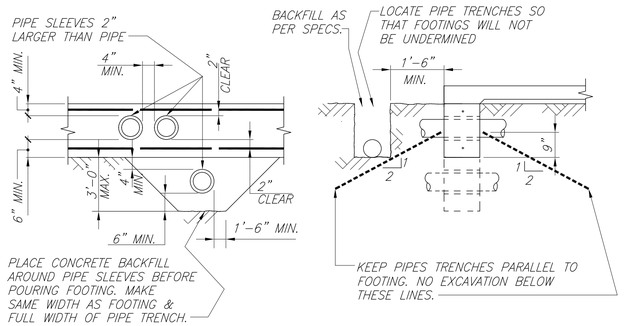
REINFORCEMENT PLACING TOLERANCES

1. DEPTH: ±1/4" FOR MEMBERS 8" OR LESS IN DEPTH
2. DEPTH: ±1/2" FOR MEMBERS LARGER THAN 8" IN DEPTH
3. LENGTH: ±1"

1/S510 TYPICAL REINFORCING STEEL DETAILS



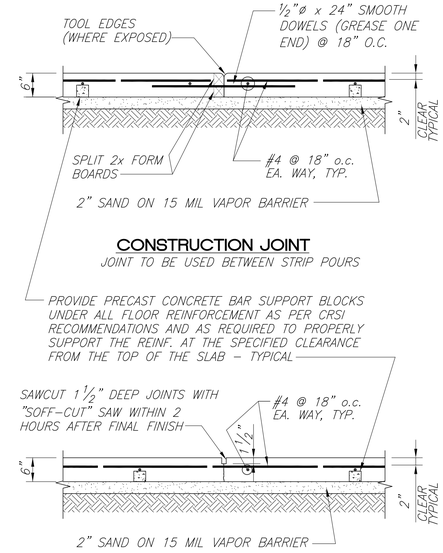
DETAIL WHERE BOTTOM REINFORCING BAR IS CUT



NOTE: SLEEVES REQUIRED FOR WATER, GAS, SEWER LINES & OTHER PIPES FOR FLUIDS, & PRIMARY ELECTRICAL SERVICE CONDUIT.

2/S510 RELATION OF PIPES AND TRENCHES TO FOOTING

CONC-2 (1")



CONSTRUCTION JOINT

JOINT TO BE USED BETWEEN STRIP POURS

PROVIDE PRECAST CONCRETE BAR SUPPORT BLOCKS UNDER ALL FLOOR REINFORCEMENT AS PER CRSI RECOMMENDATIONS AND AS REQUIRED TO PROPERLY SUPPORT THE REINF. AT THE SPECIFIED CLEARANCE FROM THE TOP OF THE SLAB – TYPICAL

CONTRACTION JOINT (C.J.)

PLACE BETWEEN CONSTRUCTION JOINTS @ 10'-0" o.c. MAXIMUM EA. WAY

3/S510 INTERIOR CONCRETE SLAB JOINTS

FOR CRACK CONTROL OF CONCRETE FLOOR SLABS

Signed 06-23-20

REGISTERED PROFESSIONAL ENGINEER
DAVID K. KOO
No. 4020
STRUCTURAL
STATE OF CALIFORNIA

Exp. Date 06-30-22

DAVID KOO

REV.	DATE	DESCRIPTION	BY

TYPICAL DETAILS

CITY OF CORCORAN
2020 WASTEWATER TREATMENT PLANT MODIFICATIONS
BLOWER BUILDING

DAVID KOO ENGINEERING
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Bakersfield, CA 93311
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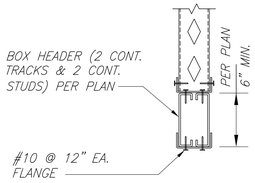
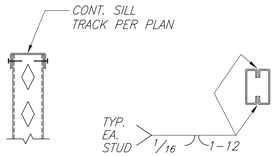
DKE

DATE 06-23-20
JOB NO. 20-0504
DRAWN DKoo
DESIGNED DKoo
CHECKED DKoo
David Koo
APPROVED

SHEET
S510

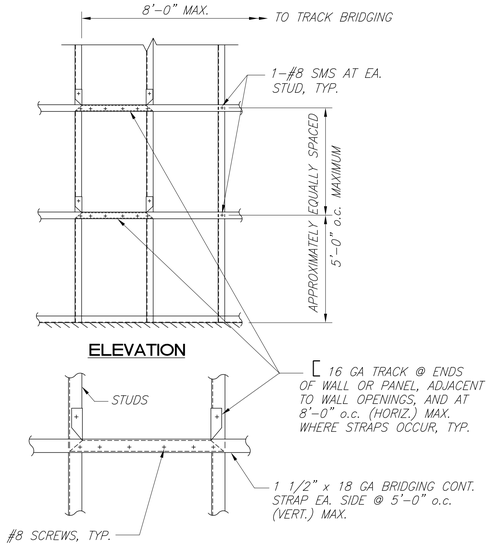


TYP. HEADER
SECTION A-A



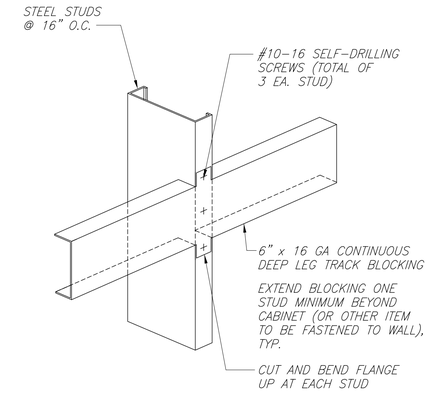
TYP. SILL
SECTION B-B

TYP. JAMB
SECTION C-C



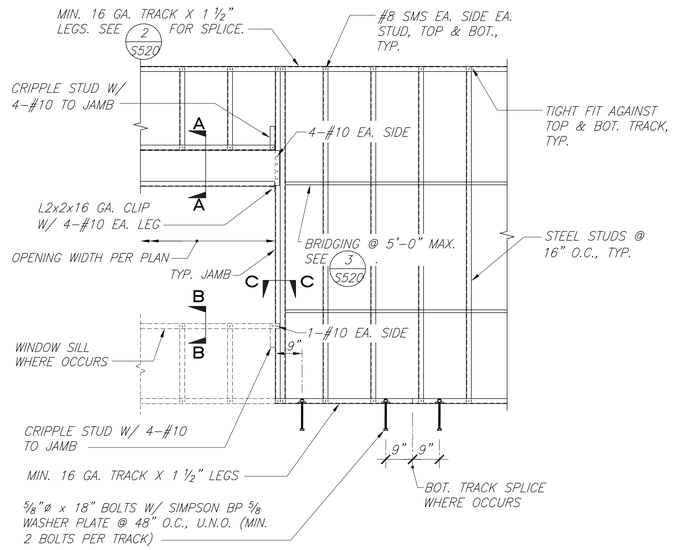
NOTE: PROVIDE BRIDGING WHERE ONE OR BOTH SIDES OF WALL ARE NOT SHEATHED WITH PLYWOOD, GYPSUM BOARD, ETC.

3 S520 BRIDGING DETAIL



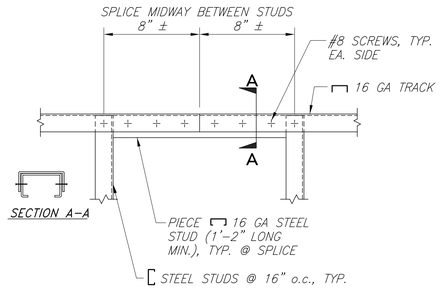
5 S520 STEEL STUD HORIZONTAL BLOCKING

SS-7

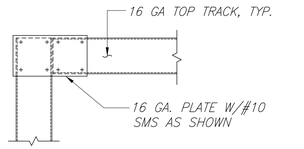


NOTES:
1. REFER TO "ERECTION OF STRUCTURAL METAL STUD WALLS" NOTE ON FOUNDATION PLAN, DWG. S100.

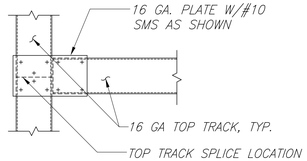
1 S520 TYPICAL STEEL STUD BEARING WALL AND / OR EXTERIOR WALL



2 S520 TOP TRACK SPLICE DETAIL



CORNER PLAN



INTERSECTION PLAN

4 S520 TOP TRACK CONNECTION DETAIL

Signed 06-23-20

REGISTERED PROFESSIONAL ENGINEER
DAVID K. KOO
No. 4020
STRUCTURAL
STATE OF CALIFORNIA

Exp. Date 06-30-22

DAVID KOO

REV.	DATE	DESCRIPTION	BY

TYPICAL DETAILS

CITY OF CORCORAN
2020 WASTEWATER TREATMENT PLANT MODIFICATIONS
BLOWER BUILDING

DAVID KOO ENGINEERING
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DATE 06-23-20
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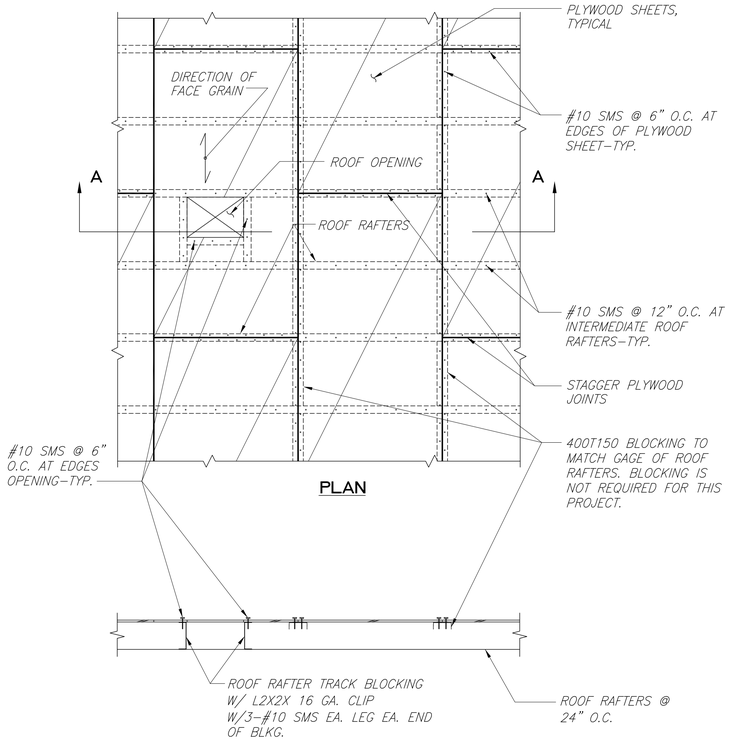
DRAWN DKoo
DESIGNED DKoo
CHECKED DKoo
David Koo
APPROVED

SHEET
S520



SECTION A-A

NOTES:

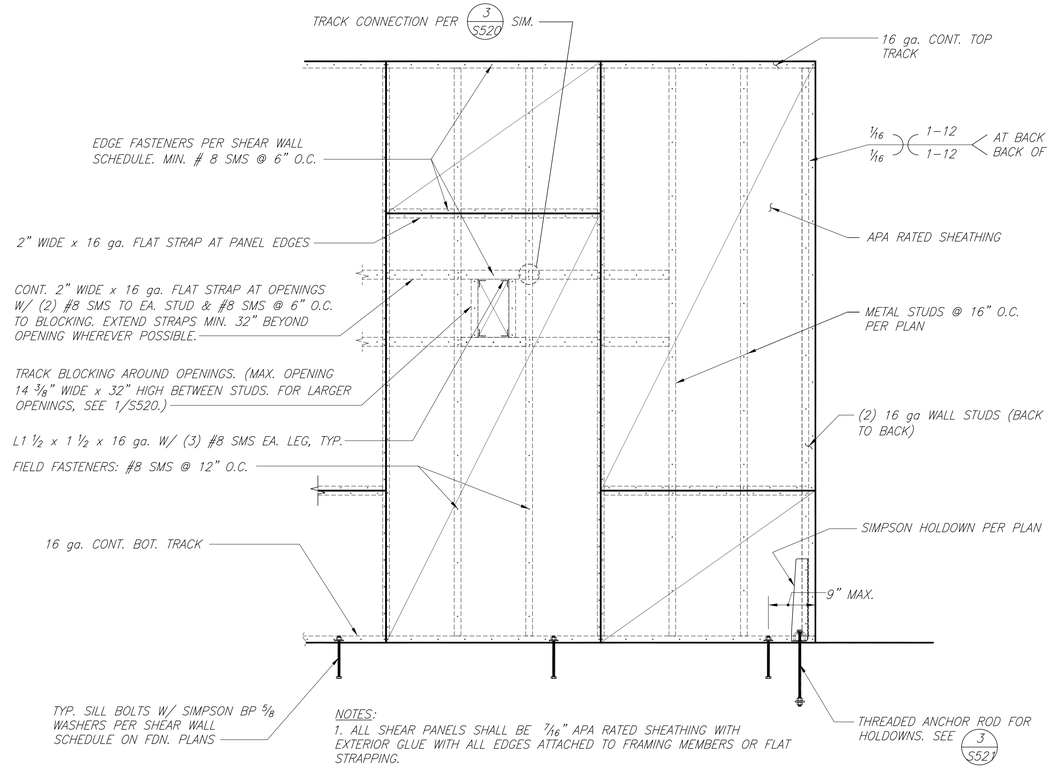
1. 4'–0" SIDE OF PLYWOOD SHEETS SHALL BE SPLICED OVER ROOF RAFTERS. NO PLYWOOD SHEET LESS THAN 2'–0" x 4'–0" IN SIZE MAY BE USED AT ROOFS.

2. PLYWOOD JOINTS SHALL OCCUR AT THE CENTER OF FRAMING MEMBERS OR BLOCKING. MIN. EDGE DISTANCE FOR SCREWS SHALL BE 3/8".

3. ALL PLYWOOD SHALL BE 5/8" APA RATED PLYWOOD PER PLAN. ALL PLYWOOD SHALL BE MANUFACTURED WITH EXTERIOR GLUE.

4. ALL SCREWS SHALL BE #10 FLATHEAD SHEET METAL SCREWS, U.N.O.

1/S521 PLYWOOD ROOF DIAPHRAGM DETAIL

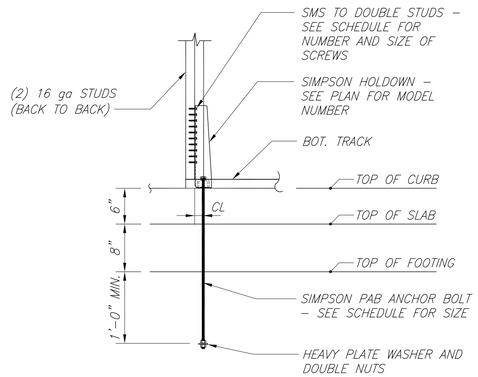


NOTES:

1. ALL SHEAR PANELS SHALL BE 7/16" APA RATED SHEATHING WITH EXTERIOR GLUE WITH ALL EDGES ATTACHED TO FRAMING MEMBERS OR FLAT STRAPPING.

2. FASTENERS SHALL BE #8 FLATHEAD SMS, U.N.O.

2/S521 WOOD STRUCTURAL SHEAR PANELS



SIMPSON HOLDOWN SCHEDULE				
MODEL	STUD FASTENERS	ANCHOR BOLT DIAMETER	"CL"	ANCHOR BOLTS
S/HDU4	6–#14	5/8"ø	1 3/8"	SIMPSON PAB5

3/S521 TYPICAL STUD ANCHOR SINGLE SIMPSON S/HDU HOLDOWNS

Signed 06-23-20

REGISTERED PROFESSIONAL ENGINEER · DAVID K. KOO · No. 4020 · STRUCTURAL · STATE OF CALIFORNIA

Exp. Date 06-30-22

DAVIDKOO

REV.	DATE	DESCRIPTION	BY

TYPICAL DETAILS

CITY OF CORCORAN
2020 WASTEWATER TREATMENT PLANT MODIFICATIONS
BLOWER BUILDING

DAVID KOO
ENGINEERING
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4317 Appleton Way
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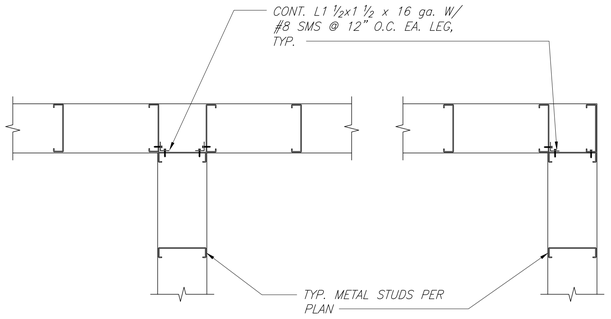
DESIGNED DKoo
CHECKED DKoo
David Koo
APPROVED

SHEET

S521



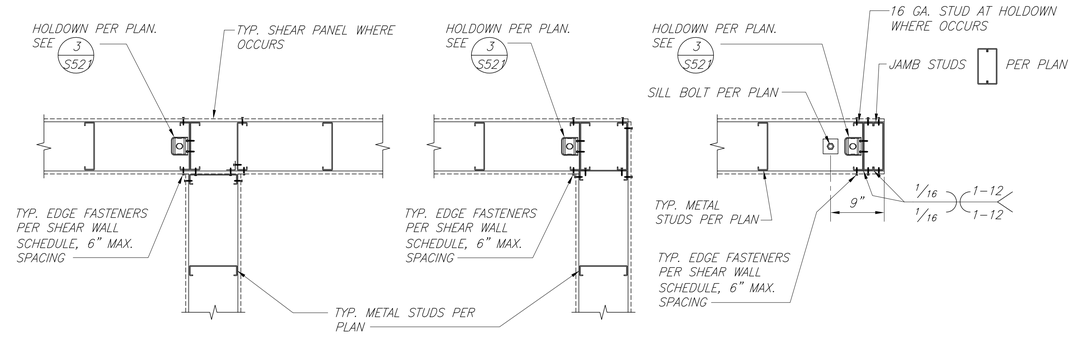
PLAN

INTERSECTION

PLAN

CORNER

1/S522 TYP. METAL STUD WALL CONNECTION PLAN



PLAN

A: INTERSECTION

PLAN

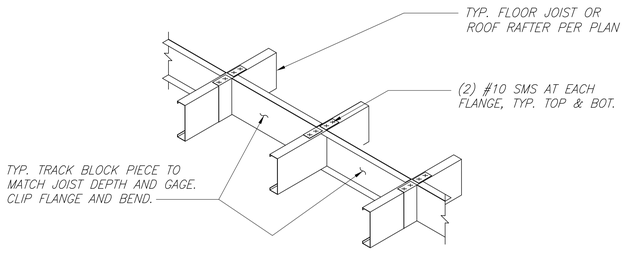
B: CORNER

PLAN

C: ADJACENT TO JAMB

NOTES:
1. SEE 1/S522 FOR STUD TO STUD CONNECTION.
2. SILL BOLTS NOT SHOWN FOR CLARITY.

2/S522 TYP. METAL STUD WALL CONNECTION PLAN WITH HOLDOWNS



3/S522 TYP. CONTINUOUS BRIDGING DETAIL

Signed 06-23-20

REGISTERED PROFESSIONAL ENGINEER
DAVID K. KOO
No. 4020
STRUCTURAL
STATE OF CALIFORNIA

Exp. Date 06-30-22

DAVIDKOO

REV.	DATE	DESCRIPTION	BY

TYPICAL DETAILS

CITY OF CORCORAN
2020 WASTEWATER TREATMENT PLANT
MODIFICATIONS
BLOWER BUILDING

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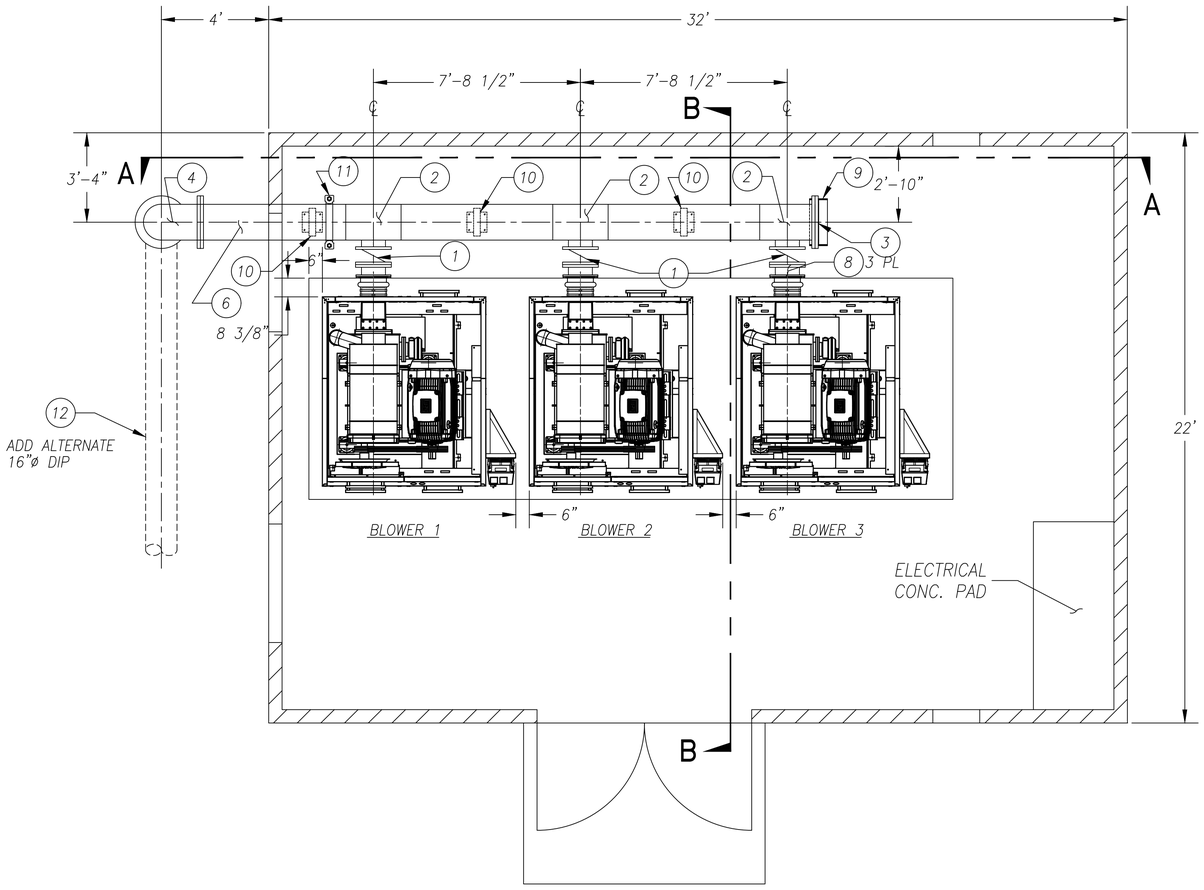
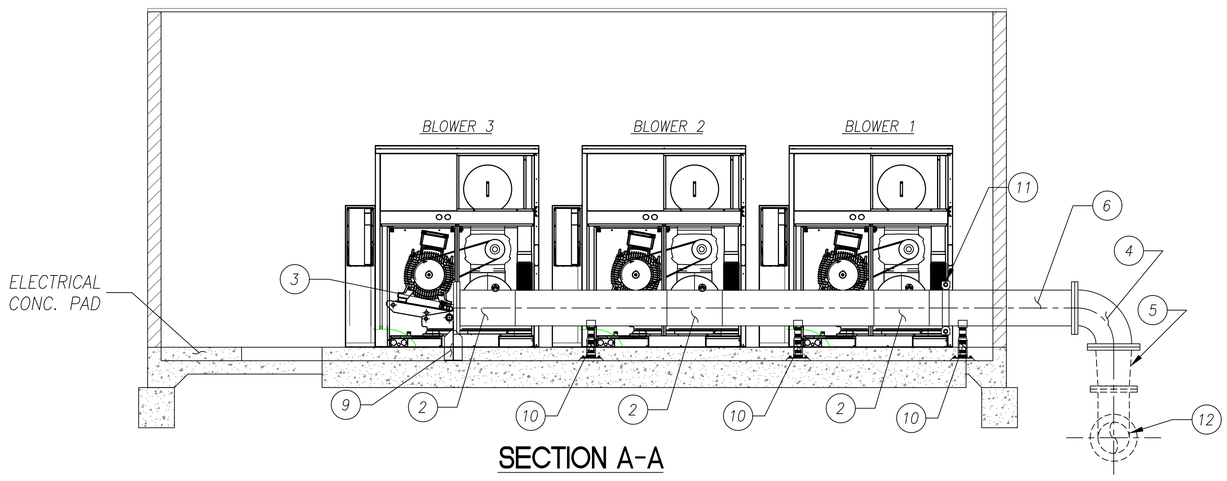
SHEET

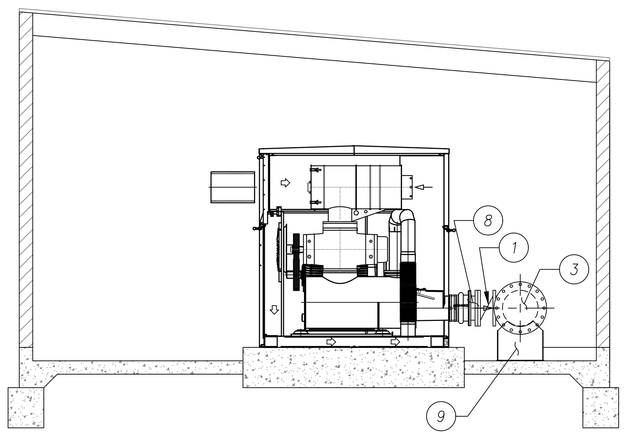
S522



PLAN VIEW



SECTION A-A



SECTION B-B

LEGEND

ITEM	QNTY	DESCRIPTION
①	3	10" BUTTERFLY VALVE
②	3	16"x16"x10" TEE
③	1	16" BLIND FLANGE
④	2	16" ELL D.I.P.
⑤	1	16"x14" REDUCER D.I.P
⑥	.	16" PIPE – SCH 40 STL
⑦	.	14" PIPE – D.I.P.
⑧	.	10" PIPE – SCH 40 STL
⑨	1	FLANGE SUPPORT
⑩	3	SADDLE PIPE SUPPORT
⑪	1	16" VICTAULIC COUPLING
⑫	1	14" D.I.P.

NOTE

PROVIDE 1" THICK ALUMINUM CLAD INSULATION FOR ALL ABOVE GROUND EXPOSED AIR PIPE

BLOWER BLDG. - EQUIPMENT

SCALE: 3/8" = 1'-0"

0 5'

DATE

REVISION	DATE	INITIALS	DESCRIPTION
	.	.	.

CITY OF CORCORAN

2020 WASTEWATER TREATMENT PLANT MODIFICATIONS

BLOWER BLDG. - EQUIPMENT

W3i ENGINEERING WATER WASTEWATER INFRASTRUCTURE
661-319-3648
tschroepfer@W3Ieng.com

DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386

DRAWN BY: JCF

DATE: .

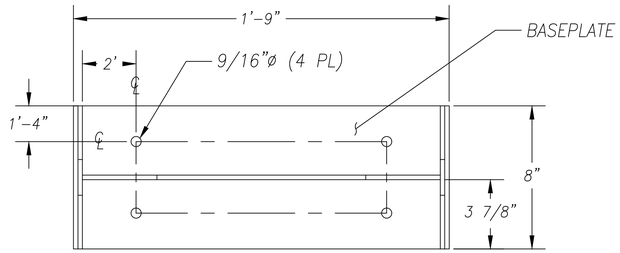
PROJ NO: CORC01-20

FILE NO: CORC-bldg2.dwg

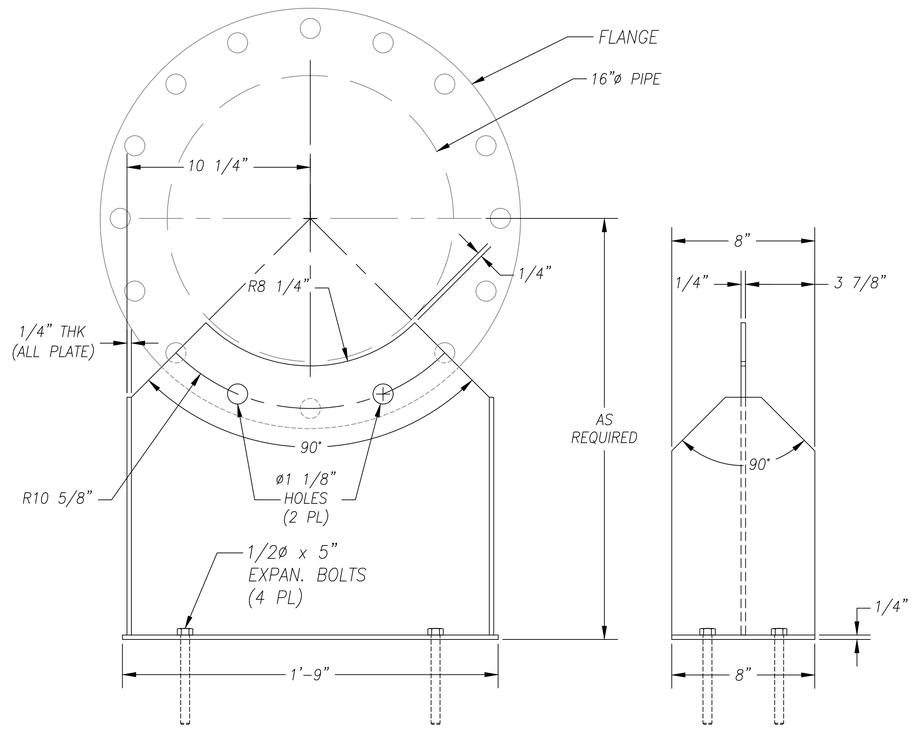
SCALE: 0 1"

SHEET: M-1.1

. OF .



TOP VIEW

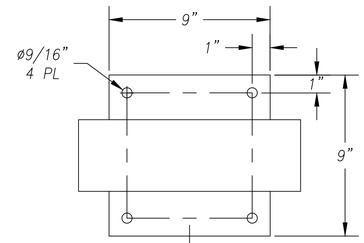


FRONT VIEW

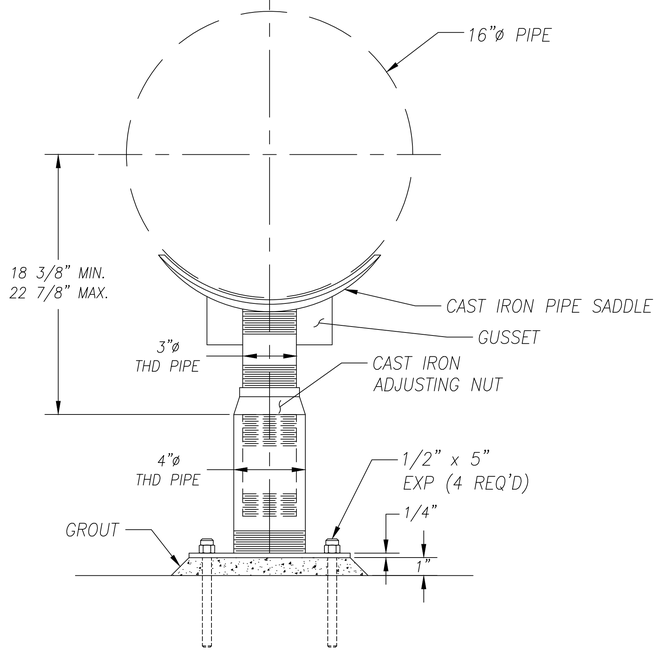
SIDE VIEW

(9) FLANGE PIPE SUPPORT

SCALE: N.T.S.



TOP VIEW



FRONT VIEW

(10) SADDLE PIPE SUPPORT

SCALE: N.T.S.

REVISION	DATE	INITIALS	DESCRIPTION
1	.	.	.

CITY OF CORCORAN

2020 WASTEWATER TREATMENT PLANT MODIFICATIONS

DETAILS

W3i ENGINEERING WATER WASTEWATER INFRASTRUCTURE

661-319-3648

tschroepfer@W3Ieng.com

DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386

DRAWN BY: JCF

DATE: .

PROJ NO: CORC01-20

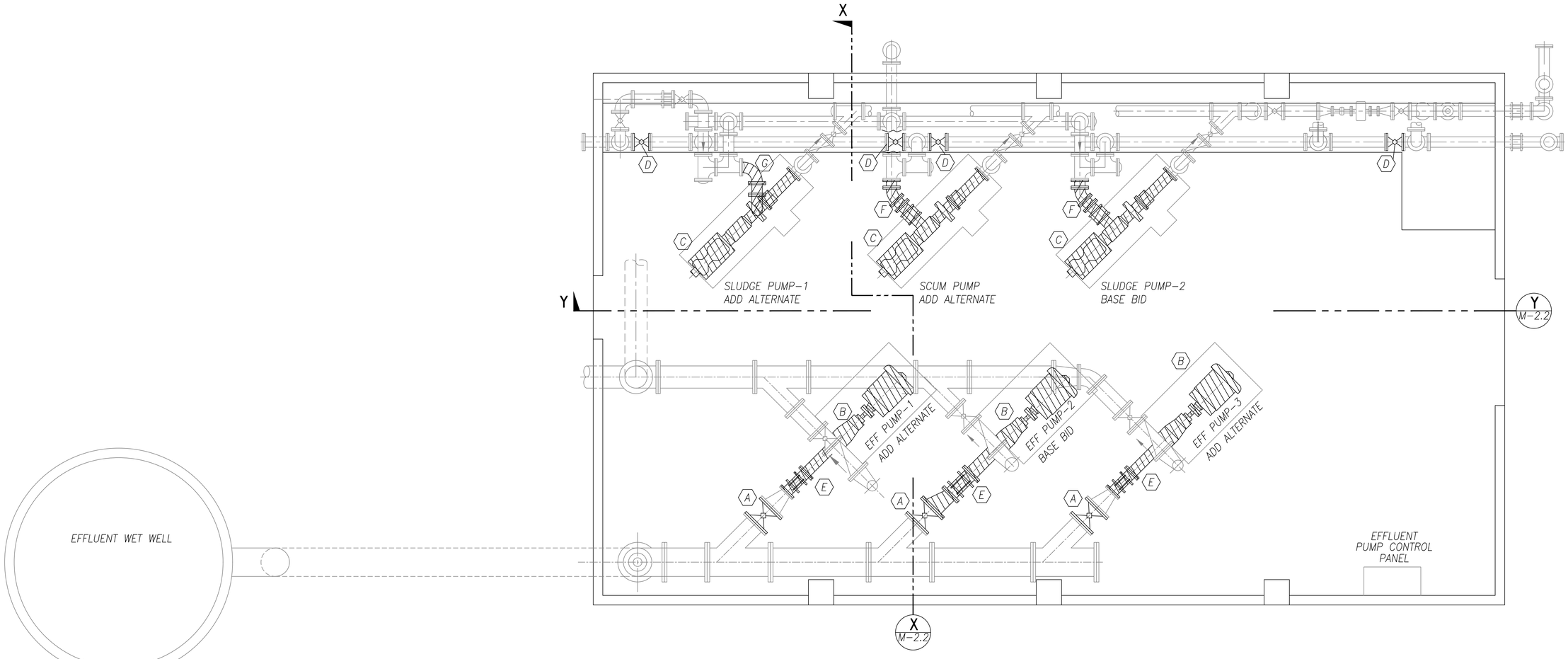
FILE NO: CORC-bldg2.dwg

SCALE: 0 1"

SHEET: M-1.2

. OF .

DATE



LEGEND

- (A) REMOVE & REPLACE 12" P.V.
- (B) REMOVE (E) EFFLUENT PUMP & WATER FLUSH TO SHUTOFF VALVE
- (C) REMOVE & REPLACE (E) SLUDGE PUMP AND WATER FLUSH
- (D) REMOVE & REPLACE (E) 6" P.V.
- (E) REMOVE & REPLACE SUCTION PIPING
- (F) REMOVE 4" SUCTION PIPING
- (G) REMOVE 4" SUCTION PIPING TO 6" TEE

DEMO EQUIPMENT, PUMPS AND MOTORS TO BE RETAINED BY OWNER.

N

EFFLUENT/SLUDGE PUMP BLDG.

SCALE: 3/8" = 1'–0"

0 5'

REVISION	DATE	INITIALS	DESCRIPTION
	.	.	.

CITY OF CORCORAN

2020 WASTEWATER TREATMENT PLANT MODIFICATIONS

EFFLUENT/SLUDGE PUMP DEMO PLAN

W3i ENGINEERING WATER WASTEWATER INFRASTRUCTURE
661–319–3648
tschroepfer@W3Ieng.com

DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386

DRAWN BY: JCF

DATE: .

PROJ NO: CORC01–20

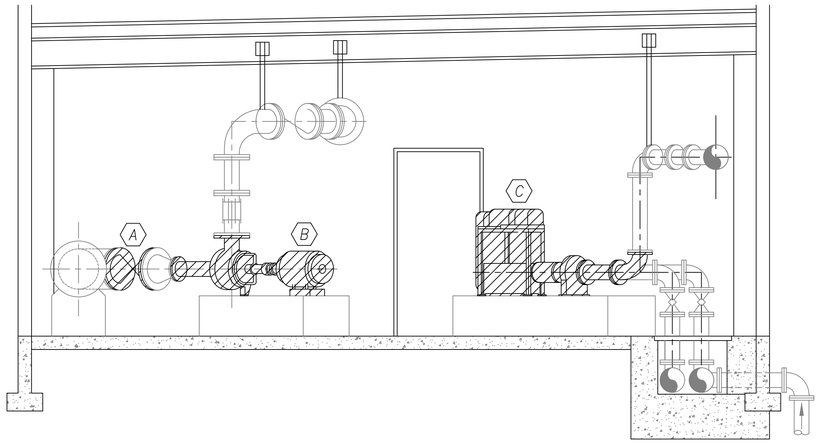
FILE NO: CORC–bldg1.dwg

SCALE: 0 1"

SHEET: M-2.1
. OF .

REGISTERED PROFESSIONAL ENGINEER
TERRY N. SCHROEPFER
No. 26,386
Civil
STATE OF CALIFORNIA

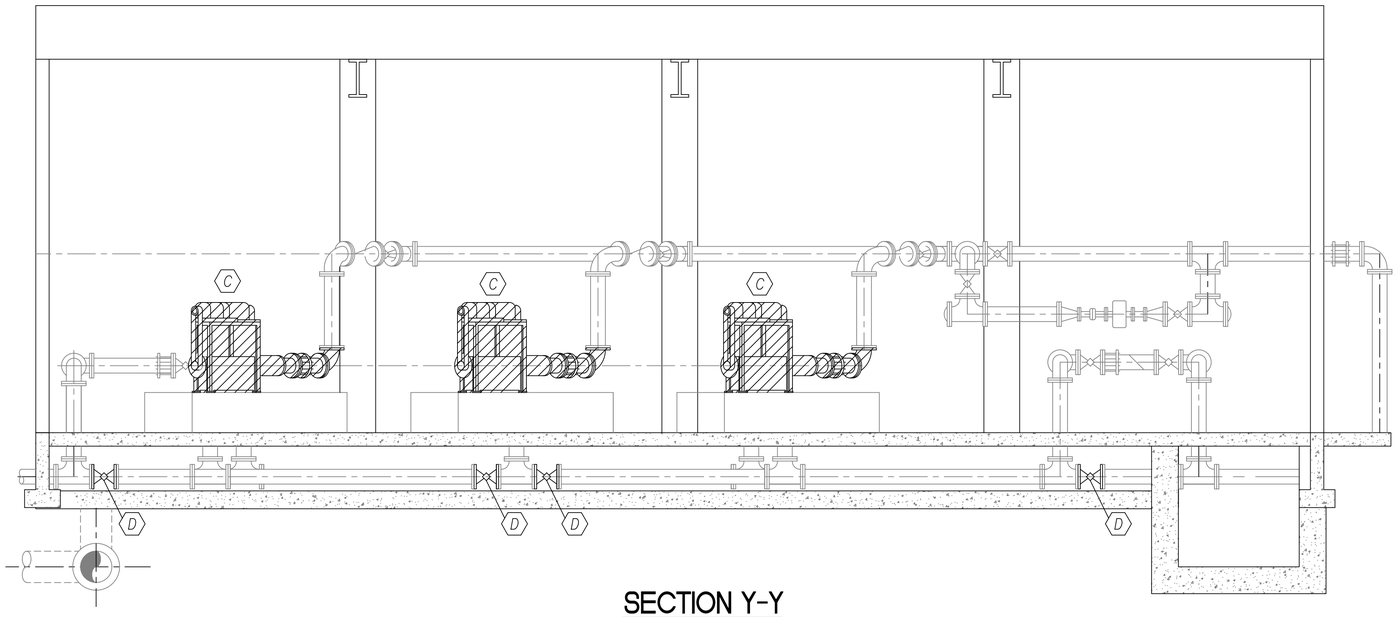
DATE



SECTION X-X

SCALE: 3/8" = 1'-0"

0 5'



SECTION Y-Y

SCALE: 3/8" = 1'-0"

0 5'

LEGEND

- (A) REMOVE & REPLACE 12" P.V.
- (B) REMOVE (E) EFFLUENT PUMP & WATER FLUSH TO SHUTOFF VALVE
- (C) REMOVE & REPLACE (E) SLUDGE PUMP
- (D) REMOVE & REPLACE (E) 6" P.V.
- (E) REMOVE & REPLACE SUCTION PIPING FOR EFF PUMP-2
- (F) REMOVE 4" SUCTION PIPING
- (G) REMOVE 4" SUCTION PIPING TO 6" TEE

DEMO EQUIPMENT, PUMPS AND MOTORS TO BE RETAINED BY OWNER.

REVISION	DATE	INITIALS	DESCRIPTION
1	.	.	.

CITY OF CORCORAN

2020 WASTEWATER TREATMENT PLANT MODIFICATIONS

EFFLUENT/SLUDGE PUMP DEMO SECTIONS

W3i ENGINEERING WATER WASTEWATER INFRASTRUCTURE
661-319-3648
tschroepfer@W3ieng.com

DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386

DRAWN BY: JCF

DATE: .

PROJ NO: CORC01-20

FILE NO: CORC-bldg1.dwg

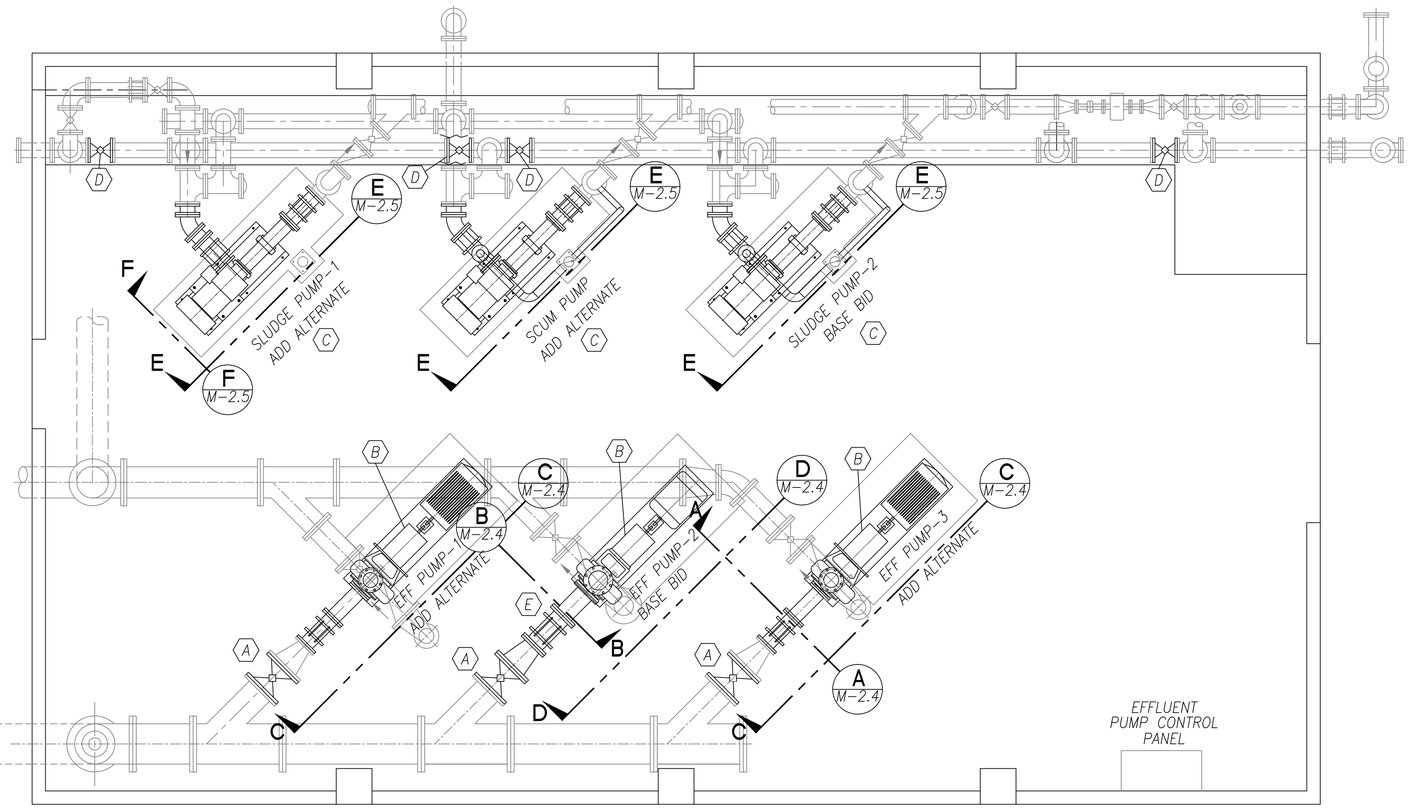
SCALE: 0 1"

SHEET: M-2.2

. OF .

REGISTERED PROFESSIONAL ENGINEER TERRY W. SCHROEPFER No. 26,386 Civil STATE OF CALIFORNIA

DATE



N

EFFLUENT/SLUDGE PUMP BLDG.

SCALE: 3/8" = 1'-0"

0 5'

LEGEND

- (A) INSTALL NEW 12" P.V.
- (B) INSTALL NEW EFFLUENT PUMP & SEAL WATER FLUSH
- (C) INSTALL NEW SLUDGE PUMP & SEAL WATER FLUSH
- (D) INSTALL NEW 6" P.V.
- (E) REPLACE SUCTION PIPING FOR EFF PUMP-2 (SEE M-2.4)

REVISION	DATE	INITIALS	DESCRIPTION
1	.	.	.

CITY OF CORCORAN

2020 WASTEWATER TREATMENT PLANT MODIFICATIONS

EFFLUENT/SLUDGE PUMP REPLACEMENT PLAN

W3i ENGINEERING WATER WASTEWATER INFRASTRUCTURE
661-319-3648
tschroepfer@W3ieng.com

DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386

DRAWN BY: JCF

DATE: .

PROJ NO: CORC01-20

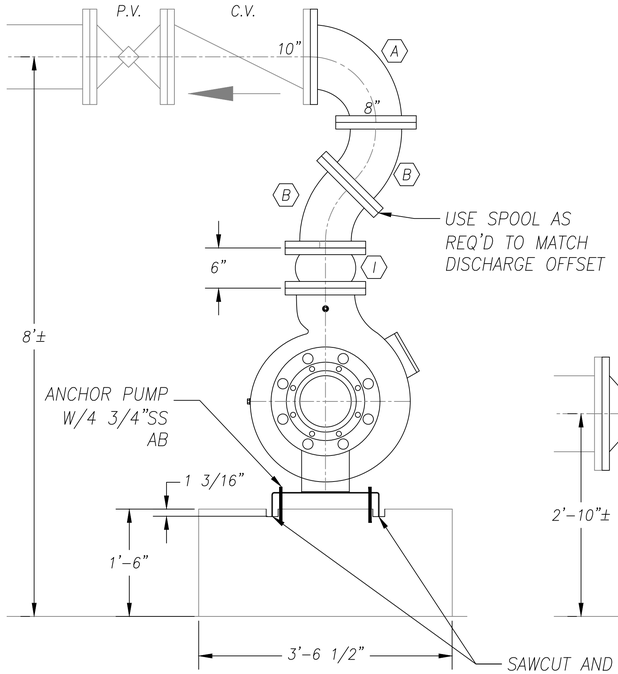
FILE NO: CORC-bldg1.dwg

SCALE: 0 1"

SHEET: M-2.3
. OF .

REGISTERED PROFESSIONAL ENGINEER
TERRY R. SCHROEPFER
No. 26,386
Civil
STATE OF CALIFORNIA

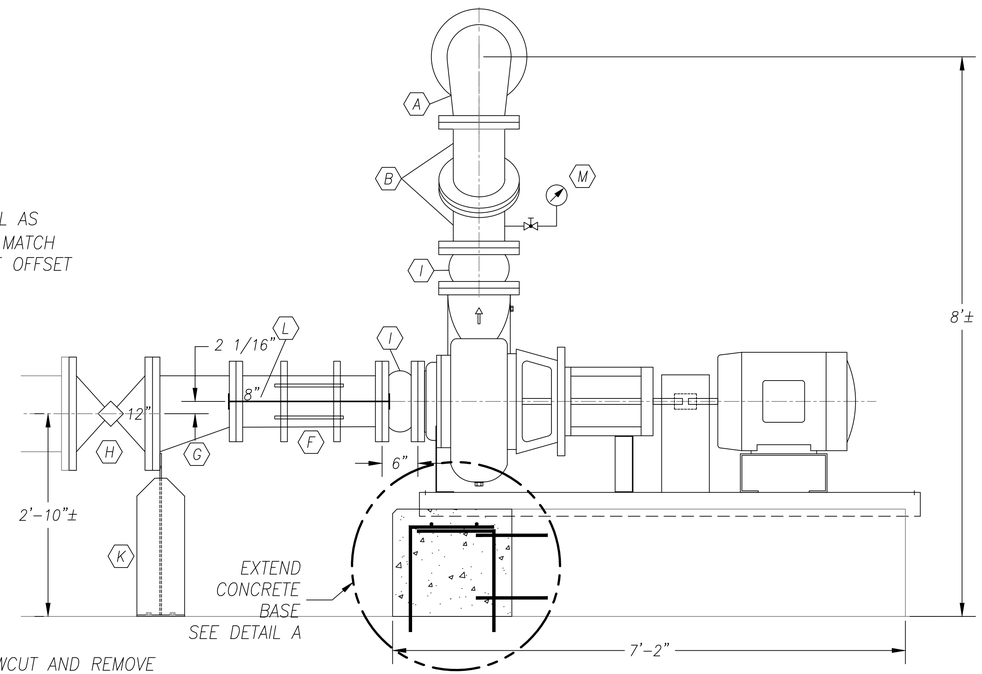
DATE



SECTION B-B (PUMP-2)

SCALE: 1" = 1'-0"

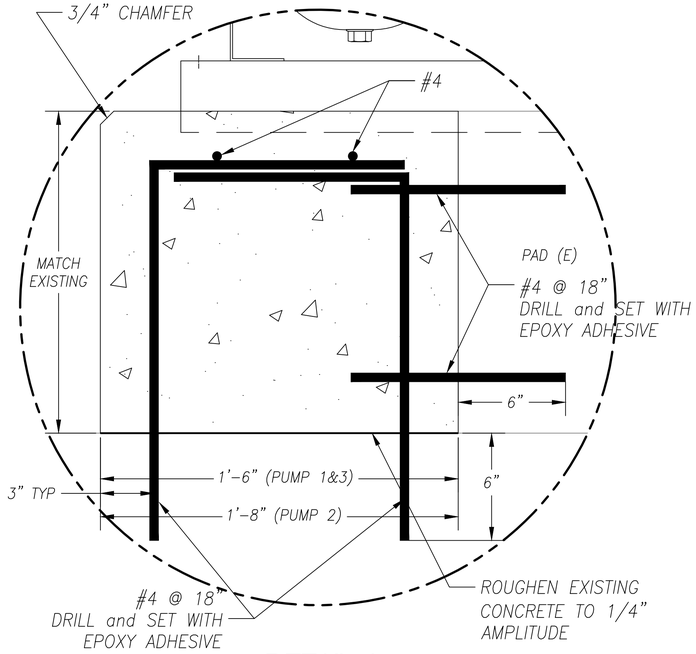
0 2'



SECTION D-D (PUMP-2) 8x8x15A BASE BID

SCALE: 1" = 1'-0"

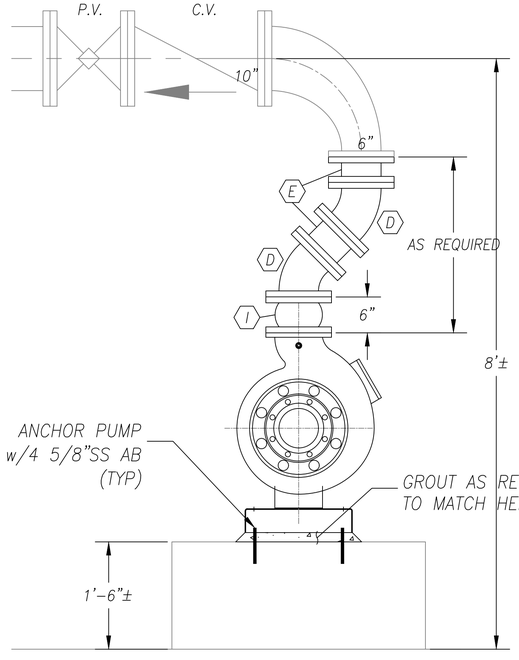
0 2'



DETAIL A

SCALE: 3" = 1'-0"

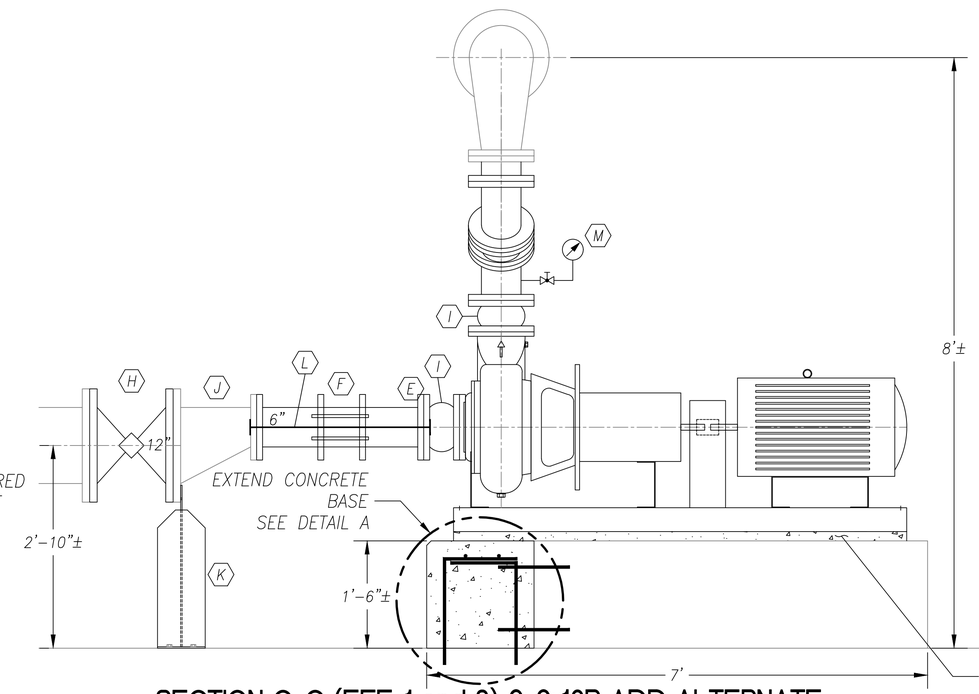
0 4"



SECTION A-A (EFF-1 and 3)

SCALE: 1" = 1'-0"

0 2'



SECTION C-C (EFF-1 and 3) 6x6x12B ADD ALTERNATE

SCALE: 1" = 1'-0"

0 2'

NOTE

INSTALL WATER SEAL ON ALL PUMPS PER DETAIL SHEET M-2.5

LEGEND

- (A) 10"x8" REDUCING ELL
- (B) 8" 45° ELL
- (C) 8"ø SPOOL, LENGTH AS REQUIRED
- (D) 6"ø 45° ELL
- (E) 6"ø SPOOL, AS REQUIRED
- (F) FLEXIBLE COUPLING
- (G) 12"x8" ECCENTRIC REDUCER
- (H) 12" P.V.
- (I) SINGLE SPHERE EXPANSION COUPLING-6" LENGTH
- (J) 12"x6" ECCENTRIC REDUCER (E)
- (K) FLANGE PIPE SUPPORT (SEE 9-M-1.2)
- (L) 1.2"ø TIE ROD (ONE EACH SIDE OF FLEX COUPLING)
- (M) 1/2" BALL VALVE w/4.5" PRESSURE GAGE - 0-50 PSI

REGISTERED PROFESSIONAL ENGINEER TERRY L. SCHROEPFER No. 26,386 Civil STATE OF CALIFORNIA

DATE

REVISION	DATE	INITIALS	DESCRIPTION

CITY OF CORCORAN

2020 WASTEWATER TREATMENT PLANT MODIFICATIONS

EFFLUENT PUMP REPLACEMENT SECTIONS

W3i ENGINEERING WATER WASTEWATER INFRASTRUCTURE
661-319-3648
tschroepfer@W3ieng.com

DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386

DRAWN BY: JCF

DATE: .

PROJ NO: CORC01-20

FILE NO: CORC-bldg1.dwg

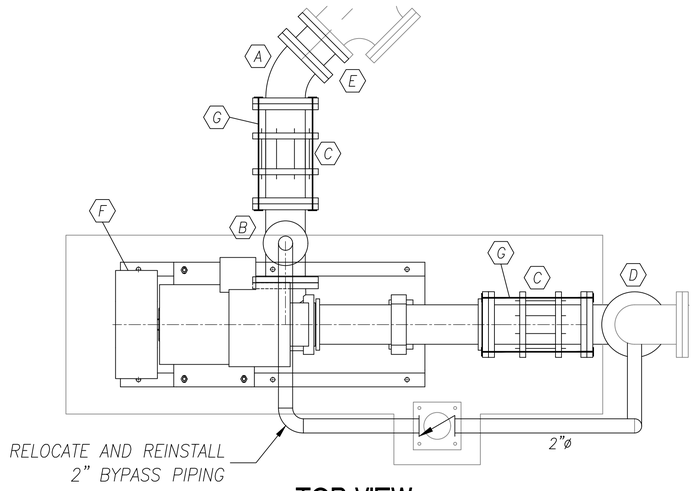
SCALE: 0 1"

SHEET: M-2.4

. OF .

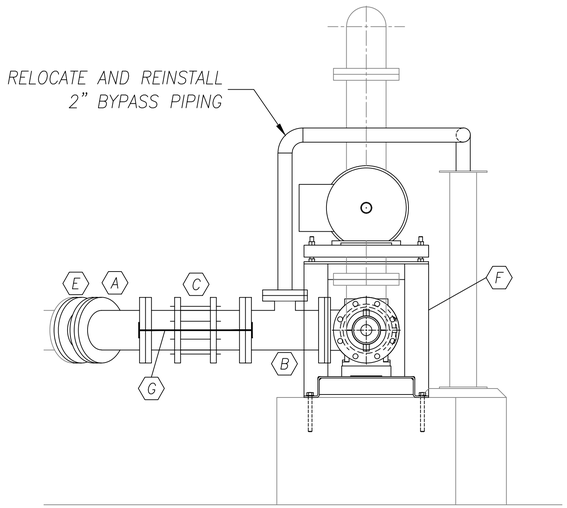
LEGEND

- (A) 6" 45° ELL
- (B) 6"x6"x3" TEE WITH 2" COMPANION FLANGE
- (C) 6" FLEXIBLE COUPLING
- (D) 6"ø 90° BASE ELL
- (E) 6"ø SPOOL, AS REQUIRED
- (F) PROGRESSIVE CAVITY PUMP
- (G) 1/2"ø TIE ROD (ONE EACH SIDE OF FLEX COUPLING)



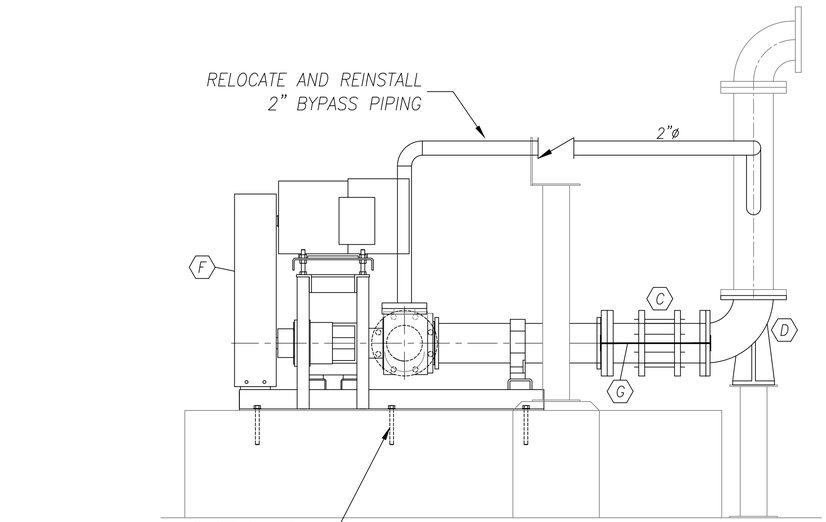
TOP VIEW

SCALE: 1" = 1'-0"
0 2'



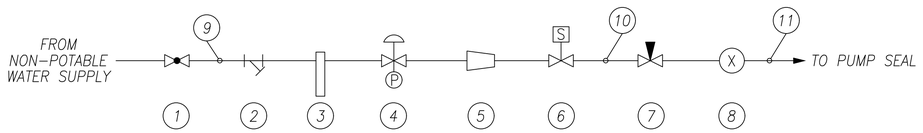
SECTION F-F

SCALE: 1" = 1'-0"
0 2'



SECTION E-E

SCALE: 1" = 1'-0"
0 2'



PUMP WATER SEAL PIPING

NOTE: INSTALL ON ALL PUMPS. SUPPORT WITH UNISTRUT AS NEEDED

ITEM	DESCRIPTION	SIZE	REFERENCE MODEL
1	BALL VALVE	1/2"	WATTS - 8-6000
2	Y STRAINER	1/2"	MUELLER 351M
3	CARTRIDGE FILTER	1/2"	SHELCO FOC 39
4	PRESSURE REDUCING VALVE w/PRESSURE GAUGE 25-75 PSI RANGE	1/2"	WATTS - LFU 58
5	REDUCER	1/2"x3/8"	-
6	SOLENOID VALVE, 120V, BRASS, N.C.	3/8"	WATTS 52W
7	NEEDLE VALVE, BRASS	3/8"	McMASTER-CARR 4982K73
8	FLOW SIGHT INDICATOR BRONZE w/IMPELLER	3/8"	DWYER INSTRUMENTS
9	SCH 40 PVC PIPE	1/2"	-
10	SCH 40 PVC PIPE OR COPPER w/S.S.	3/8"	-
11	COPPER OR SS TUBING	3/8"	-

REGISTERED PROFESSIONAL ENGINEER
TERRY W. SCHROEPFER
No. 26,386
Civil
STATE OF CALIFORNIA

DATE

REVISION	DATE	INITIALS	DESCRIPTION
1	.	.	.

CITY OF CORCORAN
2020 WASTEWATER TREATMENT PLANT MODIFICATIONS
SLUDGE PUMP PLAN/SECTIONS

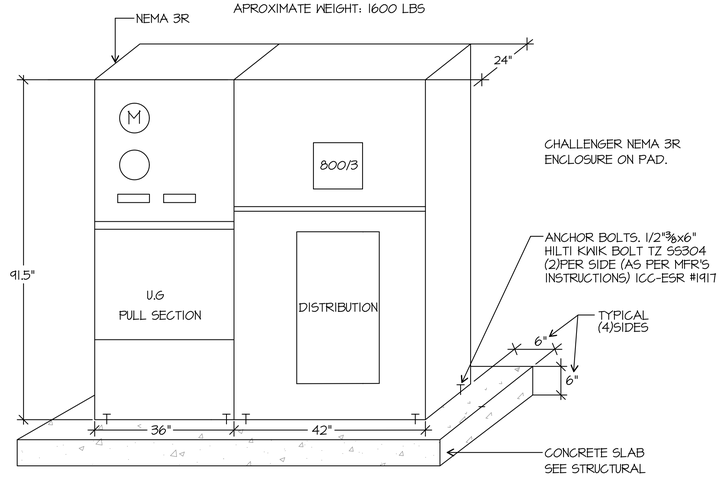
W3i ENGINEERING WATER WASTEWATER INFRASTRUCTURE
661-319-3648
tschroepfer@W3Ieng.com

DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386
DRAWN BY: JCF
DATE: .
PROJ NO: CORC01-20
FILE NO: CORC-bldg1.dwg
SCALE: 0 1"
SHEET: M-2.5
. OF .

NOTES:

1. FOR PANEL MOUNTING, CONCRETE PAD SHALL BE 6" WIDER THAN PANEL HOUSING. TOP OF SLAB SHALL BE 6" A.F.F.
2. DRILL HOLES AND SET EXPANSION ANCHORS PRIOR TO POSITIONING SWITCHBOARD.

APROXIMATE WEIGHT: 1600 LBS

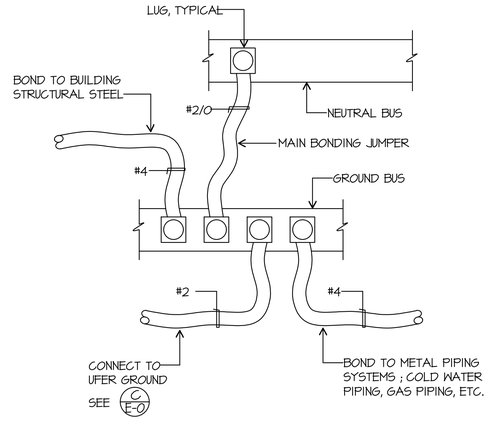


SWITCHBOARD "MSB" MOUNTING DETAIL

SCALE: NONE

(C)

(N) PANEL SCHEDULE "MP"																		
SERVICE: 120/240V 1Φ 3W			MAIN BKR.: 60						BUS: 60A							LOC.: SEE PLAN		
SQUARE D MINI POWER ZONE 10 CIRCUIT																MTG.: SURFACE		
REMARKS	LOAD		REC	LTG	MISC	POLE	TRIP	CIRC	CIRC	TRIP	POLE	REC	LTG	MISC	LOAD		REMARKS	
	ΦA	ΦB													ΦA	ΦB		
EX. FANS								1	2	15	1			1	500		CONTROLS B-1	
LIGHTS (INT.& EXT.)								3	4	15	1			1		500	CONTROLS B-2	
BLDG RECEPTS			2					5	6	15	1			1	500		CONTROLS B-3	
"			1					7	8								SPACE	
SPACE								9	10								"	
TOTAL WATTS=			ΦA=						ΦB=									
AMPS=									MINIMUM BKR						A.I.C. RATING=		10,000 AMPS SYM	



BONDING DIAGRAM MSB

SCALE: NONE

(B)

GENERAL NOTES

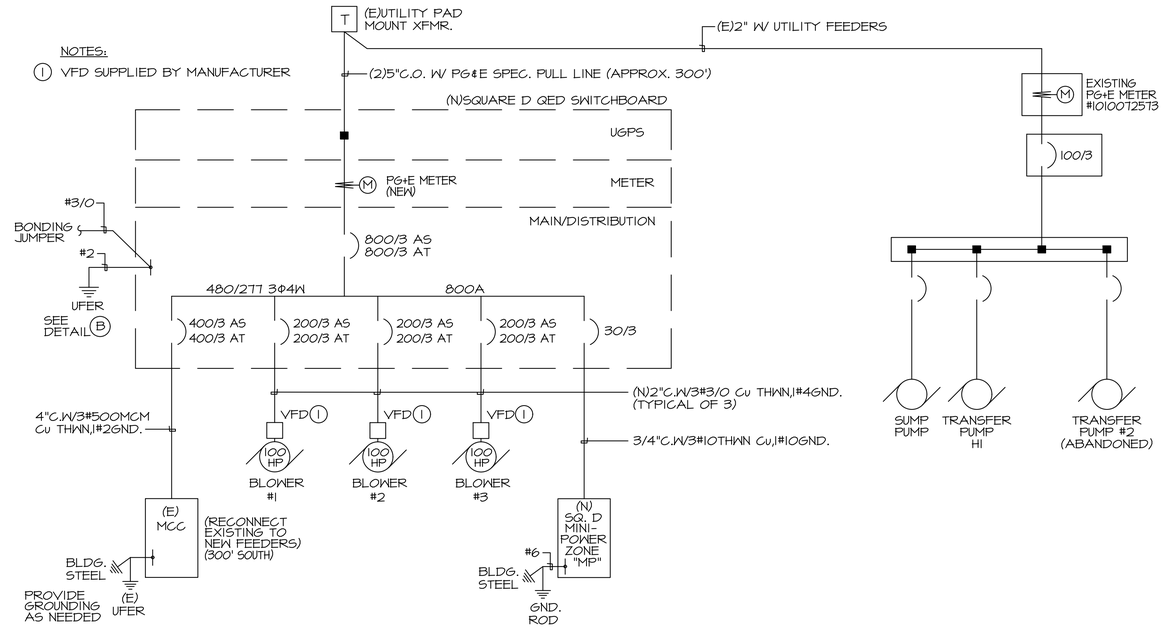
1. THE ELECTRICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE AND ALL APPLICABLE LOCAL ORDINANCES. WHERE PLANS CALL FOR A HIGHER STANDARD THAN APPLICABLE CODES, THE PLANS SHALL GOVERN.
2. CONDUIT RUNS ARE SHOWN DIAGRAMMATICALLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD TO SUIT FIELD CONDITIONS.
3. ALL ELECTRICAL EQUIPMENT SHALL BE LISTED BY A RECOGNIZED TEST LAB AND BEAR THAT LABEL OF APPROVAL.
4. CONTRACTOR SHALL FURNISH, INSTALL AND CONNECT ALL MATERIAL AND EQUIPMENT FOR THIS WORK UNLESS OTHERWISE NOTED.
5. GROUNDING AND BONDING SHALL BE PER CODE PLUS ANY ADDITIONAL PROVISIONS SPECIFIED OR SHOWN ON DRAWINGS.
6. ALL CONDUIT RUNS SHALL CONTAIN A CODE SIZED GREEN GROUND WIRE.
7. THESE PLANS ARE NOT COMPLETE UNTIL APPROVED BY THE AUTHORITY HAVING JURISDICTION.
8. ALL CONDUCTORS SHALL BE IN CONDUIT.
9. ALL CONDUCTORS SHALL BE COPPER.

SYMBOLS

- CONDUIT EXISTING
- CONDUIT CONCEALED IN WALL OR CEILING
- CONDUIT CONCEALED UNDER FLOOR OR BELOW GRADE
- CONDUIT STUBBED OUT AND CAPPED
- CONDUIT TURNED UP
- CONDUIT TURNED DOWN
- HATCH MARKS INDICATE NO. OF #12 WIRES IN CODE SIZED CONDUIT (3) MAX. IN 1/2" C., (5) MAX. IN 3/4" C., (8) MAX. IN 1"C., NO MARKS = 2 #12
- A-3 — HOME RUN: LETTER INDICATES PANEL, NUMBER(S) INDICATES CIRCUIT(S).
- SAWCUT
- GROUND CONNECTION
- DISTRIBUTION SWITCHBOARD OR PANEL
- PANEL, BRANCH CIRCUIT TYPE, SURFACE AND FLUSH
- SIGNAL TERMINAL CABINET, SURFACE & FLUSH
- FLUORESCENT FIXTURE
- OUTLET DATA: BAR INDICATES WALL MOUNT, LETTER INDICATES SWITCH CONTROL, NO. INDICATES CIRCUIT.
- SURFACE FIXTURE ON FLUSH OUTLET.
- RECESSED FIXTURE WITH JUNCTION BOX FOR THRU WIRING
- EXIT LIGHT WITH ARROWS AS SHOWN ON PLANS, WALL AND CEILING MOUNT.
- LOW LEVEL EXIT SIGN, +6" AFF, +4" FROM DOOR JAMB
- A / 100 — LIGHT FIXTURE DESIGNATION, LETTER INDICATES TYPE, NO. INDICATES WATTAGE. SEE FIXTURE SCHEDULE.
- FC / 1 — MECHANICAL EQUIPMENT DESIGNATION. SEE MECHANICAL DRAWINGS.
- SPECIAL RECEPTACLE - SEE PLAN
- METER
- FLUSH FLOOR RECEPTACLE
- RECEPTACLE, DUPLEX, 15A, 125V, NEMA 5-15R +18" U.N.O.
- DUPLEX RECEPTACLE MTD. ABOVE BACKSPLASH
- DUPLEX RECEPTACLE W/LOWER HALF SWITCHED
- GFI — GROUND FAULT CIRCUIT INTERRUPTING RECEPTACLE
- DOUBLE DUPLEX RECEPTACLE
- CEILING RECEPTACLE
- RECEPTACLE, DUPLEX, 20A, 125V, NEMA 5-20R +18" U.N.O.
- JUNCTION BOX 4" SQUARE, 1-1/2" DEEP U.N.O.
- THERMOSTAT F.D.O. +48"
- (2) — MOTOR, NO. INDICATES HORSEPOWER
- CLOCK OUTLET +7'-6" U.N.O.
- DISCONNECT SWITCH, NON-FUSED
- F — DISCONNECT SWITCH FUSED HORSEPOWER RATED OR SIZED AS NOTED
- COMBINATION MAGNETIC STARTER WITH DISCONNECT SWITCH AND FUSES
- MAGNETIC MOTOR STARTER W/OVERLOADS IN EACH PHASE
- D — DIMMER W/INTEGRAL "ON-OFF" SW.
- PUSHBUTTON
- PC — PHOTOCELL
- SD — SMOKE DETECTOR
- TELEPHONE/COMPUTER/DATA OUTLET, TWO GANG BOX W/1 GANG COVERPLATE & GROMMETED OPENING +18" U.N.O.
- CABLE TV OUTLET +18" U.N.O.
- M — MOTION SENSOR
- $ — EXISTING SWITCH
- S — SINGLE POLE SWITCH
- S^2 — DOUBLE POLE SWITCH
- S^3 — THREE WAY SWITCH
- S^P — SWITCH W/PILOT LT.

  (S, S^2, S^3, S^P: QUIET TOGGLE TYPE RATED AT 20A 120/277V AC. +41" U.N.O.)
- S^M — MANUAL MOTOR STARTER
- FACP — FIRE ALARM CONTROL PANEL
- GFI — GROUND FAULT CIRCUIT INTERRUPTING
- LST — LABOR SAVING TANDEM
- MLO — MAIN LUGS ONLY
- W/ — WITH
- C.O. — CONDUIT ONLY
- W.P. — WEATHERPROOF
- F.B.O. — FURNISHED BY OTHERS, INSTALL & CONNECT
- U.N.O. — UNLESS NOTED OTHERWISE
- N.E.C. — NATIONAL ELECTRICAL CODE
- N.I.C. — NOT IN CONTRACT
- (E) — EXISTING
- (N) — NEW
- (R) — REMOVE
- (RL) — RELOCATE
- S/M — SURFACE MOUNT
- U/G — UNDERGROUND
- CWP — COLD WATER PIPE
- AFF — ABOVE FINISHED FLOOR
- HACR — HEATING AND AIR CONDITIONING RATED CIRCUIT BREAKER
- N.L. — NIGHT LIGHT

NOTE: NOT ALL SYMBOLS SHOWN ARE USED ON THIS PROJECT.



NEW SINGLE LINE DIAGRAM

SCALE: NONE

(A)

REVISION	DATE	INITIALS	DESCRIPTION

CITY OF CORCORAN
ELECTRICAL SYMBOLS, GENERAL NOTES
SINGLE LINE DIAGRAM & DETAILS

W3i ENGINEERING WATER WASTEWATER INFRASTRUCTURE
661-319-3648
tschroepfer@W3ieng.com

JMPE ELECTRICAL ENGINEERING LIGHTING DESIGN
CA REGISTRATION NO E13083
1983
5500 MING AVENUE, SUITE 251
BAKERSFIELD, CA 93309
(661) 831-7851
FAX (661) 831-7813
email - maloney@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER MATTHEW T. MALONEY ELECTRICAL STATE OF CALIFORNIA
NO. E013983
EXP. 12/31/2014

DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386

DRAWN BY: JCF

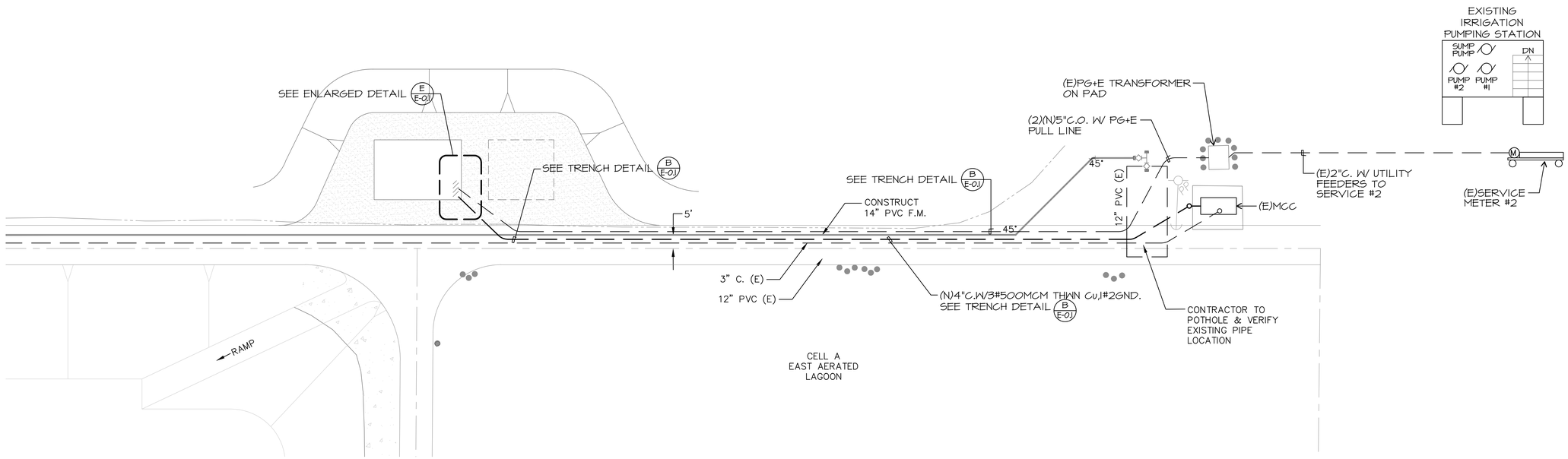
DATE: -

PROJ NO: CORC01-20

FILE NO: D-SizTitleBlock.dwg

SCALE: 0 1"

SHEET: E-0
1 OF 7



SITE ELECTRICAL PLAN

SCALE: 1"=20'-0"

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
1983
5500 MING AVENUE,
SUITE 251
BAKERSFIELD, CA 93309
(661) 831-7851
FAX (661) 831-7813
email : maloney@jmpe.net
www.jmpe.net

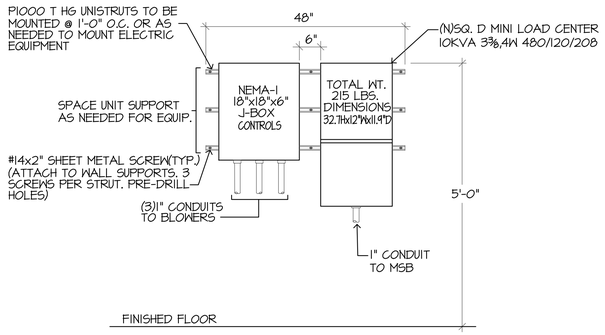
REGISTERED PROFESSIONAL ENGINEER
JOHN C. FOR MALONEY
No. E013183
EXP. 06/30/2014
ELECTRICAL
STATE OF CALIFORNIA

REVISION	DATE	INITIALS	DESCRIPTION

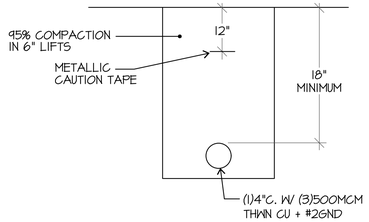
CITY OF CORCORAN
SITE ELECTRICAL PLAN

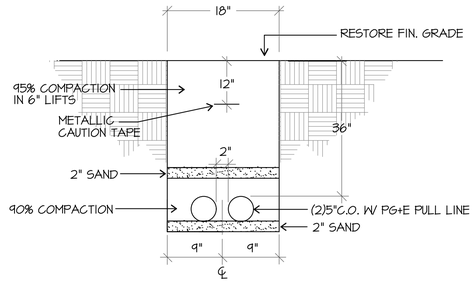
W3i ENGINEERING
WATER WASTEWATER INFRASTRUCTURE
661-319-3648
tschroepfer@W3ieng.com

DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386
DRAWN BY: JCF
DATE: .
PROJ NO: CORC01-20
FILE NO: D-SizTitleBlock.dwg
SCALE: 0 1"
SHEET: E-1
3 OF 7



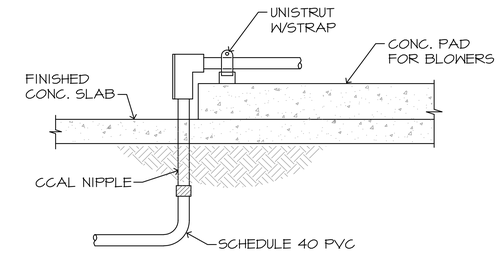
PANEL MOUNTING DETAIL (A)
NO SCALE





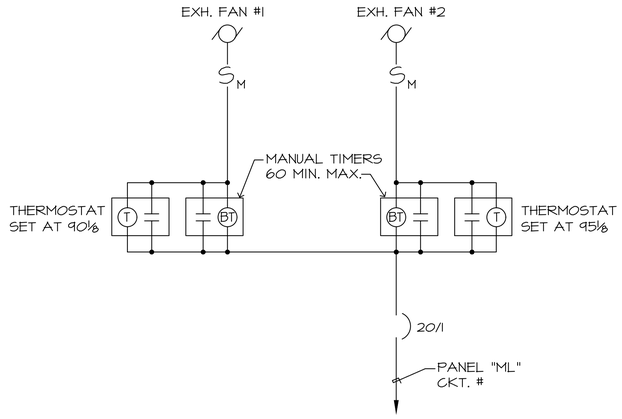
PG&E SECONDARY TRENCH

TRENCH DETAILS (B)
NO SCALE

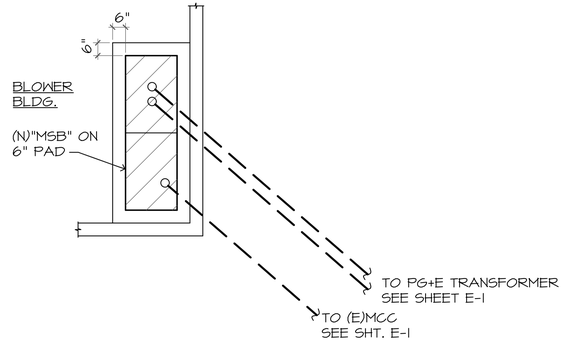


TYPICAL DETAIL FOR 1-1/2" & 1" STUB-UPS AT BLOWER SKID.

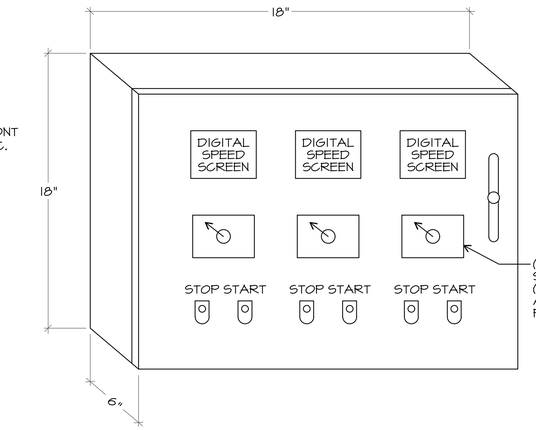
CONDUIT STUB-UP DETAIL (C)
NO SCALE



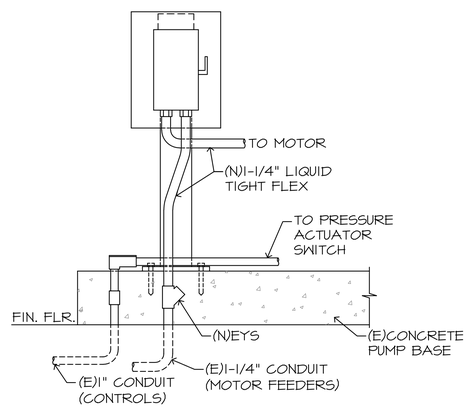
DETAIL EXH. FAN CONTROLS (D)
NO SCALE



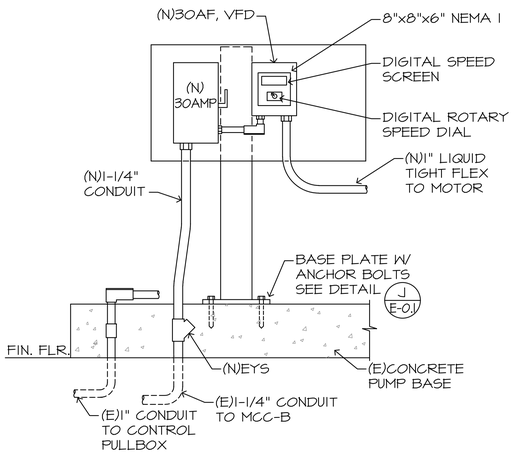
ENLARGED DETAIL (E)
NO SCALE



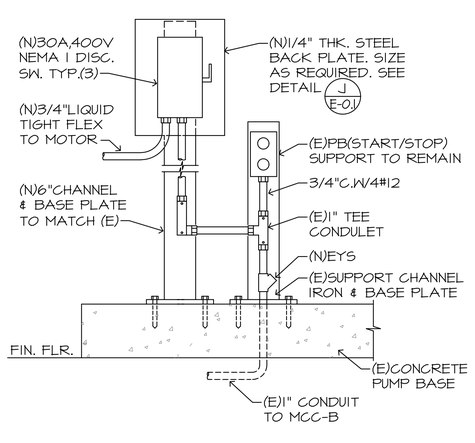
CONTROL PANEL DETAIL (F)
NO SCALE



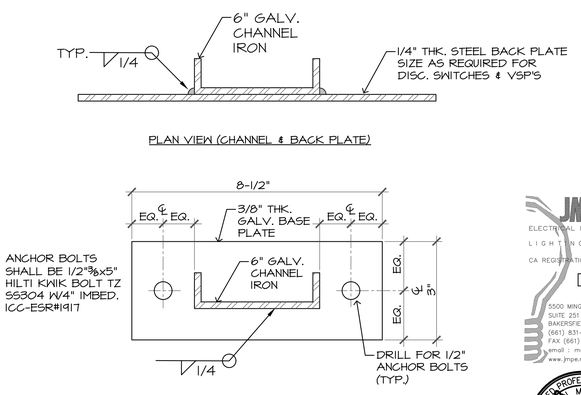
MOUNTING SUPPORT DETAIL (EFFLUENT PUMPS #1 & #3) (G)
NO SCALE



MOUNTING SUPPORT DETAIL (EFFLUENT PUMPS #2) (H)
NO SCALE



MOUNTING SUPPORT DETAIL (SLUDGE & SCUM PUMPS) (I)
NO SCALE



TYPICAL CHANNEL IRON SUPPORTS (J)
NO SCALE

REVISION	DATE	INITIALS	DESCRIPTION
	.	.	.

CITY OF CORCORAN
ELECTRICAL DETAILS

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W3i ENGINEERING
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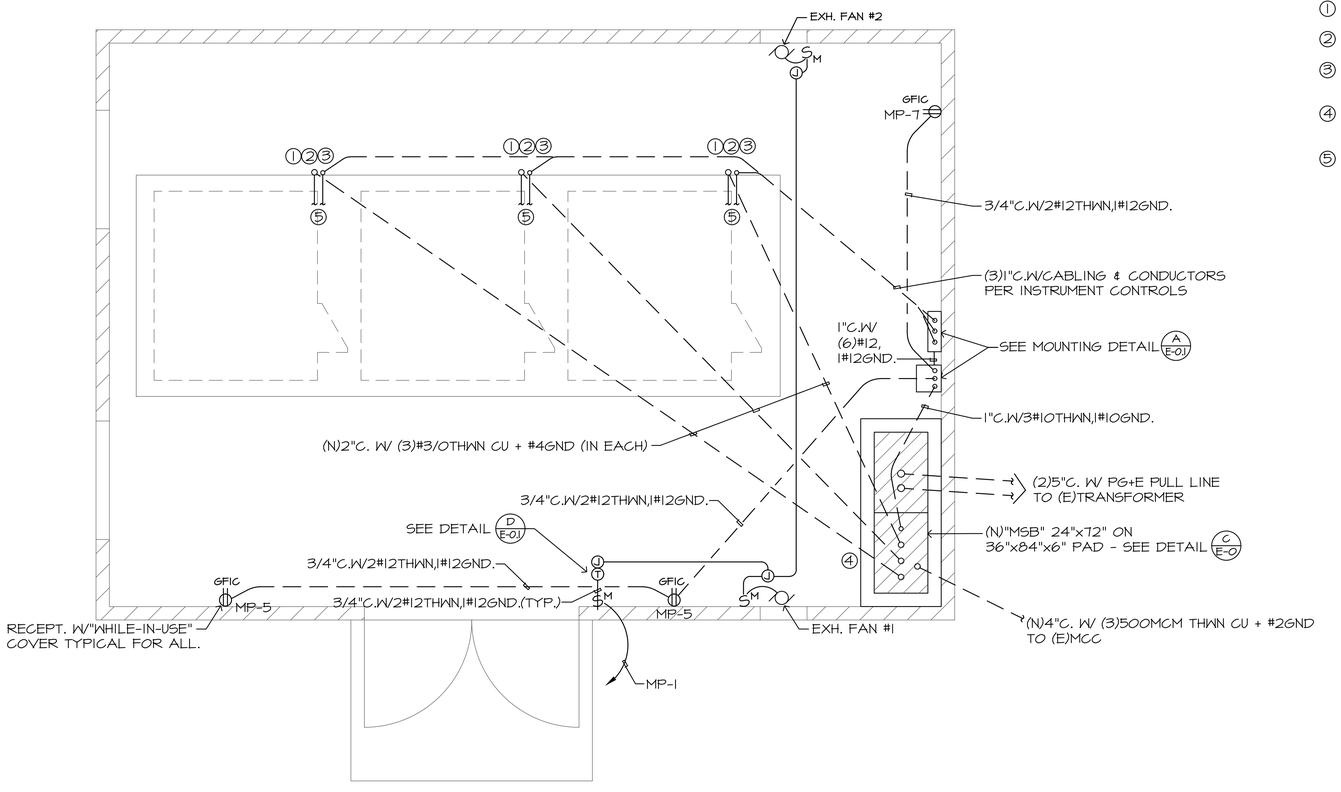
DESIGN ENGINEER:	TERRY SCHROEPFER
LICENSE NO:	26,386
DRAWN BY:	JCF
DATE:	.
PROJ NO:	CORC01-20
FILE NO:	D-SizTitleBlock.dwg
SCALE:	0 1"
SHEET:	E-0.1
	2 OF 7

REGISTERED PROFESSIONAL ENGINEER
DANIEL MALONEY
No. E013083
EXP. 06/30/2014
ELECTRICAL
STATE OF CALIFORNIA



POWER PLAN - BLOWER BUILDING

SCALE: 3/8"=1'-0"

North

ELECTRICAL NOTES:

1. VERIFY IN FIELD, LOCATION OF CONDUIT STUB-UPS.
2. SEE DETAIL C/E-01 CONDUIT SUPPORT.
3. PROVIDE LB CONDULETS ON EACH STUB-UP.
4. PROVIDE LOCK-OUT CAPABILITIES AT EACH MSB BREAKER.
5. EXTEND BOTH 1-1/2" & 1" CONDUITS WITH EMT, TO THE SIDE MOUNTED VFD'S. LAST 18" OF CONNECTION SHALL BE LIQUID TIGHT FLEX.

REVISION	DATE	INITIALS	DESCRIPTION
	.	.	.

CITY OF CORCORAN
POWER PLAN
BLOWER BUILDING

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DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386

DRAWN BY: JCF

DATE: .

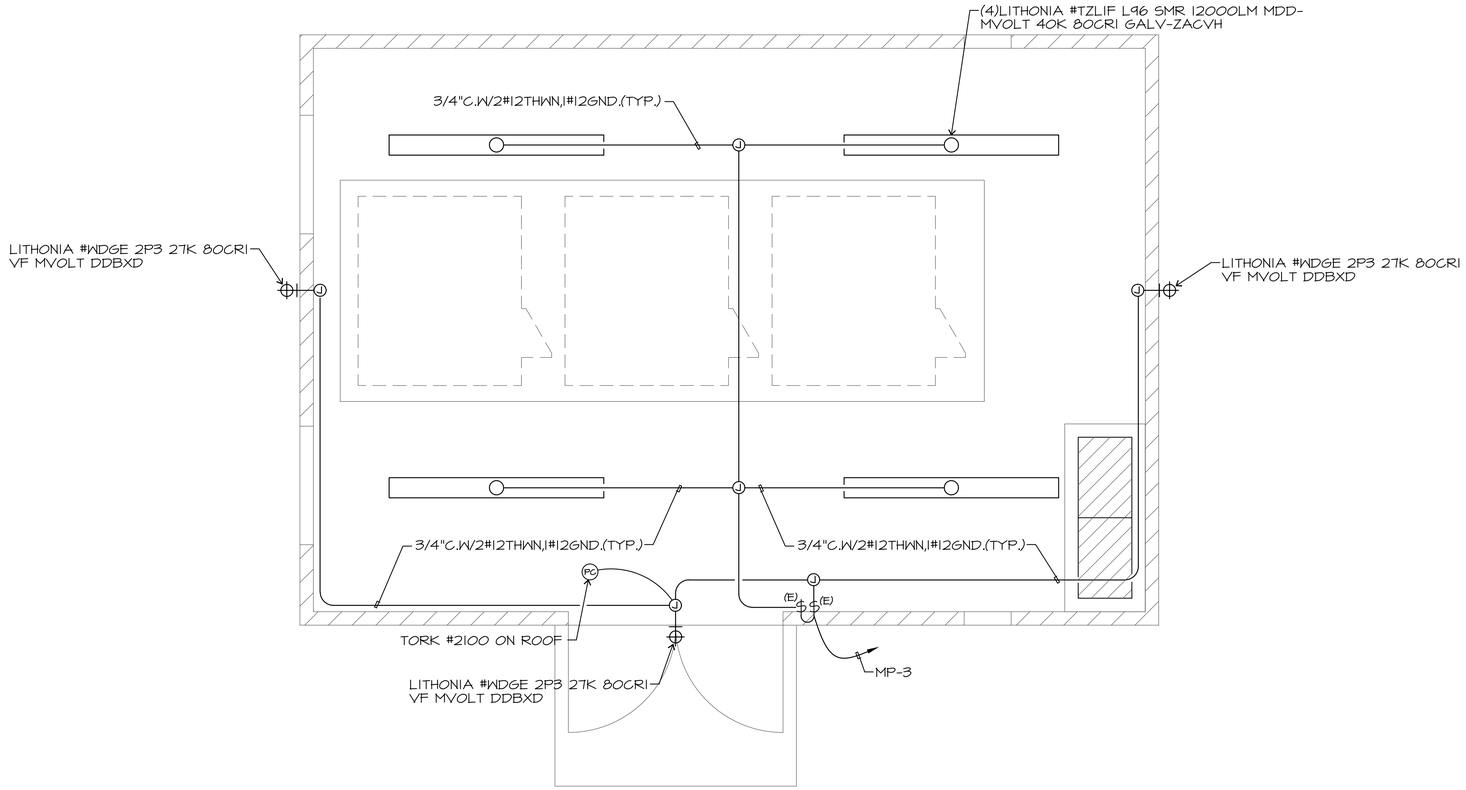
PROJ NO: CORC01-20

FILE NO: D-SizTitleBlock.dwg

SCALE: 0 1"

SHEET: **E-2**

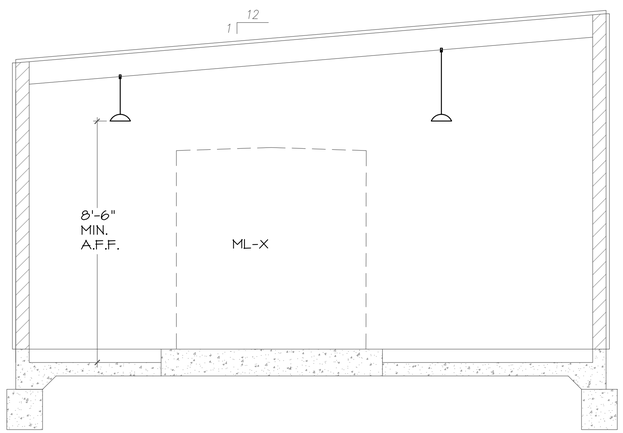
4 OF 7



LIGHTING PLAN - BLOWER BUILDING

SCALE: 3/8"=1'-0"

North



CROSS SECTION "A-A" - BLOWER BUILDING

SCALE: 3/8"=1'-0"

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STATE OF CALIFORNIA

REVISION	DATE	INITIALS	DESCRIPTION

CITY OF CORCORAN
LIGHTING PLAN & CROSS SECTION
BLOWER BUILDING

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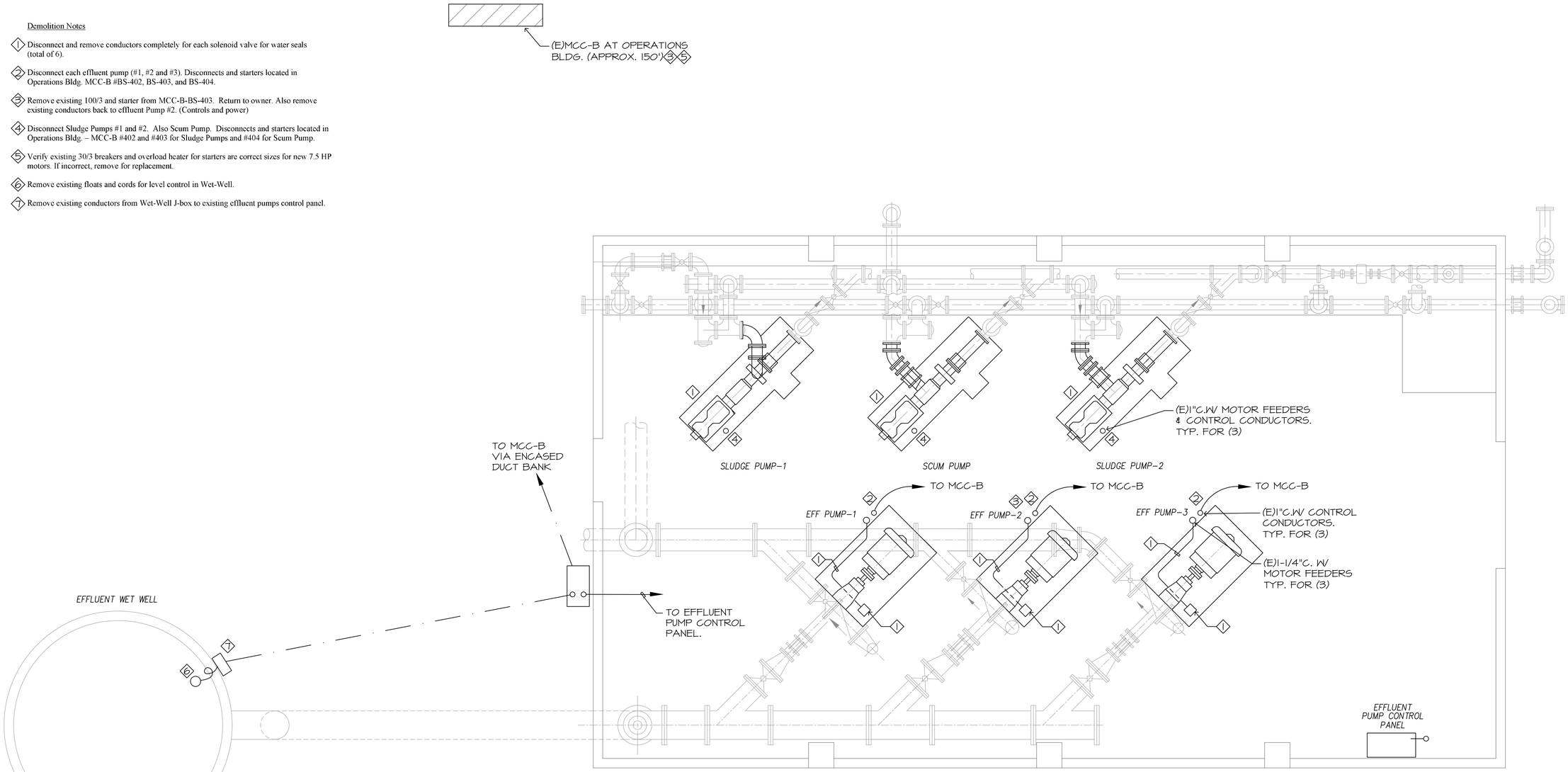
DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386
DRAWN BY: JCF
DATE: -
PROJ NO: CORC01-20
FILE NO: D-SizTitleBlock.dwg
SCALE: 0 1"
SHEET: E-3
5 OF 7

Demolition Notes

1. Disconnect and remove conductors completely for each solenoid valve for water seals (total of 6).
2. Disconnect each effluent pump (#1, #2 and #3). Disconnects and starters located in Operations Bldg. MCC-B #BS-402, BS-403, and BS-404.
3. Remove existing 100/3 and starter from MCC-B-BS-403. Return to owner. Also remove existing conductors back to effluent Pump #2. (Controls and power)
4. Disconnect Sludge Pumps #1 and #2. Also Scum Pump. Disconnects and starters located in Operations Bldg. – MCC-B #402 and #403 for Sludge Pumps and #404 for Scum Pump.
5. Verify existing 30/3 breakers and overload heater for starters are correct sizes for new 7.5 HP motors. If incorrect, remove for replacement.
6. Remove existing floats and cords for level control in Wet-Well.
7. Remove existing conductors from Wet-Well J-box to existing effluent pumps control panel.



ELECTRICAL DEMOLITION PLAN - PUMP BUILDING

SCALE: 3/8"=1'-0"

North

REVISION	DATE	INITIALS	DESCRIPTION
	-	-	-

CITY OF CORCORAN
ELECTRICAL DEMOLITION PLAN
PUMP BUILDING

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DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386

DRAWN BY: JCF

DATE: -

PROJ NO: CORC01-20

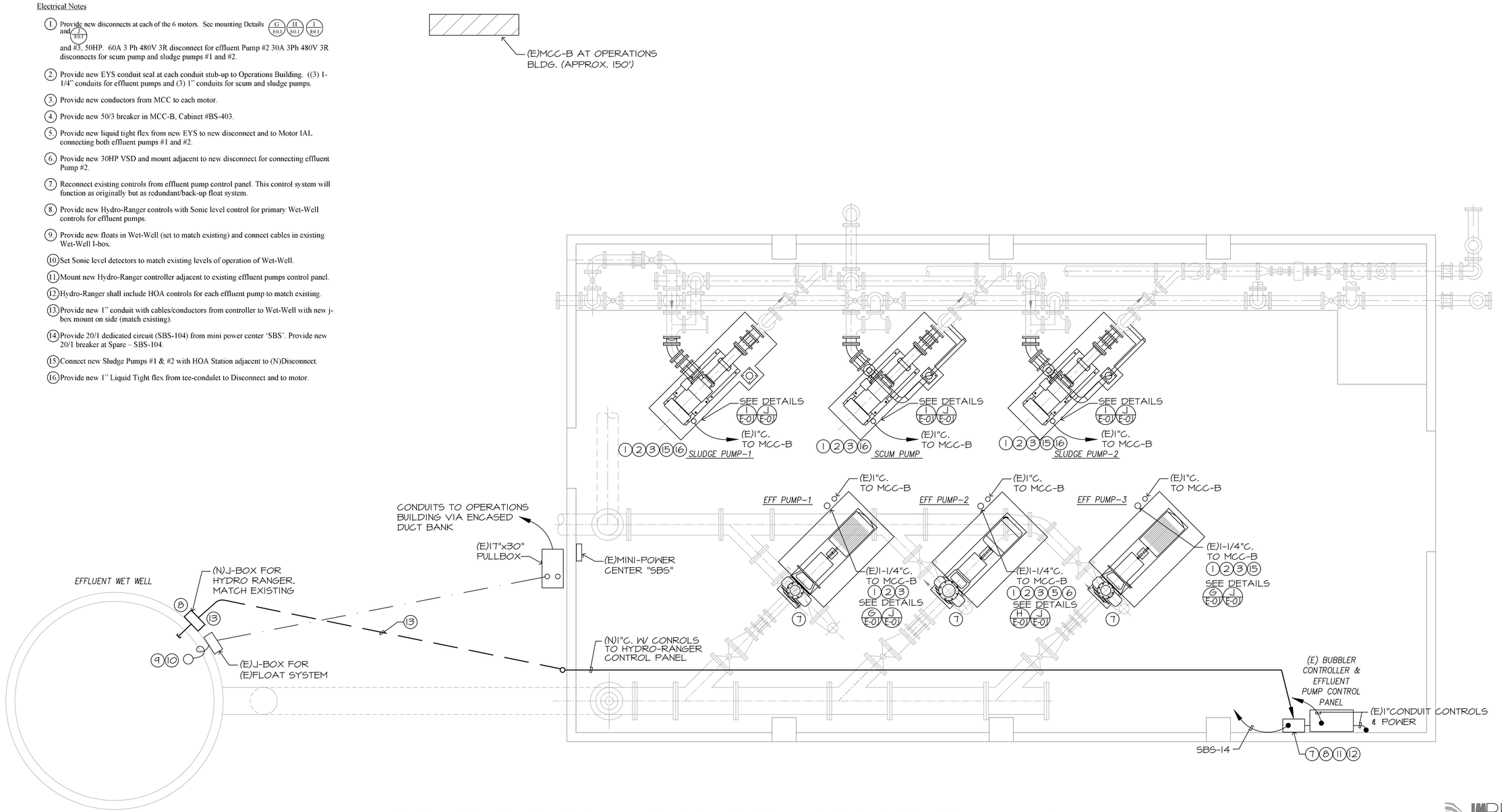
FILE NO: D-SizTitleBlock.dwg

SCALE: 0 1"

SHEET: **E-4**
6 OF 7

Electrical Notes

1. Provide new disconnects at each of the 6 motors. See mounting Details G E0.1, H E0.1, I E0.1 and J E0.1 and #3, 50HP. 60A 3 Ph 480V 3R disconnect for effluent Pump #2 30A 3Ph 480V 3R disconnects for scum pump and sludge pumps #1 and #2.
2. Provide new EYS conduit seal at each conduit stub-up to Operations Building. ((3) 1-1/4" conduits for effluent pumps and (3) 1" conduits for scum and sludge pumps.
3. Provide new conductors from MCC to each motor.
4. Provide new 50/3 breaker in MCC-B, Cabinet #BS-403.
5. Provide new liquid tight flex from new EYS to new disconnect and to Motor IAL connecting both effluent pumps #1 and #2.
6. Provide new 30HP VSD and mount adjacent to new disconnect for connecting effluent Pump #2.
7. Reconnect existing controls from effluent pump control panel. This control system will function as originally but as redundant/back-up float system.
8. Provide new Hydro-Ranger controls with Sonic level control for primary Wet-Well controls for effluent pumps.
9. Provide new floats in Wet-Well (set to match existing) and connect cables in existing Wet-Well I-box.
10. Set Sonic level detectors to match existing levels of operation of Wet-Well.
11. Mount new Hydro-Ranger controller adjacent to existing effluent pumps control panel.
12. Hydro-Ranger shall include HOA controls for each effluent pump to match existing.
13. Provide new 1" conduit with cables/conductors from controller to Wet-Well with new j-box mount on side (match existing).
14. Provide 20/1 dedicated circuit (SBS-104) from mini power center 'SBS'. Provide new 20/1 breaker at Spare – SBS-104.
15. Connect new Sludge Pumps #1 & #2 with HOA Station adjacent to (N)Disconnect.
16. Provide new 1" Liquid Tight flex from tee-condulet to Disconnect and to motor.



ELECTRICAL POWER & CONTROL PLAN - PUMP BUILDING

SCALE: 3/8"=1'-0"

North

SEE SEPARATE CONTROL LOGIC AND LADDER DIAGRAM IN SEPARATE DOCUMENT.

REVISION	DATE	INITIALS	DESCRIPTION
	.	.	.

CITY OF CORCORAN
ELECTRICAL POWER & CONTROL PLAN
PUMP BUILDING

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DESIGN ENGINEER:	TERRY SCHROEPFER
LICENSE NO:	26,386
DRAWN BY:	JCF
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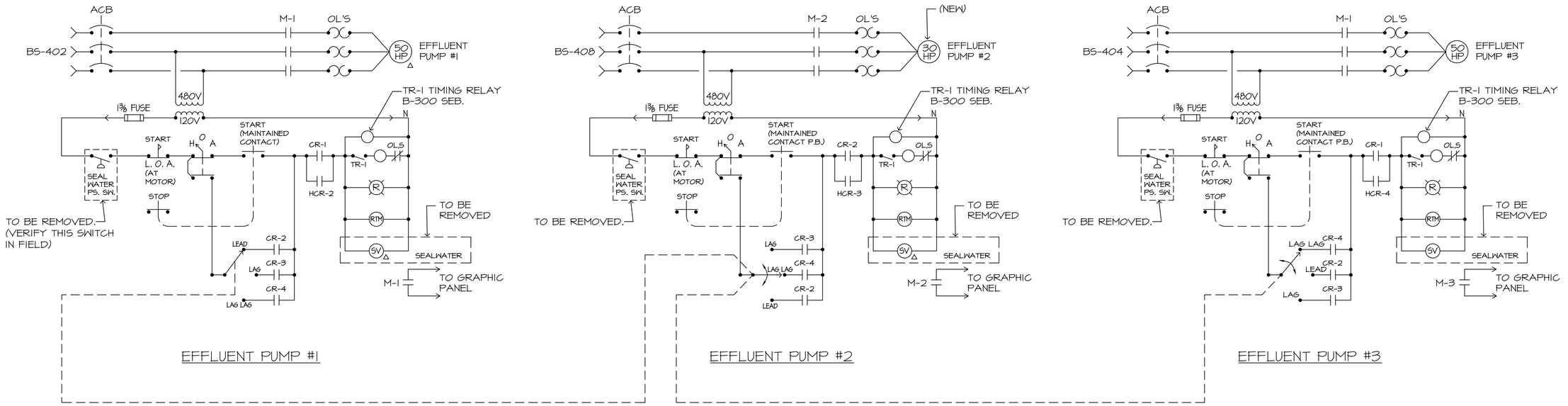
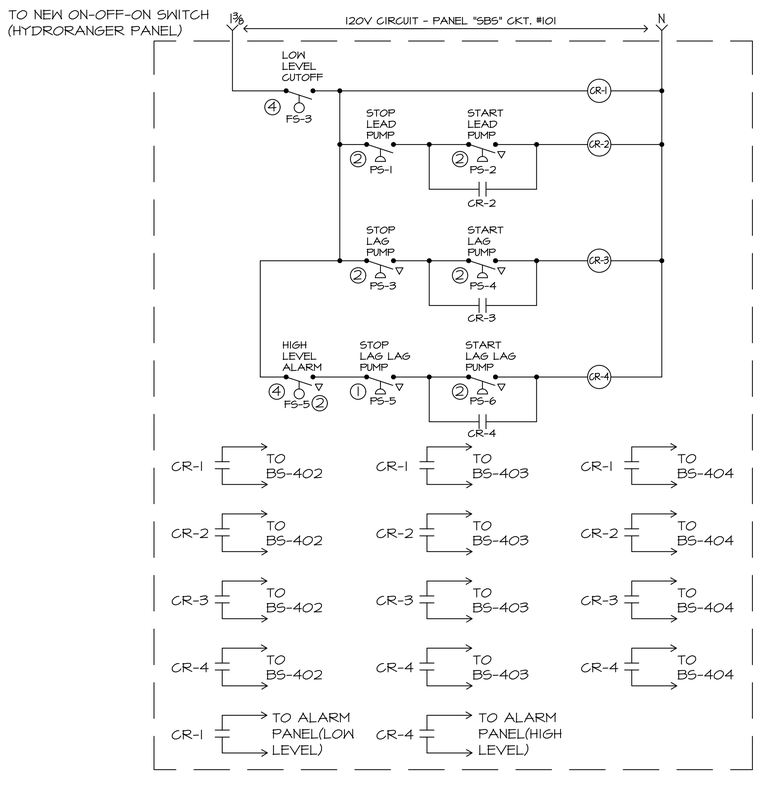
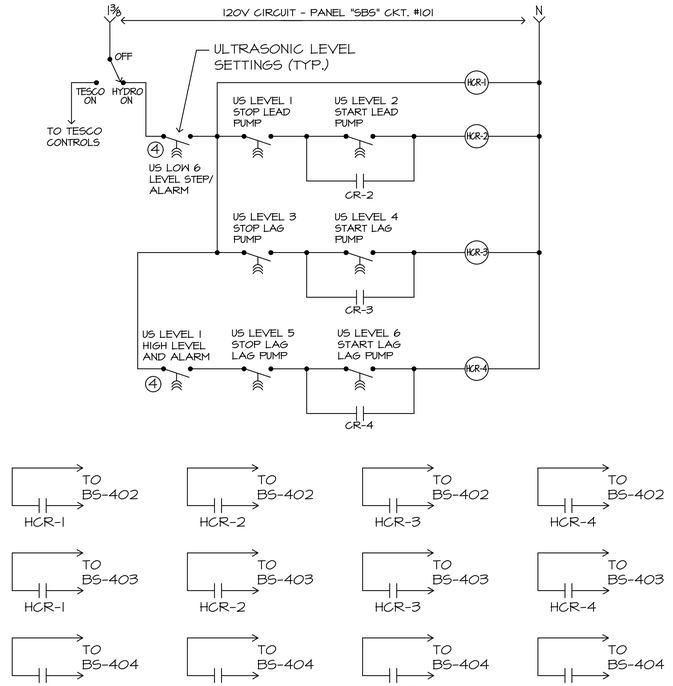
PROJ NO:	CORC01-20
FILE NO:	D-SizTitleBlock.dwg
SCALE:	0 1"
SHEET:	E-5
	7 OF 7



EXISTING EFFLUENT PUMPS (#1,#2 & #3) CONTROL DIAGRAMS (ORIGINAL FROM 1984 WITH MODIFICATIONS) (A)



(E)TESCO CONTROL PANEL/BUBBLER PANEL EFFLUENT PUMPS - CONTROL DIAGRAM FROM ORIGINAL PLANS (1984) (B)



(N)HYDRO RANGER CONTROL DIAGRAM (C)

CONTROL NOTES

1. VERIFY ALTERNATOR SWITCH OPERATED WITH POWER OFF AT TESCO PANEL.
2. VERIFY ALL FLOAT AND PRESSURE SWITCHES CONTROL IN WET WELL.
3. MODIFICATIONS AS SHOWN ON WET WELL FLOATS AND PRESSURE SWITCH (ALL OTHER CONTROLS IN WET WELL TO OPERATE AS DESIGNED)
4. ALARM CONTACTS FOR LOW LEVEL AND HIGH LEVEL WILL BE CONNECTED TO EXISTING SCADA PANEL TO TRANSMIT TO EXISTING ALARM PANEL.

REVISION	DATE	INITIALS	DESCRIPTION

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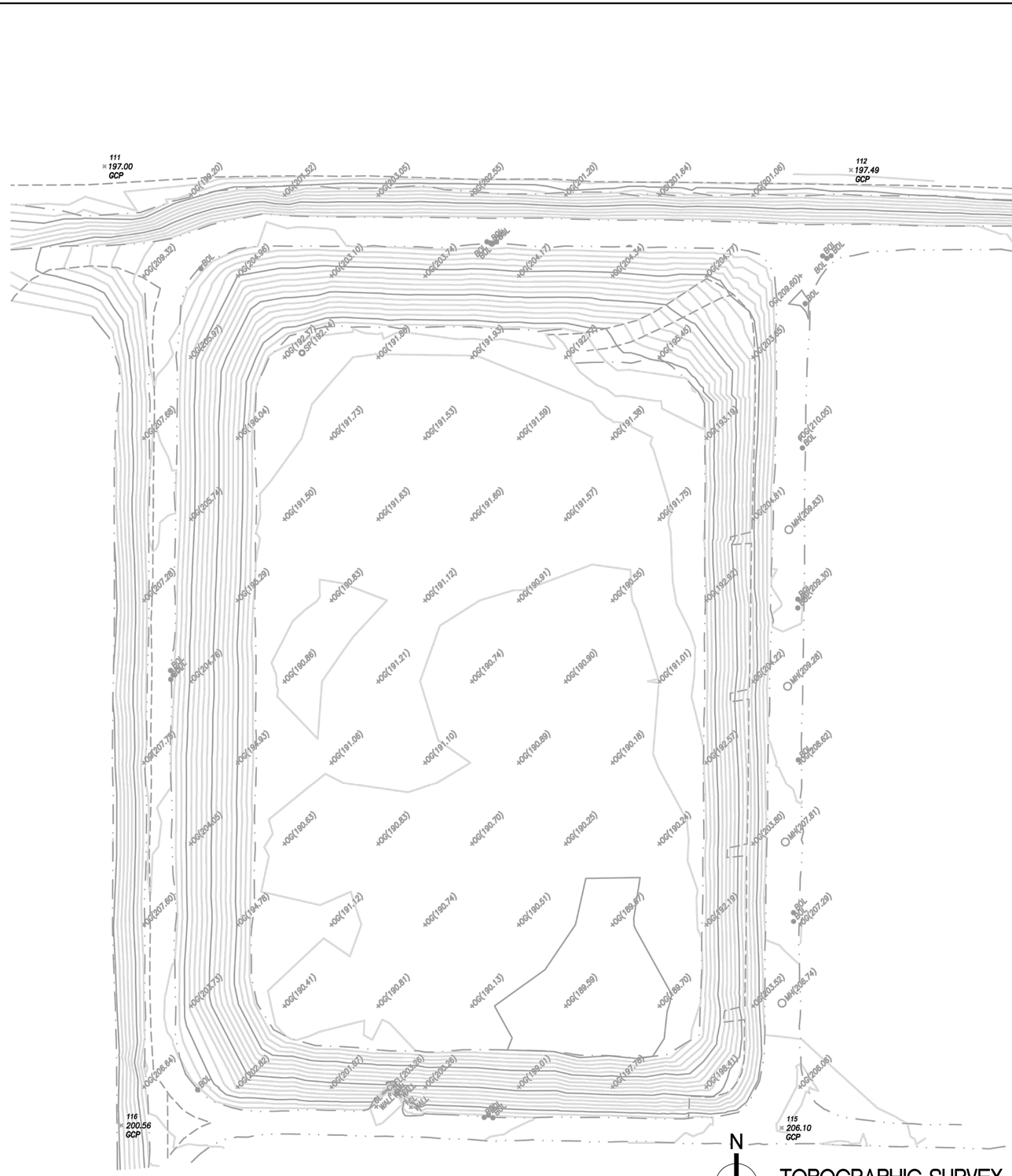
DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386

REGISTERED PROFESSIONAL ENGINEER MICHAEL J. MALONEY No. E013083 EXP. 12/31/2018 ELECTRICAL STATE OF CALIFORNIA

DRAWN BY:	JCF
DATE:	-
PROJ NO:	CORC01-20
FILE NO:	D-SizTitleBlock.dwg
SCALE:	0 1"
SHEET:	E-6 2 OF 7



LEGEND

BOL	BOLLARD
C	CONCRETE
FL	FLOW LINE
MH	MANHOLE
OG	ORIGINAL GROUND
PP	POWER POLE

TOPOGRAPHIC SURVEY

SCALE: 1"=30'-0"

0 30'

FOR REFERENCE ONLY

NOTE:
TOPO PROVIDED BY QK INC. USING UNMANNED AERIAL VEHICLE WITH GROUND CONTROL. OCTOBER, 2019

REVISION	DATE	INITIALS	DESCRIPTION

CITY OF CORCORAN

2020 WASTEWATER TREATMENT PLANT MODIFICATIONS

TOPOGRAPHIC SURVEY

W3i ENGINEERING WATER WASTEWATER INFRASTRUCTURE
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DESIGN ENGINEER: TERRY SCHROEPFER
LICENSE NO: 26,386

DRAWN BY: JCF

DATE: .

PROJ NO: CORC01-20

FILE NO: CORC-topo.dwg

SCALE: 0 1"

SHEET: T-1.1

. OF .