South San Luis Obispo County
SANITATION DISTRICT

REQUEST FOR PROPOSAL

Professional Engineering Services
For
Chemical Tanks
and
Chemical Pumping Station
Relocation Project

Due: January 6, 2019

Release Date: November 19, 2019

SOUTH SAN LUIS OBISPO COUNTY SANTIATION DISTRICT
REQUEST FOR PROPOSALS
FOR
PROFESSIONAL ENGINEERING SERVICES

I. INSTRUCTION TO PROPOSERS

A. Receipt and Opening of Proposals

The South San Luis Obispo County Sanitation District (District) invites qualified firms to submit sealed proposals for professional engineering services for the Chemical Storage Tanks and Chemical Pumps Relocation Project. Proposals will be received at the District's Office by **2:00 PM PST on Monday, January 6, 2019,** located at:

South San Luis Obispo County Sanitation District
1600 Aloha Place
Oceano, CA 93445

An envelope containing one (1) portable drive with pdf and three (3) copies of the proposal must be sealed and clearly labeled as follows:

Chemical Tanks and
Chemical Pumps Relocation Project

The District will not accept faxed or emailed copies of the submittals.

Proposals will not be opened publicly. Any proposal received after the established closing date and time will not be accepted and will be returned to the proposer unopened.

Proposals may be withdrawn upon written request at any time prior to the established closing date and time. The proposer or the proposer's authorized agent must sign such request.

B. Non-Mandatory Pre-Proposal Meeting

A non-mandatory pre-proposal meeting for this Request for Proposal (RFP) will be held on December 9, 2019, at 2:00 PM PST in the conference room, located at:

South San Luis Obispo County Sanitation District
1600 Aloha Place
Oceano, CA 93445

C. Examination of Requirements

Each proposer must carefully examine the requirements of the RFP. Each proposer shall meet all the terms and conditions of the RFP. By submitting a proposal, the proposer acknowledges acceptance of all provisions of the RFP.

D. Communications

All timely requests for information submitted in writing will receive a written response from the District. Any oral communication shall not be binding on the District. All requests for information must be provided in writing and directed to the District's Plant Superintendent: Mychal Jones at mychal@sslocsd.us. To be considered, all requests for information must be received by 2:00 PM PST on December 16, 2019. Responses and Addenda will be posted on the District's website by 2:00 PM PST on December 20, 2019.

II. BACKGROUND

The South San Luis Obispo County Sanitation District owns and operates a wastewater treatment facility located in Oceano, California. The District is responsible for wastewater treatment and 9 miles of sewer trunk line from the Cities of Arroyo Grande, Grover Beach, and the Community of Oceano. The treatment facility operates under National Pollutant Discharge Elimination System (NPDES) Permit No. CA0048003/Waste Discharge Requirements Order No. R3-2019-0002. The treatment facility uses mechanical bar screens, grit removal, primary clarifiers, fixed film reactor, secondary clarifier, chlorine contact tank, and anaerobic digesters to provide quality treatment to its 38,000+ users. The treatment facility is designed and permitted to treat a peak dry weather flow of 5.0 million gallons per day.

The District is currently soliciting proposals from qualified consultants to provide professional engineering services to install two new chemical storage tanks (Sodium Bisulfite and Sodium Hypochlorite) with appurtenances, chemical pumping station skid with redundant pumps (4 total), plumbing, electrical, instrumentation, and containment. In addition, old tanks, old plumbing, electrical and chemical pumping station will need to be disposed of.

Chlorine Contact Tank/ Effluent Pump Station Design Drawings are included as **Exhibit 1.** Possible locations for new tanks and pumping station are included as **Exhibit 2.**

III. SCOPE OF WORK

A. General Design Scope

Bid and oversee construction of the Chemical Storage Tanks and Chemical Pumps Relocation Project. The consultant will provide a feasibility technical memorandum for the relocation of the chemical tanks, pump station, electrical, integration, sizing of tanks, safety, and misc. requirements. The consultant will provide an engineer's opinion of

probable construction cost. The construction bid package shall meet all requirements of the District for the project. The consultant will prepare technical specifications and shall provide "front end" specifications which include bid forms, standard provisions and the like. The consultant will prepare responses to bidder technical questions. The consultant will assist the District in examining the bids and determining the lowest responsive, responsible bidder which will be recommended to the Board of Directors for approval and award. The consultant will plan a preconstruction meeting with the District and contractor. The consultant will provide contract support. During construction of project, consultant shall provide inspection and administrative services including but not limited to material submittal approval, pay estimate preparation, change order oversight, inspection documentation, and final walkthrough and punch list. The Consultant shall complete final Plans and Specifications by February 28, 2020 and meet a project completion of August 14, 2019.

IV. PROJECT SCHEDULE

The anticipated project schedule is summarized below. The dates are tentative and subject to change, based on permitting conditions, consultation with agencies, and other impacts that cannot be assessed at this time.

Issue RFP	November 18, 2019
Non-Mandatory Preproposal Meeting	2:00 PM December 9, 2019
Written Questions Due	December 16, 2019
Responses to Questions Posted	December 20, 2019
Proposals Due	2:00 PM January 6, 2020
Consultant Selection / Board Approval	January 15, 2020
Notice to Proceed	April 1, 2020
Completion of Services	August 14, 2020

V. GENERAL TERMS AND CONDITIONS

A. Proposal Requirements

1. Content: The proposal shall be concise, well organized and demonstrate the proposer's understanding of the Project and their applicable qualifications and experience. The proposal shall be limited to twenty (20) pages, exclusive of resumes, cover letter, graphics, and covers. Proposals should include the minimum Proposal Content as described in Section III. Any additional materials that will support your proposal may be included. However, if they do not directly address the stated requirements, please include them in a separate appendix. The District will consider all material submitted but concentrate on that which addresses the District's Project requirements.
2. Subconsultants: Identify all subconsultants to be used during the term of the project and provide a list of responsible staff and their qualifications. The

Prime Consultant in the proposal shall be responsible for a minimum of 50% of the Project work.

3. Insurance: The consultant shall obtain at their own cost an insurance policy meeting the District's requirements as described in the Standard Agreement (Appendix A).
4. Consultant's compensation: The Consultant's fee shall include all items described in this scope of work, with optional items (if applicable) shown separately. Include a breakdown of professionals to be assigned to the tasks, the estimated hours for each task per professional, the hourly rates for each professional assigned, subtotals of the man-hour costs for each task, subconsultant costs, other direct costs to be billed, and project total costs.
5. Commitment: The proposal shall be signed by the individual with power to bind the company in its proposal. Parts or the entire proposal will be the basis for the contract for the work.
6. Statement of Contract Disqualifications: Consultant shall include a signed statement of whether it or any of its employees or officers who have a proprietary interest in it has ever been disqualified, removed or otherwise prevented from proposing on or completing a municipal government project for any reason. If so, provide a description and explanation of the circumstances.
7. Exceptions: Consultant shall certify that they take no exceptions to this RFP, including but not limited to the provisions of the District's Standard Agreement (Appendix A). If the Consultant takes any exceptions, identify the specific portion and provide a full explanation.

B. Contract Award and Execution

1. The District reserves the right to reject any or all responses to this RFP, waive any insubstantial irregularities in this RFP or any proposal, to negotiate with all qualified sources, or to cancel in part or in its entirety this RFP.
2. If a contract cannot be negotiated with a selected consultant for any reason, the District reserves the right to select the next most qualified proposer.
3. The District reserves discretion to determine the ability, competency and responsibility of the Consultants. Before award, Consultants may be required to furnish evidence of capability to adequately perform the work in a timely manner as deemed necessary by the District.
4. The District reserves the right to interview proposers as needed.
5. The Consultant shall provide proof of insurance in the coverages and amounts specified in the Standard Agreement (included in the appendix) within 5 calendar days after notice of selection as a precondition to contract execution and issuance of a Notice to Proceed.
6. Even if selected, the District reserves the right to terminate any agreement reached with the selected firm at any time and in an appropriate manner.

VI. PROPOSAL CONTENT AND SELECTION PROCESS

A. Proposal Content

1. Cover letter/Executive Summary
2. Experience and References
3. Project Organization and Key Personnel
4. Project Understanding
5. Proposed Scope of Work
6. Proposed Fee
7. Acknowledgement, Exceptions, Disqualifications, Insurance Cert

B. Proposal Evaluation and Consultant Selection

Upon evaluation of the proposals, the District will determine the top firm(s) they feel are most qualified for this project based on the following criteria:

Criteria	**Maximum Points**
Understanding of the site and work to be done	25
Experience with similar kinds of work	30
Qualifications of staff and availability of consultant	25
Demonstrated technical ability	20
Total	100

Attachments:

Exhibit 1 - Chlorine Contact Tank/ Effluent Pump Station Design Drawings

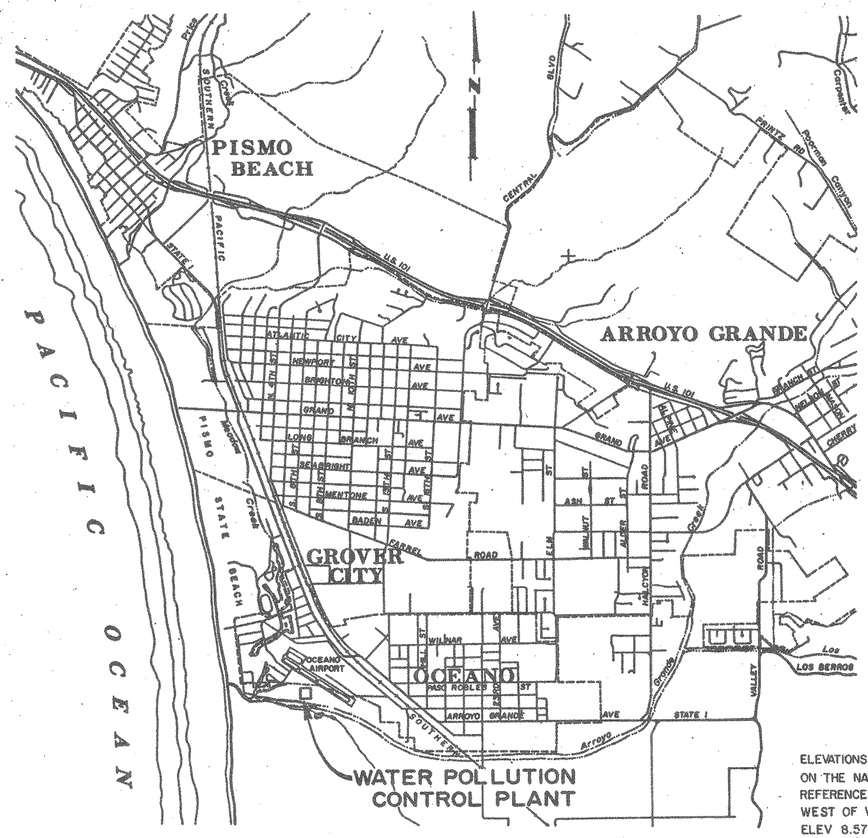
Exhibit 2 – Possible locations for new tanks and pumping station

Appendix A – District Standard Agreement

SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT
Post Office Box 339 Oceano, California 93475-0339
1600 Aloha Oceano, California 93445-9735
Telephone (805) 489-6666 Fax (805) 489-2765
www.sslocsd.org

Exhibit

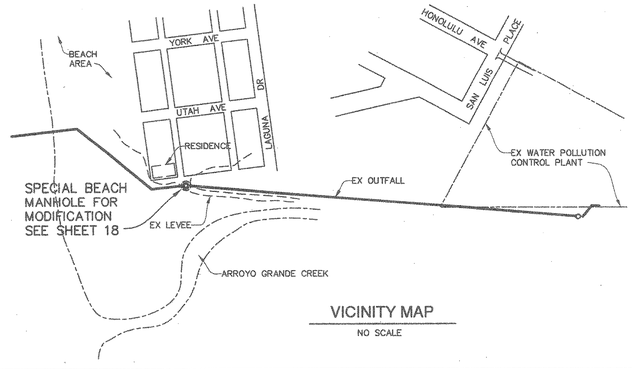
1



PROJECT LOCATION MAP

0 1000 2000 4000 6000

SCALE IN FEET



VICINITY MAP

NO SCALE

DATUM

ELEVATIONS SHOWN ON THESE PLANS ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM. REFERENCE BENCH MARK MON. Y-532 (27 FEET WEST OF WIND SOCK POLE AT OLD HANGER) ELEV 8.573. PLANT PROJECT REFERENCE BENCH MARK IS A "+" CUT IN THE NORTHEAST CORNER OF THE CONTROL BUILDING ENTRANCE SLAB (SEE SHT 5) ELEV 10.03.

INDEX TO PLANS

SHEET NUMBER AND TITLE

1 – PROJECT LOCATION MAP – AND – INDEX TO PLANS
2 – ABBREVIATIONS, – LEGENDS AND DETAILS
3 – MISCELLANEOUS DETAILS
4 – HYDRAULIC PROFILE
5 – SITE PLAN
6 – PARTIAL PLANT LAYOUT – EXISTING CONDITION – DEMOLITION PLAN
7 – PARTIAL PLANT LAYOUT
8 – CHLORINE CONTACT TANK – PIPEWORK AND EQUIPMENT – DECK PLAN
9 – CHLORINE CONTACT TANK – PIPEWORK AND EQUIPMENT – SECTIONAL PLAN
10 – CHLORINE CONTACT TANK – PIPEWORK AND EQUIPMENT – SECTIONS
11 – CHLORINE CONTACT TANK – STRUCTURAL – DECK PLAN
12 – CHLORINE CONTACT TANK – STRUCTURAL – SECTIONAL PLAN
13 – CHLORINE CONTACT TANK – STRUCTURAL – PARTIAL SECTIONAL PLANS
14 – CHLORINE CONTACT TANK – STRUCTURAL – SECTIONS A, B & C
15 – CHLORINE CONTACT TANK – STRUCTURAL – SECTIONS D, E, F & CONC STAIR
16 – CHLORINE CONTACT TANK – STRUCTURAL – MISCELLANEOUS DETAILS
17 – SITE WORK – MISCELLANEOUS DETAILS
18 – SITE WORK – MANHOLE DETAILS
19 – SITE WORK – GRADING, PAVING AND DRAINAGE
E1–20 – ELECTRICAL – LEGEND
E2–21 – ELECTRICAL – SINGLE LINE DIAGRAM – POWER GENERATION STATION PLAN – AND MCC–3A ELEVATION
E3–22 – ELECTRICAL – PARTIAL SITE PLAN
E4–23 – ELECTRICAL – PARTIAL CHLORINE CONTACT TANK PLAN – AND DETAILS
E5–24 – ELECTRICAL – ELEMENTARY DIAGRAMS AND SCHEDULES
I1–25 – INSTRUMENTATION – LEGEND
I2–26 – INSTRUMENTATION – PROCESS AND INSTRUMENTATION DIAGRAM

REVISED / ADDITIONAL PLAN SHEETS

19R1 – SITE WORK – REVISED GRADING PAVING AND DRAINAGE
27 – SITE WORK – REVISED MISC. AND MANHOLE DETAILS

SO. SAN LUIS OBISPO COUNTY SANITATION DISTRICT

SAN LUIS OBISPO COUNTY, CALIFORNIA

PLANS

FOR THE CONSTRUCTION OF

CHLORINE CONTACT TANK / EFFLUENT PUMP STATION

DISTRICT BOARD

TONY FERRARA . . . . . .DIRECTOR
DEE SANTOS. . . . . .DIRECTOR
VERN DAHL . . . . . .DIRECTOR
JIM DICKENS. . . . . ALTERNATE DIRECTOR
RON ARNOLDSEN. . . . . ALTERNATE DIRECTOR
BILL SENNA . . . . . .ALTERNATE DIRECTOR

JOHN L. WALLACE. . . . . DISTRICT ADMINISTRATOR
MICHAEL SEITZ. . . . . DISTRICT COUNSEL
JEFF APPLETON. . . . . PLANT SUPERINTENDENT

KENNEDY/JENKS CONSULTANTS

PALO ALTO, CALIFORNIA

2004

APPROVALS

DISTRICT BOARD CHAIRMAN — DATE 8-13-04

DISTRICT ADMINISTRATOR — DATE 8.9.04

DESIGN ENGINEER — DATE 7/21/04

USE OF DOCUMENTS

THIS DOCUMENT, INCLUDING THE INCORPORATED DESIGNS, IS AN INSTRUMENT OF SERVICE FOR THIS PROJECT AND SHALL NOT BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF KENNEDY/JENKS CONSULTANTS.

NO.	REVISION	DATE	BY

SCALES

0 ——— 1"

0 ——— 25mm

IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.

REGISTERED PROFESSIONAL ENGINEER — JOHN M. WYCKOFF — No. 31016 Exp. 3/31/06 — CIVIL — STATE OF CALIFORNIA — 7/21/04

DESIGNED	HLH
DRAWN	LLK
CHECKED	JMW

SO. SAN LUIS OBISPO COUNTY SANITATION DISTRICT
SAN LUIS OBISPO COUNTY, CALIFORNIA
CHLORINE CONTACT TANK / EFFLUENT PUMP STATION

Kennedy/Jenks Consultants
PALO ALTO, CALIFORNIA

PROJECT LOCATION MAP AND INDEX TO PLANS

FILE NAME	
JOB NO.	015023.00
DATE	JUNE 2004
SHEET	1 OF 26

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ABBREVIATIONS

&	AND
∠	ANGLE
±	APPROXIMATELY
@	AT
℄	CENTERLINE
Δ	DEFLECTION
°	DEGREE
ø	DIAMETER
=	EQUALS
'	FOOT
>	GREATER THAN
"	INCH
<	LESS THAN
#	NUMBER
%	PERCENT
ℙ	PLATE
ø	PHASE
AB	ANCHOR BOLT(–S)
ABAN	ABANDON (–ED)
ABS	ABSOLUTE
A/C	ASPHALT CONCRETE
ACOUS	ACOUSTICAL
ACT.	ACTIVATE
ADDL, ADDIT	ADDITIONAL
ADJ	ADJUST(–ED,–MENT,–ABLE)
ADJT	ADJACENT
ADWF	AVERAGE DRY WEATHER FLOW
AF	ACRE–FEET
AFD	ADJUSTABLE FREQUENCY DRIVE
AGG	AGGREGATE
AIR–CON	AIR CONDITION (–ER,–ING)
AL, ALUM.	ALUMINUM
ALT	ALTERNAT(–E,–IVE)
ALTD	ALTITUDE
ANC	ANCHOR
ANSI	AMERICAN NATIONAL STANDARD INSTITUTE
APPROX	APPROXIMAT(–E,–LY)
ARCH.	ARCHITECT (–URAL)
ASB	ASBESTOS
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATING & AIR CONDITIONING ENGINEERS
ASPH	ASPHALT
ASST	ASSISTANT
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
ATM	ATMOSPHERE (14.7 LB/IN) ^{2}
AWG	AMERICAN WIRE GAUGE
AWWA	AMERICAN WATER WORKS ASSOCIATION
AUX	AUXILIARY
AVE	AVENUE
AVG	AVERAGE
BARM	BARMINUTOR
BC	BEGINNING OF HORIZONTAL CURVE
BD	BOARD
BF	BLIND FLANGE
BFP	BACKFLOW PREVENTER
BHP	BRAKE HORSEPOWER
BIO	BIOFILTER
BIOL	BIOLOGICAL
BITUM	BITUMINOUS
BL	BUILDING LINE
BLDG	BUILDING
BLK	BLOCK(–S)
BLKG	BLOCKING
BM	BEAM
B.M.	BENCH MARK
BOD $_{5}$	BIOCHEMICAL OXYGEN DEMAND (5 DAY)
BOT	BOTTOM
BRG	BEARING
BSMT	BASEMENT
BTU	BRITISH THERMAL UNIT
BTWN	BETWEEN
BVC	BEGINNING OF VERTICAL CURVE
°C	DEGREES CELSIUS (CENTIGRADE)
C	CONDUIT
CAB.	CABINET
CB	CATCH BASIN
CC	CENTER TO CENTER
CEM	CEMENT
CEN	CENTRAL
CF	CUBIC FEET
CFM	CUBIC FEET PER MINUTE
CFS	CUBIC FEET PER SECOND
CH	CHAMBER
CHAN	CHANNEL
CHEM	CHEMI (–CAL,–STRY)
CHKD	CHECKERED
CI	CAST IRON
CIRC	CIRCULA(–R,–TION)
CIRCUM	CIRCUMFERENCE
CKT	CIRCUIT
CL, ℄	CENTERLINE
CL $_{2}$	CHLORINE
CLASS.	CLASSIFICATION
CLG	CEILING
CLOS	CLOSET
CLR	CLEAR (–ANCE)
CM ^{3}	CUBIC CENTIMETER
CM ^{2}	SQUARE CENTIMETER
CM	CENTIMETER
CMU	CONCRETE MASONRY UNIT(–S)
CNTR	COUNTER
CNTRSK	COUNTERSUNK
CO $_{2}$	CARBON DIOXIDE
C.O.D.	CHEMICAL OXYGEN DEMAND
COL	COLUMN
COMM	COMMUNICATION
COMP	COMPRESSOR
CONC	CONCRETE
COND	CONDENSATE
CONN	CONNECT (–S,–ION)
CONST	CONSTRUCT (–ION)
CONST JT,CJ	CONSTRUCTION JOINT
CONT	CONTINU (–ED,–OUS,–ATION)
CONTR	CONTRACTOR
COORD	COORDINATE
COR	CORNER
CORR	CORRUGATED
COUP.,CPLG	COUPLING
CP	CONTROL PANEL
C/S, CS	CONSTANT SPEED
CT	COURT
CTR	CENTER
CTS	CATHODIC TEST STATION
CW	COLD WATER
CWT	ONE HUNDRED POUNDS
CY	CUBIC YARD
D	DRAIN
DBL	DOUBLE
DEG	DEGREE(–S)
DEMO, (D)	DEMOLISH
DET, DTL	DETAIL(–S)
DF	DOUGLAS FIR; DRINKING FOUNTAIN
DGRM	DIAGRAM
DI	DUCTILE IRON
DIA	DIAMETER
DIAG	DIAGONAL(–S)
DIAPH	DIAPHRAGM
DIM.	DIMENSION(–S)
DIR	DIRECTION
DISCH	DISCHARGE
DIST	DISTRIBUTION
DN	DOWN
D.O.	DISSOLVED OXYGEN
DR	DOOR
DS	DOWN SPOUT
DUP	DUPLEX
DWG(S)	DRAWING(–S)
E	EAST
EA	EACH
EC	END OF HORIZONTAL CURVE
ECC	ECCENTRIC
EF	EACH FACE; EXHAUST FAN
EFFIC	EFFICIENCY
EFFL, EFF	EFFLUENT
EGL	ENERGY GRADE LINE
EL, ELEV.	ELEVATION
ELB, ELL	ELBOW
ELEC	ELECTRIC (–AL)
ELEM	ELEMENTARY
EMERG	EMERGENCY
ENCL	ENCLOSURE
ENGR	ENGINEER
ENTR	ENTRANCE
EP	EDGE OF PAVEMENT
EPA	ENVIRONMENTAL PROTECTION AGENCY
EQ	EQUAL (–LY)
EQUAL.	EQUALIZATION
EQUIP.	EQUIPMENT
EST	ESTIMATE (–D)
ETC	ET CETERA
EUC	EUCALYPTUS
EXC	EXCAVATE
EXH	EXHAUSTER (–S)
EX, EXIST., (E)	EXISTING
EXP	EXPANSION
EXP JT	EXPANSION JOINT
EXT	EXTERIOR
EVC	END OF VERTICAL CURVE
EW	EACH WAY
°F	DEGREE FAHRENHEIT
FT	FEET, FOOT
FA	FIRE ALARM
FAI	FRESH AIR INTAKE
FB	FLAT BAR
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FE	FIRE EXTINGUISHER
FF	FAR FACE
FH	FIRE HYDRANT
FL	FLOW LINE
FM	FLOW METER
FOS	FACE OF STUD
FRC	FLEXIBLE RUBBER COUPLING
FAB	FABRICATE(–D)
FAC	FACTORY
FACIL	FACILITY (–IES)
FDR	FEEDER
FIG.	FIGURE
FILT	FILTER
FIN.	FINISH(–ED)
FIN. GD	FINISH GRADE
FLASH.	FLASHING
FLEX.	FLEXIBLE
FLG	FLANGE(–D)
FLR	FLOOR
FLUOR	FLUORESCENT
FDN	FOUNDATION
FREQ	FREQUENCY
FRP	FIBERGLASS REINFORCED PLASTIC
FT ^{3}	CUBIC FEET
FT ^{2}	SQUARE FEET
FTG	FOOTING
FURN	FURNACE
FURR	FURRING
FUT, (F)	FUTURE
FWD	FORWARD
GA	GAUGE
GAL	GALLON (–S)
GALV	GALVANIZE(–D)
GASO	GASOLINE
GDL	GROUND LEVEL
GEN	GENERATOR
GENL	GENERAL
GL	GLASS
GND	GROUND
GPD	GALLONS PER DAY
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GR	GRAM
GRL	GUARDRAIL
GS	GALVANIZED STEEL
GYP BD	GYPSUM BOARD
H	HIGH
HGL	HYDRAULIC GRADE LINE
HGR	HANGER
HGT, HT	HEIGHT
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HP	HORSEPOWER
HPT, H.P.	HIGH POINT
HR	HOUR
HRL	HANDRAIL
HTR	HEATER
HVAC	HEATING, VENTILATING & AIR CONDITIONING
HVY	HEAVY
HW	HOT WATER
HWD, HDWD	HARDWOOD
HWL	HIGH WATER LEVEL
HWY	HIGHWAY
HYD	HYDRAULIC
HZ	HERTZ
I & C	INSTRUMENTATION AND CONTROLS
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
I.F.	INSIDE FACE
IN.	INCH (–ES)
IN ^{3}	CUBIC INCHES
IN ^{2}	SQUARE INCHES
INFL, INF	INFLUENT
INSTR	INSTRUMENT
INSUL	INSULAT(–E,–ION)
INT	INTERIOR
INV	INVERT
IPS	INTERNATIONAL PIPE STANDARD
IW	INDUSTRIAL WASTES
JAN	JANITOR
JB, J–BOX	JUNCTION BOX
JST	JOIST
JT	JOINT
KIP	ONE THOUSAND POUNDS
Km	KILOMETER
KV	KILOVOLTS
KVA	KILOVOLT–AMPERES
KW	KILOWATT
L	LENGTH; LITER
LAB	LABORATORY
LAM	LAMINATE
LAT	LATERAL
LAV	LAVATORY
LB	POUND(–S)
L/D	LITERS PER DAY
LDG	LANDING
LE	LIFTING EYE
LEL	LOWER EXPLOSION LIMIT
LF	LINEAR FEET
LG	LONG
LGT	LIGHT
LH	LEFT HAND
LIQ	LIQUID
LL	LIVE LOAD
LLV	LONG LEG VERTICAL
LO	LIVE OAK
LOC	LOCATION
LONG.	LONGITUDINAL
LP	LOW POINT
LPG	LIQUIFIED PETROLEUM GAS (PROPANE OR BUTANE AS NOTED)
LS	LIMIT SWITCH
LT	LEFT
LTG	LIGHTING
LWL	LOW WATER LEVEL
(M)	MODIF (–Y, –IED)
M ^{3}	CUBIC METERS
M ^{2}	SQUARE METERS
M	METER
MACH.	MACHINE
MATL	MATERIAL
MAX	MAXIMUM
MB	MACHINE BOLT
MCC	MOTOR CONTROL CENTER
MECH	MECHANICAL
MET.	METAL
MFR	MANUFACTURER
MG	MILLIGRAMS
M.G.	MILLION GALLONS
MGD	MILLION GALLONS PER DAY
MG/L	MILLIGRAMS PER LITER
MH	MANHOLE
MIL(S)	1/1000 INCH
MIN	MINIMUM; MINUTE
MISC	MISCELLANEOUS
ML	MILLILITER(–S)
MM	MILLIMETER(–S)
MODIF	MODIFICATION(–S)
MON	MONUMENT
MPH	MILES PER HOUR
MSL	MEAN SEA LEVEL
MTD	MOUNTED
MTG	MOUNTING
MTR	MOTOR
MUL	MULLION
N	NORTH
(N)	NEW
N/A	NOT APPLICABLE
NAT G	NATURAL GAS
N.C.	NORMALLY CLOSED
NE	NORTHEAST
NEUT	NEUTRAL
NF	NEAR FACE
NGVD	NATIONAL GEODETIC VERTICAL DATUM
NIC	NOT IN CONTRACT
N.O.	NORMALLY OPEN
NO.	NUMBER
NOM	NOMINAL
NORM	NORMAL
NRS	NON–RISING STEM (VALVE)
NT	NORMALLY THROTTLED
NTS	NOT TO SCALE
NV	NEEDLE VALVE
NW	NORTHWEST
NWL	NORMAL WATER LEVEL
OA	OVERALL
OBD	OPPOSED BLADE DAMPER
OC	ON CENTER
O/C	OPEN/CLOSE SERVICE
OD	OUTSIDE DIAMETER
O.F.	OUTSIDE FACE
OF.	OVERFLOW
OFF.	OFFICE
OFS	OUTSIDE FACE OF STUD
O.H.	OVERHEAD
OL	OVERLOAD
OPNG	OPENING
OPP	OPPOSITE
ORIG	ORIGINAL
OSHA	OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION
OZ	OUNCE(–S)
P	PIPE
PC	PIECE
P.C.	POINT OF HORIZONTAL CURVE
PCC	POINT OF COMPOUND CURVE
PCF	POUNDS PER CUBIC FEET
PCO	PRESSURE CLEANOUT
PE	PLAIN END
POLY	POLYETHYLENE
PEN.	PENETRATION
PERF	PERFORAT(–E, –ED, –ES, –ATION)
PF	PROFILE
PG	PRESSURE GAUGE
PH	PIPE HANGER
PHMS	PAN HEAD MACHINE SCREW
P.I.	POINT OF HORIZONTAL INTERSECTION
P & ID	PROCESS (OR PIPING) & INSTRUMENTATION DIAGRAM
P.L., P/L	PROPERTY LINE
PL, ℙ	PLATE
PLAS	PLASTER
PLY.	PLYWOOD
PNL	PANEL
P.O.T	POINT OF TANGENCY
PP	PAGES
P.P.	POWER POLE
PPB	PARTS PER BILLION
PPM	PARTS PER MILLION
PR	PAIR
P.R.	PULL RING
PRESS.	PRESSURE
PRI	PRIMARY
PROJ	PROJECT(–ION)
PROP.	PROPERTY
PROT	PROTECTOR
PRS	PRESSURE SNUBBER
PS	PIPE SUPPORT
PSF	POUNDS PER SQUARE FEET
PSI	POUNDS PER SQUARE INCH
PSIA	POUNDS PER SQUARE INCH ABSOLUTE (PRESSURE ABOVE VACUUM)
PSIG	POUNDS PER SQUARE INCH–GAUGE (PRESSURE ABOVE ATMOSPHERE)
P.SL.	PIPE SLEEVE
P.STA.	PUMP STATION
P. SW.	PRESSURE SWITCH
PT	POINT
PVC	POINT OF VERTICAL CURVE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
PWWF	PEAK WET WEATHER FLOW
PVMT	PAVEMENT
PWR	POWER
Q.	FLOW OR DISCHARGE
R	RISER
R, RAD	RADIUS
RC	REINFORCED CONCRETE
RD	ROAD
REC	RECEIVING
RECIRC	RECIRCULAT(–E, –ION)
RED.	REDUCE(–R)
REF	REFERENCE
REFR	REFRIGERATOR
REG	REGULAT(–E, –OR, –ION, –ING)
REINF	REINFORC(–E, –ED, –ING, –MENT)
REL	RELATIVE
REQD	REQUIRED
REQT	REQUIREMENT
RES, RSVR	RESERVOIR
RESIL	RESILIENT
REV	REVISION
RH	RIGHT HAND
RM	ROOM
RND	ROUND
RPM	REVOLUTIONS PER MINUTE
RPS	REVOLUTIONS PER SECOND
RR	RAILROAD
RT	RIGHT
RTE	ROUTE
RTN	RETURN
R/W	RIGHT–OF–WAY
RWD	REDWOOD
S	SOUTH; SLOPE
SAN	SANITARY
SCFM	STANDARD CUBIC FEET PER MINUTE
SCHED, SCH	SCHEDULE
SD	STORM DRAIN
SE	SOUTHEAST
SEC	SECOND(–S, –ARTY)
SECT	SECTION(–S)
SED	SEDIMENTATION
SEW.	SEWER
SHT, SH	SHEET
SI	SIDEWALK INLET
SIG	SIGNAL
SIM	SIMILAR
SL	SLUDGE
SO $_{2}$	SULFUR DIOXIDE
SP	STATIC PRESSURE
SP. GR.	SPECIFIC GRAVITY
SPC	SPACE
SPCD	SPACED
SPCNG	SPACING
SPCS	SPACES
SPEC	SPECIFICATIONS
SQ	SQUARE
SQ FT, SF	SQUARE FEET
SQ IN	SQUARE INCHES
SS	SANITARY SEWER
SS 304	STAINLESS STEEL TYPE 304
SS 316	STAINLESS STEEL TYPE 316
ST	STREET
STA	STATION
STD	STANDARD
STIFF	STIFFEN (–ER)
STL	STEEL
STM	STEAM
STN	STAINLESS
STOR	STORAGE
STRUCT	STRUCTUR(–E, –AL)
SUB	SUBNATANT
SUBM	SUBMISSION (SUBMIT)
SUP	SUPERNATANT
SUPP	SUPPORT(–S)
SURF.	SURFACE
SUSP	SUSPEND(–ED)
SW	SOUTHWEST; SWITCH
SWBD	SWITCHBOARD
S/W	SIDEWALK
SWGR	SWITCHGEAR
SYM	SYMMETRICAL
T/	TOP OF
TAN.	TANGENT(–IAL)
TB	THRUST BLOCK
TBM	TEMPORARY BENCH MARK
T & B	TOP & BOTTOM
TC	TOP OF CURB
TDH	TOTAL DYNAMIC HEAD
TEL, TELE	TELEPHONE
TEMP	TEMPERATURE
TEMPY	TEMPORARY
TERM.	TERMINAL; TERMINATION
THK	THICK(–ENED, –ENER, –NESS)
TOC	TOP OF CONCRETE
TOD	TOTAL OXYGEN DEMAND
TOPO	TOPOGRAPHY
TOS	TOP OF STEEL; TOP OF SLAB
T.O.W.	TOP OF WALL
TP	TELEPHONE POLE
TR	TREAD(–S)
T–R	THROUGH ROOF
TRANSF	TRANSFORMER
TRANSV	TRANSVERSE
TRTMT	TREATMENT
TS, T'STAT	THERMOSTAT
TURB	TURBIDITY
TYP	TYPICAL
UG	UNDERGROUND
UGE	UNDERGROUND ELECTRIC
UH	UNIT HEATER
UPR	UPPER
V	VOLT
VAC	VACUUM
VAR	VARIABLE
V.A.T.	VINYL ASBESTOS TILE
VC	VERTICAL CURVE
VEL	VELOCITY
VERT	VERTICAL
VERTS	VERTICAL BARS
VEST.	VESTIBULE
VOL	VOLUME
VPI	VERTICAL POINT OF INTERSECTION
V/S, VS	VARIABLE SPEED
VT	VENT
W	WIDTH; WIDE; WEST
W/	WITH
WC	WATER CLOSET
W CL	WATER COLUMN
WD	WOOD
WH	WATER HEATER
WM	WATER METER
W/O	WITHOUT
WP	WEATHERPROOF
WS	WELDED STEEL
WST	WATERSTOP
WT	WEIGHT
WTR	WATER
WW	WATER WASTE
WWF	WELDED WIRE FABRIC
WWM	WELDED WIRE MESH
YD ^{3}	CUBIC YARD
YD ^{2}	SQUARE YARD
YD	YARD
YR	YEAR

VALVES AND ACCESSORIES

AIRVAC	AIR AND VACUUM VALVE
ARV	AIR RELEASE VALVE
BCV	BALL CHECK VALVE
BFV	BUTTERFLY VALVE
BV	BALL VALVE
CO	CLEANOUT
CV	CHECK VALVE
FG	FLAP GATE
GLV	GLOBE VALVE
GV	GATE VALVE
HB	HOSEBIBB
KG	KNIFE GATE
MV	MUD VALVE
OS&Y	OUTSIDE SCREW & YOKE (RISING STEM–VALVE)
PDV	PLUG DRAIN VALVE
PINV	PINCH VALVE
PIV	POST INDICATOR VALVE
PRFV	PRESSURE RELIEF VALVE
PRV	PRESSURE REDUCING VALVE
PV	PLUG VALVE
SG	SLUICE GATE
SV	SOLENOID VALVE
TCV	TWIN ELEMENT CHECK VALVE

PIPE LININGS, COATINGS

CMC	CEMENT MORTAR COATED
CML	CEMENT MORTAR LINED
CML&C	CEMENT MORTAR LINED & COATED
EC	EPOXY COATED
EL	EPOXY LINED
EL&C	EPOXY LINED & COATED
GL	GLASS LINED
IC	INSULATION COATED
PC	PLASTIC COATED

PIPE JOINTS

BC	BOLT–ON COUPLING
DRG	DOUBLE RUBBER GASKET JOINT
FC	FLEXIBLE COUPLING
FCA	FLANGED COUPLING ADAPTER
GC	GROOVED COUPLING
MJ	MECHANICAL JOINT
SRG	SINGLE RUBBER GASKET JOINT
TA	TENSION ANCHOR
T/G	TONGUE & GROOVE JOINT

NOTE

THIS IS A GENERALIZED ABBREVIATIONS, LEGEND, AND DETAILS SHEET. THIS CONTRACT MAY NOT USE ALL INFORMATION SHOWN.

PIPE MATERIAL TABLE

ABS	ACRYLONITRILE–BUTADIENE–STYRENE PIPE
AL	ALUMINUM PIPE
A–BCM	ASBESTOS–BONDED CORRUGATED METAL PIPE
AC	ASBESTOS CEMENT PIPE
BI	BLACK IRON PIPE
BS	BLACK STEEL PIPE
CC	CONCRETE CYLINDER
CI	CAST IRON PIPE
CIS	CAST IRON SOIL PIPE
CM	CORRUGATED METAL PIPE
CPVC	CHLORINATED POLYVINYL CHLORIDE PIPE
CU	COPPER PIPE
DI	DUCTILE IRON PIPE
FRP	FIBERGLASS REINFORCED PLASTIC PIPE
GI	GALVANIZED IRON PIPE
GS	GALVANIZED STEEL PIPE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
PE	POLYETHYLENE PIPE
PVC	POLYVINYL CHLORIDE PIPE
RC	REINFORCED CONCRETE PIPE
RPM	REINFORCED PLASTIC MORTAR PIPE
VC	VITRIFIED CLAY PIPE
WI	GENUINE WROUGHT IRON PIPE
WS	WELDED STEEL PIPE

PIPING SYMBOLS

TYPICAL SYMBOLS	FLANGED ENDS: DOUBLE LINE	FLANGED ENDS: SINGLE LINE	HUB ENDS: DOUBLE	HUB ENDS: SINGLE	SCREWED OR SOCKET ENDS: DOUBLE LINE	SCREWED OR SOCKET ENDS: SINGLE LINE
GATE VALVE	–	–	–	–	–	–
PLUG VALVE	–	–	–	–	–	–
BUTTERFLY VALVE	–	–	–	–	–	–
CHECK VALVE	–	–	–	–	–	–
PINCH VALVE	–	–	–	–	–	–
BALL VALVE	–	–	–	–	–	–
HOSE BIBB	–	–	–	–	–	–
90° ELBOW						
45° ELBOW						
TEE						
LATERAL						
CONCENTRIC REDUCER						
BOLT–ON COUPLING					(UNION)	
FLEX. COUP. (RUBBER)						
GROOVED COUPLING						
BLIND FLANGE					(CAP)	
MECH. JOINT CONNECTION						

EXISTING PIPE CONTENT DESIGNATIONS

- (A) (CA) (FA) (PA) AIR, CONTAM, FRESH, PRESS
- (CAU) CAUSTIC
- (CLG) CHLORINE GAS
- (CLL) CHLORINE LIQUID
- (CLS) CHLORINE SOLUTION
- (D) (SD) DRAIN, STORM DRAIN
- (E) ELECTRICAL
- (FC) FERRIC CHLORIDE
- (FO) (GA) FUEL OIL, GASOLINE
- (G) (NG) (PG) (SG) GAS, NAT, PROPANE, SLUDGE
- (HCL) HYPOCHLORITE
- (L) LIME
- (PO) POLYMER
- (SC) SCUM
- (SCU) (SU) SCUM UNDERFLOW, SUPER, FILTRATE, ETC
- (SL) (RAS) (WAS) (DSL) (TSL) SLUDGE RETURN ACT, WASTE ACT, DIGEST, THICK
- (SOG) SULPHUR DIOXIDE GAS
- (SOL) SULPHUR DIOXIDE LIQUID
- (SOS) SULPHUR DIOXIDE SOLUTION
- (WW) WASTEWATER
- (TWW) TREATED WASTEWATER
- (1W) POTABLE WATER
- (2W) NON–POTABLE WATER
- (3W) RECLAIMED WATER
- (4W) WELL WATER

SECTION A 6 3 — SECTION DESIGNATION; SHEET LOCATED ON; SHEET DRAWN ON

TEXTURE LEGEND

UNLESS OTHERWISE NOTED

- INDICATES NEW CONCRETE IN SECTION
- INDICATES EXIST. CONCRETE IN SECTION
- INDICATES ITEMS TO BE REMOVED
- INDICATES NEW PAVING (OR AS NOTED)

USE OF DOCUMENTS

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NO.	REVISION	DATE	BY

SCALES: 0 — 1" ; 0 — 25mm. IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.

REGISTERED PROFESSIONAL ENGINEER — JOHN M. WYLIE — No. 31719 — Exp. 3/31/06 — CIVIL — STATE OF CALIFORNIA — 6/17/04

DESIGNED	HLH
DRAWN	LLK
CHECKED	JMW

SO. SAN LUIS OBISPO COUNTY SANITATION DISTRICT
SAN LUIS OBISPO COUNTY, CALIFORNIA
CHLORINE CONTACT TANK / EFFLUENT PUMP STATION

Kennedy/Jenks Consultants
PALO ALTO, CALIFORNIA

ABBREVIATIONS, LEGENDS AND DETAILS

FILE NAME	
JOB NO.	015023.00
DATE	JUNE 2004
SHEET	2 OF 26

PIPE SUPPORT NOTE

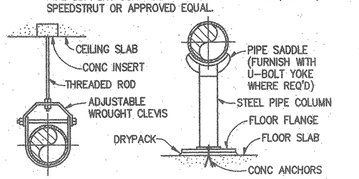
ALL PIPING INSTALLED AS PART OF THIS PROJECT SHALL BE ADEQUATELY SUPPORTED. THE PIPING SHALL BE SUPPORTED BY APPROVED HANGERS, SADDLES, STRAPS, BRACKETS, FRAMES AND/OR CONCRETE PIERS WHICH SHALL BE SECURELY CONNECTED TO THE REINFORCED CONCRETE FLOOR SLABS, WALLS AND/OR ROOF SLABS. THE SUPPORT SYSTEM SHALL BE DESIGNED TO ADEQUATELY SUPPORT THE FULL WEIGHT OF THE PIPE, PIPE FITTINGS AND PIPE CONTENTS AS WELL AS TO PROVIDE LATERAL AND LONGITUDINAL SUPPORT FOR THE COMPLETE PIPING SYSTEM. THE PIPE SUPPORTS SHALL BE LOCATED AS SHOWN AND/OR NOTED ON THESE PLANS, AND THEY SHALL ALSO CONFORM TO THE FOLLOWING MAXIMUM SPACINGS AND LOCATIONS:

1. 30"ø TO 14"ø PIPES – – – – – 15'–0" MAX SPACING.
2. 12"ø TO 8"ø PIPES – – – – – 12'–0" MAX SPACING.
3. 6"ø CI OR WS PIPES – – – – – 10'–0" MAX SPACING.
4. 4"ø CI OR WS PIPES – – – – – 8'–0" MAX SPACING.
5. 3"ø TO 2"ø METAL PIPES – – – – 6'–0" MAX SPACING.
6. $1\frac{1}{2}$"ø TO $\frac{1}{2}$"ø METAL PIPES – – 4'–0" MAX SPACING.
7. 6"ø TO $2\frac{1}{2}$"ø PVC PIPES – – – 4'–0" MAX SPACING.
8. 2"ø TO $\frac{1}{2}$"ø PVC PIPES – – – – 3'–0" MAX SPACING.
9. LOCATE A SUPPORT AT EACH END OF EACH PIPE.
10. LOCATE A SUPPORT AT EACH HORIZONTAL AND EACH VERTICAL ANGLE POINT.

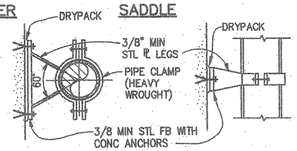
REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

THE PROPOSED PIPING SUPPORT SYSTEM SHALL BE SUBMITTED FOR APPROVAL PRIOR TO THE POURING OF THE CONCRETE STRUCTURE.

PIPE SUPPORT COMPONENTS SHALL BE GRINNELL, ELCEN, UNISTRUT, SPEEDSTRUT OR APPROVED EQUAL.



HANGER SADDLE

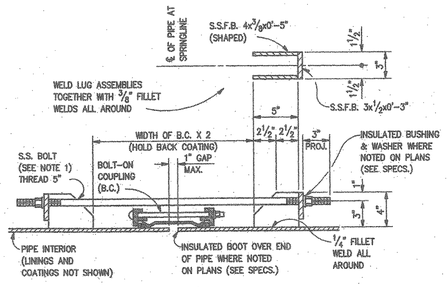


PLAN ELEVATION

FABRICATED

PIPE SUPPORT NOTE AND DETAILS

NO SCALE

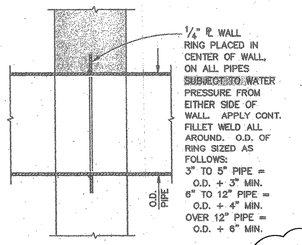


TENSION ANCHOR NOTES

1. TENSION ANCHORS ON PIPE CONNECTIONS WILL BE REQUIRED AT THOSE LOCATIONS INDICATED AND/OR NOTED ON THESE PLANS. THEY WILL ALSO BE REQUIRED IN YARD PIPEWORK ON R.C. AND W.S. PIPE JOINTS WHICH ARE LOCATED WITHIN 8 FEET OF ANY BEND GREATER THAN 15°. THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO ANCHORS AT EACH REQUIRED JOINT LOCATED AT THE SPRINGLINE OF THE PIPE. ALL STAINLESS STEEL BAR STOCK SHALL BE TYPE 316. THE SIZES AND DIMENSIONS SHOWN ON THIS DETAIL ARE MINIMUMS AND DIMENSIONS MAY REQUIRE MODIFICATIONS FOR SPECIFIC LOCATIONS.
   MINIMUM TENSION ANCHOR BOLT DIAMETERS SHALL BE:
   $\frac{3}{4}$"ø BOLTS FOR PIPES SMALLER THAN 30" DIAMETER.
   $\frac{7}{8}$"ø BOLTS FOR PIPES 30" TO 51" DIAMETER.
   1"ø BOLTS FOR PIPES LARGER THAN 51" DIAMETER.
   THE CONTRACTOR SHALL SUBMIT DETAILS FOR REVIEW PRIOR TO FABRICATION.
2. TENSION ANCHOR DETAILS SHOWN HERE MAY ALSO BE ADAPTED TO OTHER CONDITIONS INCLUDING R.C. TO W.S. TENSION ANCHORS AT STRUCTURES MAY ALSO BE DRILLED 8" MIN. INTO SOUND CONCRETE AND GROUTED IN PLACE WITH AN EPOXY ADHESIVE COMPOUND (SEE SPECS.), PROVIDE BEND TO PREVENT TURNING.

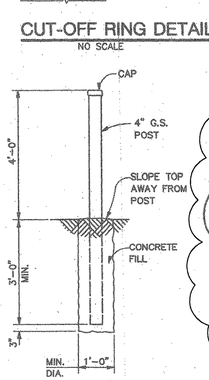
TENSION ANCHOR DETAILS WSCML&C PIPE

NO SCALE



CUT-OFF RING DETAIL

NO SCALE



PROTECTION POST DETAILS

NO SCALE

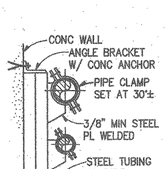
HANGER SADDLE

PLAN ELEVATION

FABRICATED

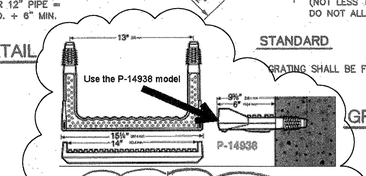
PIPE SUPPORT NOTE AND DETAILS

NO SCALE



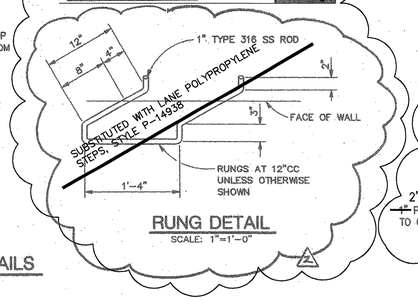
FABRICATED BRACKET

NO SCALE



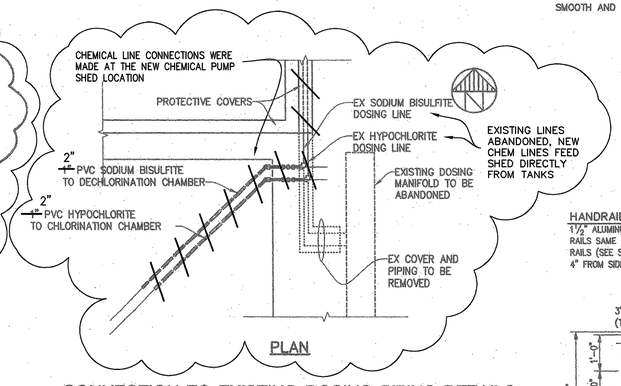
GRATING AND BEARING DETAIL

SCALE: 3"=1'-0"



RUNG DETAIL

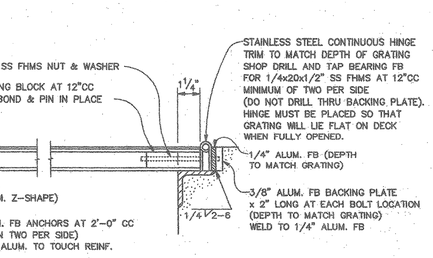
SCALE: 1"=1'-0"



PLAN

CONNECTION TO EXISTING DOSING PIPING DETAILS

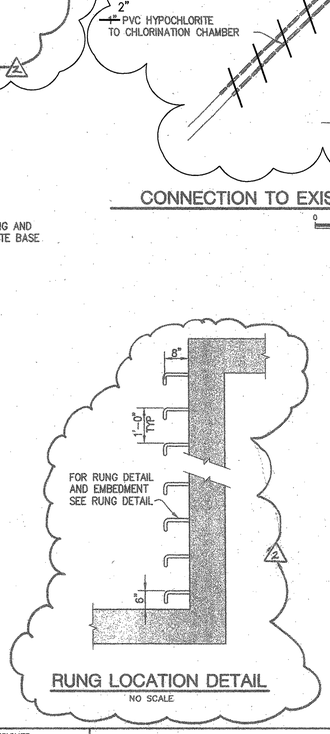
0 2 4
3/8"=1'-0"



STANDARD — GRATING SHALL BE FIBERGLASS

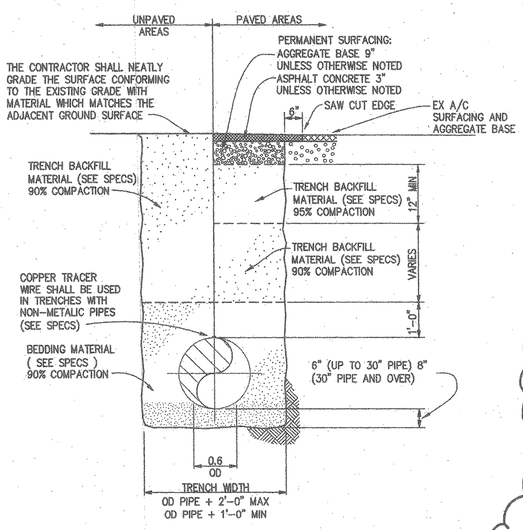
HINGED

CLEAR SPAN	DEPTH
0" TO 2'-0"	1" DEEP
2'-1" TO 3'-0"	1½" DEEP



RUNG LOCATION DETAIL

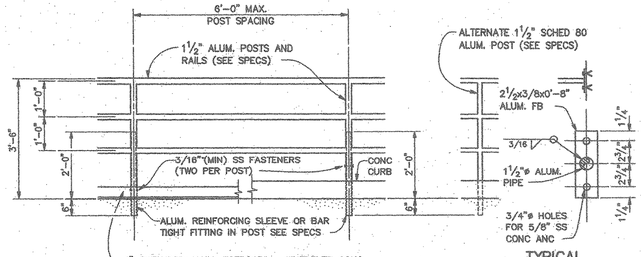
NO SCALE



PLASTIC PIPE NOTE
PIPE BEDDING SHALL BE SAND, 6" MIN ENCASEMENT (SEE SPECS)

TRENCH BACKFILL AND RESURFACING

NO SCALE



TYPICAL RAIL CONNECTION

NO SCALE

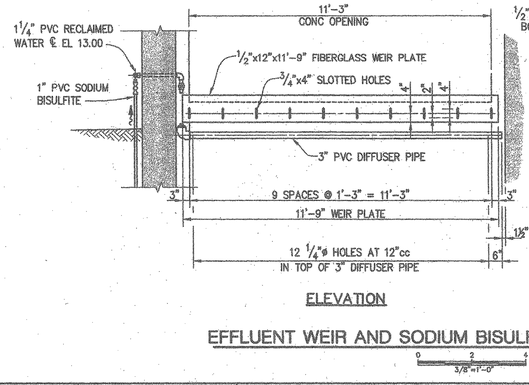
ALUM. POST TO BE SET IN CORED OR FORMED HOLES (REMOVABLE FORMS) AND SECURELY FIXED BY GROUT (SEE SPECS.)

TOP RAIL AT END POST SHALL BEND DOWN ON 3" MAX ℄ RADIUS. USE 3" ℄ RADIUS HORIZ BEND IN ALL RAILS AND TOEBOARD AT CORNERS WITH POSTS OFFSET 6" FROM CORNER.

VERTICAL MITERS, OFFSETS OR PROTRUSIONS IN THE TOP RAIL ARE NOT ACCEPTABLE. ALL SPLICES SHALL BE SMOOTH AND TIGHT. REFER TO ELECT PLANS FOR LIGHT POST LOCATIONS AND DETAILS WHERE REQUIRED

ALUMINUM GUARDRAIL DETAIL

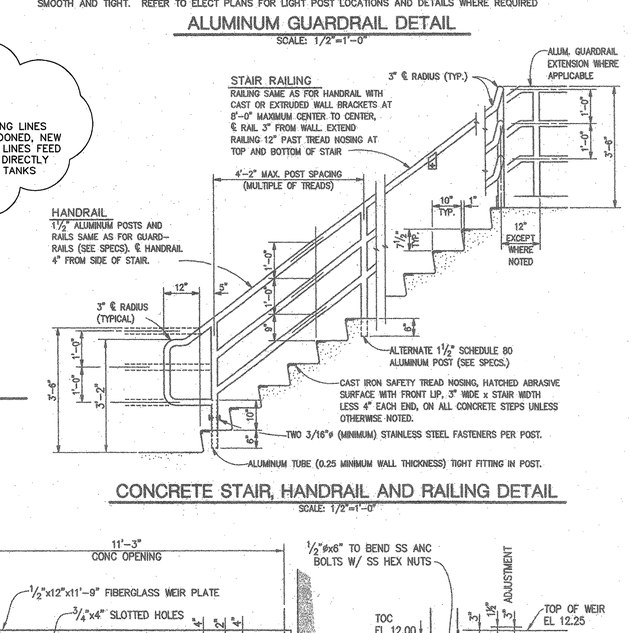
SCALE: 1/2"=1'-0"



ELEVATION SECTION

EFFLUENT WEIR AND SODIUM BISULFITE DIFFUSER DETAILS

0 2 4
3/8"=1'-0"



CONCRETE STAIR, HANDRAIL AND RAILING DETAIL

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

NO.	REVISION	DATE	BY
2	REVISED SHEET	SEPT. 04	GKC

SCALES
0 1"
0 25mm
IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.

REGISTERED PROFESSIONAL ENGINEER — JOHN M. WISEMAN — No. 21018 Exp. 3/31/05 — CIVIL — STATE OF CALIFORNIA — 9/23/04

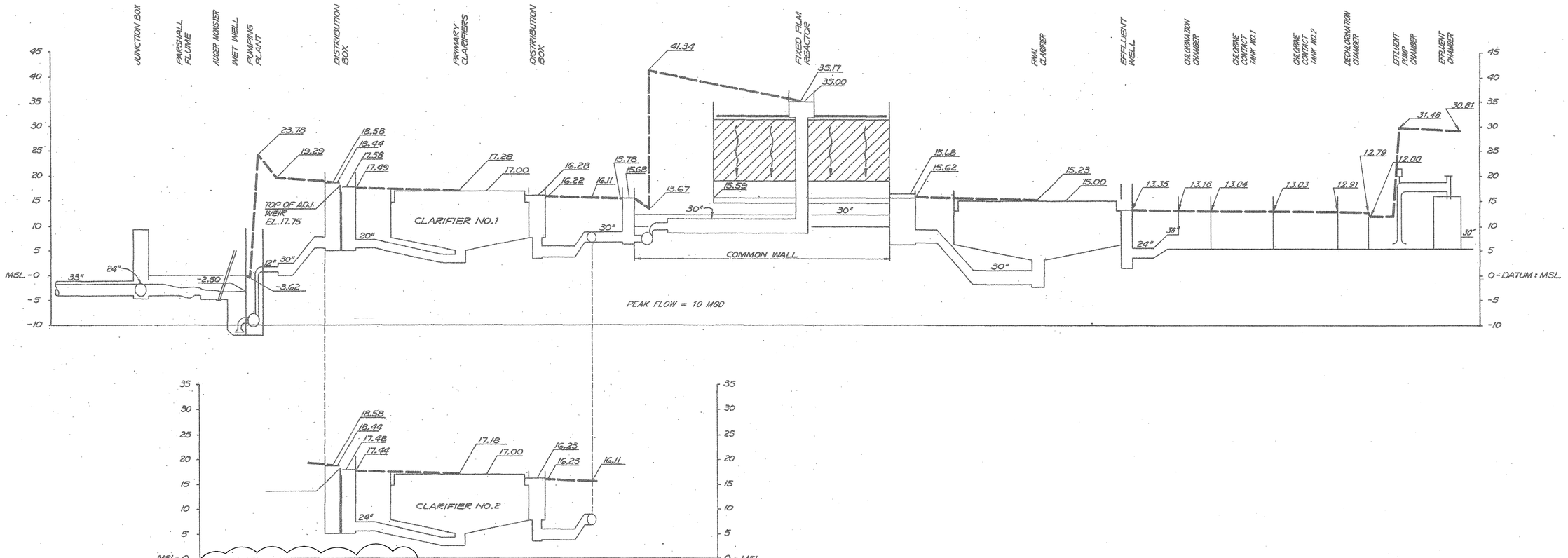
DESIGNED	HLH
DRAWN	LLK
CHECKED	JMW

SO. SAN LUIS OBISPO COUNTY SANITATION DISTRICT
SAN LUIS OBISPO COUNTY, CALIFORNIA
CHLORINE CONTACT TANK / EFFLUENT PUMP STATION

Kennedy/Jenks Consultants
PALO ALTO, CALIFORNIA

MISCELLANEOUS DETAILS

FILE NAME	
JOB NO.	015023.00
DATE	JUNE 2004
SHEET	3 OF 26



WATER POLLUTION CONTROL PLANT

Scales : Vert.- 1" = 5'
Horiz.- None

OCEAN OUTFALL

Scales : Vert.- 1" = 20'
Horiz.- 1" = 300'

USE OF DOCUMENTS

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NO.	REVISION	DATE	BY

SCALES

0 ——— 1"
0 ——— 25mm

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REGISTERED PROFESSIONAL ENGINEER — JOHN M. WYGANT — No. 31619 — Exp. 3/31/06 — CIVIL — STATE OF CALIFORNIA — 6/17/04

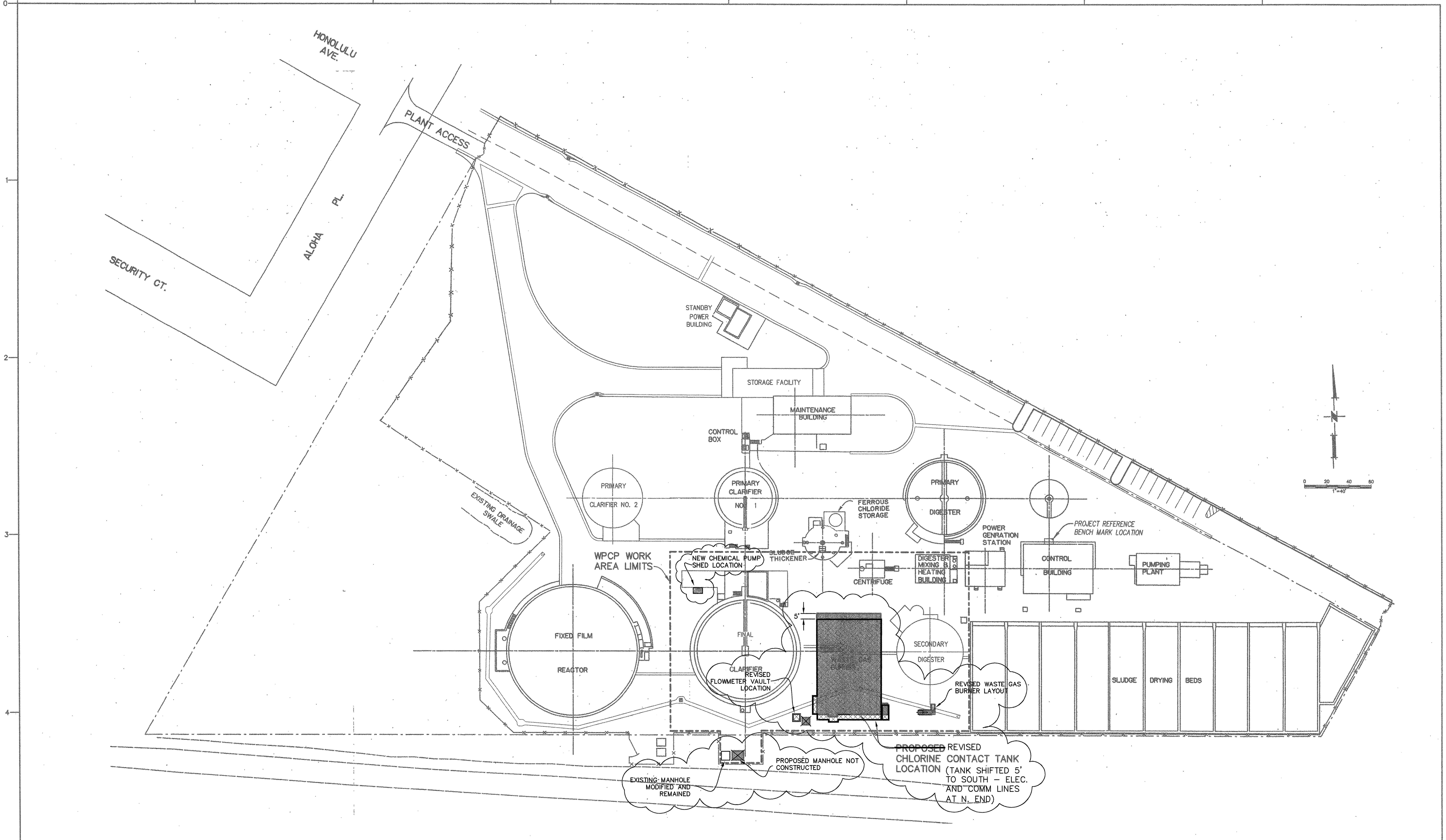
DESIGNED HLH
DRAWN LLK
CHECKED JMW

SO. SAN LUIS OBISPO COUNTY SANITATION DISTRICT
SAN LUIS OBISPO COUNTY, CALIFORNIA
CHLORINE CONTACT TANK / EFFLUENT PUMP STATION

Kennedy/Jenks Consultants
PALO ALTO, CALIFORNIA

HYDRAULIC PROFILE

FILE NAME
JOB NO. 015023.00
DATE JUNE 2004
SHEET 4 OF 26



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NO.	REVISION	DATE	BY

SCALES

0 — 1"

0 — 25mm

IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.

REGISTERED PROFESSIONAL ENGINEER JOHN M. WILSON No. 3_019 Exp. 3/31/06 CIVIL STATE OF CALIFORNIA 6/17/04

DESIGNED HLH

DRAWN LLK

CHECKED JMW

SO. SAN LUIS OBISPO COUNTY SANITATION DISTRICT

SAN LUIS OBISPO COUNTY, CALIFORNIA

CHLORINE CONTACT TANK / EFFLUENT PUMP STATION

Kennedy/Jenks Consultants

PALO ALTO, CALIFORNIA

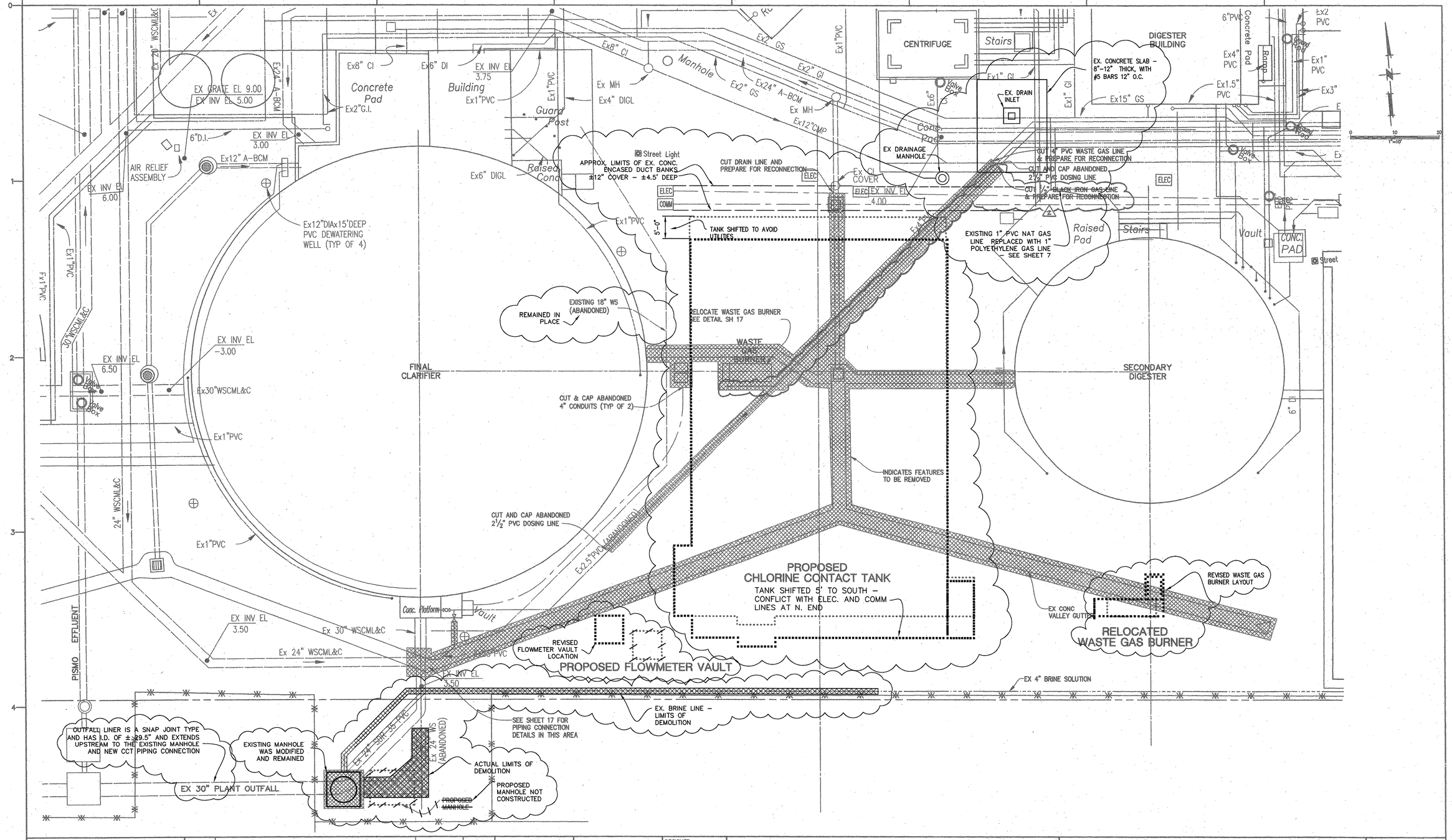
SITE PLAN

FILE NAME

JOB NO. 015023.00

DATE JUNE 2004

SHEET 5 OF 26



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NO.	REVISION	DATE	BY
2	ADDENDUM 2	SEPT. 2004	GKC

0:\01\01502300mu\SH-06revised.dwg 9-28-04 11:15:00 AM

SCALES

0 ——— 1"

0 ——— 25mm

IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.

REGISTERED PROFESSIONAL ENGINEER JOHN M. WICKS No. 31044 Exp. 3/31/06 CIVIL STATE OF CALIFORNIA 9/28/04

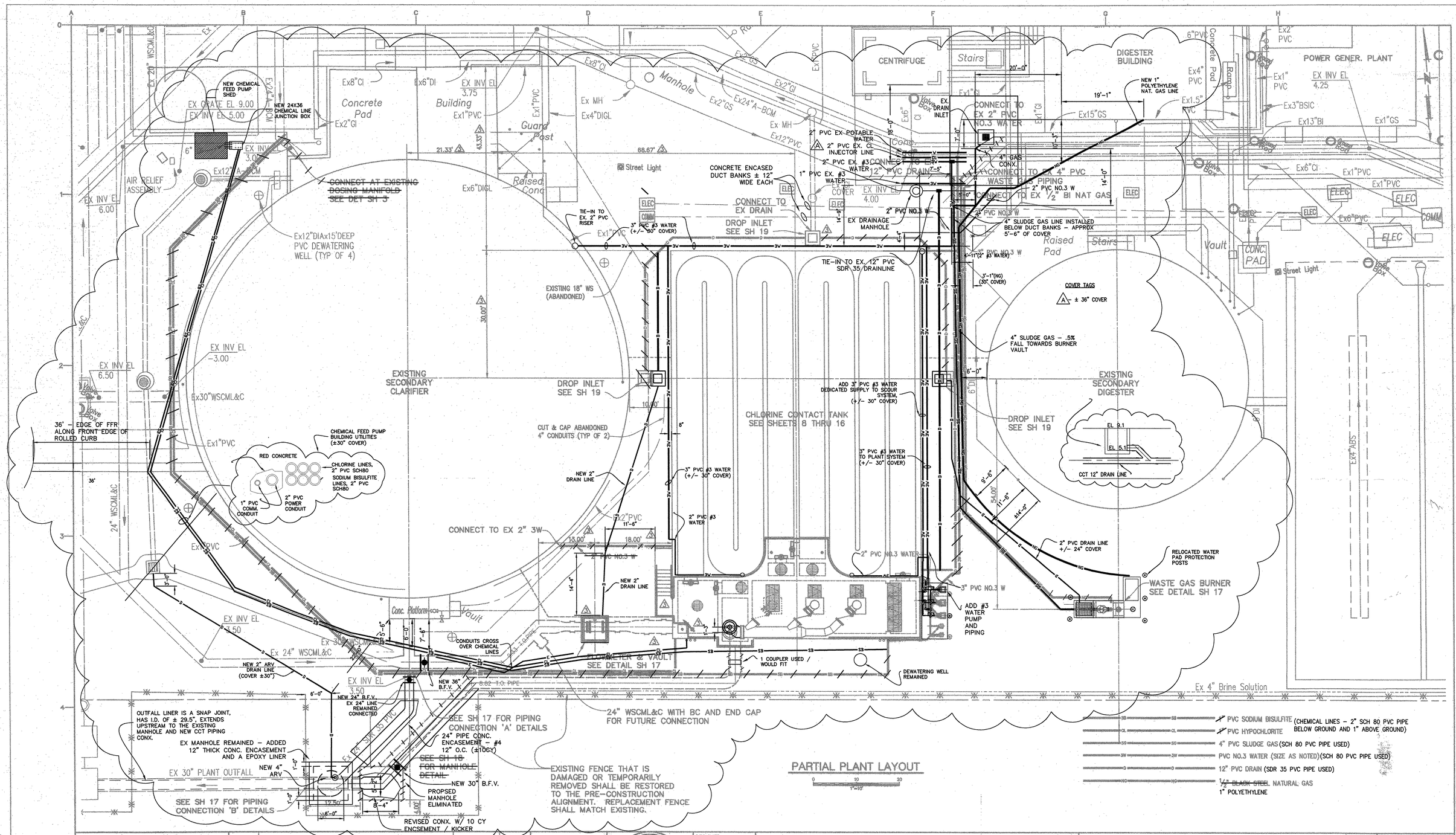
DESIGNED	HLH
DRAWN	LLK
CHECKED	JMW

SO. SAN LUIS OBISPO COUNTY SANITATION DISTRICT
SAN LUIS OBISPO COUNTY, CALIFORNIA
CHLORINE CONTACT TANK / EFFLUENT PUMP STATION

Kennedy/Jenks Consultants
PALO ALTO, CALIFORNIA

PARTIAL PLANT LAYOUT EXISTING CONDITION DEMOLITION PLAN

FILE NAME	
JOB NO.	015023.00
DATE	JUNE 2004
SHEET	6 OF 26



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NO.	REVISION	DATE	BY
1	RELOCATED CHLORINE CONTACT TANK STRUCTURE	MARCH 2005	GKC
2	ADDENDUM 2	SEPT. 2004	GKC

0:\01\01502300ms\SH-07cotreloc.dwg 3-18-05 10:17:58 AM

SCALES
0 1"
0 25mm
IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.

REGISTERED PROFESSIONAL ENGINEER JOHN M. WYCKOFF No. 31019 Exp. 3/31/06 CIVIL STATE OF CALIFORNIA 8/17/05

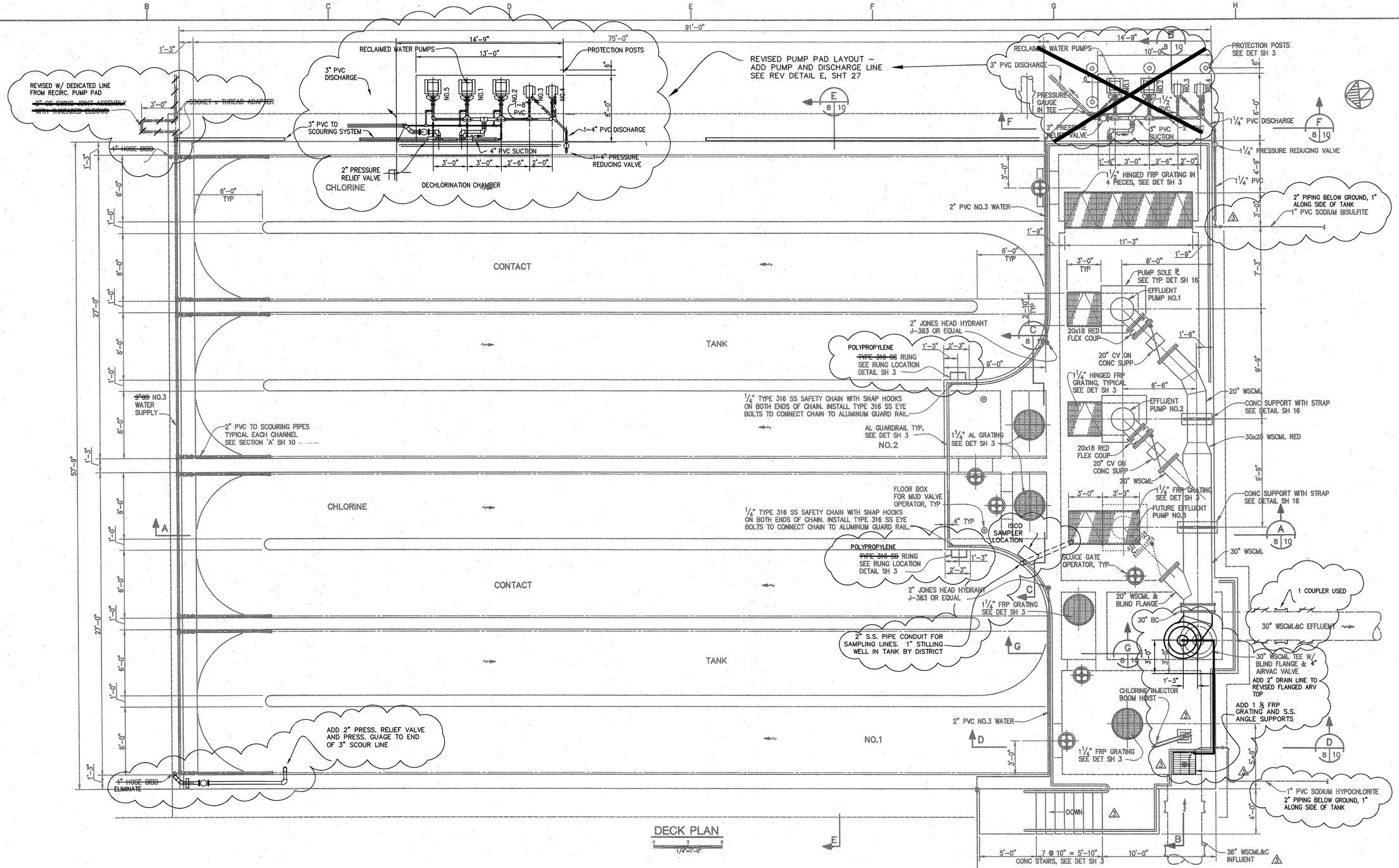
DESIGNED HLH
DRAWN LLK
CHECKED JMW

SO. SAN LUIS OBISPO COUNTY SANITATION DISTRICT
SAN LUIS OBISPO COUNTY, CALIFORNIA
CHLORINE CONTACT TANK / EFFLUENT PUMP STATION

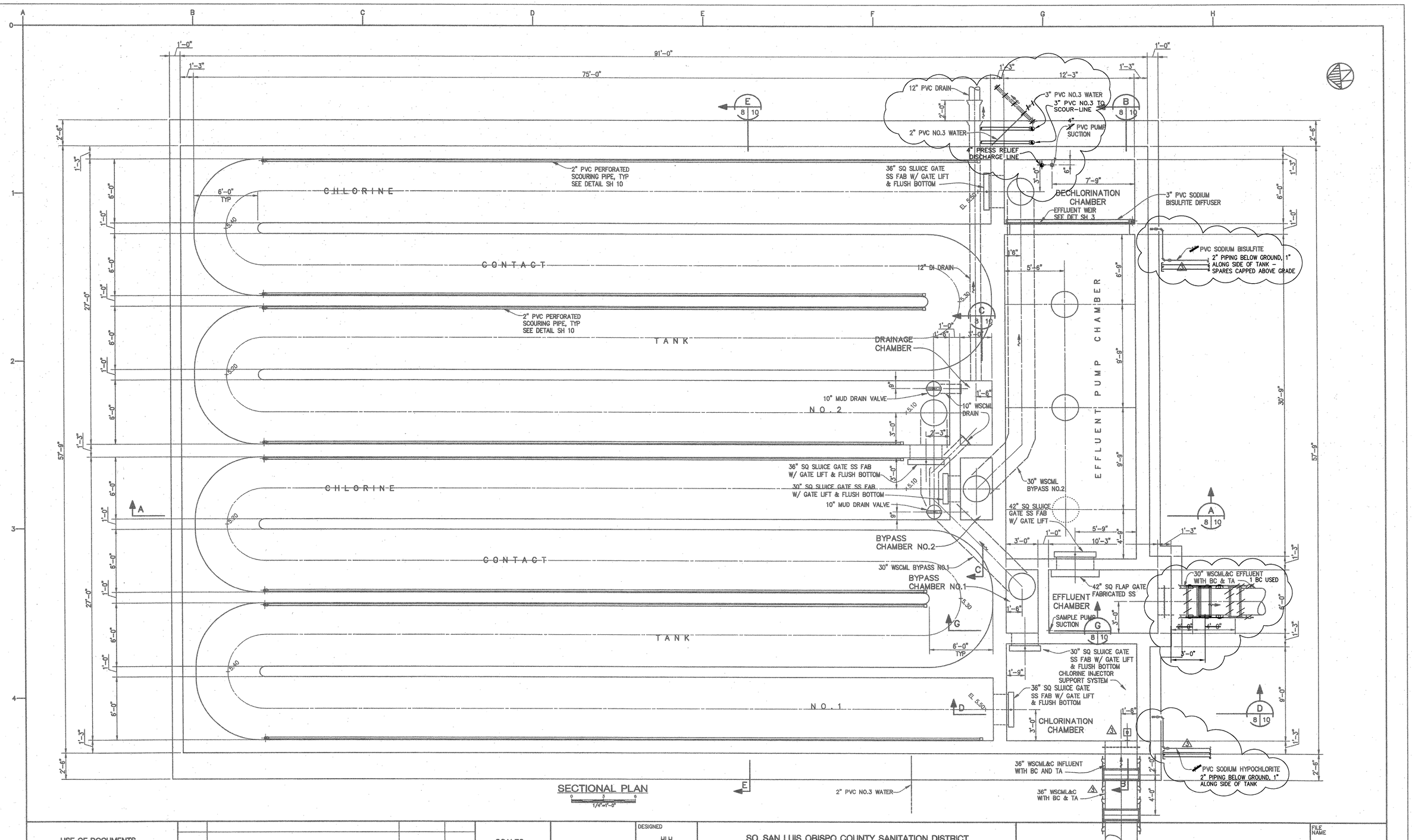
Kennedy/Jenks Consultants
PALO ALTO, CALIFORNIA

PARTIAL PLANT LAYOUT

FILE NAME
JOB NO. 015023.00
DATE JUNE 2004
SHEET 7 OF 26



USE OF DOCUMENTS					SCALES	John M. Wyckoff C 31019	DESIGNED HLH	SO. SAN LUIS OBISPO COUNTY SANITATION DISTRICT SAN LUIS OBISPO COUNTY, CALIFORNIA CHLORINE CONTACT TANK / EFFLUENT PUMP STATION	CHLORINE CONTACT TANK PIPEWORK AND EQUIPMENT DECK PLAN	FILE NAME
THIS DOCUMENT, INCLUDING THE INCORPORATED DESIGNS, IS AN INSTRUMENT OF SERVICE FOR THIS PROJECT AND SHALL NOT BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF KENNEDY/JENKS CONSULTANTS.					0 1"		DRAWN LLK			JOB NO. 015023.00
	1	RELOCATED CHLORINE CONTACT TANK STRUCTURE	MARCH 2005	GKC	0 25mm		CHECKED JMW	Kennedy/Jenks Consultants PALO ALTO, CALIFORNIA		DATE JUNE 2004
	2	REVISED SHEET	SEPT. 04	GKC	IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.					SHEET 8 OF 26
O:\01\01502300nu\SH-08cctreloc.dwg 4-01-05 09:03:01 AM	NO.	REVISION	DATE	BY						



USE OF DOCUMENTS

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NO.	REVISION	DATE	BY
3	RELOCATED CHLORINE CONTACT TANK STRUCTURE	MARCH 2005	GKC

SCALES

0 1"

0 25mm

IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.

John M. Wyckoff
C 31019

DESIGNED HLH
DRAWN LLK
CHECKED JMW

SO. SAN LUIS OBISPO COUNTY SANITATION DISTRICT
SAN LUIS OBISPO COUNTY, CALIFORNIA
CHLORINE CONTACT TANK / EFFLUENT PUMP STATION

Kennedy/Jenks Consultants
PALO ALTO, CALIFORNIA

CHLORINE CONTACT TANK PIPEWORK AND EQUIPMENT SECTIONAL PLAN

FILE NAME

JOB NO. 015023.00

DATE JUNE 2004

SHEET 9 OF 26

O:\01\01502300ms\SH-09cctrloc.dwg 4-01-05 09:02:33 AM

CHLORINE INJECTOR BOOM HOIST
SIDE HANDLES AND RISING STEMS TYPICAL ALL LOCATIONS
SLUICE GATE OPERATORS
AL GUARDRAIL SEE DET SH 3
EL 16.00
NWL EL 12.50±
CHLORINATION CHAMBER
EL 5.50
36" SQ SLUICE GATE SS FAB W/ GATE LIFT & FLUSH BOTTOM

PVC PIPE ~~GS PIPE~~ TYPICAL | PVC PIPE TYPICAL
2" SV TYP
2" PVC
2" BFV TYP
℄ EL 14.00
~~1" STAINLESS STEEL BV~~
~~1" CAMLOCK~~
PIPE SUPPORT
EL 16.00
EL ~~15.00~~ 16.00 CORNER FILLET
NWL EL 12.50±
EL 5.50
GRAVEL PAD TYPICAL

CHLORINE CONTACT TANK NO.1
2" PVC PERFORATED SCOURING PIPE IN EACH CHANNEL, SEE TYP DET THIS SH
TOC VARIES ALONG ℄ OF CHANNEL, FROM EL 5.50 AT HP TO EL 5.10 AT DRAIN
EL VARIES – 5.66 TO 5.26
~~TOC EL 5.66~~ AT WALLS

ADDITIONAL RECIRC. PUMP
4" PRESSURE RELIEF PIPING TO DECHLORINATION CHAMBER
2" PRESSURE RELIEF VALVE
REV. DISCHARGE PIPING TO AVOID SUCTION LINE
1 ½" PVC DISCHARGE PIPING
PRESSURE GAUGE
1~3" PVC TO PLANT
1~3" PVC TO SCOUR SYSTEM
SECTION F – REV PUMP PAD DETAIL

SIDE HANDLES AND RISING STEMS TYPICAL
SLUICE GATE OPERATORS
AL GUARDRAIL SEE DET SH 3
EFFLUENT PUMP
20" WSCML
30" WSCML
EL 16.00
1'-0"
10'-6"
BYPASS CHAMBER NO.2
EFFLUENT PUMP CHAMBER
EL 5.50
36" SQ SLUICE GATE SS FAB W/ GATE LIFT & FLUSH BOTTOM
10" DRAIN MUD VALVE NRS W/ FLOOR BOX
30" WSCML BYPASS NO.1
30" WSCML BYPASS NO.2

SECTION D 8|10
0 3 6
1/4"=1'-0"

SIDE HANDLES AND RISING STEMS TYPICAL ALL LOCATIONS
SLUICE GATE OPERATORS
AL GUARDRAIL SEE DET SH 3
EL 16.00
CHLORINE CONTACT TANK NO.1
NWL EL 12.50±
BYPASS CHAMBER NO.2
DRAINAGE CHAMBER
CHLORINE CONTACT TANK NO.2
NWL EL 12.50±
10" WS DRAIN CC–TANK 1
EL 3.20
10" WS DRAIN CC–TANK 2
12" DI DRAIN TO HEADWORKS INV EL 3.20
30" WSCML BYPASS NO.1
30" WSCML BYPASS NO.2

S.S UNISTRUT W/ PIPE CLAMPS
2" PVC PERFORATED SCOURING PIPE, WITH 3/8"ø HOLES AT 60°cc ORIENTED AS SHOWN, SECURED TO WALL.
2"
6"
45°
2" PVC SCOURING PIPE DETAIL
0 1
1"=1'-0"

SECTION A 8|10
0 3 6
1/4"=1'-0"

4" ARV WITH BUTTERFLY VALVE AND FLANGED TOP
30" WSCML TEE W/ BLIND FLANGE & AIR–VAC VALVE
NEW 2" ARV DRAIN LINE
FUTURE EFFLUENT PUMP NO.3
AL GUARDRAIL SEE DET SH 3
EFFLUENT PUMP NO.2
EFFLUENT PUMP NO.1
AL GUARDRAIL SEE DET SH 3
EL 16.00
RECLAIMED WATER PUMPS
CHLORINATION CHAMBER
CHLORINE INJECTOR
EFFLUENT CHAMBER
42" SQ SS FLAP GATE FABRICATED
42" SQ SLUICE GATE SS FAB W/ GATE LIFT
EL 5.50
E F F L U E N T P U M P C H A M B E R
TOW EL 12.00
ACTUAL 1'-10" 1'-3" TYP
EFFLUENT WEIR EL 12.25 SEE DET SH 3
DECHLORINATION CHAMBER
℄ EL 12.25
1'-0"
10'-6"
6'-6"
4" S.S. ~~3" PVC~~ SUCTION PIPE WITH FOOT VALVE
EL 5.50
1'-3"
1/4" SCREEN REMOVED
30" SQ SLUICE GATE SS FAB W/ GATE LIFT & FLUSH BOTTOM
30" WSCML BYPASS NO.1
30" WSCML BYPASS NO.2
12" PVC DRAIN TO HEADWORKS INV EL 3.20
12" DI DRAIN INV EL 3.20
GRAVEL PAD TYPICAL

SECTION C 8|10
0 3 6
1/4"=1'-0"

PRESSURE GAUGE
1" PVC PUMP DISCHARGE
3" PVC
2" PVC
1¼" PVC PUMP DISCHARGE
℄ EL 13.50
℄ EL 13.00
℄ EL 12.25
EL 11.50
3" PVC TO PLANT USE
2" PRESSURE RELIEF VALVE
ORIFICE PLATE
~~SEE ABOVE REVISED DETAIL AND REVISED DETAIL E, SHEET 27~~

SECTION F 8|10
0 3 6
1/4"=1'-0"

ISCO SAMPLER
EL 16.00
DIST. INSTALLED 1" PVC STILLING WELL FOR SAMPLING PROBE
BYPASS CHAMBER NO.1
EFFLUENT CHAMBER
½" PVC SAMPLE PUMP ~~SUCTION PIPING~~
EL 5.50

SECTION G 8|10
0 3 6
1/4"=1'-0"

SECTION B 8|10
0 3 6
1/4"=1'-0"

EL 16.00
EL 15.00
NWL EL 12.50±
10'-6"
1'-3"
EL 5.50
CHLORINE CONTACT TANK NO. 1
2" PVC PERFORATED SCOURING PIPE IN EACH CHANNEL, SEE TYP DET THIS SH
EL'S VARY AT WALLS FROM 5.66 TO 5.26 ~~EL 5.50 AT WALLS TYPICAL~~
CHLORINE CONTACT TANK NO. 2
10'-6" TYP
9'-6"
℄ CHANNEL VARIES FROM EL 5.50 TO EL 5.10, SEE SH 9

SECTION E 8|10
0 3 6
1/4"=1'-0"

3	RELOCATED CHLORINE CONTACT TANK STRUCTURE	MARCH 2005	GKC
NO.	REVISION	DATE	BY

USE OF DOCUMENTS
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O:\01\01502300mu\SH-10cctreloc.dwg 4-01-05 09:02:07 AM

SCALES
0 1"
0 25mm
IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.

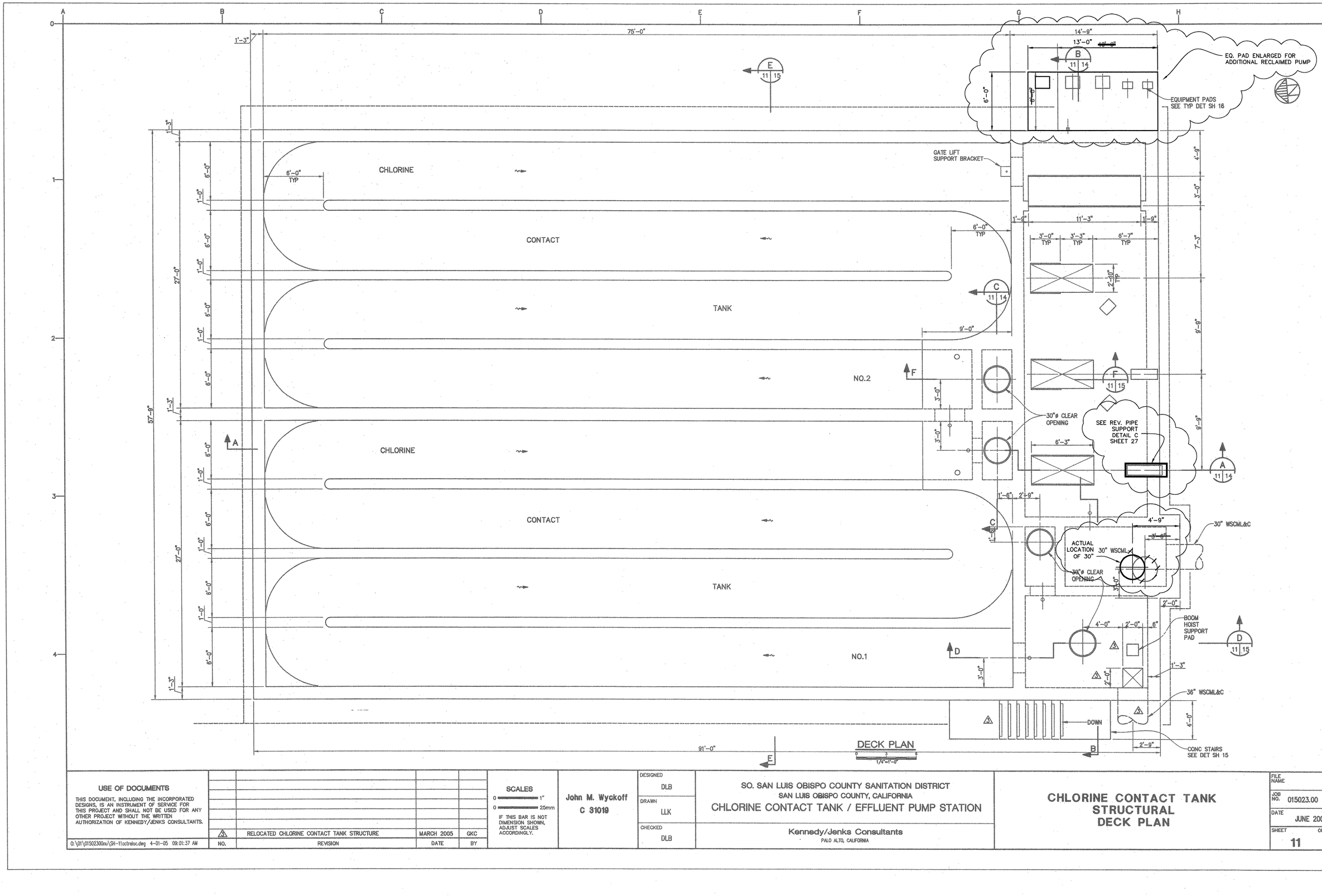
John M. Wyckoff
C 31019

DESIGNED HLH
DRAWN LLK
CHECKED JMW

SO. SAN LUIS OBISPO COUNTY SANITATION DISTRICT
SAN LUIS OBISPO COUNTY, CALIFORNIA
CHLORINE CONTACT TANK / EFFLUENT PUMP STATION
Kennedy/Jenks Consultants
PALO ALTO, CALIFORNIA

CHLORINE CONTACT TANK PIPEWORK AND EQUIPMENT SECTIONS

FILE NAME
JOB NO. 015023.00
DATE JUNE 2004
SHEET 10 OF 26



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NO.	REVISION	DATE	BY
5	RELOCATED CHLORINE CONTACT TANK STRUCTURE	MARCH 2005	GKC

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SCALES
0 1"
0 25mm
IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.

John M. Wyckoff
C 31019

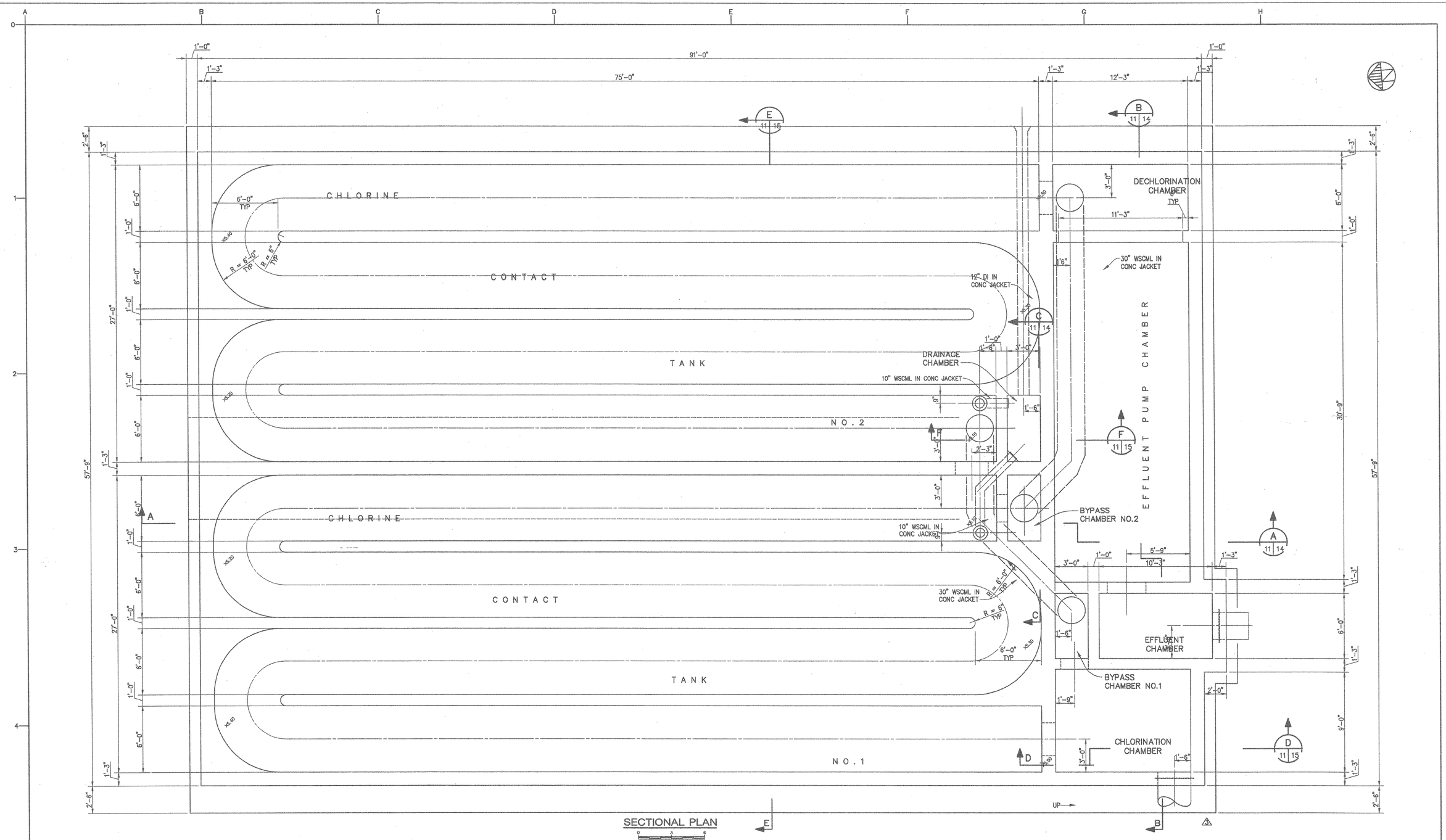
DESIGNED DLB
DRAWN LLK
CHECKED DLB

SO. SAN LUIS OBISPO COUNTY SANITATION DISTRICT
SAN LUIS OBISPO COUNTY, CALIFORNIA
CHLORINE CONTACT TANK / EFFLUENT PUMP STATION

Kennedy/Jenks Consultants
PALO ALTO, CALIFORNIA

CHLORINE CONTACT TANK STRUCTURAL DECK PLAN

FILE NAME
JOB NO. 015023.00
DATE JUNE 2004
SHEET 11 OF 26



SECTIONAL PLAN

0 3 6
1/4"=1'-0"

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NO.	REVISION	DATE	BY
3	RELOCATED CHLORINE CONTACT TANK STRUCTURE	MARCH 2005	GKC

SCALES
0 ——— 1"
0 ——— 25mm
IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.

John M. Wyckoff
C 31019

DESIGNED DLB
DRAWN LLK
CHECKED DLB

SO. SAN LUIS OBISPO COUNTY SANITATION DISTRICT
SAN LUIS OBISPO COUNTY, CALIFORNIA
CHLORINE CONTACT TANK / EFFLUENT PUMP STATION

Kennedy/Jenks Consultants
PALO ALTO, CALIFORNIA

CHLORINE CONTACT TANK STRUCTURAL SECTIONAL PLAN

FILE NAME
JOB NO. 015023.00
DATE JUNE 2004
SHEET 12 OF 26

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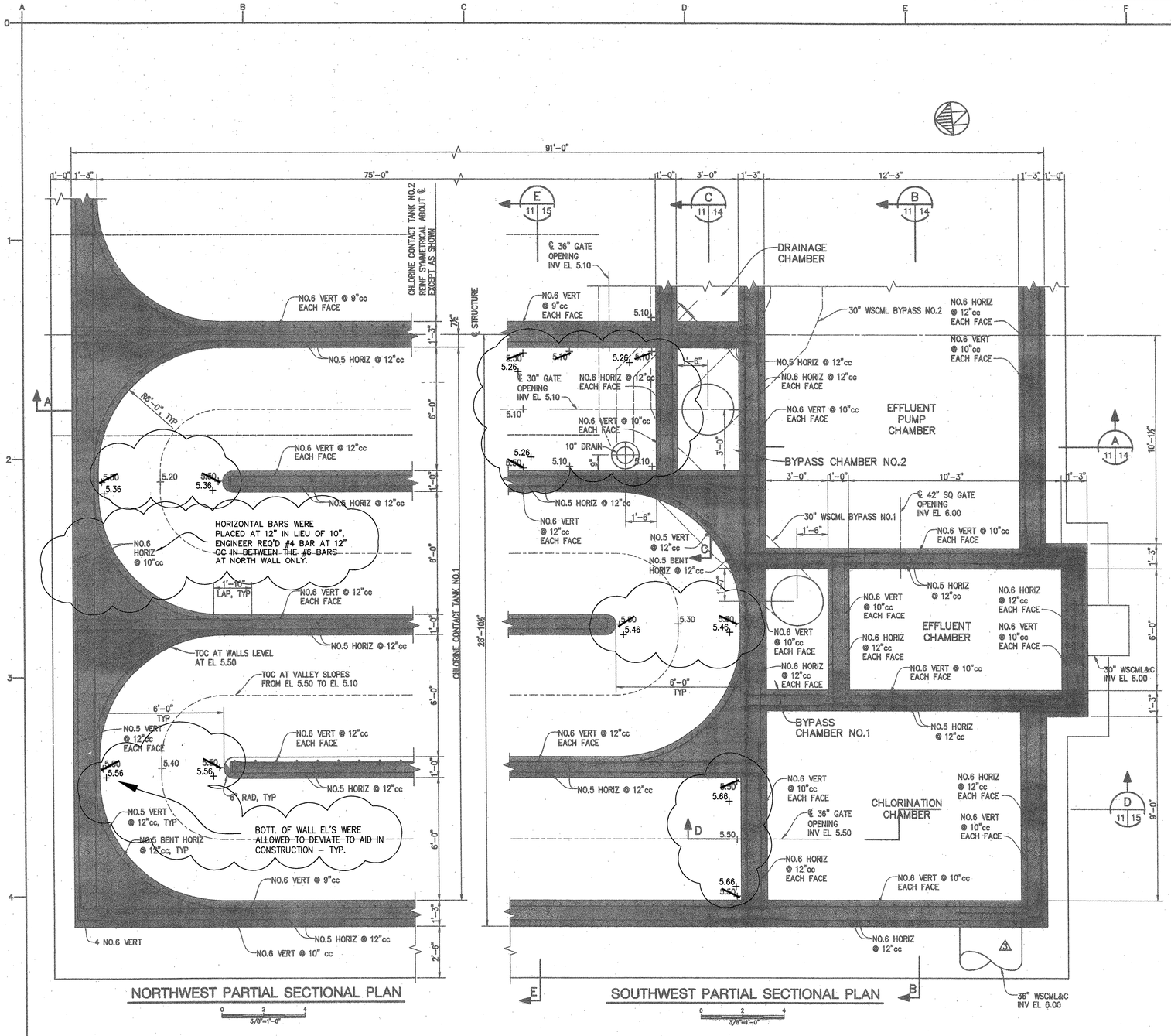

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NO.	REVISION	DATE	BY
3	RELOCATED CHLORINE CONTACT TANK STRUCTURE	MARCH 2005	GKC

C:\01\01502300mu\SH-13ctrleloc.dwg 4-01-05 08:59:19 AM

SCALES
0 1"
0 25mm
IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.

Donald L. Barraza
C 45483

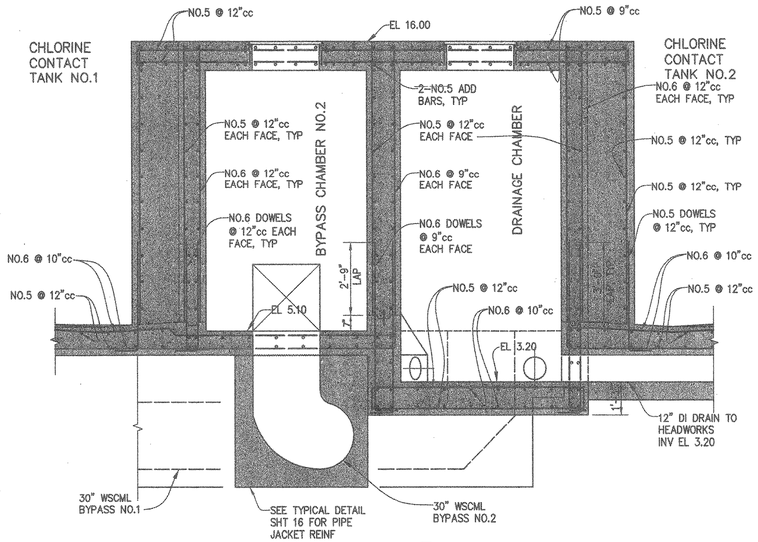
DESIGNED DLB
DRAWN LLK
CHECKED DLB

SO. SAN LUIS OBISPO COUNTY SANITATION DISTRICT
SAN LUIS OBISPO COUNTY, CALIFORNIA
CHLORINE CONTACT TANK / EFFLUENT PUMP STATION

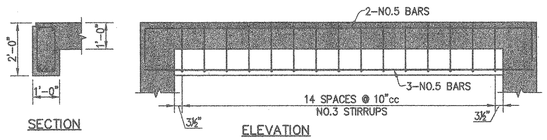
Kennedy/Jenks Consultants
PALO ALTO, CALIFORNIA

CHLORINE CONTACT TANK STRUCTURAL PARTIAL SECTIONAL PLANS

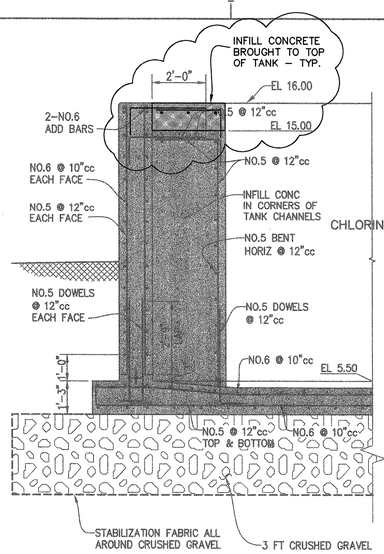
FILE NAME
JOB NO. 015023.00
DATE JUNE 2004
SHEET 13 OF 26

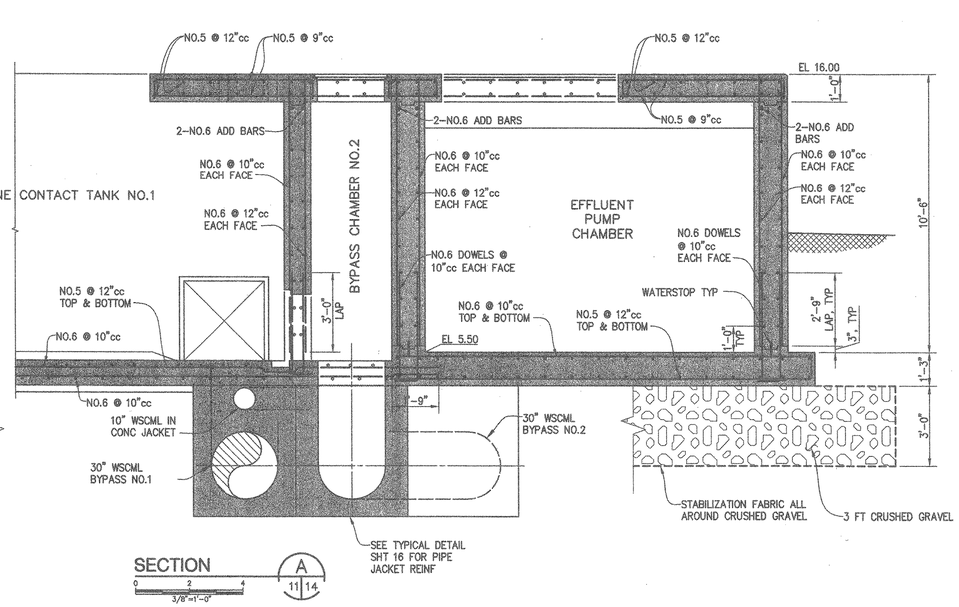


SECTION C
0 2 4
3/8"=1'-0"
11 14

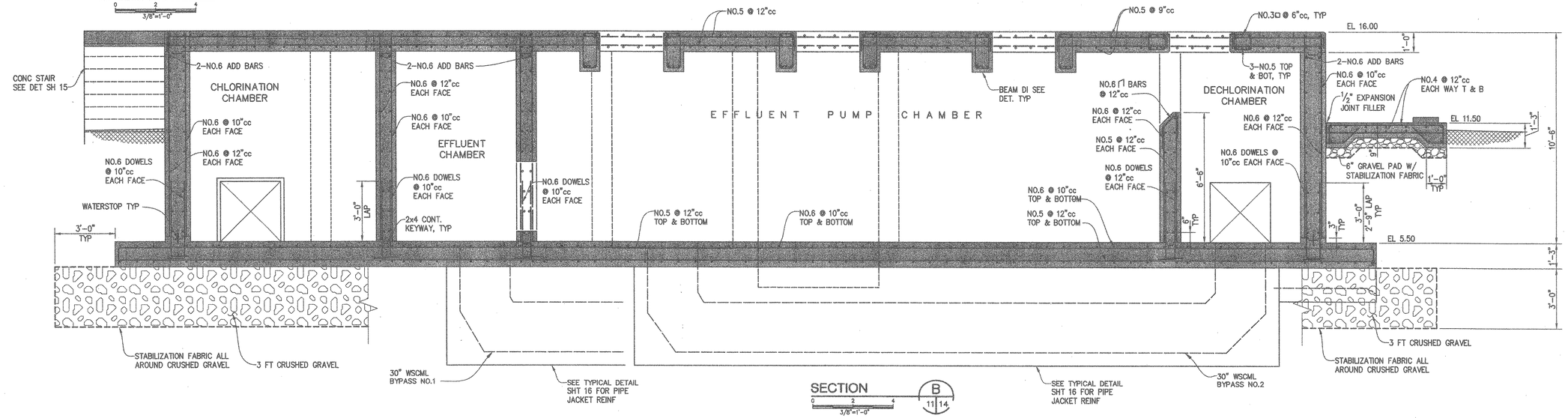


BEAM D1 DETAIL
0 2 4
3/8"=1'-0"





SECTION A
0 2 4
3/8"=1'-0"
11 14



SECTION B
0 2 4
3/8"=1'-0"
11 14

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NO.	REVISION	DATE	BY

SCALES
0 1"
0 25mm
IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.

REGISTERED PROFESSIONAL ENGINEER
DONALD LEE BARTZ
C45483
Exp. 12-31-06
CIVIL
STATE OF CALIFORNIA
6-18-04

DESIGNED DLB
DRAWN LLK
CHECKED DLB

SO. SAN LUIS OBISPO COUNTY SANITATION DISTRICT
SAN LUIS OBISPO COUNTY, CALIFORNIA
CHLORINE CONTACT TANK / EFFLUENT PUMP STATION

Kennedy/Jenks Consultants
PALO ALTO, CALIFORNIA

CHLORINE CONTACT TANK STRUCTURAL SECTIONS A, B & C

FILE NAME
JOB NO. 015023.00
DATE JUNE 2004
SHEET 14 OF 26

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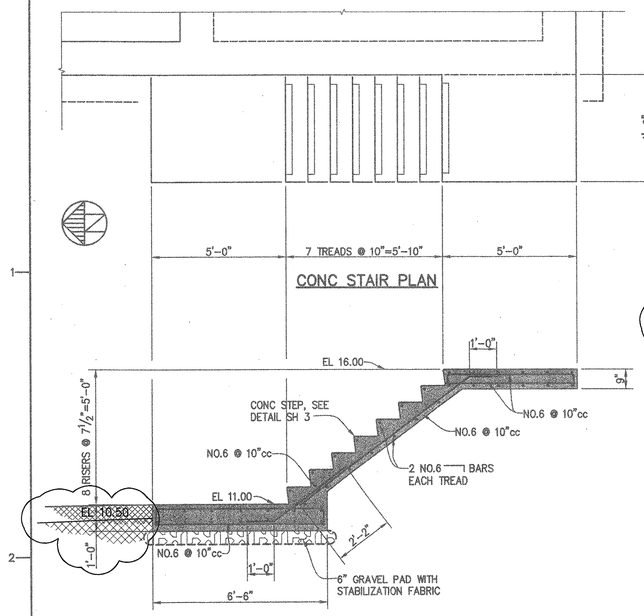
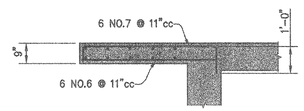
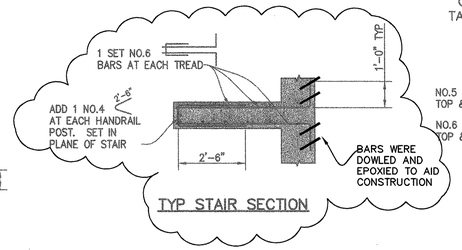
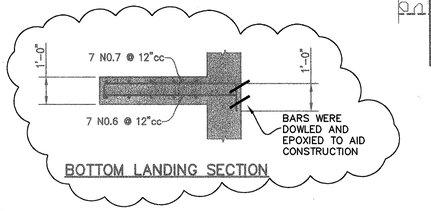


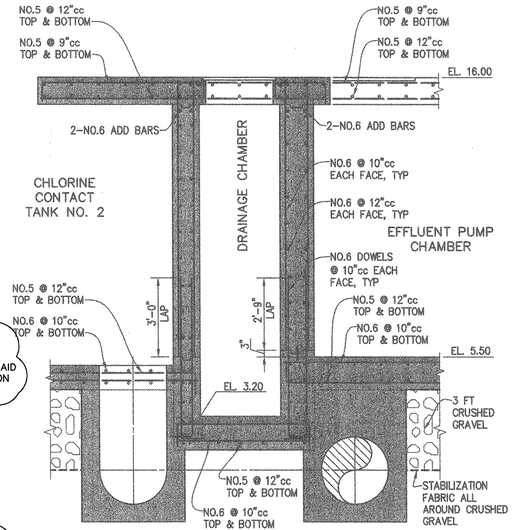




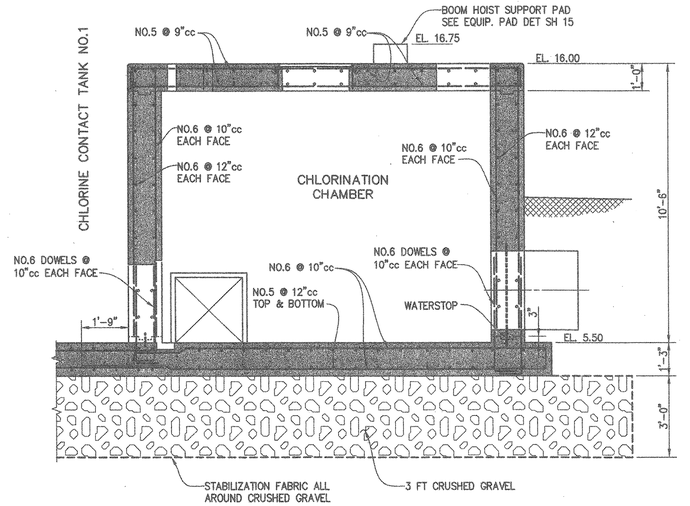


CONCRETE STAIR DETAILS

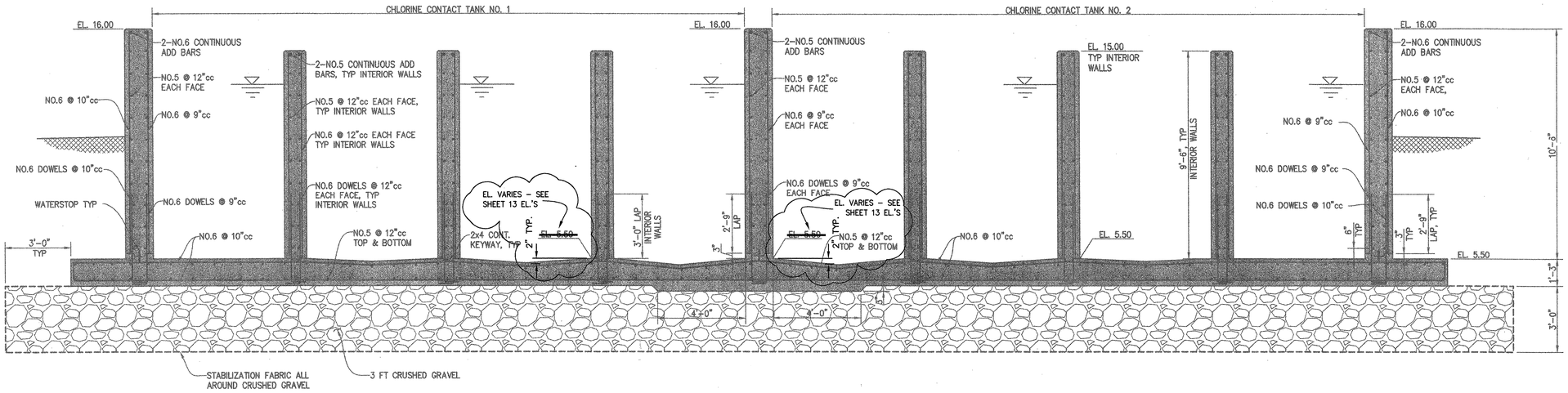
0 2 4
3/8"=1'-0"



SECTION F
0 2 4
3/8"=1'-0"
11 15



SECTION D
0 2 4
3/8"=1'-0"
11 15



SECTION E
0 2 4
3/8"=1'-0"
11 15

NO.	REVISION	DATE	BY

SCALES
0 1"
0 25mm
IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.

REGISTERED PROFESSIONAL ENGINEER DONALD LEE BARELA C45483 Exp. 12-31-06 STATE OF CIVIL

6-18-04

DESIGNED	DLB
DRAWN	LLK
CHECKED	DLB DLB

SO. SAN LUIS OBISPO COUNTY SANITATION DISTRICT
SAN LUIS OBISPO COUNTY, CALIFORNIA
CHLORINE CONTACT TANK / EFFLUENT PUMP STATION

Kennedy/Jenks Consultants
PALO ALTO, CALIFORNIA

CHLORINE CONTACT TANK STRUCTURAL SECTIONS D, E, F & CONC STAIR

FILE NAME	
JOB NO.	015023.00
DATE	JUNE 2004
SHEET	15 OF 26

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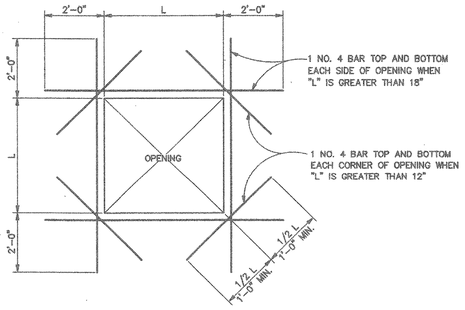
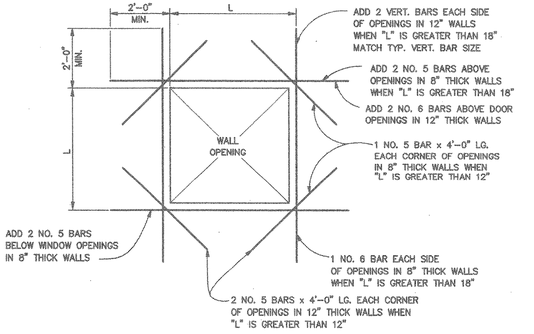


NOTE: MINIMUM SIZE AND NUMBER OF ADD BARS AT ALL SUSPENDED SLAB OPENINGS SHALL BE AS SHOWN.

SUSPENDED SLAB OPENING ADD BARS

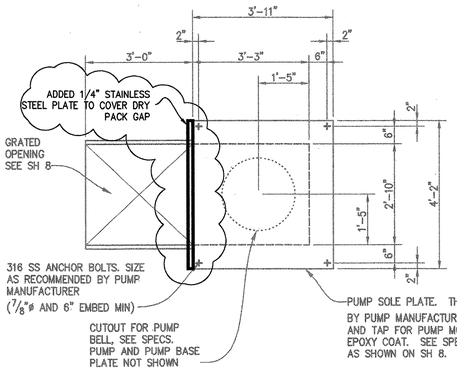
NO SCALE



NOTE: MINIMUM SIZE AND NUMBER OF ADD BARS AT WALL OPENING SHALL BE AS SHOWN.

WALL OPENING ADD BARS

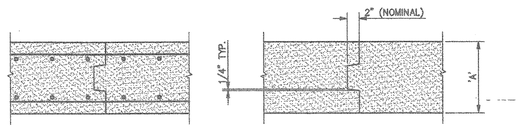
NO SCALE



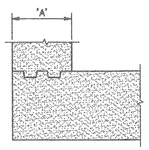
TYPICAL PUMP SOLE PLATE DETAIL (2 REQ'D)

0 3

1/2"=1'-0"



NOTE:
REINFORCING STEEL IS CONTINUOUS THROUGH CONSTRUCTION JOINTS

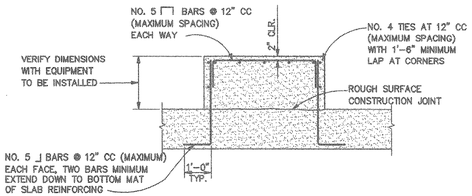


'A'	NOMINAL KEY SIZE
UP TO 8"	1 – 2"x3" KEY
9" TO 12"	1 – 2"x4" KEY
13" TO 18"	1 – 2"x6" KEY
19" TO 25"	2 – 2"x4" KEYS
36" AND OVER	2 – 2"x8" KEYS

NOTE:
NUMBER AND SIZE OF KEYS SHOWN APPLY BOTH TO VERTICAL AND HORIZONTAL JOINTS.

LONGITUDINAL KEYS

NO SCALE



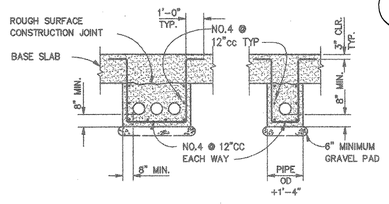
NOTE: EQUIPMENT ANCHOR BOLTS ARE NOT SHOWN. VERIFY PLAN DIMENSIONS WITH EQUIPMENT MANUFACTURER.
CONC. PAD SHALL EXTEND A MINIMUM OF 3" BEYOND EQUIPMENT ANCHOR BOLTS.
NO. 4 TIES SHALL BE LOCATED OUTSIDE OF EQUIPMENT ANCHOR BOLTS.

TYPICAL EQUIPMENT PAD REINFORCING DETAIL

NO SCALE

CONCRETE JACKET NOTES

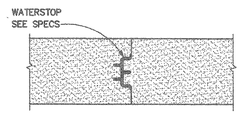
1. CONCRETE JACKET LONGITUDINAL REINFORCEMENT REQUIREMENTS
   - A. ALL BARS SHALL BE CONTINUOUS AND/OR HAVE 36 DIAMETER LAPS AT JUNCTIONS WITH OTHER PIPE JACKETS.
   - B. SIDE BARS SHALL BE CONTINUOUS AROUND THE END OF THE JACKET.
   - C. BOTTOM BARS SHALL BEND UP INTO THE BASE SLAB AT THE ENDS OF THE JACKETS AND SHALL HAVE A 1'-0" LONG 90° HOOK AT THE TOP.
2. WHERE PIPE ALIGNMENT IS VERTICAL, THE CONCRETE SECTION SHALL BE SQUARE WITH AN 8" MINIMUM CONCRETE JACKET THICKNESS AND SHALL BE REINFORCED WITH NO.4 @ 12"CC (4–NO.4 BARS MINIMUM) VERTICAL BARS AND NO. 4 TIES @ 12"CC.



MULTIPLE PIPES SINGLE PIPE

CONC JACKET DETAILS

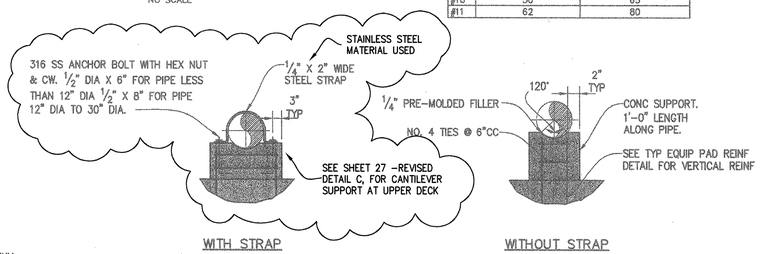
NO SCALE



TYPE B–2

TYPICAL WATERSTOP DETAIL

NO SCALE



WITH STRAP WITHOUT STRAP

SEE SUPPORT AT RIGHT FOR ADDITIONAL DETAILS

CONC SUPPORT DETAILS

NO SCALE

CONSTRUCTION NOTES

1. CONSTRUCTION UNDER THIS CONTRACT INVOLVES EXPANSION AND/OR MODIFICATION OF FACILITIES THAT ARE A PART OF AN EXISTING, OPERATING TREATMENT PLANT. THE TREATMENT PLANT MUST MEET STATE AND FEDERAL REGULATORY AGENCY REQUIREMENTS AT ALL TIMES. THE CONTRACTOR MUST SCHEDULE ITS WORK AND OPERATIONS WITH THE OWNER'S OPERATION OF THE TREATMENT PLANT SO THAT THESE REQUIREMENTS ARE MET. THE OPERATION OF SOME FACILITIES INVOLVED WITH THIS PROJECT MAY NEED TO BE MAINTAINED AT ALL TIMES. SOME FACILITIES MAY NEED TO BE SHUT DOWN IN ORDER TO ALLOW THE CONSTRUCTION OF THE SPECIFIED IMPROVEMENTS. SHUTDOWNS MAY NEED TO BE PERFORMED DURING PERIODS OF MINIMUM USE WHICH MAY NECESSITATE WORK AT NIGHT OR ON WEEKENDS.
2. THE CONTRACTOR SHALL VERIFY ALL FEATURES (INCLUDING DIMENSIONS) OF THE EXISTING FACILITIES AT THE JOB SITE PRIOR TO STARTING WORK THAT INVOLVES THE FACILITIES.
3. THE DESIGN SHOWN ON THESE DRAWINGS IS BASED UPON THE USE OF THE FIRST–NAMED ITEMS SPECIFIED IN THE SPECIFICATIONS INCLUDING ALL SPECIFIED CUSTOM MODIFICATIONS, SPECIAL FEATURES, ACCESSORIES, AND OPTIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS REQUIRED TO MODIFY THE DESIGN TO ACCOMMODATE ITEMS OTHER THAN THE FIRST–NAMED ITEMS.
4. PRIOR TO EXCAVATING OR TRENCHING, THE CONTRACTOR SHALL UNCOVER ALL EXISTING UNDERGROUND UTILITIES THAT MAY BE EFFECTED BY THE EXCAVATING OR TRENCHING TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATIONS OF THE UTILITIES. THIS SHALL INCLUDE ALL CROSSINGS OF THE EXISTING UTILITIES, ANTICIPATED INTERFERENCES WITH THEM, AND POINTS OF CONNECTION TO THEM. SUBMIT DOCUMENTATION OF THE LOCATIONS OF THE EXISTING UTILITIES TO THE ENGINEER.
5. THE CONTRACTOR SHALL PROTECT FROM DAMAGE ALL EXISTING FACILITIES DESIGNATED TO REMAIN. THE CONTRACTOR SHALL IMPLEMENT ALL PRECAUTIONS NECESSARY TO MEET THIS REQUIREMENT. THIS SHALL INCLUDE THE USE OF TEMPORARY SUPPORTS. IF DAMAGE SHOULD OCCUR, REPORT THE DAMAGE IMMEDIATELY TO THE OWNER OR ITS DESIGNATED REPRESENTATIVE AND REPAIR IT TO THE SATISFACTION OF THE ENGINEER.
6. CONSTRUCTION UNDER THIS CONTRACT MAY REQUIRE THE REMOVAL OF EXISTING STRUCTURAL SUPPORT SYSTEMS. THE CONTRACTOR SHALL INSTALL ADEQUATE SHORING AND FALSEWORK AS NECESSARY TO SUPPORT THE REMAINING STRUCTURE PRIOR TO THE REMOVAL OF THE EXISTING SUPPORT SYSTEMS.
7. PIPING THAT CONNECTS TO THE STRUCTURE SHALL BE ABLE TO ACCOMMODATE, WITHOUT DAMAGE, 2" MINIMUM STRUCTURE SETTLEMENT AFTER INSTALLATION AND BACKFILL.

TYPICAL STRUCTURAL NOTES

1. THESE NOTES SHALL APPLY TO ALL CONSTRUCTION INCLUDED IN THE PROJECT.
2. THE DESIGN AND CONSTRUCTION OF THIS PROJECT SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITION OF THE UNIFORM BUILDING CODE AND THE LATEST EDITIONS OF APPLICABLE LOCAL CODES.
3. THE CONSTRUCTION OF THE IMPROVEMENTS INCLUDED IN THIS PROJECT SHALL BE COORDINATED WITH FAVORABLY REVIEWED EQUIPMENT MANUFACTURER'S DRAWINGS. DIMENSIONS AND STRUCTURES SHALL CONFORM TO THE EQUIPMENT TO BE INSTALLED.
4. TYPICAL STRUCTURAL DETAILS SHOWN ON THESE DRAWINGS SHALL APPLY TO ALL CONSTRUCTION UNLESS OTHERWISE SHOWN OR NOTED.

REINFORCING STEEL BAR LAPS

BAR SIZE NO.	MINIMUM SPLICE LENGTH (INCHES) WALLS: VERT BARS SLABS: BOT. MAT	WALLS: HORIZ. BARS SLABS: TOP MAT
#3	16	18
#4	19	24
#5	23	30
#6	28	36
#7	33	42
#8	37	48
#9	42	55
#10	50	65
#11	62	80

CONCRETE NOTES

1. THESE NOTES SHALL APPLY TO ALL CONCRETE CONSTRUCTION INCLUDED IN THIS PROJECT.
2. ALL CONCRETE SHALL BE "CLASS A" DEVELOPING A COMPRESSIVE STRENGTH OF NOT LESS THAN 3500 P.S.I. IN 28 DAYS, UNLESS OTHERWISE NOTED.
3. CHAMFER ALL EXPOSED CONCRETE EDGES AND CORNERS 3/4–INCH, UNLESS OTHERWISE NOTED.
4. REINFORCING STEEL SHALL BE GRADE 60, DEFORMED BARS CONFORMING TO ASTM A–615. IN ADDITION TO THE ARRANGEMENTS AND CONFIGURATIONS SHOWN ON THESE DRAWINGS, REINFORCEMENT ARRANGEMENTS, DETAILS, SPACERS, AND SUPPORTS SHALL BE IN ACCORDANCE WITH THE LATEST ACI 315 DETAILING MANUAL. ALL SPLICES SHALL BE LAPPED A MINIMUM OF 1.7 TIMES THE TENSILE DEVELOPMENT LENGTH, UNLESS OTHERWISE SHOWN. SPLICES SHALL BE STAGGERED AND SHALL NOT BE LOCATED AT POINTS OF MAXIMUM STRESS. REINFORCING FOR SLABS AND BEAMS SHALL EXTEND INTO SUPPORTING STRUCTURES THE MINIMUM DISTANCES STIPULATED BY THE LATEST ACI 318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.
5. CONCRETE COVER FOR REINFORCING BARS, UNLESS OTHERWISE SHOWN OR NOTED, SHALL BE AS FOLLOWS:
   - SLABS AND FOOTINGS:
     - BOTTOM AND SIDE CAST AGAINST EARTH – 3"
     - FORMED SIDE AND TOP EXPOSED TO EARTH – 2 1/2"
     - TOP AND BOTTOM EXPOSED TO TANK (OR CHANNEL) INTERIOR ATMOSPHERE OR WEATHER– 2"
     - TOP AND BOTTOM, ALL OTHER EXPOSURES – 1 1/2"
   - WALLS:
     - INTERIOR FACE EXPOSED TO TANK (OR CHANNEL) INTERIOR ATMOSPHERE – 2 1/2"
     - INTERIOR FACE, ALL OTHER EXPOSURES – 1 1/2"
     - EXTERIOR FACE EXPOSED TO WEATHER – 2 1/2"
     - FORMED EXTERIOR FACE EXPOSED TO EARTH – 2 1/2"
   - BEAMS AND COLUMNS:
     - CAST AGAINST EARTH
       - PRINCIPLE REINFORCEMENT – 3 1/2"
       - STIRRUPS, SPIRALS AND TIES– 3"
     - EXPOSED TO TANK INTERIOR ATMOSPHERE, EARTH, WEATHER
       - PRINCIPLE REINFORCEMENT – 2 1/2"
       - STIRRUPS, SPIRALS AND TIES– 2"
     - ALL OTHER EXPOSURES
       - PRINCIPLE REINFORCEMENT – 2"
       - STIRRUPS, SPIRALS AND TIES– 1 1/2"
6. ALL CONCRETE STRUCTURES SUBJECT TO WATER PRESSURE (FROM SOURCES BOTH INTERNAL AND EXTERNAL TO THE STRUCTURE) SHALL BE WATERTIGHT. PROPER PRECAUTIONS AND CAREFUL WORKMANSHIP SHALL BE EXERCISED BY THE CONTRACTOR TO ASSURE THAT THIS REQUIREMENT IS MET.
7. THE LOCATIONS OF PERMISSIBLE CONSTRUCTION JOINTS ARE SHOWN ON THESE DRAWINGS. REINFORCING SHALL BE CONTINUOUS THROUGH EACH CONSTRUCTION JOINT AND CONCRETE SHALL BE PLACED IN ONE CONTINUOUS OPERATION BETWEEN THE JOINTS. PROPOSED ALTERNATE CONSTRUCTION JOINT LOCATIONS MAY BE SUBMITTED TO THE ENGINEER FOR CONSIDERATION. RECEIVE THE ENGINEER'S DECISION ON THE PROPOSED ALTERNATE LOCATIONS BEFORE STARTING FORM AND REINFORCING WORK.
8. AT CONSTRUCTION JOINTS, IN–PLACE CONCRETE SHALL BE: DENSE AND SOUND; SANDBLASTED TO EXPOSE FIRMLY EMBEDDED, CLEAN COARSE AGGREGATE; AND DAMPENED JUST PRIOR TO PLACING FRESH CONCRETE (REMOVE STANDING WATER). AT HORIZONTAL JOINTS, PLACE A 2– TO 6–INCH LIFT OF MODIFIED CONCRETE MIX (SPECIFIED CONCRETE MIX WITH ONLY ONE–HALF OF THE SPECIFIED COARSE AGGREGATE) PRIOR TO PLACING THE SPECIFIED CONCRETE MIX. PLACE THE FRESH CONCRETE BEFORE THE MODIFIED CONCRETE MIX HAS ATTAINED ITS INITIAL SET.
9. INSTALL WATERSTOP WHERE SHOWN ON THESE DRAWINGS. IN ADDITION, WHETHER SHOWN ON THESE DRAWINGS OR NOT, INSTALL WATERSTOP ALONG THE ENTIRE LENGTH OF ALL VERTICAL CONSTRUCTION JOINTS IN WALLS. WATERSTOP SHALL BE OF THE 3–RIB LABYRINTH TYPE AS SHOWN. ALL JOINTS IN WATERSTOP SHALL BE WELDED.
10. ALL EXISTING CONCRETE SURFACES AGAINST WHICH NEW CONCRETE OR GROUT IS TO BE PLACED SHALL BE ROUGHENED, CLEANED, AND COATED WITH AN EPOXY ADHESIVE COMPOUND. ROUGHEN TO A MINIMUM 1/4–INCH AMPLITUDE BY CHIPPING, BUSHHAMMERING, WATERBLASTING, ETC. AS FAVORABLY REVIEWED BY THE ENGINEER. REMOVE ALL LOOSE CONCRETE, DUST, DIRT, OR OTHER MATERIALS THAT WILL INHIBIT BONDING FROM THE ROUGHENED SURFACES. IMMEDIATELY PRIOR TO PLACING NEW CONCRETE OR GROUT, COAT THE CLEAN, ROUGH SURFACES WITH AN EPOXY ADHESIVE COMPOUND THAT MEETS THE REQUIREMENTS OF SPECIFICATION SECTION 03300. PLACE THE FRESH CONCRETE OR GROUT BEFORE THE COMPOUND SETS.
11. REMOVE EXISTING CONCRETE FROM THE AREAS INDICATED BY CHIPPING, WATERBLASTING, OR OTHER FAVORABLY REVIEWED MEANS. DO NOT CUT THE EXISTING REINFORCING UNLESS THE REINFORCING IS SPECIFICALLY SHOWN TO BE CUT. WHERE THE BOUNDARIES OF THE CONCRETE REMOVAL AREAS WILL BE VISIBLE, SAWCUT THE VISIBLE SURFACES OF THE EXISTING CONCRETE TO FORM CLEAN, STRAIGHT LINES ALONG THE BOUNDARIES.
12. WHERE EXISTING CONCRETE IS DESIGNATED TO BE REMOVED AND THE EXPOSED SURFACES OF THE REMOVAL AREA ARE TO BE LEFT VISIBLE, REMOVE THE EXISTING REINFORCING AT THE EXPOSED SURFACES AS REQUIRED BY THESE CONCRETE NOTES. THE EXPOSED CONCRETE SURFACES SHALL BE SMOOTH AND SHALL MATCH THE CONFIGURATION OF THE SURROUNDING CONCRETE. THE SURFACE SHALL BE MADE SMOOTH BY EITHER GRINDING OR GROUTING AS NECESSARY. GROUT SHALL BE NO LESS THAN 1/2 INCH THICK. THE EXPOSED SURFACE OF THE EXISTING CONCRETE SHALL BE PREPARED AS NECESSARY TO MEET THIS GROUT THICKNESS REQUIREMENT.
13. WHERE EXISTING BOLTS, REINFORCING, GUARDRAIL POSTS, PIPE STUBS, ANCHORS, ETC. EMBEDDED IN EXISTING CONCRETE ARE TO BE REMOVED, THEY SHALL BE REMOVED TO A LEVEL NO LESS THAN 1–1/2 INCHES BELOW THE SURFACE OF THE EXISTING CONCRETE. REMOVAL OF THE EMBEDDED ITEMS SHALL INCLUDE CHIPPING OF THE EXISTING CONCRETE FROM AROUND THE EMBEDDED ITEMS TO ALLOW THE ITEMS TO BE CUT OFF BELOW THE CONCRETE SURFACE. ALL HOLES AND POCKETS IN THE EXISTING CONCRETE CREATED AS A RESULT OF THE REMOVAL OF EMBEDDED ITEMS SHALL BE GROUTED FLUSH WITH THE ADJACENT CONCRETE SURFACE BY FIRST REMOVING ALL LOOSE AND DETERIORATED CONCRETE FROM THE HOLES AND POCKETS, APPLYING A FAVORABLY REVIEWED EPOXY ADHESIVE COMPOUND TO THE EXPOSED SURFACES, AND FILLING THE HOLES AND POCKETS WITH NON–SHRINK GROUT. SEE SPECIFICATION SECTION 03300.
14. REFER TO THE PIPEWORK AND EQUIPMENT DRAWINGS, TYPICAL DETAILS, AND EQUIPMENT MANUFACTURER'S DRAWINGS AND SPECIFICATIONS FOR THE REQUIRED LOCATIONS AND SIZES OF OPENINGS, SLEEVES, PIPES, CONDUITS, ANCHORS, PIPEWORK, AND EQUIPMENT TO BE FORMED, CAST, AND/OR EMBEDDED IN THE CONCRETE STRUCTURE.

NO.	REVISION	DATE	BY

SCALES

0 1"

0 25mm

IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.

REGISTERED PROFESSIONAL ENGINEER DONALD LEE BARRAZA C45483 Exp.12.31.06 CIVIL STATE OF CALIFORNIA

6-18-04

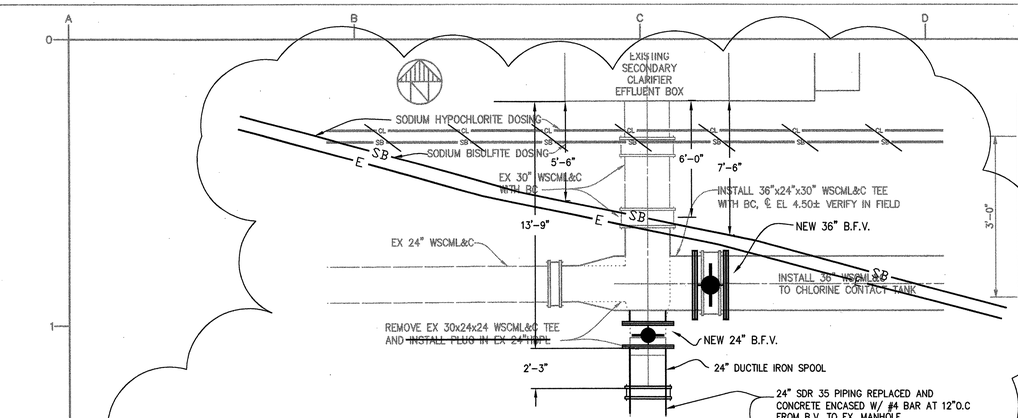
DESIGNED	DLE
DRAWN	LLK
CHECKED	DJB. DLB

SO. SAN LUIS OBISPO COUNTY SANITATION DISTRICT
SAN LUIS OBISPO COUNTY, CALIFORNIA
CHLORINE CONTACT TANK / EFFLUENT PUMP STATION

Kennedy/Jenks Consultants
PALO ALTO, CALIFORNIA

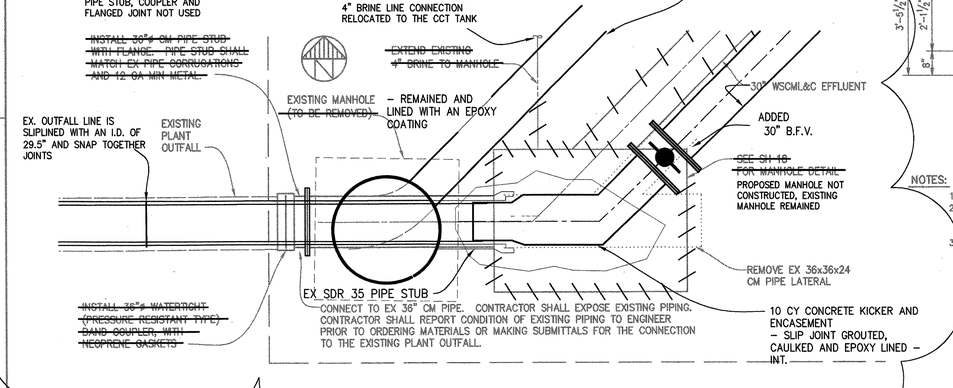
CHLORINE CONTACT TANK STRUCTURAL MISCELLANEOUS DETAILS

FILE NAME	
JOB NO.	015023.00
DATE	JUNE 2004
SHEET	16 OF 26



CONNECTION 'A' DETAIL

0 3 6
1/4"=1'-0"

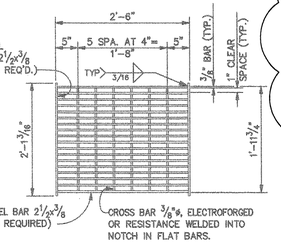


CONNECTION 'B' DETAIL

0 3 6
1/4"=1'-0"

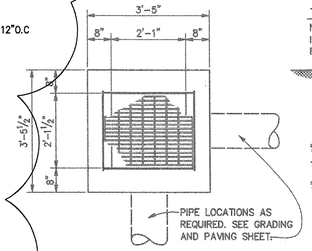
FRAME

SCALE: 3/4"=1'-0"



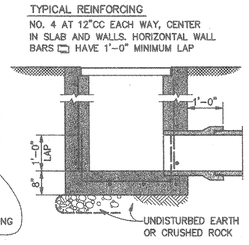
GRATE

SCALE: 3/4"=1'-0"



PLAN

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



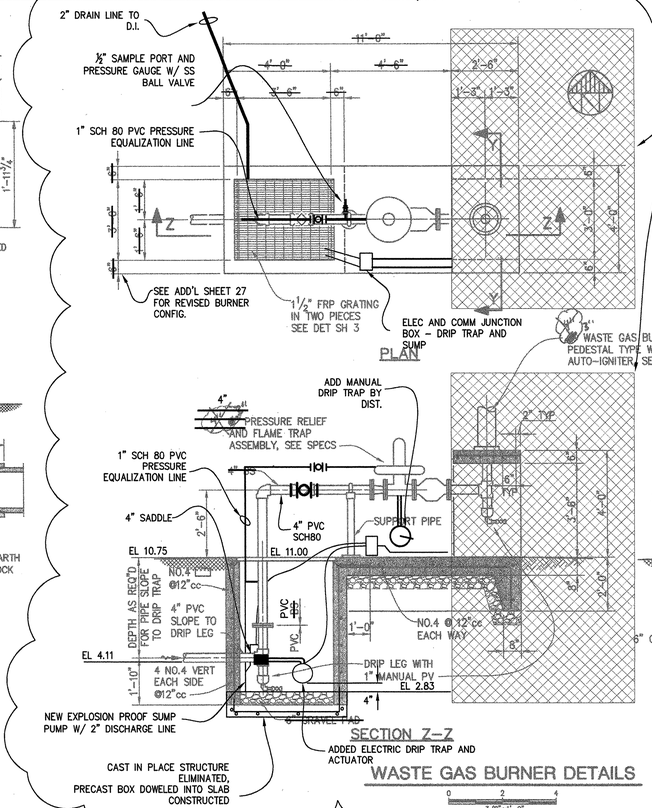
SECTION

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

NOTES:

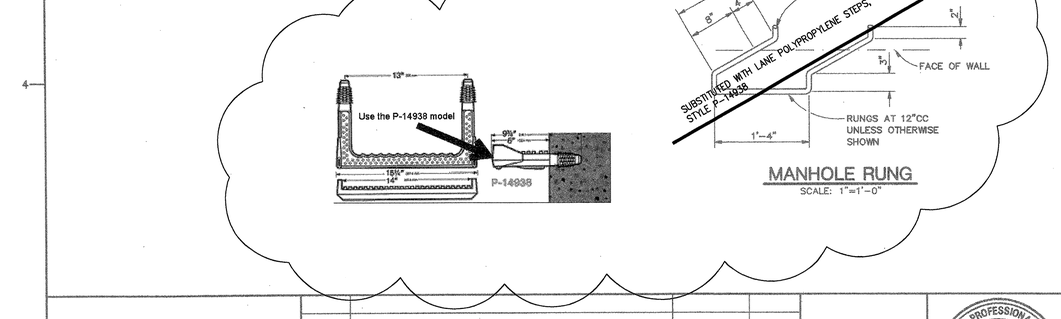
1. TOP AND BOTTOM SURFACES OF GRATE TO BE GROUND FLUSH AFTER WELDING.
2. ALL METAL SURFACES SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM SPEC. A-123. ALL FABRICATING, SHEARING, BENDING AND WELDING SHALL BE DONE BEFORE GALVANIZING.
3. FRAME AND GRATE SHALL BE ASSEMBLED IN SHOP BEFORE DELIVERY.

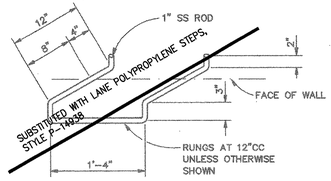
TYPICAL CATCH BASIN DETAILS



WASTE GAS BURNER DETAILS

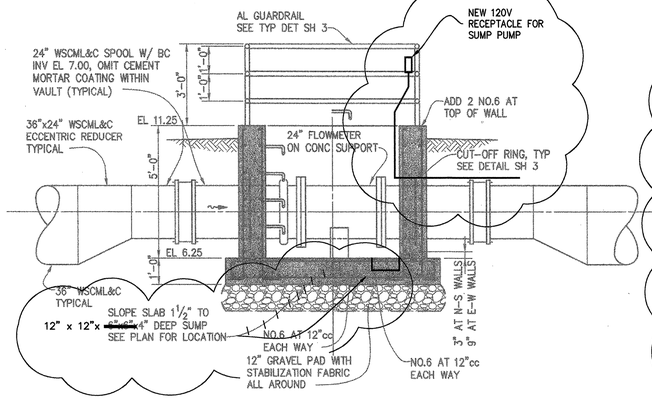
0 2 4
3/8"=1'-0"





MANHOLE RUNG

SCALE: 1"=1'-0"



FLOWMETER AND VAULT DETAILS

0 2 4
3/8"=1'-0"

USE OF DOCUMENTS

THIS DOCUMENT, INCLUDING THE INCORPORATED DESIGNS, IS AN INSTRUMENT OF SERVICE FOR THIS PROJECT AND SHALL NOT BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF KENNEDY/JENKS CONSULTANTS.

NO.	REVISION	DATE	BY
	CHANGED FLARE FLARE TRAP & PRESSURE RELIEF BACK TO 4"	8-13-04	DMR
	CHANGED FLARE FLAME TRAP & PRESSURE RELIEF 3" TO 4"	8-12-04	DMR

SCALES
0 1"
0 25mm
IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.

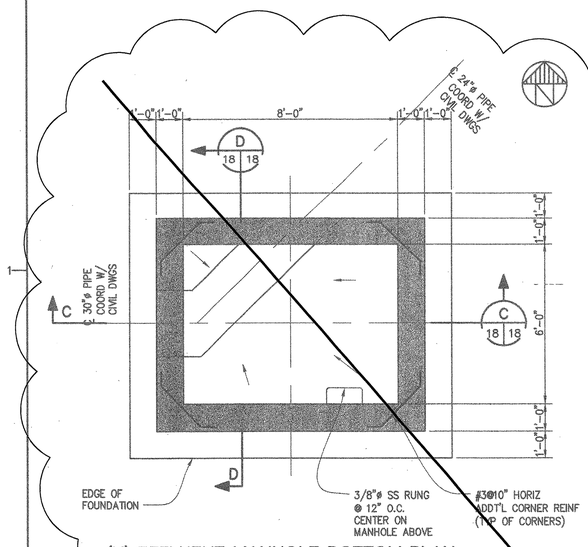
REGISTERED PROFESSIONAL ENGINEER JOHN M. WYCKOFF No. 31018 Exp. 3/31/05 CIVIL STATE OF CALIFORNIA

DESIGNED HLH
DRAWN LLK
CHECKED JMW

SO. SAN LUIS OBISPO COUNTY SANITATION DISTRICT
SAN LUIS OBISPO COUNTY, CALIFORNIA
CHLORINE CONTACT TANK / EFFLUENT PUMP STATION
Kennedy/Jenks Consultants
PALO ALTO, CALIFORNIA

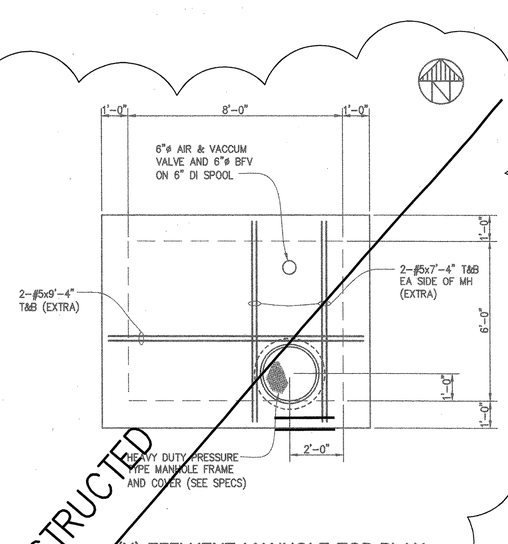
SITE WORK MISCELLANEOUS DETAILS

FILE NAME
JOB NO. 015023.00
DATE JUNE 2004
SHEET 17 OF 26



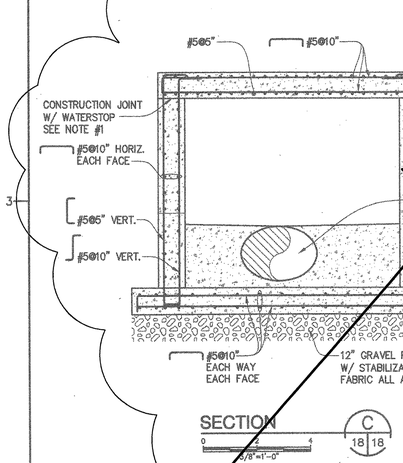
(N) EFFLUENT MANHOLE BOTTOM PLAN

0 2 4
3/8"=1'-0"



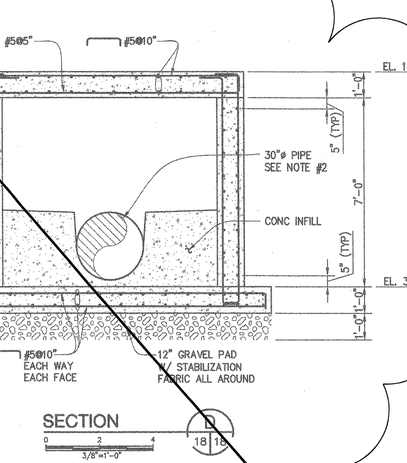
(N) EFFLUENT MANHOLE TOP PLAN

0 2 4
3/8"=1'-0"



SECTION C

0 2 4
3/8"=1'-0"
18 18



SECTION B

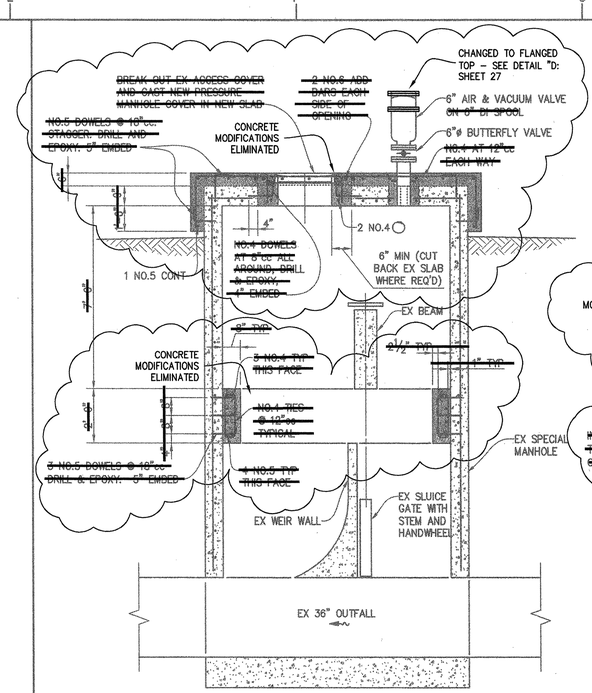
0 2 4
3/8"=1'-0"
18 18

MANHOLE NOT CONSTRUCTED

GENERAL NOTES:

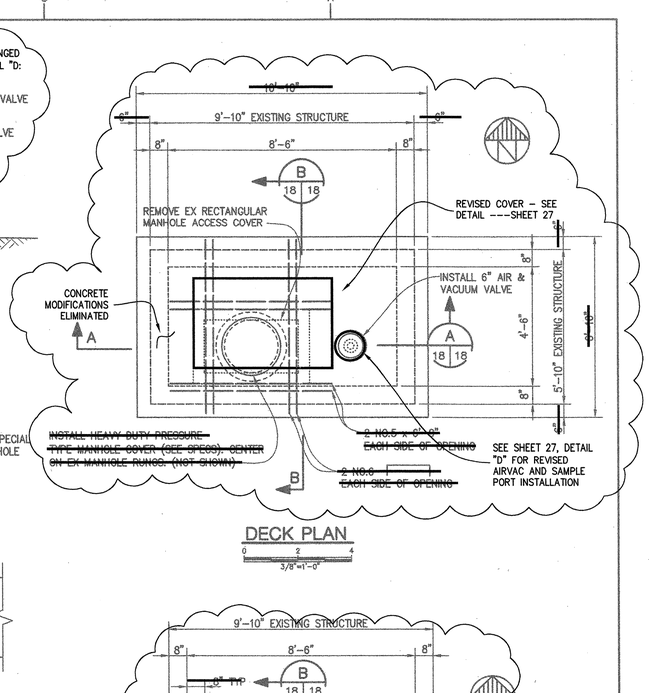
1. PROVIDE A 1 5/8" x 3 1/4" x 3/16" PVC LABYRINTH WATERSTOP, GREENSTREAK 789, OR EQUAL, CONTINUOUS IN ALL CONSTRUCTION JOINTS.
2. PROVIDE HOOKS ON INTERRUPTED BARS. PROVIDE ADDITIONAL REINFORCING BARS EQUAL IN AREA TO INTERRUPTED BARS. PLACE ONE-HALF AT EACH SIDE OF THE OPENING AT 3" ON-CENTER.

MANHOLE DETAIL



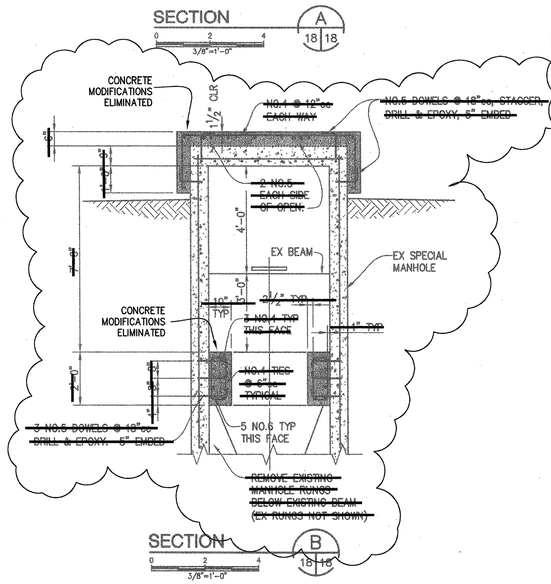
SECTION A

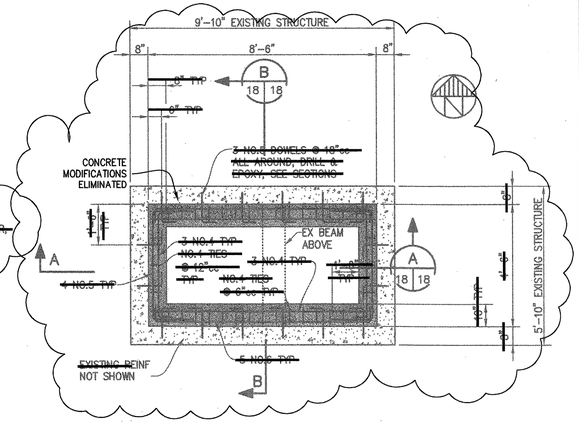
0 2 4
3/8"=1'-0"
18 18



DECK PLAN

0 2 4
3/8"=1'-0"





SECTIONAL PLAN THRU NEW BEAM

0 2 4
3/8"=1'-0"

SPECIAL MANHOLE NOTES

1. VERIFY ALL EXISTING FEATURES (INCLUDING DIMENSIONS) IN FIELD. REPORT ALL CRACKED, DETERIORATED, OR DAMAGED CONCRETE CONDITIONS TO THE ENGINEER PRIOR TO CONSTRUCTING IMPROVEMENTS.
2. THE MANHOLE SHALL NOT BE SUBJECTED TO NEGATIVE PRESSURE UNTIL ALL NEW CONCRETE HAS GAINED A MIN COMPRESSIVE STRENGTH OF 4000 PSI.
3. CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4500 PSI.
4. THE LENGTH OF HOOKS ON REINF SHALL BE 6" UNLESS OTHERWISE NOTED.
5. THE POSITION OF DOWELS TO BE DRILLED AND EPOXIED INTO EX CONC MAY BE ADJUSTED TO AVOID INTERFERENCE WITH EX REINF. DO NOT CUT EX REINF EXCEPT AS NOTED.
6. SEE NOTES ON SHEET 16 FOR ADDITIONAL REQUIREMENTS.

SPECIAL BEACH MANHOLE DETAIL

NO.	REVISION	DATE	BY

0:\01\01502300nu\SH-18.dwg 7-15-04 11:06:12 AM

SCALES
0 1"
0 25mm
IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.

REGISTERED PROFESSIONAL ENGINEER JOHN M. WICKERSHAM No. 31019 Exp. 3/31/06 CIVIL STATE OF CALIFORNIA 7/15/04

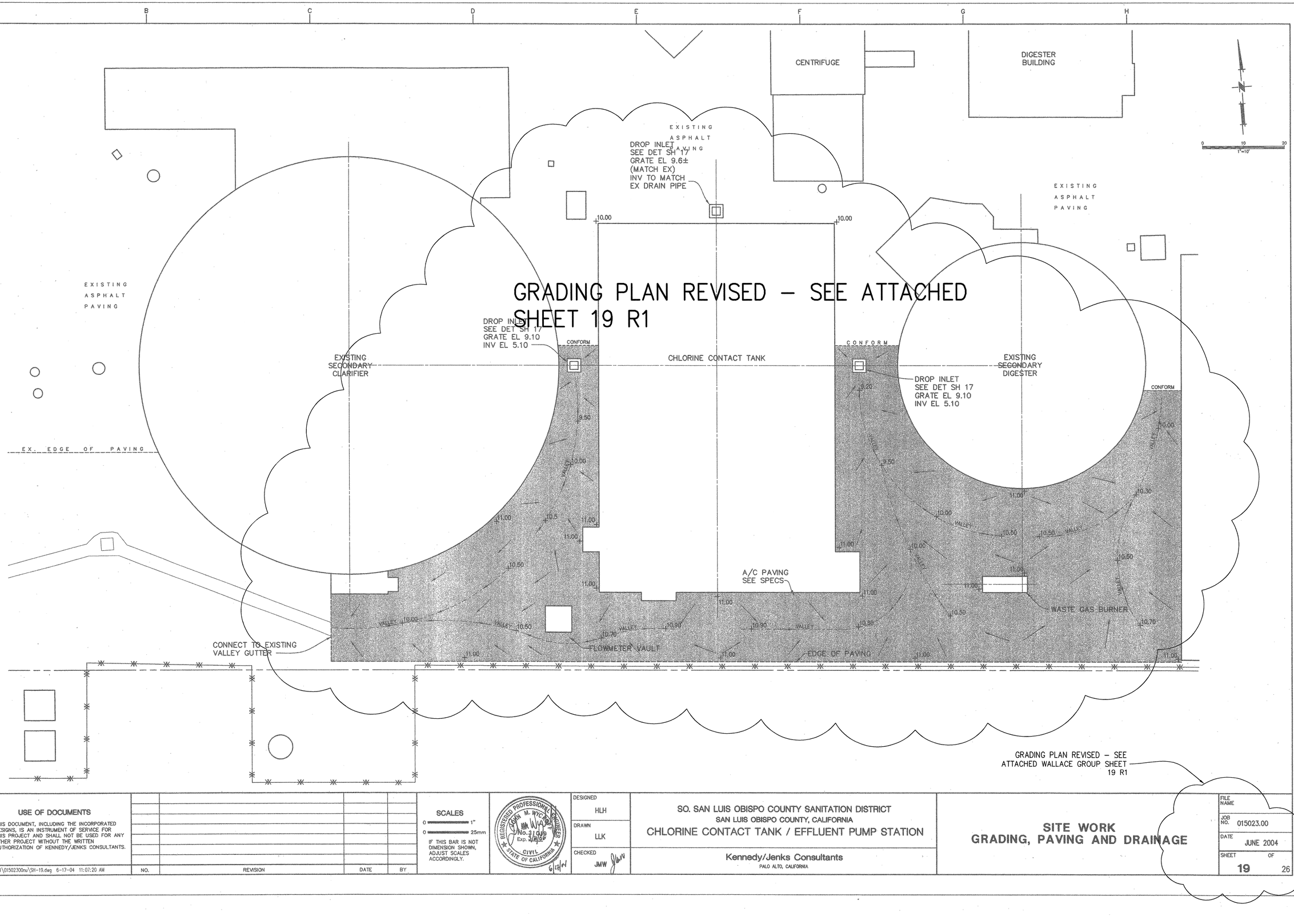
DESIGNED	BF
DRAWN	LLK
CHECKED	DLB

SO. SAN LUIS OBISPO COUNTY SANITATION DISTRICT
SAN LUIS OBISPO COUNTY, CALIFORNIA
CHLORINE CONTACT TANK / EFFLUENT PUMP STATION

Kennedy/Jenks Consultants
PALO ALTO, CALIFORNIA

SITE WORK
MANHOLE DETAILS

FILE NAME	
JOB NO.	015023.00
DATE	JUNE 2004
SHEET	18 OF 26



USE OF DOCUMENTS

THIS DOCUMENT, INCLUDING THE INCORPORATED DESIGNS, IS AN INSTRUMENT OF SERVICE FOR THIS PROJECT AND SHALL NOT BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF KENNEDY/JENKS CONSULTANTS.

NO.	REVISION	DATE	BY

0:\01\01502300nu\SH-19.dwg 6-17-04 11:07:20 AM

SCALES
0 1"
0 25mm
IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.

REGISTERED PROFESSIONAL ENGINEER JOHN M. WEAVER No. 31009 Exp. 3/31/05 CIVIL STATE OF CALIFORNIA 6/17/04

DESIGNED HLH
DRAWN LLK
CHECKED JMW

SO. SAN LUIS OBISPO COUNTY SANITATION DISTRICT
SAN LUIS OBISPO COUNTY, CALIFORNIA
CHLORINE CONTACT TANK / EFFLUENT PUMP STATION

Kennedy/Jenks Consultants
PALO ALTO, CALIFORNIA

SITE WORK
GRADING, PAVING AND DRAINAGE

FILE NAME
JOB NO. 015023.00
DATE JUNE 2004
SHEET 19 OF 26

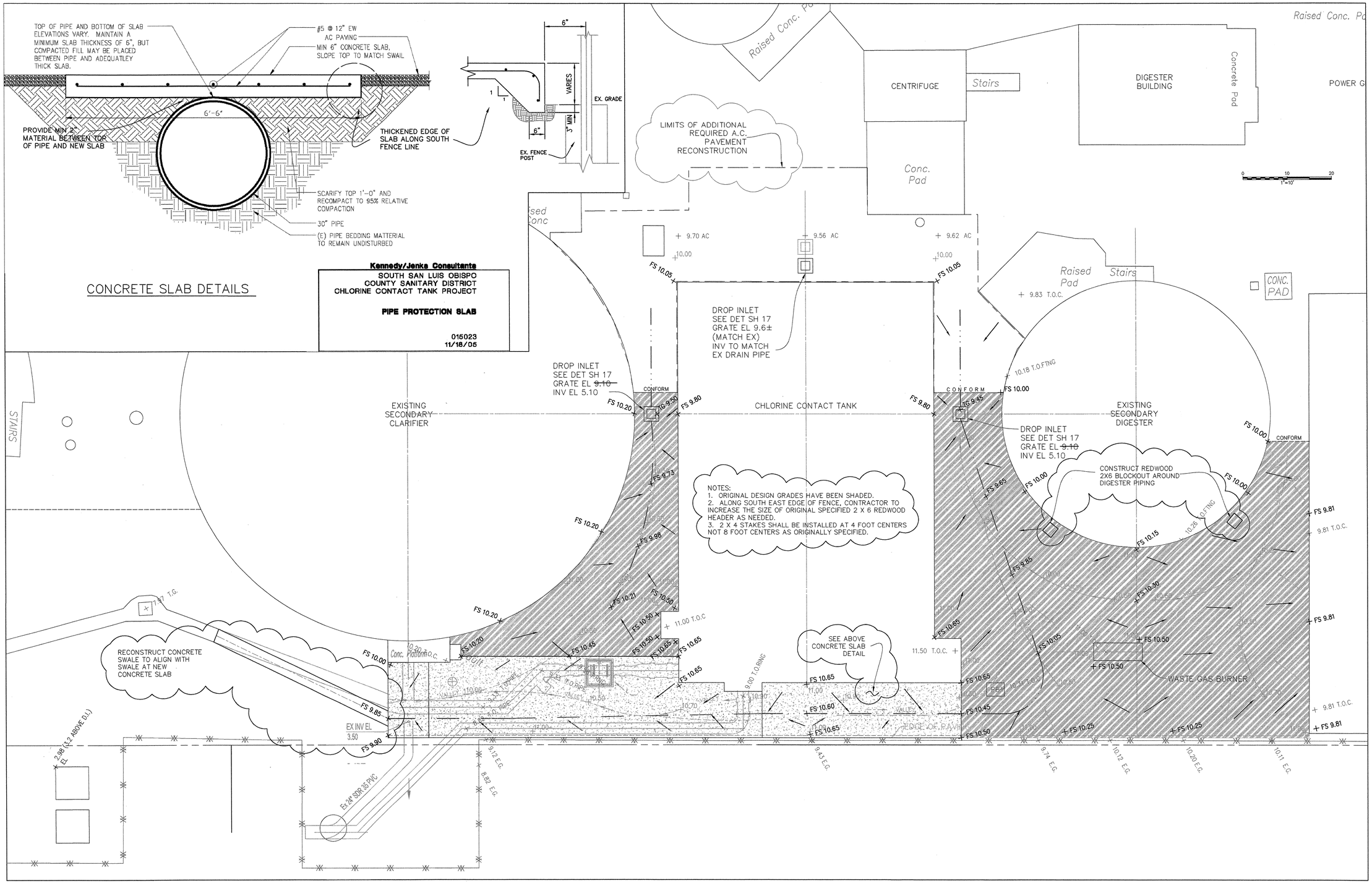
FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES 0 1 2 3

CONCRETE SLAB DETAILS

Kennedy/Jenks Consultants
SOUTH SAN LUIS OBISPO
COUNTY SANITARY DISTRICT
CHLORINE CONTACT TANK PROJECT

PIPE PROTECTION SLAB

015023
11/18/05



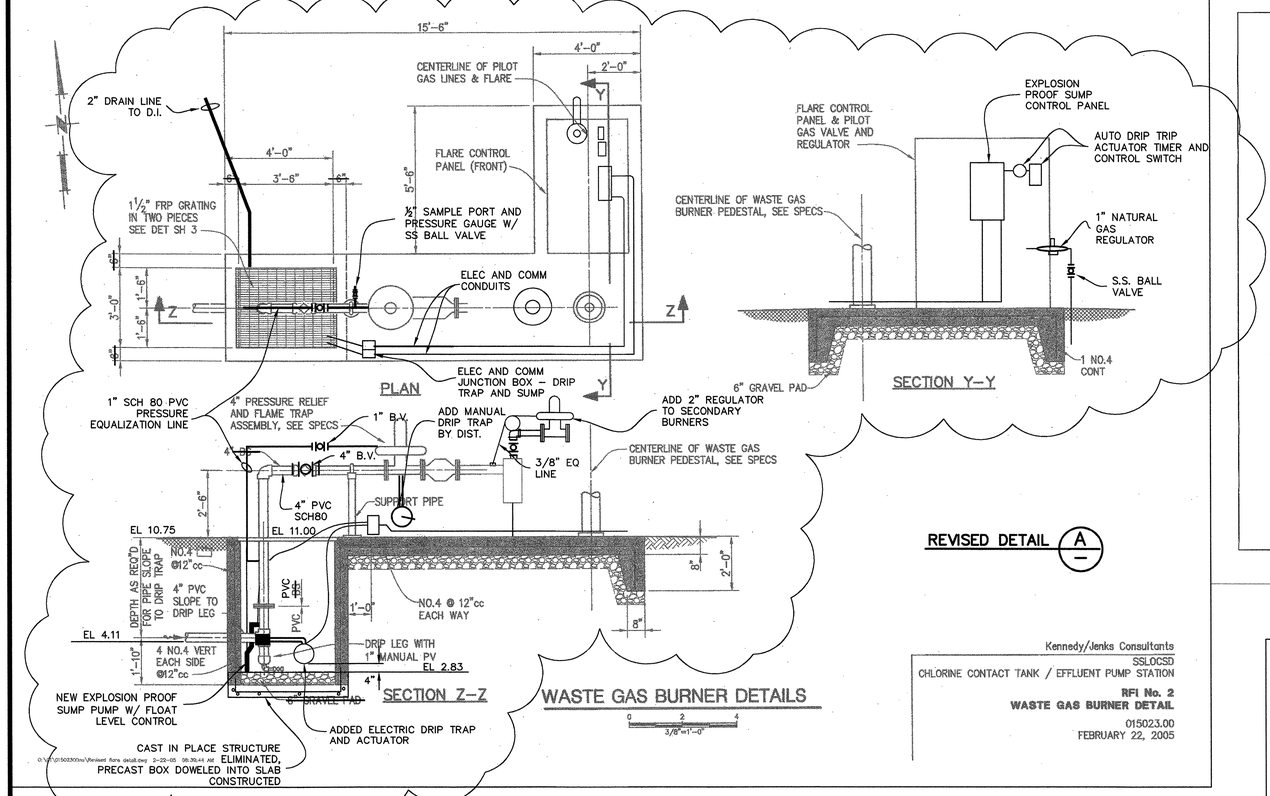
WALLACE GROUP
CIVIL ENGINEERING
CONSTRUCTION MANAGEMENT
LANDSCAPE ARCHITECTURE
MECHANICAL ENGINEERING
PLANNING
PUBLIC WORKS ADMINISTRATION
SURVEYING / GIS SOLUTIONS
WATER RESOURCES
WALLACE SWANSON INTERNATIONAL
4115 BROAD STREET, SUITE B-5
SAN LUIS OBISPO, CA 93401
T 805 544-4011 F 805 544-4294
www.wallacegroup.us

SIGNATURE

DATE SIGNED

S.S.L.O.C.S.D.
CHLORINE CONTACT TANK
REVISED GRADING PLAN

JOB #: 0026-002(131)
DESIGNERS: DR / TZ
DRAWN BY: DR
DATE: 11-30-05
DRAWING NO.
SHT 19 R1
1 OF 0 1



REVISED DETAIL A

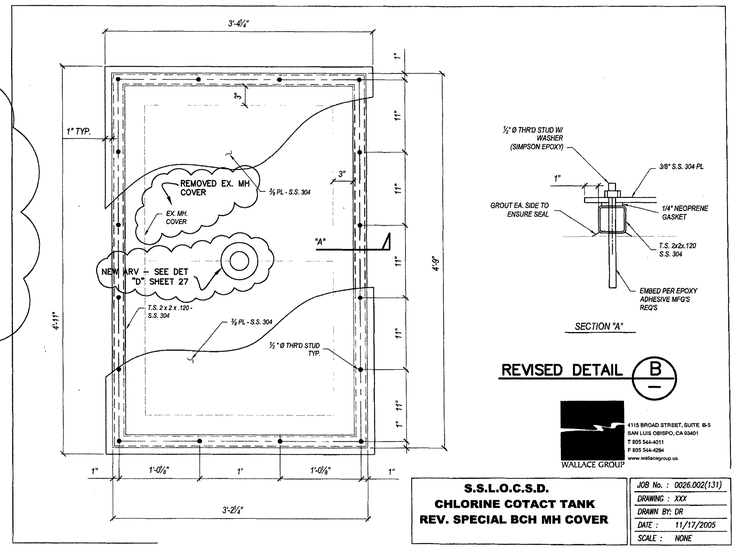
WASTE GAS BURNER DETAILS

0 2 4
3/8"=1'-0"

Kennedy/Jenks Consultants
SSLOCSD
CHLORINE CONTACT TANK / EFFLUENT PUMP STATION

RFI No. 2
WASTE GAS BURNER DETAIL

015023.00
FEBRUARY 22, 2005

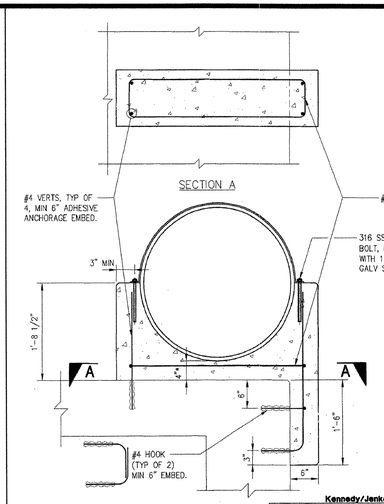


REVISED DETAIL B

WALLACE GROUP
4115 BROAD STREET, SUITE B-5
SAN LUIS OBISPO, CA 93401
T 805 544-4011
F 805 544-4094
www.wallacegroup.us

S.S.L.O.C.S.D.
CHLORINE COTACT TANK
REV. SPECIAL BCH MH COVER

JOB No. :	0026.002(131)
DRAWING :	XXX
DRAWN BY:	DR
DATE :	11/17/2005
SCALE :	NONE



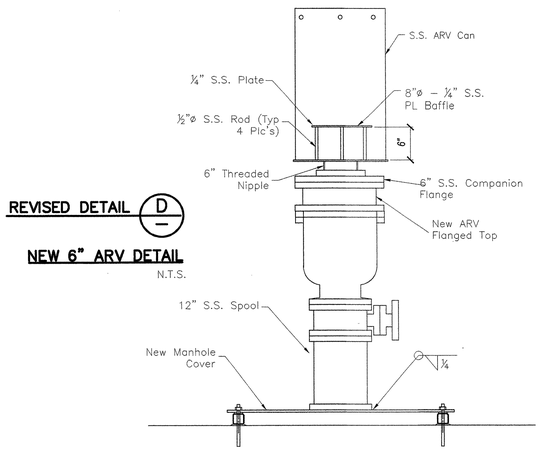
REVISED DETAIL C

Kennedy/Jenks Consultants
SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT
CHLORINE CONTACT TANK

PIPE SUPPORT DETAIL
RESPONSE TO RFI #10

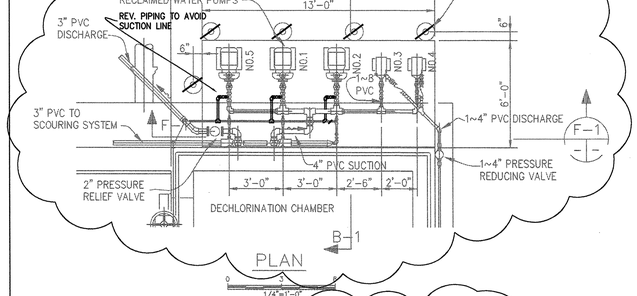
015023
11/28/05

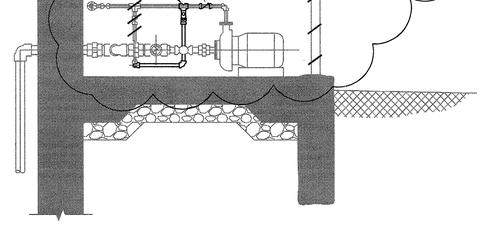
Figure No. 1

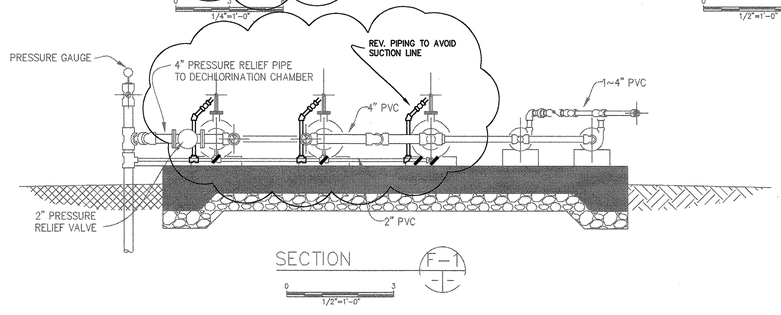


REVISED DETAIL D

NEW 6" ARV DETAIL
N.T.S.







REVISED DETAIL E

Kennedy/Jenks Consultants
SO. SAN LUIS OBISPO COUNTY SANITATION DISTRICT
SAN LUIS OBISPO COUNTY, CALIFORNIA
CHLORINE CONTACT TANK
EFFLUENT PUMP STATION
K/J_015023.00
MAY 2005
REVISED No. 3 WATER PUMP LAYOUT

NO.	REVISION	DATE	BY

SCALES
0 1"
0 25mm
IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.

SO. SAN LUIS OBISPO COUNTY SANITATION DISTRICT
SAN LUIS OBISPO COUNTY, CA
CHLORINE CONTACT / EFFLUENT PUMP STATION

WHITAKER CONTRACTORS, SANTA MARGARITA, CA

REVISED SITE WORK
MISCELLANEOUS DETAILS

FILE NAME	
JOB NO.	–
DATE	APRIL 2006
SHEET	27 OF 28

ELEC
COMM
Ex1"PVC
1.86
1.61
COVER
4.00
ELEC
NG 18" WS
DONED)
13.00'
18.00'
AIT 120
A1
2" PVC Chase
FUTURE STUB w/ Cap
LOS 120
3/4 POWER A-3
To Gas Burner
1" Power to Pump 3
A10-12
PB
315
To Chem BLD
2" POWER
1" Comm
1" POWER
1" Power to sump pump
2" Power to chem bld
1" to Pump 3
2" to PNL A
1" to solenoid valves

SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT
Post Office Box 339 Oceano, California 93475-0339
1600 Aloha Oceano, California 93445-9735
Telephone (805) 489-6666 Fax (805) 489-2765
www.sslocsd.org

Exhibit 2

Chem Tanks & Chem Pump Possible Locations

Write a description for your map.

Legend

Location 1

Location 2

Location 3

Google Earth

N

100 ft

Appendix A

SSLOCSD Standard Agreement

AGREEMENT FOR PROFESSIONAL SERVICES

This Agreement is made on [insert date] ("Effective Date"), by and between [insert formal entity name], a [insert state and business type], ("Consultant") and the South San Luis Obispo County Sanitation District ("District"), in Oceano, California, based on the following recitals:

1. District proposes to utilize the services of Consultant as an independent contractor to _____, as more fully described herein;
2. [insert text as needed];
3. [Insert text as needed];
4. Contracting with Consultant to provide [insert text] services for District is consistent with District's Purchasing Guidelines, as adopted by Resolution 2016-353, which provide that the District Administrator is the District's agent for purchasing services less than $175,000 and establish objectives including that District services procurement be efficient, at lowest possible cost, and of a quality to assure efficient running of the wastewater plant.

NOW, THEREFORE, IT IS AGREED:

1. **Recitals true.** The above recitals are true.
2. **General.**

2.01. Term and Termination. The term of this contract shall commence on the Effective Date and continue for a period of ____ months, ending on _____ unless previously terminated as provided herein. This contract may be extended by mutual consent of the parties. This contract may be terminated by District for breach of its terms or conditions, or because of discovery of any act by Consultant which violates local, state or federal law. Termination is effective 14 days after deposit of notice as specified in this Agreement.

2.02. Services to be Performed. Consultant agrees to perform the specific services listed in Exhibit "A." Consultant shall determine the method, details and means of providing these services.

2.03 District's Duties. District's duties under this Agreement are to cooperate with Consultant in the performance of the contract and timely pay invoices.

2.04. Payment. Payment terms under this Agreement are listed in Exhibit "B."

2.05. Insurance. Consultant shall provide insurance as listed in Exhibit "C."

2.06. Exhibits. Exhibits "A," "B," and "C" are attached and incorporated into this agreement.

3. **Consultant's Obligations.**

3.01. Minimum Amount of Service. Consultant shall devote sufficient time to perform services under this agreement efficiently and effectively. Consultant may represent, perform services for and be employed by additional individuals or entities, in Consultant's sole discretion, as long as the performance of these extra-contractual services does not interfere with or present a conflict with District's business.

3.02. Tools and Equipment. Except as otherwise stated in this Agreement, Consultant will supply all tools and equipment necessary to perform this Agreement.

3.03. Status. Consultant (including its employees) is an independent contractor. No employer/employee relationship exists between Consultant and the District. Consultant's assigned personnel shall not be entitled to any benefits payable to employees of the District. The District is not required to make any deductions or withholdings from the compensation payable to Consultant under this agreement.

3.04. Indemnification. To the fullest extent permitted by law, the Consultant shall indemnify, defend (with independent counsel approved by the District) and hold harmless the District, and its directors, officers, and employees from and against all liabilities (including without limitation all claims, losses, damages, penalties, fines, and judgments, associated investigation and administrative expenses, and defense costs, including but not limited to reasonable attorneys' fees, court costs and costs of alternative dispute resolution) regardless of nature or type that arise out of Consultant's performance under this agreement, or that pertain to, or relate to the negligence, reckless, or willful misconduct of the Consultant or the acts or omissions of an employee, agent or subcontractor of the Consultant. The provisions of this paragraph survive completion of the services or the termination of this contract. The provisions of this Section are not limited by the provisions of the Section relating to insurance.

4. Miscellaneous

4.01. Notices. All communication relating to the day-to-day activities of this Agreement shall be exchanged between a designated representative of the District and a representative of Consultant, listed below. All notices shall be addressed as follows unless a written change is filed with the District:

To District:
Attn. (Interim) District Administrator
South San Luis Obispo County
Sanitation District
P.O. Box 339
Oceano, CA 93475-0339

To Consultant:

If the designated Representative or address of either party changes during the term of this agreement, a written notice shall be given to the other party prior to the effective date of change. Any written notices required under this agreement shall be effective five (5) days after deposit into United States mail, postage prepaid, addressed to the designated Representative, or upon confirmation of receipt of delivery if another notification process is used.

4.02. Compliance With Laws, etc. Consultant shall comply with all laws, including but not limited to the rules and policies of the District, in performing this agreement.

4.03. Integration. This agreement constitutes the entire agreement of the parties with respect to the subject matter. All modifications, amendments, or waivers of the terms of this agreement must be in writing and signed by the appropriate representatives of the parties.

4.04. Interpretation. This agreement shall be interpreted in accordance with the laws of the State of California.

4.05. Jurisdiction. Jurisdiction and venue of all disputes over the terms of this agreement shall be in the County of San Luis Obispo, State of California.

4.06. Warranty of authority. Each person signing this agreement on behalf of a party warrants that he or she has authority to do so.

4.07. No Waiver. Failure to enforce with respect to a default shall not be construed as a waiver.

4.08. Severability. The provisions of this agreement are severable. If any part of this agreement is held invalid by a court of competent jurisdiction, the remainder of the agreement shall remain in full force and effect unless amended or modified by mutual written consent of the parties.

4.09. Submittals. In addition to any other submittals required by this agreement, Consultant shall submit copies of its current certificate of workers compensation coverage to the

District before beginning work on this project.

4.10 Prevailing Wage. If applicable, Consultant and all subconsultants are required to pay the general prevailing wage rates of per diem wages and overtime and holiday wages determined by the Director of the Department of Industrial Relations under Section 1720 et seq. of the California Labor Code. The Director's determination is on file and open to inspection at www.dir.ca.gov and is referred to and made a part hereof; the wage rates therein ascertained, determined and specified are referred to and made a part hereof as though fully set forth herein.

4.11 Exclusive Ownership. All plans, specifications, reports, electronic media, records, and other design documents prepared by Consultant pursuant to this agreement shall be the property of the District; District is entitled to full and unrestricted use of such plans, specifications, reports and other design documents prepared by Consultant pursuant to this agreement; such plans, specifications, reports, and other design documents prepared by Consultant pursuant to this agreement shall be used exclusively on this project and shall not be used on any other work unless deemed necessary by the District.

IN WITNESS WHEREOF, this agreement is executed by the parties on the date first written above.

CONSULTANT

_____
By:

_____
By:

SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

_____
By:

APPROVED AS TO FORM:

_____
District Counsel

EXHIBIT “A”

EXHIBIT “B”

EXHIBIT "C"
INSURANCE REQUIREMENTS

Consultant shall procure and maintain for the duration of the contact insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Consultant, his/her agents, representatives, or employees. If the contractor maintains broader coverage and/or higher limits than the minimums shown above, the District requires and shall be entitled to the broader coverage and/or higher limits maintained by the contractor.

A. Minimum Scope of Insurance

Coverage shall be at least as broad as:

1. Insurance Services Office Commercial General Liability coverage (occurrence form CG 0001), including products and completed operations, property damage, bodily injury and personal & advertising injury.

2. Insurance Services Office Business Auto Coverage Form Number CA 00 01 covering any auto (Code 1), or if Contractor has no owned autos, covering hired (Code 8) and non-owned autos (Code 9).

3. Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.

4. Errors and Omissions liability insurance appropriate to the Consultant's profession. Architects' and engineers' coverage is to be endorsed to include contractual liability.

B. Minimum Limits of Insurance

Consultant shall maintain limits no less than:

1. General Liability - $2,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location (ISO CG 25 03 or 25 04) or the general aggregate limit shall be twice the required occurrence limit.

2. Automobile Liability - $1,000,000 per accident for bodily injury and property damage.

3. Workers' Compensation: Statutory limits.

4. Employer's Liability - $1,000,000 per accident for bodily injury or disease.

5. Errors and Omissions Liability - $1,000,000 per occurrence or claim, $2,000,000 aggregate.

EXHIBIT "C"
INSURANCE REQUIREMENTS

Consultant shall procure and maintain for the duration of the contact insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Consultant, his/her agents, representatives, or employees. If the contractor maintains broader coverage and/or higher limits than the minimums shown above, the District requires and shall be entitled to the broader coverage and/or higher limits maintained by the contractor.

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2. Automobile Liability - $1,000,000 per accident for bodily injury and property damage.

3. Workers' Compensation: Statutory limits.

4. Employer's Liability - $1,000,000 per accident for bodily injury or disease.

5. Errors and Omissions Liability - $1,000,000 per occurrence or claim, $2,000,000 aggregate.

C. Self-insured Retentions

Self-insured retentions must be declared to and approved by the District. The District may require the Consultant to purchase coverage with a lower retention or provide proof of ability to pay losses and related investigations, claim administration and defense expenses within the retention.

D. Other Insurance Provisions

The commercial general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

1. The District, its officers, officials, employees and volunteers are to be covered as additional insureds on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of the Consultant including materials, parts or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form or an endorsement to the Contractor's insurance (at least as broad as ISO Form CG 20 10 11 85 or both CG 20 10, CG 20 26, CG 20 33, or CG 20 38 and CG 20 37 forms if later revisions are used).

2. For any claims related to this project, the Consultant's insurance coverage shall be primary insurance coverage at least as broad as ISO CG 20 01 04 13 as respects the District, its officers, officials, employees and volunteers. Any insurance or self-insurance maintained by the District, its officers, officials, employees or volunteers shall be excess of the Consultant's insurance and shall not contribute with it.

3. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled or reduced, except with notice stating the title of this contract to the District. All notices provided pursuant to this Agreement shall be given to the District representative listed for notice in this agreement and shall specify the title of this Agreement. Notice may be given by overnight mail, facsimile with confirmation of receipt, or certified mail with return-receipt requested.

4. Consultant hereby grants to District a waiver of any right to subrogation which any insurer of said Consultant may acquire against the District by virtue of the payment of any loss under such insurance. Consultant agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the District has received a waiver of subrogation endorsement from the insurer.

5. If any of the required policies provide claims-made coverage:

a. The Retroactive Date must be shown, and must be before the date of the contract or the beginning of contract work.

b. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the contract of work.

c. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a Retroactive Date prior to the contract effective date, the

Consultant must purchase “extended reporting” coverage for a minimum of five (5) years after completion of work.

E. Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to the District.

F. Verification of Coverage

Consultant shall furnish the District with original certificates and amendatory endorsements of the applicable policy language effecting coverage required by this clause. All certificates and endorsements are to be received and approved by the District before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the Consultant’s obligation to provide them. The District reserves the right to require complete, certified copies of all required insurance policies, including endorsements effecting the coverage required by these specifications at any time.

G. Special Risks or Circumstances

Entity reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

C. Self-insured Retentions

Self-insured retentions must be declared to and approved by the District. The District may require the Consultant to purchase coverage with a lower retention or provide proof of ability to pay losses and related investigations, claim administration and defense expenses within the retention.

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