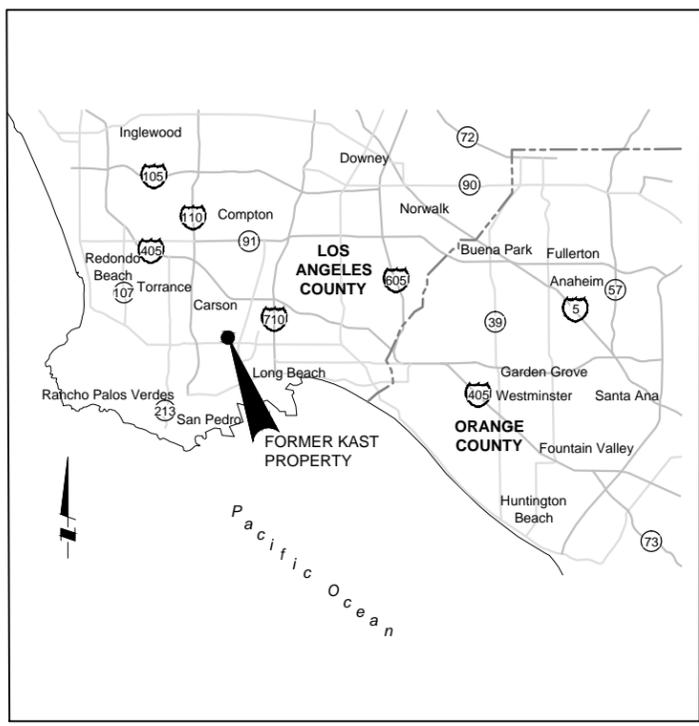


SHELL OIL PRODUCTS US SOIL VAPOR EXTRACTION/BIOVENTING SYSTEM

CAROUSEL TRACT CITY OF CARSON OCTOBER 2015



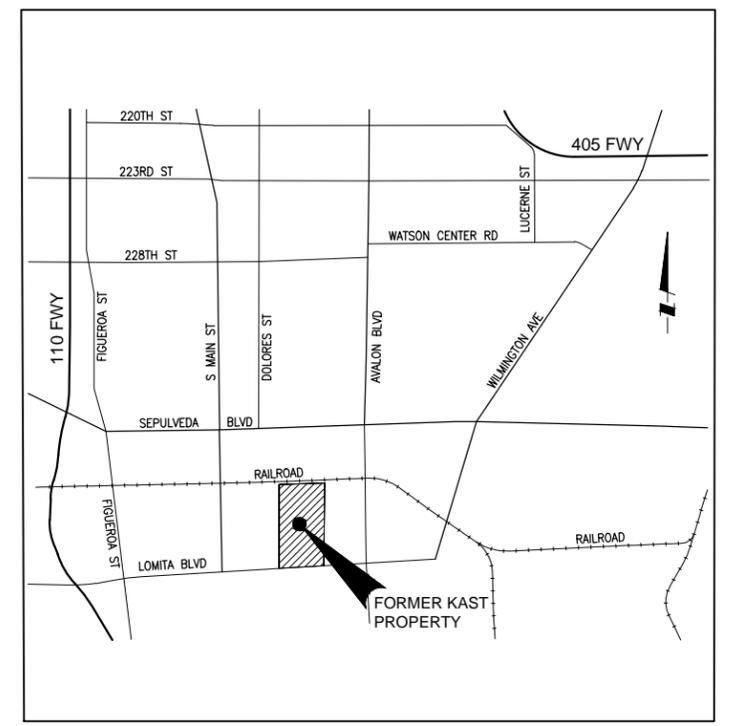
VICINITY MAP
NTS

EXISTING UTILITIES

- AT&T TELEPHONE
CONTACT: MIKE DUHE
PHONE: 310-515-4270
- CALIFORNIA WATER SERVICE COMPANY
CONTACT: KOREY BRADBURY
PHONE: 310-220-9439
- SOUTHERN CALIFORNIA GAS COMPANY
CONTACT: WILLIAM CARR
PHONE: 310-605-7906
- SOUTHERN CALIFORNIA EDISON
CONTACT: TBD
PHONE:
- TIME WARNER CABLE
CONTACT: TBD
PHONE:

GENERAL NOTES

1. ALL WORK AND MATERIALS SHALL COMPLY WITH THE STANDARD PLANS OF THE CITY OF CARSON, AMERICAN PUBLIC WORKS ASSOCIATION AND CALTRANS STANDARD PLANS AND SPECIFICATIONS. (ALL LATEST EDITION)
2. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER 24 HOURS IN ADVANCE FOR INSPECTION PRIOR TO STARTING WORK AT (310) 952-1700 EXT. 1814.
3. THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES 48 HOURS IN ADVANCE PRIOR TO WORKING AROUND THEIR FACILITIES.
4. THE CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT (800)422-4133 48-HRS PRIOR TO ANY EXCAVATION.
5. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN AT ALL TIMES DURING CONSTRUCTION AMPLE MEANS AND DEVICES WITH WHICH TO PROMPTLY REMOVE AND PROPERLY DISPOSE OF ALL WATER FROM ANY SOURCE ENTERING THE EXCAVATION OR OTHER PARTS OF THE WORK.
6. ALL EXISTING IMPROVEMENTS, INCLUDING STRIPING, REMOVED OR DAMAGED SHALL BE REPLACED IN KIND, OR AS SPECIFIED IN THE TECHNICAL SPECIFICATIONS.
7. THE EDGES OF ALL A.C. PATCH SHALL BE SEALED WITH ASPHALT EMULSION.
8. TRAFFIC CONTROL AND CONSTRUCTION SIGNING SHALL BE PER WATCH HANDBOOK, OR THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) ALONG WITH THE CALIFORNIA SUPPLEMENT.
9. CONTRACTOR SHALL HAVE SUFFICIENT MATERIALS ON HAND AT ALL TIMES TO EXPEDITE ANY EMERGENCY REPAIR.
10. WORKING HOURS SHALL BE BETWEEN 7 AM AND 3:30 PM MONDAY - FRIDAY UNLESS OTHERWISE APPROVED BY THE DIRECTOR OF PUBLIC WORKS.
11. REPAIR ANY BROKEN OR RAISED SIDEWALK, CURB AND GUTTER ABUTTING THE DEVELOPMENT PER CITY OF CARSON STANDARD AND TO THE SATISFACTION OF THE CITY ENGINEER.
12. THE DEVELOPER SHALL FILL IN MISSING SIDEWALK, REMOVE AND REPLACE ANY BROKEN/DAMAGED DRIVEWAY APPROACH IN THE PUBLIC RIGHT OF WAY, ABUTTING THE PROPOSED DEVELOPMENT PER CITY OF CARSON STANDARD AND TO THE SATISFACTION OF THE CITY ENGINEER.
13. THE DEVELOPER SHALL MODIFY EXISTING DRIVEWAYS IN THE PUBLIC RIGHT OF WAY PER CITY OF CARSON STANDARD TO COMPLY WITH THE ADA REQUIREMENTS AND TO THE SATISFACTION OF THE CITY ENGINEER.
14. WHERE SIDEWALK MEANDER AROUND EXISTING DRIVEWAYS AND EXTENDING BEYOND THE PUBLIC RIGHT OF WAY AT ANY LOCATION, THE REQUIRED DESCRIBED SIDEWALK EASEMENTS SHALL BE SUBMITTED AND APPROVED PRIOR TO ISSUANCE OF THE BUILDING PERMIT.
15. REMOVE UNUSED DRIVEWAY APPROACH IF ANY, AND REPLACE IT WITH FULL HEIGHT CURB AND GUTTER AND SIDEWALK PER CITY OF CARSON STANDARD, AND TO THE SATISFACTION OF THE CITY ENGINEER.
16. ALL NEW OVERHEAD UTILITY LINES, ABUTTING THE PROPOSED DEVELOPMENT SHALL BE UNDERGROUND TO THE SATISFACTION OF THE CITY ENGINEER.
17. A CONSTRUCTION PERMIT IS REQUIRED FOR ANY WORK TO BE DONE IN THE PUBLIC RIGHT-OF-WAY.
18. ANY IMPROVEMENTS DAMAGED DURING THE CONSTRUCTION SHALL BE REMOVED AND RECONSTRUCTED PER CITY OF CARSON STANDARD PLAN AND TO THE SATISFACTION OF THE CITY ENGINEER.
19. CONSTRUCTION BOND AS REQUIRED FOR ALL WORK TO BE DONE WITHIN THE PUBLIC RIGHT OF WAY.
20. PROOF OF WORKER'S COMPENSATION AND LIABILITY INSURANCE.



LOCATION MAP
NTS

PROJECT OWNER

SHELL OIL PRODUCTS US
20945 S. WILMINGTON AVENUE
CARSON, CA 90810
CONTACT: DOUG WEIMER
PHONE: 310-816-2043

PROJECT ENGINEER

AECOM
999 TOWN & COUNTRY ROAD
ORANGE, CA 92868
CONTACT: GLEN T. DAVIS, PE
PHONE: 714-448-3063

STATEMENT OF LIMITATIONS

THESE DOCUMENTS HAVE BEEN PREPARED BY AECOM FOR THE SOLE USE OF SHELL OIL CORPORATION IN THE EVALUATION OF THE PROJECT NAMED ABOVE. THESE DOCUMENTS MAY NOT BE APPROPRIATE TO SATISFY THE NEEDS OF OTHER USERS, AND ANY USE OR RE-USE OF THESE DOCUMENTS IS AT THE SOLE RISK AND RESPONSIBILITY OF THE USER. BACKGROUND INFORMATION, DESIGN BASIS, AND OTHER DATA HAVE BEEN FURNISHED TO AECOM BY SHELL OIL AND/OR THIRD PARTIES, WHICH AECOM HAS USED IN PREPARING THESE DOCUMENTS. AECOM HAD RELIED ON THIS INFORMATION AS FURNISHED, AND IS NEITHER RESPONSIBLE FOR NOR HAS CONFIRMED THE ACCURACY OF THIS INFORMATION. THESE DOCUMENTS ARE BASED ON DATA, SITE CONDITIONS, AND OTHER INFORMATION THAT IS GENERALLY APPLICABLE AS OF OCTOBER 2015.

DESIGN BY: L.FERRY	STAMP	PLANS PREPARED BY:	BENCHMARK:
DRAWN BY: L.FERRY		AECOM	SEE DRAWING C-002
CHECKED BY: G.DAVIS		999 W. TOWN & COUNTRY ROAD ORANGE, CA 92868-4713	

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US		
CITY OF CARSON		
SVE/BIOVENTING SYSTEM CAROUSEL TRACT		
TITLE SHEET		
PROJECT NO. XXX	SHEET 1 of 87	PLAN NO. G-001

G:\1 Shell Products - Former Kast Property\BAP Implementation\CADD\010_General\1 G-001.dwg Plotted on Oct 14, 2015 7:52am by lake_ferry

90% SUBMITTAL

SHEET NO.	DRAWING NO.	TITLE
GENERAL		
1	G-1	TITLE SHEET
2	G-2	SHEET INDEX
3	G-3	SITE PLAN
CIVIL		
4	C-1	CIVIL KEY MAP
5	C-2	CIVIL NOTES, ABBREVIATIONS, AND SYMBOLS
6	C-3	SVE WELLS AND PIPE BANK - PLAN AND PROFILE 1
7	C-4	SVE WELLS AND PIPE BANK - PLAN AND PROFILE 2
8	C-5	SVE WELLS AND PIPE BANK - PLAN AND PROFILE 3
9	C-6	SVE WELLS AND PIPE BANK - PLAN AND PROFILE 4
10	C-7	SVE WELLS AND PIPE BANK - PLAN AND PROFILE 5
11	C-8	SVE WELLS AND PIPE BANK - PLAN AND PROFILE 6
12	C-9	SVE WELLS AND PIPE BANK - PLAN AND PROFILE 7
13	C-10	SVE WELLS AND PIPE BANK - PLAN AND PROFILE 8
14	C-11	SVE WELLS AND PIPE BANK - PLAN AND PROFILE 9
15	C-12	SVE WELLS AND PIPE BANK - PLAN AND PROFILE 10
16	C-13	SVE WELLS AND PIPE BANK - PLAN AND PROFILE 11
17	C-14	CIVIL SECTIONS 1
18	C-15	CIVIL SECTIONS 2
19	C-16	CIVIL SECTIONS 3
20	C-17	CIVIL SECTIONS 4
21	C-18	CIVIL DETAILS 1
22	C-19	CIVIL DETAILS 2
23	C-20	CIVIL DETAILS 3
MECHANICAL		
24	M-1.1	PIPING PLAN - SVE/BIOVENTING COMPOUND
25	M-1.2	PIPING PLAN - MANIFOLD BUILDING
26	M-2.1	SECTION - SVE/BIOVENTING COMPOUND
27	M-2.2	SECTION - MANIFOLD BUILDING
28	M-3.1	YARD PIPING - PLAN AND SECTION
PROCESS		
29	D-1	PROCESS LEGEND AND ABBREVIATIONS
30	D-2	NOT USED
31	D-3	PROCESS FLOW DIAGRAM 1
32	D-4	PROCESS FLOW DIAGRAM 2
33	D-5	PROCESS FLOW DIAGRAM 3
34	D-6	PROCESS FLOW DIAGRAM 4
35	D-7	PROCESS FLOW DIAGRAM 5
ARCHITECTURAL		
36	A-0.1	ARCHITECTURAL GENERAL NOTES
37	A-0.2	GENERAL INFORMATION AND CODE ANALYSIS
38	A-0.3	LIFE SAFETY PLANS
39	A-1.0	ARCHITECTURAL SITE PLAN
40	A-1.1	FLOOR PLAN - SVE/BIOVENTING COMPOUND
41	A-1.2	FLOOR PLAN - MANIFOLD BUILDING
42	A-1.3	ROOF PLAN - SVE/BIOVENTING COMPOUND
43	A-1.4	ROOF PLAN - MANIFOLD BUILDING
44	A-1.5	REFLECTED CEILING PLAN - SVE/BIOVENTING COMPOUND
45	A-1.6	REFLECTED CEILING PLAN - MANIFOLD BUILDING
46	A-2.1	EXTERIOR ELEVATIONS - SVE/BIOVENTING COMPOUND
47	A-2.2	EXTERIOR ELEVATIONS - MANIFOLD BUILDING
48	A-3.1	BUILDING SECTIONS - SVE/BIOVENTING COMPOUND
49	A-3.2	BUILDING SECTIONS - MANIFOLD BUILDING
50	A-4.1	EXTERIOR WALL SECTIONS - SVE/BIOVENTING COMPOUND
51	A-4.2	EXTERIOR WALL SECTIONS - MANIFOLD BUILDING
52	A-5.1	ROOF AND WALL DETAILS
53	A-5.2	DOOR AND LOUVER DETAILS
54	A-5.3	DETAILS
55	A-6.1	DOOR, LOUVER, AND ROOM FINISH SCHEDULE
56	A-6.2	WALL TYPES

SHEET NO.	DRAWING NO.	TITLE
STRUCTURAL		
57	S-0.1	STRUCTURAL GENERAL NOTES
58	S-0.2	STRUCTURAL GENERAL NOTES
59	S-0.3	STRUCTURAL TESTS, INSPECTIONS AND OBSERVATIONS
60	S-0.4	STRUCTURAL TESTS, INSPECTIONS AND OBSERVATIONS
61	S-0.5	STRUCTURAL TYPICAL DETAILS - CONCRETE
62	S-0.6	STRUCTURAL TYPICAL DETAILS - MASONRY
63	S-0.7	STRUCTURAL TYPICAL DETAILS - STEEL
64	S-1.1	FOUNDATION PLAN - SVE/BIOVENTING COMPOUND
65	S-1.2	FOUNDATION PLAN - MANIFOLD BUILDING
66	S-1.3	ROOF FRAMING PLAN - SVE/BIOVENTING COMPOUND
67	S-1.4	ROOF FRAMING PLAN - MANIFOLD BUILDING
68	S-2.1	WALL ELEVATIONS - SVE/BIOVENTING COMPOUND
69	S-2.2	WALL ELEVATIONS - MANIFOLD BUILDINGS
70	S-5.1	STRUCTURAL DETAILS
BUILDING MECHANICAL		
71	H-0.1	SYMBOLS, LEGENDS, GENERAL NOTES, AND SCHEDULES
72	H-1.1	MECHANICAL 1ST FLOOR AND ROOF PLAN
73	H-6.1	MECHANICAL SCHEDULES
ELECTRICAL		
74	E-0.1	ELECTRICAL LEGEND AND ABBREVIATIONS
75	E-0.2	ELECTRICAL DETAILS
76	E-1.0	ELECTRICAL SITE PLAN
77	E-1.1	SVE/BIOVENTING COMPOUND - LIGHTING PLAN
78	E-1.2	SVE/BIOVENTING COMPOUND - POWER AND CONTROL PLAN
79	E-1.3	MANIFOLD BUILDING - LIGHTING, POWER, AND CONTROL PLAN
80	E-2.0	SINGLE-LINE DIAGRAM
81	E-2.1	CONDUIT SCHEDULE
82	E-3.0	SVE/BIOVENTING COMPOUND - AREA CLASSIFICATION PLAN
83	E-3.1	SVE/BIOVENTING COMPOUND - GROUNDING PLAN
PLUMBING		
84	P-001	GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS
85	P-211	FIRST FLOOR PLAN - WATER AND DRAINAGE
86	P-411	ENLARGED PARTIAL FLOOR PLAN - DRAINAGE AND WATER
87	P-801	SCHEDULES
LANDSCAPE ARCHITECTURE		
TBD		

DESIGN BY:
L.FERRY

DRAWN BY:
L.FERRY

CHECKED BY:
G.DAVIS

STAMP

PLANS PREPARED BY:



999 W. TOWN & COUNTRY ROAD
ORANGE, CA 92868-4713

BENCHMARK:

SEE DRAWING C-002

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US

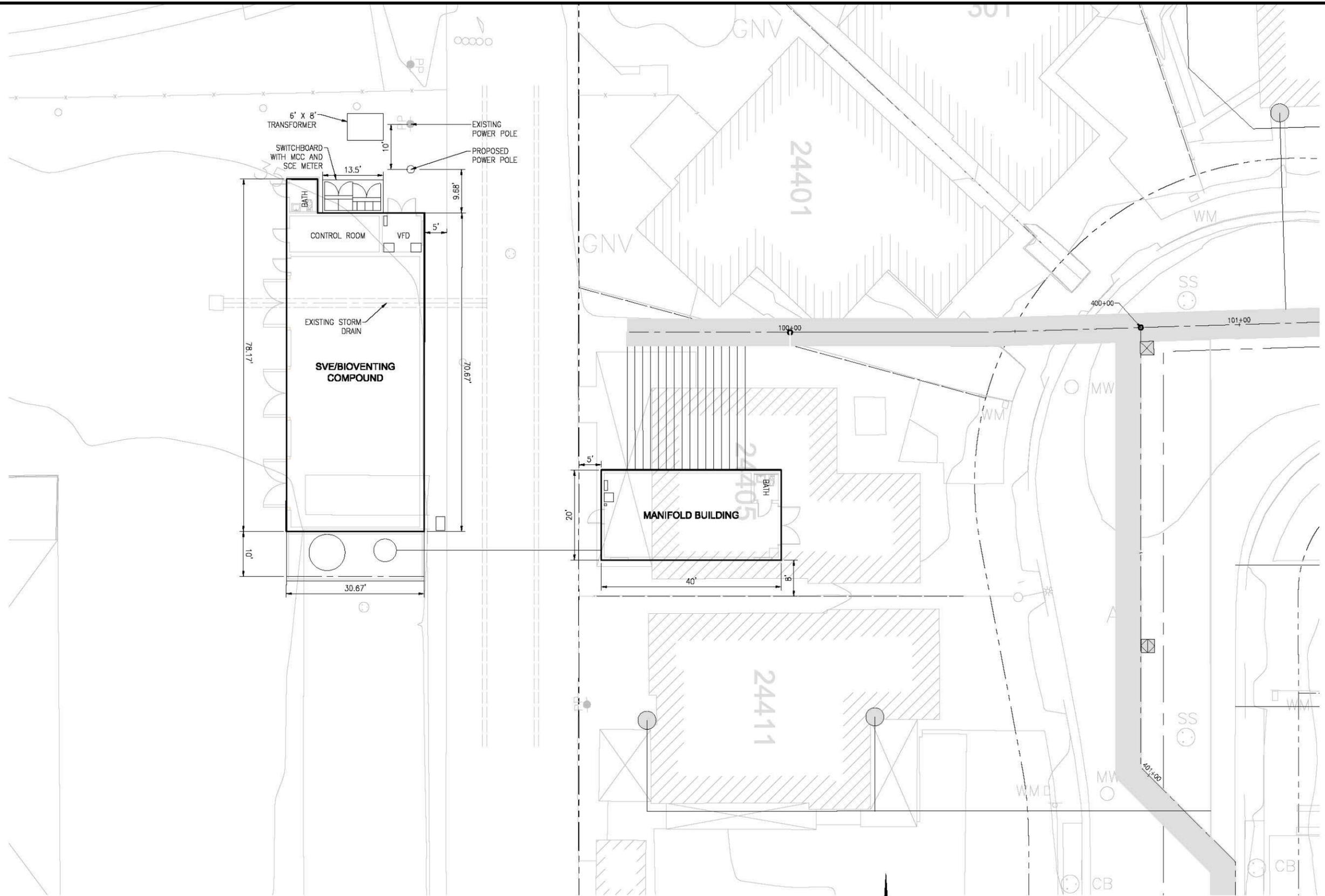
CITY OF CARSON

**SVE/BIOVENTING SYSTEM
CAROUSEL TRACT**

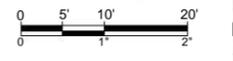
SHEET INDEX

PROJECT NO. XXX	SHEET 2 of 87	PLAN NO. G-002
---------------------------	-------------------------	--------------------------

G:\1 Shell Products - Former Keat Property\RP Implementation\000\010_General\3 e-003.dwg Plotted on Oct 15, 2015 2:41pm by Luke Ferry



PLAN
SCALE: 1" = 10'



DESIGN BY:
L.FERRY
DRAWN BY:
L.FERRY
CHECKED BY:
G.DAVIS

STAMP

PLANS PREPARED BY:
AECOM
999 W. TOWN & COUNTRY ROAD
ORANGE, CA 92868-4713

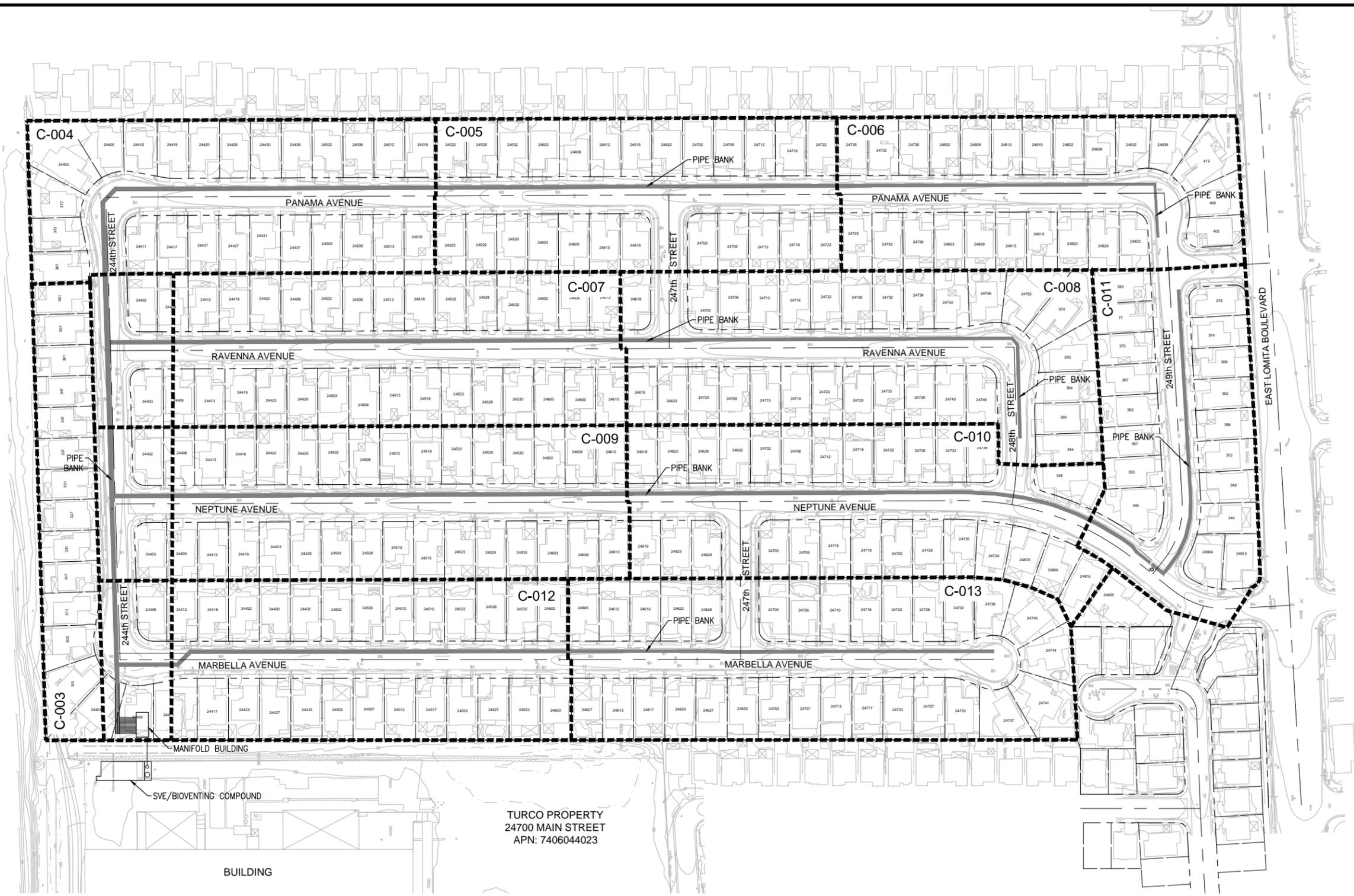
BENCHMARK:
SEE DRAWING C-002

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

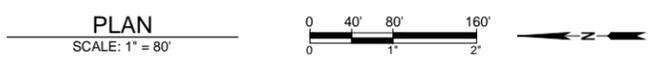
SHELL OIL PRODUCTS US		
CITY OF CARSON		
SVE/BIOVENTING SYSTEM CAROUSEL TRACT		
SITE PLAN		
PROJECT NO. XXX	SHEET 3 of 87	PLAN NO. G-003

90% SUBMITTAL

\\s01onca02_projects\1 Shell Products - Former Kast Property\Map Implementation\CAD\020_Civil\4 C-001.dwg Plotted on Oct 15, 2015 - 2:13pm by Luke Ferry



TURCO PROPERTY
 24700 MAIN STREET
 APN: 7406044023



DESIGN BY:
 L.FERRY
 DRAWN BY:
 L.FERRY
 CHECKED BY:
 G.DAVIS

STAMP

PLANS PREPARED BY:
AECOM
 999 W. TOWN & COUNTRY ROAD
 ORANGE, CA 92868-4713

BENCHMARK:
 SEE DRAWING C-002

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/BIOVENTING SYSTEM
CAROUSEL TRACT
CIVIL KEY MAP

PROJECT NO. XXX	SHEET 4 of 87	PLAN NO. C-001
---------------------------	-------------------------	--------------------------

90% SUBMITTAL

LIST OF ABBREVIATIONS

∠	ANGLE
" OR IN	INCH
' OR FT	FOOT
ABAN, ABND OR ABAND	ABANDONED UTILITY
AC	ASPHALT CONCRETE
ALT	ALTERNATIVE
AWWA	AMERICAN WATER WORKS ASSOCIATION
AV OR AVE	AVENUE
BC	BEGINNING OF CURVE
BCR	BEGINNING OF CURVE RETURN
BFV	BUTTERFLY VALVE
BM	BENCHMARK
BVC	BEGINNING OF VERTICAL CURVE
CAL-OSHA	CALIF. DEPT. OF INDUSTRIAL RELATIONS DIV. OF OCCUPATIONAL SAFETY AND HEALTH
CATV	CABLE TELEVISION
CB	CATCH BASIN
CCP	CONCRETE CYLINDER PIPE
CIP	CAST IRON PIPE
CISP	CAST IRON SOIL PIPE
CFM	CUBIC FEET PER MINUTE
CFS	CUBIC FEET PER SECOND
C	CENTERLINE
CL	CLASS
CML	CEMENT MORTAR LINED
CMU	CONCRETE MASONRY UNIT
CLR	CLEARANCE
CML&C	CEMENT MORTAR LINED & COATED
CP	CATHODIC PROTECTION
CONC	CONCRETE
CONT	CONTINUOUS
D	DEGREES
DIA OR Ø	DIAMETER
DSOD	DIVISION OF SAFETY OF DAMS
DWG	DRAWING
DWV	DRAIN, WASTE, AND VENT PIPE
E	ELECTRICAL LINE OR EAST
EC	END OF CURVE
ECR	END OF CURB RETURN
EL/ELEV	ELEVATION
ELEC	ELECTRICAL
ENCS	ENCASEMENT
EQ	EQUAL
EVC	END OF VERTICAL CURVE
EW	EACH WAY
EXIST	EXISTING
FF	FINISHED FLOOR
FL	FLOW LINE
FLG	FLANGED
FO	FIBER OPTIC (LINE)
FM	FORCE MAIN
FS	FINISHED SURFACE
FT	FEET
G	GAS (LINE)
GA	GAUGE
GALV	GALVANIZED
GE	GROOVED END
GPM	GALLON PER MINUTE
GCB	GENERATOR CONNECTION BOX
H	HEIGHT
HDPE	HIGH DENSITY POLYETHYLENE
HP	HORSE POWER
HORIZ	HORIZONTAL
INV	INVERT
INSUL	INSULATING
JTS	JOINTS
L	LENGTH
LF	LINEAR FEET
LT	LEFT
MAT'L	MATERIAL
MAX	MAXIMUM
MCC	MOTOR CONTROL CENTER
MFG	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MIP	MALE IRON PIPE
MOD	MODIFY
MTS	MANUAL TRANSFER SWITCH
N	NORTH
N'LY	NORTHERLY
NO	NUMBER
NTS	NOT TO SCALE
NTU	NEPHELOMETRIC TURBIDITY UNITS
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFF	OFFSET
OH	OVERHEAD
PE	PLAIN END
PL	PLACE
PLC	PROGRAMMABLE LOGIC CONTROLLERS

PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
PT	POINT
PVC	POLYVINYL CHLORIDE
R	RADIUS LENGTH
RET	RETAINING
REQ'D	REQUIRED
RPM	REVOLUTIONS PER MINUTE
ROW OR R/W	RIGHT OF WAY
RT	RIGHT
RW	RECYCLED WATER (LINE)
S	SANITARY SEWER / SLOPE / SOUTH / SIGN
SCH	SCHEDULE
SD	STORM DRAIN (LINE)
SDG&E	SAN DIEGO GAS & ELECTRIC
SMC	SOLID STATE MOTOR CONTROLLER
SMWD	SANTA MARGARITA WATER DISTRICT
SPECS	SPECIFICATIONS
SPPWC	STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION
SS	STAINLESS STEEL
SSPWC	STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION
STA	STATION
STD	STANDARD
SVE	SOIL VAPOR EXTRACTION
STL	STEEL
SWR	SEWER
T	TANGENT LENGTH
T OR TELE	TELEPHONE
TDH	TOTAL DYNAMIC HEAD
TYP	TYPICAL
UB	UTILITY BOX
V	VALVE OR VOLTS
VPI	VERTICAL POINT OF INTERSECTION
W/	WATER (LINE) OR WEST OR WIDTH
W/	WITH
WT	WEIGHT
WWM	WELDED WIRE MESH

STANDARD SYMBOLS

	CENTERLINE
	PROPERTY LINE
	PROPOSED 4" DOMESTIC WATER
	PROPOSED 8" STORM DRAIN
	PROPOSED COMPRESSED AIR LINE
	PROPOSED ELECTRICAL LINE
	PROPOSED FORCE MAIN
	FENCE
	PROPOSED PIPE (BURIED)
	PROPOSED PIPE (ABOVE-GRADE)
	EASEMENT LINE
	DEMOLISH
	AREA OF DEMOLITION
	ALL-WEATHER GRAVEL SURFACE
	CONCRETE
	DRAIN INLET
	GUARD POST/BOLLARD

EXISTING FEATURES

	AERIAL TARGET
	ASPHALTIC CONCRETE PAVING
	BACK FLOW PREVENTER
	BORE HOLE
	CABLE TV PULLBOX
	CATCH BASIN MANHOLE
	ELECTRICAL CABINET
	ELECTRICAL METER
	ELECTRICAL RISER
	ELECTRICAL VAULT
	FIRE HYDRANT
	IRRIGATION CABINET
	GAS ELECTRONIC TESTING STATION
	GAS VALVE
	GUY ANCHOR
	GUY POLE
	MONITORING WELL
	TREE
	PINE TREE
	TELEPHONE
	PARKING LOT LIGHT
	PETROLEUM CABINET
	POWER POLE
	POWER POLE (WITH CONDUITS)
	SANITARY SEWER MANHOLE
	SIGN
	STREET LIGHT POLE
	STREET LIGHT PULLBOX
	STORM DRAIN MANHOLE
	TELEPHONE CABINET
	TELEPHONE MANHOLE
	TELEPHONE POLE
	TELEPHONE PULLBOX
	TELEPHONE RISER
	TELEPHONE VAULT
	TRAFFIC CABINET
	TRAFFIC SIGNAL
	TRAFFIC SIGNAL PULLBOX
	VAULT
	WATER METER
	WATER RISER
	WATER VALVE
	BUILDING LINE

BENCH MARK:

ELEVATIONS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), AS DETERMINED BY A CLOSED-LOOP DIGITAL LEVEL RUN, FROM THE FOLLOWING BENCHMARK:

COUNTY OF LOS ANGELES B.M. NO. Y8412
ELEVATION: 43.755 FEET
DATUM: NAVD88 (COUNTY LEVELED IN 2005).

DESCRIBED BY LA COUNTY SURVEYOR: "L&SPK IN CB 7M(23') W/O BCR @ SW COR LOMITA BLVD & BAY VIEW AVE"

BASIS OF BEARINGS:

THE COORDINATES SHOWN HEREON ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83), ZONE V, 2011.00 EPOCH, RELATIVE TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), AND WERE DETERMINED BY GLOBAL POSITIONING SYSTEM (G.P.S.) TIES TO TWO CONTINUOUS GLOBAL POSITIONING STATIONS (C.G.P.S.) REFERRED TO AS CSDH AND LBC2. THE BEARING BETWEEN SAID STATIONS BEING N44°47'42"W BASED ON POSITIONS COMPUTED MAY 13, 2011 AND PUBLISHED BY THE CALIFORNIA SPATIAL REFERENCE CENTER (C.S.R.C.). <http://csrc.ucsd.edu/>

GRID TO GROUND

ALL DISTANCES BASED ON THESE COORDINATES ARE GRID DISTANCES. TO OBTAIN GROUND DISTANCES, DIVIDE GRID DISTANCES BY THE COMPUTED COMBINATION FACTOR OF 1.00006185 AT POINT 705 (ELEVATION OF 43.01' AND CONVERGENCE ANGLE OF -0°09'10.27")

NOTICE TO CONTRACTOR

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND SHALL REPORT ALL DISCREPANCIES TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THESE REQUIREMENTS SHALL APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER, THE ENGINEER, AND THE SANTA MARGARITA WATER DISTRICT (SMWD) HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM SOLE NEGLIGENCE OF OWNER, ENGINEER, OR SMWD.

PURSUANT TO ASSEMBLY BILL 3019, NO EXCAVATION PERMIT IS VALID UNLESS THE FOLLOWING IS PERFORMED:

1. UNDERGROUND SERVICE ALERT HAS BEEN CONTACTED AND HAS PROVIDED INQUIRY I.D. NUMBER _____
2. THE UNDERSIGNED AGREES TO CONTACT AND OBTAIN AN INQUIRY I.D. NUMBER FROM UNDERGROUND SERVICE ALERT (811) AT LEAST TWO WORKING DAYS PRIOR TO COMMENCING EXCAVATION.

SIGNED

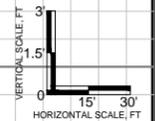
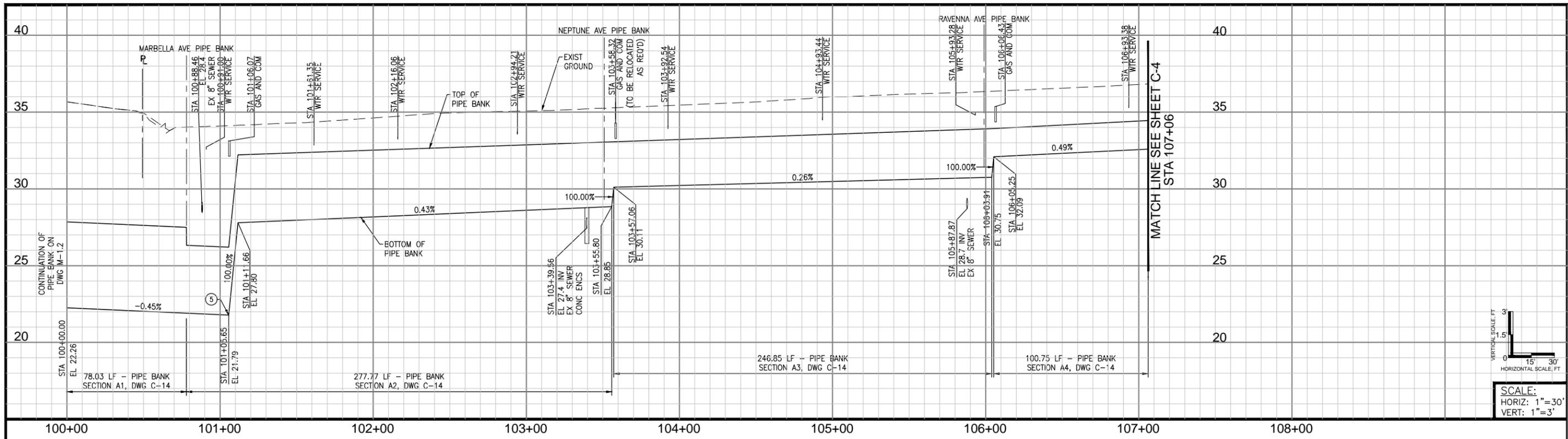
DATE

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

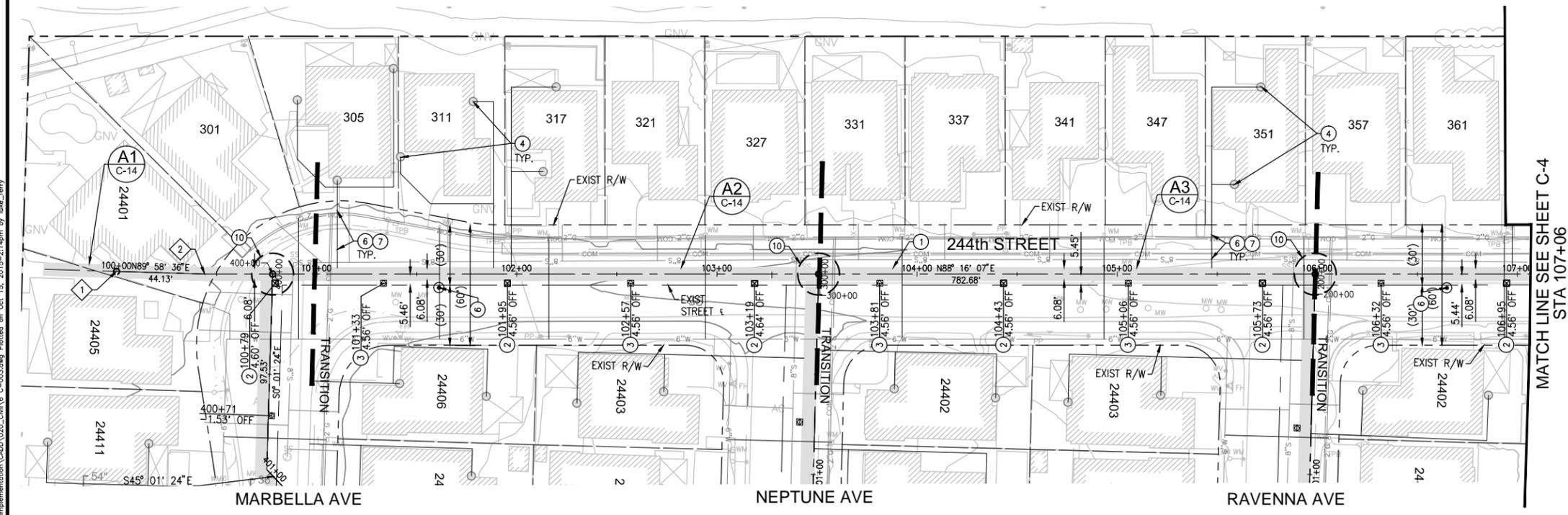
SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/BIOVENTING SYSTEM
CAROUSEL TRACT
CIVIL NOTES, ABBREVIATIONS, AND SYMBOLS

PROJECT NO.	SHEET	PLAN NO.
XXX	5 of 87	C-002

DESIGN BY: L.FERRY	STAMP	PLANS PREPARED BY:	BENCHMARK: SEE DRAWING C-002
DRAWN BY: L.FERRY			
CHECKED BY: G.DAVIS		999 W. TOWN & COUNTRY ROAD ORANGE, CA 92868-4713	



SCALE:
HORIZ: 1"=30'
VERT: 1"=3'



CONSTRUCTION NOTES

- ① CONSTRUCT PIPE BANK PER SECTION LABELED ON PLAN
- ② CONSTRUCT SHALLOW STREET WELL PER DETAIL 1 C-18
- ③ CONSTRUCT TRIPLE NESTED STREET WELL PER DETAIL 2 C-18
- ④ CONSTRUCT RESIDENTIAL WELL PER DETAIL 3 C-18
- ⑤ CONSTRUCT HEADER PIPE SUMP PER DETAIL 4 C-19
- ⑥ CONSTRUCT HANDHOLE/SAMPLE PORT LOCATION PER DETAIL 5 C-19
- ⑦ INSTALL 2" SCH 40 PVC PIPE, MIN 18" COVER, WITHIN R/W ONLY
- ⑧ CONSTRUCT SOIL VAPOR PROBE PER DETAIL 7 C-20
- ⑩ INSTALL 90° BENDS, SIZE TO MATCH MAIN LINES, AND JOIN MAIN PIPE BANK

COORDINATE TABLE

POINT #	NORTHING	EASTING
1	1751185.4648	6479360.8198
2	1751185.4827	6479404.9452

NOTE

RESIDENTIAL SOIL VAPOR EXTRACTION WELLS WILL BE CONSTRUCTED PER DETAIL AS REFERENCED WITHIN THIS PLAN HOWEVER PIPING AND FINAL LOCATION OF WELL WILL BE DETERMINED BY FUTURE RESTORATION PLANS AND FIELD CONDITIONS. CONNECTING PIPING IS SHOWN SCHEMATICALLY

DESIGN BY:
L.FERRY
DRAWN BY:
L.FERRY
CHECKED BY:
G.DAVIS

STAMP

PLANS PREPARED BY:
AECOM
999 W. TOWN & COUNTRY ROAD
ORANGE, CA 92868-4713

BENCHMARK:
SEE DRAWING C-002

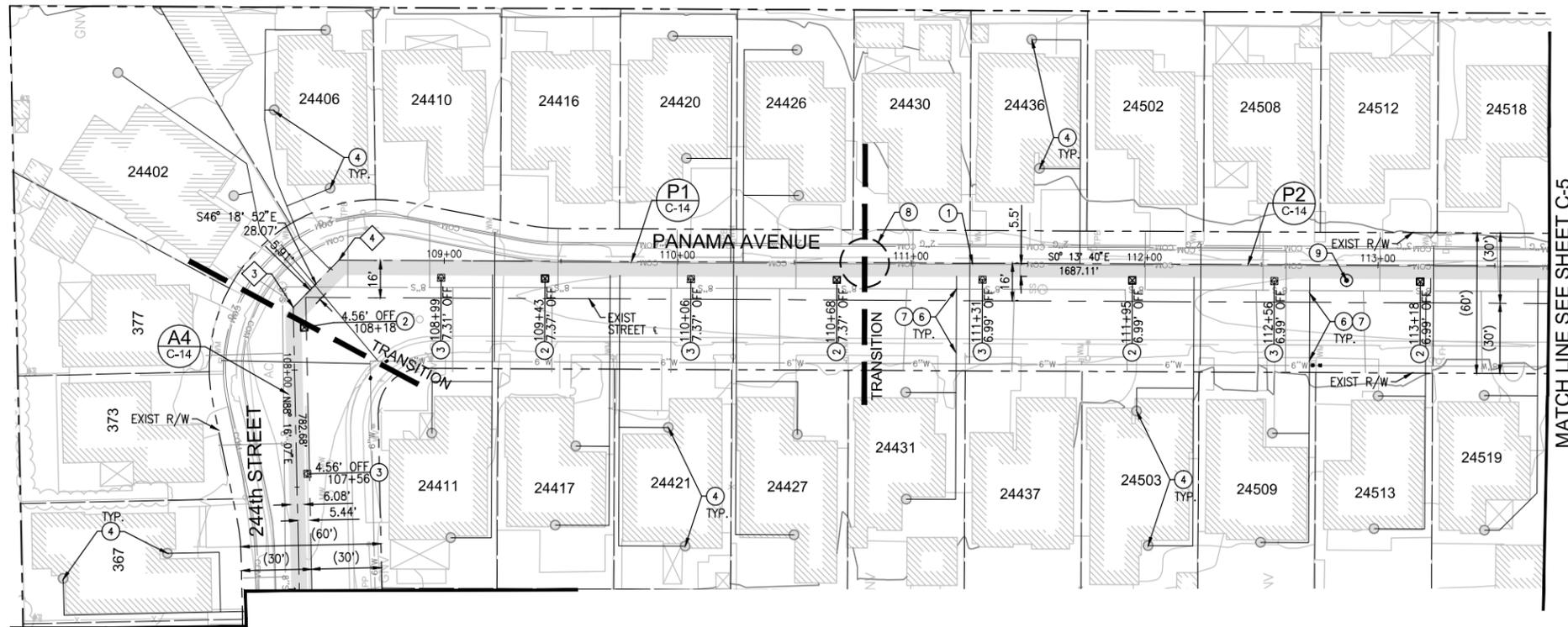
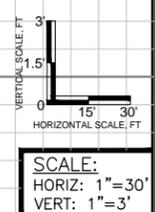
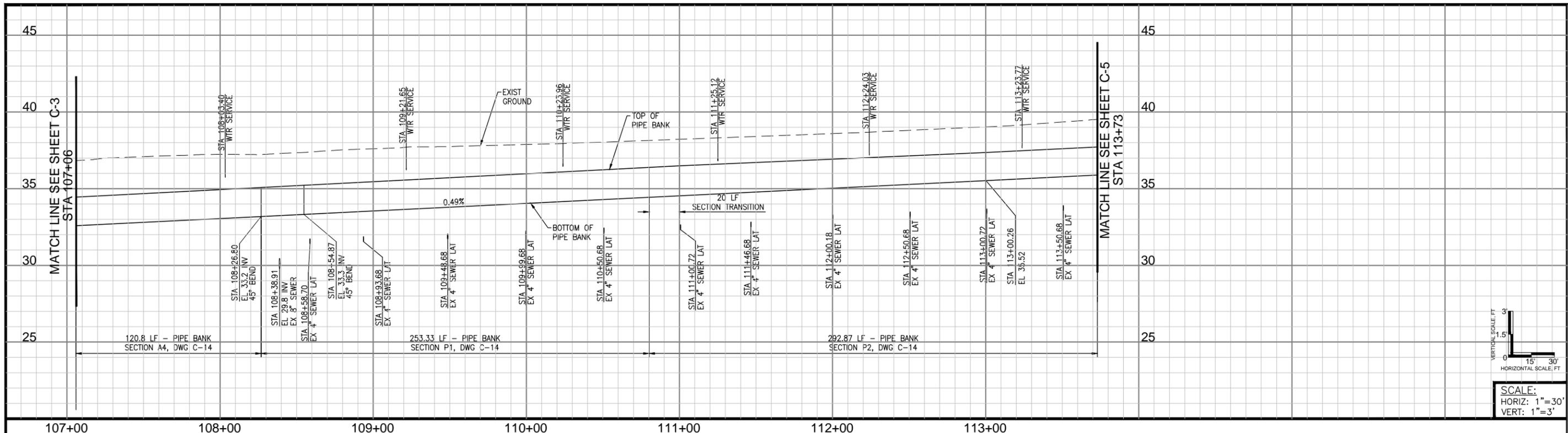
REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/BIOVENTING SYSTEM
CAROUSEL TRACT
SVE WELLS AND PIPE BANK
PLAN AND PROFILE 1

PROJECT NO. XXX	SHEET 6 of 87	PLAN NO. C-003
---------------------------	-------------------------	--------------------------

\\s010nc02\projects\1 Shell Products - Former Kast Property\Map Implementation\CADD\020_Civil\6 C-003.dwg Plotted on Oct 15, 2015 - 2:14pm by Luke Ferry

90% SUBMITTAL



CONSTRUCTION NOTES

- 1 CONSTRUCT PIPE BANK PER SECTION LABELED ON PLAN
- 2 CONSTRUCT SHALLOW STREET WELL PER DETAIL
- 3 CONSTRUCT TRIPLE NESTED STREET WELL PER DETAIL
- 4 CONSTRUCT RESIDENTIAL WELL PER DETAIL
- 5 CONSTRUCT HEADER PIPE SUMP PER DETAIL
- 6 CONSTRUCT HANDHOLE/SAMPLE PORT LOCATION PER DETAIL
- 7 INSTALL 2" SCH 40 PVC PIPE, MIN 18" COVER, WITHIN R/W ONLY
- 8 CONSTRUCT PIPE BANK TRANSITION PER DETAIL
- 9 CONSTRUCT SOIL VAPOR PROBE PER DETAIL

COORDINATE TABLE

POINT #	NORTHING	EASTING
3	1751209.1311	6480187.2634
4	1751189.7425	6480207.5627

MATCH LINE SEE SHEET C-3
STA 107+06

NOTE
RESIDENTIAL SOIL VAPOR EXTRACTION WELLS WILL BE CONSTRUCTED PER DETAIL AS REFERENCED WITHIN THIS PLAN HOWEVER PIPING AND FINAL LOCATION OF WELL WILL BE DETERMINED BY FUTURE RESTORATION PLANS AND FIELD CONDITIONS. CONNECTING PIPING IS SHOWN SCHEMATICALLY



REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

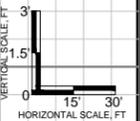
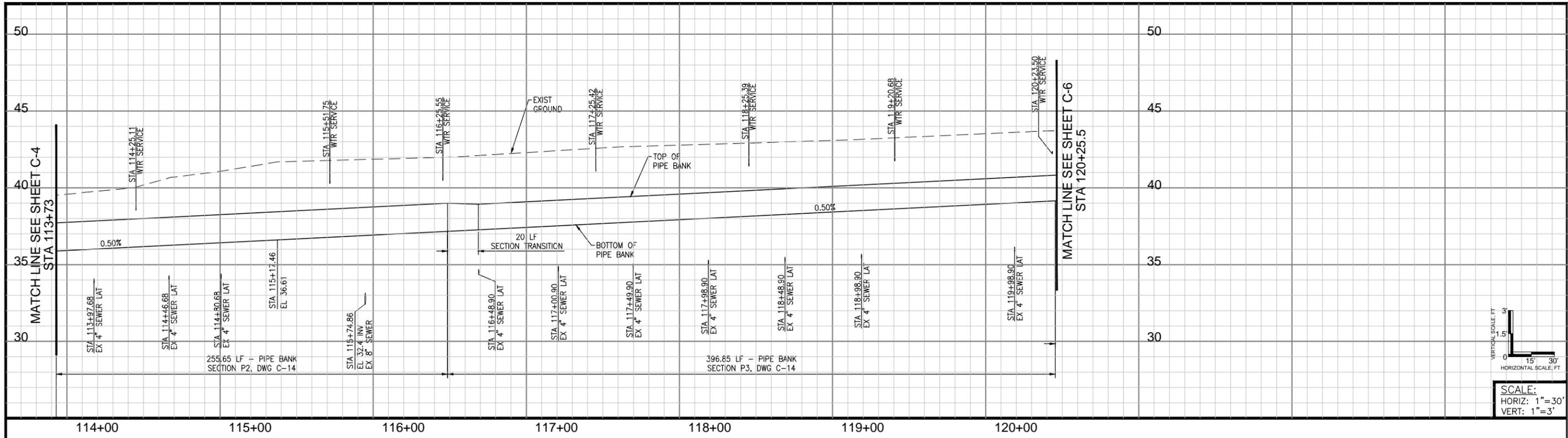
SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/BIOVENTING SYSTEM
CAROUSEL TRACT
SVE WELLS AND PIPE BANK
PLAN AND PROFILE 2

PROJECT NO. **XXX** SHEET **7 of 87** PLAN NO. **C-004**

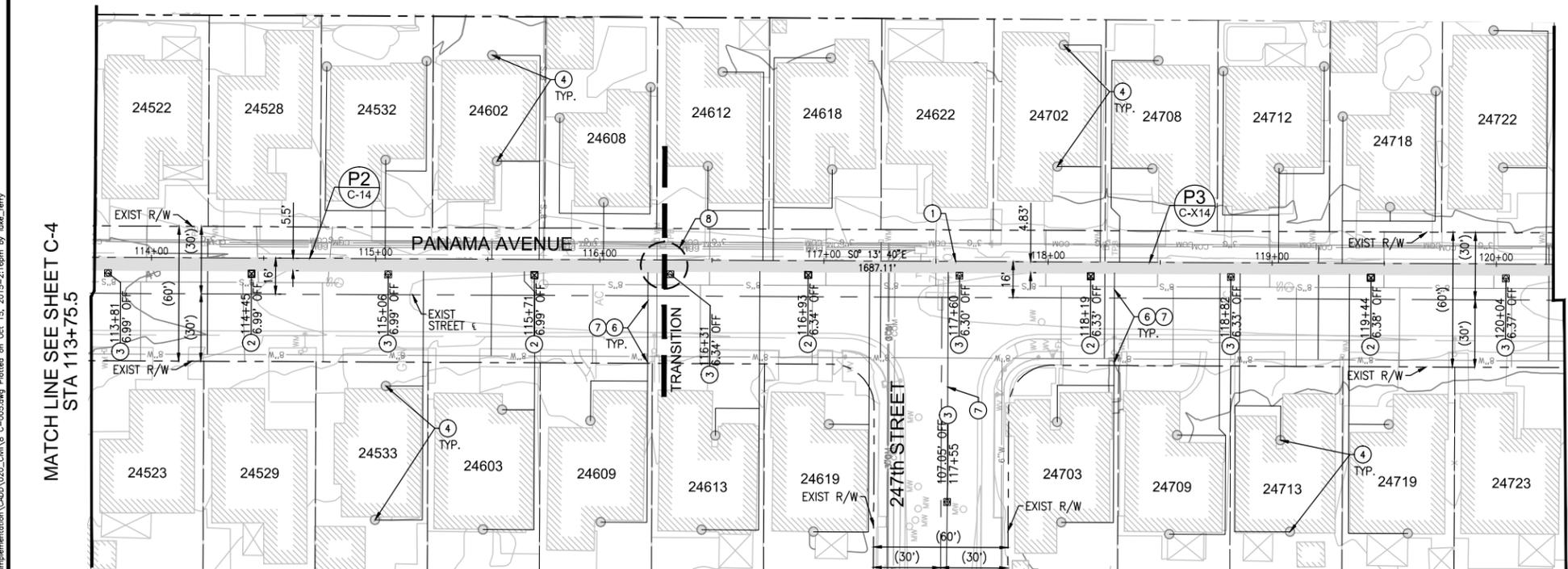
DESIGN BY: L.FERRY	STAMP	PLANS PREPARED BY:	BENCHMARK: SEE DRAWING C-002
DRAWN BY: L.FERRY		AECOM	
CHECKED BY: G.DAVIS		999 W. TOWN & COUNTRY ROAD ORANGE, CA 92868-4713	

\\s01\one02\projects\1 Shell Products - Former Kast Property\Map Implementation\CAD\020_Civil\7 C-004.dwg Plotted on Oct 15, 2015 - 2:15pm by Luke Ferry

90% SUBMITTAL



SCALE:
HORIZ: 1"=30'
VERT: 1"=3'



- CONSTRUCTION NOTES**
- 1 CONSTRUCT PIPE BANK PER SECTION LABELED ON PLAN
 - 2 CONSTRUCT SHALLOW STREET WELL PER DETAIL 1
C-18
 - 3 CONSTRUCT TRIPLE NESTED STREET WELL PER DETAIL 2
C-18
 - 4 CONSTRUCT RESIDENTIAL WELL PER DETAIL 3
C-18
 - 5 CONSTRUCT HEADER PIPE SUMP PER DETAIL 4
C-19
 - 6 CONSTRUCT HANDHOLE/SAMPLE PORT LOCATION PER DETAIL 5
C-19
 - 7 INSTALL 2" SCH 40 PVC PIPE, MIN 18" COVER, WITHIN R/W ONLY
 - 8 CONSTRUCT PIPE BANK TRANSITION PER DETAIL 6
C-19
 - 9 CONSTRUCT SOIL VAPOR PROBE PER DETAIL 7
C-20

NOTE
RESIDENTIAL SOIL VAPOR EXTRACTION WELLS WILL BE CONSTRUCTED PER DETAIL AS REFERENCED WITHIN THIS PLAN HOWEVER PIPING AND FINAL LOCATION OF WELL WILL BE DETERMINED BY FUTURE RESTORATION PLANS AND FIELD CONDITIONS. CONNECTING PIPING IS SHOWN SCHEMATICALLY

DESIGN BY: L.FERRY	STAMP	PLANS PREPARED BY: AECOM	BENCHMARK: SEE DRAWING C-002
DRAWN BY: L.FERRY		999 W. TOWN & COUNTRY ROAD ORANGE, CA 92868-4713	
CHECKED BY: G.DAVIS			

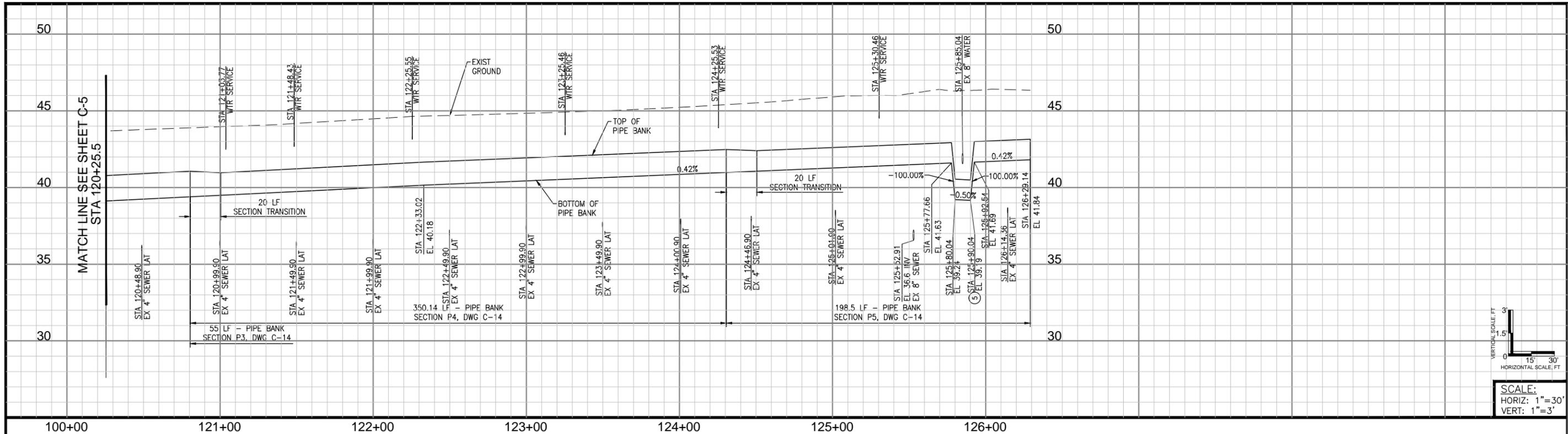
REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/BIOVENTING SYSTEM
CAROUSEL TRACT
SVE WELLS AND PIPE BANK
PLAN AND PROFILE 3

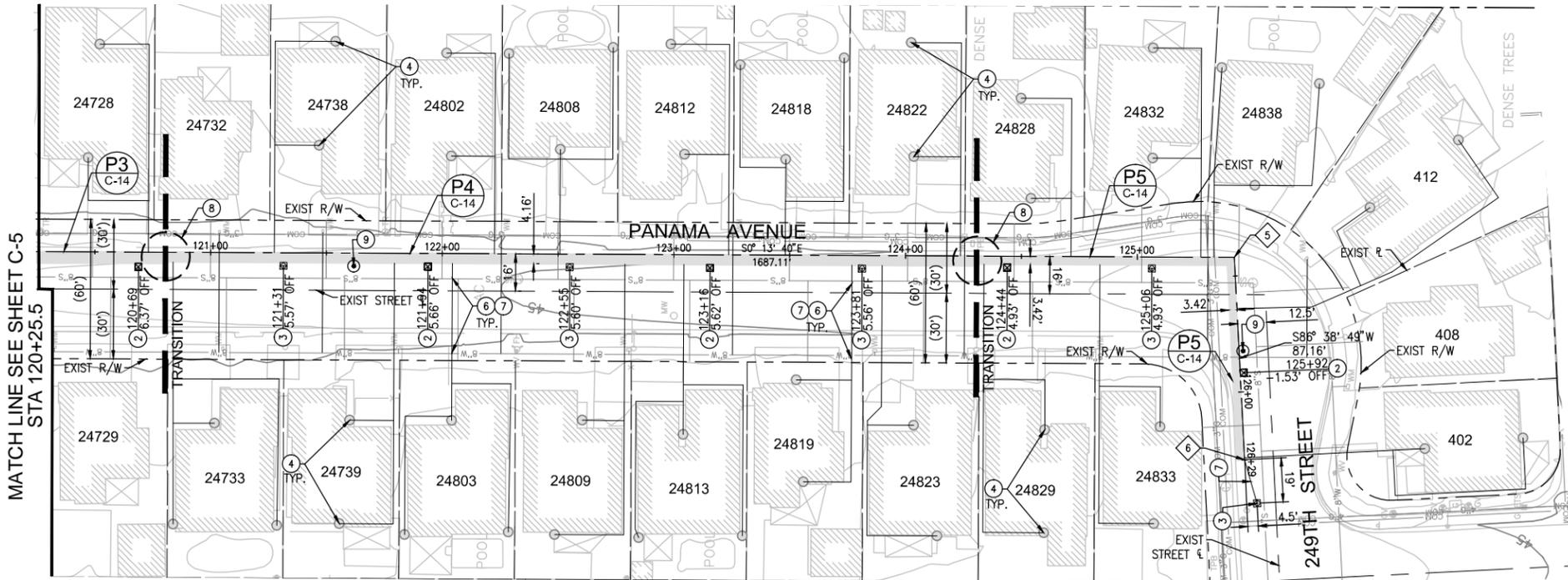
PROJECT NO. XXX	SHEET 8 of 87	PLAN NO. C-005
---------------------------	-------------------------	--------------------------

\\s01one02\projects\1 Shell Products - Former Kast Property\Map Implementation\CADD\020_Civil\8 C-005.dwg Plotted on Oct 15, 2015 - 2:16pm by Luke Ferry

90% SUBMITTAL



SCALE:
HORIZ: 1"=30'
VERT: 1"=3'



CONSTRUCTION NOTES

- 1 CONSTRUCT PIPE BANK PER SECTION LABELED ON PLAN
- 2 CONSTRUCT SHALLOW STREET WELL PER DETAIL
- 3 CONSTRUCT TRIPLE NESTED STREET WELL PER DETAIL
- 4 CONSTRUCT RESIDENTIAL WELL PER DETAIL
- 5 CONSTRUCT HEADER PIPE SUMP PER DETAIL
- 6 CONSTRUCT HANDHOLE/SAMPLE PORT LOCATION PER DETAIL
- 7 INSTALL 2" SCH 40 PVC PIPE, MIN 18" COVER, WITHIN R/W ONLY
- 8 CONSTRUCT PIPE BANK TRANSITION PER DETAIL
- 9 CONSTRUCT SOIL VAPOR PROBE PER DETAIL

COORDINATE TABLE

POINT #	NORTHING	EASTING
5	1749502.6480	6480214.2704
6	1749497.5501	6480127.2624

NOTE

RESIDENTIAL SOIL VAPOR EXTRACTION WELLS WILL BE CONSTRUCTED PER DETAIL AS REFERENCED WITHIN THIS PLAN HOWEVER PIPING AND FINAL LOCATION OF WELL WILL BE DETERMINED BY FUTURE RESTORATION PLANS AND FIELD CONDITIONS. CONNECTING PIPING IS SHOWN SCHEMATICALLY

DESIGN BY: L.FERRY	STAMP	PLANS PREPARED BY: AECOM	BENCHMARK: SEE DRAWING C-002
DRAWN BY: L.FERRY		999 W. TOWN & COUNTRY ROAD ORANGE, CA 92868-4713	
CHECKED BY: G.DAVIS			

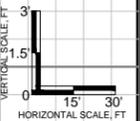
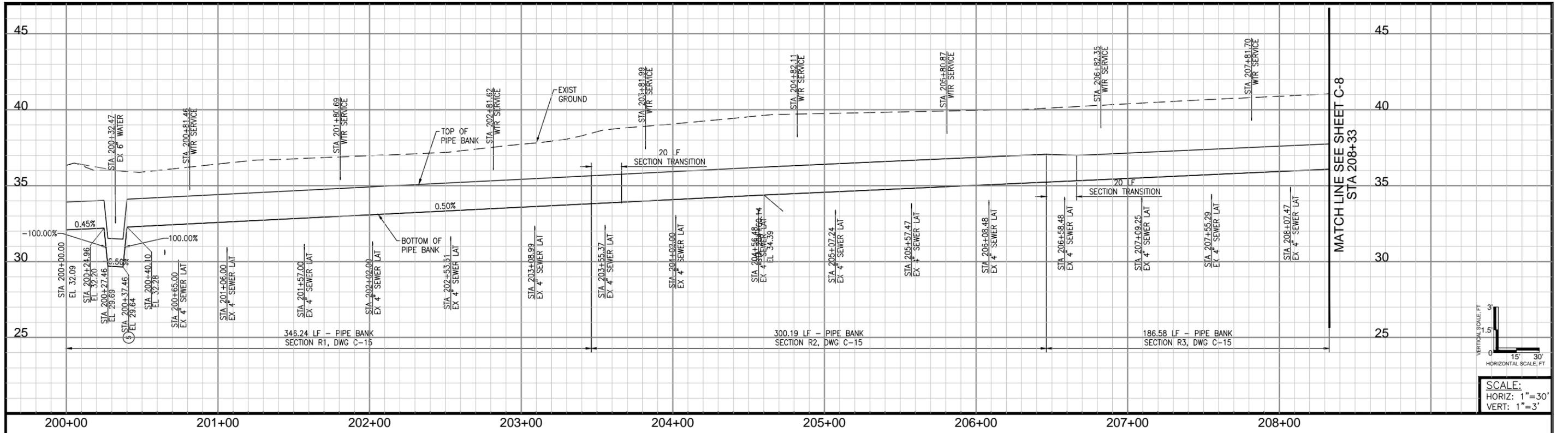
REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/BIOVENTING SYSTEM
CAROUSEL TRACT
SVE WELLS AND PIPE BANK
PLAN AND PROFILE 4

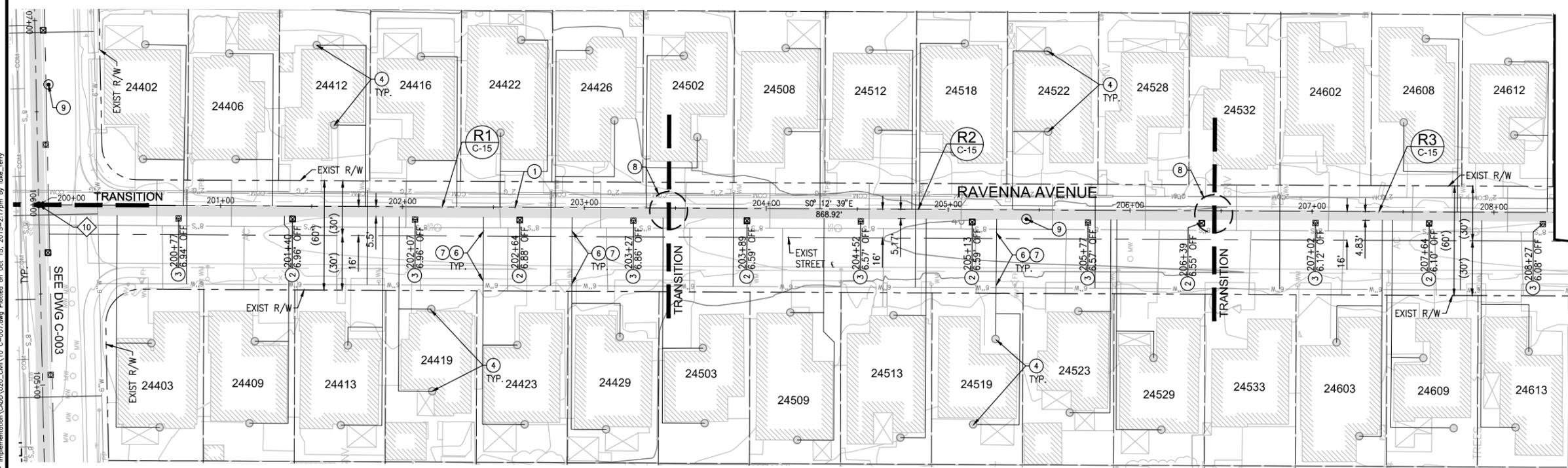
PROJECT NO. XXX	SHEET 9 of 87	PLAN NO. C-006
---------------------------	-------------------------	--------------------------

\\s01onca02\projects\1 Shell Products - Former Kast Property\Map Implementation\CADD\020_Civil\9 C-006.dwg Plotted on Oct 15, 2015 - 2:16pm by Luke Ferry

90% SUBMITTAL



SCALE:
 HORIZ: 1" = 30'
 VERT: 1" = 3'



- CONSTRUCTION NOTES**
- 1 CONSTRUCT PIPE BANK PER SECTION LABELED ON PLAN
 - 2 CONSTRUCT SHALLOW STREET WELL PER DETAIL
 - 3 CONSTRUCT TRIPLE NESTED STREET WELL PER DETAIL
 - 4 CONSTRUCT RESIDENTIAL WELL PER DETAIL
 - 5 CONSTRUCT HEADER PIPE SUMP PER DETAIL
 - 6 CONSTRUCT HANDHOLE/SAMPLE PORT LOCATION PER DETAIL
 - 7 INSTALL 2" SCH 40 PVC PIPE, MIN 18" COVER, WITHIN R/W ONLY
 - 8 CONSTRUCT PIPE BANK TRANSITION PER DETAIL
 - 9 CONSTRUCT SOIL VAPOR PROBE PER DETAIL

COORDINATE TABLE

POINT #	NORTHING	EASTING
10	1751202.2455	6479959.4789

NOTE
 RESIDENTIAL SOIL VAPOR EXTRACTION WELLS WILL BE CONSTRUCTED PER DETAIL AS REFERENCED WITHIN THIS PLAN HOWEVER PIPING AND FINAL LOCATION OF WELL WILL BE DETERMINED BY FUTURE RESTORATION PLANS AND FIELD CONDITIONS. CONNECTING PIPING IS SHOWN SCHEMATICALLY

DESIGN BY: L.FERRY	STAMP	PLANS PREPARED BY:	BENCHMARK: SEE DRAWING C-002
DRAWN BY: L.FERRY		AECOM	
CHECKED BY: G.DAVIS		999 W. TOWN & COUNTRY ROAD ORANGE, CA 92868-4713	

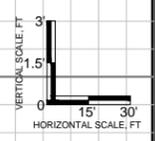
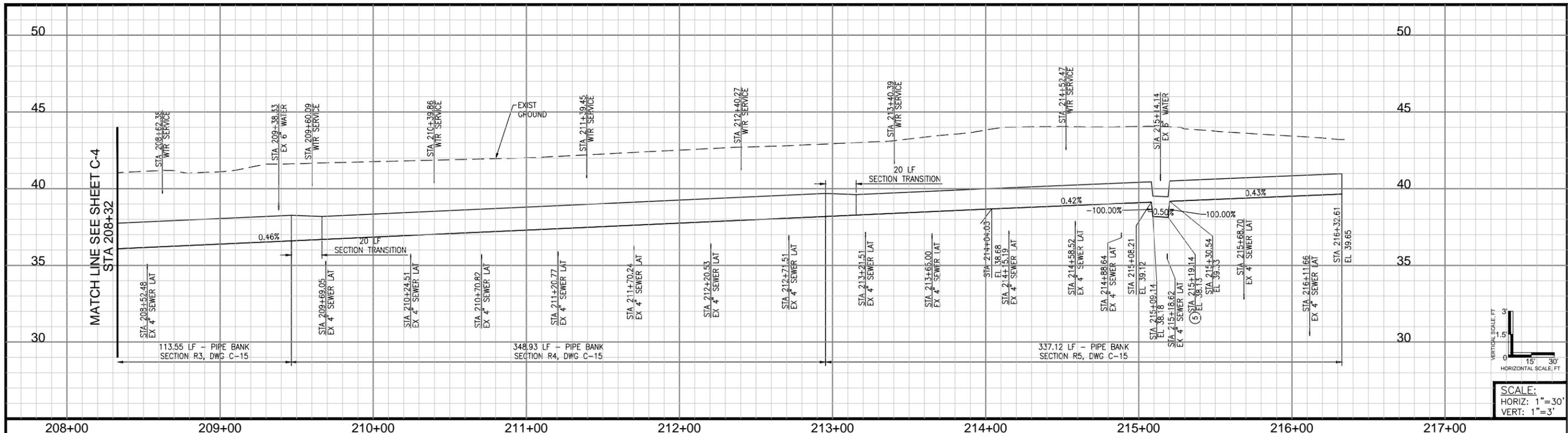
REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/BIOVENTING SYSTEM
CAROUSEL TRACT
SVE WELLS AND PIPE BANK
PLAN AND PROFILE 5

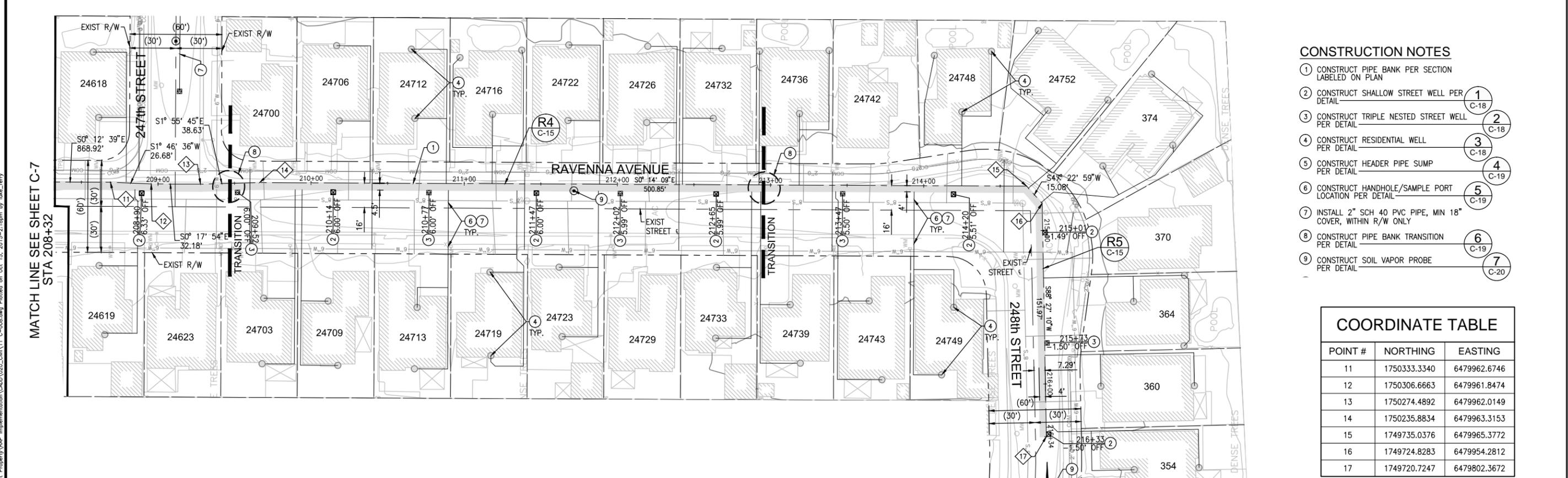
PROJECT NO. XXX	SHEET 10 of 87	PLAN NO. C-007
---------------------------	--------------------------	--------------------------

\\s01onca02\projects\1 Shell Products - Former Kast Property\pdp Implementation\CADD\020_Civil\10 C-007.dwg Plotted on Oct 15, 2015 - 2:17pm by luke.ferry

90% SUBMITTAL



SCALE:
HORIZ: 1"=30'
VERT: 1"=3'



- CONSTRUCTION NOTES**
- 1 CONSTRUCT PIPE BANK PER SECTION LABELED ON PLAN
 - 2 CONSTRUCT SHALLOW STREET WELL PER DETAIL C-18
 - 3 CONSTRUCT TRIPLE NESTED STREET WELL PER DETAIL C-18
 - 4 CONSTRUCT RESIDENTIAL WELL PER DETAIL C-18
 - 5 CONSTRUCT HEADER PIPE SUMP PER DETAIL C-19
 - 6 CONSTRUCT HANDHOLE/SAMPLE PORT LOCATION PER DETAIL C-19
 - 7 INSTALL 2" SCH 40 PVC PIPE, MIN 18" COVER, WITHIN R/W ONLY
 - 8 CONSTRUCT PIPE BANK TRANSITION PER DETAIL C-19
 - 9 CONSTRUCT SOIL VAPOR PROBE PER DETAIL C-20

COORDINATE TABLE

POINT #	NORTHING	EASTING
11	1750333.3340	6479962.6746
12	1750306.6663	6479961.8474
13	1750274.4892	6479962.0149
14	1750235.8834	6479963.3153
15	1749735.0376	6479965.3772
16	1749724.8283	6479954.2812
17	1749720.7247	6479802.3672

NOTE
RESIDENTIAL SOIL VAPOR EXTRACTION WELLS WILL BE CONSTRUCTED PER DETAIL AS REFERENCED WITHIN THIS PLAN HOWEVER PIPING AND FINAL LOCATION OF WELL WILL BE DETERMINED BY FUTURE RESTORATION PLANS AND FIELD CONDITIONS. CONNECTING PIPING IS SHOWN SCHEMATICALLY

DESIGN BY: L.FERRY	STAMP	PLANS PREPARED BY: AECOM	BENCHMARK: SEE DRAWING C-002
DRAWN BY: L.FERRY		999 W. TOWN & COUNTRY ROAD ORANGE, CA 92868-4713	
CHECKED BY: G.DAVIS			

REVISIONS

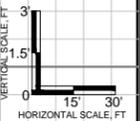
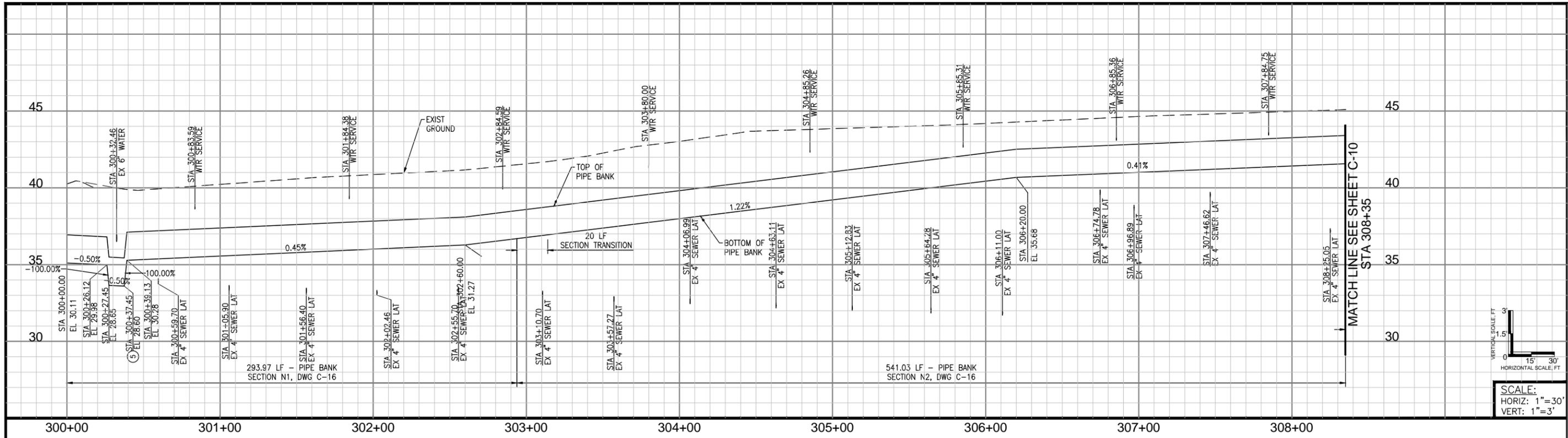
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/BIOVENTING SYSTEM
CAROUSEL TRACT
SVE WELLS AND PIPE BANK
PLAN AND PROFILE 6

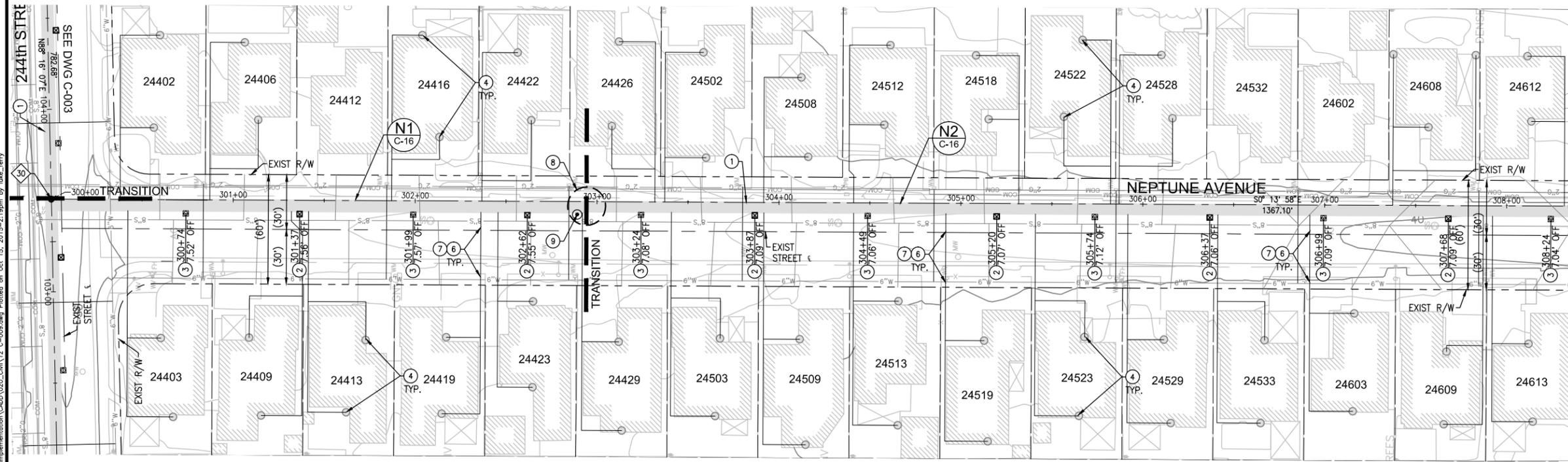
PROJECT NO. XXX	SHEET 11 of 87	PLAN NO. C-008
---------------------------	--------------------------	--------------------------

\\s01onca02\projects\1 Shell Products - Former Kast Property\Map Implementation\CAD\020_Civil\1 C-008.dwg Plotted on Oct. 15, 2015 - 2:18pm by luke.ferry

90% SUBMITTAL



SCALE:
HORIZ: 1"=30'
VERT: 1"=3'



- CONSTRUCTION NOTES**
- CONSTRUCT PIPE BANK PER SECTION LABELED ON PLAN
 - CONSTRUCT SHALLOW STREET WELL PER DETAIL
 - CONSTRUCT TRIPLE NESTED STREET WELL PER DETAIL
 - CONSTRUCT RESIDENTIAL WELL PER DETAIL
 - CONSTRUCT HEADER PIPE SUMP PER DETAIL
 - CONSTRUCT HANDHOLE/SAMPLE PORT LOCATION PER DETAIL
 - INSTALL 2" SCH 40 PVC PIPE, MIN 18" COVER, WITHIN R/W ONLY
 - CONSTRUCT PIPE BANK TRANSITION PER DETAIL
 - CONSTRUCT SOIL VAPOR PROBE PER DETAIL

COORDINATE TABLE

POINT #	NORTHING	EASTING
30	1751194.7491	6479711.4898

NOTE
RESIDENTIAL SOIL VAPOR EXTRACTION WELLS WILL BE CONSTRUCTED PER DETAIL AS REFERENCED WITHIN THIS PLAN HOWEVER PIPING AND FINAL LOCATION OF WELL WILL BE DETERMINED BY FUTURE RESTORATION PLANS AND FIELD CONDITIONS. CONNECTING PIPING IS SHOWN SCHEMATICALLY

DESIGN BY: L.FERRY	STAMP	PLANS PREPARED BY:	BENCHMARK: SEE DRAWING C-002
DRAWN BY: L.FERRY		AECOM	
CHECKED BY: G.DAVIS		999 W. TOWN & COUNTRY ROAD ORANGE, CA 92868-4713	

REVISIONS

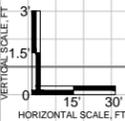
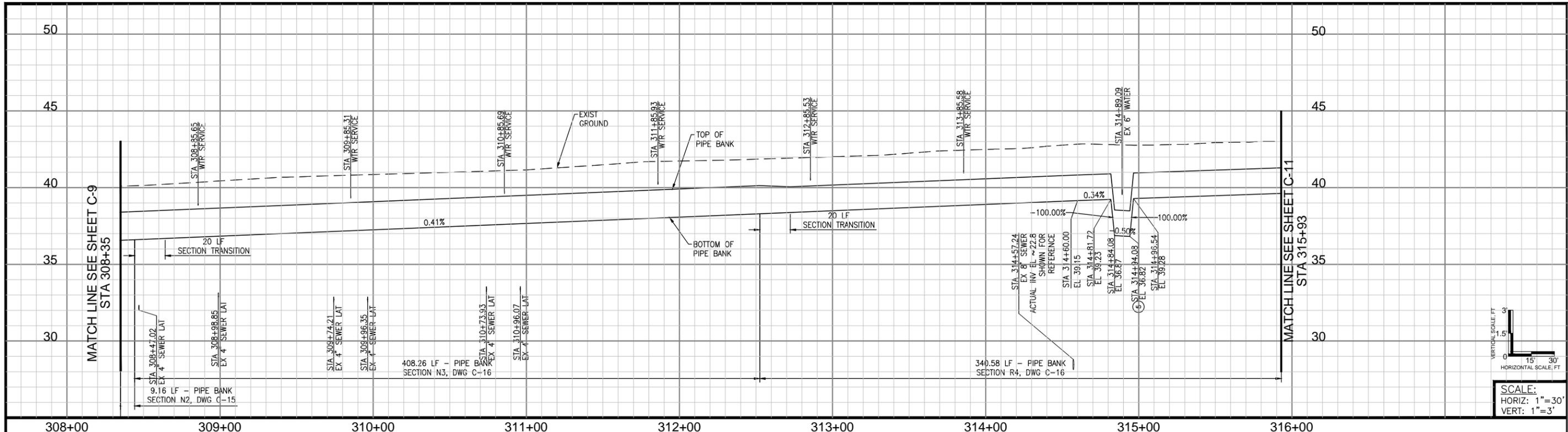
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/BIOVENTING SYSTEM
CAROUSEL TRACT
SVE WELLS AND PIPE BANK
PLAN AND PROFILE 7

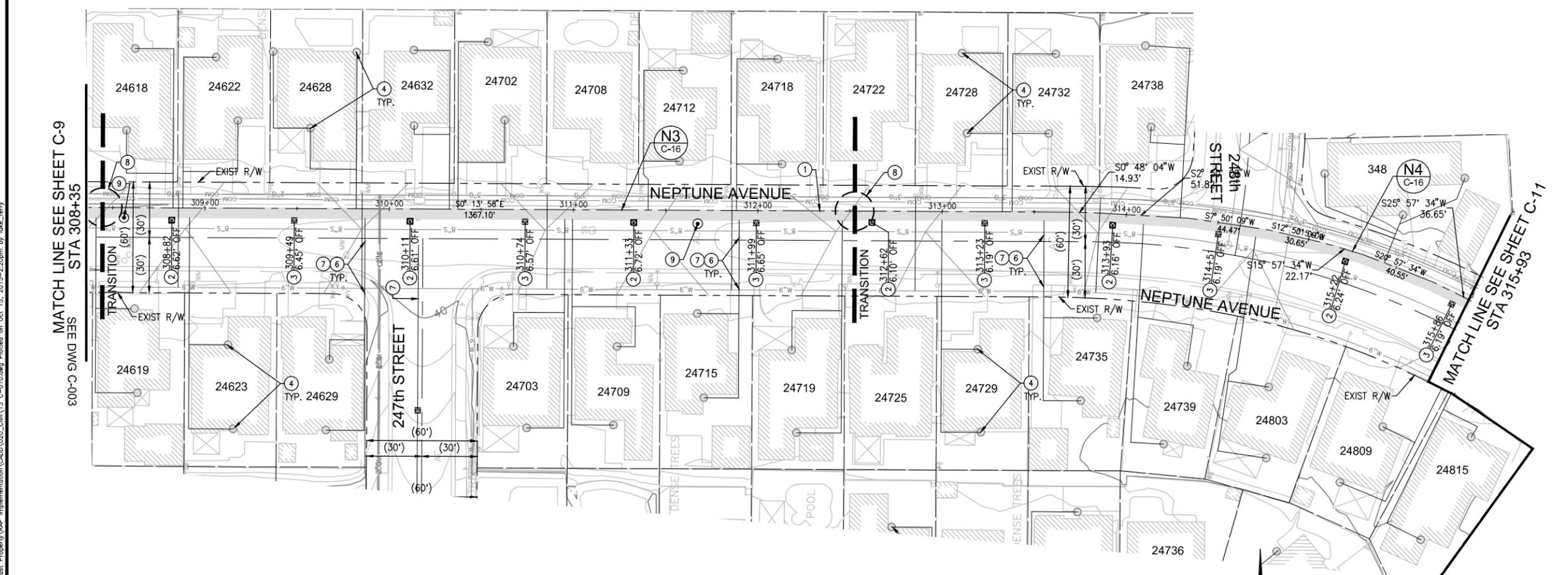
PROJECT NO. XXX	SHEET 12 of 87	PLAN NO. C-009
---------------------------	--------------------------	--------------------------

\\s01one02.projects\1 Shell Products - Former Kast Property\Map Implementation\CAD\020_Civil\12 C-009.dwg Plotted on Oct 15, 2015 - 2:19pm by luke.ferry

90% SUBMITTAL



SCALE:
HORIZ: 1"=30'
VERT: 1"=3'



CONSTRUCTION NOTES

- 1 CONSTRUCT PIPE BANK PER SECTION LABELED ON PLAN
- 2 CONSTRUCT SHALLOW STREET WELL PER DETAIL
- 3 CONSTRUCT TRIPLE NESTED STREET WELL PER DETAIL
- 4 CONSTRUCT RESIDENTIAL WELL PER DETAIL
- 5 CONSTRUCT HEADER PIPE SUMP PER DETAIL
- 6 CONSTRUCT HANDHOLE/SAMPLE PORT LOCATION PER DETAIL
- 7 INSTALL 2" SCH 40 PVC PIPE, MIN 18" COVER, WITHIN R/W ONLY
- 8 CONSTRUCT PIPE BANK TRANSITION PER DETAIL
- 9 CONSTRUCT SOIL VAPOR PROBE PER DETAIL

COORDINATE TABLE

POINT #	NORTHING	EASTING
38	1749594.9120	6479664.7553
46	1749444.0568	6479700.9789
39	1749554.7041	6479640.6347
40	1749539.9315	6479629.9178
41	1749532.5789	6479619.8274
42	1749487.3996	6479583.7194
43	1749463.7379	6479615.6658
44	1749452.2838	6479641.2158
45	1749444.8050	6479673.8782
47	1749463.9873	6480041.6865

NOTE

RESIDENTIAL SOIL VAPOR EXTRACTION WELLS WILL BE CONSTRUCTED PER DETAIL AS REFERENCED WITHIN THIS PLAN HOWEVER PIPING AND FINAL LOCATION OF WELL WILL BE DETERMINED BY FUTURE RESTORATION PLANS AND FIELD CONDITIONS. CONNECTING PIPING IS SHOWN SCHEMATICALLY

DESIGN BY:
L.FERRY
DRAWN BY:
L.FERRY
CHECKED BY:
G.DAVIS

STAMP

PLANS PREPARED BY:
AECOM
999 W. TOWN & COUNTRY ROAD
ORANGE, CA 92868-4713

BENCHMARK:
SEE DRAWING C-002

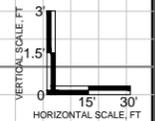
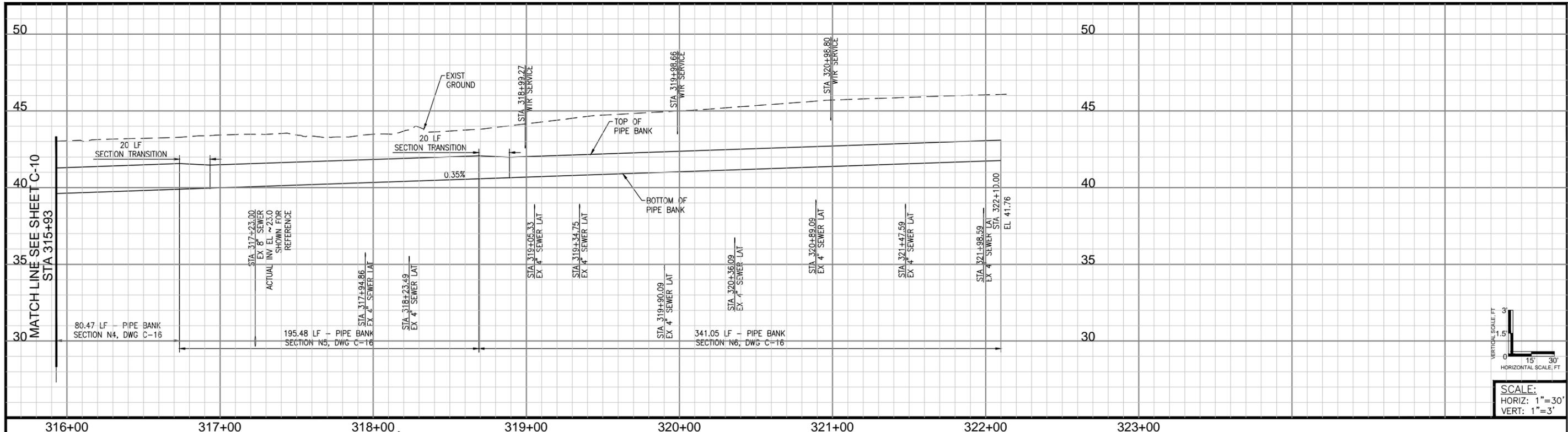
REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/BIOVENTING SYSTEM
CAROUSEL TRACT
SVE WELLS AND PIPE BANK
PLAN AND PROFILE 8

PROJECT NO. **XXX** SHEET **13 of 87** PLAN NO. **C-010**

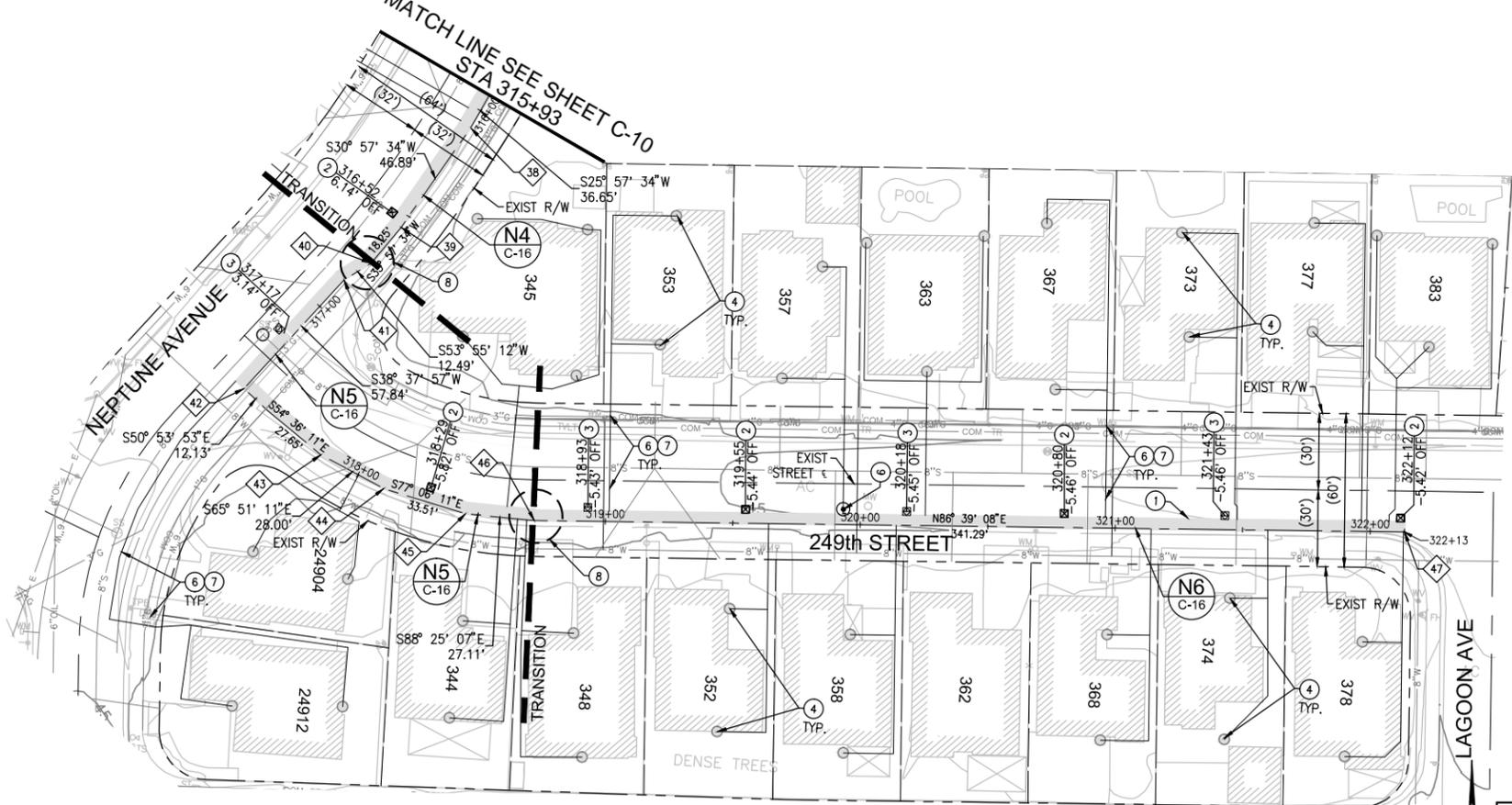
\\s010nc02\projects\1 Shell Products - Former Kast Property\Map Implementation\CAD\020_Civil\13 C-010.dwg Plotted on Oct 15, 2015 2:20pm by luke.ferry

90% SUBMITTAL



SCALE:
HORIZ: 1"=30'
VERT: 1"=3'

316+00 317+00 318+00 319+00 320+00 321+00 322+00 323+00



CONSTRUCTION NOTES

- ① CONSTRUCT PIPE BANK PER SECTION LABELED ON PLAN
- ② CONSTRUCT SHALLOW STREET WELL PER DETAIL
- ③ CONSTRUCT TRIPLE NESTED STREET WELL PER DETAIL
- ④ CONSTRUCT RESIDENTIAL WELL PER DETAIL
- ⑤ CONSTRUCT HEADER PIPE SUMP PER DETAIL
- ⑥ CONSTRUCT HANDHOLE/SAMPLE PORT LOCATION PER DETAIL
- ⑦ INSTALL 2" SCH 40 PVC PIPE, MIN 18" COVER, WITHIN R/W ONLY
- ⑧ CONSTRUCT PIPE BANK TRANSITION PER DETAIL
- ⑨ CONSTRUCT SOIL VAPOR PROBE PER DETAIL

COORDINATE TABLE

POINT #	NORTHING	EASTING
38	1749594.9120	6479664.7553
46	1749444.0568	6479700.9789
39	1749554.7041	6479640.6347
40	1749539.9315	6479629.9178
41	1749532.5789	6479619.8274
42	1749487.3996	6479583.7194
43	1749463.7379	6479615.6658
44	1749452.2838	6479641.2158
45	1749444.8050	6479673.8782
47	1749463.9873	6480041.6865

NOTE

RESIDENTIAL SOIL VAPOR EXTRACTION WELLS WILL BE CONSTRUCTED PER DETAIL AS REFERENCED WITHIN THIS PLAN HOWEVER PIPING AND FINAL LOCATION OF WELL WILL BE DETERMINED BY FUTURE RESTORATION PLANS AND FIELD CONDITIONS. CONNECTING PIPING IS SHOWN SCHEMATICALLY

DESIGN BY: L.FERRY	STAMP	PLANS PREPARED BY:	BENCHMARK:
DRAWN BY: L.FERRY		AECOM	SEE DRAWING C-002
CHECKED BY: G.DAVIS		999 W. TOWN & COUNTRY ROAD ORANGE, CA 92868-4713	

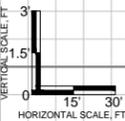
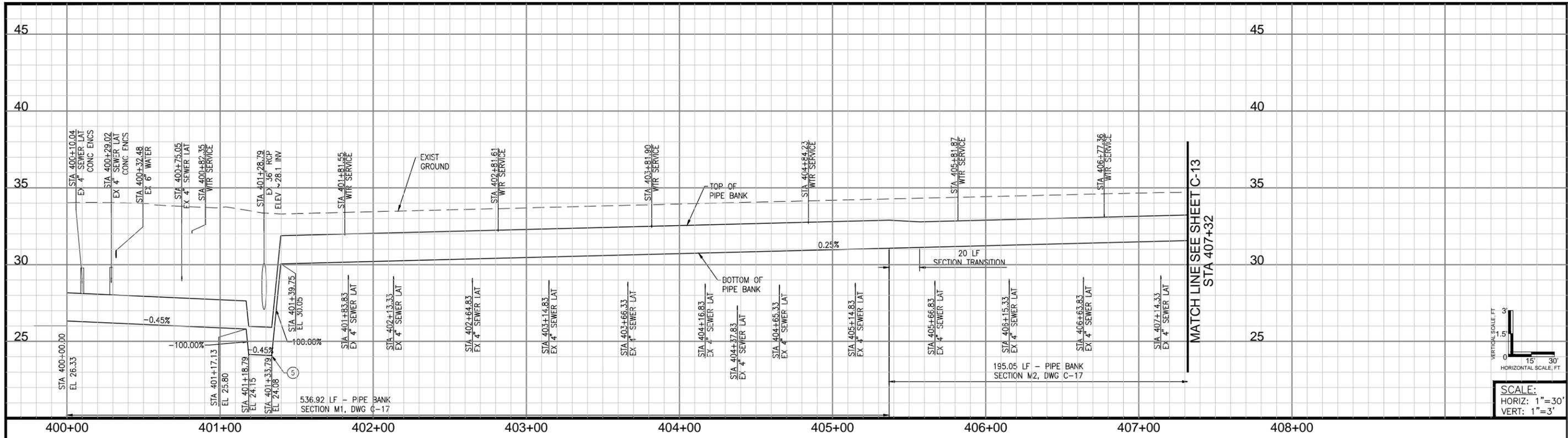
REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/BIOVENTING SYSTEM
CAROUSEL TRACT
SVE WELLS AND PIPE BANK
PLAN AND PROFILE 9

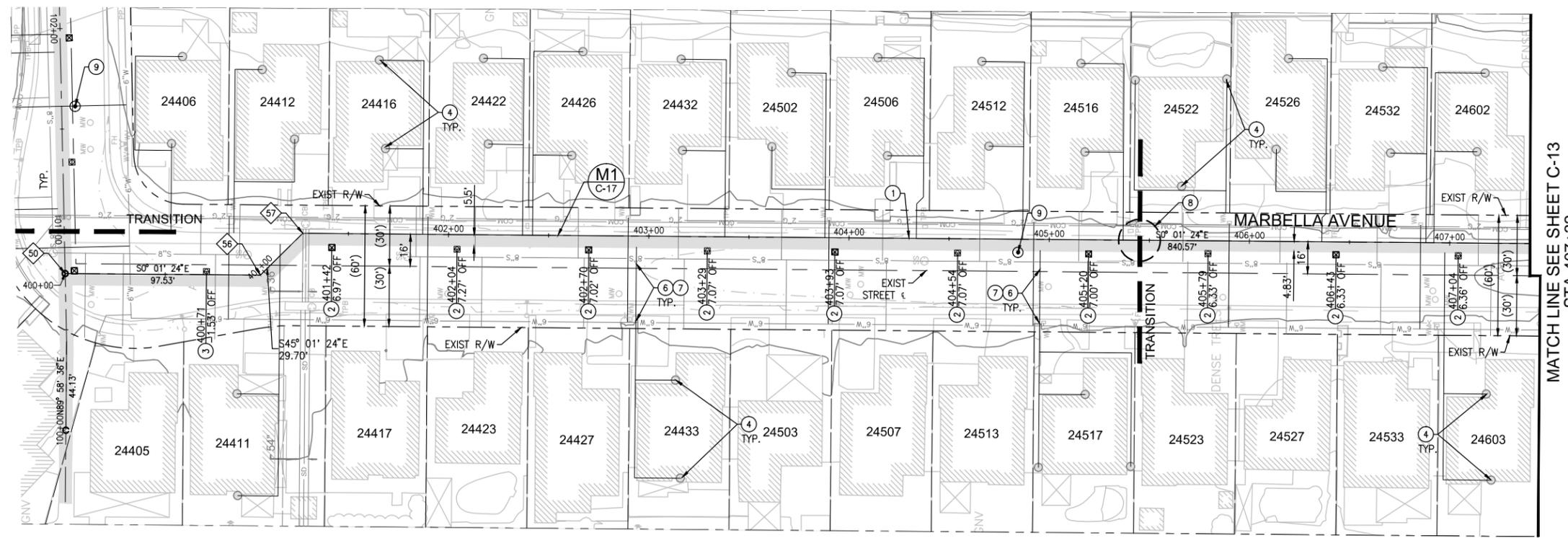
PROJECT NO. XXX	SHEET 14 of 87	PLAN NO. C-011
---------------------------	--------------------------	--------------------------

\\s01onca02\projects\1 Shell Products - Former Kast Property\Map Implementation\CAD\020_Civil\14_C-011.dwg Plotted on Oct 15, 2015 - 2:20pm by luke.ferry

90% SUBMITTAL



SCALE:
HORIZ: 1"=30'
VERT: 1"=3'



CONSTRUCTION NOTES

- ① CONSTRUCT PIPE BANK PER SECTION LABELED ON PLAN
- ② CONSTRUCT SHALLOW STREET WELL PER DETAIL
- ③ CONSTRUCT TRIPLE NESTED STREET WELL PER DETAIL
- ④ CONSTRUCT RESIDENTIAL WELL PER DETAIL
- ⑤ CONSTRUCT HEADER PIPE SUMP PER DETAIL
- ⑥ CONSTRUCT HANDHOLE/SAMPLE PORT LOCATION PER DETAIL
- ⑦ INSTALL 2" SCH 40 PVC PIPE, MIN 18" COVER, WITHIN R/W ONLY
- ⑧ CONSTRUCT PIPE BANK TRANSITION PER DETAIL
- ⑨ CONSTRUCT SOIL VAPOR PROBE PER DETAIL

COORDINATE TABLE

POINT #	NORTHING	EASTING
50	1751186.5072	6479438.8367
56	1751088.9776	6479438.8763
57	1751067.9861	6479459.8848

NOTE

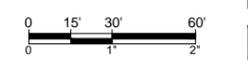
RESIDENTIAL SOIL VAPOR EXTRACTION WELLS WILL BE CONSTRUCTED PER DETAIL AS REFERENCED WITHIN THIS PLAN HOWEVER PIPING AND FINAL LOCATION OF WELL WILL BE DETERMINED BY FUTURE RESTORATION PLANS AND FIELD CONDITIONS. CONNECTING PIPING IS SHOWN SCHEMATICALLY

DESIGN BY:
L.FERRY
DRAWN BY:
L.FERRY
CHECKED BY:
G.DAVIS

STAMP

PLANS PREPARED BY:
AECOM
999 W. TOWN & COUNTRY ROAD
ORANGE, CA 92868-4713

BENCHMARK:
SEE DRAWING C-002



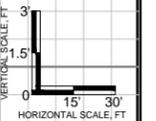
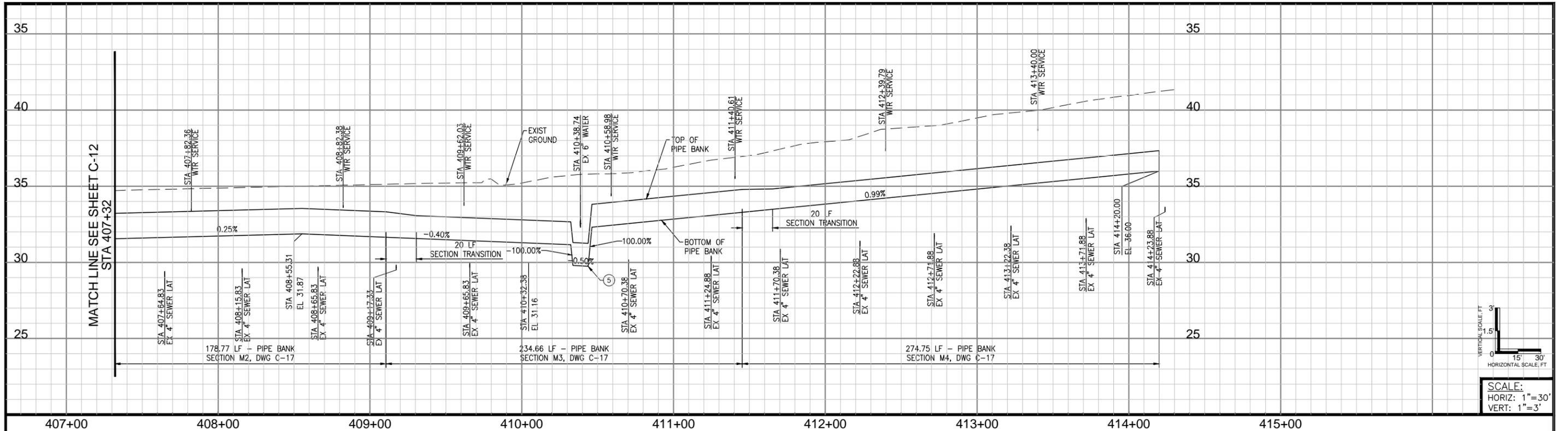
REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/BIOVENTING SYSTEM
CAROUSEL TRACT
SVE WELLS AND PIPE BANK
PLAN AND PROFILE 10

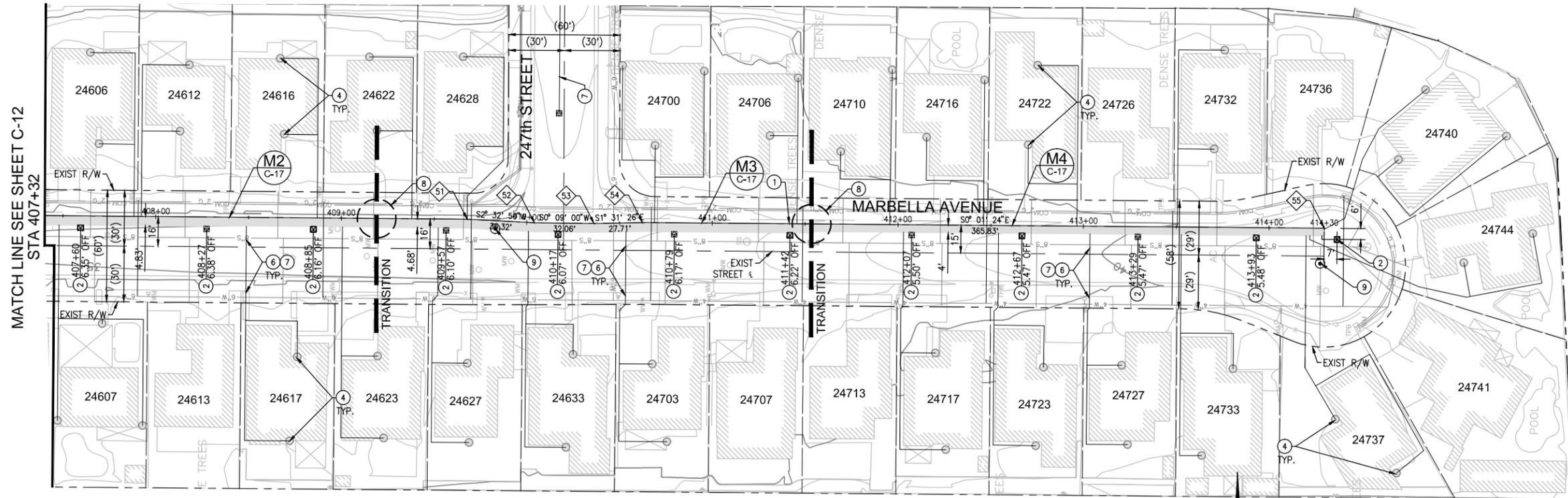
PROJECT NO. XXX	SHEET 15 of 87	PLAN NO. C-012
---------------------------	--------------------------	--------------------------

\\s01onca02\projects\1 Shell Products - Former Kast Property\Map Implementation\CAD\020_Civil\15 C-012.dwg Plotted on Oct. 15, 2015 - 2:21 pm by luke.ferry

90% SUBMITTAL



SCALE:
 HORIZ: 1"=30'
 VERT: 1"=3'



- CONSTRUCTION NOTES**
- 1 CONSTRUCT PIPE BANK PER SECTION LABELED ON PLAN
 - 2 CONSTRUCT SHALLOW STREET WELL PER DETAIL
 - 3 CONSTRUCT TRIPLE NESTED STREET WELL PER DETAIL
 - 4 CONSTRUCT RESIDENTIAL WELL PER DETAIL
 - 5 CONSTRUCT HEADER PIPE SUMP PER DETAIL
 - 6 CONSTRUCT HANDHOLE/SAMPLE PORT LOCATION PER DETAIL
 - 7 INSTALL 2" SCH 40 PVC PIPE, MIN 18" COVER, WITHIN R/W ONLY
 - 8 CONSTRUCT PIPE BANK TRANSITION PER DETAIL
 - 9 CONSTRUCT SOIL VAPOR PROBE PER DETAIL

COORDINATE TABLE

POINT #	NORTHING	EASTING
51	1750227.4121	6479460.2254
52	1750191.1309	6479458.6114
53	1750159.0683	6479458.5275
54	1750132.8716	6479459.2072
55	1749765.5413	6479459.4126

NOTE
 RESIDENTIAL SOIL VAPOR EXTRACTION WELLS WILL BE CONSTRUCTED PER DETAIL AS REFERENCED WITHIN THIS PLAN HOWEVER PIPING AND FINAL LOCATION OF WELL WILL BE DETERMINED BY FUTURE RESTORATION PLANS AND FIELD CONDITIONS. CONNECTING PIPING IS SHOWN SCHEMATICALLY

DESIGN BY: L.FERRY	STAMP	PLANS PREPARED BY: AECOM	BENCHMARK: SEE DRAWING C-002
DRAWN BY: L.FERRY		999 W. TOWN & COUNTRY ROAD ORANGE, CA 92868-4713	
CHECKED BY: G.DAVIS			

REVISIONS

NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/BIOVENTING SYSTEM
CAROUSEL TRACT
SVE WELLS AND PIPE BANK
PLAN AND PROFILE 11

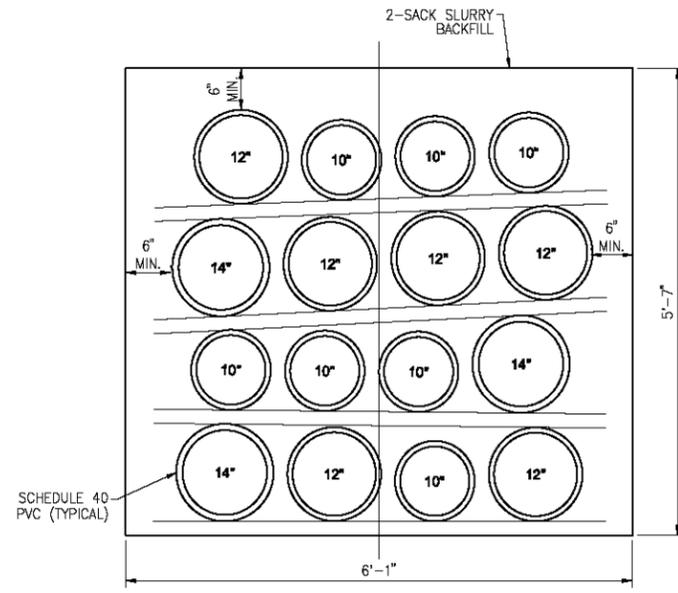
PROJECT NO. XXX	SHEET 16 of 87	PLAN NO. C-013
---------------------------	--------------------------	--------------------------

\\s01\one02\projects\1 Shell Products - Former Kast Property Vap Implementation\CADD\020_Civil\16 C-013.dwg Plotted on Oct. 15, 2015 - 2:22pm by luke.ferry

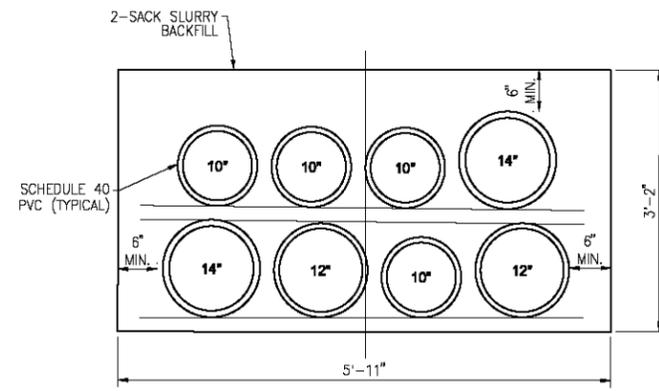
90% SUBMITTAL

244TH STREET

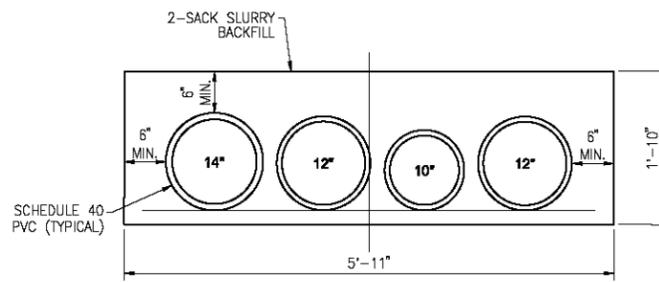
PANAMA AVENUE



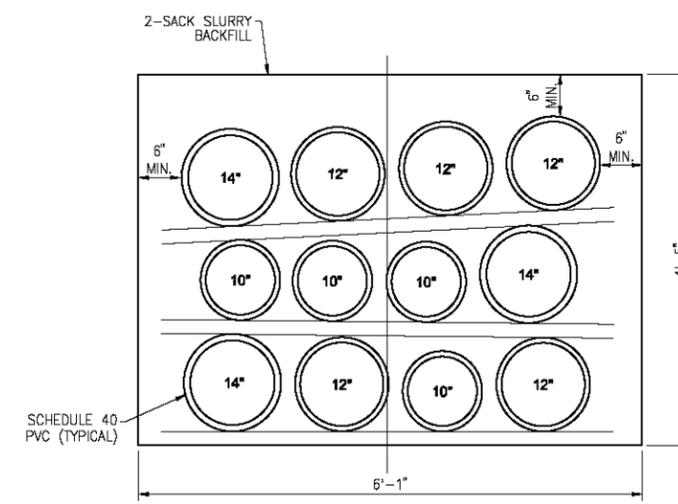
SECTION A1
SCALE: 1" = 1'



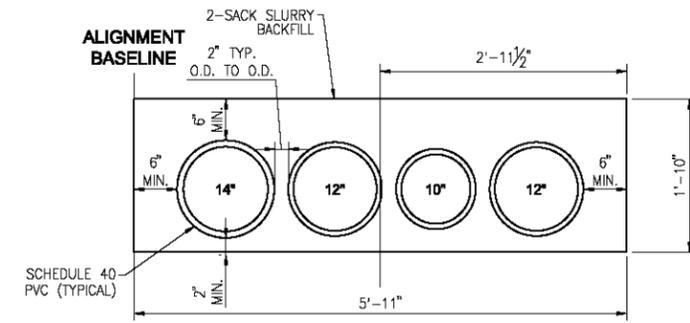
SECTION A3
SCALE: 1" = 1'



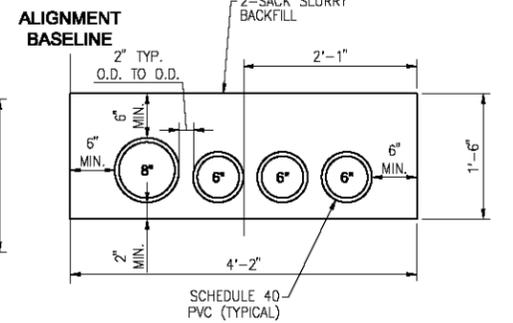
SECTION A4
SCALE: 1" = 1'



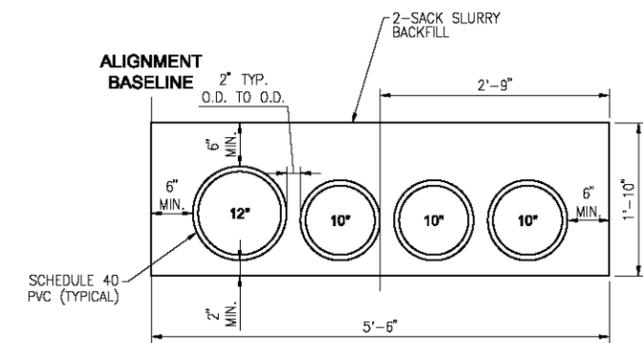
SECTION A2
SCALE: 1" = 1'



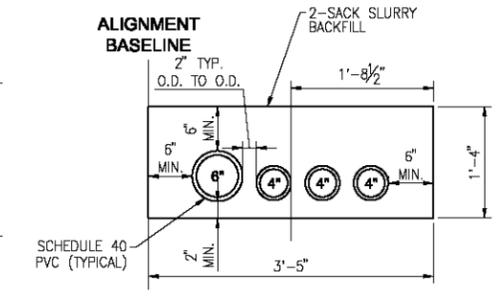
SECTION P1
SCALE: 1" = 1'



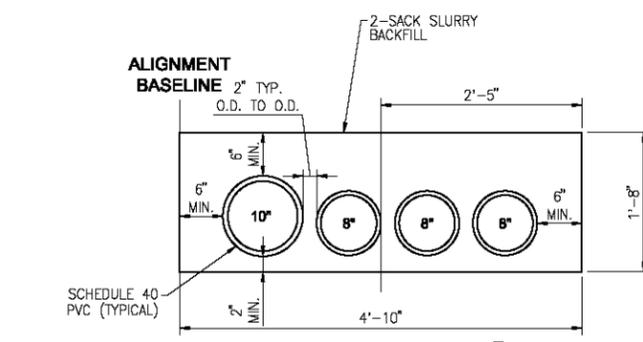
SECTION P4
SCALE: 1" = 1'



SECTION P2
SCALE: 1" = 1'



SECTION P5
SCALE: 1" = 1'



SECTION P3
SCALE: 1" = 1'

NOTE

ALL SECTIONS VIEWED IN THE DIRECTION OF INCREASING STATIONING



REVISIONS			
NO.	DESCRIPTION	APPROVE	DATE

DESIGN BY:
L.FERRY
DRAWN BY:
L.FERRY
CHECKED BY:
G.DAVIS

STAMP

PLANS PREPARED BY:
AECOM
999 W. TOWN & COUNTRY ROAD
ORANGE, CA 92868-4713

BENCHMARK:
SEE DRAWING C-002

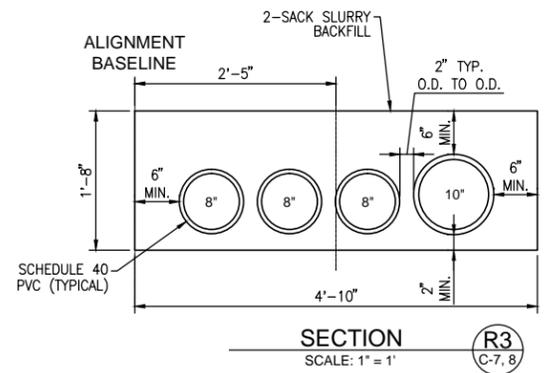
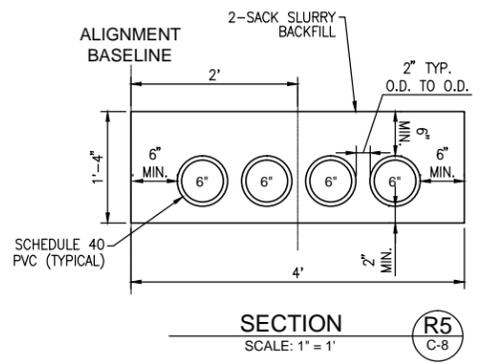
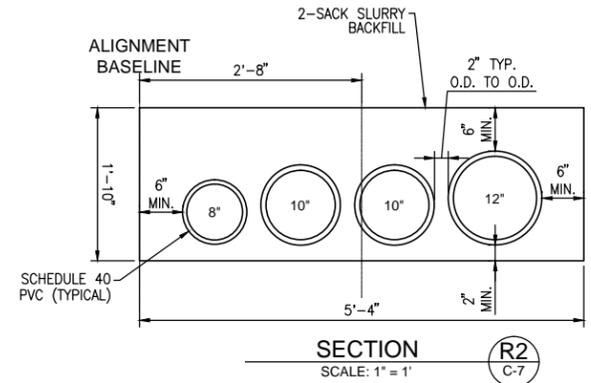
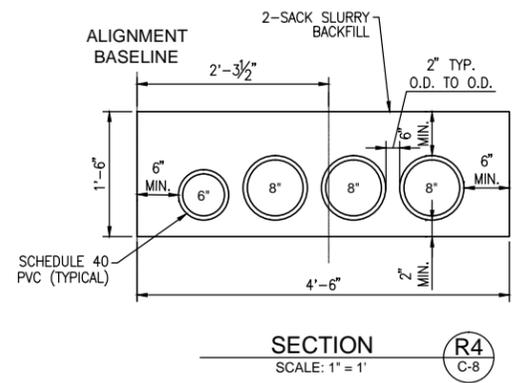
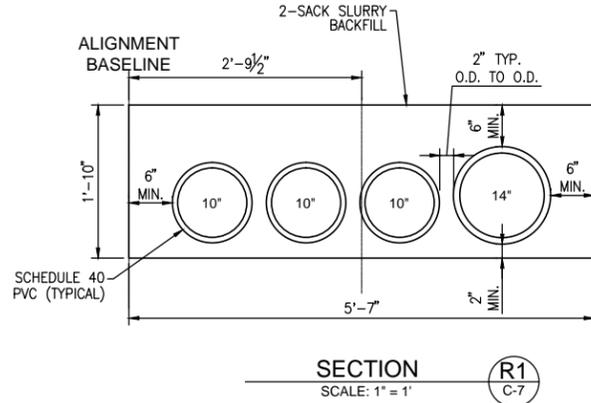
SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/BIOVENTING SYSTEM
CAROUSEL TRACT
CIVIL SECTIONS 1

PROJECT NO. XXX	SHEET 17 of 87	PLAN NO. C-014
---------------------------	--------------------------	--------------------------

\\01Ons02_projects\1_Shell_Products - Former East Property\pwr_implementation\CAD\020_Civil\17_C-014.dwg Plotted on Oct. 15, 2015 - 2:22pm by lusa_ferry

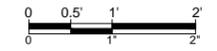
90% SUBMITTAL

RAVENNA AVENUE



NOTE

ALL SECTIONS VIEWED IN THE DIRECTION OF INCREASING STATIONING



DESIGN BY:
L.FERRY
DRAWN BY:
L.FERRY
CHECKED BY:
G.DAVIS

STAMP

PLANS PREPARED BY:
AECOM
999 W. TOWN & COUNTRY ROAD
ORANGE, CA 92868-4713

BENCHMARK:
SEE DRAWING C-002

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/BIOVENTING SYSTEM
CAROUSEL TRACT
CIVIL SECTIONS 2

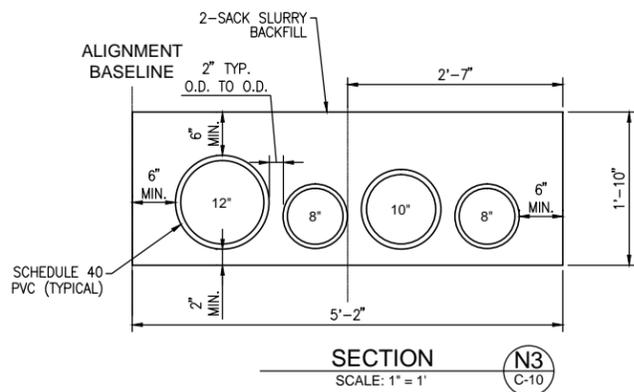
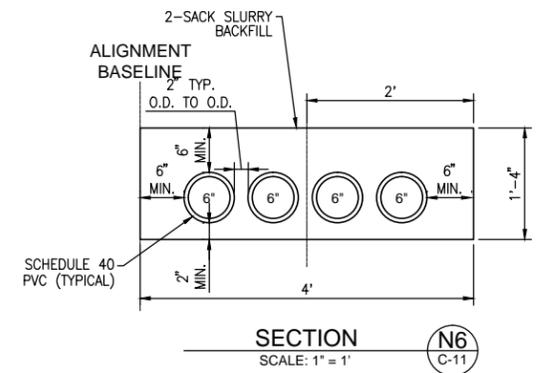
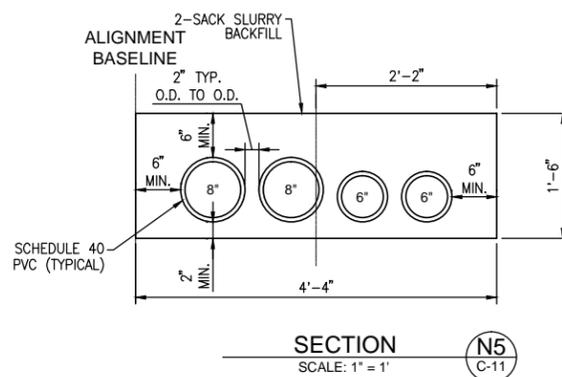
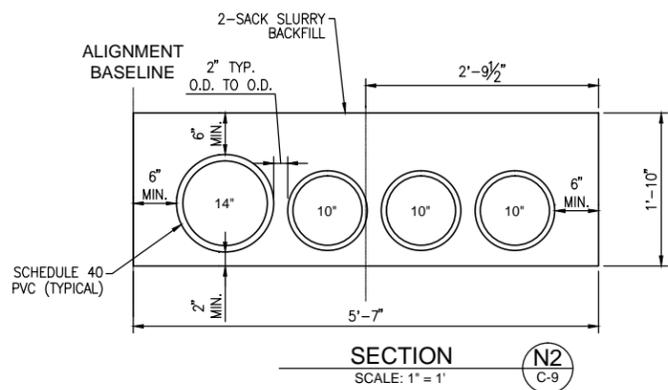
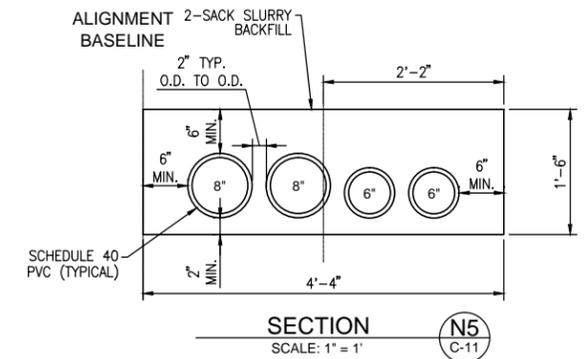
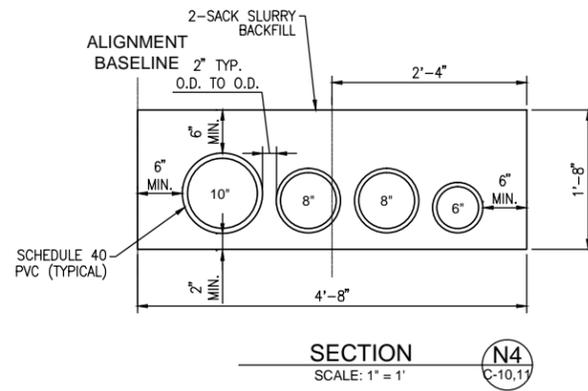
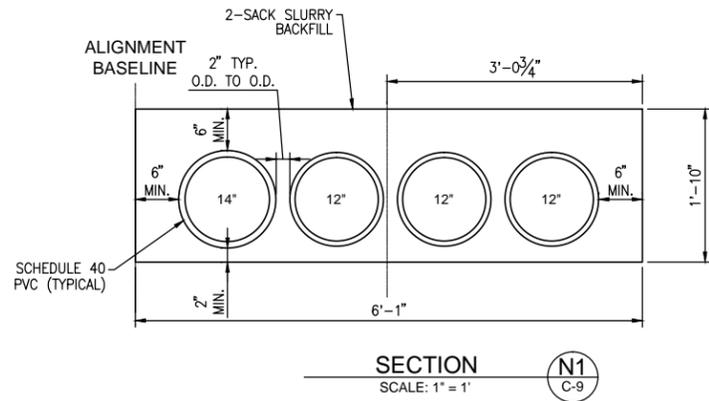
PROJECT NO. XXX	SHEET 18 of 87	PLAN NO. C-015
---------------------------	--------------------------	--------------------------

\\s010nc02\projects\1 Shell Products - Former Kast Property\Map Implementation\CADD\020_Civil\18 C-015.dwg Plotted on Oct 15, 2015-2:23pm by luke_ferry

90% SUBMITTAL

NEPTUNE AVENUE

249TH STREET



NOTE

ALL SECTIONS VIEWED IN THE DIRECTION OF INCREASING STATIONING



REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/BIOVENTING SYSTEM
CAROUSEL TRACT
CIVIL SECTIONS 3

PROJECT NO. **XXX** SHEET **19 of 87** PLAN NO. **C-016**

DESIGN BY:
L.FERRY
 DRAWN BY:
L.FERRY
 CHECKED BY:
G.DAVIS

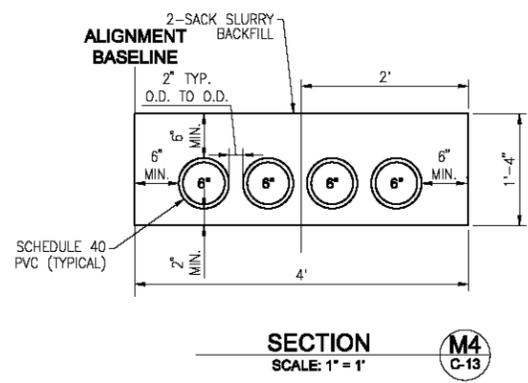
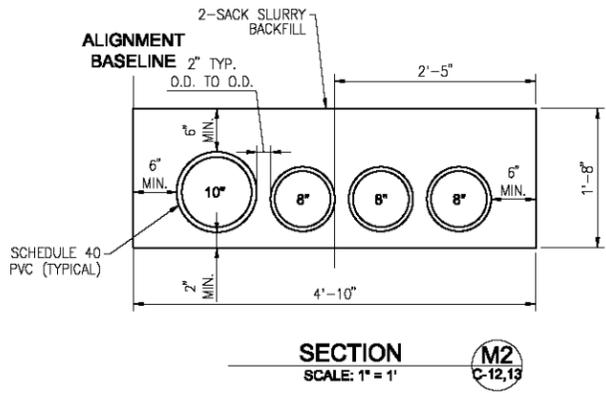
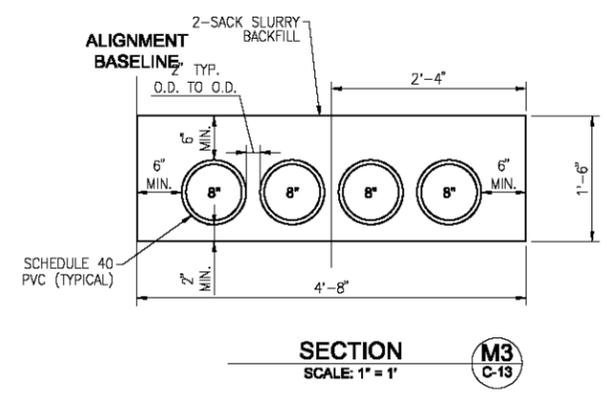
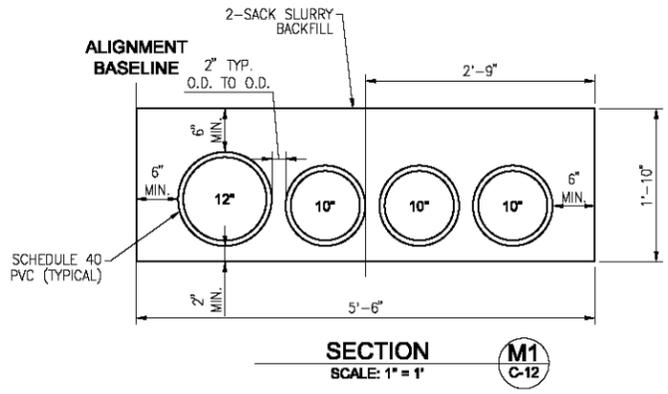
STAMP

PLANS PREPARED BY:

 999 W. TOWN & COUNTRY ROAD
 ORANGE, CA 92868-4713

BENCHMARK:
SEE DRAWING C-002

MARBELLA AVENUE



NOTE
ALL SECTIONS VIEWED IN THE DIRECTION OF INCREASING STATIONING



DESIGN BY: L.FERRY	STAMP	PLANS PREPARED BY:	BENCHMARK: SEE DRAWING C-002
DRAWN BY: L.FERRY		AECOM	
CHECKED BY: G.DAVIS		999 W. TOWN & COUNTRY ROAD ORANGE, CA 92868-4713	

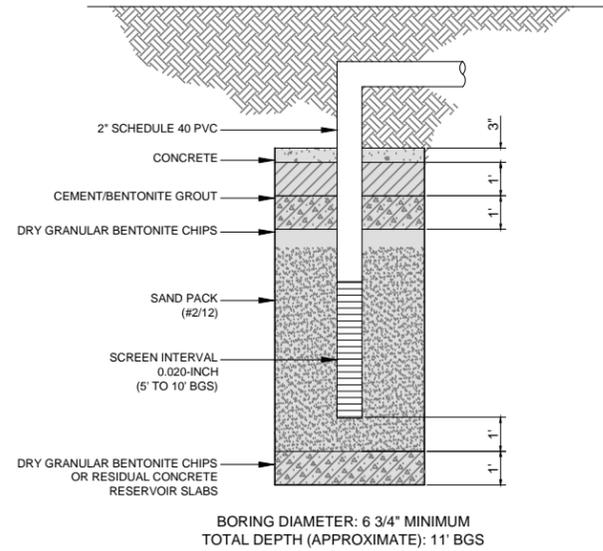
REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/BIOVENTING SYSTEM
CAROUSEL TRACT
CIVIL SECTIONS 4

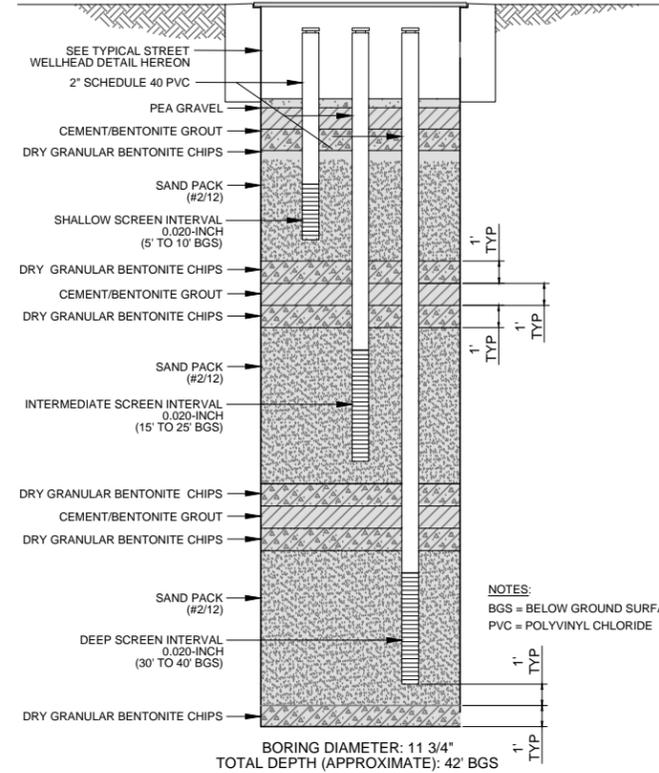
PROJECT NO. XXX	SHEET 20 of 87	PLAN NO. C-017
---------------------------	--------------------------	--------------------------

\\p01onad2\projects\1 Shell Products - Former Kat Property\pdp_implementation\CAD\020_Civil\20 C-017.dwg Plotted on Oct 15, 2015 - 2:23pm by lusa_ferry

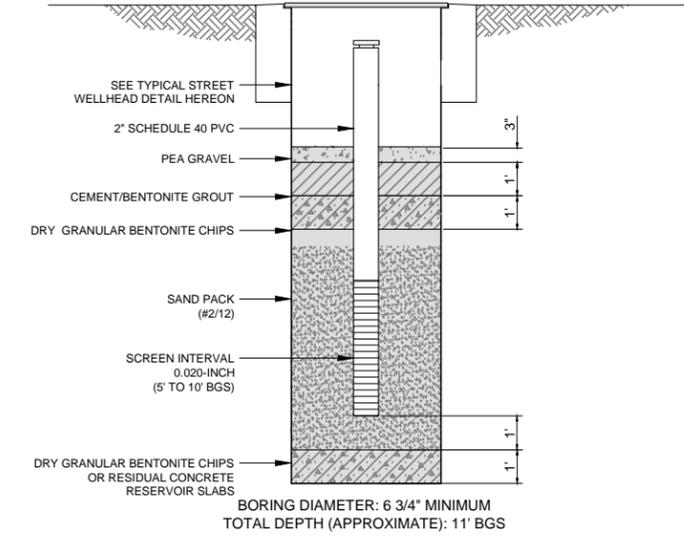
90% SUBMITTAL



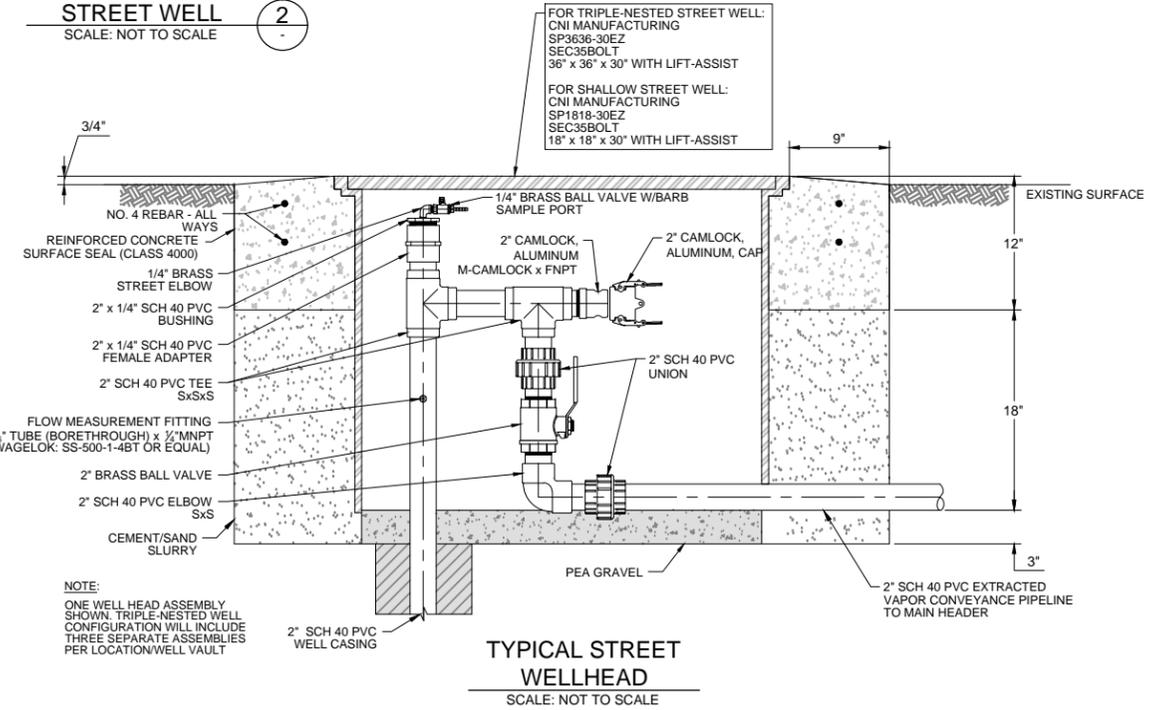
SHALLOW RESIDENTIAL WELL ③
SCALE: NOT TO SCALE



TRIPLE-NESTED STREET WELL ②
SCALE: NOT TO SCALE



SHALLOW STREET WELL ①
SCALE: NOT TO SCALE



TYPICAL STREET WELLHEAD
SCALE: NOT TO SCALE

DESIGN BY: L.FERRY	STAMP	PLANS PREPARED BY:	BENCHMARK:
DRAWN BY: L.FERRY		AECOM	SEE DRAWING C-002
CHECKED BY: G.DAVIS		999 W. TOWN & COUNTRY ROAD ORANGE, CA 92868-4713	

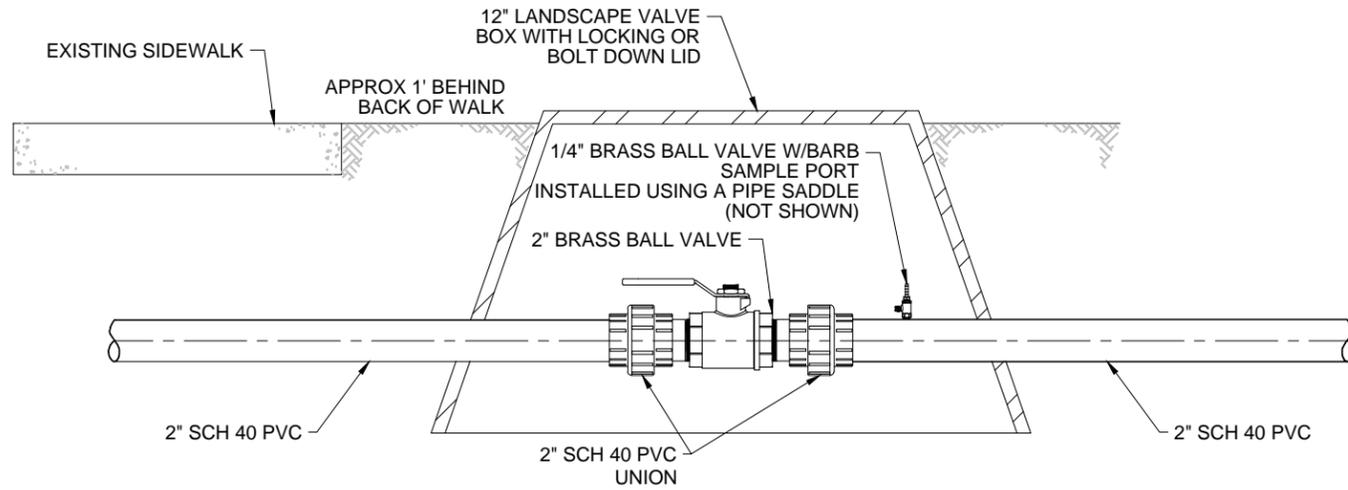
REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/BIOVENTING SYSTEM
CAROUSEL TRACT
CIVIL DETAILS 1

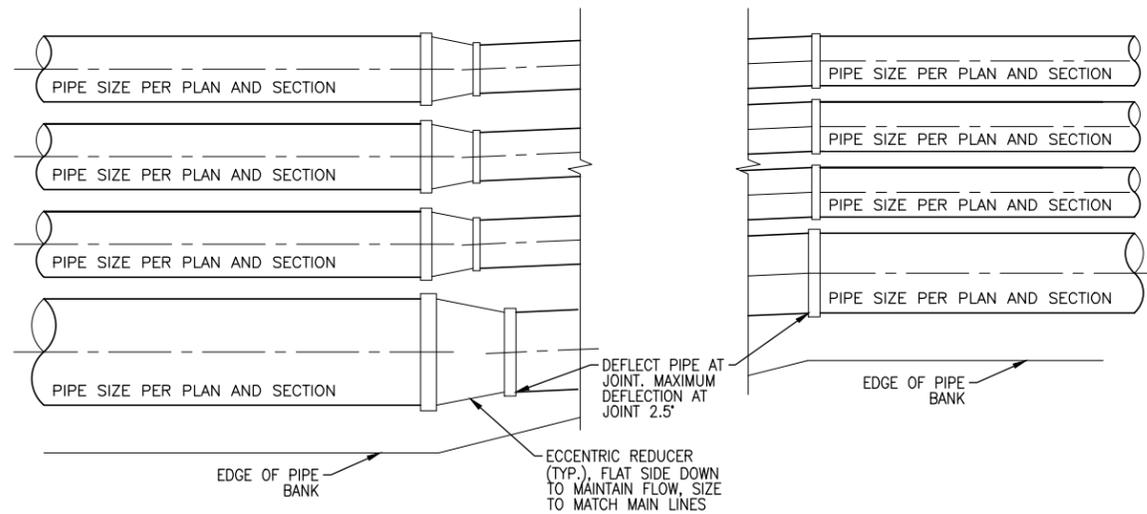
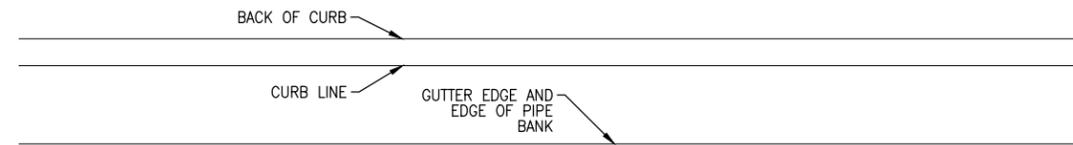
PROJECT NO. XXX	SHEET 21 of 87	PLAN NO. C-018
---------------------------	--------------------------	--------------------------

\\s010nas02\projects\1 Shell Products - Former Kast Property\Map Implementation\CADD\020_Civil\21 C-018.dwg Plotted on Oct 15, 2015 - 2:24pm by luke_ferry

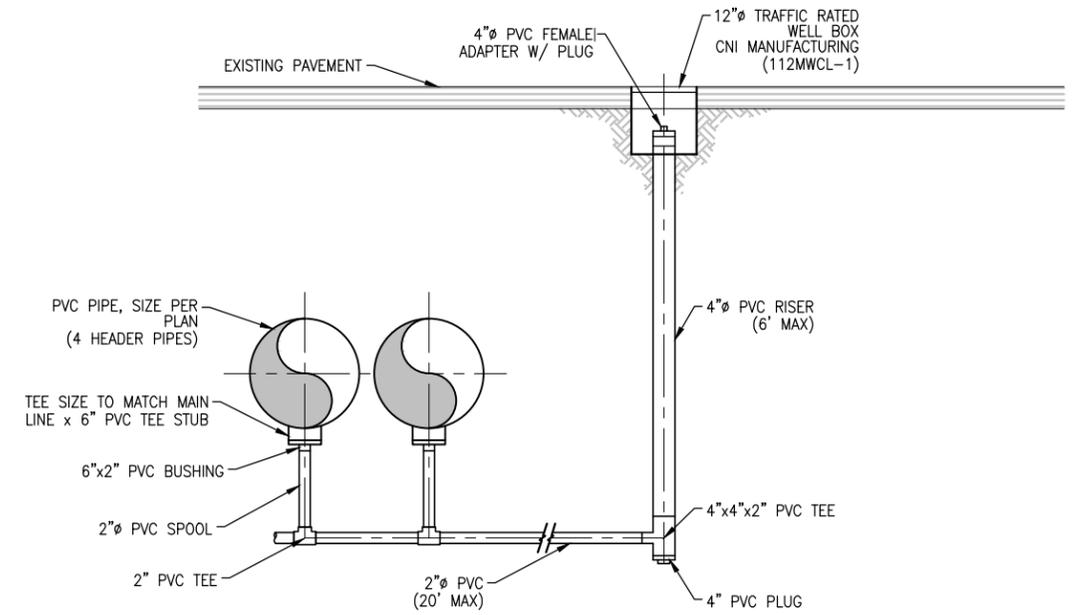
90% SUBMITTAL



TYPICAL
HANDHOLE/SAMPLE
PORT LOCATION (5)
SCALE: NOT TO SCALE



TYPICAL PIPE BANK
SECTION
TRANSITION (6)
SCALE: NOT TO SCALE



TYPICAL PIPE
SUMP DRAIN (4)
SCALE: NOT TO SCALE

\\s01one02_projects\1_Shell_Products - Former_Kast_Property_Vap_Implementation\CAD\020_Civil\22_C-019.dwg Plotted on Oct. 15, 2015 - 2:24pm by luke_ferry

DESIGN BY:
L.FERRY
DRAWN BY:
L.FERRY
CHECKED BY:
G.DAVIS

STAMP

PLANS PREPARED BY:
AECOM
999 W. TOWN & COUNTRY ROAD
ORANGE, CA 92868-4713

BENCHMARK:
SEE DRAWING C-002

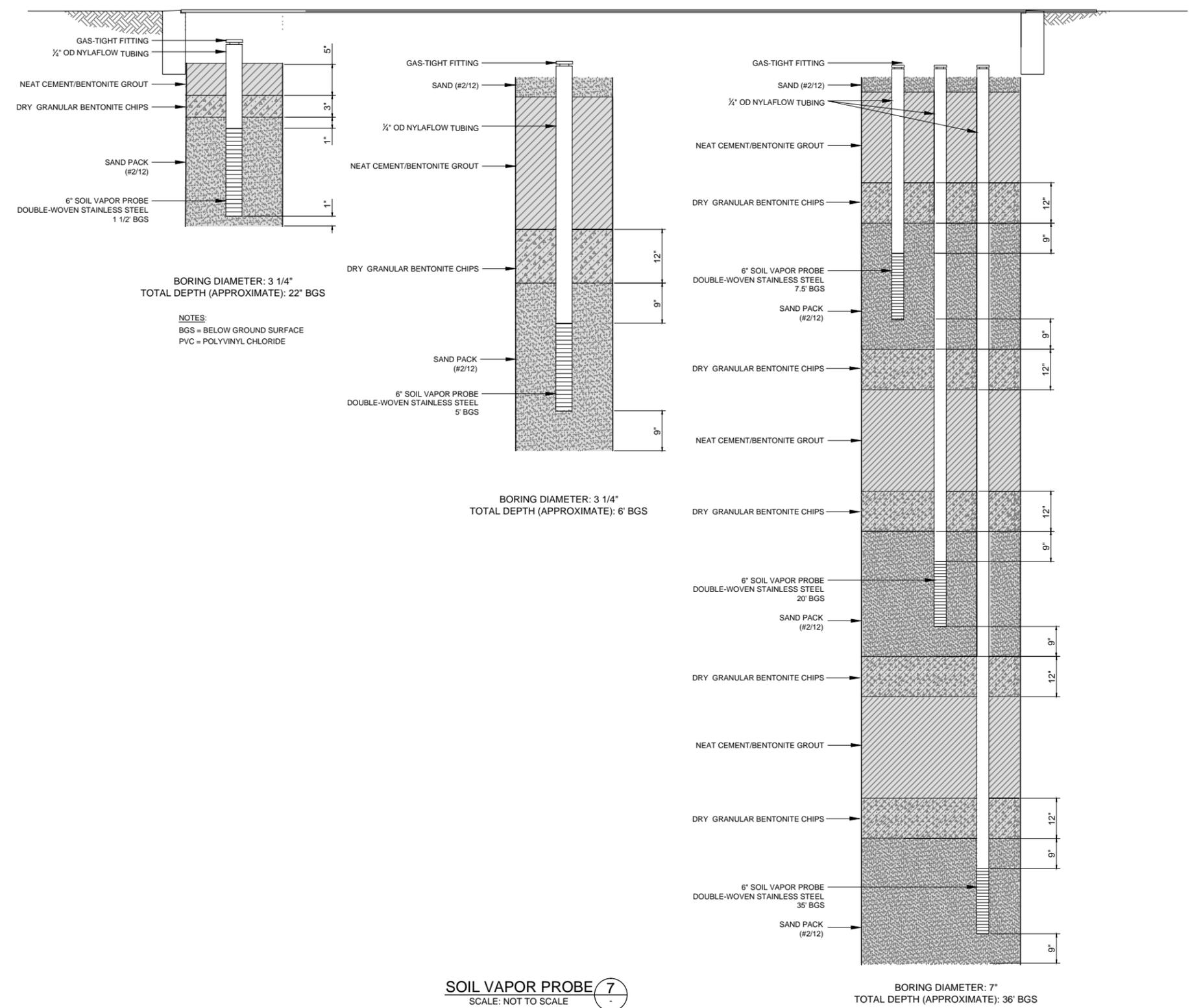
REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/BIOVENTING SYSTEM
CAROUSEL TRACT
CIVIL DETAILS 2

PROJECT NO. XXX	SHEET 22 of 87	PLAN NO. C-019
---------------------------	--------------------------	--------------------------

90% SUBMITTAL

\\s010k502\projects\1 Shell Products - Former Kost Property\AP Implementation\CADD\020_Civil\23 C-020.dwg Plotted on Oct. 15, 2015 - 2:24pm by Luke_Ferry



BORING DIAMETER: 3 1/4"
 TOTAL DEPTH (APPROXIMATE): 22' BGS
 NOTES:
 BGS = BELOW GROUND SURFACE
 PVC = POLYVINYL CHLORIDE

BORING DIAMETER: 3 1/4"
 TOTAL DEPTH (APPROXIMATE): 6' BGS

BORING DIAMETER: 7"
 TOTAL DEPTH (APPROXIMATE): 36' BGS

SOIL VAPOR PROBE (7)
 SCALE: NOT TO SCALE

DESIGN BY:
 L.FERRY
 DRAWN BY:
 L.FERRY
 CHECKED BY:
 G.DAVIS

STAMP

PLANS PREPARED BY:
AECOM
 999 W. TOWN & COUNTRY ROAD
 ORANGE, CA 92868-4713

BENCHMARK:
 SEE DRAWING C-002

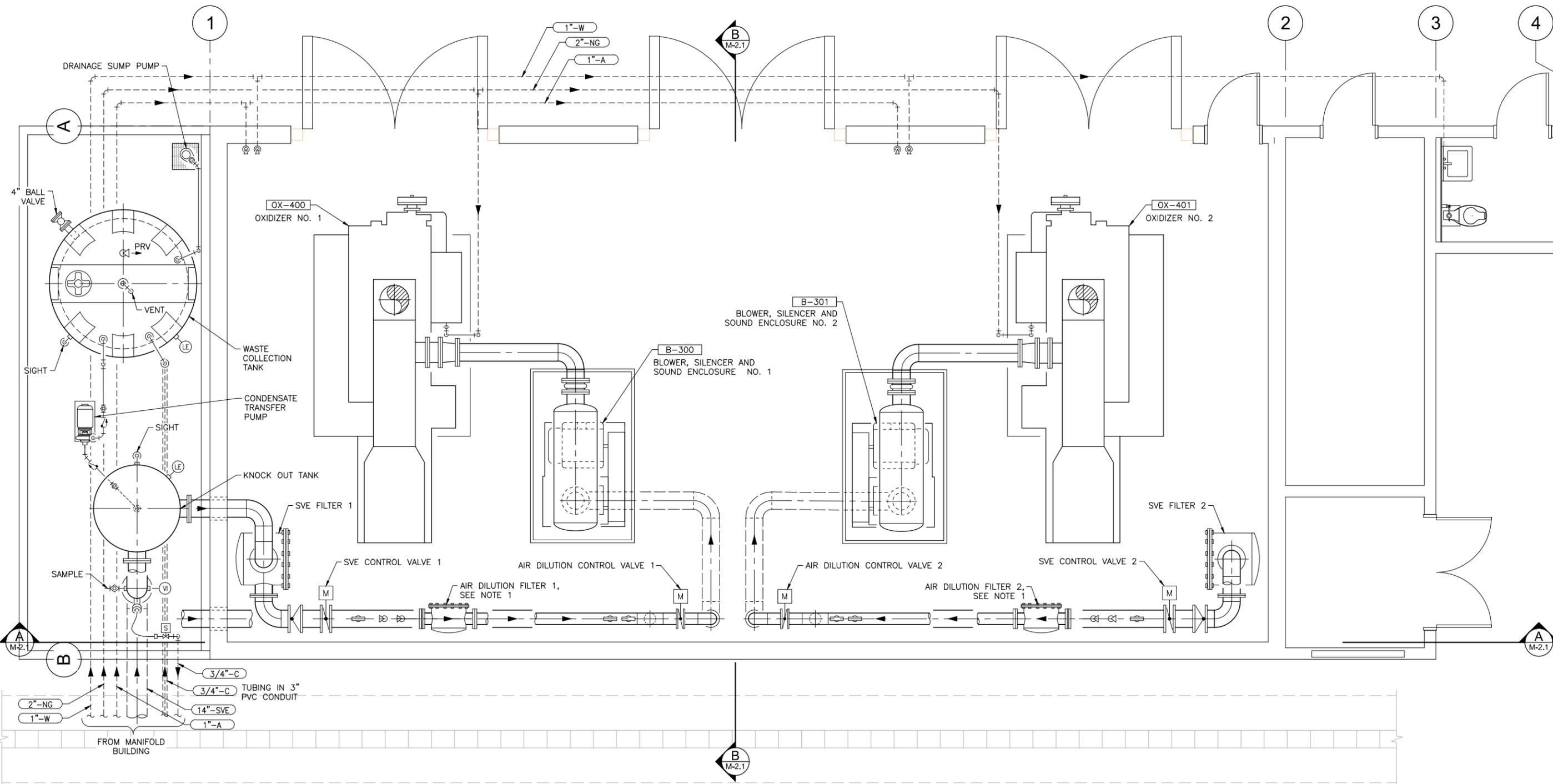
REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/BIOVENTING SYSTEM
CAROUSEL TRACT
CIVIL DETAILS 3

PROJECT NO. XXX	SHEET 23 of 87	PLAN NO. C-020
---------------------------	--------------------------	--------------------------

90% SUBMITTAL

\\s01one02\projects\1 Shell Products - Former Kast Property\PIP Implementation\CAD\030_Mechanical\24_M-1.1.dwg Plotted on Oct 14, 2015 - 2:03pm by luke_ferry



- NOTES:**
- AIR DILUTION FILTERS SHOWN OUT OF PLAN LOCATION FOR CLARITY. SEE SECTION A/M-2.1 FOR AIR DILUTION FILTERS LOCATION.
 - SUPPORTS NOT SHOWN.

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

DESIGN BY:
 L.FERRY
 DRAWN BY:
 L.FERRY
 CHECKED BY:
 G.DAVIS

STAMP

PLANS PREPARED BY:
AECOM
 999 W. TOWN & COUNTRY ROAD
 ORANGE, CA 92868-4713

BENCHMARK:
 SEE DRAWING C-002

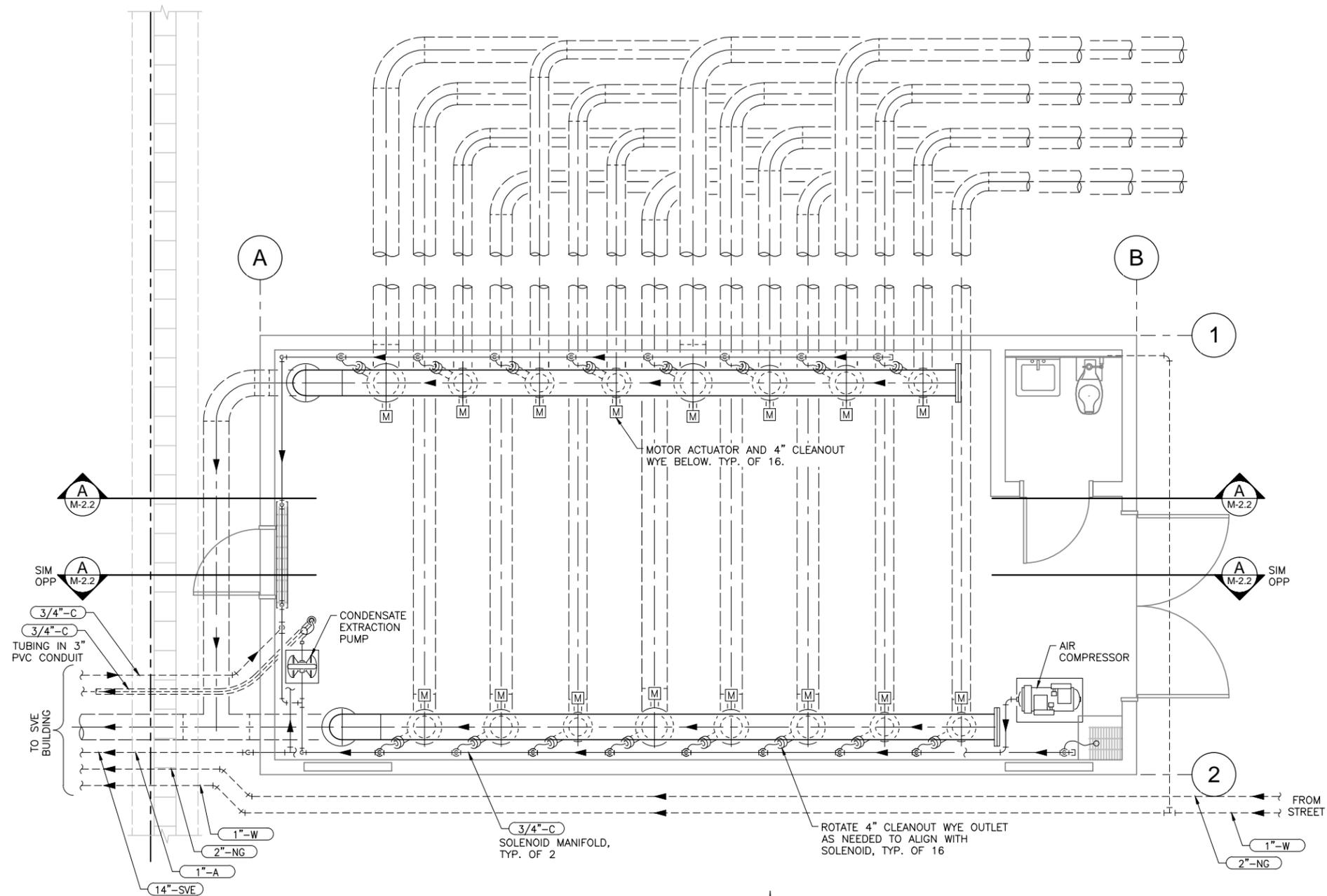
REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/BIOVENTING SYSTEM
CAROUSEL TRACT
PIPING PLAN - SVE BUILDING

PROJECT NO. XXX	SHEET 24 of 87	PLAN NO. M-1.1
---------------------------	--------------------------	--------------------------

90% SUBMITTAL

\\s010nas02_projects\1 Shell Products - Former Kast Property\Map Implementation\CAD\030_Mechanical\25 M-1.2.dwg Plotted on Oct 14, 2015 - 2:03pm by luke_ferry



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



NOTE:
 SUPPORTS NOT SHOWN.

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

DESIGN BY:
 L.FERRY
 DRAWN BY:
 L.FERRY
 CHECKED BY:
 G.DAVIS

STAMP

PLANS PREPARED BY:

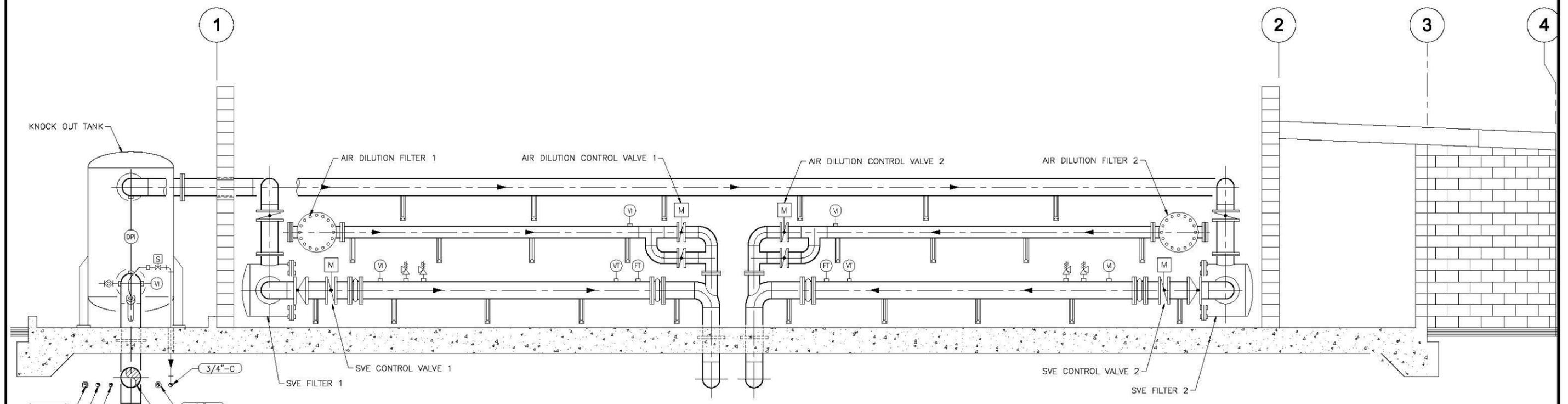
 999 W. TOWN & COUNTRY ROAD
 ORANGE, CA 92868-4713

BENCHMARK:
 SEE DRAWING C-002

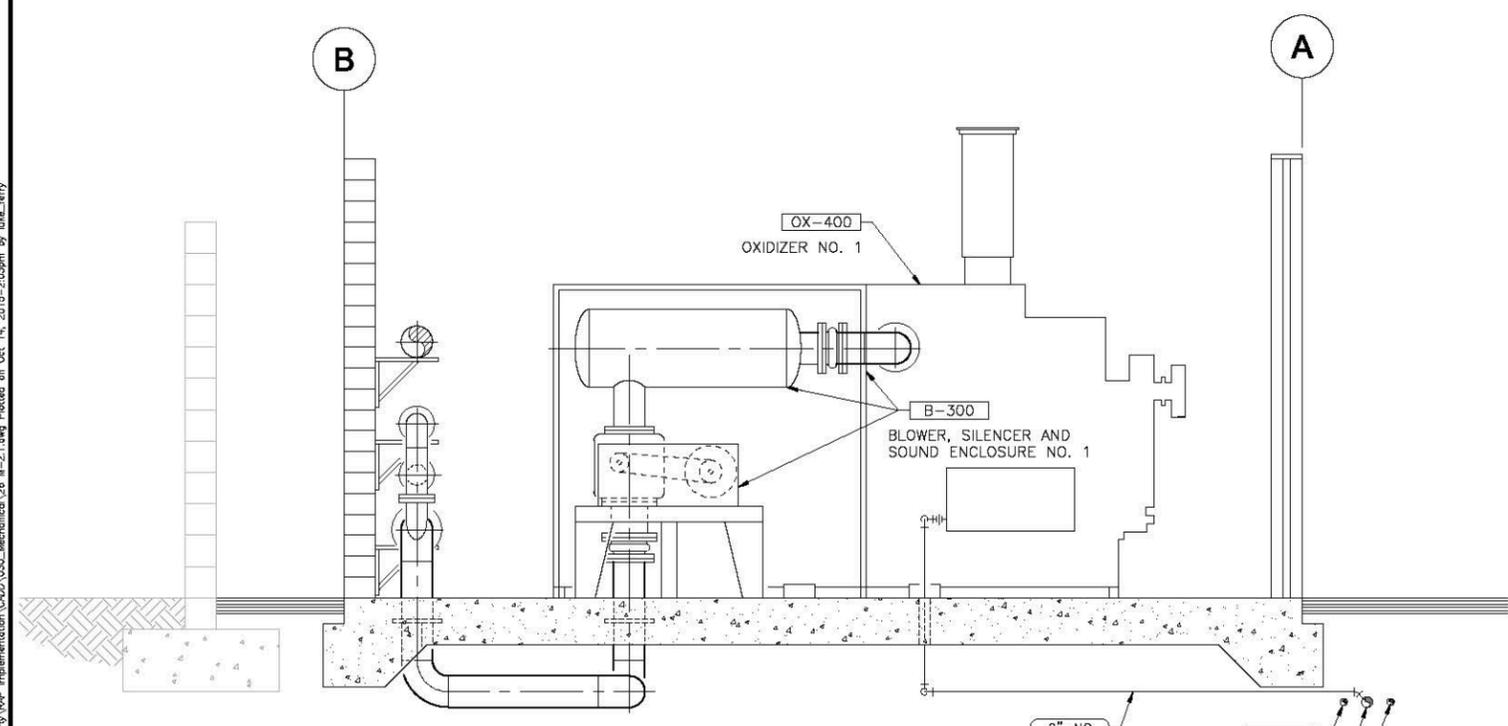
SHELL OIL PRODUCTS US		
CITY OF CARSON		
SVE/BIOVENTING SYSTEM CAROUSEL TRACT		
PIPING PLAN - MANIFOLD BUILDING		
PROJECT NO. XXX	SHEET 25 of 87	PLAN NO. M-1.2

90% SUBMITTAL

\\p01onad2\projects\1 Shell Products - Former Kat Property\pdp_implementation\CAD\3D_Mechanical\2B_M-2.1.dwg Picked on Oct 15, 2010 2:03pm by luke_ferry



SECTION A
 SCALE: 3/8" = 1'-0"
 M-1.1



SECTION B
 SCALE: 3/8" = 1'-0"
 M-1.1

DESIGN BY:
 L.FERRY
 DRAWN BY:
 L.FERRY
 CHECKED BY:
 G.DAVIS

STAMP

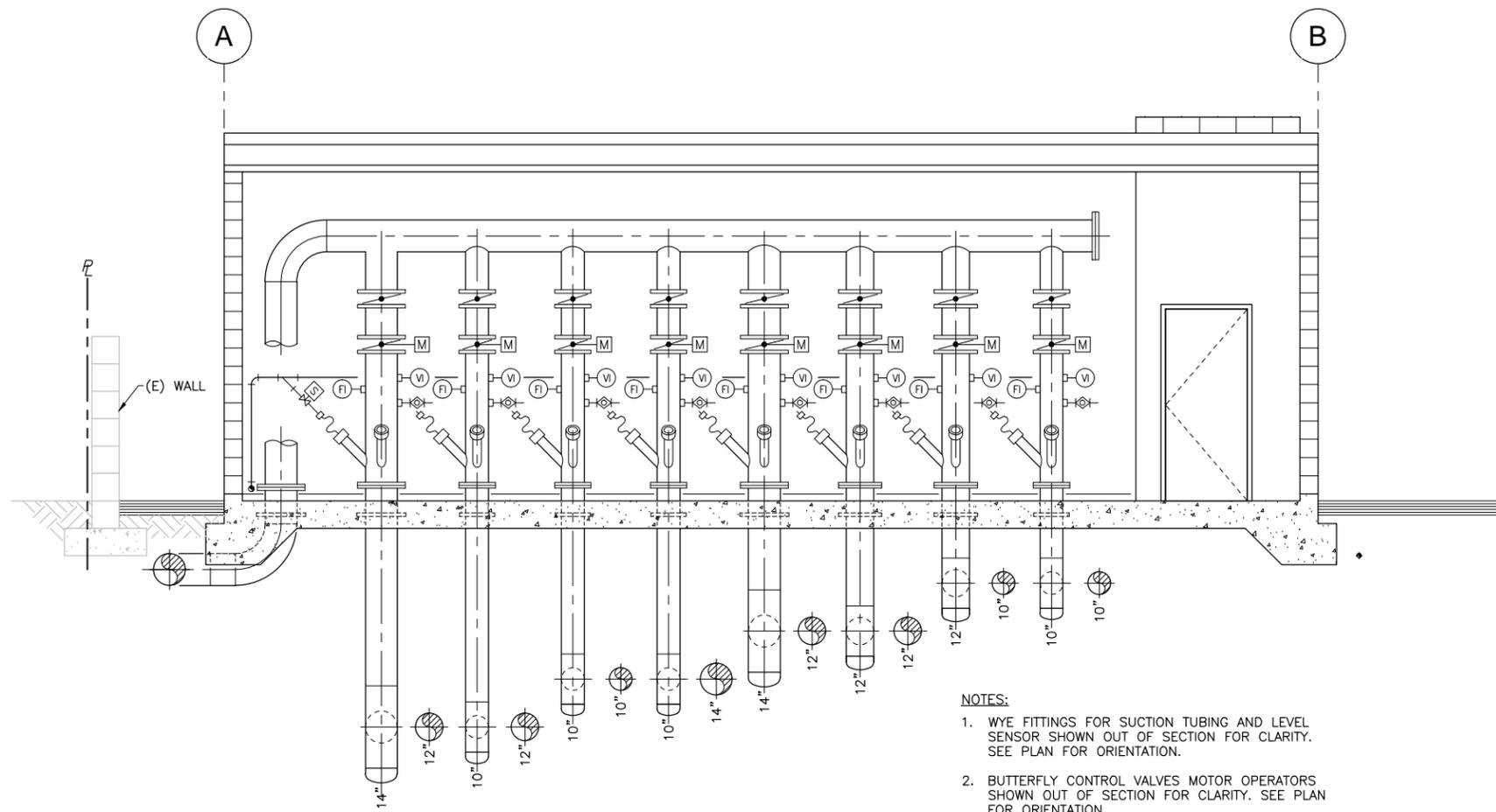
PLANS PREPARED BY:
AECOM
 999 W. TOWN & COUNTRY ROAD
 ORANGE, CA 92868-4713

BENCHMARK:
 SEE DRAWING C-002

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

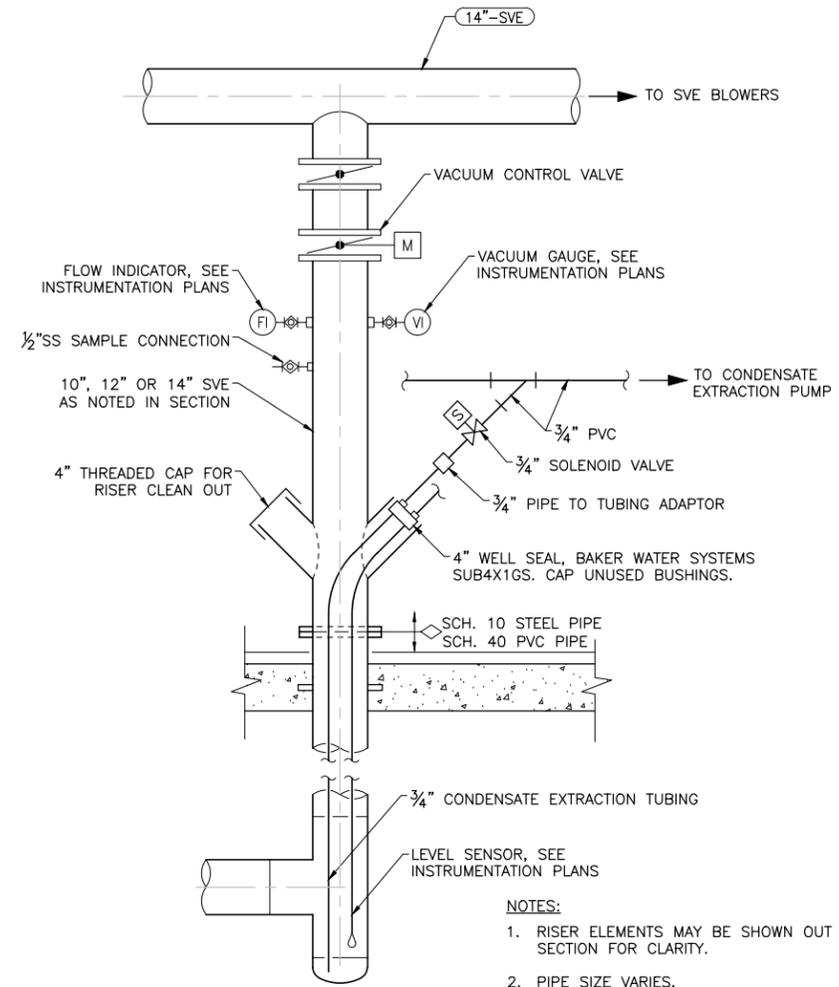
SHELL OIL PRODUCTS US		
CITY OF CARSON		
SVE/BIOVENTING SYSTEM CAROUSEL TRACT		
SECTION - SVE BUILDING		
PROJECT NO. XXX	SHEET 26 of 87	PLAN NO. M-2.1

90% SUBMITTAL



SECTION
SCALE: 3/8" = 1'-0"
A
M-1.2

- NOTES:**
1. WYE FITTINGS FOR SUCTION TUBING AND LEVEL SENSOR SHOWN OUT OF SECTION FOR CLARITY. SEE PLAN FOR ORIENTATION.
 2. BUTTERFLY CONTROL VALVES MOTOR OPERATORS SHOWN OUT OF SECTION FOR CLARITY. SEE PLAN FOR ORIENTATION.
 3. SUPPORTS NOT SHOWN.



RISER DETAIL
TYP. OF 16
NOT TO SCALE
1

- NOTES:**
1. RISER ELEMENTS MAY BE SHOWN OUT OF SECTION FOR CLARITY.
 2. PIPE SIZE VARIES.
 3. PROVIDE ADDITIONAL SOLENOID VALVE, CONDENSATE SUCTION TUBING AND LEVEL SENSOR FOR FLOOR SUMP.

\\s01one02\projects\1 Shell Products - Former Kast Property\Map Implementation\CAD\030_Mechanical\27 M-2.2.dwg Plotted on Oct. 14, 2015 - 2:03pm by lue_ferry

DESIGN BY:
L.FERRY
DRAWN BY:
L.FERRY
CHECKED BY:
G.DAVIS

STAMP

PLANS PREPARED BY:
AECOM
999 W. TOWN & COUNTRY ROAD
ORANGE, CA 92868-4713

BENCHMARK:
SEE DRAWING C-002

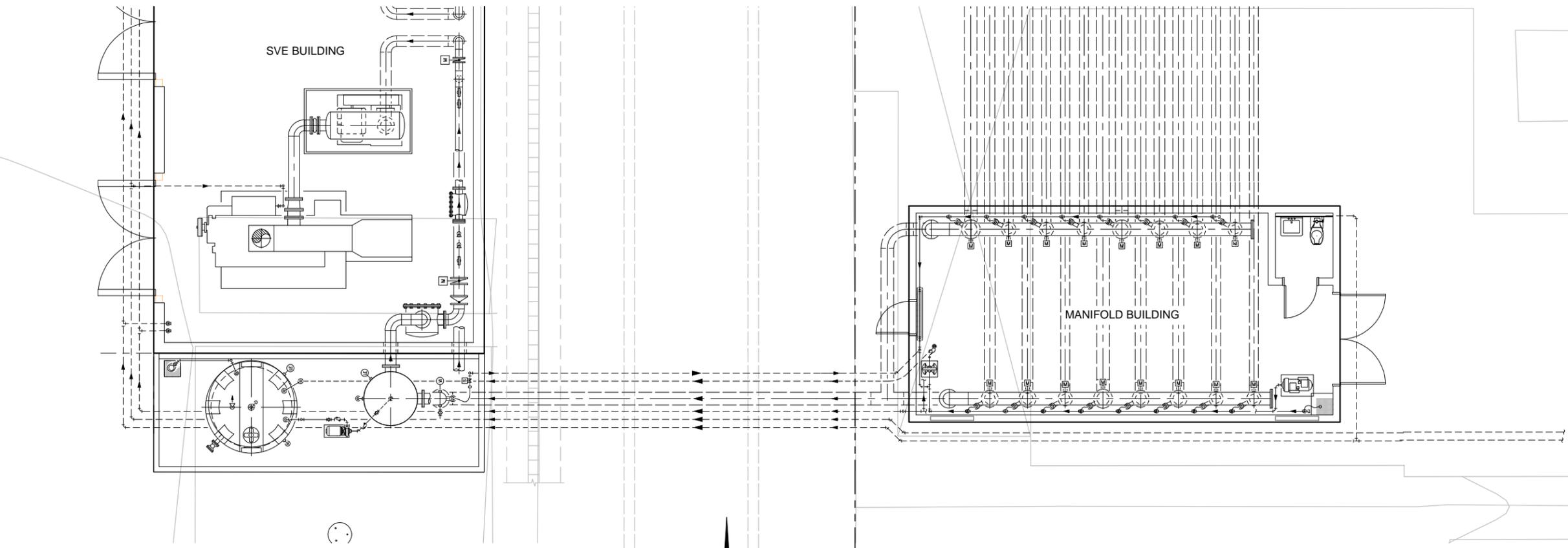
REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/BIOVENTING SYSTEM
CAROUSEL TRACT
SECTION - MANIFOLD BUILDING

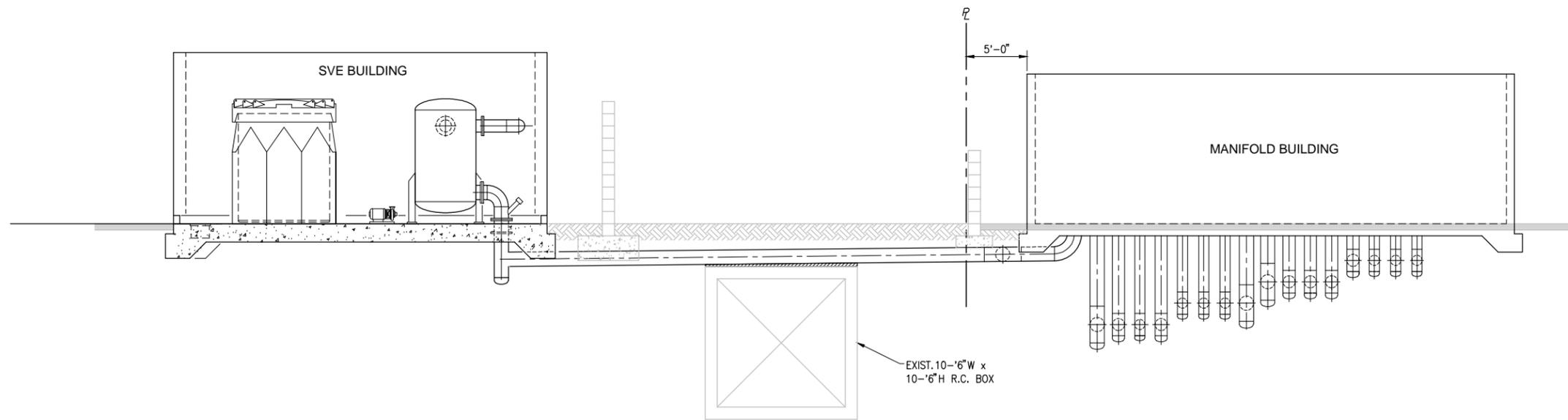
PROJECT NO. XXX	SHEET 27 of 87	PLAN NO. M-2.2
---------------------------	--------------------------	--------------------------

90% SUBMITTAL

\\s01one02_projects\1 Shell Products - Former Kat Property\Map Implementation\CAD\030_Mechanical\28_M-3.1.dwg Plotted on Oct 14, 2015-2:04pm by luke_ferry



PLAN
SCALE: 1" = 5'



SECTION
SCALE: 1" = 5'

DESIGN BY:
L.FERRY

DRAWN BY:
L.FERRY

CHECKED BY:
G.DAVIS

STAMP

PLANS PREPARED BY:

AECOM

999 W. TOWN & COUNTRY ROAD
ORANGE, CA 92868-4713

BENCHMARK:
SEE DRAWING C-002

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US

CITY OF CARSON

SVE/BIOVENTING SYSTEM

CAROUSEL TRACT

YARD PIPING - PLAN AND SECTION

PROJECT NO. XXX	SHEET 28 of 87	PLAN NO. M-3.1
---------------------------	--------------------------	--------------------------

90% SUBMITTAL

EXPLANATION

EQUIPMENT SYMBOLS

-  VACUUM BLOWER
-  COMPRESSOR
-  TRANSFER PUMP
-  DOUBLE DIAPHRAGM PUMP
-  SILENCER
-  FILTER
-  FLAME ARRESTOR

FITTING SYMBOLS

-  CAP (THREADED)
-  PLUG (THREADED)
-  REDUCER
-  EXPANSION JOINT
-  UNION
-  CAM LOCK
-  FLANGE
-  WYE STRAINER

VALVE SYMBOLS

-  GATE (NORMALLY OPEN)
-  GATE (THROTTLED)
-  BUTTERFLY (NORMALLY OPEN)
-  BALL (NORMALLY OPEN)
-  BALL (NORMALLY CLOSED)
-  CHECK
-  ACTUATED REGULATOR
-  VACUUM RELIEF
-  MOTOR OPERATED BUTTERFLY VALVE (NORMALLY CLOSED; UNLESS OTHERWISE NOTED)
-  SOLENOID VALVE (NORMALLY CLOSED; UNLESS OTHERWISE NOTED)

MISCELLANEOUS SYMBOLS

-  SAMPLE/PRESSURE PORT
-  EQUIPMENT MOUNTED DEVICE
-  ALARM CONDITION
-  PANEL MOUNTED DEVICE

PIPING DEFINITIONS

-  AIRLINE
-  PROCESS VAPOR LINE
-  WATER LINE
-  PIPE FLOW DIRECTION
-  SHEET CONTINUATION

LEGEND

- FE FLOW ELEMENT
- FIT FLOW INDICATING TRANSMITTER
- FI FLOW INDICATOR
- FRV FIRING RATE VALVE
- FSP FLAME SAFETY PROGRAMMER
- HV HAND VALVE
- IT TRANSFORMER IGNITER
- LIT LEVEL INDICATING TRANSMITTER
- LSH LEVEL SWITCH HIGH
- LSHH LEVEL SWITCH HIGH HIGH
- LSL LEVEL SWITCH LOW
- M MOTOR
- MCP MASTER CONTROL PANEL
- MOV MOTOR OPERATED VALVE
- PAL PRESSURE ALARM LOW
- PAH PRESSURE ALARM HIGH
- PC PRESSURE CONTROLLER
- PDAH PRESSURE DIFFERENTIAL ALARM HIGH
- PDAL PRESSURE DIFFERENTIAL ALARM LOW
- PDH PRESSURE DIFFERENTIAL HIGH
- PDI PRESSURE DIFFERENTIAL INDICATOR
- PDL PRESSURE DIFFERENTIAL LOW
- PDS PRESSURE DIFFERENTIAL SWITCH
- PI PRESSURE INDICATOR
- PS PRESSURE SWITCH
- PSH PRESSURE SWITCH HIGH
- PSL PRESSURE SWITCH LOW
- SI IGNITION SPARK
- SG SIGHT GLASS
- SP SAMPLE PORT
- SV SOLENOID VALVE
- TAH TEMPERATURE ALARM HIGH
- TAL TEMPERATURE ALARM LOW
- TCV TEMPERATURE CONTROL VALVE
- TE TEMPERATURE ELEMENT
- TI TEMPERATURE INDICATOR
- TIC TEMPERATURE INDICATING TRANSMITTER
- TIR TEMPERATURE INDICATOR RECORDER
- TSH TEMPERATURE SWITCH HIGH
- TSHH TEMPERATURE SWITCH HIGH HIGH
- TT TEMPERATURE TRANSMITTER
- UV ULTRAVIOLET
- VFD VARIABLE FREQUENCY DRIVE
- VI VACUUM INDICATOR
- VT VACUUM TRANSMITTER
- ZAL POSITION ALARM LOW
- ZI POSITION INDICATOR
- ZS POSITION SWITCH
- ZSC POSITION SWITCH CLOSED
- ZSL POSITION SWITCH LOW
- ZSO POSITION SWITCH OPEN

\\s01one02\projects\1 Shell Products - Former Kast Property\Map Implementation\CADD\031_Process\29 D-1.dwg Plotted on Oct 14, 2015 - 10:22am by Luke_Ferry

DESIGN BY:
L.FERRY

DRAWN BY:
L.FERRY

CHECKED BY:
G.DAVIS

STAMP

PLANS PREPARED BY:

AECOM

999 W. TOWN & COUNTRY ROAD
ORANGE, CA 92868-4713

BENCHMARK:
SEE DRAWING C-002

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US

CITY OF CARSON

**SVE/BIOVENTING SYSTEM
CAROUSEL TRACT**

PROCESS LEGEND AND ABBREVIATIONS

PROJECT NO. XXX	SHEET 29 of 87	PLAN NO. D-001
---------------------------	--------------------------	--------------------------

90% SUBMITTAL

\\010ncad2\projects\1 Shell Products - Former Kat Property\pwr_implementation\CAD\031_Process\30 D-002.dwg Plotted on Oct 14, 2010 10:36am by Luke Ferry

DESIGN BY:
L.FERRY
DRAWN BY:
L.FERRY
CHECKED BY:
G.DAVIS

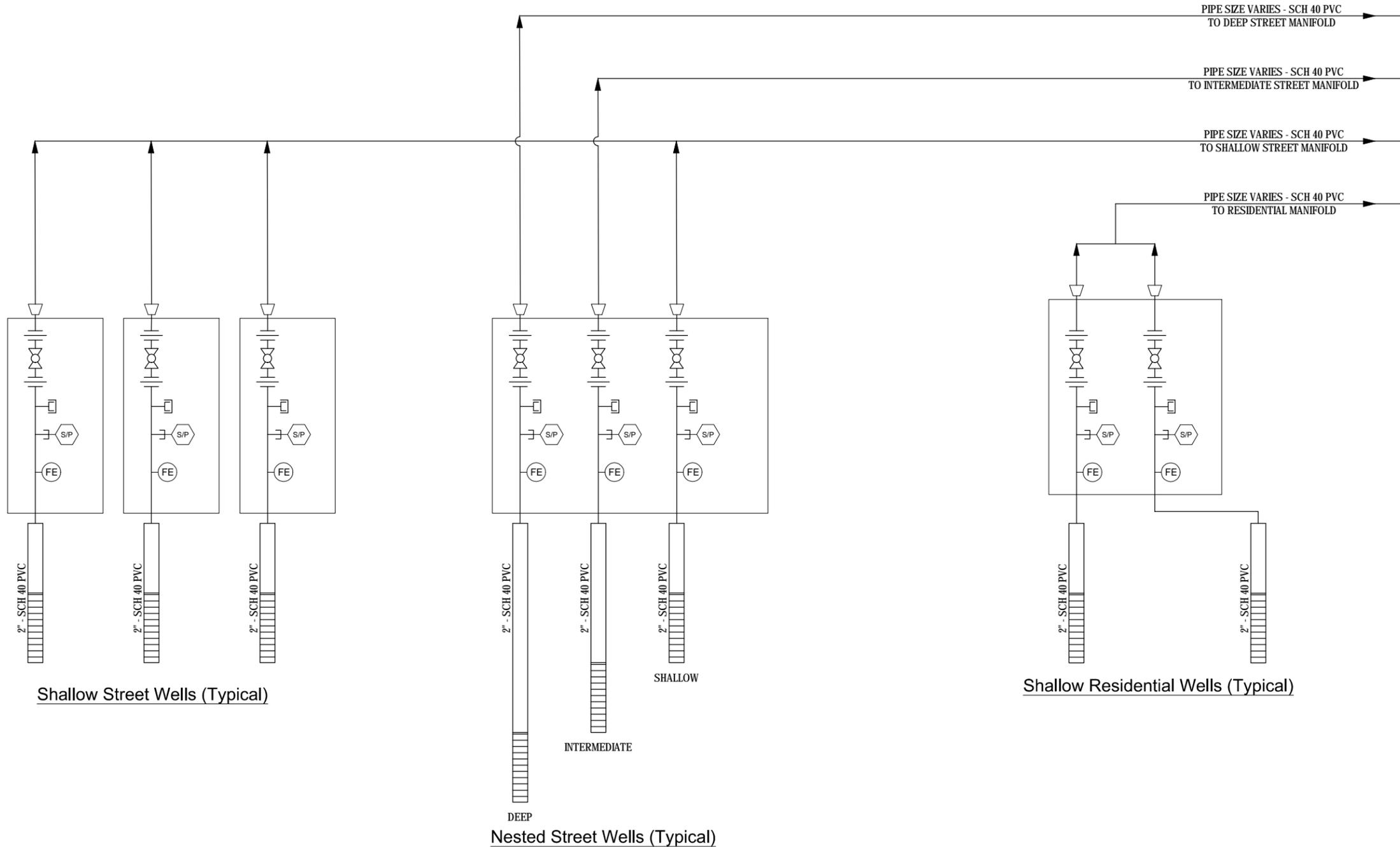
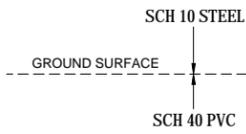
STAMP

PLANS PREPARED BY:
AECOM
999 W. TOWN & COUNTRY ROAD
ORANGE, CA 92868-4713

BENCHMARK:
SEE DRAWING C-002

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US		
CITY OF CARSON		
SVE/BIOVENTING SYSTEM CAROUSEL TRACT		
SIMPLIFIED PROCESS FLOW		
PROJECT NO. XXX	SHEET 30 of 87	PLAN NO. D-002



NOTES:
 -REFER TO DRAWING D-1 FOR SYMBOL EXPLANATION
 -REFER TO DRAWING D-8 AND D-9 FOR EQUIPMENT SPECIFICATION

WELL TYPE	STREET 1	STREET 2	STREET 3	STREET 4	TOTAL
SHALLOW STREET	14	17	16	15	62
NESTED SHALLOW	13	19	15	16	63
NESTED INTERMEDIATE	13	19	15	16	63
NESTED DEEP	13	19	15	16	63
SHALLOW RESIDENTIAL	86	156	102	106	450

DESIGN BY:
L.FERRY

DRAWN BY:
L.FERRY

CHECKED BY:
G.DAVIS

STAMP

PLANS PREPARED BY:

AECOM

999 W. TOWN & COUNTRY ROAD
ORANGE, CA 92868-4713

BENCHMARK:
SEE DRAWING C-002

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US

CITY OF CARSON

SVE/BIOVENTING SYSTEM

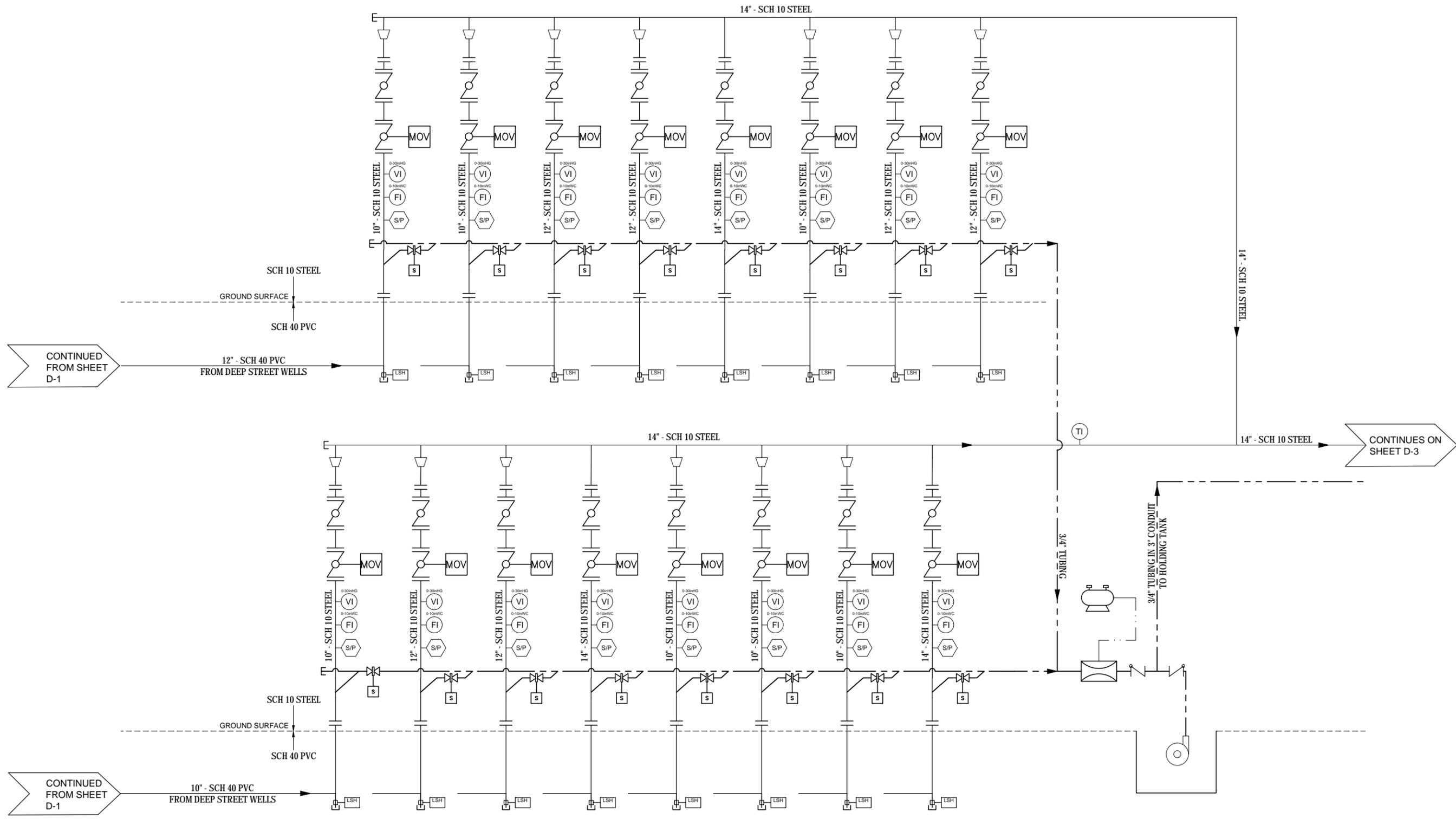
CAROUSEL TRACT

PROCESS FLOW DIAGRAM 1

PROJECT NO. XXX	SHEET 31 of 87	PLAN NO. D-003
---------------------------	--------------------------	--------------------------

\\s01one02\projects\1 Shell Products - Former Kast Property\Map Implementation\CADD\031_Process\31 D-003.dwg Plotted on Oct 14, 2015-10:22am by Luke_Ferry

90% SUBMITTAL



NOTES:
 -REFER TO DRAWING D-1 FOR SYMBOL EXPLANATION
 -REFER TO DRAWING D-8 AND D-9 FOR EQUIPMENT SPECIFICATION

DESIGN BY:
L.FERRY
 DRAWN BY:
L.FERRY
 CHECKED BY:
G.DAVIS

STAMP

PLANS PREPARED BY:
AECOM
 999 W. TOWN & COUNTRY ROAD
 ORANGE, CA 92868-4713

BENCHMARK:
SEE DRAWING C-002

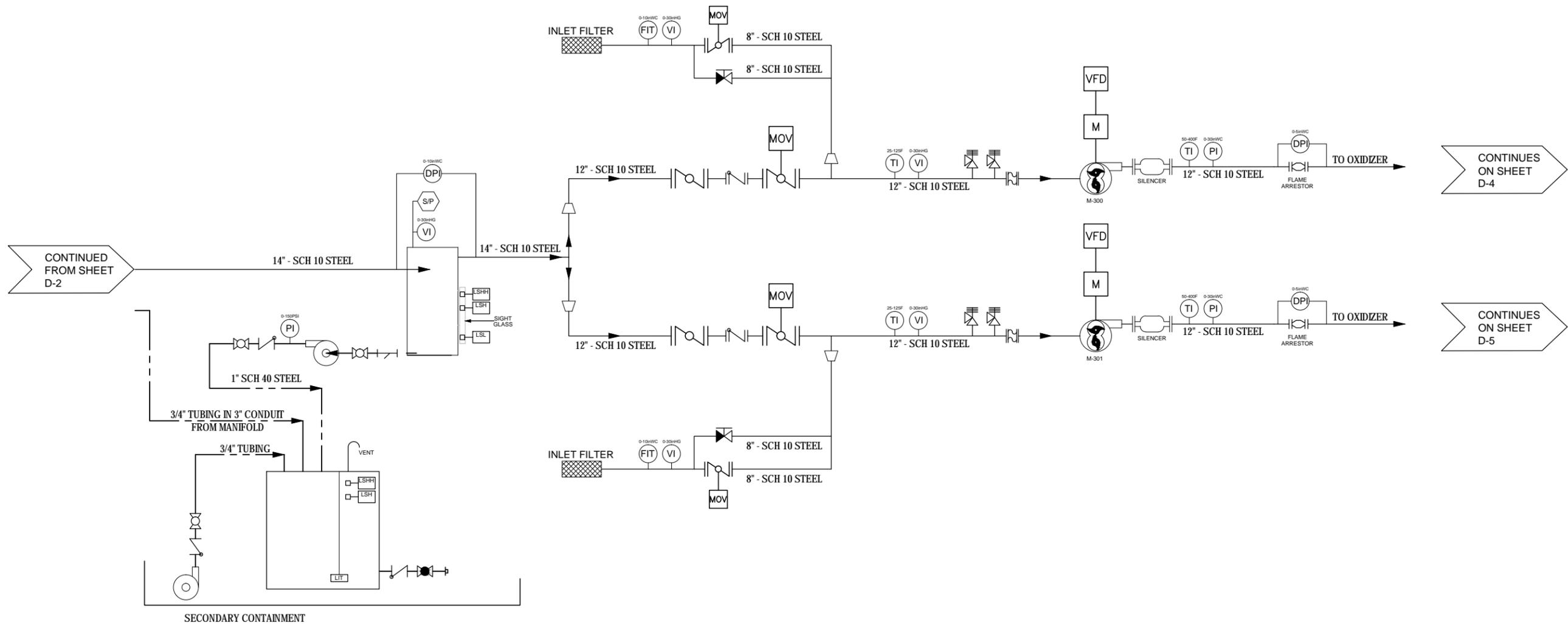
REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/BIOVENTING SYSTEM
CAROUSEL TRACT
PROCESS FLOW DIAGRAM 2

PROJECT NO. XXX	SHEET 32 of 87	PLAN NO. D-004
---------------------------	--------------------------	--------------------------

\\s010nas02_projects\1 Shell Products - Former Kast Property\Map Implementation\CADD\031_Process\32 D-004.dwg Plotted on Oct. 14, 2015 - 10:25am by luke_ferry

90% SUBMITTAL



NOTES:
 -REFER TO DRAWING D-1 FOR SYMBOL EXPLANATION
 -REFER TO DRAWING D-8 AND D-9 FOR EQUIPMENT SPECIFICATION

DESIGN BY:
L.FERRY
 DRAWN BY:
L.FERRY
 CHECKED BY:
G.DAVIS

STAMP

PLANS PREPARED BY:
AECOM
 999 W. TOWN & COUNTRY ROAD
 ORANGE, CA 92868-4713

BENCHMARK:
SEE DRAWING C-002

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/BIOVENTING SYSTEM
CAROUSEL TRACT
PROCESS FLOW DIAGRAM 3

PROJECT NO. XXX	SHEET 33 of 87	PLAN NO. D-005
---------------------------	--------------------------	--------------------------

\\s010nas02\projects\1 Shell Products - Former Kast Property\Map Implementation\CADD\031_Process\33 D-005.dwg Plotted on Oct 14, 2015-10:23am by luke_ferry

90% SUBMITTAL

THERMAL OXIDIZER WITH CATALYST MODULE:

Designation - 0-400
 50% Nom. Thermal Efficiency Heat Exchanger
 Max Rated Capacity 1500 SCFM
 Air Flow Turn Down 4:1

Combustion Air Blower:

Designation - B-400
 HP - 5
 Rated RPM - 3450RPM
 Volts - 480 VAC
 FLA - 6
 Ph - 3

Process:

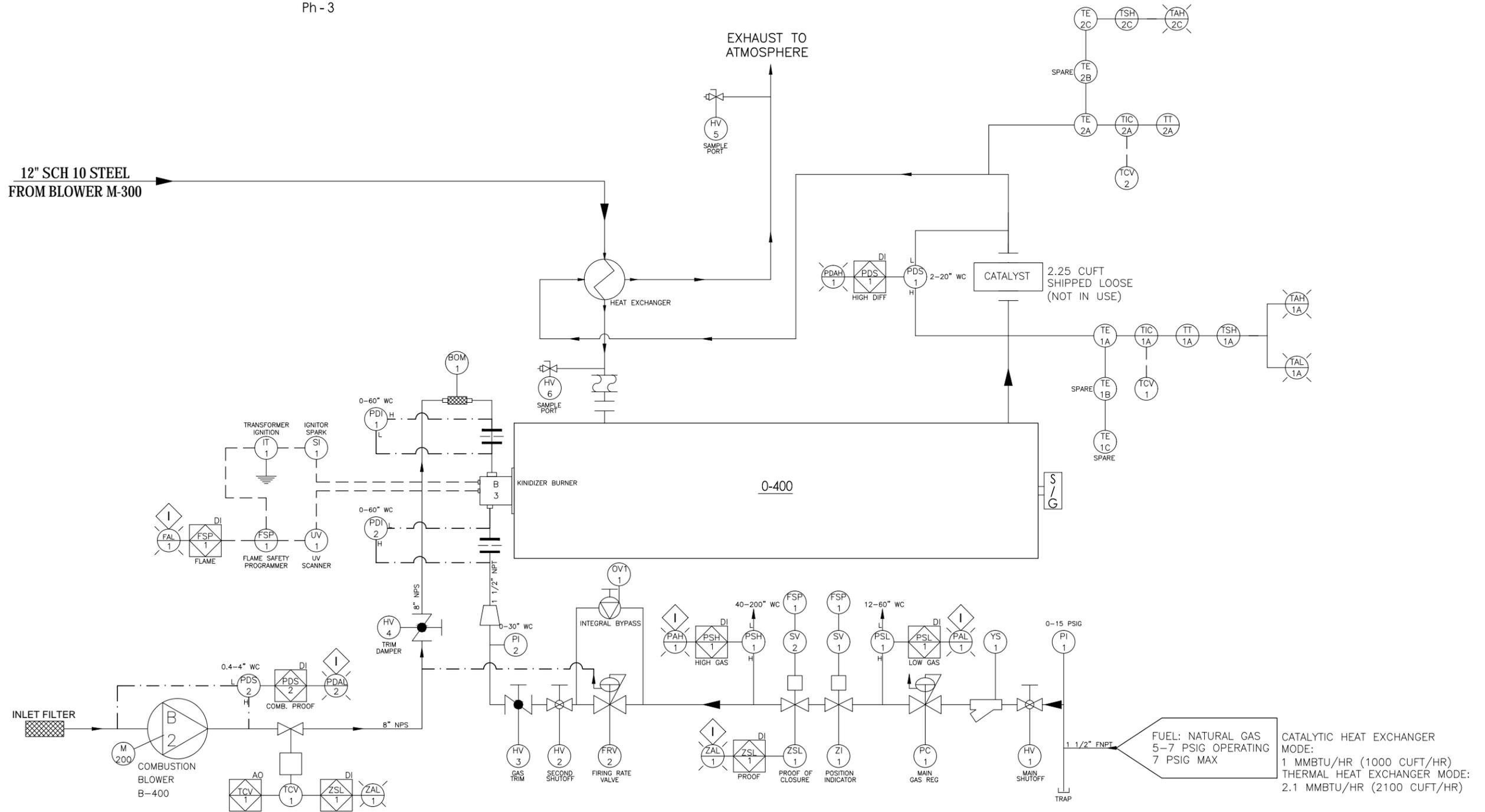
Flow Rate -SVE 1500 SCFM
 Average Temp.= 265 °F

Area Classification:

Class 1, Div 2, Group D
 SVE Only

CONTINUED FROM SHEET D-3

12" SCH 10 STEEL FROM BLOWER M-300



NOTES:
 -REFER TO DRAWING D-1 FOR SYMBOL EXPLANATION
 -REFER TO DRAWING D-8 AND D-9 FOR EQUIPMENT SPECIFICATION
 -DRAWING AS SUBMITTED TO AECOM BY INTELLISHARE (CATALYST REMOVED)

FUEL: NATURAL GAS
 5-7 PSIG OPERATING
 7 PSIG MAX
 CATALYTIC HEAT EXCHANGER MODE:
 1 MMBTU/HR (1000 CUFT/HR)
 THERMAL HEAT EXCHANGER MODE:
 2.1 MMBTU/HR (2100 CUFT/HR)

DESIGN BY: L.FERRY	STAMP	PLANS PREPARED BY: AECOM	BENCHMARK: SEE DRAWING C-002
DRAWN BY: L.FERRY		999 W. TOWN & COUNTRY ROAD ORANGE, CA 92868-4713	
CHECKED BY: G.DAVIS			

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/BIOVENTING SYSTEM
CAROUSEL TRACT
PROCESS FLOW DIAGRAM 4

PROJECT NO. XXX	SHEET 34 of 87	PLAN NO. D-006
---------------------------	--------------------------	--------------------------

\\s010nas02\projects\1 Shell Products - Former Kast Property\app Implementation\CAD\031_Process\34 D-006.dwg Plotted on Oct. 14, 2015-10:25am by Luke Ferry

90% SUBMITTAL

THERMAL OXIDIZER WITH CATALYST MODULE:

Designation - 0-401
50% Nom. Thermal Efficiency Heat Exchanger
Max Rated Capacity 1500 SCFM
Air Flow Turn Down 4:1

Combustion Air Blower:

Designation - B-401
HP - 5
Rated RPM - 3450RPM
Volts - 480 VAC
FLA - 6
Ph - 3

Process:

Flow Rate -SVE 1500 SCFM
Average Temp.= 265 °F

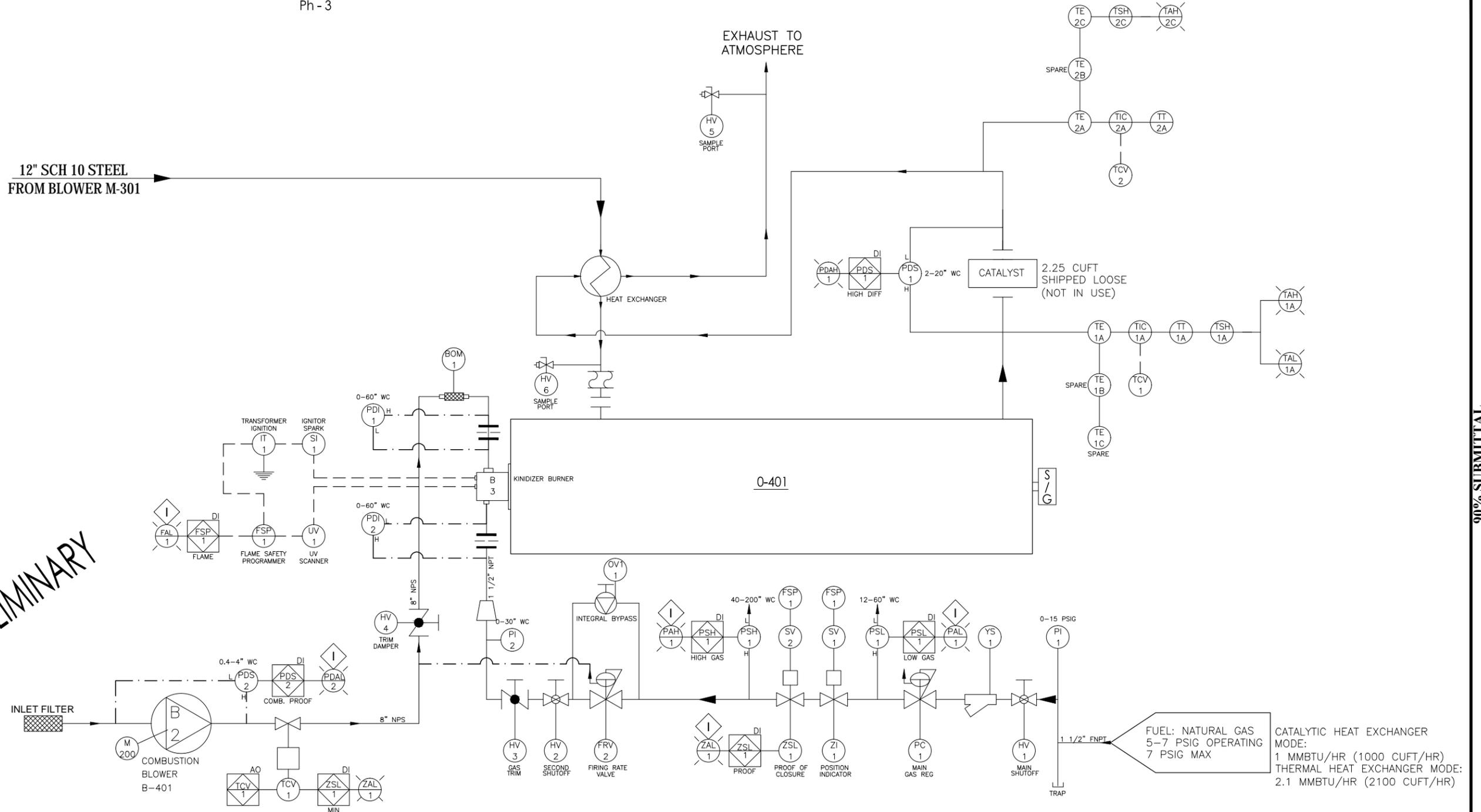
Area Classification:

Class 1, Div 2, Group D
SVE Only

CONTINUED FROM SHEET D-3

12" SCH 10 STEEL FROM BLOWER M-301

PRELIMINARY



FUEL: NATURAL GAS
5-7 PSIG OPERATING
7 PSIG MAX

CATALYTIC HEAT EXCHANGER MODE:
1 MMBTU/HR (1000 CUFT/HR)
THERMAL HEAT EXCHANGER MODE:
2.1 MMBTU/HR (2100 CUFT/HR)

NOTES:
-REFER TO DRAWING D-1 FOR SYMBOL EXPLANATION
-REFER TO DRAWING D-8 AND D-9 FOR EQUIPMENT SPECIFICATION
-DRAWING AS SUBMITTED TO AECOM BY INTELLISHARE (CATALYST REMOVED)

DESIGN BY: L.FERRY	STAMP	PLANS PREPARED BY:	BENCHMARK:
DRAWN BY: L.FERRY		AECOM	SEE DRAWING C-002
CHECKED BY: G.DAVIS		999 W. TOWN & COUNTRY ROAD ORANGE, CA 92868-4713	

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/BIOVENTING SYSTEM
CAROUSEL TRACT
PROCESS FLOW DIAGRAM 5

PROJECT NO. XXX	SHEET 35 of 87	PLAN NO. D-007
---------------------------	--------------------------	--------------------------

90% SUBMITTAL

GENERAL NOTES

1. THE TERM CONTRACTOR IS USED IN THESE NOTES TO IDENTIFY THE PARTY WHO IS CONTRACTED TO THE OWNER AND WHO CAUSES THE WORK OF THE CONTRACT TO BE PERFORMED EITHER BY HIS OWN FORCES OR BY OTHER CONTRACTORS RETAINED BY HIM.

2. THE CONTRACTOR SHALL DO THIS WORK IN ACCORDANCE WITH LOCAL LAWS AND ORDINANCES HAVING JURISDICTION. OTHER THAN THE BUILDING PERMIT, THE CONTRACTOR SHALL OBTAIN ALL OTHER PERMITS AND APPROVALS AS REQUIRED BY LAW FOR THE COMPLETION OF THE WORK AND ISSUANCE OF A FULL CERTIFICATE OF OCCUPANCY.

3. THE SUBMISSION OF A PROPOSAL BY THE CONTRACTOR WILL BE CONSTRUED AS EVIDENCE THAT A CAREFUL AND THOROUGH EXAMINATION OF THE SITE HAS BEEN MADE AND LATER CLAIMS FOR LABOR, MATERIALS OR EQUIPMENT REQUIRED OR FOR DIFFICULTIES ENCOUNTERED, WHICH COULD HAVE BEEN FORESEEN HAD SUCH AN EXAMINATION BEEN MADE, WILL NOT BE RECOGNIZED. IT SHALL ALSO CONSTITUTE A REPRESENTATION THAT THE CONTRACTOR HAS CHECKED AND VERIFIED ALL QUANTITIES, WORK AND MATERIALS INVOLVED AND THAT HE SHALL TAKE RESPONSIBILITY FOR ANY DEFICIENCIES THEREIN.

4. BEFORE ORDERING ANY MATERIAL OR DOING ANY WORK, EACH TRADE SHALL VERIFY ALL MEASUREMENTS IN THE FIELD AND SHALL BE RESPONSIBLE FOR THE CORRECTNESS OF SAME. NO EXTRA CHARGE OR COMPENSATION WILL BE ALLOWED ON ACCOUNT OF DIFFERENCE BETWEEN ACTUAL DIMENSIONS AND THE MEASUREMENTS INDICATED ON THE DRAWINGS; ANY DISCREPANCIES BETWEEN THE DRAWINGS AND FIELD CONDITIONS WHICH MAY BE FOUND SHALL BE SUBMITTED TO THE ARCHITECT FOR CONSIDERATION AND CLARIFICATION BEFORE PROCEEDING WITH THE WORK.

5. ALL OF THE ARCHITECT'S DRAWINGS AND CONSTRUCTION NOTES ARE COMPLIMENTARY AND WHAT IS CALLED FOR BY EITHER WILL BE BINDING AS IF CALLED FOR BY ALL. ANY WORK SHOWN OR REFERRED TO ON ANY ONE DRAWING SHALL BE PROVIDED AS THOUGH SHOWN ON ALL DRAWINGS. WHENEVER AN ITEM IS SPECIFIED AND/OR SHOWN ON THE DRAWINGS BY DETAIL OR REFERENCE IT SHALL BE CONSIDERED TYPICAL FOR OTHER ITEMS WHICH ARE OBVIOUSLY INTENDED TO BE THE SAME EVEN THOUGH NOT SO DESIGNATED OR SPECIFICALLY NAMED BUT DO SERVE THE SAME FUNCTION.

6. THE WORK TO BE PERFORMED CONSISTS OF FURNISHING ALL LABOR, EQUIPMENT, TOOLS, TRANSPORTATION, SUPPLIES, FEES, MATERIALS, AND SERVICES IN ACCORDANCE WITH THESE NOTES AND DRAWINGS AND PERFORMING ALL OPERATIONS NECESSARY TO CONSTRUCT AND INSTALL COMPLETE AND IN SATISFACTORY CONDITION THE VARIOUS MATERIALS AND EQUIPMENT AT THE LOCATIONS SHOWN. IT IS INTENDED THAT THE DRAWINGS INCLUDE EVERYTHING REQUISITE AND NECESSARY TO FINISH THE ENTIRE WORK PROPERLY, NOTWITHSTANDING THE FACT THAT EVERY ITEM NECESSARILY INVOLVED MAY NOT BE SPECIFICALLY MENTIONED OR SHOWN. ANY ITEM WHICH MAY BE REASONABLY CONSTRUED AS INCIDENTAL TO THE PROPER AND SATISFACTORY COMPLETION OF THE WORK IN ACCORDANCE WITH THE INTENT OF THESE NOTES AND DRAWINGS IS HEREBY INCLUDED.

7. THE CONTRACTOR SHALL ABIDE BY AND COMPLY WITH THE TRUE INTENT AND MEANING OF THE DRAWINGS AND NOTES TAKEN AS A WHOLE AND SHALL NOT AVAIL HIMSELF OF ANY OBVIOUS ERRORS OR OMISSIONS, SHOULD ANY EXIST. SHOULD ANY ERROR OR DISCREPANCY APPEAR OR ANY DOUBT ARISE AS TO THE TRUE MEANING OF THE DRAWINGS OR NOTES, THE CONTRACTOR SHALL BRING SUCH ITEMS TO THE ATTENTION OF THE ARCHITECT BEFORE SUBMISSION OF PROPOSAL FOR EXPLANATION OR CORRECTION OF SAME. AFTER THE SUBMISSION OF PROPOSAL, THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ALL SUCH ITEMS.

8. THE CHARACTER AND SCOPE OF THE WORK ARE ILLUSTRATED BY THE DRAWINGS AND NOTES. TO INTERPRET AND EXPLAIN THE DRAWINGS OTHER INFORMATION DEEMED NECESSARY BY THE ARCHITECT WILL BE FURNISHED TO THE CONTRACTOR WHEN AND AS REQUIRED BY THE WORK AND IT IS TO BE UNDERSTOOD THAT SAID ADDITIONAL INFORMATION OR DRAWINGS ARE TO BE OF EQUAL FORCE WITH THESE.

9. FULL SIZE OR LARGE SCALE DETAILS OR DRAWINGS SHALL GOVERN SMALL SCALE DRAWINGS WHICH THEY ARE INTENDED TO AMPLIFY. DETAILS OR CONDITIONS INDICATED FOR A PORTION OF THE WORK BUT NOT CARRIED OUT FULLY FOR OTHER PORTIONS SHALL APPLY THROUGHOUT TO ALL SIMILAR PORTIONS EXCEPT AS OTHERWISE SPECIFICALLY NOTED. IN EVERY CASE THE GREATER QUANTITY, OR A MORE EXPENSIVE ITEM OR METHOD SHALL BE ASSUMED OVER A LESSER QUANTITY OR A LESS EXPENSIVE ONE AND DIMENSIONS SHALL BE FIGURED RATHER THAN DETERMINED BY RULE OR SCALE.

10. ALL PARTITIONS ARE DIMENSIONED TO THE FINISHED FACES OF WALLS. ALL PARTITION THICKNESSES SHOWN ARE NOMINAL DIMENSIONS.

11. ALL MISCELLANEOUS WOOD BLOCKING, GROUNDS, FURRING AS REQUIRED, TO BE FIRE RETARDANT TREATED. REFER TO SPECIFICATION.

12. THE PROJECT HAS BEEN DESIGNED AND DETAILED FOR THE SPECIFIC MATERIALS AND EQUIPMENT SPECIFIED. NO SUBSTITUTIONS SHALL BE MADE WITHOUT THE EXPRESS WRITTEN CONSENT OF THE ARCHITECT. IF THE SPECIFIED MATERIAL IS NOT AVAILABLE, THE CONTRACTOR SHALL PROPOSE AN ALTERNATE MATERIAL AND SHALL PROVIDE DRAWINGS, SAMPLES, SPECIFICATIONS, MANUFACTURER'S LITERATURE, PERFORMANCE DATE, ETC. IN ORDER THAT THE ARCHITECT CAN EVALUATE THE PROPOSED SUBSTITUTION. IF THE SUBSTITUTION AFFECTS A CORRELATED FUNCTION, ADJACENT CONSTRUCTION, OR THE WORK OF ANY OTHER CONTRACTOR OR TRADE, THE NECESSARY CHANGES AND MODIFICATIONS TO THE AFFECTED WORK SHALL BE SUBMITTED WITH THE SUBSTITUTION AND ACCOMPLISHED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER. NO REQUESTS FOR SUBSTITUTES WILL BE ENTERTAINED BY THE ARCHITECT DUE TO CONTRACTOR'S FAILURE TO ORDER MATERIALS IN A TIMELY MANNER.

13. THE STANDARD SPECIFICATIONS OF THE MANUFACTURERS APPROVED FOR USE IN THE PROJECT ARE HEREBY MADE A PART OF THESE NOTES WITH THE SAME FORCE AND EFFECT AS THOUGH HEREIN WRITTEN OUT IN FULL, EXCEPT THAT WHEREVER THE DRAWINGS REQUIRE HEAVIER MEMBERS, BETTER QUALITY MATERIALS OR ARE OTHERWISE MORE STRINGENT, THESE STRINGENT REQUIREMENTS SHALL GOVERN.

14. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY IF HE CANNOT FOR ANY REASON COMPLY WITH ALL THE REQUIREMENTS OF THESE NOTES AND DRAWINGS.

15. THE CONTRACTOR SHALL COORDINATE AND SUPERVISE THE WORK OF ALL SUB CONTRACTORS. HE SHALL BE RESPONSIBLE FOR GIVING ALL TRADES SUCH INFORMATION, PLANS OR DETAILS AS MAY BE REQUIRED FOR THE PROPER INSTALLATION AND COMPLETION OF THEIR WORK.

16. THE CONTRACTOR SHALL SUBMIT ALL FABRICATION SHOP DRAWINGS, SAMPLES, AND FIXTURE CUTS FOR THE ARCHITECT'S REVIEW AS REQUIRED AND/OR INDICATED ON DRAWINGS. THE ARCHITECT'S REVIEW SHALL NOT BE CONSTRUED AS AN INDICATION THAT SUBMITTAL IS CORRECT OR SUITABLE NOR THAT WORK REPRESENTED BY SUBMITTAL COMPLIES WITH THE DRAWINGS, EXCEPT AS TO MATTERS OF FINISH, COLOR, AND OTHER ESTHETIC MATTERS. ACTION NOTED ABOVE DOES NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY TO COORDINATE ALL TRADES AND TO CHECK QUANTITIES AND DIMENSIONS AGAINST CONDITIONS IN THE FIELD. CONTRACTORS AND ENGINEERS SHALL ASSUME RESPONSIBILITY FOR ALL ERRORS ON THEIR DRAWINGS.

17. ALL MATERIALS REQUIRED FOR THE PERFORMANCE OF THIS CONTRACT SHALL BE NEW AND OF THE BEST QUALITY OF KINDS SPECIFIED, ALL SUBJECT TO THE APPROVAL OF THE ARCHITECT. THE USE OF OLD OR SECOND-HAND MATERIALS IS STRICTLY FORBIDDEN. THE CONTRACTOR SHALL, IF REQUIRED, FURNISH SATISFACTORY EVIDENCE AS TO THE KIND AND QUALITY OF MATERIALS AND WORKMANSHIP. MATERIALS SHALL BE USED IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS. UPON REQUEST, THE MANUFACTURER'S REPRESENTATIVE SHALL GO TO THE SITE AND INSTRUCT THE MECHANICS IN THE USE OF THE MATERIALS OR SHALL SUPERVISE THEIR USE.

18. FOR THE EXECUTION OF THE WORK TO BE PERFORMED UNDER THIS CONTRACT AND FOR THE MANUFACTURE OR TRANSPORTATION OF ANY OF THE MATERIALS OR EQUIPMENT TO BE USED OR INSTALLED, THE CONTRACTOR SHALL EMPLOY ONLY SUCH LABOR THROUGHOUT AS WILL NOT INTERFERE WITH THE SPEEDY AND UNINTERRUPTED COMPLETION OF THE PROJECT. ALL WORK SHALL BE DONE BY MECHANICS SKILLED IN THEIR TRADE AND SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER IN ACCORDANCE WITH THE BEST TRADE PRACTICES.

19. ANY MATERIALS DELIVERED OR WORK PERFORMED, CONTRARY TO THE DRAWINGS AND SPECIFICATIONS AND APPROVED SHOP DRAWINGS, SHALL BE REMOVED BY THE CONTRACTOR AT HIS OWN EXPENSE AND THE SAME SHALL BE REPLACED WITH OTHER MATERIALS OR WORK SATISFACTORY TO THE ARCHITECT. THE CONTRACTOR SHALL ALSO ASSUME THE COST OF REPLACING THE WORK WHICH MAY BE DISTURBED.

20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY AND ACCURATELY LAYING OUT THE WORK AND FOR THE LINES AND MEASUREMENTS HEREIN. HE SHALL ESTABLISH NECESSARY REFERENCE LINES AND PERMANENT BENCH MARKS FROM WHICH BUILDING LINES AND ELEVATIONS SHALL BE TAKEN. ELEVATION HEIGHTS OF ALL WORK INCLUDING BUT NOT LIMITED TO SOFFITS, CEILINGS, DOORS, HOLLOW METAL SHALL BE TRUE AND LEVEL WITHIN A MAXIMUM TOLERANCE OF 1/8" OVERALL THE ENTIRE PROJECT.

21. AT ALL ROOMS WITH FLOOR DRAINS: PITCH FINISHED FLOOR TO DRAINS.

22. FOR ALL PARTITIONS REFER TO PARTITION SYMBOLS ON DRAWINGS AND THE PARTITION TYPE SCHEDULE WHICH SHOWS PARTITION CORES AND FINISHES. REFER TO LIFE SAFETY DRAWINGS FOR LOCATION OF 1-HOUR AND 2-HOUR PARTITIONS, AND SMOKE PARTITIONS.

23. THE CONTRACTOR SHALL KEEP THE ARCHITECT INFORMED OF THE PROGRESS OF HIS WORK. NO WORK SHALL BE CLOSED OR COVERED UNTIL IT HAS BEEN DULY INSPECTED AND APPROVED. SHOULD UNINSPECTED WORK BE COVERED, THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, UNCOVER ALL SUCH WORK SO THAT IT CAN BE PROPERLY INSPECTED AND AFTER SUCH INSPECTION, HE SHALL PROPERLY REPAIR AND REPLACE ALL WORK INTERFERED WITH.

24. INSPECTION BY THE ARCHITECT AND ACCEPTANCE BY THE OWNER.

25. PROTECT OWNER'S PROPERTY, EQUIPMENT AND EMPLOYEES FROM INJURY AND DAMAGE.

26. ALL HVAC, PLUMBING, SPRINKLER AND ELECTRICAL LINES ARE TO BE COORDINATED SO THAT NO CONFLICTS OCCUR. ANY CONFLICTS WHICH RESULT IN A RELOCATION OF A FINISHED SURFACE MUST BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER PRIOR TO INSTALLATION.

27. CONTRACTOR SHALL CONSULT WITH ELECTRICAL AND PLUMBING SUB CONTRACTORS FOR LOCATIONS OF CONDUIT AND PIPES IN FOUNDATION, SLABS ON GRADE, AND EXTERIOR WALLS AND SHALL INSTALL WATERTIGHT PIPE SLEEVES AT THEIR RESPECTIVE LOCATIONS.

28. A SET OF THE INSTRUCTION MANUALS AND INSTALLATION INSTRUCTIONS OF ALL EQUIPMENT AND ACCESSORIES INSTALLED IN THIS JOB SHALL BE KEPT BY THE CONTRACTOR AND TURNED OVER TO THE OWNER AT THE COMPLETION OF THE JOB.

29. THE CONTRACTOR IS TO PROVIDE LOOSE STEEL ANGLE OR CMU LINTELS OVER ALL DUCTS PASSING THROUGH MASONRY PARTITIONS.

30. PROVIDE ADEQUATE BACKUP AND BLOCKING FOR ALL WALLS OR CEILING MOUNTED EQUIPMENT, ARCHITECTURAL WOODWORK, HANDRAILS LIGHTING OR OTHER MISCELLANEOUS ITEMS AS SHOWN ON DRAWINGS TO ASSURE A SECURE INSTALLATION.

31. THE PREMISES AND THE JOB SITE SHALL BE MAINTAINED IN A REASONABLY NEAT AND ORDERLY CONDITION AND KEPT FREE FROM ACCUMULATIONS OF WASTE MATERIALS AND RUBBISH DURING THE ENTIRE CONSTRUCTION PERIOD.

A. REMOVE CRATES, CARTONS AND OTHER FLAMMABLE WASTE MATERIALS OR TRASH FROM THE WORK AREAS AT THE END OF EACH WORKING DAY.

B. ELECTRICAL CLOSETS, PIPE AND DUCT SHAFTS, CHASES, FURRED SPACES AND SIMILAR SPACES WHICH ARE GENERALLY UNFINISHED SHALL BE CLEANED AND LEFT FREE FROM RUBBISH, LOOSE PLASTER, MORTAR DRIPPINGS, EXTRANEOUS CONSTRUCTION MATERIALS, DIRT AND DUST.

C. CARE SHALL BE TAKEN BY WORKMEN NOT TO MARK, SOIL, OR OTHERWISE DEFACE FINISHED SURFACES. IN THE EVENT THAT FINISHED SURFACES BECOME DEFACED, CLEAN AND RESTORE SUCH SURFACES TO THEIR ORIGINAL CONDITION. IF THIS IS NOT POSSIBLE, DAMAGED SURFACES SHALL BE REPLACED.

D. CLEAN UP IMMEDIATELY UPON COMPLETION OF EACH TRADE'S WORK.

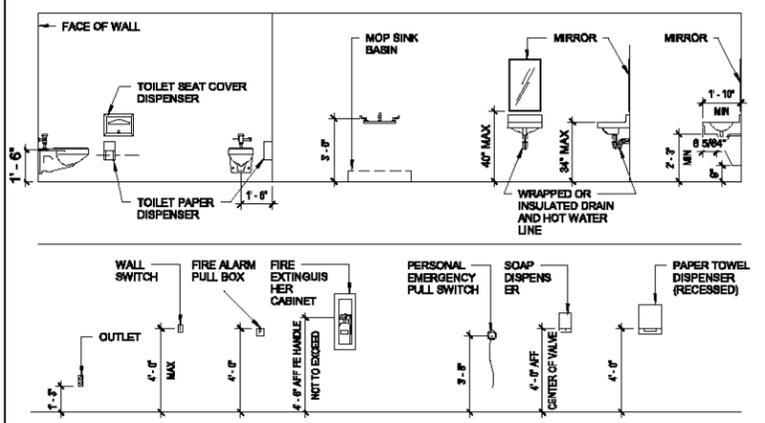
E. CLEAN AREAS OF THE BUILDING IN WHICH PAINTING AND FINISHING WORK IS TO BE PERFORMED JUST PRIOR TO THE START OF THIS WORK, AND MAINTAIN THESE AREAS IN SATISFACTORY CONDITION FOR PAINTING AND FINISHING.

F. THIS CLEANING INCLUDES THE REMOVAL OF TRASH AND RUBBISH FROM THESE AREAS, BROOM CLEANING OF FLOORS, THE REMOVAL OF ANY PLASTER, MORTAR, DUST AND OTHER EXTRANEOUS MATERIALS FROM FINISH SURFACES, INCLUDING BUT NOT LIMITED TO, MISCELLANEOUS METAL, WOODWORK, PLASTER, GYPSUM DRYWALL, MASONRY, CONCRETE, MECHANICAL AND ELECTRICAL EQUIPMENT, PIPING, DUCTWORK, CONDUIT, AND SURFACES VISIBLE AFTER GRILLES, REGISTERS AND OTHER SUCH FIXTURES OR DEVICES ARE IN PLACE.

G. IN ADDITION TO THE CLEANING SPECIFIED ABOVE AND THE MORE SPECIFIC CLEANING WHICH MAY BE REQUIRED IN VARIOUS SECTIONS OF THE SPECIFICATIONS, THE PREMISES SHALL BE PREPARED FOR OCCUPANCY BY:

- i. A THOROUGH CLEANING THROUGHOUT INCLUDING WASHING OR CLEANING BY OTHER APPROVED METHODS OF ALL FLOORS AND SURFACES ON WHICH DIRT OR DUST HAS COLLECTED AND BY WASHING GLASS, REMOVING ALL PAINT, PUTTY AND STAINS THEREFROM.
- ii. PROVIDING AND MAINTAINING ADEQUATE RUNNER STRIPS OF NON-STAINING REINFORCED KRAFT BUILDING PAPER ON FINISHED FLOORS AS REQUIRED FOR PROTECTION.
- iii. LEAVING ALL FIXTURES AND EQUIPMENT IN AN UNDAMAGED, BRIGHT, CLEAN, POLISHED CONDITION.
- iv. CLEAN AND POLISH ALL HARDWARE, AND OTHER MEAL WORK.
- v. ALL OTHER CLEANING AS REQUIRED TO TURN THE BUILDING AND PREMISES OVER TO THE OWNER IN A SPOTLESS AND ORDERLY CONDITION.

TYPICAL MOUNTING HEIGHTS



DESIGN BY: Designer
 DRAWN BY: Author
 CHECKED BY: Checker

STAMP
 PLANS PREPARED BY:
AECOM
 999 W. TOWN & COUNTRY ROAD
 ORANGE, CA 92668-4713

BENCHMARK:

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/ BIOVENTING SYSTEM
CAROUSEL TRACT
ARCHITECTURAL GENERAL NOTES

PROJECT NO. **XXX** SHEET **36 of 87** PLAN NO. **A-0.1**

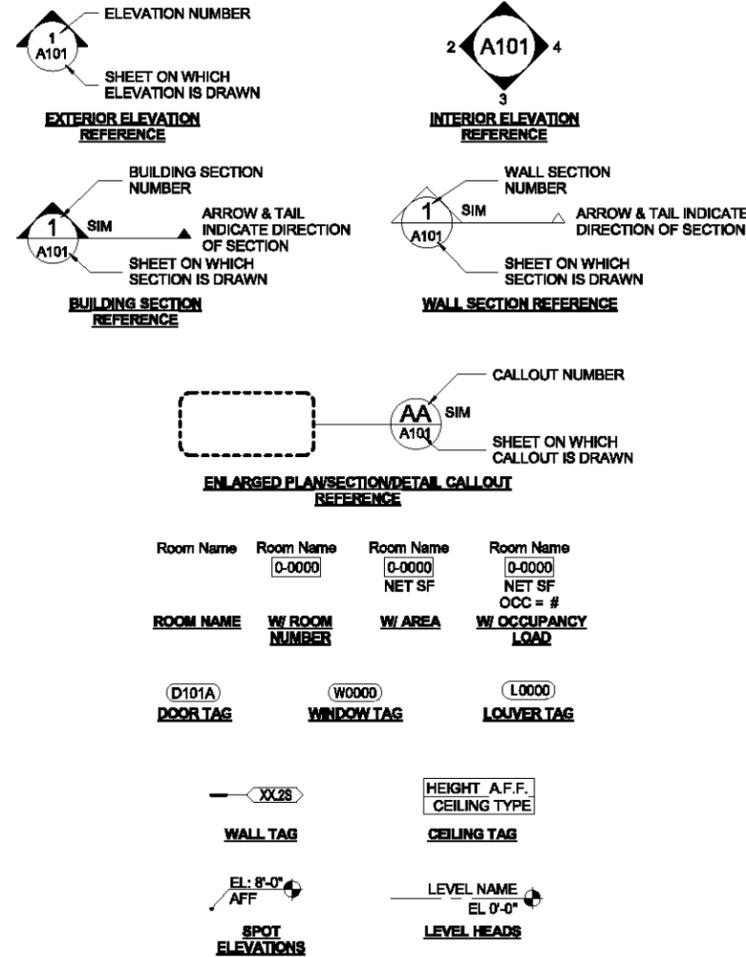
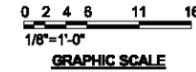
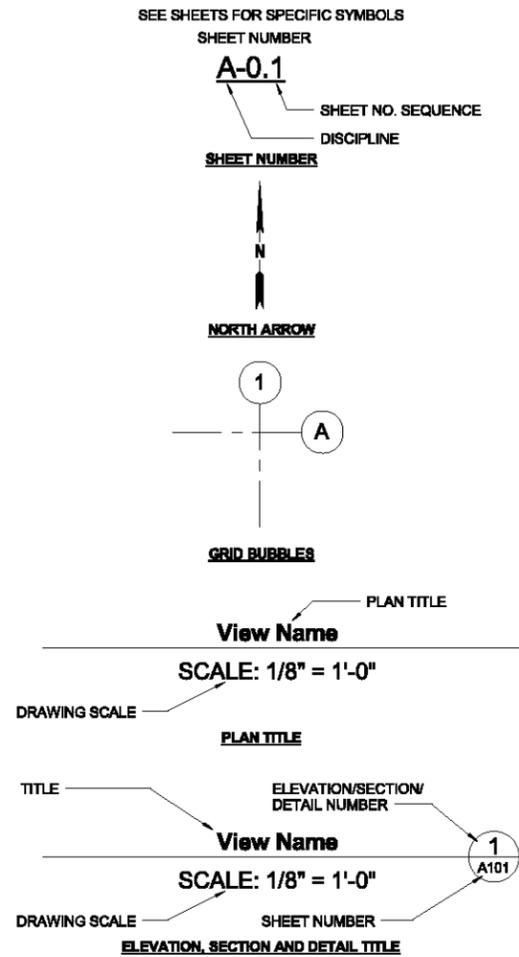
10/14/2015 3:30:52 PM C:\Users\champ3\Documents\KAST_SVE_A14_champ3.rvt

90% SUBMITTAL

APPLICABLE CODES

SYMBOLOLOGY LEGEND

CODE ANALYSIS



ZONING INFORMATION

AHJ = CITY OF CARSON, CA, BUILDING & SAFETY DEPARTMENT, AND THE COUNTY OF LOS ANGELES

CODES & STANDARDS

- 1. APPLICABLE CODES:**
 2014 COUNTY OF LOS ANGELES BUILDING CODE (TITLE 26) BASED ON THE 2013 CALIFORNIA BUILDING CODE AND THE 2012 INTERNATIONAL BUILDING CODE
 2014 COUNTY OF LOS ANGELES ELECTRICAL CODE (TITLE 27) BASED ON THE 2013 CALIFORNIA ELECTRICAL CODE AND THE 2011 NATIONAL ELECTRICAL CODE
 2014 COUNTY OF LOS ANGELES PLUMBING CODE (TITLE 28) BASED ON THE 2013 CALIFORNIA PLUMBING CODE AND THE 2012 UNIFORM PLUMBING CODE
 2014 COUNTY OF LOS ANGELES MECHANICAL CODE (TITLE 29) BASED ON THE 2013 CALIFORNIA MECHANICAL CODE AND THE 2012 UNIFORM MECHANICAL CODE
 2014 COUNTY OF LOS ANGELES GREEN BUILDING STANDARDS CODE (TITLE 31) BASED ON THE 2013 CALIFORNIA GREEN BUILDING STANDARDS CODE

2. BUILDING AREA SUMMARY:

SVE BUILDING: 2,226 SF
 MANIFOLD BUILDING: 800 SF

3. CBC CHAPTER 3 - USE AND OCCUPANCY CLASSIFICATION

SVE BUILDING: B, F-1, OR H-2 OR H-3
 MANIFOLD BUILDING: F-1, OR H-2 OR H-3

4. CBC CHAPTER 4 - SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY:

SVE BUILDING: SECTIONS 414 AND 415 MAY BE APPLICABLE.
 MANIFOLD BUILDING: SECTIONS 414 AND 415 MAY BE APPLICABLE.

5. CBC CHAPTER 5 - GENERAL BUILDING HEIGHTS AND AREAS:

ASSUMING TYPE IIB CONSTRUCTION AND MOST RESTRICTIVE OCCUPANCY:
 SVE BUILDING: BASIC ALLOW. AREA FOR H-2 = 7,000 SF > ACTUAL AREA OF 350 SF (COMPLIES)
 MANIFOLD BUILDING: BASIC ALLOW. AREA FOR H-2 = 7,000 SF > ACTUAL AREA OF 800 SF (COMPLIES)

6. CBC CHAPTER 6 - TYPES OF CONSTRUCTION:

SVE BUILDING: TYPE IIB
 MANIFOLD BUILDING: TYPE IIB

7. CBC CHAPTER 7 - FIRE AND SMOKE PROTECTION FEATURES:

SVE BUILDING: SOME SECTIONS APPLY.
 MANIFOLD BUILDING: SOME SECTIONS APPLY.

8. CBC CHAPTER 8 - INTERIOR FINISHES:

SVE BUILDING: SOME SECTIONS APPLY.
 MANIFOLD BUILDING: SOME SECTIONS APPLY.

9. CBC CHAPTER 9 - FIRE PROTECTION SYSTEMS:

SVE BUILDING: SOME SECTIONS MAY APPLY.
 MANIFOLD BUILDING: SOME SECTIONS MAY APPLY.

10. CBC CHAPTER 10 - MEANS OF EGRESS:

SVE BUILDING: APPLICABLE.
 MANIFOLD BUILDING: APPLICABLE.

11B. CBC CHAPTER 11B - ACCESSIBILITY TO MACHINERY SPACES:

SVE BUILDING: NOT APPLICABLE.
 MANIFOLD BUILDING: NOT APPLICABLE.

12. CBC CHAPTER 12 - INTERIOR ENVIRONMENT:

SVE BUILDING: SOME SECTIONS APPLY.
 MANIFOLD BUILDING: SOME SECTIONS APPLY.

13. CBC CHAPTER 13 - ENERGY EFFICIENCY:

SVE BUILDING: REFER TO CALIFORNIA ENERGY CODE, TITLE 24, PART 6.
 MANIFOLD BUILDING: REFER TO CALIFORNIA ENERGY CODE, TITLE 24, PART 6.

14. CBC CHAPTER 14 - EXTERIOR WALLS:

SVE BUILDING: SOME SECTIONS APPLY.
 MANIFOLD BUILDING: SOME SECTIONS APPLY.

15. CBC CHAPTER 15 - ROOF ASSEMBLIES:

SVE BUILDING: SOME SECTIONS APPLY.
 MANIFOLD BUILDING: SOME SECTIONS APPLY.

90% SUBMITTAL

DESIGN BY:	Designer
DRAWN BY:	Author
CHECKED BY:	Checker

STAMP

PLANS PREPARED BY:

AECOM

999 W. TOWN & COUNTRY ROAD
 ORANGE, CA 92868-4713

BENCHMARK:

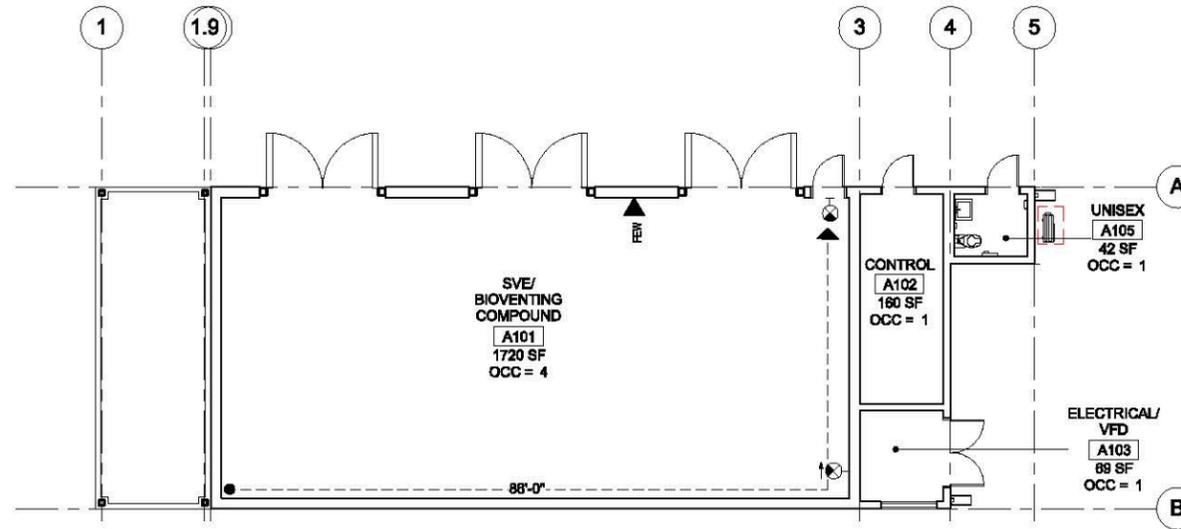
REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/ BIOVENTING SYSTEM
CAROUSEL TRACT
GENERAL INFORMATION AND CODE ANALYSIS

PROJECT NO.	SHEET	PLAN NO.
XXX	37 of 87	A-0.2

LIFE SAFETY LEGEND

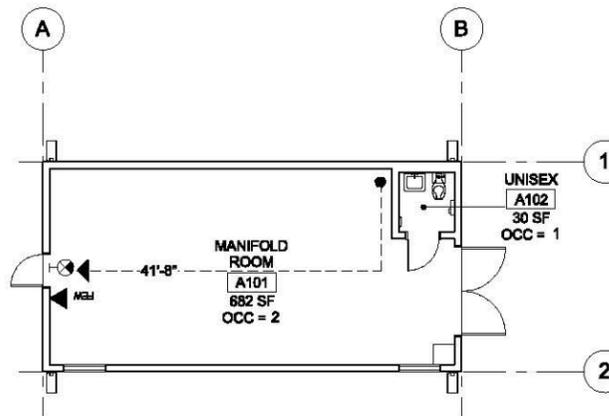
- ROOM USE OCCUPANCY LOAD
- REQUIRED EXIT WIDTH
- PROVIDED EXIT WIDTH
- PROVIDED STAIR WIDTH
- REQUIRED STAIR WIDTH
- SMOKE PARTITION
- SMOKE BARRIER
- 1 - HOUR FIRE BARRIER
- FIRE EXTINGUISHER AND CABINET
- FIRE EXTINGUISHER AND WALL MOUNT'G BRACKET
- STAND PIPE
- EXIT SIGN (SINGLE SIDED, DOUBLE SIDED, W/ DIRECTIONAL ARROW, WALL MOUNTED)
- EGRESS COMPONENT CAPACITY
- ACTUAL EGRESS OCCUPANCY OF DOOR
- MAXIMUM ALLOWABLE EGRESS OCCUPANCY OF EXIT
- OCCUPANCY CALCULATION
- CALCULATED OCCUPANCY
- AREA IN SQUARE FEET
- OCCUPANCY LOAD FACTOR
- MAXIMUM TRAVEL DISTANCE FROM FURTHEST POINT
- DIRECTION OF TRAVEL WITH ACCUMULATED OCCUPANCY LOAD



LIFE SAFETY PLAN - SVE/ BIOVENTING COMPOUND

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

1
A-0.3



LIFE SAFETY PLAN - MANIFOLD BUILDING

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

2
A-0.3



DESIGN BY:	STAMP	PLANS PREPARED BY:	BENCHMARK:
DRAWN BY:		AECOM	
CHECKED BY:		888 W. TOWN & COUNTRY ROAD ORANGE, CA 92868-4713	

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/ BIOVENTING SYSTEM
CAROUSEL TRACT
LIFE SAFETY PLANS

PROJECT NO. XXX	SHEET 38 of 87	PLAN NO. A-0.3
------------------------	-----------------------	-----------------------

EXISTING BUILDING

EXISTING PAVING

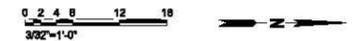
SVE/
BIOVENTING
COMPOUND

MANIFOLD
BUILDING

90% SUBMITTAL

SITE PLAN

SCALE: 3/32" = 1'-0"



DESIGN BY:
DRAWN BY:
CHECKED BY:

STAMP

PLANS PREPARED BY:
AECOM
898 W. TOWN & COUNTRY ROAD
ORANGE, CA 92868-4713

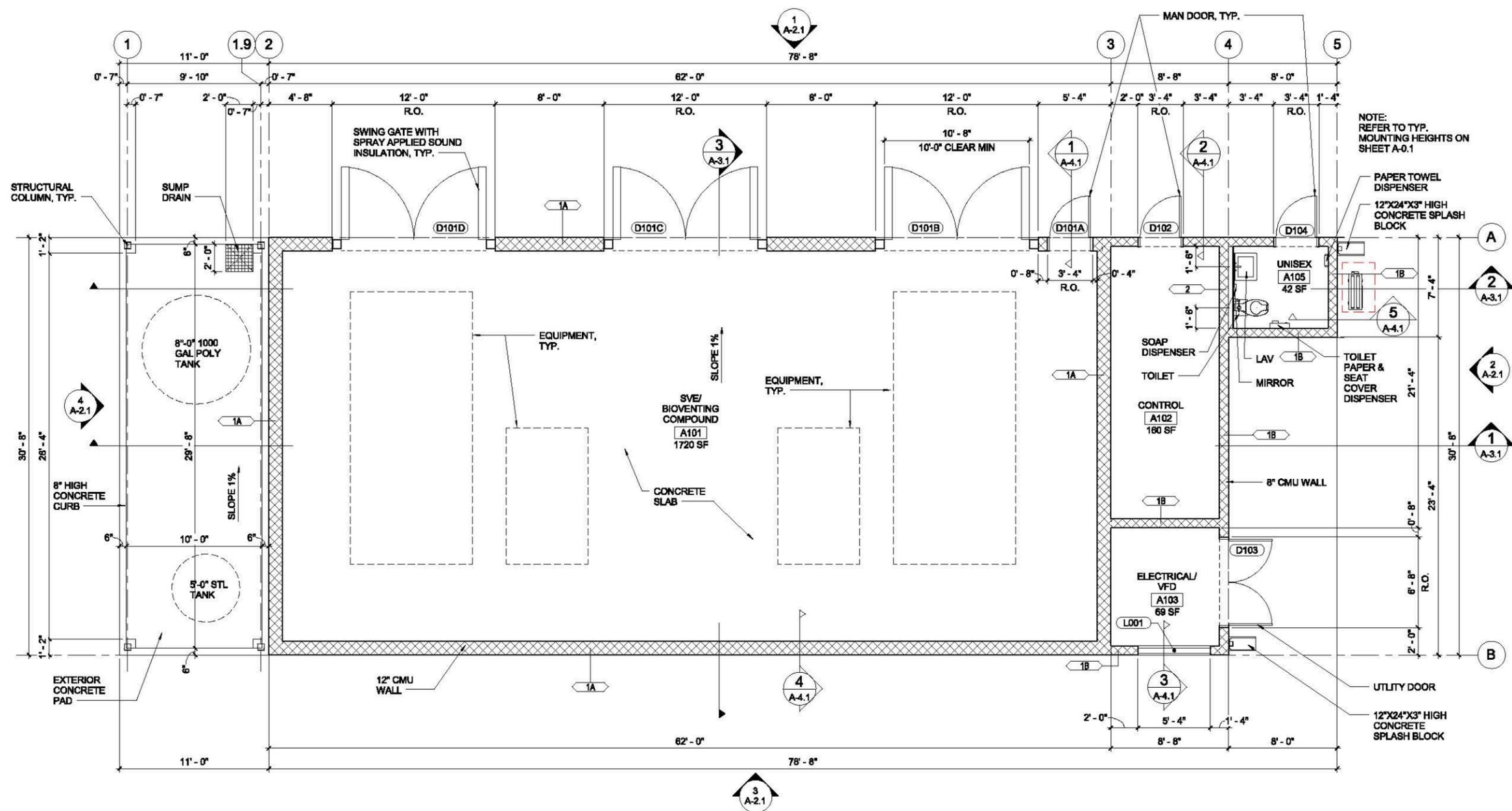
BENCHMARK:

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/ BIOVENTING SYSTEM
CAROUSEL TRACT
ARCHITECTURAL SITE PLAN

PROJECT NO. **XXX** SHEET **39 of 87** PLAN NO. **A-1.0**

10/16/2015 10:52:33 AM C:\Users\champ3\Documents\KAST_SVE_A14_champ3.rvt



LEVEL 1 FLOOR PLAN
SCALE: 1/4" = 1'-0"



DESIGN BY:	STAMP	PLANS PREPARED BY:	BENCHMARK:
DRAWN BY:		AECOM	
CHECKED BY:		888 W. TOWN & COUNTRY ROAD ORANGE, CA 92868-4713	

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

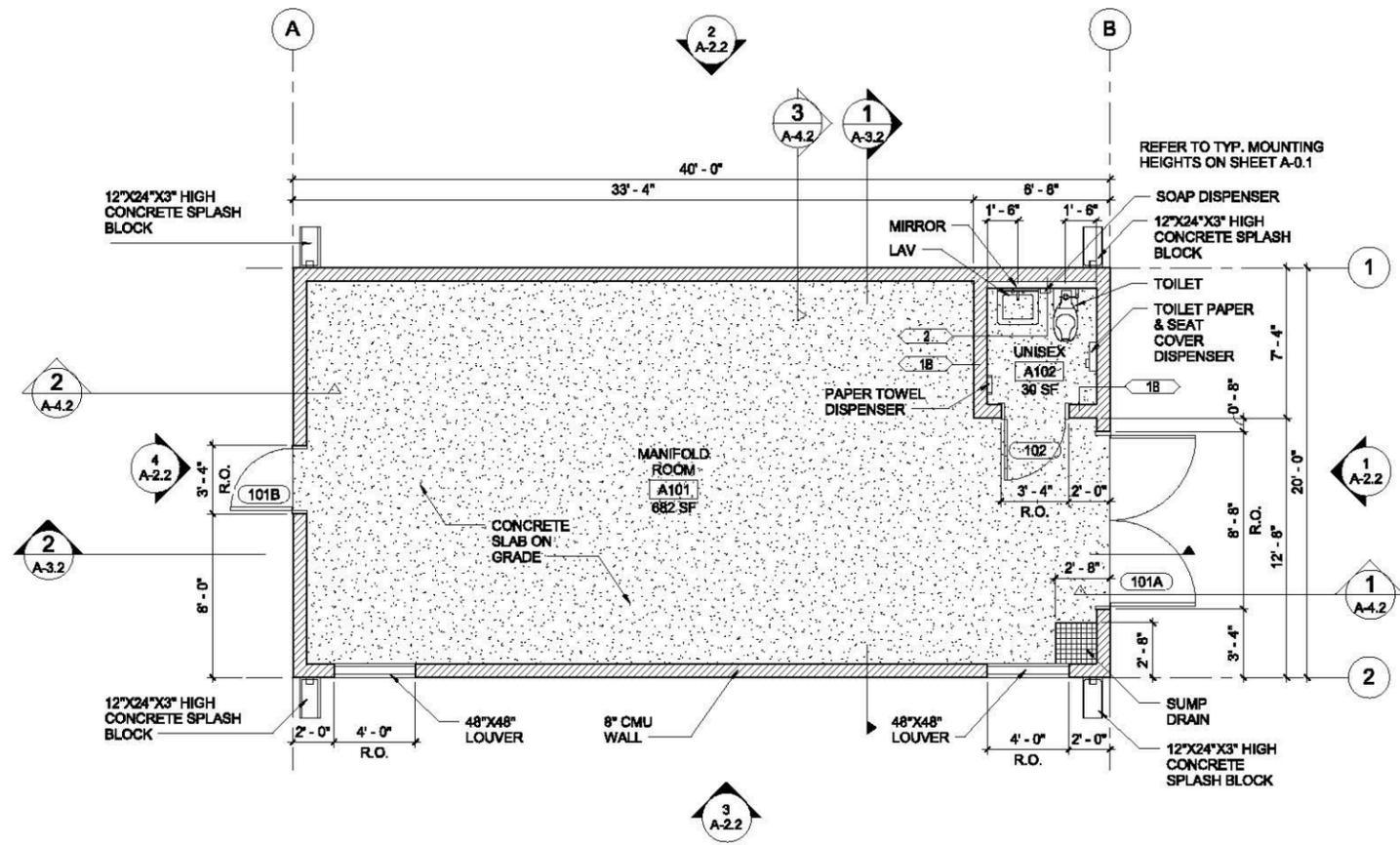
SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/ BIOVENTING SYSTEM
CAROUSEL TRACT
FLOOR PLAN - SVE/ BIOVENTING
COMPOUND

PROJECT NO. **XXX** SHEET **40 of 87** PLAN NO. **A-1.1**

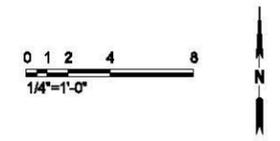
10/16/2015 10:52:34 AM C:\Users\champ3\Documents\KAST_SVE_A11_champ3.rvt

90% SUBMITTAL

10/14/2015 3:29:49 PM
 C:\Users\champ3\Documents\KAST_MANIFOLD_A14_champ3.rvt



LEVEL 1 FLOOR PLAN
 SCALE: 1/4" = 1'-0"



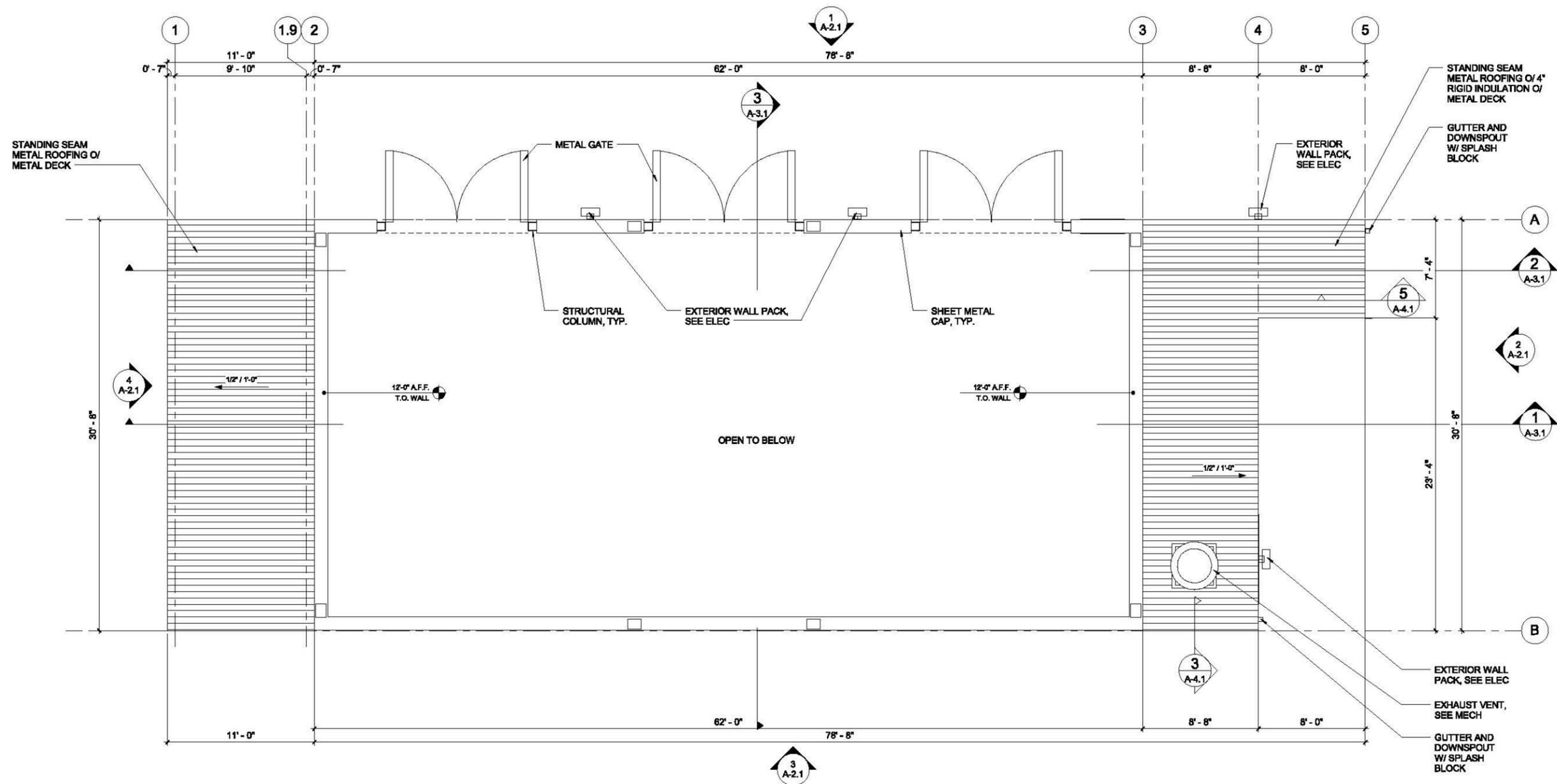
90% SUBMITTAL

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/ BIOVENTING SYSTEM
CAROUSEL TRACT
FLOOR PLAN - MANIFOLD BUILDING

PROJECT NO. **XXX** SHEET **41 of 87** PLAN NO. **A-1.2**

DESIGN BY: Designer	STAMP	PLANS PREPARED BY: AECOM	BENCHMARK:
DRAWN BY: Author		999 W. TOWN & COUNTRY ROAD ORANGE, CA 92868-4713	
CHECKED BY: Checker			



ROOF PLAN
SCALE: 1/4" = 1'-0"



DESIGN BY:	STAMP
Designer	
DRAWN BY:	
Author	
CHECKED BY:	
Checker	

PLANS PREPARED BY:

AECOM

999 W. TOWN & COUNTRY ROAD
ORANGE, CA 92868-4713

BENCHMARK:

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US

CITY OF CARSON

SVE/ BIOVENTING SYSTEM

CAROUSEL TRACT

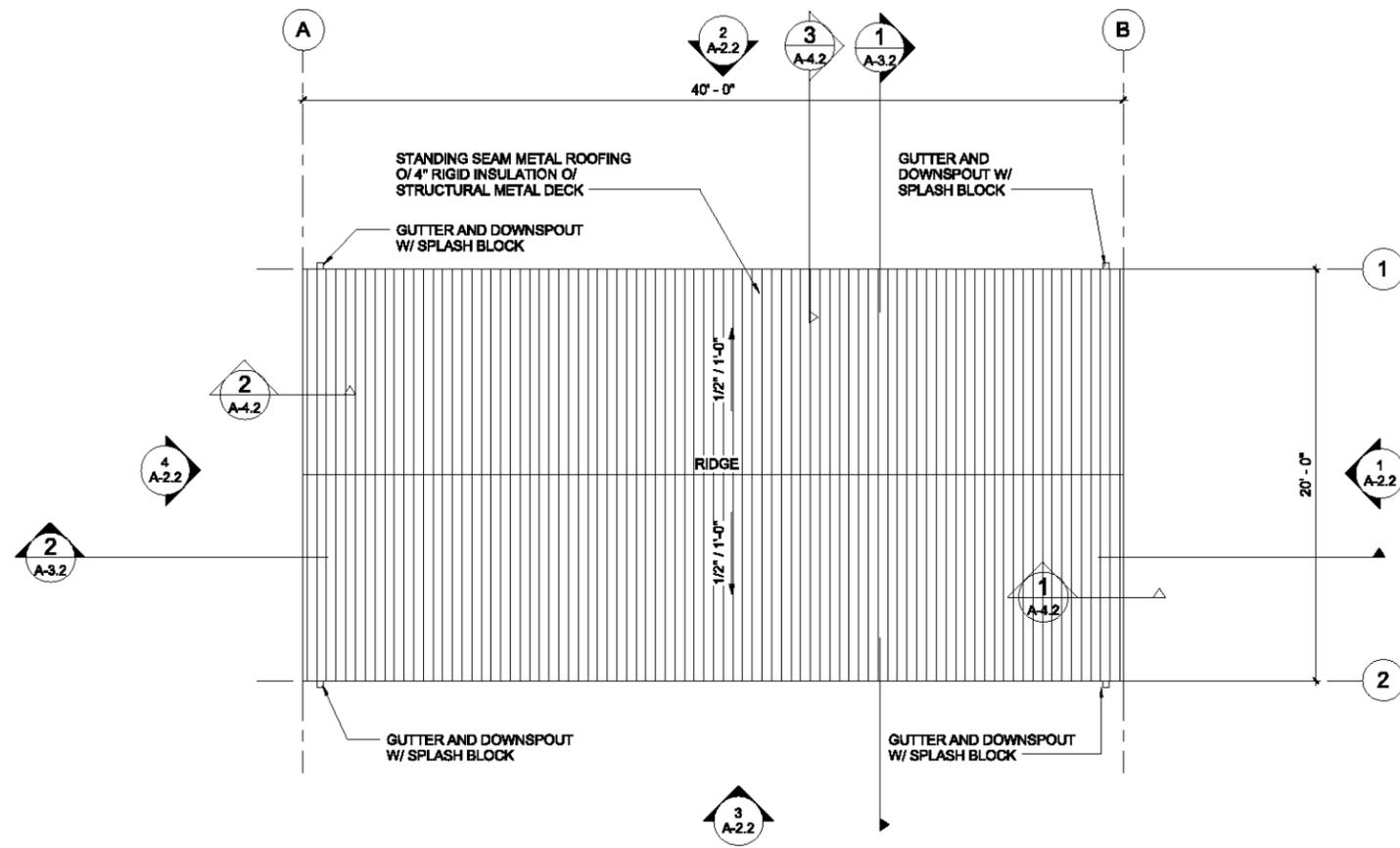
ROOF PLAN - SVE/ BIOVENTING

COMPOUND

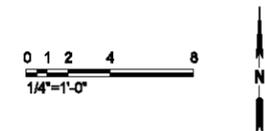
PROJECT NO.	SHEET	PLAN NO.
XXX	42 of 87	A-1.3

10/14/2016 3:37:37 PM
C:\Users\champ3\Documents\KAST_SVE_A14_champ3.rvt

10/14/2016 3:29:50 PM
 C:\Users\champ3\Documents\KAST_MANIFOLD_A14_champ3.rvt



ROOF PLAN
 SCALE: 1/4" = 1'-0"



DESIGN BY:	STAMP
Designer	
DRAWN BY:	
Author	
CHECKED BY:	
Checker	

PLANS PREPARED BY:
AECOM
 999 W. TOWN & COUNTRY ROAD
 ORANGE, CA 92868-4713

BENCHMARK:

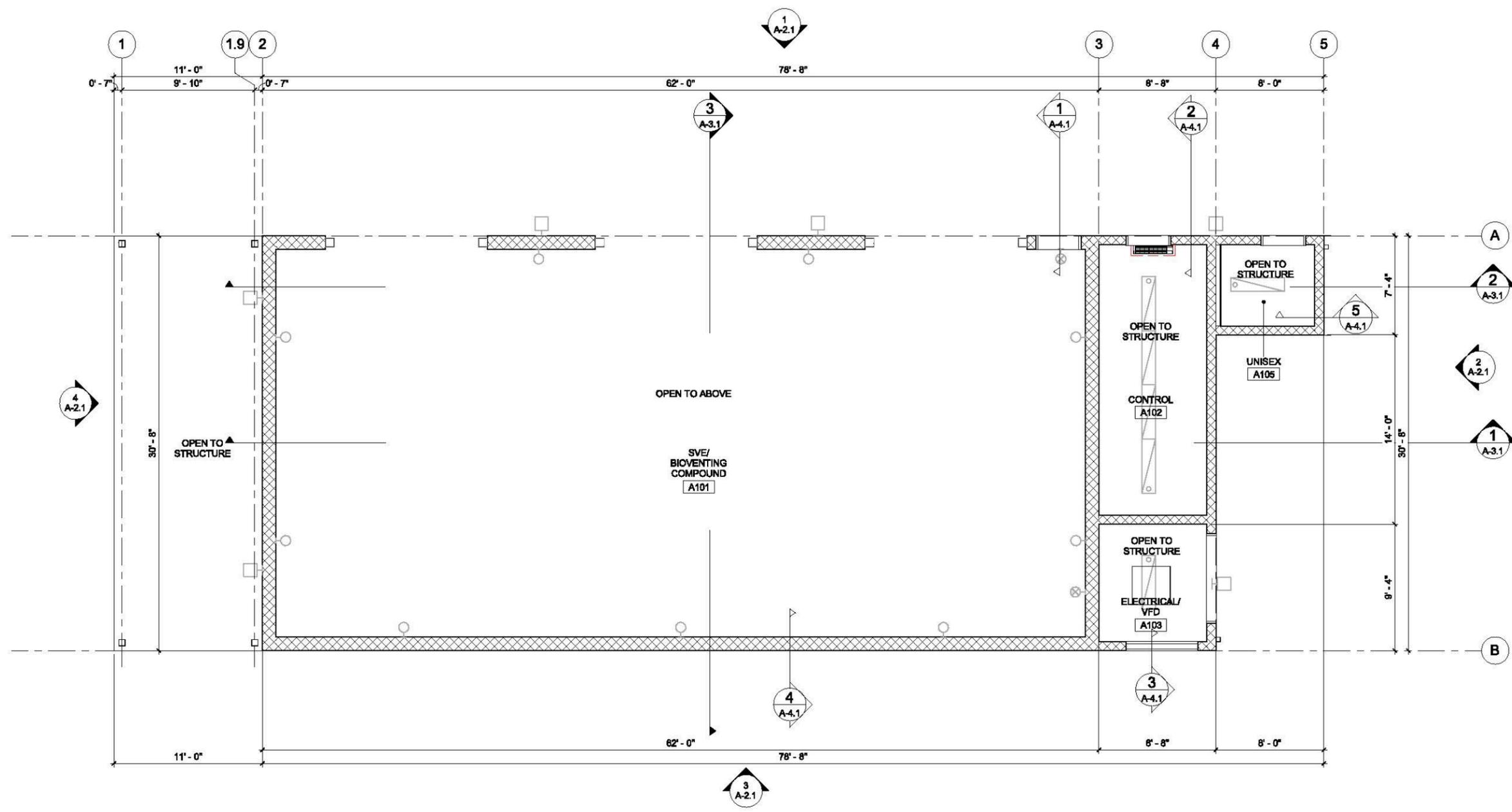
REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/ BIOVENTING SYSTEM
CAROUSEL TRACT
ROOF PLAN - MANIFOLD BUILDING

PROJECT NO. XXX	SHEET 43 of 87	PLAN NO. A-1.4
------------------------	-----------------------	-----------------------

90% SUBMITTAL

- CEILING PLAN LEGEND**
- 1'-0" x 4'-0" FLUORESCENT LIGHT FIXTURE - PENDANT SEE ELECTRICAL
 - EXTERIOR WALL PACK
 - WALL MOUNTED LIGHT FIXTURE
 - PENDANT LIGHT FIXTURE
 - WALL MOUNTED EXIT SIGN



LEVEL 1 REFLECTED CEILING PLAN
SCALE: 1/4" = 1'-0"



DESIGN BY:	STAMP	PLANS PREPARED BY:	BENCHMARK:
DRAWN BY:		AECOM	
CHECKED BY:		888 W. TOWN & COUNTRY ROAD ORANGE, CA 92868-4713	

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/ BIOVENTING SYSTEM
CAROUSEL TRACT
REFLECTED CEILING PLAN - SVE/
BIOVENTING COMPOUND

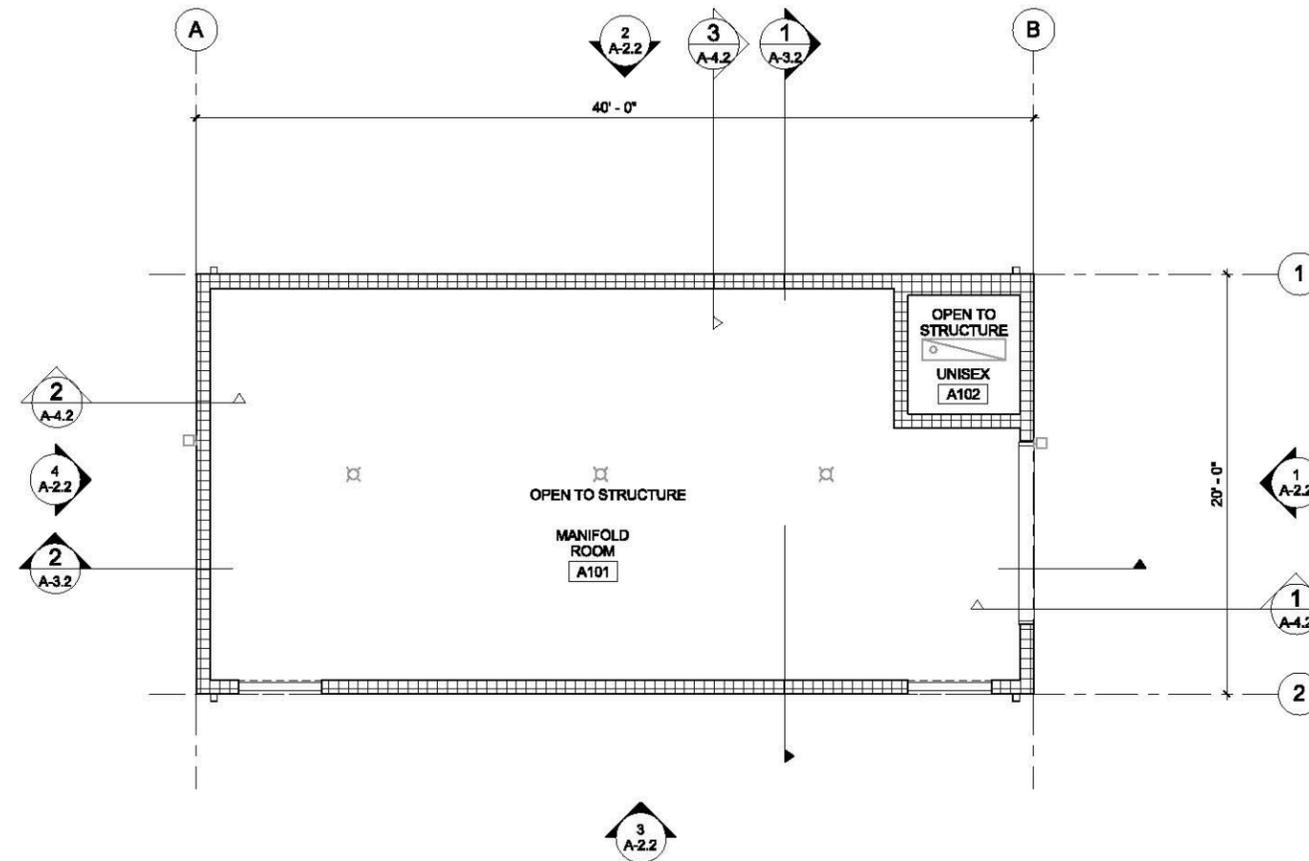
PROJECT NO. XXX	SHEET 44 of 87	PLAN NO. A-1.5
-----------------	----------------	----------------

10/16/2015 11:09:37 AM C:\Users\champ3\Documents\KAST_SVE_A14_champ3.rvt

90% SUBMITTAL

CEILING PLAN LEGEND

	1'-0" x 4'-0" FLUORESCENT LIGHT FIXTURE - PENDANT SEE ELECTRICAL
	EXTERIOR WALL PACK
	WALL MOUNTED LIGHT FIXTURE
	PENDANT LIGHT FIXTURE



LEVEL 1 REFLECTED CEILING PLAN

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



90% SUBMITTAL

DESIGN BY:	Designer
DRAWN BY:	Author
CHECKED BY:	Checker

STAMP

PLANS PREPARED BY:

AECOM

999 W. TOWN & COUNTRY ROAD
ORANGE, CA 92868-4713

BENCHMARK:

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US

CITY OF CARSON

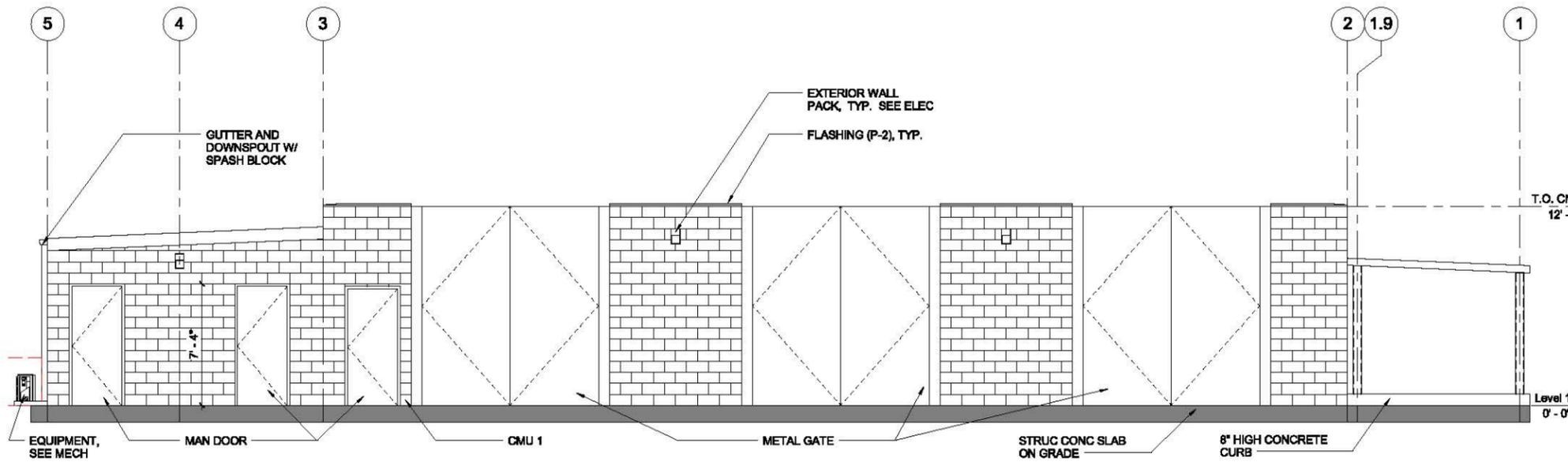
SVE/ BIOVENTING SYSTEM

CAROUSEL TRACT

REFLECTED CEILING PLAN -

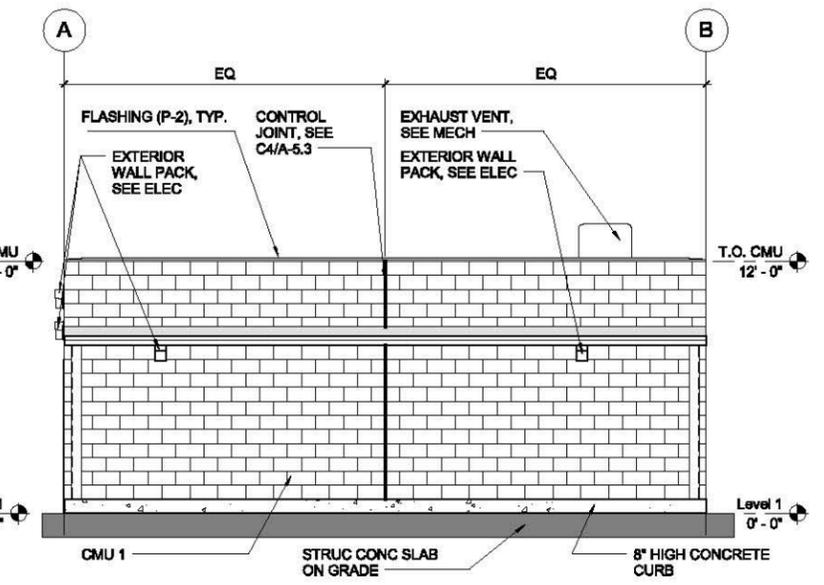
MANIFOLD BUILDING

PROJECT NO.	SHEET	PLAN NO.
XXX	45 of 87	A-1.6



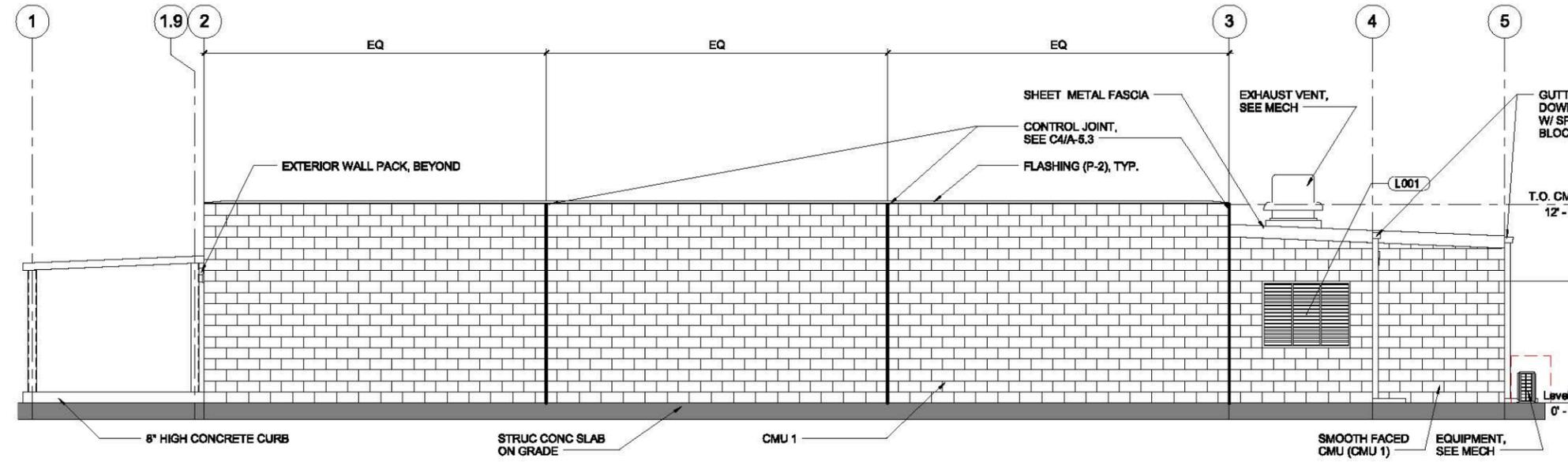
WEST ELEVATION
SCALE: 1/4" = 1'-0"

1
A-2.1



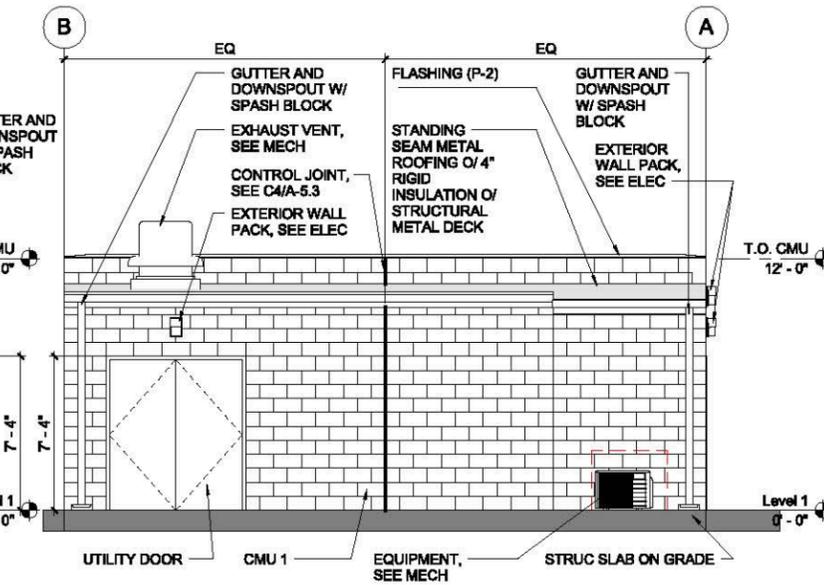
SOUTH ELEVATION
SCALE: 1/4" = 1'-0"

4
A-2.1



EAST ELEVATION
SCALE: 1/4" = 1'-0"

3
A-2.1



NORTH ELEVATION
SCALE: 1/4" = 1'-0"

2
A-2.1



90% SUBMITTAL

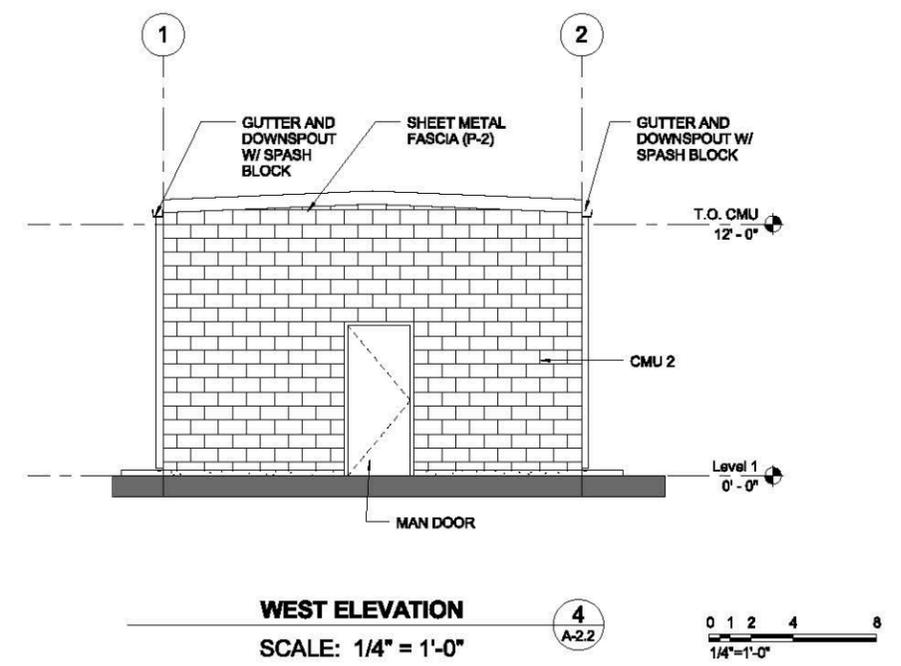
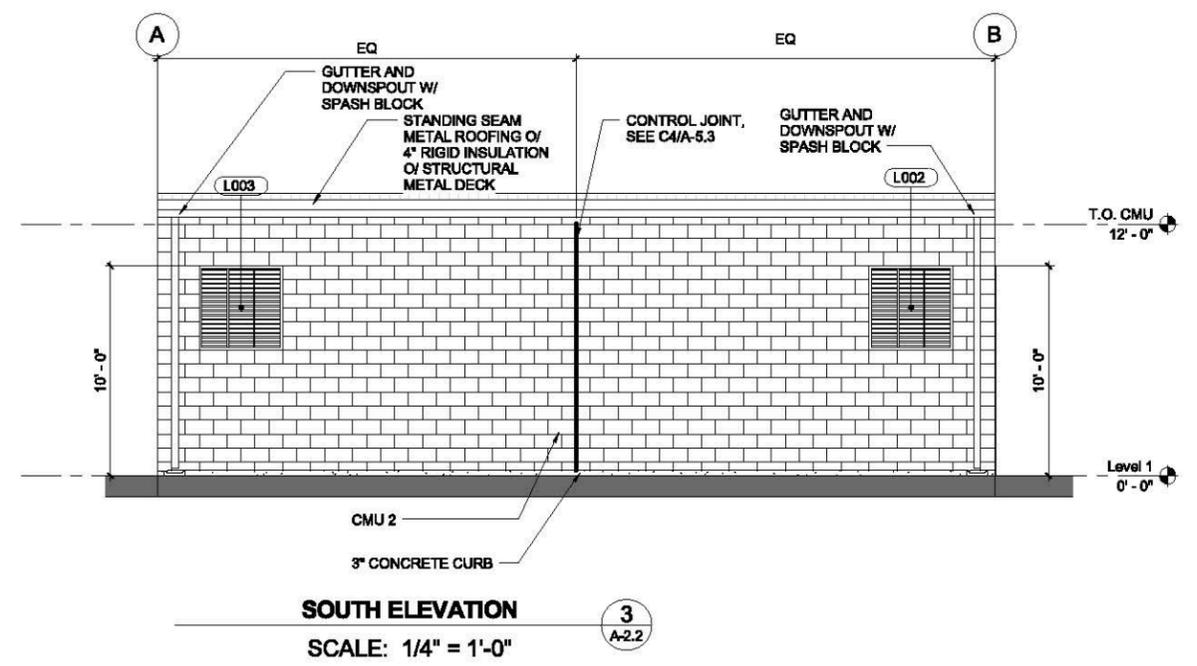
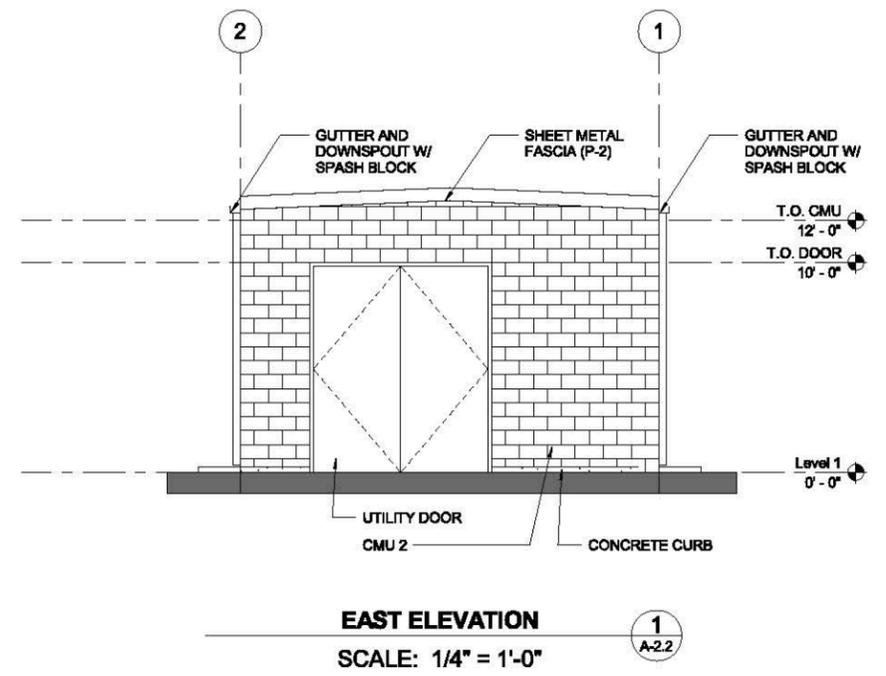
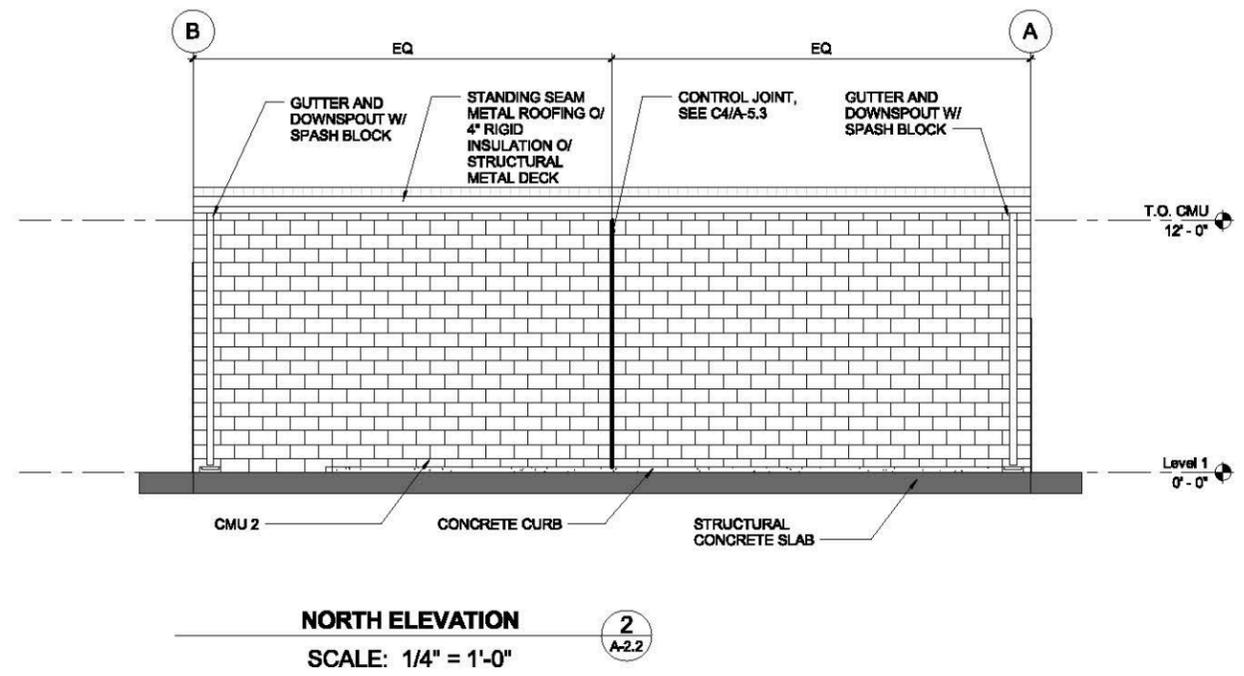
DESIGN BY: Designer	STAMP	PLANS PREPARED BY: AECOM	BENCHMARK:
DRAWN BY: Author		999 W. TOWN & COUNTRY ROAD ORANGE, CA 92868-4713	
CHECKED BY: Checker			

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/ BIOVENTING SYSTEM
CAROUSEL TRACT
EXTERIOR ELEVATIONS - SVE/
BIOVENTING COMPOUND

PROJECT NO. XXX	SHEET 46 of 87	PLAN NO. A-2.1
---------------------------	--------------------------	--------------------------

10/14/2016 3:30:59 PM C:\Users\champ3\Documents\KAST_SVE_A14_champ3.rvt



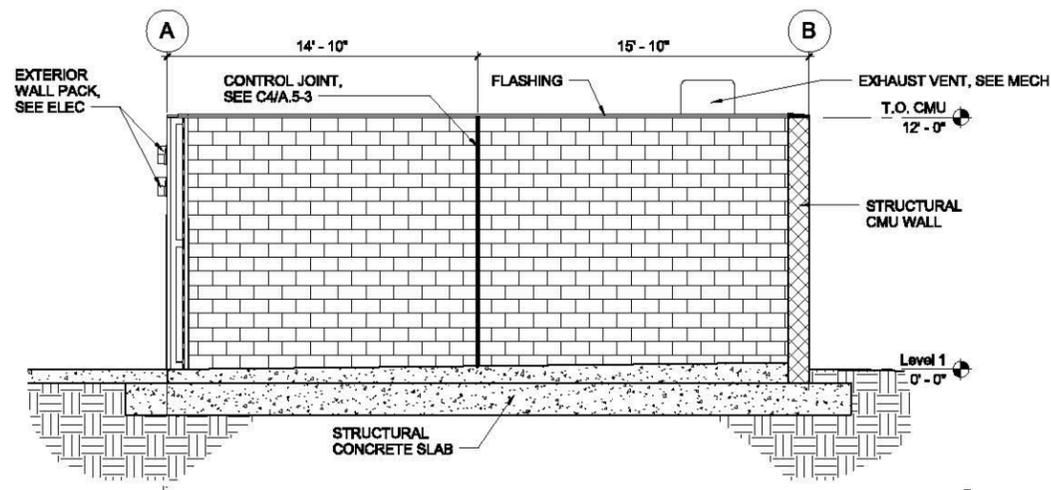
DESIGN BY: Designer	STAMP	PLANS PREPARED BY: AECOM	BENCHMARK:
DRAWN BY: Author		999 W. TOWN & COUNTRY ROAD ORANGE, CA 92868-4713	
CHECKED BY: Checker			

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

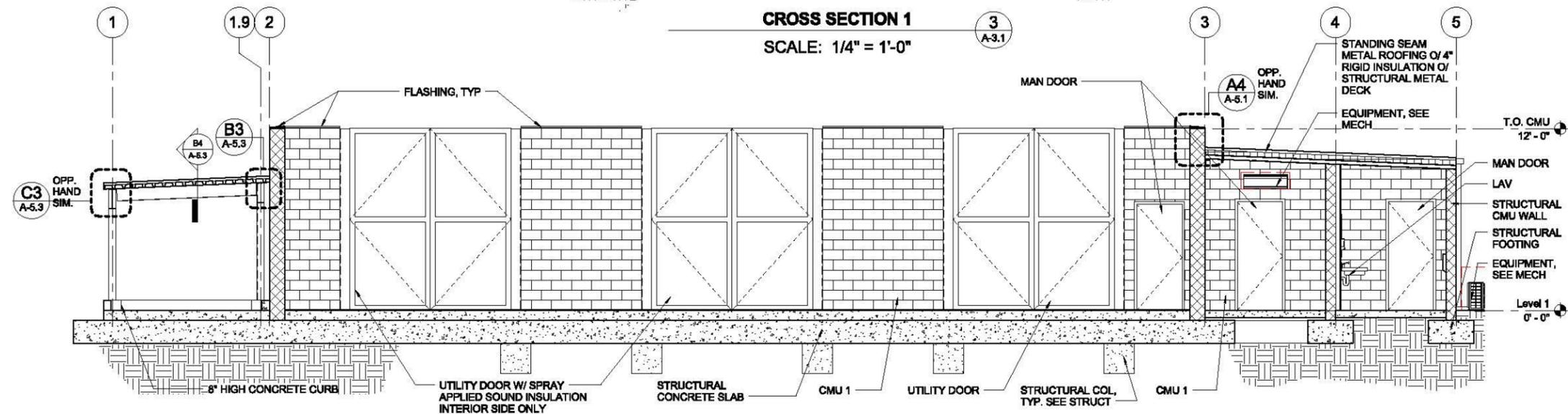
SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/ BIOVENTING SYSTEM
CAROUSEL TRACT
EXTERIOR ELEVATIONS - MANIFOLD BUILDING

PROJECT NO. **XXX** SHEET **47 of 87** PLAN NO. **A-2.2**

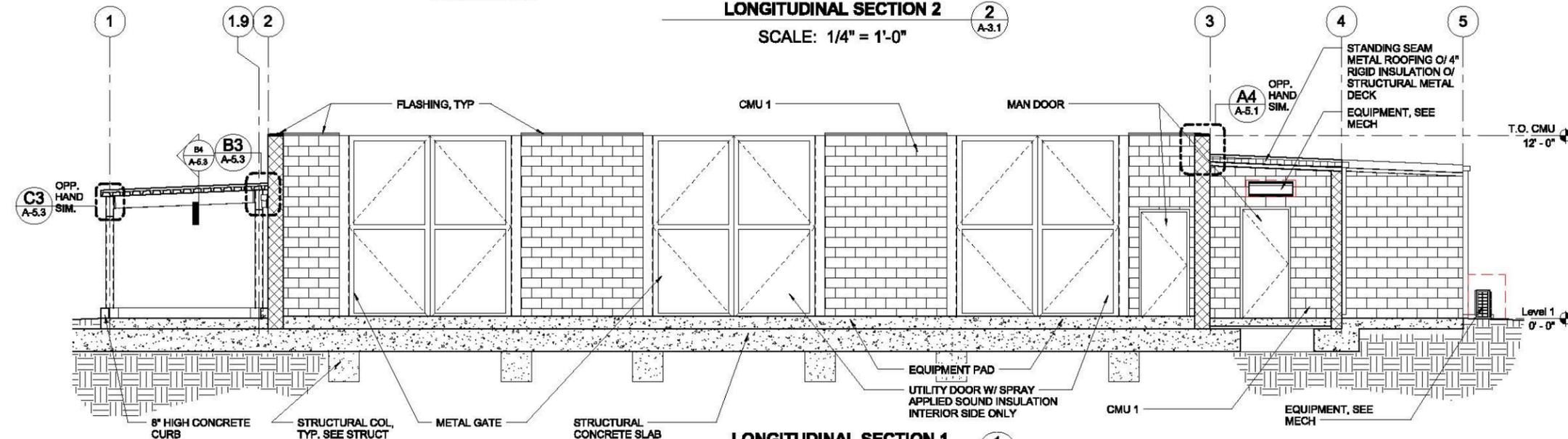
10/14/2016 3:29:51 PM C:\Users\champ3\Documents\KAST_MANIFOLD_A14_champ3.rvt



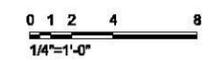
CROSS SECTION 1
SCALE: 1/4" = 1'-0"



LONGITUDINAL SECTION 2
SCALE: 1/4" = 1'-0"



LONGITUDINAL SECTION 1
SCALE: 1/4" = 1'-0"



DESIGN BY: Designer	STAMP	PLANS PREPARED BY: AECOM	BENCHMARK:
DRAWN BY: Author		999 W. TOWN & COUNTRY ROAD ORANGE, CA 92868-4713	
CHECKED BY: Checker			

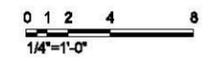
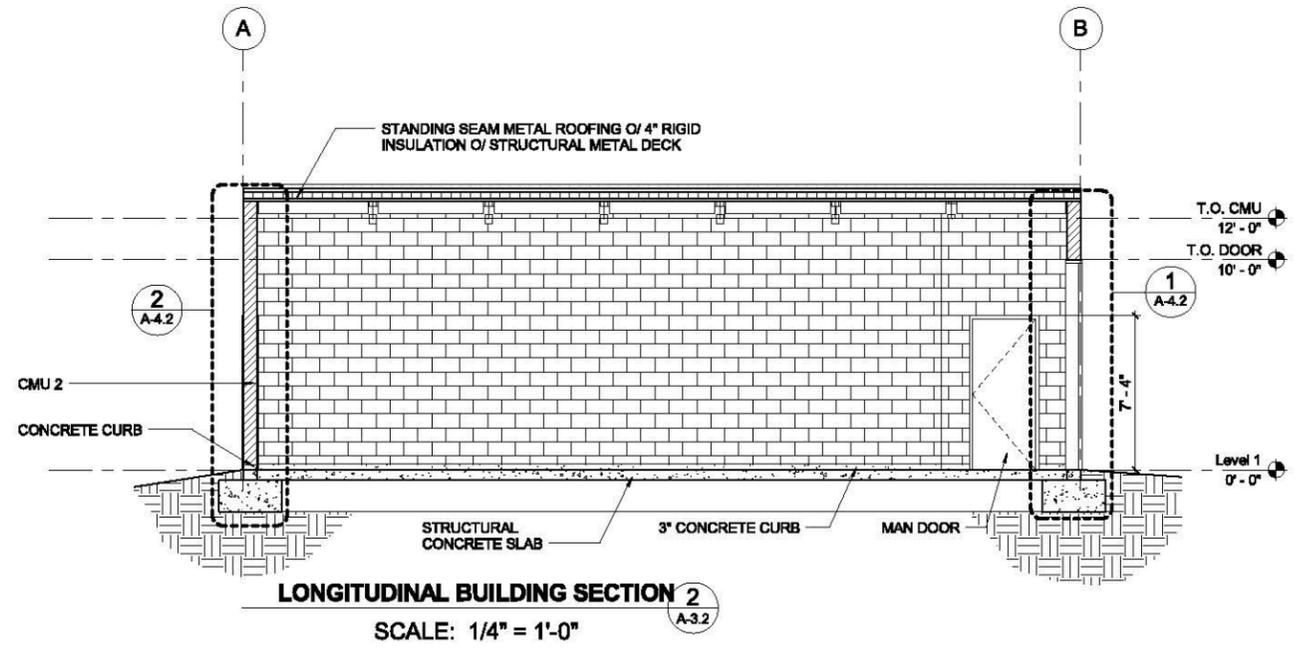
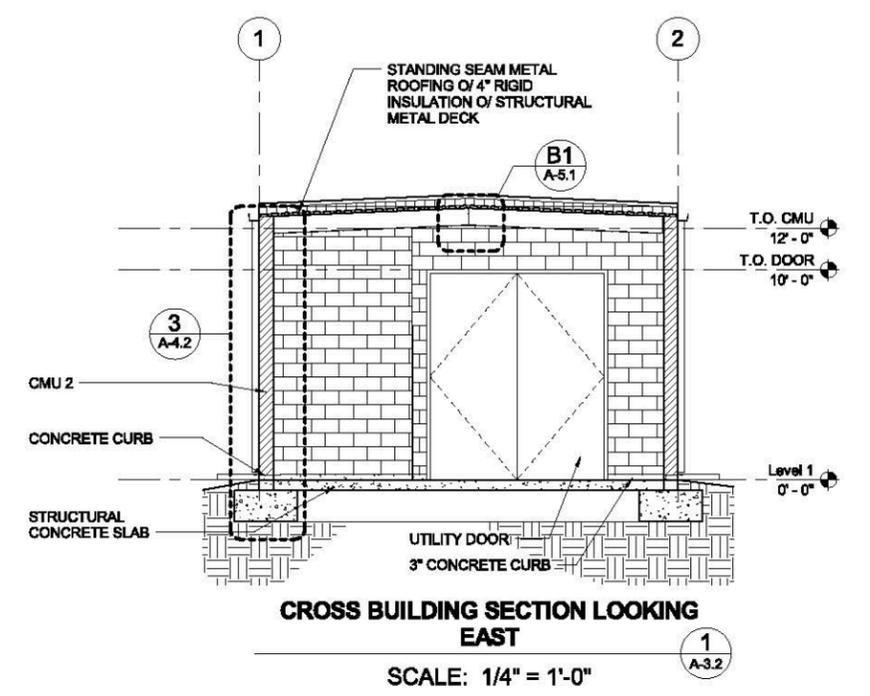
REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/ BIOVENTING SYSTEM
CAROUSEL TRACT
BUILDING SECTIONS - SVE/
BIOVENTING COMPOUND

PROJECT NO. XXX	SHEET 48 of 87	PLAN NO. A-3.1
---------------------------	--------------------------	--------------------------

10/14/2016 3:45:15 PM C:\Users\champ3\Documents\KAST_SVE_A14_champ3.rvt

10/14/2016 3:29:51 PM
 C:\Users\champ3\Documents\KAST_MANIFOLD_A14_champ3.rvt



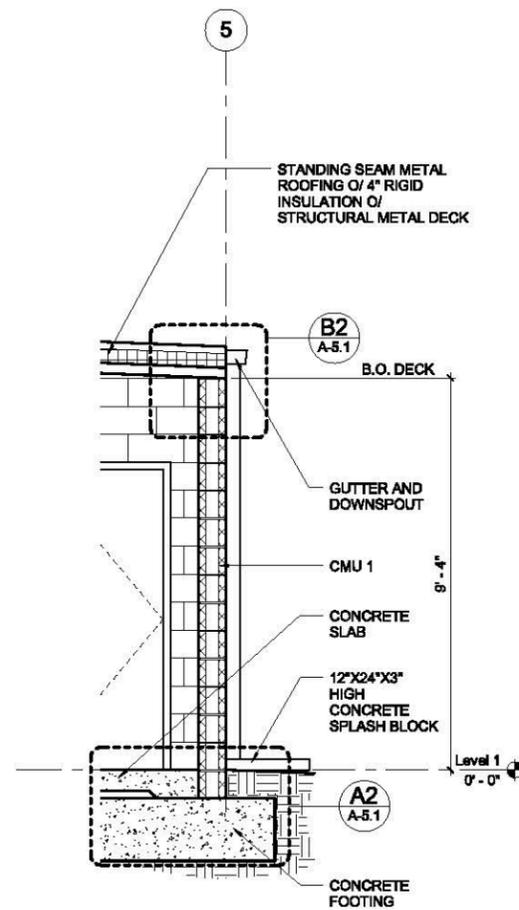
REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/ BIOVENTING SYSTEM
CAROUSEL TRACT
BUILDING SECTIONS - MANIFOLD
BUILDING

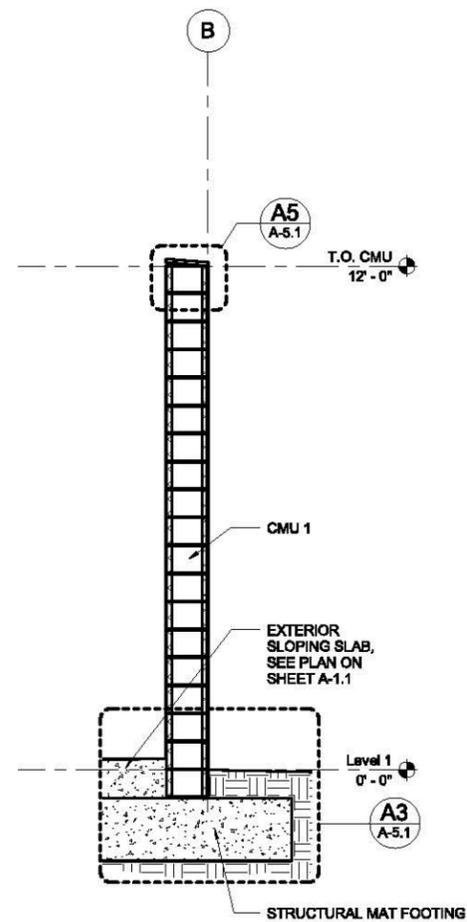
PROJECT NO. **XXX** SHEET **49 of 87** PLAN NO. **A-3.2**

DESIGN BY: Designer	STAMP	PLANS PREPARED BY:	BENCHMARK:
DRAWN BY: Author		AECOM	
CHECKED BY: Checker		999 W. TOWN & COUNTRY ROAD ORANGE, CA 92868-4713	

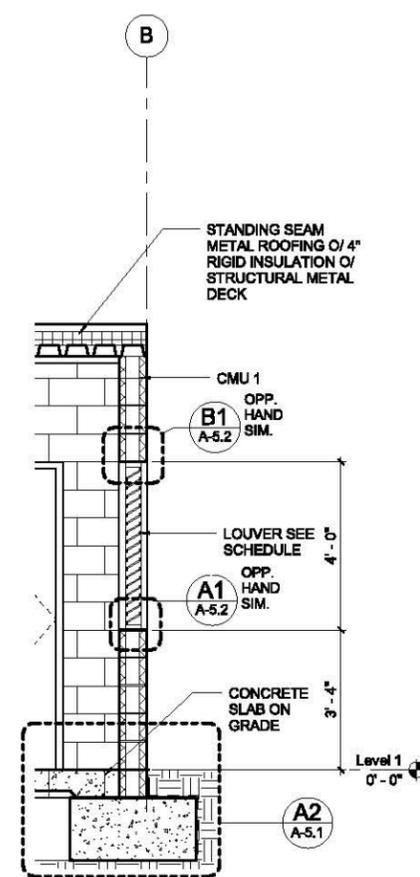
90% SUBMITTAL



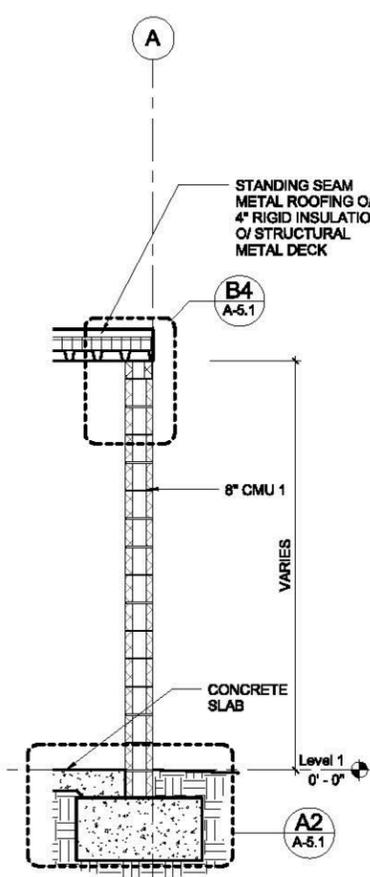
WALL SECTION 5
SCALE: 1/2" = 1'-0"
5
A-4.1



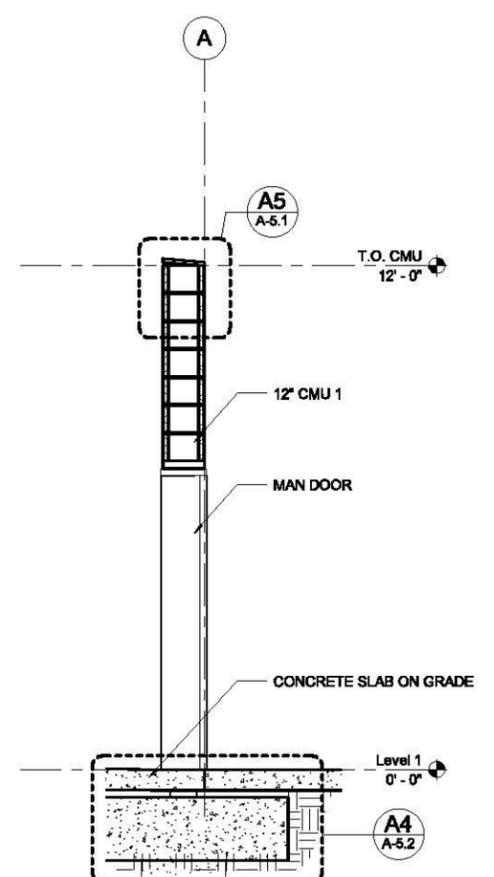
WALL SECTION 4
SCALE: 1/2" = 1'-0"
4
A-4.1



WALL SECTION 3
SCALE: 1/2" = 1'-0"
3
A-4.1



WALL SECTION 2
SCALE: 1/2" = 1'-0"
2
A-4.1



WALL SECTION 1
SCALE: 1/2" = 1'-0"
1
A-4.1



90% SUBMITTAL

DESIGN BY:	Designer
DRAWN BY:	Author
CHECKED BY:	Checker

STAMP

PLANS PREPARED BY:
AECOM
999 W. TOWN & COUNTRY ROAD
ORANGE, CA 92868-4713

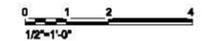
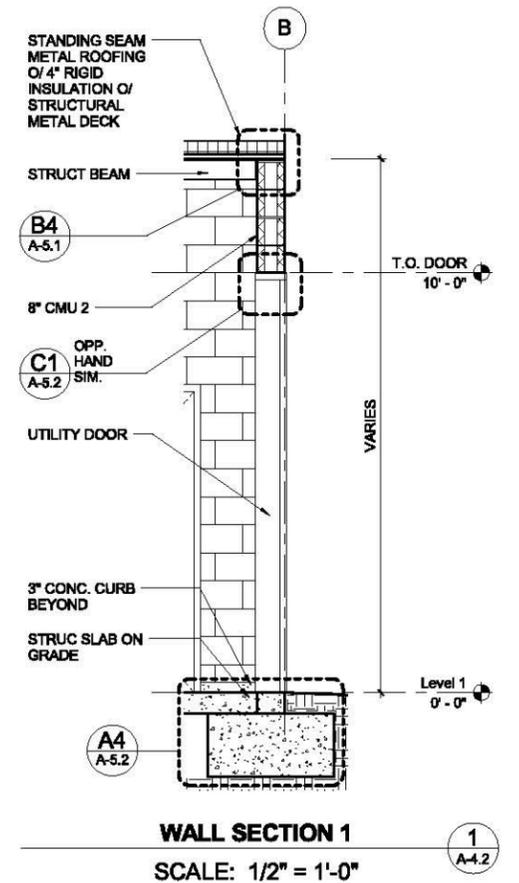
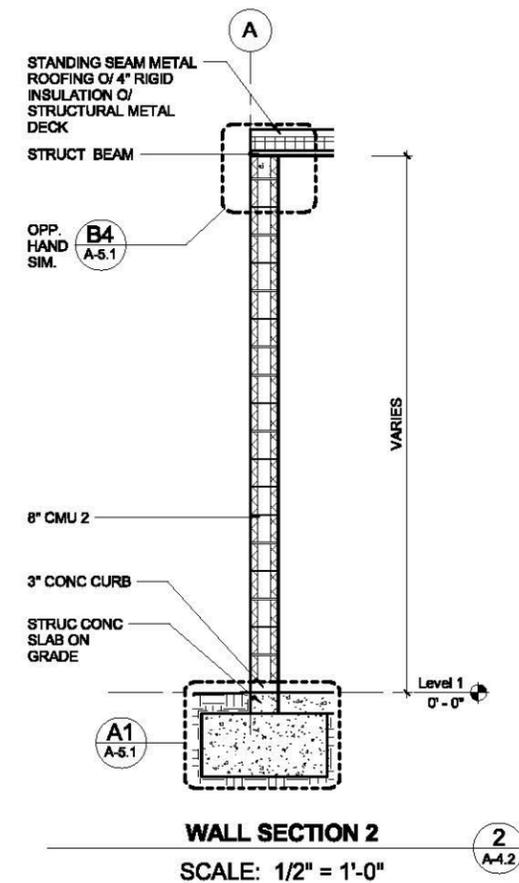
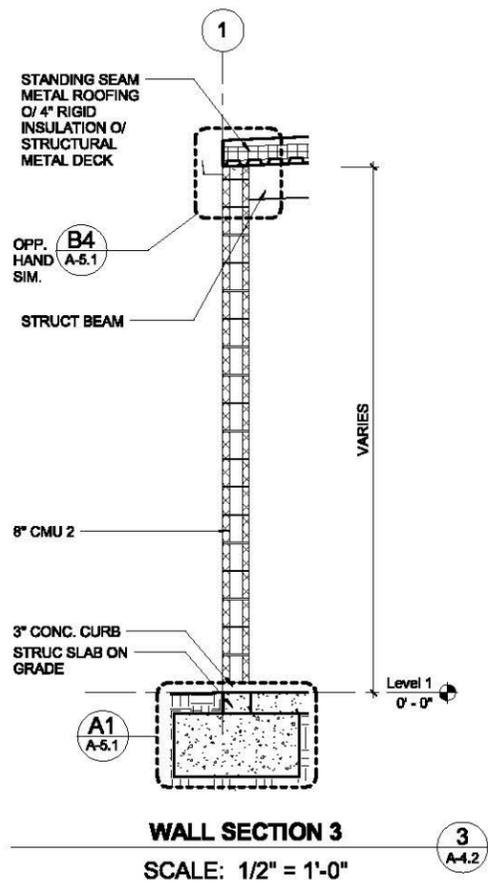
BENCHMARK:

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/ BIOVENTING SYSTEM
CAROUSEL TRACT
EXTERIOR WALL SECTIONS - SVE/
BIOVENTING COMPOUND

PROJECT NO. XXX	SHEET 50 of 87	PLAN NO. A-4.1
-----------------	----------------	----------------

10/14/2016 3:29:52 PM
 C:\Users\champ3\Documents\KAST_MANIFOLD_A14_champ3.rvt



DESIGN BY:	STAMP
Designer	
DRAWN BY:	
Author	
CHECKED BY:	
Checker	

PLANS PREPARED BY:

AECOM

999 W. TOWN & COUNTRY ROAD
 ORANGE, CA 92868-4713

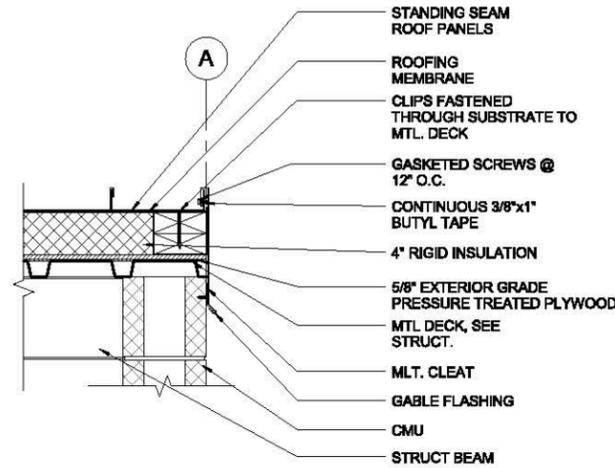
BENCHMARK:

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

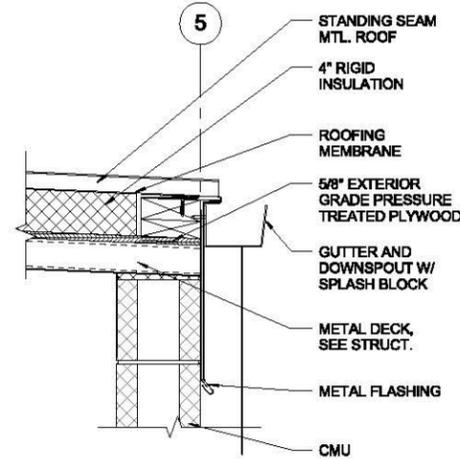
SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/ BIOVENTING SYSTEM
CAROUSEL TRACT
EXTERIOR WALL SECTIONS -
MANIFOLD BUILDING

PROJECT NO.	SHEET	PLAN NO.
XXX	51 of 87	A-4.2

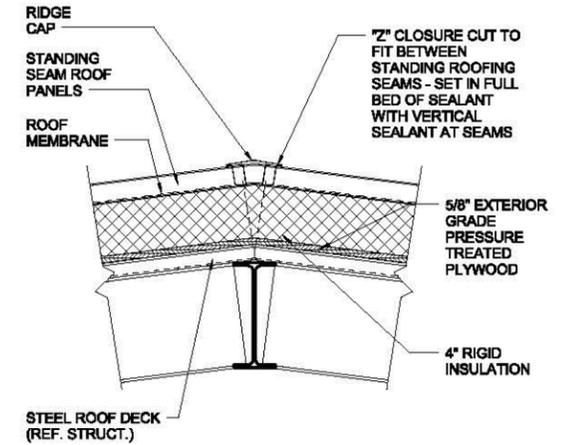
90% SUBMITTAL



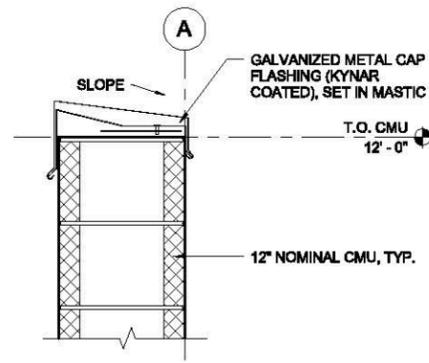
ROOF RAKE
SCALE: 1 1/2" = 1'-0"
B4
A-5.1



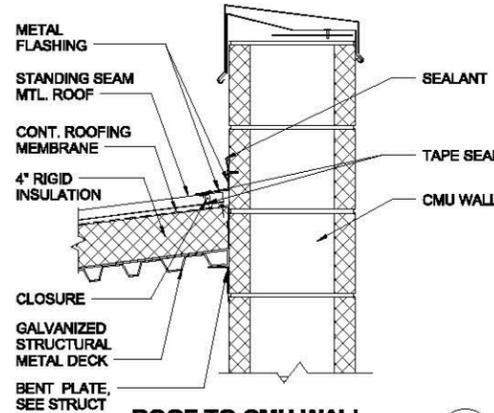
ROOF EAVE WITH GUTTER
SCALE: 1 1/2" = 1'-0"
B2
A-5.1



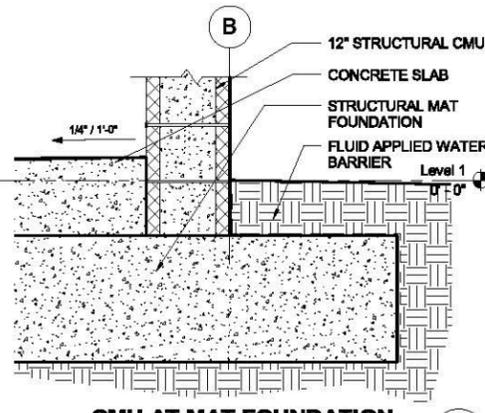
ROOF RIDGE
SCALE: 1 1/2" = 1'-0"
B1
A-5.1



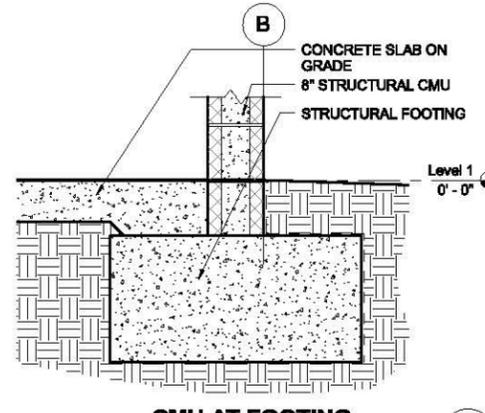
PARAPET WALL CAP
SCALE: 1 1/2" = 1'-0"
A5
A-5.1



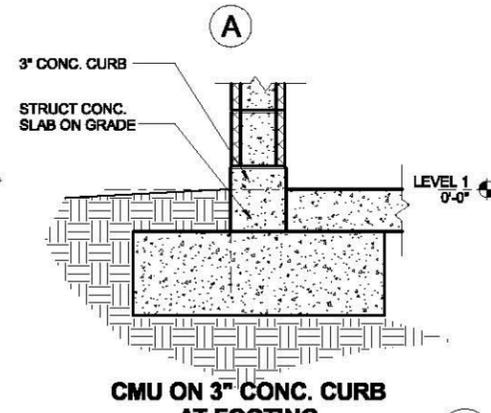
ROOF TO CMU WALL
SCALE: 1 1/2" = 1'-0"
A4
A-5.1



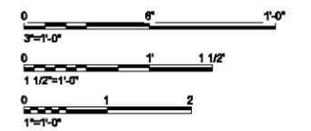
CMU AT MAT FOUNDATION
SCALE: 1" = 1'-0"
A3
A-5.1



CMU AT FOOTING
SCALE: 1" = 1'-0"
A2
A-5.1



CMU ON 3" CONC. CURB AT FOOTING
SCALE: 1" = 1'-0"
A1
A-5.1

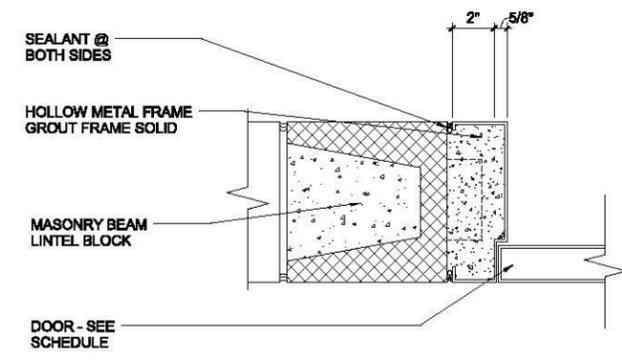


REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/ BIOVENTING SYSTEM
CAROUSEL TRACT
ROOF & WALL DETAILS

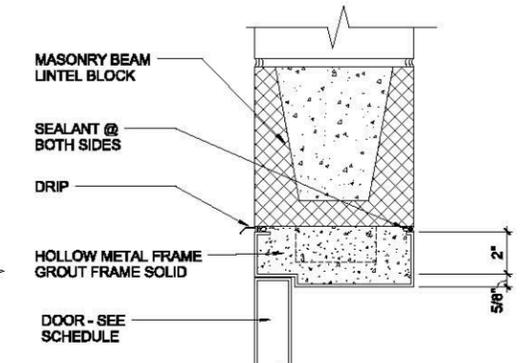
PROJECT NO. **XXX** SHEET **52 of 87** PLAN NO. **A-5.1**

DESIGN BY: Designer	STAMP	PLANS PREPARED BY: AECOM	BENCHMARK:
DRAWN BY: Author		999 W. TOWN & COUNTRY ROAD ORANGE, CA 92868-4713	
CHECKED BY: Checker			



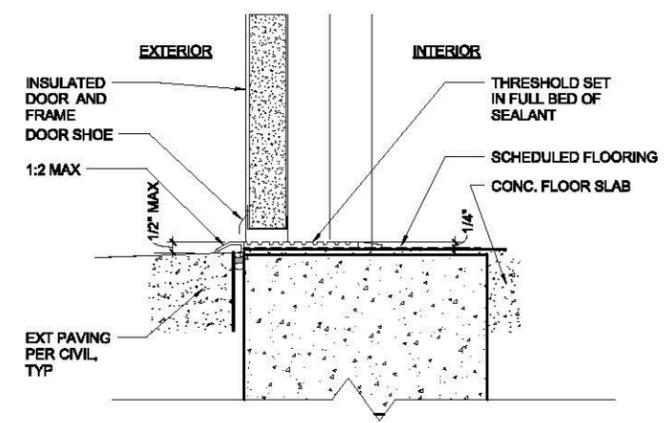
DOOR JAMB @ CMU WALL
SCALE: 3" = 1'-0"

C2
A-5.2



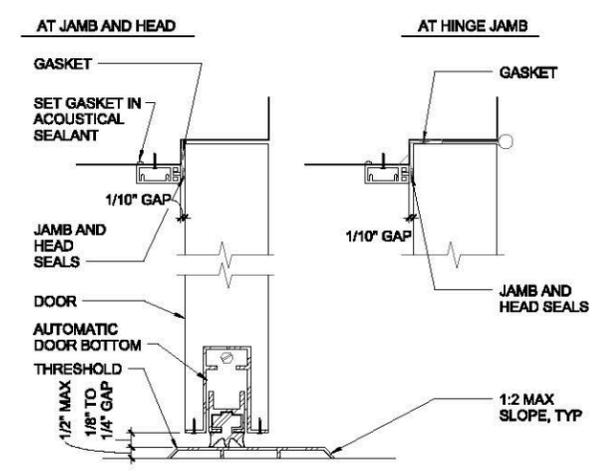
DOOR HEAD @ CMU WALL
SCALE: 3" = 1'-0"

C1
A-5.2



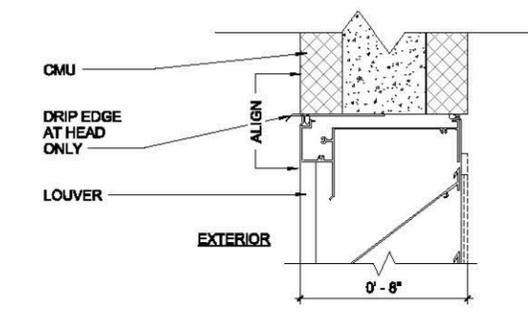
EXT. HOL MET DOOR THRESHOLD
SCALE: 3" = 1'-0"

A4
A-5.2



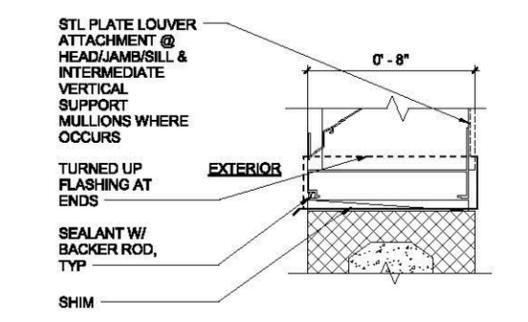
DOOR SILL W/ SOUND GASKET
SCALE: 6" = 1'-0"

A2
A-5.2



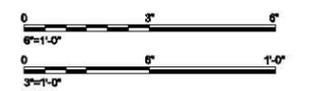
LOUVER - HEAD/ JAMB SIM.
SCALE: 3" = 1'-0"

B1
A-5.2



LOUVER - SILL
SCALE: 3" = 1'-0"

A1
A-5.2



REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

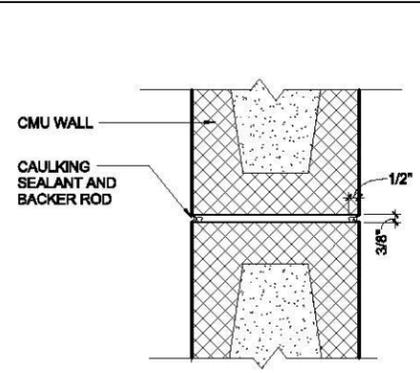
SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/ BIOVENTING SYSTEM
CAROUSEL TRACT
DOOR & LOUVER DETAILS

PROJECT NO. **XXX** SHEET **53 of 87** PLAN NO. **A-5.2**

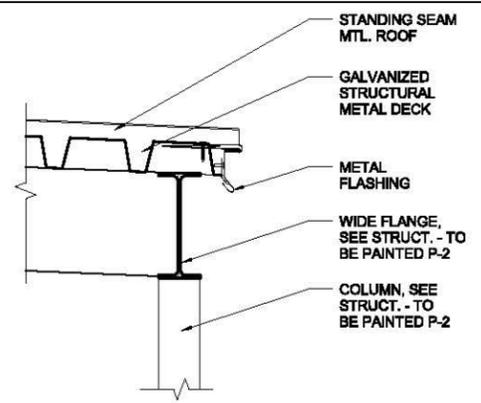
DESIGN BY: Designer	STAMP	PLANS PREPARED BY: AECOM	BENCHMARK:
DRAWN BY: Author		999 W. TOWN & COUNTRY ROAD ORANGE, CA 92868-4713	
CHECKED BY: Checker			

10/14/2016 3:31:03 PM C:\Users\champ3\Documents\KAST_SVE_A14_champ3.rvt

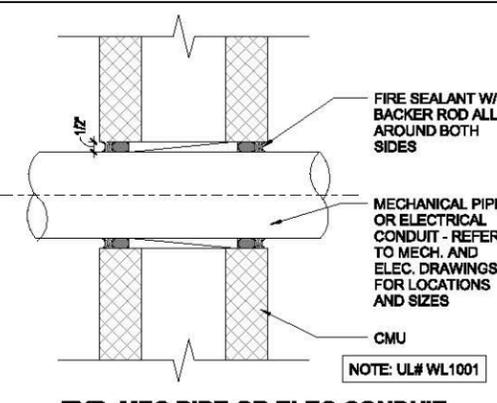
90% SUBMITTAL



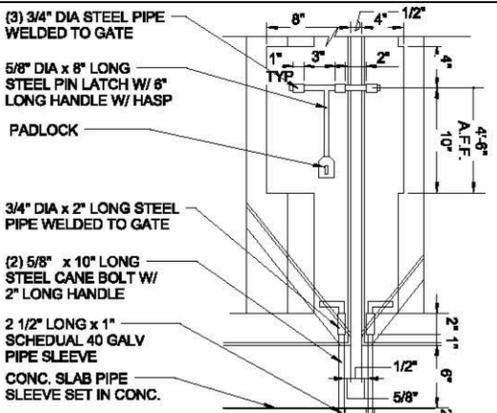
CMU CONTROL JOINT
SCALE: 3" = 1'-0"
C4
A-5.3



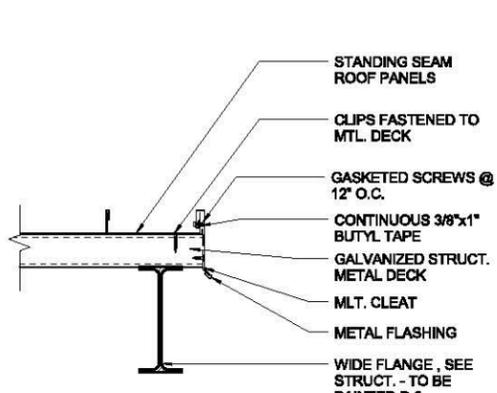
CANOPY EAVE
SCALE: 1 1/2" = 1'-0"
C3
A-5.3



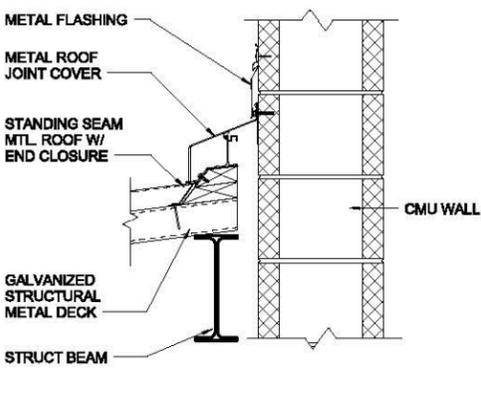
TYP. MEC PIPE OR ELEC CONDUIT PENETRATION
SCALE: 3" = 1'-0"
C2
A-5.3



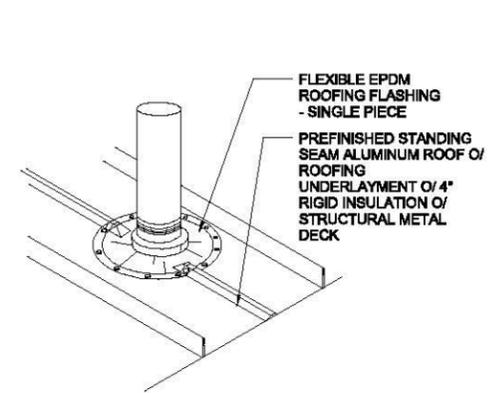
METAL GATE - LATCH
SCALE: 12" = 1'-0"
C1
A-5.3



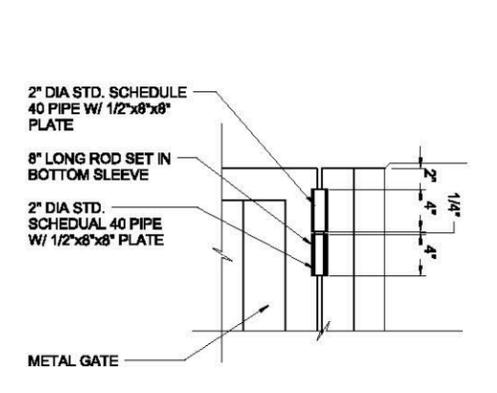
CANOPY RAKE
SCALE: 1 1/2" = 1'-0"
B4
A-5.3



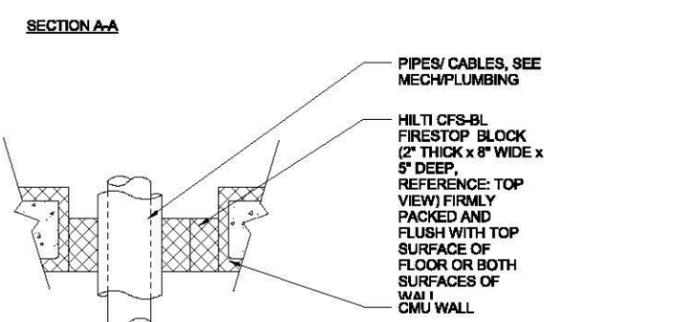
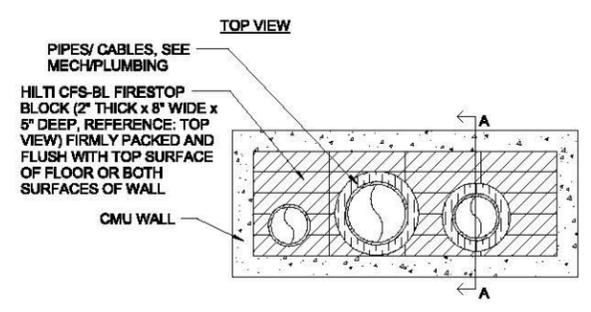
CANOPY TO WALL
SCALE: 1 1/2" = 1'-0"
B3
A-5.3



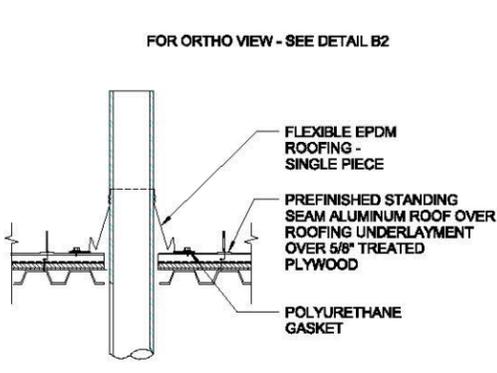
VENT FLASHING ISO
SCALE: 1 1/2" = 1'-0"
B2
A-5.3



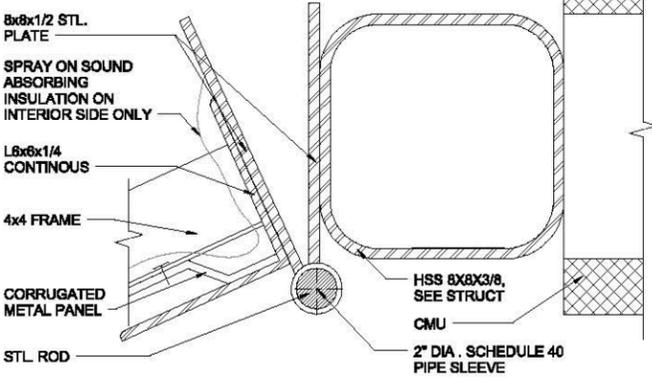
METAL GATE - HINGE
SCALE: 12" = 1'-0"
B1
A-5.3



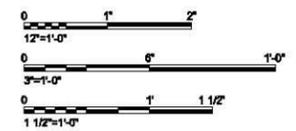
RATE MULTIPLE PENETRATIONS THROUGH BLOCK WALL
SCALE: 1 1/2" = 1'-0"
A3
A-5.3



VENT STACK FLASHING
SCALE: 1 1/2" = 1'-0"
A2
A-5.3



METAL GATE - ENLARGED HINGE
SCALE: 12" = 1'-0"
A1
A-5.3



DESIGN BY:	Designer	STAMP
DRAWN BY:	Author	
CHECKED BY:	Checker	

PLANS PREPARED BY:

AECOM

999 W. TOWN & COUNTRY ROAD
ORANGE, CA 92868-4713

BENCHMARK:

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US

CITY OF CARSON

SVE/ BIOVENTING SYSTEM

CAROUSEL TRACT

MISC DETAILS

PROJECT NO.	SHEET	PLAN NO.
XXX	54 of 87	A-5.3

10/14/2015 3:31:04 PM C:\Users\champ3\Documents\KAST_SVE_A14_champ3.rvt

ROOM FINISH SCHEDULE									
ROOM NUMBER	ROOM NAME	WALL FINISH				CEILING FINISH	FLOOR FINISH	BASE MATERIAL	COMMENTS
		NORTH WALL	EAST WALL	SOUTH WALL	WEST WALL				
SVE BUILDING									
A101	SVE/ BIOVENTING AREA	P-1	P-1	P-1	P-1	EXPOSED/ P-3	SEALED CONC.		
A102	CONTROL	P-1	P-1	P-1	P-1	EXPOSED/ P-3	SEALED CONC.		
A103	ELECTRICAL/ VFD	P-1	P-1	P-1	P-1	EXPOSED/ P-3	SEALED CONC.		
A104	STOR	P-1	P-1	P-1	P-1	EXPOSED/ P-3	SEALED CONC.		
A105	UNISEX	P-1	P-1	P-1	P-1	EXPOSED/ P-3	SEALED CONC.		

SVE BUILDING: 5

MANIFOLD BUILDING

A101	MANIFOLD ROOM	P-1	P-1	P-1	P-1	EXPOSED/ P-3	SEALED CONC.		
A102	UNISEX	P-1	P-1	P-1	P-1	EXPOSED/ P-3	SEALED CONC.		
A103	ELECTRICAL/ VFD	P-1	P-1	P-1	P-1	EXPOSED/ P-3	SEALED CONC.		
A104	STOR	P-1	P-1	P-1	P-1	EXPOSED/ P-3	SEALED CONC.		

MANIFOLD BUILDING: 4

Grand total: 9

DOOR SCHEDULE															
DOOR NUMBER	DOOR						FRAME		HEAD DETAIL	JAMB DETAIL	SILL DETAIL	STC RATING	FIRE RATING	HARDWARE GROUP	REMARKS
	PANEL WIDTH	PANEL HEIGHT	THICKNESS	FINISH	TYPE	MATERIAL	MATERIAL	FINISH							
SVE BUILDING															
101A	3' - 0"	7' - 0"	0' - 1 3/4"	P-2	A	SCM			C1/A-5.2	C2/A-5.2	A2/A-5.2			2	1, 3, 4
101B	10' - 0"	12' - 0"		P-2		STEEL			-	A1/A-5.3 & A2/A-5.3	C1/A-5.3				6, 7, 8
101C	10' - 0"	12' - 0"		P-2		STEEL			-	A1/A-5.3 & A2/A-5.3	C1/A-5.3				6, 7, 8
101D	10' - 0"	12' - 0"		P-2		STEEL			-	A1/A-5.3 & A2/A-5.3	C1/A-5.3				6, 7, 8
102	3' - 0"	7' - 2"	0' - 1 3/4"	P-2	A	HM			C1/A-5.2	C2/A-5.2	A1/A-5.2			2	1, 2, 4, 5
103	6' - 4"	7' - 2"	0' - 1 3/4"	P-2	B	HM			C1/A-5.2	C2/A-5.2	A1/A-5.2			1	1, 2, 4, 5
104	3' - 0"	7' - 2"	0' - 1 3/4"	P-2	A	HM			C1/A-5.2	C2/A-5.2	A1/A-5.2			2	1, 2, 4, 5

SVE BUILDING: 7

MANIFOLD BUILDING

101A	8' - 4"	9' - 10"	0' - 1 3/4"	P-2	B	HM			C1/A-5.2	C2/A-5.2	A1/A-5.2			1	1, 2, 4, 5
101B	3' - 0"	7' - 2"	0' - 1 3/4"	P-2	A	HM			C1/A-5.2	C2/A-5.2	A1/A-5.2			2	1, 2, 4, 5
102	3' - 0"	7' - 2"	0' - 1 3/4"	P-2	A	HM			C1/A-5.2	C2/A-5.2	A1/A-5.2			2	1, 2, 4, 5

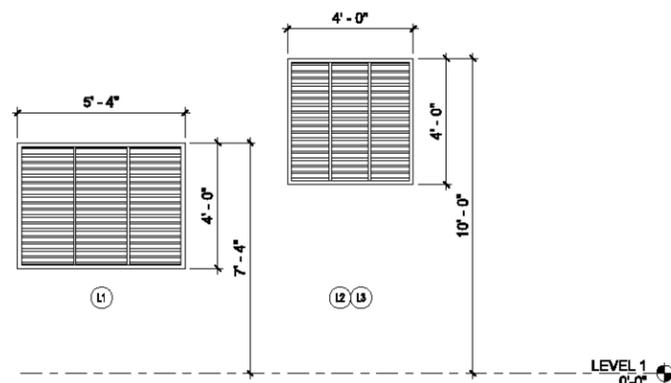
MANIFOLD BUILDING: 3

Grand total: 10

LOUVER SCHEDULE									
Mark	R.O.		HEAD HEIGHT	Material	COUNT	HEAD DETAIL	JAMB DETAIL	SILL DETAIL	COMMENTS
	WIDTH	HEIGHT							
SVE BUILDING									
001	5' - 4"	4' - 0"	7' - 4"	ALUMINIUM	1	B1/A-5.2	B1/A-5.2	A1/A-5.2	DRAINABLE
MANIFOLD BUILDING									
002	4' - 0"	4' - 0"	10' - 0"	ALUMINIUM	1	B1/A-5.2	B1/A-5.2	A1/A-5.2	DRAINABLE
003	4' - 0"	4' - 0"	10' - 0"	ALUMINIUM	1	B1/A-5.2	B1/A-5.2	A1/A-5.2	DRAINABLE

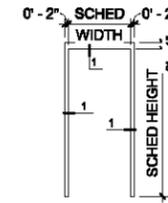
MANIFOLD BUILDING: 2

Grand total: 3



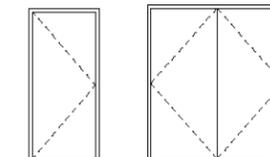
LOUVER TYPES

INTERIOR FINISH AND COLOR LEGEND						
ABBR.	DESCRIPTION	MANUFACTURER	COLOR	PROD	FINISH / STYLE	NOTES
SC	SEALED CONCRETE		CLEAR SEALER COAT			
CMU 1	CMU		TBD		PRECISION GROUND	
CMU 2	CMU		TBD		SPLIT FACE	
P-1	PAINT		TBD		EGG SHELL	
P-2	PAINT		TBD		EGG SHELL	
P-3	PAINT		BLACK		EGG SHELL	



FM1
STANDARD MASONRY

DOOR FRAME TYPES



DOOR PANEL TYPES

DOOR HARDWARE

HARDWARE SET NO. 1

PROVIDE EACH PAIR DOORS WITH THE FOLLOWING:

QTY	DESCRIPTION	CATALOG #	FINISH	MFR
3EA	HINGE	BB1199	SS	HGR
1EA	LOCKSET	3550	-	HGR
2EA	SURFACE CLOSER	P4040T	689	LCN
2EA	DOOR SHOE	216AV	CL	PMK
1SET	SEALS	S88GR	-	PMK
2EA	FLOOR STOP	268F	BLK	HGR
2EA	DOOR HOLDER	270C	S2	HGR
1SET	ASTRAGAL	355PS	CL	PMK
1EA	THRESHOLD	2005AT	AL	PMK
1EA	FLUSHBOLT	2842	US32D	RO
1EA	SILL NOSING	3261A	AL	PMK

HARDWARE SET NO. 2

PROVIDE EACH DOOR WITH THE FOLLOWING:

QTY	DESCRIPTION	CATALOG #	FINISH	MFR
3EA	HINGE	BB1199	SS	HGR
1EA	LOCKSET	3550	-	HGR
1EA	SURFACE CLOSER	P4040T	689	LCN
1EA	DOOR SHOE	216AV	CL	PMK
1SET	SEALS	S88GR	-	PMK
1EA	FLOOR STOP	268F	BLK	HGR
1EA	DOOR HOLDER	270C	S2	HGR
1EA	THRESHOLD	2005AT	AL	PMK
1EA	FLUSHBOLT	2842	US32D	RO
1EA	SILL NOSING	3261A	AL	PMK

REMARK KEYNOTES FOR DOOR SCHEDULE

- DOOR CLOSER
- ACOUSTIC SEALS
- EXIT SIGN
- 20 GA STEEL
- PROVIDE WEATHER-PROOF DRIP CAP AND THRESHOLD
- CAIN BOLTS
- HASP AND LOCK
- SPRAY ON SOUND INSULATION

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US
CITY OF CARSON
SVE/ BIOVENTING SYSTEM
CAROUSEL TRACT
DOOR, LOUVER, AND ROOM FINISH
SCHEDULE

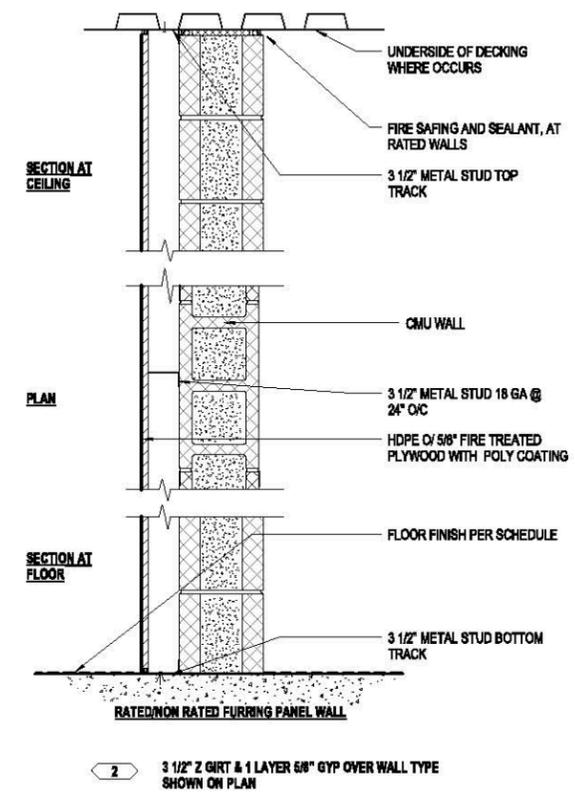
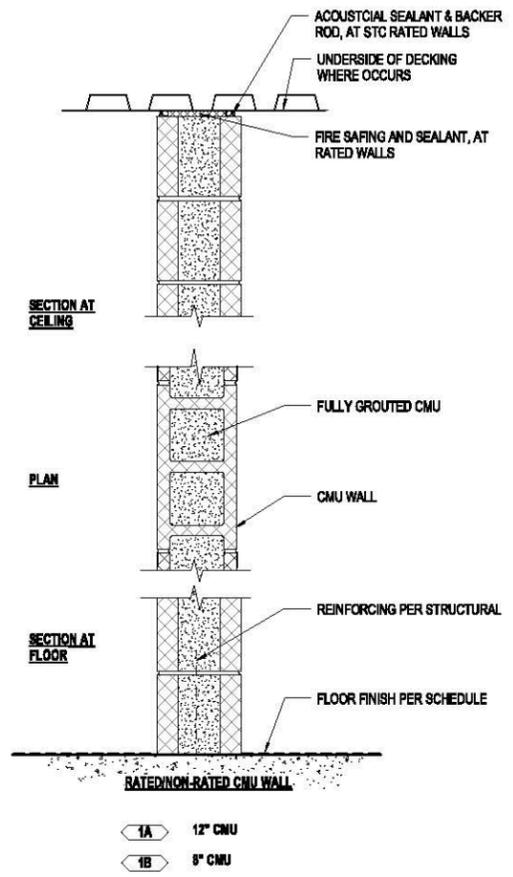
PROJECT NO. **XXX** SHEET **55 of 87** PLAN NO. **A-6.1**

DESIGN BY: Designer
 DRAWN BY: Author
 CHECKED BY: Checker

STAMP

PLANS PREPARED BY:
AECOM
 999 W. TOWN & COUNTRY ROAD
 ORANGE, CA 92868-4713

BENCHMARK:



DESIGN BY:	STAMP
Designer	
DRAWN BY:	
Author	
CHECKED BY:	
Checker	

PLANS PREPARED BY:

AECOM

999 W. TOWN & COUNTRY ROAD
ORANGE, CA 92868-4713

BENCHMARK:

REVISIONS			
NO	DESCRIPTION	APPROVE	DATE

SHELL OIL PRODUCTS US

CITY OF CARSON

SVE/ BIOVENTING SYSTEM

CAROUSEL TRACT

WALL TYPES

PROJECT NO.	SHEET	PLAN NO.
XXX	56 of 87	A-6.2

10/14/2016 3:31:07 PM C:\Users\champ3\Documents\KAST_SVE_A14_champ3.rvt