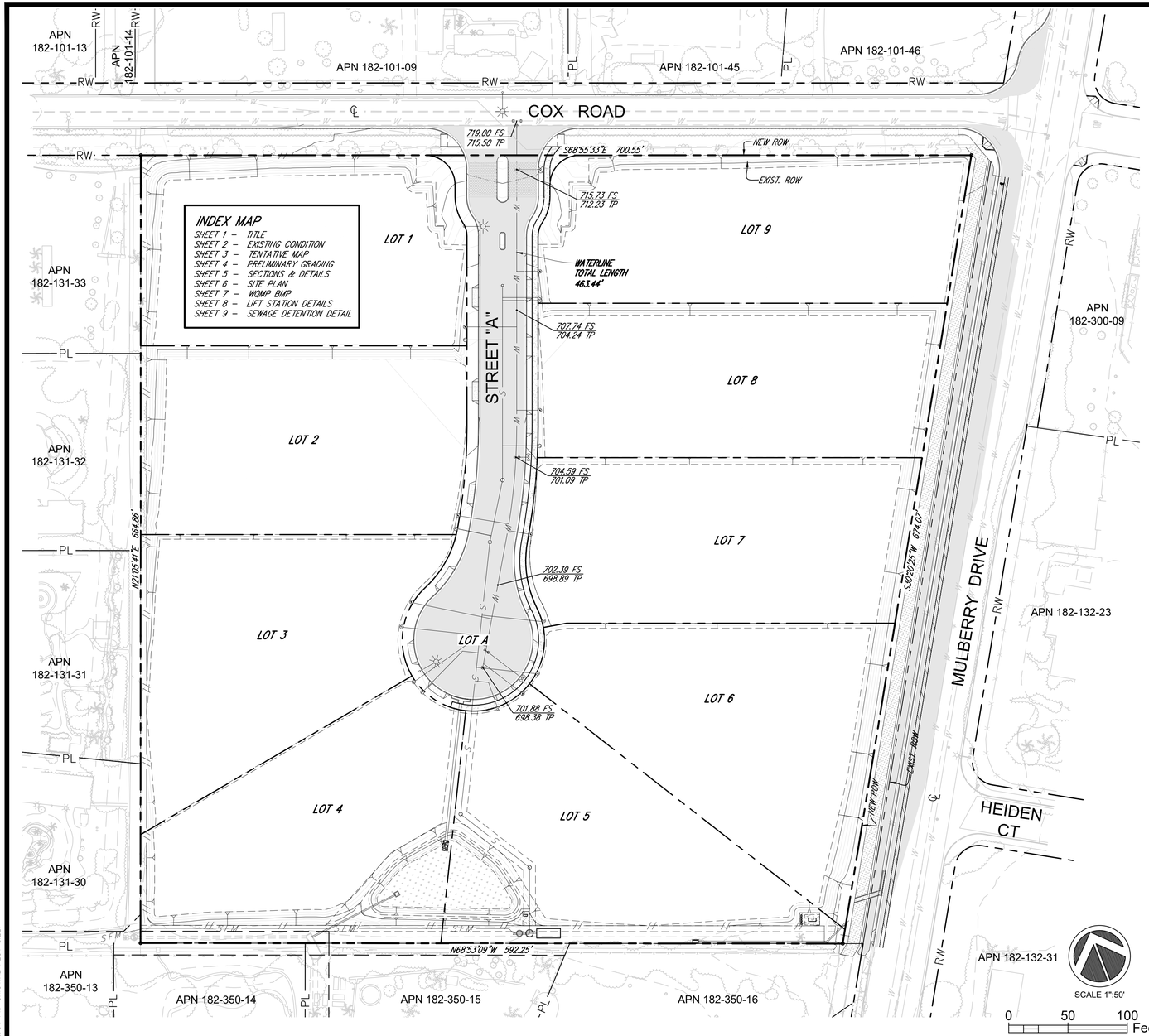
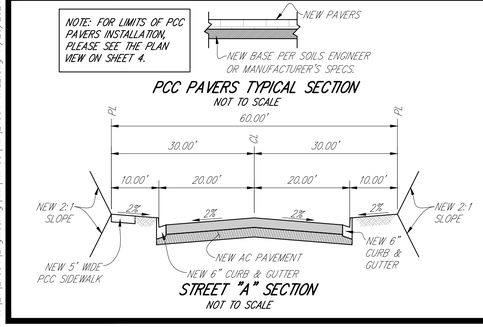
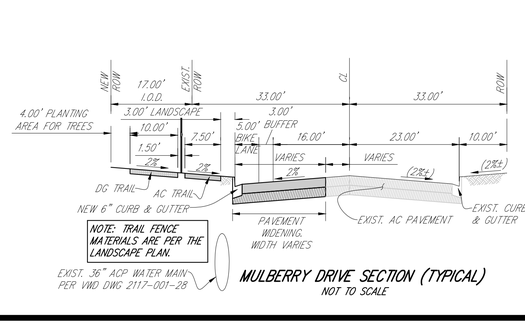
ATTACHMENT E

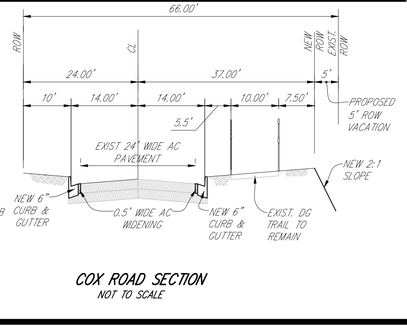
TENTATIVE SUBDIVISION MAP & GRADING

TSM21-0004









OWNER'S CERTIFICATE

I (WE) HEREBY CERTIFY THAT I (WE) AM (ARE) THE RECORD OWNER(S) OF THE PROPERTY SHOWN ON THE TENTATIVE SUBDIVISION MAP AND THAT SAID MAP SHOWS MY (OUR) ENTIRE CONTIGUOUS OWNERSHIP (EXCLUDING SUBDIVISION LOTS). I (WE) UNDERSTAND THAT PROPERTY IS CONSIDERED AS CONTIGUOUS EVEN IF IT IS SEPARATED BY ROAD, STREET, UTILITY EASEMENTS OR RAILROAD RIGHT-OF-WAY.

OWNER'S NAME

COX FAMILY TRUST & CAROLE ANN COX WALLACE TRUST

APPLICANT'S NAME

MANNING HOME'S
20151 SW BIRCH STREET, SUITE 150
NEWPORT BEACH, CA 92660

OWNER _____ DATE: _____

APPLICANT _____ DATE: _____

DATE PREPARED

OCTOBER 2021

SURVEYOR OF WORK

EXCEL ENGINEERING
440 STATE PLACE ESCONDIDO,
CA 92029 (760) 745-8118

LICENSED LAND SURVEYOR
Michael D. Levin
No. 6896
STATE OF CALIFORNIA

MICHAEL D. LEVIN PLS# 6896

ENGINEER OF WORK

EXCEL ENGINEERING
440 STATE PLACE ESCONDIDO,
CA 92029 (760) 745-8118

REGISTERED PROFESSIONAL ENGINEER
ROBERT D. DENTINO
No. 45629
CIVIL
STATE OF CALIFORNIA

ROBERT D. DENTINO RCE# 45629

ASSESSOR'S PARCEL NO.

182-131-14-00

LAND AREA

10.05 ACRES

ZONING

EXISTING: A-1 AGRICULTURAL
PROPOSE: A-1 AGRICULTURAL

SITE ADDRESS

SW CORNER OF COX ROAD & MULBERRY DR,
SAN MARCOS, CA 92069

LOT INFORMATION

EXISTING: 1 LOT
PROPOSED: 9 SINGLE FAMILY RESIDENTIAL LOTS & 1 HOA LOT
(PRIVATE STREET – LOT A)

OVERHEAD LINES STATEMENT

OVERHEAD LINES ALONG MULBERRY ARE REQUIRED TO BE UNDERGROUNDED AS PART OF THIS PROJECT. EXISTING INFRASTRUCTURE AFFECTED BY THIS PROJECT ARE TO BE UNDERGROUNDED AS NEEDED.

EARTHWORK STATEMENT

PRISMOIDAL METHOD WAS USED TO CALCULATE THE EARTHWORK VOLUME SHOWN HERE. SEE TABLE BELOW FOR DETAILS. THE GRADING PROPOSED FOR THIS PROJECT IS AS SHOWN ON SHEETS 4 OF THIS PLAN SET.

CUT = 19,000 CY
FILL = 19,000 CY
IMPORT = 0 CY

EARTHWORK CALCULATION DETAIL

LINE ID	ITEM DESCRIPTION	AREA (SF)	SECTION/LENGTH (FT)	VOL (CY)	ROUNDED
1	RAW CUT			16503.59	16,510.00
2	STREET A	24,852.06	1.08	997.15	1,000.00
3	MULBERRY WIDENING	14,877.86	0.75	413.27	420.00
4	WQ BIO BASIN A (4 FT DEEP)	4,253.24	5.00	787.64	790.00
5	WQ BIO BASIN B (4 FT DEEP)	1,504.46	5.00	278.60	280.00
6	TOTAL CUT			18,980.26	19,000.00
7					
8	RAW FILL			16,815.08	16,820.00
9	SHRINKAGE FROM SOILS ENGINER PG 11, 5% TO 15% (APPLIED TO RAW CUT)	16,503.59	0.15	2,475.54	2,480.00
10	TOTAL FILL			19,290.62	19,300.00
11	IMPORT (EXPECTED TO BE GENERATED FROM FOUNDATIONS & THE USE OF EXISTING ON-SITE MATERIALS)			-310.36	-300.00
12	FOR PERMITTING PURPOSES, SAY EARTHWORK IS BALANCE AT (CY)	19,000.00			

FIRE DISTRICT

CITY OF SAN MARCOS

SCHOOL DISTRICT

SAN MARCOS UNIFIED

SEWER DISTRICT

VALLECITOS WATER DISTRICT

WATER DISTRICT

VALLECITOS WATER DISTRICT

LEGAL ACCESS

COX ROAD & MULBERRY DRIVE

FEMA ZONE

AS SHOWN ON FEMA PANEL 792 OF 2375; MAP 06073C0792G, DATED MAY 16, 2012, THIS PROJECT IS IN ZONE X – "AREA OF MINIMAL FLOOD HAZARD".

WQTR / HYDROLOGY STUDY

STUDY BY EXCEL ENGINEERING & DATED OCTOBER 2021

LEGAL DESCRIPTION

LOT 5 AND THE SOUTHEASTERLY 70.05 FEET OF LOT 4, BLOCK 33, OF RANCHO LOS VALLECITOS DE SAN MARCOS, IN THE CITY OF SAN MARCOS, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 806, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, DECEMBER 21, 1895.

PROJECT BENCHMARK

THE BENCHMARK FOR THIS PROJECT IS THE CITY OF SAN MARCOS "CP-007", BEING A 2" BRASS DISK STAMPED "CITY OF SAN MARCOS SURVEY CONTROL NVS LS6310 2018 CP-007", LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF NORTH TWIN OAKS VALLEY ROAD AND LA CIENEGA ROAD, SET FLUSH WITH BACK OF SIDEWALK PER ROS 23721.

ELEVATION: 677.98 DATUM: NAVD88

BASIS OF BEARINGS

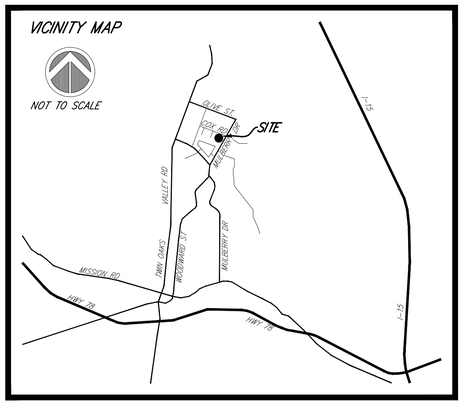
THE BASIS OF BEARINGS FOR THIS PROJECT IS THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83), ZONE VI, (EPOCH 2017.50) AS DETERMINED LOCALLY BETWEEN CITY OF SAN MARCOS CONTROL POINTS "CP-007" AND "CP-004", BEING NORTH 37° 31' 48" WEST PER ROS 23721.

SOURCE OF TOPOGRAPHY

THE EXISTING TOPOGRAPHY SHOWN HEREON IS FROM AN AERIAL TOPOGRAPHY FLOWN BY AEROTECH MAPPING, INC (DATE FLOWN: 08/26/2021), AND SUPPLEMENTAL FIELD DATA SURVEYED BY EXCEL ENGINEERING. DATES OF FIELD SURVEY 08/24/2021 & 09/03/2021.

VICINITY MAP

NOT TO SCALE



DATE	REMARKS
12/2021	PLANNING SUBMITTAL

EXCEL ENGINEERING
LAND PLANNING • ENGINEERING • CIVIL SURVEYING
440 STATE PLACE, ESCONDIDO, CA 92029
PH (760)745-8118 FX (760)745-8334

SHEET 1 OF 9 SHEETS
TITLE

MANNING HOMES
APN 182-131-14-00
COX ROAD / MULBERRY DR, SAN MARCOS CA
TSM21-0004

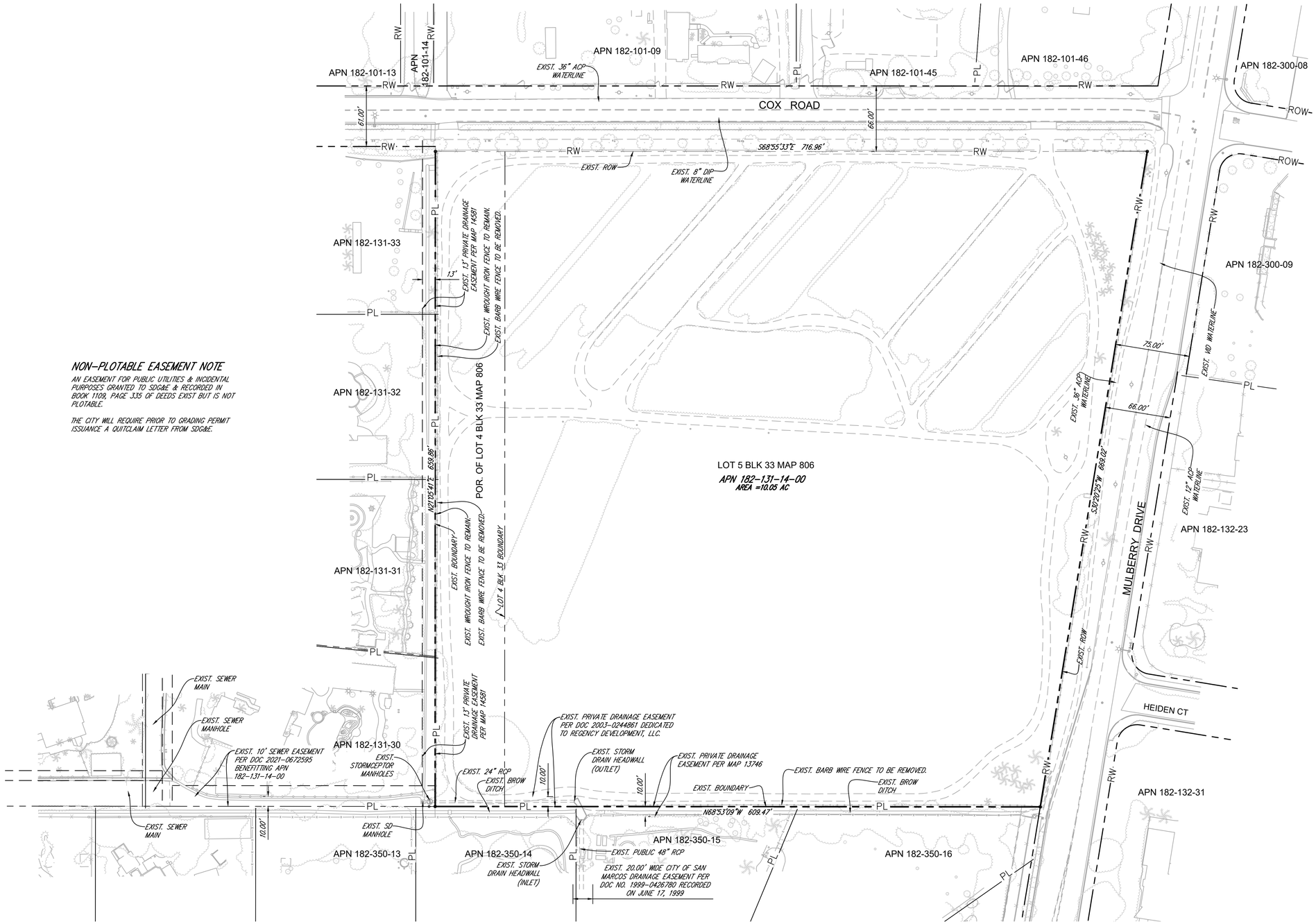
K:\21\21054\Engineering\DWG\TM 03\M\21054 TITLE.dwg 11/26/2024 5:04 PM ORIGINAL PLOT SIZE: ----

TSM21-0004

NON-PLOTABLE EASEMENT NOTE

AN EASEMENT FOR PUBLIC UTILITIES & INCIDENTAL PURPOSES GRANTED TO SDG&E & RECORDED IN BOOK 1109, PAGE 335 OF DEEDS EXIST BUT IS NOT PLOTABLE.

THE CITY WILL REQUIRE PRIOR TO GRADING PERMIT ISSUANCE A QUITCLAIM LETTER FROM SDG&E.



SCALE 1":50'

0 50 100 Feet

	DATE	REMARKS
	12/2021	PLANNING SUBMITTAL

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SHEET 2 OF 9 SHEETS

EXISTING CONDITION

MANNING HOMES

APN 182-131-14-00

COX ROAD / MULBERRY DR, SAN MARCOS CA

TSM21-0004

TSM21-0004

APN 182-101-13
APN 182-101-14
APN 182-101-09
APN 182-101-45
APN 182-101-46
APN 182-300-08
ROW
RW
PL
COX ROAD
24.00'
14'
10'
14'
61.00'
37.00'
23'
NEW ROW
EXIST. ROW
HATCH DENOTES AREA WHERE PROJECT RELINQUISHED ACCESS RIGHTS (TYP).
5' ROW VACATION
240.1'
S68°55'33"E 700.55'
130.0'
330.5'
Δ=090°00'00" L=39.27' R=25.00'
S21°04'27"W 10.00'
Δ=033°33'26" L=23.43' R=40.00'
Δ=033°33'26" L=11.71' R=20.00'
N21°04'27"E 10.00'
LOT 1
GROSS/NET AREA =1.00 AC
=43562.25 SF
LOT 9
GROSS/NET AREA =1.00 AC
=43699.03 SF
APN 182-131-33
APN 182-300-09
50.00'
42.00'
92.00'
126.5'
17.00' I.O.D.
S68°55'33"E 345.09'
60.00'
H.O.A. PRIVATE ROAD & PUBLIC UTILITY EASEMENT. THE PUBLIC UTILITY EASEMENT WILL BE FINALIZED IN THE FINAL MAP.
10' 20' 20' 10'
N68°55'33"W 275.14'
SUBD. BOUNDARY
STREET "A" (PRIVATE)
LOT 8
GROSS/NET AREA =1.00 AC
=43586.42 SF
LOT 2
GROSS/NET AREA =1.00 AC
=43569.48 SF
APN 182-131-32
EXIST. 13' PRIVATE DRAINAGE EASEMENT PER MAP 14581
Δ=002°50'05" L=26.22' R=529.99'
S68°55'33"E 324.48'
50.00'
26.00'
24.00'
33.00'
83.00'
Δ=010°19'05" L=84.65' R=470.00'
Δ=007°29'04" L=69.23' R=529.99'
Δ=00°31'46" L=5.05' R=90.00'
2.0'
LOT 7
GROSS/NET AREA =1.02 AC
=44395.74 SF
Δ=033°39'25" L=52.87' R=90.00'
Δ=016°19'20" L=17.09' R=60.00'
H.O.A.
S79°09'16"E 20.00'
S68°55'33"E 276.89'
S30°20'25"W 624.11'
MULBERRY DRIVE
APN 182-132-23
Δ=077°17'18" L=81.18' R=60.00'
R50.00'
LOT A
GROSS/NET AREA =0.78 AC
R60.00'
Δ=048°08'50" L=50.42' R=60.00'
LOT 3
GROSS/NET AREA =1.00 AC
=43580.61 SF
APN 182-131-31
Δ=053°37'50" L=56.07' R=90.00'
Δ=058°11'05" L=60.95' R=60.00'
LOT 6
GROSS/NET AREA =1.06 AC
=46099.03 SF
HATCH DENOTES AREA WHERE PROJECT RELINQUISHED ACCESS RIGHTS (TYP)
S80°44'29"W 265.24'
10' HOA PRIVATE DRAINAGE EASEMENT
10' HOA PRIVATE SEWER EASEMENT
S21°00'28"E 317.59'
LOT 4
GROSS/NET AREA =1.00 AC
=43581.72 SF
LOT 5
GROSS/NET AREA =1.00 AC
=43673.94 SF
HEIDEN CT
EXIST. 13' PRIVATE DRAINAGE EASEMENT PER MAP 14581
APN 182-131-30
HOA WATER QUALITY EASEMENT
EXIST. PRIVATE DRAINAGE EASEMENT PER DOC 2003-0244861
HOA PRIVATE SEWER EASEMENT
PROPOSED PUBLIC DRAINAGE EASEMENT
EXIST. PRIVATE DRAINAGE EASEMENT PER MAP 14581
PROPOSED 10' PUBLIC DRAINAGE EASEMENT
APN 182-132-31
1257.1'
N68°53'09"W 592.25'
15.00'
EXIST. 10' SEWER EASEMENT PER DOC 2021-0672595
EXIST. PRIVATE DRAINAGE EASEMENT PER MAP 13746
15' HOA PRIVATE SEWER & DRAINAGE EASEMENT
S30°20'25"W 12.17'
APN 182-350-13
APN 182-350-14
APN 182-350-15
APN 182-350-16
EXIST. 20.00' WIDE CITY OF SAN MARCOS DRAINAGE EASEMENT PER DOC NO. 1999-0426780 RECORDED ON JUNE 17, 1999

FOR STREET SECTIONS SEE SHEET 5 .

NOTE: ALL PRIVATE EASEMENTS & LOT "A" WILL BE GRANTED TO THE HOMEOWNERS' ASSOCIATION (H.O.A.)

SCALE 1":40'
0 40 80 Feet

DATE	REMARKS
12/2021	PLANNING SUBMITTAL

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SHEET 3 OF 9 SHEETS
TENTATIVE MAP

MANNING HOMES
APN 182-131-14-00
COX ROAD / MULBERRY DR, SAN MARCOS CA
TSM21-0004

TSM21-0004

CONSTRUCTION NOTES

SURFACE IMPROVEMENTS

SI-01	AC PAVEMENT
SI-02	PCC DECORATIVE PAVEMENT
SI-03	6" PCC CURB & GUTTER
SI-04	6" AC BERM
SI-05	PCC RAMP. SEE SHEET 5 FOR DETAILS.
SI-06	DG & AC TRAIL PER CITY STANDARDS
SI-07	5' WIDE PCC SIDEWALK
SI-08	8' WIDE PCC DRIVEWAY FOR MAINTENANCE ACCESS. SEE SHEET 5
SI-09	INSTALL STREET LIGHT PER CITY STANDARD
SI-10	INSTALL SOLAR SPEED FEEDBACK SIGN. LOCATION & SPECS WILL BE FINALIZED ON THE CONSTRUCTION DOCUMENT.

UTILITY IMPROVEMENTS

UT-01	WATERLINE MAIN
UT-02	FIRE HYDRANT
UT-03	6" PVC PRIVATE SEWER MAIN
UT-04	PRIVATE SEWER MANHOLE/CLEANOUT
UT-05	PRIVATE DUPLEX SEWAGE LIFT STATION
UT-06	PRIVATE SEWER FORCE MAIN

STORM DRAIN / WATER QUALITY IMPROVEMENTS

SD-01	STORM DRAIN INLET
SD-02	STORM DRAIN BOX/CLEANOUT
SD-03	STORM DRAIN PIPE
SD-04	WATER QUALITY BASIN. SEE DETAILS ON SHEET 7
SD-05	WATER QUALITY OUTLET CONTROL STRUCTURE. SEE DETAILS ON SHEET 7
SD-06	REVERSE CURB OUTLET
SD-07	RIPRAP

FOR STREET SECTIONS SEE SHEET 1

PLEASE SEE SHEET 5 FOR SECTION PROFILE VIEWS

PLEASE SEE SHEET 5 FOR SEWER FORCE MAIN PROFILE

SCALE 1"=40'

0 40 80 Feet

MATCHLINE – SEE BELOW RIGHT FOR CONTINUATION

MATCHLINE – SEE ABOVE LEFT FOR CONTINUATION

APN 182-101-13 — MEET & MATCH EXIST. START WIDENING & NEW CURB & GUTTER

APN 182-101-09

APN 182-101-45

APN 182-101-46

APN 182-300-08

APN 182-300-09

APN 182-131-33

APN 182-131-32

APN 182-131-31

APN 182-131-30

APN 182-350-13

APN 182-350-14

APN 182-350-15

APN 182-350-16

APN 182-132-23

APN 182-132-31

COX ROAD

MULBERRY DRIVE

HEIDEN CT

MULBERR DRIVE

REMOVE EXIST. DRIVEWAY & REPLACED WITH LANDSCAPING & MATCH EXISTING TRAIL.

EXIST. 36" ACP WATERLINE

EXIST. 8" DIP WATERLINE

CONNECTION POINT. CONNECT NEW WATERMAIN TO EXIST 8" WATERMAIN

END NEW PCC CURB & GUTTER @ ECR. BEGIN AC BERM.

EXIST. CURB OUTLET TO REMAIN

NEW ROW

EXIST. ROW

BLDG SETBACK (TYP)

EXIST. DG TRAIL TO REMAIN

PROPOSED GATED ENTRY

PLEASE SEE SHEET 6 FOR TYPICAL LOT DRAINAGE DETAIL

LOT 1
GROSS/NET AREA =1.00 AC
=43562.25 SF
PAD = 712.00

LOT 2
GROSS/NET AREA =1.00 AC
=43569.48 SF
PAD = 706.00

LOT 3
GROSS/NET AREA =1.00 AC
=43580.61 SF
PAD = 704.00

LOT 4
GROSS/NET AREA =1.00 AC
=43581.72 SF
PAD = 703.00

LOT 5
GROSS/NET AREA =1.00 AC
=43673.94 SF
PAD = 703.00

LOT 6
GROSS/NET AREA =1.06 AC
=46099.03 SF
PAD = 703.00

LOT 7
GROSS/NET AREA =1.02 AC
=44395.74 SF
PAD = 705.00

LOT 8
GROSS/NET AREA =1.00 AC
=43586.42 SF
PAD = 708.00

LOT 9
GROSS/NET AREA =1.00 AC
=43699.03 SF
PAD = 713.00

LOT A
GROSS/NET AREA =0.78 AC

EXIST. 13' PRIVATE DRAINAGE EASEMENT PER MAP 14581

EXIST. 10' SEWER EASEMENT PER DOC 2021-0672595

10' HOA PRIVATE DRAINAGE EASEMENT

10' HOA PRIVATE SEWER EASEMENT

HOA WATER QUALITY EASEMENT

PROPOSED PUBLIC DRAINAGE EASEMENT

PROPOSED 10' PUBLIC DRAINAGE EASEMENT

EXIST. PRIVATE DRAINAGE EASEMENT PER DOC 2003-0244861

EXIST. PRIVATE DRAINAGE EASEMENT PER MAP 13746

15' PRIVATE SEWER & DRAINAGE EASEMENT

EXIST. 20.00' WIDE CITY OF SAN

SEWER CONNECTION CONNECT NEW 8" PVC MAIN TO EXISTING SEWER MANHOLE.

EXIST. STORMCEPTOR MANHOLES

EXIST. STORM DRAIN HEADWALL (OUTLET)

EXIST. SD MANHOLE

EXIST. 24" RCP

EXIST. BROW DITCH

EXIST. SD CHANNEL/DITCH

EXIST. PUBLIC 48" RCP

EXIST. STORM DRAIN HEADWALL (INLET TO EXIST. PUBLIC 48" RCP)

NEW 18" STORM DRAIN PIPE

WATER QUALITY BASIN 4,677 SF

PUMP CONTROLLER PAD=700.00

PRIVATE SEWER PUMP

8'x20' TANK FOR SEWER

NEW PCC BROWDITCH

WALLED GENERATOR, AUTOMATED TRANSFER SWITCH, HOA ELECTRICAL METER PAD=707.17

NEW 12" STORM DRAIN HEADWALL TO OUTLET INTO NEW BROWDITCH

NEW 12" STORM DRAIN PIPE

704.00 IE OUTLET TO EXIST. BROWDITCH

NEW CURB INLET DESIGNED TO CAPTURE 100 YR RUNOFF W/ REVERSE CURB OULET. THIS OUTLETS TO A MWS BMP.

NEW MWS UNIT (MODEL MWS-L-8-24-6'-3"-C-CHC). UNIT IS DESIGN TO HAVE HIGH RUNOFF BYPASS.

MEET & MATCH EXISTING TRAIL IMPROVEMENTS HERE

EXIST. 12" ACP WATERLINE

EXIST. MD WATERLINE

MEET & MATCH EXIST. START OF WIDENING. END OF NEW AC BERM

LEGEND

- BOUNDARY LINE
- RIGHT OF WAY LINE — RW
- PARCEL LOT LINE — PL
- PCC CURB
- PCC CURB & GUTTER
- SEWER LINE — S
- WATER LINE — W
- FIRE LINE — F
- FIRE HYDRANT
- BLDG FIRE SERVICE LATERAL — F
- WATER SERVICE LATERAL — W
- SEWER SERVICE LATERAL — S
- STORM DRAIN INLETS / CLEANOUTS
- EXIST. TOPO (5 FT) MAJOR CONTOUR
- EXIST. TOPO (1 FT) MINOR CONTOUR
- PROPOSED TOPO (5 FT) MAJOR CONTOUR — X
- PROPOSED TOPO (1 FT) MINOR CONTOUR

DATE	REMARKS
12/2021	PLANNING SUBMITTAL

SHEET 4 OF 9 SHEETS

PRELIMINARY GRADING

MANNING HOMES

APN 182-131-14-00

COX ROAD / MULBERRY DR, SAN MARCOS CA

TSM21-0004

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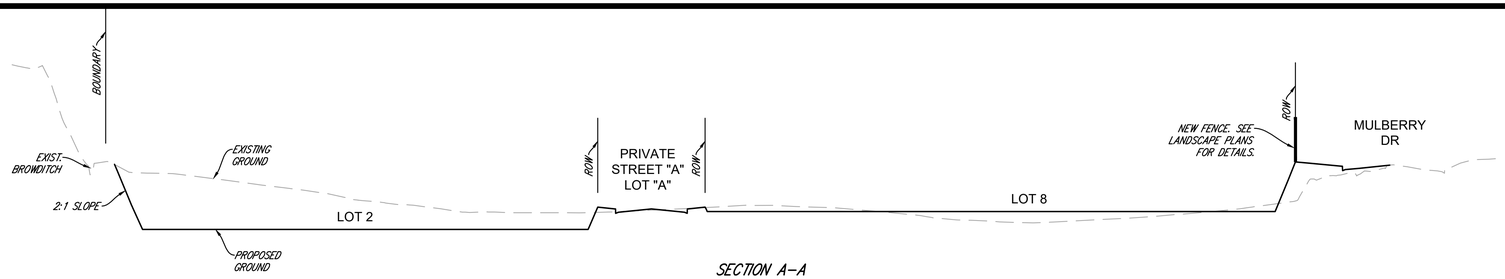
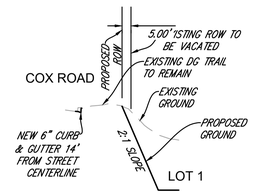
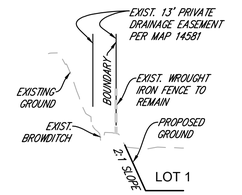
TSM21-0004



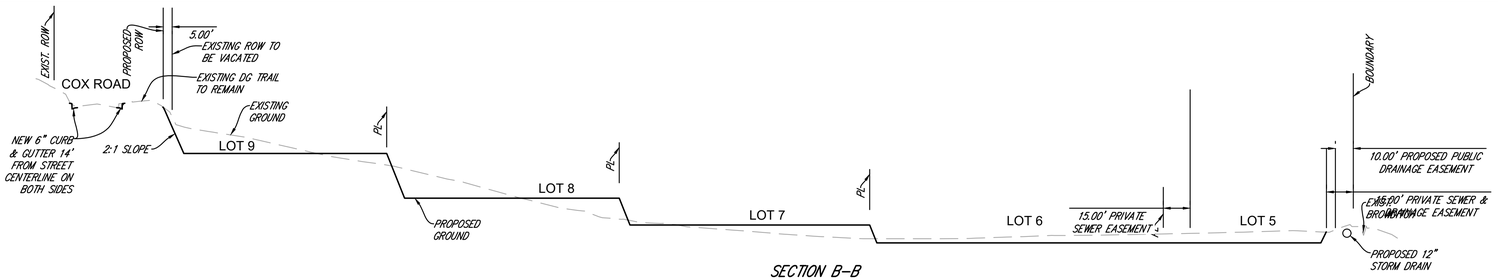
SECTION A–A
SCALE HORIZONTAL 1":40'
VERTICAL 1":8'



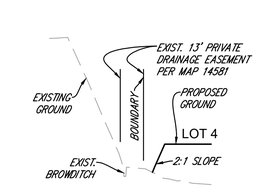
SECTION C–C
SCALE HORIZONTAL 1":40'
VERTICAL 1":8'



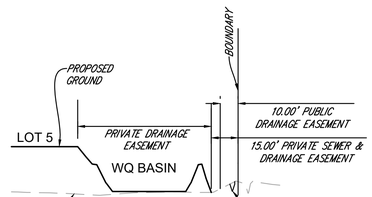
SECTION D–D
SCALE HORIZONTAL 1":40'
VERTICAL 1":8'



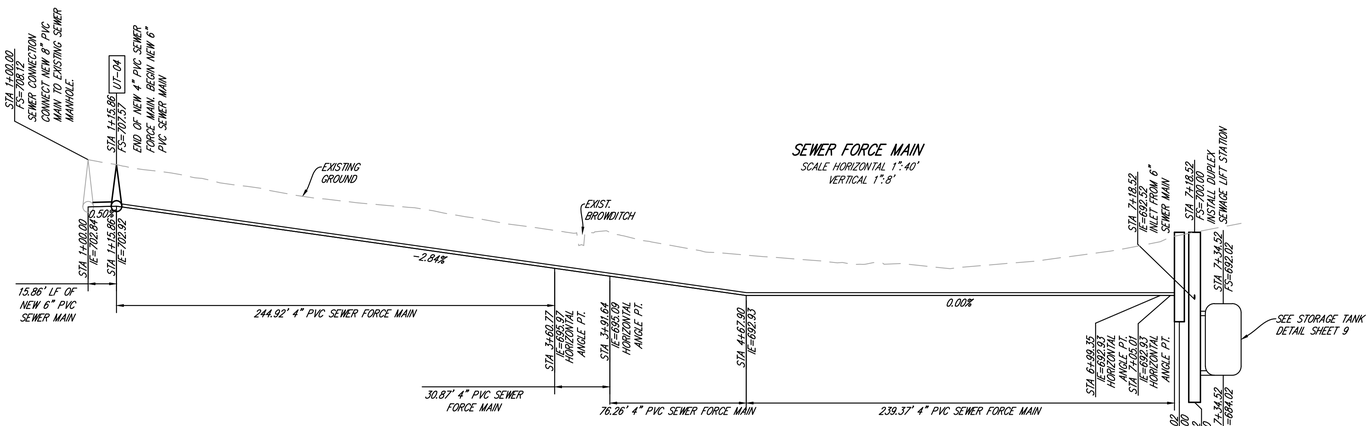
SECTION B–B
SCALE HORIZONTAL 1":40'
VERTICAL 1":8'



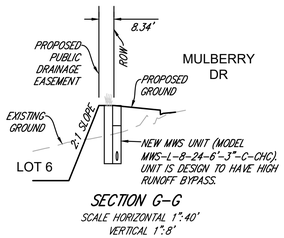
SECTION E–E
SCALE HORIZONTAL 1":40'
VERTICAL 1":8'



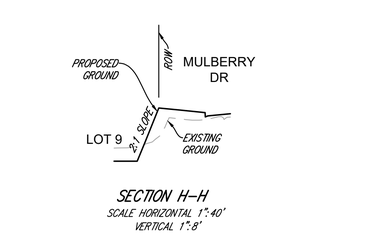
SECTION F–F
SCALE HORIZONTAL 1":40'
VERTICAL 1":8'



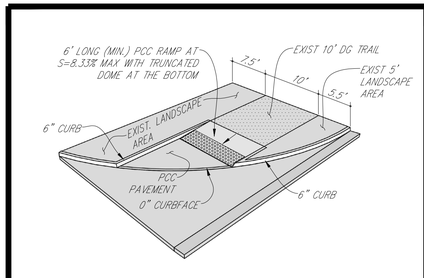
SEWER FORCE MAIN
SCALE HORIZONTAL 1":40'
VERTICAL 1":8'



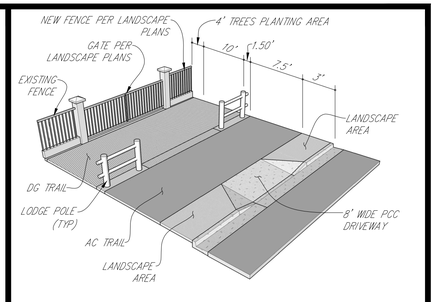
SECTION G–G
SCALE HORIZONTAL 1":40'
VERTICAL 1":8'



SECTION H–H
SCALE HORIZONTAL 1":40'
VERTICAL 1":8'



RAMP TO DG TRAIL TYPICAL DETAIL
NOT TO SCALE



MAINTENANCE ACCESS DRIVEWAY DETAIL
NOT TO SCALE

DATE	REMARKS
12/2021	PLANNING SUBMITTAL

EXCEL ENGINEERING
LAND PLANNING • ENGINEERING • CIVIL SURVEYING
440 STATE PLACE, ESCONDIDO, CA 92029
PH (760)745-8118 FX (760)745-8334

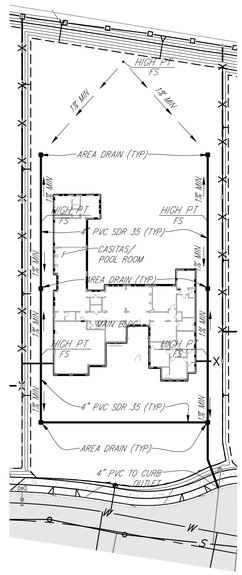
SHEET 5 OF 9 SHEETS
SECTIONS & DETAILS

MANNING HOMES
APN 182-131-14-00
COX ROAD / MULBERRY DR, SAN MARCOS CA
TSM21-0004

TSM21-0004

APN 182-101-13
APN 182-101-14
APN 182-101-09
APN 182-101-45
APN 182-101-46
APN 182-300-08
COX ROAD
NEW ROW
FENCING PER LANDSCAPE PLAN (TYP)
HATCH DENOTES AREA WHERE PROJECT RELINQUISHED ACCESS RIGHTS (TYP).
BLDG SETBACK (TYP)
LOT 1
GROSS/NET AREA =1.00 AC
=43562.25 SF
LOT 9
GROSS/NET AREA =1.00 AC
=43699.03 SF
APN 182-131-33
EXIST. MASONRY WALL TO REMAIN
H.O.A. PRIVATE ROAD & UTILITY EASEMENT
17.00' I.O.D.
APN 182-300-09
LOT 8
GROSS/NET AREA =1.00 AC
=43586.42 SF
LOT 2
GROSS/NET AREA =1.00 AC
=43569.48 SF
APN 182-131-32
EXIST. 13' PRIVATE DRAINAGE EASEMENT PER MAP 14581
SUBD. BOUNDARY
STREET "A"
H.O.A.
LOT 7
GROSS/NET AREA =1.02 AC
=44395.74 SF
APN 182-132-23
LOT 3
GROSS/NET AREA =1.00 AC
=43580.61 SF
APN 182-131-31
LOT A
GROSS/NET AREA =0.78 AC
MULBERRY DRIVE
HEIDEN CT
LOT 6
GROSS/NET AREA =1.06 AC
=46099.03 SF
LOT 4
GROSS/NET AREA =1.00 AC
=43581.72 SF
APN 182-131-30
10' HOA PRIVATE DRAINAGE EASEMENT
BLOCK WALL PER LANDSCAPE PLAN (TYP)
HOA WATER QUALITY EASEMENT
LOT 5
GROSS/NET AREA =1.00 AC
=43673.94 SF
SEWER PUMP CONTROLLER
PROPOSED PUBLIC DRAINAGE EASEMENT
APN 182-132-31
EXIST. PRIVATE DRAINAGE EASEMENT PER DOC 2003-0244861
EXIST. PRIVATE DRAINAGE EASEMENT PER MAP 14581
EXIST. 10' SEWER EASEMENT PER DOC 2021-0672595
APN 182-350-13
APN 182-350-14
PRIVATE SEWER PUMP AND STORAGE TANK
EXIST. PRIVATE DRAINAGE EASEMENT PER MAP 13746
APN 182-350-15
EXIST. 20.00' WIDE CITY OF SAN MARCOS DRAINAGE EASEMENT PER DOC NO. 1999-0426780 RECORDED ON JUNE 17, 1999
PROPOSED 10' PUBLIC DRAINAGE EASEMENT
15' HOA PRIVATE SEWER & DRAINAGE EASEMENT
HOA ACCESS ONLY GATES PER LANDSCAPE PLAN (TYP)
APN 182-350-16
HOA ACCESS ONLY GATES PER LANDSCAPE PLAN (TYP)

SCALE 1":40'
0 40 80 Feet



TYPICAL LOT DRAINAGE
NOT TO SCALE

NOTE: THE BUILDING FOOTPRINTS, LOCATION OF LOT DRIVEWAY APRONS SHOWN HERE ARE SUBJECT TO CHANGE. EXACT FOOTPRINTS & LOCATION WILL BE PART OF THE CONSTRUCTION DOCUMENT APPROVAL PROCESS.

NOTE: FENCES, BLOCK WALLS, & GATES ARE PER THE LANDSCAPE PLANS. THEY ARE SHOWN HERE FOR REFERENCE ONLY.

DATE	REMARKS
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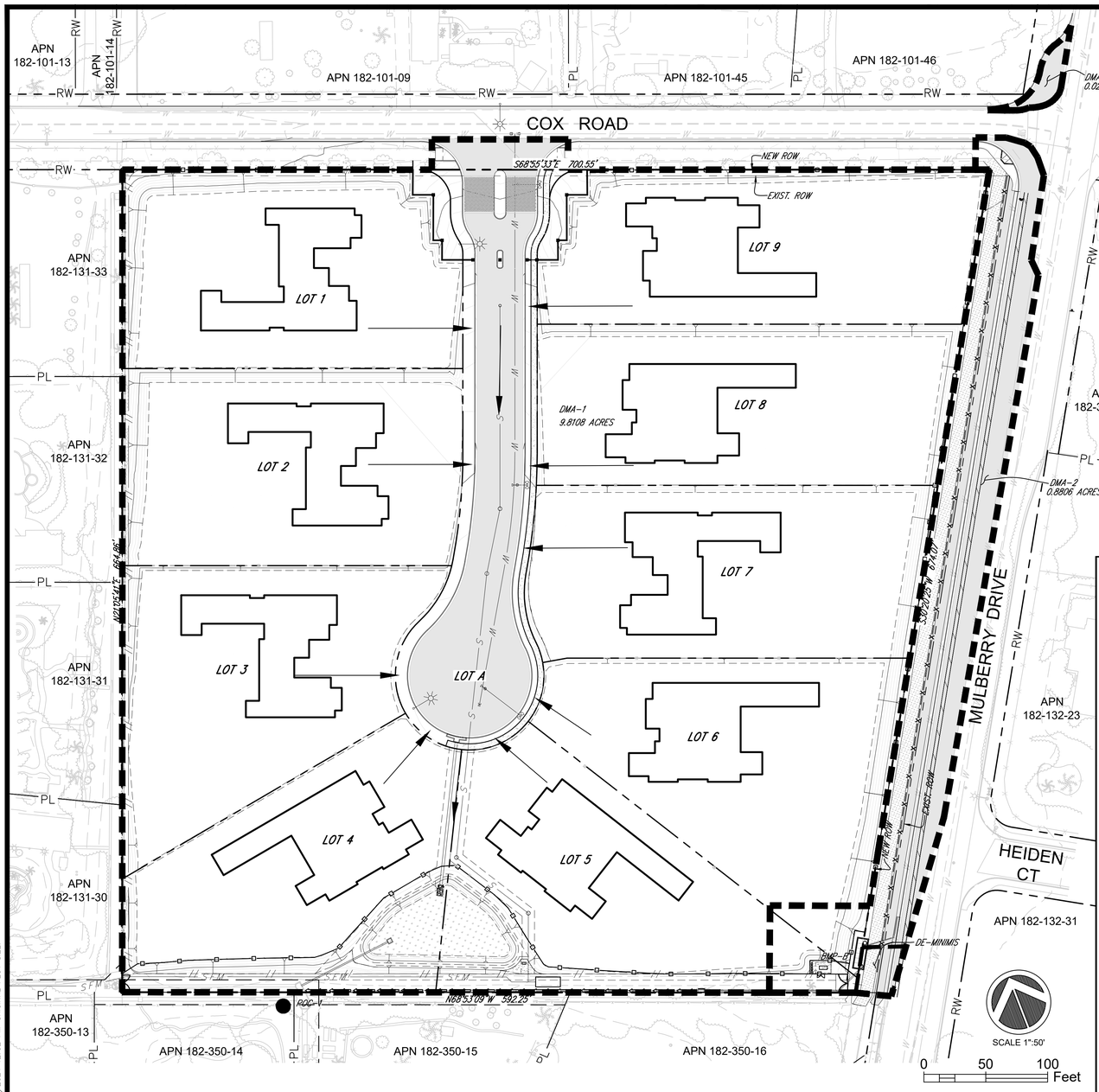
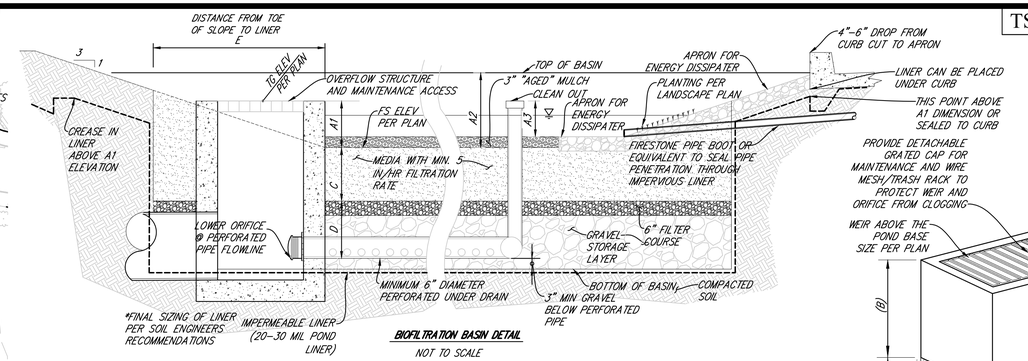
SHEET 6 OF 9 SHEETS
SITE PLAN

MANNING HOMES
APN 182-131-14-00
COX ROAD / MULBERRY DR, SAN MARCOS CA
TSM21-0004

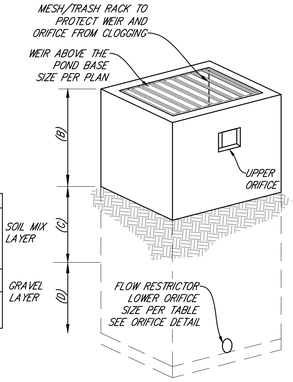
V: \21\21054\Engineering\ PM \ 03 \ IM \ 21054 SITEPLAN.dwg 11/26/2024 12:42 PM ORIGINAL PLOT SIZE: ---

TSM21-0004





BIOFILTRATION BASIN DETAIL
NOT TO SCALE



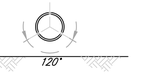
CATCHBASIN DETAIL
NOT TO SCALE

STRUCTURAL BIO-BASIN SUMMARY TABLE

DMA NAME	DMA TYPE	BMP NAME	TYPE OF BMP	EFFECTIVE AREA (SQFT)	A1 (INCH) WATER QUALITY	A2 (INCH) TOP OF BASIN	A3 (INCH) CLEAN OUT	A4 (INCH) TOP OF RISER	B (INCH) UPPER ORIFICE	C (INCH) MEDIA	D (INCH) GRAVEL	E (INCH) OFFSET	BOX RISER OVERFLOW STRUCTURE SIZE (INCHES)	ORIFICES DIAMETER		IMPERMEABLE LINER ?
														UPPER (INCH)	LOWER (INCH)	
DMA-1	DRAINS TO BMP	BMP-A	BIOFILTRATION	4677	6	36	6	12	3	21	60	47	24X24	3	2	YES
DMA-2+ DMA-3	DRAINS TO BMP	BMP-B	PROPRIETARY BIOFILTRATION (MWS)	FLOW-THROUGH 0.796 CFS	–	–	–	–	–	–	–	–	–	N/A	2.75	–

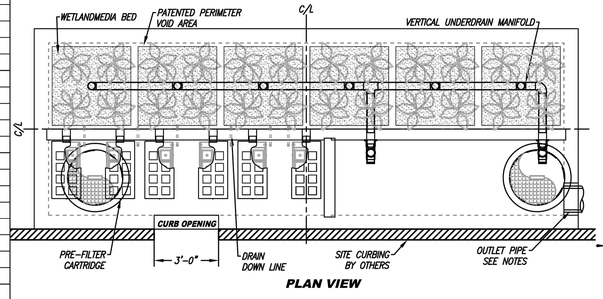
NOTE: FREEBOARD = A2-A1

DMA-ID	IMPERVIOUS (SQFT)	PERVIOUS (SQFT)	TOTAL (SQFT)
DMA-1	93,228.58	334,129.62	427,358.20
DMA-2	19,329.64	17,782.56	37,112.20
DMA-3	1,136.75	0.00	1,136.75
DE-MINIMIS	502.34	733.98	1,236.32

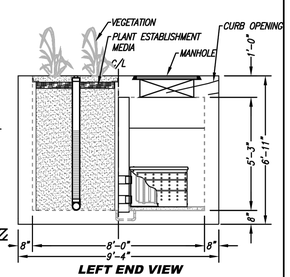


6" PVC PIPE PERFORATION LAYOUT DETAIL
NOT TO SCALE

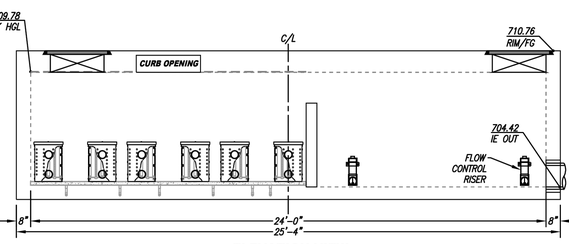
SITE SPECIFIC DATA			
PROJECT NUMBER		15258	
PROJECT NAME		MANNING HOMES	
PROJECT LOCATION		SAN MARCOS, CA	
STRUCTURE ID		----	
TREATMENT REQUIRED			
VOLUME BASED (CF)		FLOW BASED (CFS)	
N/A		0.796	
TREATMENT HGL AVAILABLE (FT)			N/K
PEAK BYPASS REQUIRED (CFS) – IF APPLICABLE			21.00
PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	N/A	N/A	N/A
INLET PIPE 2	N/A	N/A	N/A
OUTLET PIPE	704.42	RCP	12
	PRETREATMENT	BIOFILTRATION	DISCHARGE
RIM ELEVATION	710.76	710.76	710.76
SURFACE LOAD	PEDESTRIAN	N/A	PEDESTRIAN
FRAME & COVER	ø30"	OPEN PLANTER	ø30"
WETLANDMEDIA VOLUME (CY)			19.03
ORIFICE SIZE (DIA. INCHES)			ø2.75 EA
NOTES: PRELIMINARY NOT FOR CONSTRUCTION.			



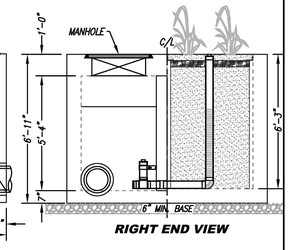
PLAN VIEW



LEFT END VIEW



ELEVATION VIEW



RIGHT END VIEW

INSTALLATION NOTES

1. CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO OFFLOAD AND INSTALL THE SYSTEM AND APPURTENANCES IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURERS' SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURER'S CONTRACT.
2. UNIT MUST BE INSTALLED ON LEVEL BASE. MANUFACTURER RECOMMENDS A MINIMUM 6" LEVEL ROCK BASE UNLESS SPECIFIED BY THE PROJECT ENGINEER. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PROJECT ENGINEER'S RECOMMENDED BASE SPECIFICATIONS.
4. CONTRACTOR TO SUPPLY AND INSTALL ALL EXTERNAL CONNECTING PIPES. ALL PIPES MUST BE FLUSH WITH INSIDE SURFACE OF CONCRETE (PIPES CANNOT INTRUDE BEYOND FLUSH). INVERT OF OUTFLOW PIPE MUST BE FLUSH WITH DISCHARGE CHAMBER FLOOR. ALL PIPES SHALL BE SEALED WATERTIGHT PER MANUFACTURER'S STANDARD CONNECTION DETAIL.
5. CONTRACTOR RESPONSIBLE FOR INSTALLATION OF ALL PIPES, RISERS, MANHOLES, AND HATCHES. CONTRACTOR TO USE GROUT AND/OR BRICKS TO MATCH COVERS WITH FINISHED SURFACE UNLESS SPECIFIED OTHERWISE.
6. VEGETATION SUPPLIED AND INSTALLED BY OTHERS. ALL UNITS WITH VEGETATION MUST HAVE DRIP OR SPRAY IRRIGATION SUPPLIED AND INSTALLED BY OTHERS.
7. CONTRACTOR RESPONSIBLE FOR CONTACTING BIO CLEAN FOR ACTIVATION OF UNIT. MANUFACTURER'S WARRANTY IS VOID WITHOUT PROPER ACTIVATION BY A BIO CLEAN REPRESENTATIVE.

GENERAL NOTES

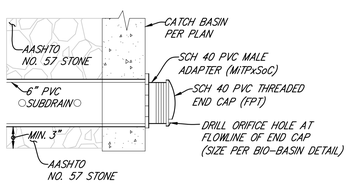
1. MANUFACTURER TO PROVIDE ALL MATERIALS UNLESS OTHERWISE NOTED.
2. ALL DIMENSIONS, ELEVATIONS, SPECIFICATIONS AND CAPACITIES ARE SUBJECT TO CHANGE. FOR PROJECT SPECIFIC DRAWINGS DETAILING EXACT DIMENSIONS, WEIGHTS AND ACCESSORIES PLEASE CONTACT BIO CLEAN.

INTERNAL BYPASS DISCLOSURE:

THE DESIGN AND CAPACITY OF THE PEAK CONVEYANCE METHOD TO BE REVIEWED AND APPROVED BY THE ENGINEER OF RECORD. HGL(S) AT PEAK FLOW SHALL BE ASSESSED TO ENSURE NO UPSTREAM FLOODING. PEAK HGL AND BYPASS CAPACITY SHOWN ON DRAWING ARE USED FOR GUIDANCE ONLY.

TREATMENT FLOW (CFS)	0.796
OPERATING HEAD (FT)	3.9
PRETREATMENT LOADING RATE (GPM/SF)	2.3
WETLAND MEDIA LOADING RATE (GPM/SF)	1.0

MWS-L-8-24-6'-3"-C-HC
STORMWATER BIOFILTRATION SYSTEM
STANDARD DETAIL



LOWER ORIFICE DETAIL
NOT TO SCALE

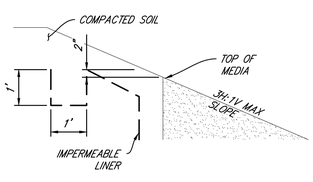
PERMANENT WATER QUALITY TREATMENT FACILITY
KEEPING OUR WATER WAYS CLEAN
MAINTAIN WITH CARE – NO MODIFICATIONS WITHOUT AGENCY APPROVAL

DETAIL
WATER QUALITY SIGN– PLACED AT EACH BIOFILTRATION BASIN

NOTE: ALL BIOFILTRATION AREAS WILL HAVE A SIGN POSTED TO BE VISIBLE AT ALL TIMES.

DETAIL
"NO DUMPING" AT CATCH BASINS

NOTE: ALL CATCH BASINS WITH GRATES SHALL BE STENCILED WITH CITY REQUIRED ITEM PER ABOVE DETAIL (DAS MANUFACTURING #SDO OR EQUIVALENT).



IMPERMEABLE LINER EDGE ANCHOR DETAIL
NOT TO SCALE

LEGEND

DMA BOUNDARY

WATER QUALITY EFFECTIVE AREA

GENERAL DRAINAGE DIRECTION PATH

EXISTING SITE FEATURES:

- THE APPROXIMATE DEPTH TO GROUNDWATER IS GREATER THAN 20 FEET.
- THERE ARE NO NATURAL HYDROLOGIC FEATURES ON THE SITE.
- THE SITE PROPOSES TO CONNECT TO THE EXISTING PUBLIC STORM DRAIN SYSTEM LOCATED IN THE SOUTH EDGE OF THE SITE.
- BASED ON WATERSHED MAPPING OF POTENTIAL CRITICAL COARSE SEDIMENT YIELD AREAS (CCSYA), THERE ARE NO CCSYA LOCATED WITHIN THE PROJECT BOUNDARY OR TRIBUTARY TO THE RUNOFF BYPASSED AROUND THE SITE.

NOTE:
HOA WILL BE THE FINAL OWNER OF BMP-A, MAINTAIN BMP INTO PERPETUITY, AND FUNDING MECHANISM FOR MAINTENANCE.

HYDROLOGIC SOIL GROUP
THE HYDROLOGICAL SOIL GROUP FOR THIS SITE IS TYPE C.

DATE	REMARKS
12/2021	PLANNING SUBMITTAL

EXCEL ENGINEERING
LAND PLANNING • ENGINEERING • QSP/QSD/SWPPP
440 STATE PLACE, ESCONDIDO, CA 92029
PH (760)745-8118 FX (760)745-8154

SHEET 7 OF 9 SHEETS
PRELIMINARY WQMP BMP

MANNING HOMES
APN 182-131-14-00
COX ROAD / MULBERRY DR, SAN MARCOS CA
TSM21-0004

PACKAGE DUPLEX PUMP LIFT STATION - MANUFACTURED BY PACIFIC SOUTHWEST INDUSTRIES

COX AND MULBERRY ROAD - SAN MARCOS

Furnish and install complete pre-packaged duplex Lift Station model **#PSI-MAN080723** as manufactured by Pacific Southwest Industries (National phone # 800-358-9095)

This pre-packaged Lift Station shall incorporate a quick removal system manufactured by the pump manufacturer. The pump(s) shall be guided to the discharge base elbow by a single or double guide rail and shall be stainless steel and shall extend from the discharge base elbow to the upper guide bracket mounted on 1-5/8" x 1-5/8" channel strut just below the basin cover. Stainless steel lifting chain or cable shall be supplied and properly installed to remove the pump from the wet well. The internal discharge piping shall be completely pre-plumbed with pressure rated schedule 40 or 80 PVC pipe as indicated and extend 12" beyond the wet well and valve vault side wall for contractor connection to the force main piping. The pump(s) discharge piping shall have a check and ball valve installed on each pump discharge. The Lift Station shall include control panel and level control floats. The control panel shall be suitable for surface mounting or free standing on a leg kit if the site conditions require it.

OPERATING CONDITIONS:
The submersible pump shall be capable of handling residential and commercial sewage and grinding it to a fine slurry, enabling it to be pumped over long distances.

CONSTRUCTION:
Each centrifugal sewage grinder pump shall be the Certified LGH/ LGV-Series pumps as manufactured by Liberty Pumps, Bergen NY. The casting enclosing the motor shall be constructed of class 30 cast iron. The motor housing shall be oil-filled to dissipate heat. Air-filled motors shall not be considered equal since they do not properly dissipate heat from the motor. Mating parts shall be machined and sealed with a Buna-N O-ring. All fasteners exposed to the process fluid shall be stainless steel. The motor shall be protected on the top side with a sealed cast iron cord entry plate, which is potted to prevent water from entering through the cord. The motor shall be protected on the lower side with a dual mechanical seal arrangement and an oil-filled intermediate chamber. The upper (inner) seal shall be a two-piece mechanical seal with a Graphite Impregnated Carbon rotating and a silicon carbide stationary face. The lower (outer) seal shall be a two-piece mechanical seal with silicon carbide faces. The upper and lower bearings shall be sized to properly withstand radial and thrust loads produced throughout the full operating range of the pump.

POWER AND CONTROL CORD:
The submersible pump shall be supplied with 35, 50, or 100 feet of a multi-conductor cord of type W. These type W power cords carry a voltage rating of 600 V, a temperature rating of 90°C, have oil-resistant insulation, are water- and weather-resistant, UL listed, and CSA approved. The power cord shall be sized for the rated full load amps of the pump for continuous duty in accordance with the NEC. A separate type SOOW control cord of equal length shall also exit the pump. The cord entries to the pump shall be protected via two sealing methods. The cords first pass through a Buna-N compression grommet that seals against the outer jacket of the cable. The Buna-N grommet also doubles as a strain relief. Each individual conductor then continues into a chamber that is filled with epoxy potting compound. The epoxy potting compound seals each individual conductor and protects against any intrusion of liquid into the motor cavity in the event of wicking. The power and control cord leads shall be connected to the motor leads via a terminal block.

MOTOR :
The motor shall be oil-filled, inverter duty, Class H insulated, NEMA A design, and rated for continuous duty. Since air-filled motors are not capable of dissipating heat efficiently, they shall not be considered equal. The mid chamber design utilizing MidTherm™ Cooling technology shall allow for oil in the motor chamber to reject heat to the pumped media and provide cooling to the motor. This motor design shall provide significantly reduced operating temperatures. Pumps requiring an auxiliary cooling means shall not be considered equal. The motor shall be constructed to meet IE3 Premium Efficiency standards in accordance with NEMA MG1. The copper stator windings shall be insulated with moisture-resistant Class H insulation materials, rated for 180°C per NEMA MG1 1.66. The maximum continuous temperature of pumped liquids shall be 40°C. The winding operating temperature at rated horsepower and service factor shall be a maximum of 125°C @ 40°C ambient. Motor shall have UL approved thermostats mounted directly on the stator windings. Motor shall have three thermostats, one on each phase. The thermostat leads of the control cord shall be connected to a motor control relay in the control panel.
Motor service factor shall be 1.0 under normal conditions and 1.0 when operated on a Variable Frequency Drive (VFD) per MG1 standard. Motor shall have a voltage tolerance of ±10% from nominal. Motor shall meet the requirements of NEMA MG1 Part 30 and 31 for operation on Pulse Width Modulation type VFD with inverter duty rated magnet wire and insulation. Motor shall be capable of handling up to 15 evenly spaced starts per hour without overheating.

BEARINGS AND SHAFT:
The shaft shall be supported by two ball bearings. The top bearing shall be a deep groove radial contact ball bearing and the lower bearing shall be a double row angular contact ball bearing designed to handle the radial and axial forces incurred by pumping. The lower bearing shall be positively retained by a threaded bearing retaining nut, which eliminates any axial movement or rotation of the outer bearing race. Both bearings shall be permanently lubricated by the oil that fills the motor housing. Pump designs requiring scheduled bearing maintenance shall not be considered equal. Pumps with single row lower bearings or sleeve bearings shall not be considered equal. The bearing system shall be sized to provide a minimum of 100,000 hours B10 bearing life throughout the operating range of the pump. Pumps that only provide a 50,000-hour B10 bearing life shall not be considered equal. The motor shaft shall be made of 416 stainless steel. The motor shaft shall be constructed from a single piece of stainless steel. Spin welded shafts shall not be considered equal. The shaft shall be designed to withstand the maximum torque and radial loads present during start-up and normal operation. Shafts of carbon steel or chrome-plated shafts shall not be considered equal.

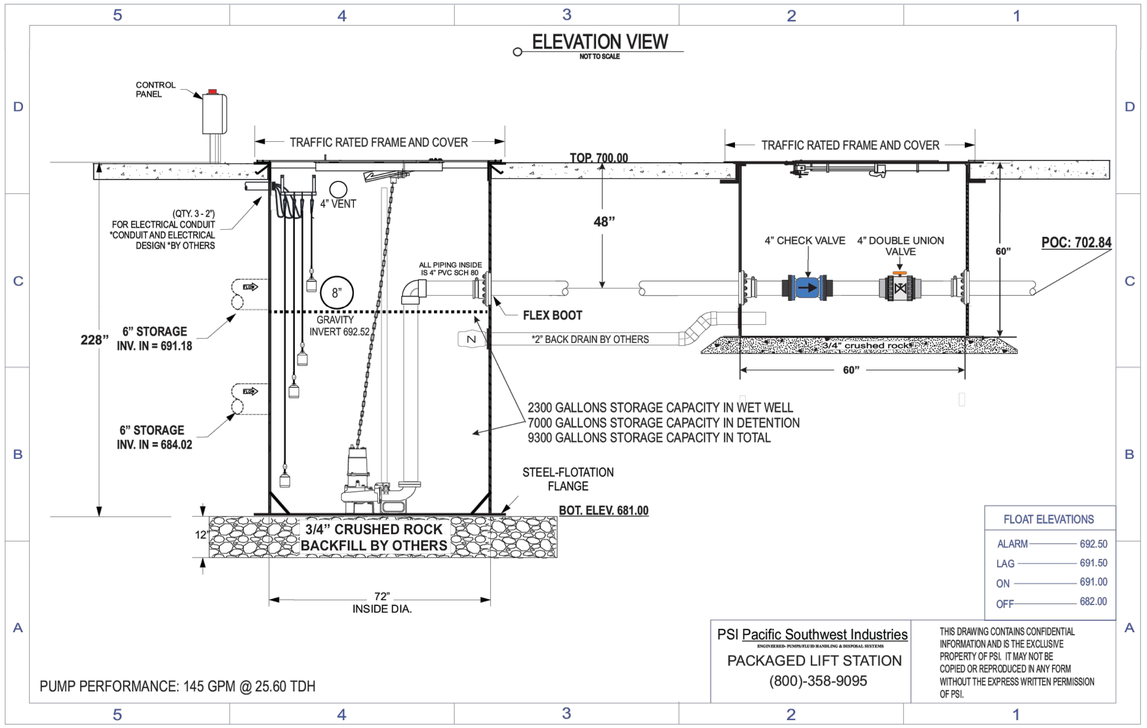
SEALS:
The pump shall have two shaft seals separated by an oil chamber. Pumps utilizing single seal technology shall not be considered equal. A leak detection probe shall be positioned in the oil chamber and shall allow for continuous monitoring for lower (outer) seal failure. The lower seal shall be a two-piece design that is easily serviceable. Shaft seals shall not require scheduled maintenance. The upper (inner) seal shall be Graphite Impregnated Carbon on silicon carbide and the lower seal shall be silicon carbide on silicon carbide. Both seals shall include stainless steel housings and Viton elastomers. Lower seals shall be optionally available in tungsten carbide.

CUTTER MECHANISM:
The cutter and plate shall consist of hardened 440 stainless steel with a Rockwell C hardness of 55-60. The stationary cutter plate shall have specially designed orifices through it, which enable the slurry to flow through the pump housing at an equalized pressure and velocity. The stationary cutter plate shall feature patented V-Slice® Cutter Technology. This superior cutting system consists of V shapes to maximize cutting action and arc shape exclusion slots to outwardly eject debris from under the rotary cutter. The rotary cutter shall have four blades and be designed with a recessed area behind the cutting edge to prevent the accumulation and binding of any material between rotary cutter and the stationary cutter plate. The cutter shall be capable of over 400,000 cuts per minute. The cutting system shall incorporate close tolerances for optimum performance. Ring or radial cutters, or those that grind on the outside circumference of shall not be considered equal.

QUICK REMOVAL SYSTEM:
The pumping unit(s) shall be equipped with a quick removal system (QRS). The construction shall be such that the pump(s) will automatically connect to the discharge piping when lowered into place on the discharge connector. There shall be no need for personnel to enter the wet well to accomplish installation or removal of the pump(s). The pumping unit(s) shall be fitted with stainless steel lifting chain(s) of sufficient length and strength to permit the raising and lowering of the unit(s). The chain(s) shall be fastened at the top of the structure near the access opening. The need for a protective coating shall not be required. A sliding guide bracket shall be an integral part of the pumping unit and the pump casing shall have a machined connection with a bracket to connect with the discharge connection. Sealing of the pumping unit to the discharge connection shall be accomplished by a single linear downward motion of the pump with the entire weight of the pumping unit guided by a pawl, thereby wedging the pumping unit tightly against the discharge connector. No portion of the pump shall bear directly on the floor of the sump, nor shall a rotary motion of the pump be required for sealing. All fasteners meeting the pumpage shall be stainless steel. Two corrosion resistant guide pipes shall be furnished and installed for each pump to permit raising and lowering of the pump.

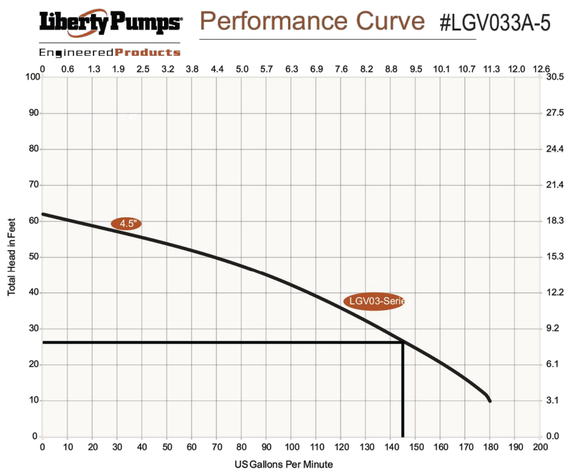
FIBERGLASS WET WELL:
The fiberglass wet well with an anti-flotation flange shall have the proper diameter and depth below the lowest inlet to promote proper cycling while maintaining the rim at grade. The fiberglass wet well shall be manufactured using a process that is filament wound and or chopped spray. The wet well shall be constructed with an anti flotation flange. Lifting lugs shall be required for those wet wells 48 inches in diameter and larger for setting of the wet well. The laminate shall have a Barcol hardness of at least 90% of the resin manufactures minimum specified hardness for cured resin on both the interior and exterior surfaces. The minimum wall thickness of the wet well shall not be less than 1/4". Stainless steel studs will be encapsulated in the bottom of the wet well to allow the mounting of the quick removal system. The top rim flange will be a minimum of 2" wide to allow for the installation of the pedestrian rated aluminum cover to the rim flange or shall be rimless if the cover is specified for H20 off street locations. The wet well shall be provided with "unseal" fittings that can be installed in the field to insure proper elevation of the inlet, vent, and electrical on the side of the wet well. The wet well will house 2 - swing check valves, and 2 – shut off valves.

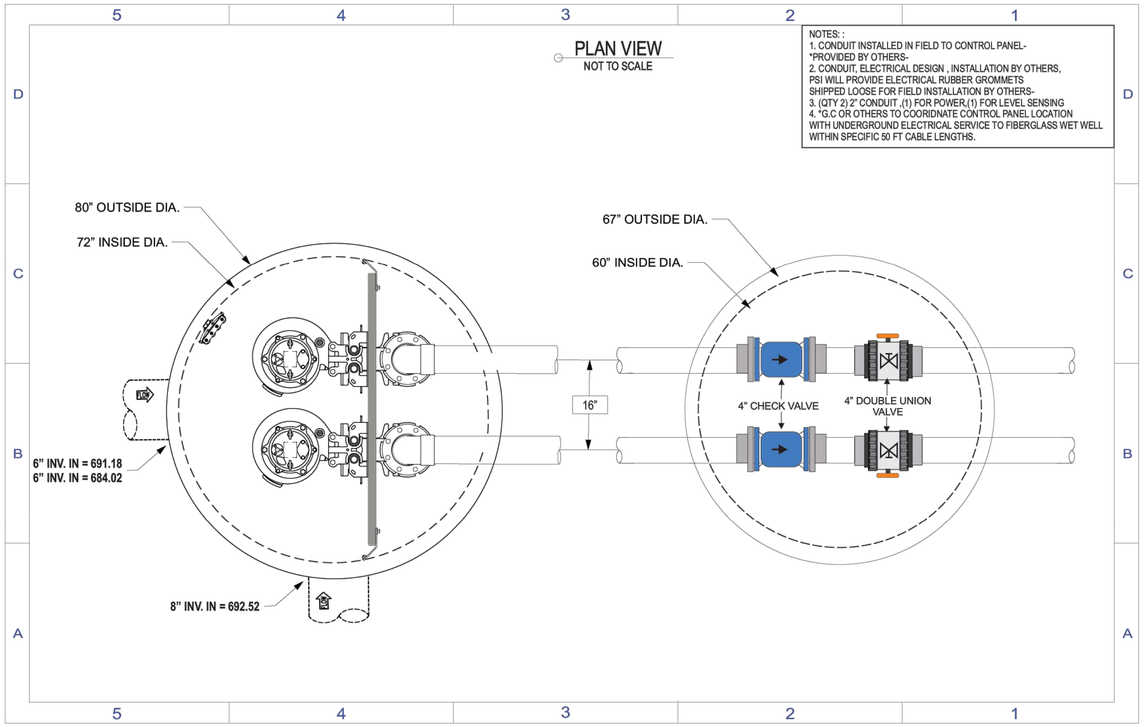
DUPLEX ALTERNATING CONTROL PANEL:
The duplex control panel, as a minimum, shall include the appropriate enclosure type for the environment it is to be installed in and should include the following: Motor starters, motor circuit protectors or variable frequency drives (VFD), pump run indicator(s), operation selector switch(es), high water alarm and light, silence switch, dry contact for alarm, numbered terminals for all incoming power, pump motor(s) and level controls. The control panel shall be UL listed 508 or 913.



HAZEN-WILLIAMS EQUATION/HEAD LOSS IN WATER PIPE	
$(f) = 0.2083\ (100 / c)^{1.852}\ q^{1.852} / dh^{4.8655}$	
c=	150 HDPE / PVC
q=	145 GPM
dh=	4" SCH 40 = 4.03
FRICTION LOSS PER 100 FT f=	1.12
Velocity (ft/s) =	3.65

LIFT STATION PROFILE & CALCULATIONS					
4" SCH 40 = 4.03 SCH 80 = 3.83					
4" PVC PIPE	(QTY)	400	x	1 FT	400 FT
4" PVC 90 ELBOW	(QTY)	1	x	10.1 FT	10.1 FT
4" PVC 45 BEND	(QTY)	4	x	5.1 FT	20.4 FT
4" PVC TEE	(QTY)	0	x	26.8 FT	0 FT
4" BALL VALVE	(QTY)	1	x	2.7 FT	2.7 FT
4" CHECK VALVE	(QTY)	1	x	22 FT	22 FT
TOTAL EQUIVALENT LENGTH					455.2 FT
FRICTION LOSS PER 100 FT 4" PVC	145 GPM	1.1 FT		PER 100 FT	
FRICTION LOSS 4"	455.2	/ 100	x	1.1 FT	5.11 FT
TOTAL DYNAMIC HEAD					
4" FRICTION LOSS					5.11 FT
STATIC HEAD				+	20.50 FT
PERFORMANCE	145 GPM @ 25.61	FT TDH THROUGH 4" PVC LINE			





LIFT STATION DETAILS

NOTE: VERIFY ALL ELEVATIONS PRIOR TO FABRICATION. OTHERS TO VERIFY ALL INLET/OUTLET ORIENTATIONS PRIOR TO FABRICATION AND INSTALLATION. *ALL PIPE OPENINGS AND SEALING SHALL BE COMPLETED IN FIELD BY OTHERS.

PSI Pacific Southwest Industries
ENGINEERED- PUMPS/FLUID HANDLING & DISPOSAL SYSTEMS
18541 COLLIER . . LAKE ELSINORE, CA 92530 PH: 800 358-9095

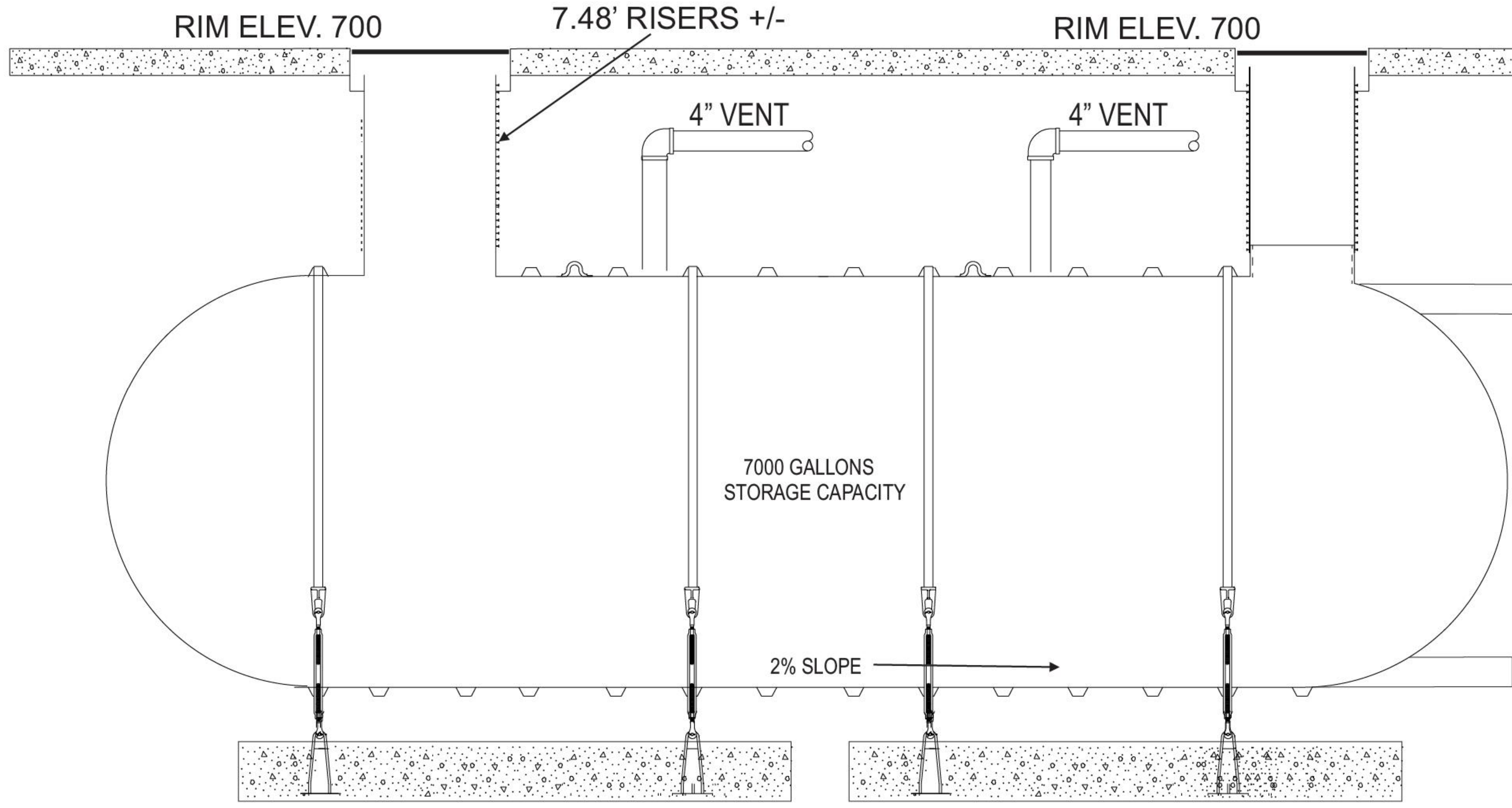
No.	Date	Description
1	10/24/24	FIRST DRAFT

LIFT STATION DETAILS
COX AND MULBERRY ROAD
SAN MARCOS

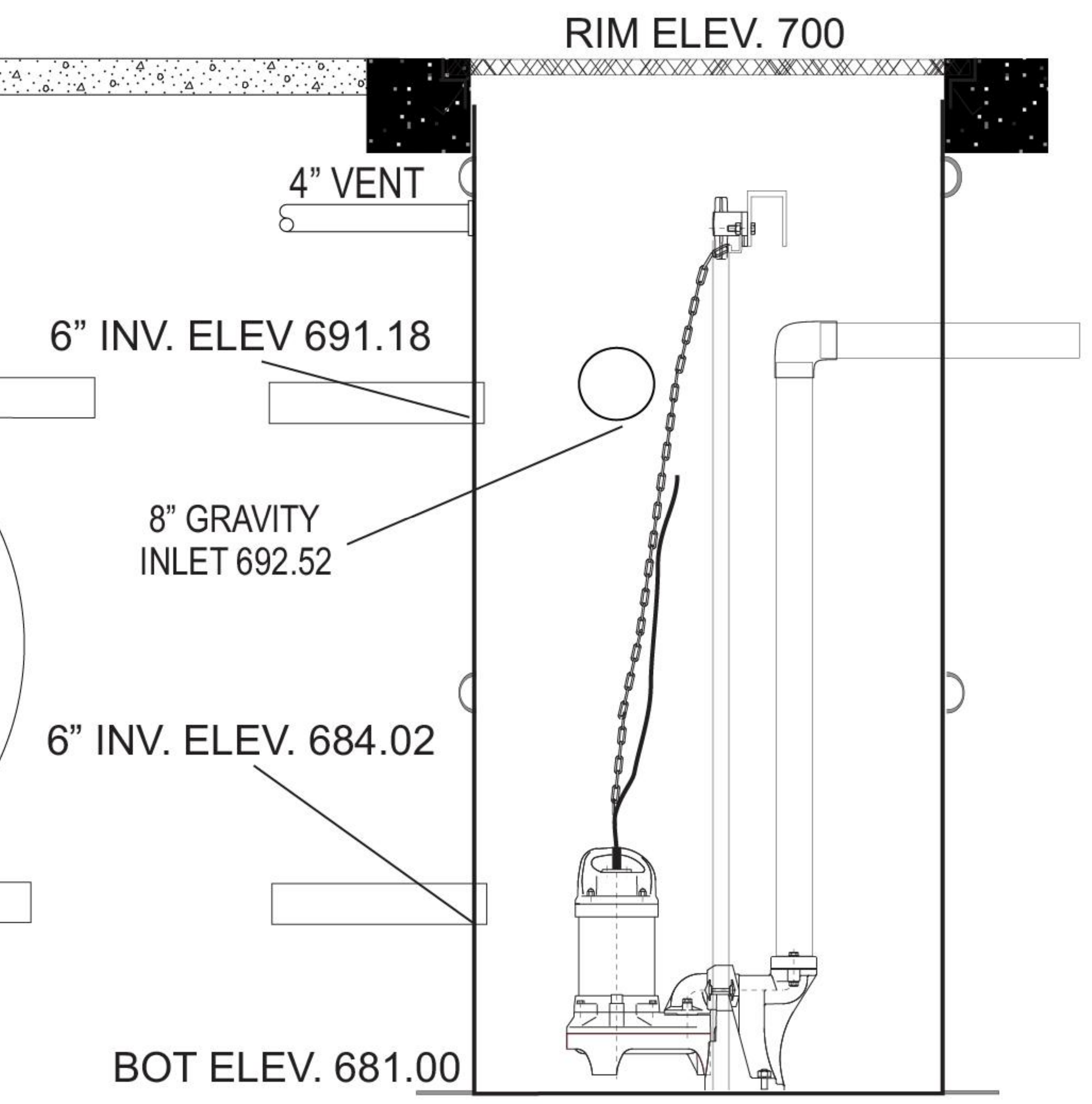
Date:	10/24/24
Drawn by:	DM
Checked by:	OR
Scale:	NTS
Sheet No.	1 OF 1

LSD-1

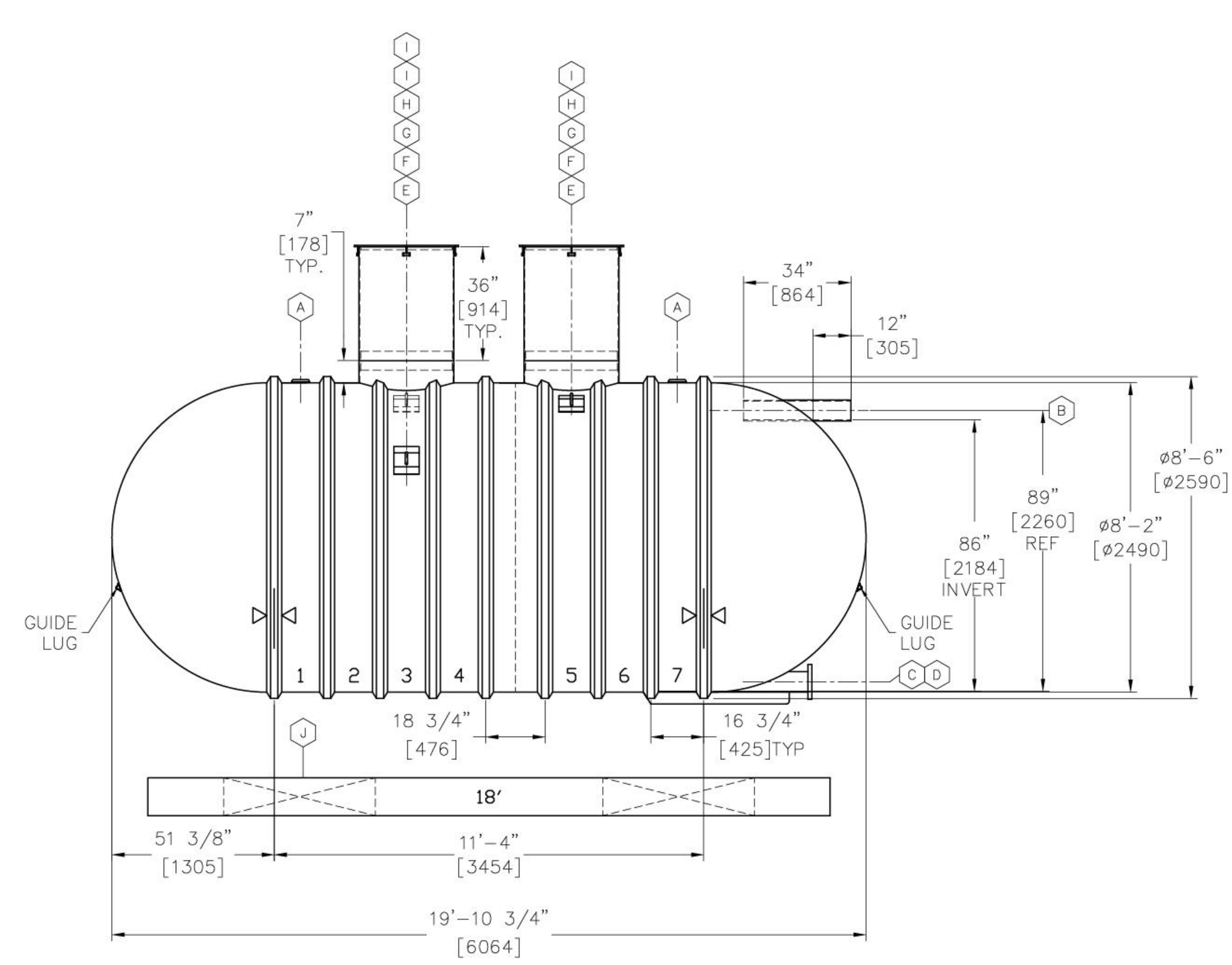
SIDE PROFILE



8 FT DIAMETER TANK X 19.5 FT LONG



DPLX PUMP SYSTEM
SEE LSD-1



NOTES:

1. ALL DIMENSIONS SHOWN ARE IN FEET/INCHES. DIMENSIONS IN BRACKETS ARE IN mm.
2. DRAWING EXPIRATION: DRAWING VALID FOR SIX (6) MONTHS FROM DATE OF LAST REVISION. XERXES RESERVES THE RIGHT TO REVIEW AND UPDATE.
3. ONLY MATERIALS THAT HAVE BEEN TESTED AND APPROVED BY XERXES SHOULD BE USED FOR FIELD BONDING OF CONTAINMENT SUMP OR ACCESS RISER COMPONENTS.
4. INVERT DIMENSION FROM TANK I.D.
5. ROTATE SHIPMENT ON TRAILER TO AVOID COMPONENT DAMAGE.
6. NOMINAL TANK WEIGHT: 2,400 lbs. [1,100 kg]

ITEM	QTY	DESCRIPTION	PART NO.
A	2	4"NPT SERVICE FITTING	C310021
B	1	6"DIA SCH 40 PVC HORIZONTAL PIPE	C600176
C	1	6"DIA FRP FLANGED & GUSSETED TANGENTIAL NOZZLE	C600048
D	1	FLANGE BOTTOM SUPPORT	C600055
E	2	29 1/2"I.D. FIBERGLASS ACCESS OPENING WITH 29 3/8"O.D. ALIGNMENT RING	–
F	2	30"DIA (29 1/2"I.D.) x 36"HIGH ORENCO FRP ACCESS RISER (SUPPLIED BY XERXES, SHIPPED LOOSE)	–
G	2	30"DIA ORENCO FLD SERIES FRP ACCESS LID WITH GASKET (SUPPLIED BY XERXES, SHIPPED LOOSE)	FLD30G
H	2	1 GAL FIELD LAMINATION KIT	C810011
I	3	LIFTING LUG (10" x 8") 36" , 36", 25"	C340009
J	2	18' PREFABRICATED CONCRETE DEADMEN KIT	–
▷◁	2	HOLD DOWN STRAP LOCATION	–

CUSTOMER DESIGNATION:
COX MULBERRY

00	REVISION DESCRIPTION				
DRN –	DATE –	CHK'D –	DATE –	APPR'D –	DATE –

XERXES®

DRN: DR	DATE: 10-31-24	TITLE: 8FT SWX CAP. 25,000 LITRES 7,000 GALLONS MULBERRY COX
CHK'D: LJB	DATE: 10-31-24	
APPR'D:	DATE:	
SALES MANAGER: DAVID HOLMES	DR. SIZE: B	DR. NUMBER: XS-008087 REV: 00
	SCALE: N.T.S.	SHT 1 OF 1

INDUSTRY TYPE: M205 WASTEWATER-ONSITE SEPTIC

SEWAGE DETENTION DETAIL

PSI pacific southwest industries
ENGINEERED- PUMPS/FLUID HANDLING & DISPOSAL SYSTEMS
18541 COLLIER AVE., LAKE ELSINORE, CA 92530 PH: 800 358-9095

No.	Date	Description
1	10/24/24	ELEVATION CHANGES

LIFT STATION DETAILS
COX AND MULBERRY
SAN MARCOS, CA

Date: 10/24/24
Drawn by: OR
Checked by: SR
Scale: NTS
Sheet No. 1 OF 1

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