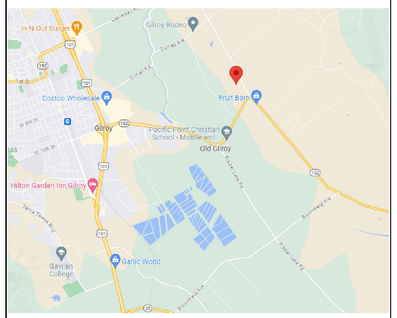
PROPOSED MANUFACTURED HOMES
AT CHEN FARM
2740 FERGUSON ROAD
GILROY, CA 95020
SANTA CLARA COUNTY
APN: 841-21-022

MAP (NO SCALE)



PROJECT DIRECTORY

OWNER/APPLICANT:
JOE CHEN
CHEN FARMS
10482 GARCIA LANE
GILROY, CA 95020

ARCHITECT:
REID LERNER ARCHITECTS
7680 MONTEREY STREET, SUITE 105
GILROY, CA 95020

MEP ENGINEERING:
GMEP ENGINEERS
26439 RANCHO PKWY S STE 120
LAKE FOREST, CA 92630

SURVEY:
CARNES & EKPARIAN, INC.
9505 SUGAR BABE DRIVE
GILROY, CA 95020

CIVIL ENGINEER:
HANNA BRUNETTI
7651 EIGLEBERRY STREET
GILROY, CA 95020

GEOTECHNICAL ENGINEER:
GEO-LOGIC ASSOCIATES
6300 SAN IGNACIO, SUITE A
SAN JOSE, CA 95119

TRAFFIC ENGINEER:
JEFF WALLER CONSULTING
GILROY, CA 95020

FIRE PROTECTION DESIGN:
NOR-CAL FIRE PROTECTION
16840 JOLEEN WAY SUITE A
MORGAN HILL, CA 95037

ENVIRONMENTAL HEALTH SPECIALIST:
CHRISTOPHER DAY
PO BOX 26
REDWOOD CITY, CA 94064

STEEL BUILDING DESIGN & SUPPLY:
EMPIRE STEEL BUILDINGS
5230 CARROLL CANYON RD
SAN DIEGO, CA 92121

FOUNDATION DESIGN:
ALEXANDER TOUNIAN ENGINEERING
8945 HILLARY LANE
STOCKTON, CA 95212

PROJECT DATA

APN: 841-21-022

OCCUPANCY GROUP:
PROPOSED: S-2 (BARN), B (BUSINESS OFFICE), & R-3 (WORKER'S HOUSE)

CONSTRUCTION TYPE:
PROPOSED BARN: II-B SPRINKLERED (PRE-ENGINEERED STEEL FRAME BUILDING WITH METAL SKIN WALL AND ROOF)
PROPOSED WORKER'S HOUSE: V-B (WOOD FRAME)

SPRINKLER: PROPOSED NEW

BUILDING HEIGHT:
BARN BUILDING: 22'-0"±
WORKER'S HOUSE: 11'-5"±

ZONING: A-40Ac

FLOOD ZONE: ZONE D (BUILDINGS) & ZONE A (DRAIN FIELD)

SCOPE OF WORK

1) INSTALL A 840 SQUARE FEET (56'X15') PRE-MANUFACTURED HOME (WITH A TOTAL OF 3 HOMES) TO SERVE AS RESIDENT FOR THE FARM WORKERS WORKING ON THE FIELD.

3) BUILD NEW GRAVEL DRIVEWAY FOR VEHICLE ACCESS AND LOADING AREA. BUILD 3 PARKING SPACES, INCLUDING 1 ACCESSIBLE SPACE.

4) PROVIDE SITE GRADING AND DRAINAGE. BUILD BIORETENTION POND TO SUPPORT ON-SITE STORM WATER MANAGEMENT.

5) BUILD DRAIN FIELD & SEPTIC TANK TO SUPPORT PROPOSED STRUCTURES.

6) INSTALL WATER TANKS TO SUPPORT PROPOSED STRUCTURES.

7) PROVIDE PG&E SERVICE LINES TO PROPOSED STRUCTURES.

NOTE: ITEMS 3-7 ARE UNDER SEPARATE PERMITS.

DRAWINGS INDEX

DEFERRED SUBMITTAL

1) FIRE SPRINKLER & FIRE ALARM PLANS SHALL BE DEFERRED SUBMITTAL UNDER A SEPARATE PERMIT.

APPLICABLE CODES & REQUIREMENTS

1. ALL WORK SHALL COMPLY WITH APPLICABLE CODES & ORDINANCES INCLUDING:
   - 2022 CALIFORNIA BUILDING CODE (CBC)
   - 2022 CALIFORNIA FIRE CODE (CFC) WITH LOCAL AMENDMENTS
   - 2022 CALIFORNIA ELECTRICAL CODE (CEC)
   - 2022 CALIFORNIA PLUMBING CODE (CPC)
   - 2022 CALIFORNIA MECHANICAL CODE (CMC)
   - 2022 CALIFORNIA ENERGY CODE (CENC)
   - 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CGBSC)
2. OBTAIN PERMITS AND INSPECTIONS AS REQUIRED.
3. INSTALL EQUIPMENT AND MATERIALS IN ACCORDANCE TO MANUFACTURERS' INSTRUCTIONS AND RECOMMENDATIONS.
4. OWNER SHALL OBTAIN CLEARANCES FROM PLANNING, ENGINEERING, BUILDING & FIRE DEPARTMENTS BEFORE THE START OF CONSTRUCTION
5. APPROVED NUMBERS & ADDRESSES SHALL BE PLACED ON ALL NEW & EXISTING BUILDINGS IN SUCH A POSITION AS TO BE PLAINLY VISIBLE & LEGIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY. SAID NUMBERS SHALL CONTRAST WITH THEIR BACKGROUND.
6. CONTRACTOR SHALL PROVIDE TEMPORARY SHORING, SCAFFOLDING, BRACING & BARRICADES AS REQUIRED
7. PROPOSED COMMERCIAL SIGNAGE SHALL BE AUTHORIZED BY A SEPARATE BUILDING PERMIT APPLICATION AND SUBJECT TO REVIEW AND APPROVAL.
8. CONTRACTOR SHALL APPLY MANDATORY CALGREEN REQUIREMENTS AS LISTED ON PLANS.
9. WORK ON THE PUBLIC RIGHT OF WAY SHALL REQUIRE PERMIT FROM THE PUBLIC WORKS DEPARTMENTS.

PARKING ANALYSIS

VEHICLE PARKING:
REQUIRED:
PROPOSED: 3 (2 STANDARD + 1 ACCESSIBLE)

ACCESSIBLE PARKING:
MINIMUM REQUIRED (PER CBC TABLE 11B-208.2): 1
PROPOSED: 1
VAN ACCESSIBLE:
MINIMUM REQUIRED: 1 (PER CBC 11B-208.2.4)
PROPOSED: 1

CLEAN AIR/VAN POOL/EV PARKING:
MINIMUM REQUIRED (PER CGBSC TABLE 5.106.5.3.1): 0
PROPOSED: 0

ELECTRIC VEHICLE (EV) CHARGING SPACES:
MINIMUM REQUIRED (PER CGBSC TABLE 5.106.5.3.1): 0
PROPOSED: 0

BICYCLE PARKING:
SHORT TERM:
MINIMUM REQUIRED (PER CGBSC 5.106.4.1.1): 1
PROPOSED: 1
LONG TERM:
MINIMUM REQUIRED (PER CGBSC 5.106.4.1.2): 1
PROPOSED: 1

NO.	REVISION	DATE	BY
1	PLANCHECK COMMENTS	01-29-25	

LICENSED ARCHITECT
REID T. LERNER
No. C 19293
EXP: 31 AUG 2025
STATE OF CALIFORNIA

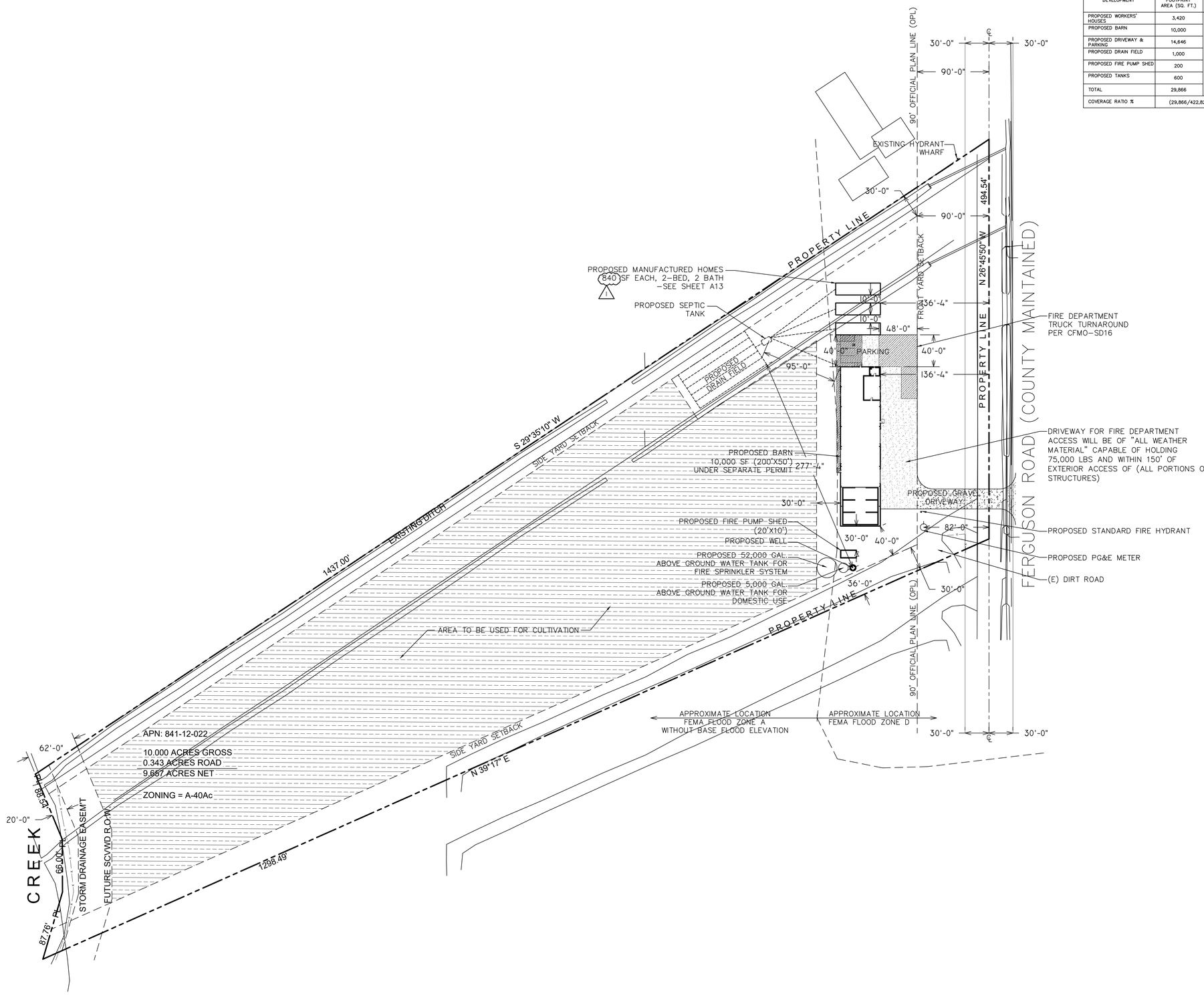
REID LERNER ARCHITECTS
PHONE 408-842-9942
REIDLERNER@YAHOO.COM
7680 MONTEREY ST #105
GILROY, CA 95020

PROPOSED MANUFACTURED HOMES
CHEN FARM
2740 FERGUSON ROAD
GILROY, CA 95020 SANTA CLARA COUNTY

COVER SHEET

Drawn	MM
Checked	RL
Date	08/08/23
Scale	AS NOTED
For	PLANCHECK
Sheet	A0

DEVELOPMENT	FOOTPRINT AREA (SQ. FT.)	LOT AREA (SQ. FT.)	AGRICULTURAL LAND USE %
PROPOSED WORKERS' HOUSES	3,420		
PROPOSED BARN	10,000		
PROPOSED DRIVEWAY & PARKING	14,646		
PROPOSED DRAIN FIELD	1,000		
PROPOSED FIRE PUMP SHED	200		
PROPOSED TANKS	600		
TOTAL	29,866	422,825±	±93%
COVERAGE RATIO %	(29,866/422,825) X100		±7%



PROPOSED SITE PLAN

SCALE: 1" = 60'-0"

0 60' 120'

NO.	REVISION	DATE	BY
	PLANCHECK COMMENTS	01-29-25	

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REID C. LERNER
No. C 19293
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STATE OF CALIFORNIA

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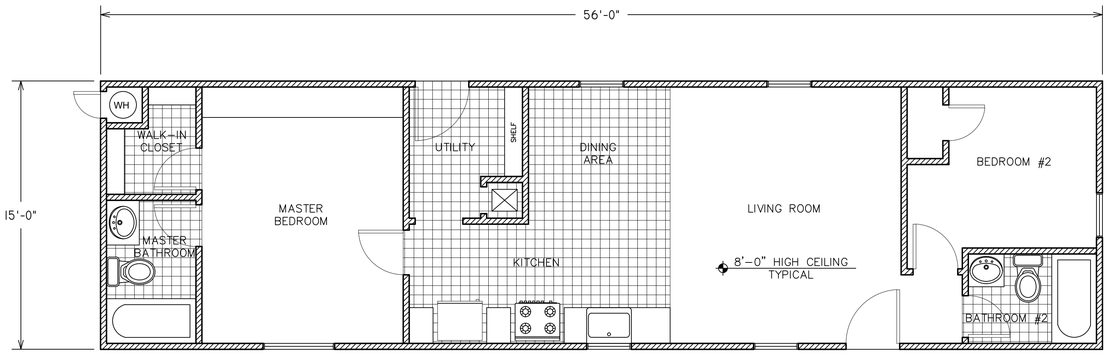
PROPOSED MANUFACTURED HOMES
CHEN FARM
2740 FERGUSON ROAD
GILROY, CA 95020 SANTA CLARA COUNTY

PROPOSED SITE PLAN

Drawn	MM
Checked	RL
Date	08/08/23
Scale	AS NOTED
For	PLANCHECK
Sheet	A1



TYPICAL MANUFACTURED HOME FLOOR PLAN (3 TOTAL)

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

NO.	REVISION	DATE	BY

LICENSED ARCHITECT REID T. LERNER No. C 19293 EXP: 31 AUG 2025 STATE OF CALIFORNIA

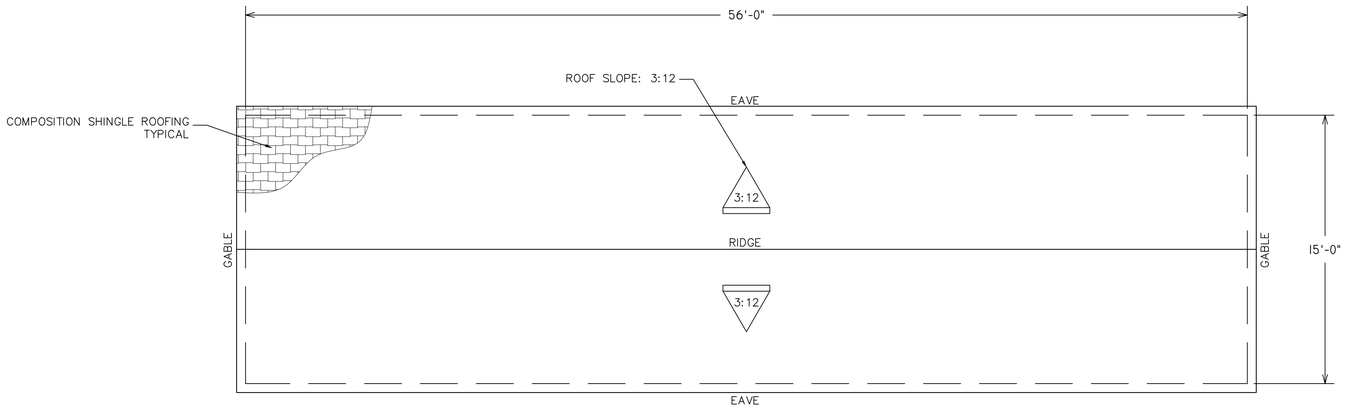
REID LERNER ARCHITECTS

PHONE 408-842-9942
REIDLERNER@YAHOO.COM
7680 MONTEREY ST #105
GILROY, CA 95020

PROPOSED MANUFACTURED HOMES
CHEN FARM
2740 FERGUSON ROAD
GILROY, CA 95020 SANTA CLARA COUNTY

MANUFACTURED HOME
TYPICAL FLOOR PLAN

Drawn	MM
Checked	RL
Date	08/08/23
Scale	AS NOTED
For	PLANCHECK
Sheet	A13



TYPICAL MANUFACTURED HOME ROOF PLAN

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

NO.	REVISION	DATE	BY

LICENSED ARCHITECT
REID T. LERNER
No. C 19293
EXP: 31 AUG 2025
STATE OF CALIFORNIA

REID LERNER ARCHITECTS

PHONE 408-842-9942
REIDLERNER@YAHOO.COM
7680 MONTEREY ST #105
GILROY, CA 95020

PROPOSED MANUFACTURED HOMES
CHEN FARM
2740 FERGUSON ROAD
GILROY, CA 95020 SANTA CLARA COUNTY

MANUFACTURED HOME
TYPICAL ROOF PLAN

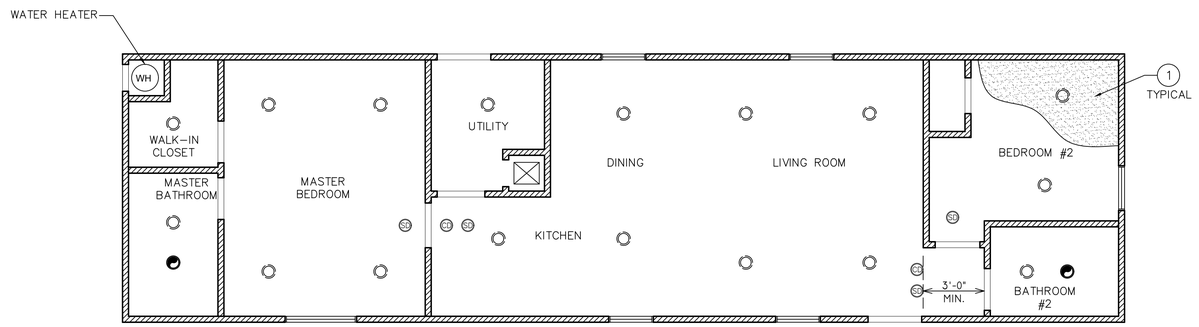
Drawn	MM
Checked	RL
Date	08/08/23
Scale	AS NOTED
For	PLANCHECK
Sheet	A14

LEGEND	DESCRIPTION
○	LED LIGHT PER MANUFACTURER'S PLAN
◕	EXHAUST FAN W/ HUMIDISTAT CONTROL AND MIN. 50 CFM
SD	SMOKE DETECTOR, 120V HARD-WIRED WITH 10-YEAR BATTERY BACK-UP
CD	CARBON MONOXIDE DETECTOR HARD WIRED WITH BATTERY BACK-UP
1	CLG-1: GYPSUM BOARD CEILING AT 8'-0" HIGH

NOTES:

1) FOR LIGHTING SPECIFICATIONS, WIRING, AND OTHER DETAILS, SEE ELECTRICAL PLANS.

2) FOR HVAC REGISTERS, FANS, & OTHER INFO NOT SHOWN, SEE MECHANICAL PLANS.



REFLECTED CEILING PLAN

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

NO.	REVISION	DATE	BY

LICENSED ARCHITECT REID C. LERNER No. C 19293 EXP: 31 AUG 2025 STATE OF CALIFORNIA

REID LERNER ARCHITECTS

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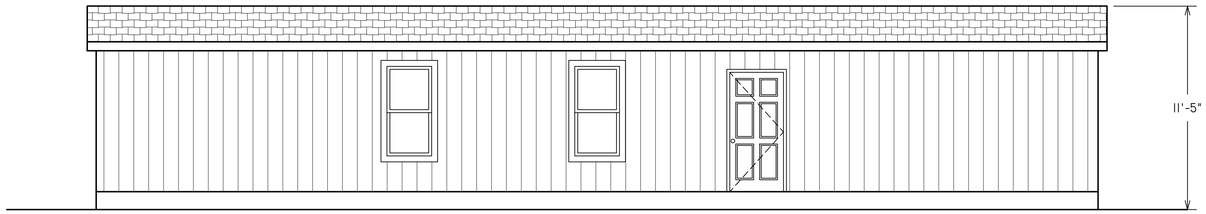
7680 MONTEREY ST #105
GILROY, CA 95020

PROPOSED MANUFACTURED HOMES
CHEN FARM
2740 FERGUSON ROAD
GILROY, CA 95020 SANTA CLARA COUNTY

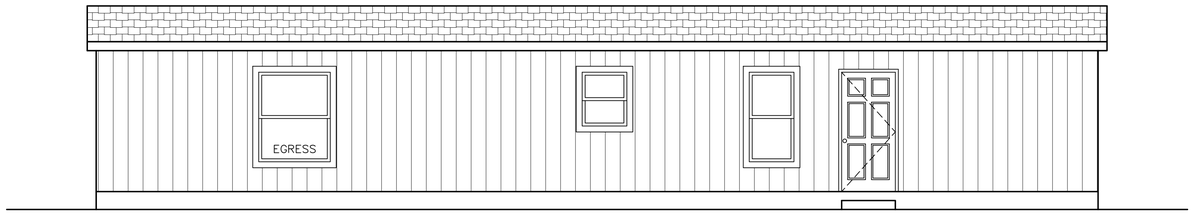
MANUFACTURED HOME
TYPICAL REFLECTED
CEILING PLAN

Drawn	MM
Checked	RL
Date	08/08/23
Scale	AS NOTED
For	PLANCHECK
Sheet	A15



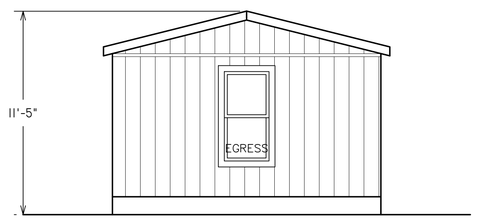
PROPOSED NORTH ELEVATION

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



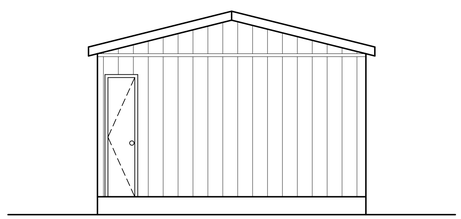
PROPOSED SOUTH ELEVATION

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



PROPOSED EAST ELEVATION

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



PROPOSED WEST ELEVATION

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

NO.	REVISION	DATE	BY

LICENSED ARCHITECT REID T. LERNER No. C 19293 EXP: 31 AUG 2025 STATE OF CALIFORNIA

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PROPOSED MANUFACTURED HOMES
CHEN FARM
2740 FERGUSON ROAD
GILROY, CA 95020 SANTA CLARA COUNTY

MANUFACTURED HOME
TYPICAL ELEVATIONS

Drawn	MM
Checked	RL
Date	08/08/23
Scale	AS NOTED
For	PLANCHECK
Sheet	A16

SHEAR WALL DATA										
WIND ZONE: 1										
LABEL	UNIT	WALL	PANEL	TYPE	ACT.LENGTH	REQ.LENGTH	NOTE	ACT.TRIB**	REQ.TRIB	JNS	SWHT
A	A	1	1SG	E	70 3/4"	26"	3 x 26 ga STRAP	16'-1 1/8"	5'-6 1/2"		90
B	A	1	2SG	S	120 3/4"		1 JOIST & 2 LAGS	42'-1 5/8"	28'-0"	3	90
C	A	1	1SG	E	148 1/2"	98"	3 x 26 ga STRAP	34'-3 1/2"	22'-5 1/2"		90
** EMPTY TRIB FIELD IS COMBINED IN NUMBER ABOVE											
JNS = NUMBER OF JOISTS FOR USE WITHOUT STRAP. HEAVY FRAMING MUST USE ACT.LENGTH(S)											

OPT. 1440 WINDOW IN BATH 1

SHEAR WALL DATA										
WIND ZONE: 1 OPT1										
LABEL	UNIT	WALL	PANEL	TYPE	ACT.LENGTH	REQ.LENGTH	NOTE	ACT.TRIB**	REQ.TRIB	JNS	SWHT
A	A	1	1SG	E	70 3/4"	26"	3 x 26 ga STRAP	16'-1 1/8"	5'-6 1/2"		90
B	A	1	2SG	S	120 3/4"		1 JOIST & 2 LAGS	42'-1 5/8"	28'-0"	3	90
C	A	1	1SG	E	89"	98"	3 x 26 ga STRAP	30'-5 1/8"	22'-5 1/2"		90
C	A	2	1SG	E	45"		3 x 26 ga STRAP				90
** EMPTY TRIB FIELD IS COMBINED IN NUMBER ABOVE											
JNS = NUMBER OF JOISTS FOR USE WITHOUT STRAP. HEAVY FRAMING MUST USE ACT.LENGTH(S)											

FLOOR INFO	
JOIST SIZE	2x8
JOIST MATERIAL	SPF
JOIST SPACING	16

WALL INFO	
SIDEWALL HGT.	90"
EXT WALL SIZE	2x4
EXT SIDING MATL	5/16 4X8 HARDIE

CEILING/ROOF INFO	
CEILING THICKNESS	1/2"
CEILING MATERIAL	US GYP
FRONT EAVE O'HANG	0
REAR EAVE O'HANG	0
FRONT GABLE O'HG	12"
REAR GABLE O'HG	0

DOOR SCHEDULE					
SYMBOL	SIZE	DESCRIPTION	GLAZ	VENT	U VALUE
3679	36 x 79	BLANK-INSWING			0.19

WINDOW SCHEDULE					
SYMBOL	SIZE	DESCRIPTION	GLAZ	VENT	AREA
V3059SH	30 x 59	SGL HUNG WINDOW	9.48	5.08	12.47
V4659SH	46 x 59	SGL HUNG WINDOW	15.27	8.04	19.01
V3036SH	30 x 36	SGL HUNG WINDOW	5.37	2.73	7.68
V1440SH	14 x 40	SGL HUNG WINDOW	2.35	1.29	4.02

PFS #24 Conforms to HUD MHCSS 4/18/16

FLEETWOOD HOMES

RIVERSIDE
220

v.1.1

PRODUCT NAME
CANYON LAKE

MODEL NO.
15562X

DRAWING TITLE
SPEC DRWG

DRAWN BY: MARIBEL L.

DATE: 04/18/16

SHT: SPEC.1

REV:

22CL15562X

SHEAR WALL DATA											
WIND ZONE: 1											
LABEL	UNIT	WALL	PANEL	TYPE	ACT.LENGTH	REQ.LENGTH	NOTE	ACT.TRIB**	REQ.TRIB	JNS	SWHT
A	A	1	1SG	E	70 3/4"	26"	3 x 26 ga STRAP	16'-1 1/8"	5'-6 1/2"		90
B	A	1	2SG	S	120 3/4"		1 JOIST & 2 LAGS	42'-1 5/8"	26'-0"	3	90
C	A	1	1SG	E	148 1/2"	89 3/8"	3 x 26 ga STRAP	34'-3 1/2"	20'-5 1/2"		90
** EMPTY TRIB FIELD IS COMBINED IN NUMBER ABOVE											
JNS = NUMBER OF JOISTS FOR USE WITHOUT STRAP. HEAVY FRAMING MUST USE ACT.LENGTH(S)											

OPT. 1440 WINDOW IN BATH 1

SHEAR WALL DATA											
WIND ZONE: 1 OPT1											
LABEL	UNIT	WALL	PANEL	TYPE	ACT.LENGTH	REQ.LENGTH	NOTE	ACT.TRIB**	REQ.TRIB	JNS	SWHT
A	A	1	1SG	E	70 3/4"	26"	3 x 26 ga STRAP	16'-1 1/8"	5'-6 1/2"		90
B	A	1	2SG	S	120 3/4"		1 JOIST & 2 LAGS	42'-1 5/8"	26'-0"	3	90
C	A	1	1SG	E	45"	89 3/8"	3 x 26 ga STRAP	30'-5 1/8"	20'-5 1/2"		90
C	A	2	1SG	E	89"		3 x 26 ga STRAP				90
** EMPTY TRIB FIELD IS COMBINED IN NUMBER ABOVE											
JNS = NUMBER OF JOISTS FOR USE WITHOUT STRAP. HEAVY FRAMING MUST USE ACT.LENGTH(S)											

DOOR SCHEDULE					
SYMBOL	SIZE	DESCRIPTION	GLAZ	VENT	U VALUE
3679	36 x 79	BLANK-INSWING			0.19

WINDOW SCHEDULE					
SYMBOL	SIZE	DESCRIPTION	GLAZ	VENT	AREA
V3036SH	30 x 36	SGL HUNG WINDOW	5.37	2.73	7.68
V3059SH	30 x 59	SGL HUNG WINDOW	9.48	5.08	12.47
V4659SH	46 x 59	SGL HUNG WINDOW	15.27	8.04	19.01
V1440SH	14 x 40	SGL HUNG WINDOW	2.35	1.29	4.02

FLOOR INFO	
JOIST SIZE	2x8
JOIST MATERIAL	SPF
JOIST SPACING	16

WALL INFO	
SIDEWALL HGT.	90"
EXT WALL SIZE	2x4
EXT SIDING MATL	5/16 4X8 HARDIE

CEILING/ROOF INFO	
CEILING THICKNESS	1/2"
CEILING MATERIAL	US GYP
FRONT EAVE O'HANG	0
REAR EAVE O'HANG	0
FRONT GABLE O'HG	12"
REAR GABLE O'HG	0

PFS #24 Conforms to HUD MHCSS 4/18/16

52' PLAN #1

FLEETWOOD HOMES

RIVERSIDE
220

v.1.1

PRODUCT NAME
CANYON LAKE

MODEL NO.
15562X

DRAWING TITLE
ALTERNATE 1
SPEC DRWG

DRAWN BY: MARIBEL L.

DATE: 04/18/16

SHT: SPEC1.1

REV:

22CL15562Xa1

OPTIONAL DOOR EQUIVALENT GLAZING AREA			
WALL	WINDOW	DOOR	AREA
11	KINRO VINYL CLEAR (1500)	32 x 76 COTTAGE	23.06
11	KINRO VINYL CLEAR (1500)	32 x 76 COTTAGE-INSWING	8.83
11	KINRO VINYL CLEAR (1500)	32 x 77 COTTAGE	7.88
11	KINRO VINYL CLEAR (1500)	32 x 79 BLANK-INSWING	4.74
11	KINRO VINYL CLEAR (1500)	32 x 79 COTTAGE-INSWING	9.17
11	KINRO VINYL CLEAR (1500)	32 x 79 COTTAGE-INSWING	9.17
11	KINRO VINYL CLEAR (1500)	36 x 78 BLANK-OUTSWING	5.25
11	KINRO VINYL CLEAR (1500)	36 x 79 BLANK-INSWING	5.29
11	KINRO VINYL CLEAR (1500)	36 x 79 COTTAGE-INSWING	10.24
11	KINRO VINYL CLEAR (1500)	36 x 79 GUNSLOT-INSWING	17.61
11	KINRO VINYL CLEAR (1500)	36 x 79 GUNSLOT-INSWING	15.16
11	KINRO VINYL CLEAR (1500)	36 x 79 GUNSLOT-INSWING	10.79
11	KINRO VINYL CLEAR (1500)	36 x 79 GUNSLOT-INSWING	12.53
11	KINRO VINYL CLEAR (1500)	36 x 79 GUNSLOT-INSWING	7.49
11	KINRO VINYL CLEAR (1500)	36 x 80 COTTAGE-INSWING	6.94
11	KINRO VINYL CLEAR (1500)	36 x 96 BLANK-INSWING	6.28
11	KINRO VINYL CLEAR (1500)	5/0 x 6/8 SGD - SAFETY	16.51
11	KINRO VINYL CLEAR (1500)	6/0 x 6/8 SGD - SAFETY	19.81
11	KINRO VINYL CLEAR (1500)	6/0 x 8/0 SGD - SAFETY	28.61
11	KINRO VINYL CLEAR (1500)	72 x 79 FRENCH - SAFETY	26.21
11	KINRO VINYL CLEAR (1500)	72 x 79 FRENCH - SAFETY-INSWIN	26.54
11	KINRO VINYL CLEAR (1500)	8/0 x 6/8 SGD - SAFETY	31.80
11	KINRO VINYL CLEAR (1500)	8/0 x 8/0 SGD - SAFETY	60.77
11	KINRO VINYL LOW-E (1500)	32 x 76 COTTAGE	35.67
11	KINRO VINYL LOW-E (1500)	32 x 76 COTTAGE-INSWING	13.66
11	KINRO VINYL LOW-E (1500)	32 x 77 COTTAGE	12.19
11	KINRO VINYL LOW-E (1500)	32 x 79 BLANK-INSWING	7.33
11	KINRO VINYL LOW-E (1500)	32 x 79 COTTAGE-INSWING	14.18
11	KINRO VINYL LOW-E (1500)	32 x 79 COTTAGE-INSWING	14.18
11	KINRO VINYL LOW-E (1500)	36 x 78 BLANK-OUTSWING	8.12
11	KINRO VINYL LOW-E (1500)	36 x 79 BLANK-INSWING	8.18
11	KINRO VINYL LOW-E (1500)	36 x 79 COTTAGE-INSWING	15.84
11	KINRO VINYL LOW-E (1500)	36 x 79 GUNSLOT-INSWING	27.24
11	KINRO VINYL LOW-E (1500)	36 x 79 GUNSLOT-INSWING	23.45
11	KINRO VINYL LOW-E (1500)	36 x 79 GUNSLOT-INSWING	16.69
11	KINRO VINYL LOW-E (1500)	36 x 79 GUNSLOT-INSWING	19.38
11	KINRO VINYL LOW-E (1500)	36 x 79 GUNSLOT-INSWING	11.58
11	KINRO VINYL LOW-E (1500)	36 x 80 COTTAGE-INSWING	10.73
11	KINRO VINYL LOW-E (1500)	36 x 96 BLANK-INSWING	9.71
11	KINRO VINYL LOW-E (1500)	5/0 x 6/8 SGD - SAFETY	25.54
11	KINRO VINYL LOW-E (1500)	6/0 x 6/8 SGD - SAFETY	30.64
11	KINRO VINYL LOW-E (1500)	6/0 x 8/0 SGD - SAFETY	44.27
11	KINRO VINYL LOW-E (1500)	72 x 79 FRENCH - SAFETY	40.56
11	KINRO VINYL LOW-E (1500)	72 x 79 FRENCH - SAFETY-INSWIN	41.06
11	KINRO VINYL LOW-E (1500)	8/0 x 6/8 SGD - SAFETY	49.19
11	KINRO VINYL LOW-E (1500)	8/0 x 8/0 SGD - SAFETY	94.01
19	KINRO VINYL CLEAR (1500)	32 x 76 COTTAGE	22.74
19	KINRO VINYL CLEAR (1500)	32 x 76 COTTAGE-INSWING	9.58
19	KINRO VINYL CLEAR (1500)	32 x 77 COTTAGE	8.70
19	KINRO VINYL CLEAR (1500)	32 x 79 BLANK-INSWING	5.85
19	KINRO VINYL CLEAR (1500)	32 x 79 COTTAGE-INSWING	9.95
19	KINRO VINYL CLEAR (1500)	32 x 79 COTTAGE-INSWING	9.95
19	KINRO VINYL CLEAR (1500)	36 x 78 BLANK-OUTSWING	6.48
19	KINRO VINYL CLEAR (1500)	36 x 79 BLANK-INSWING	6.53
19	KINRO VINYL CLEAR (1500)	36 x 79 COTTAGE-INSWING	11.11
19	KINRO VINYL CLEAR (1500)	36 x 79 GUNSLOT-INSWING	18.96
19	KINRO VINYL CLEAR (1500)	36 x 79 GUNSLOT-INSWING	16.32
19	KINRO VINYL CLEAR (1500)	36 x 79 GUNSLOT-INSWING	11.61
19	KINRO VINYL CLEAR (1500)	36 x 79 GUNSLOT-INSWING	13.49
19	KINRO VINYL CLEAR (1500)	36 x 79 GUNSLOT-INSWING	8.57
19	KINRO VINYL CLEAR (1500)	36 x 80 COTTAGE-INSWING	8.06
19	KINRO VINYL CLEAR (1500)	36 x 96 BLANK-INSWING	7.76
19	KINRO VINYL CLEAR (1500)	5/0 x 6/8 SGD - SAFETY	17.77
19	KINRO VINYL CLEAR (1500)	6/0 x 6/8 SGD - SAFETY	21.33
19	KINRO VINYL CLEAR (1500)	6/0 x 8/0 SGD - SAFETY	30.08
19	KINRO VINYL CLEAR (1500)	72 x 79 FRENCH - SAFETY	27.42
19	KINRO VINYL CLEAR (1500)	72 x 79 FRENCH - SAFETY-INSWIN	27.76

OPTIONAL DOOR EQUIVALENT GLAZING AREA			
WALL	WINDOW	DOOR	AREA
19	KINRO VINYL CLEAR (1500)	8/0 x 6/8 SGD - SAFETY	33.42
19	KINRO VINYL CLEAR (1500)	8/0 x 8/0 SGD - SAFETY	61.01
19	KINRO VINYL LOW-E (1500)	32 x 76 COTTAGE	33.78
19	KINRO VINYL LOW-E (1500)	32 x 76 COTTAGE-INSWING	14.24
19	KINRO VINYL LOW-E (1500)	32 x 77 COTTAGE	12.93
19	KINRO VINYL LOW-E (1500)	32 x 79 BLANK-INSWING	8.69
19	KINRO VINYL LOW-E (1500)	32 x 79 COTTAGE-INSWING	14.78
19	KINRO VINYL LOW-E (1500)	32 x 79 COTTAGE-INSWING	14.78
19	KINRO VINYL LOW-E (1500)	36 x 78 BLANK-OUTSWING	9.63
19	KINRO VINYL LOW-E (1500)	36 x 79 BLANK-INSWING	9.70
19	KINRO VINYL LOW-E (1500)	36 x 79 COTTAGE-INSWING	16.50
19	KINRO VINYL LOW-E (1500)	36 x 79 GUNSLOT-INSWING	28.17
19	KINRO VINYL LOW-E (1500)	36 x 79 GUNSLOT-INSWING	24.25
19	KINRO VINYL LOW-E (1500)	36 x 79 GUNSLOT-INSWING	17.26
19	KINRO VINYL LOW-E (1500)	36 x 79 GUNSLOT-INSWING	20.05
19	KINRO VINYL LOW-E (1500)	36 x 79 GUNSLOT-INSWING	12.73
19	KINRO VINYL LOW-E (1500)	36 x 80 COTTAGE-INSWING	11.97
19	KINRO VINYL LOW-E (1500)	36 x 96 BLANK-INSWING	11.52
19	KINRO VINYL LOW-E (1500)	5/0 x 6/8 SGD - SAFETY	26.41
19	KINRO VINYL LOW-E (1500)	6/0 x 6/8 SGD - SAFETY	31.69
19	KINRO VINYL LOW-E (1500)	6/0 x 8/0 SGD - SAFETY	44.69
19	KINRO VINYL LOW-E (1500)	72 x 79 FRENCH - SAFETY	40.74
19	KINRO VINYL LOW-E (1500)	72 x 79 FRENCH - SAFETY-INSWIN	41.24
19	KINRO VINYL LOW-E (1500)	8/0 x 6/8 SGD - SAFETY	49.65
19	KINRO VINYL LOW-E (1500)	8/0 x 8/0 SGD - SAFETY	90.65

THERMAL CALCULATION RESULTS									
TZ	CEIL	WALL	FLOOR	U	DESCRIPTION	DUCT TYPE	RESULT	MAX NOM	AVAIL.
2	21	11	11	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	170.87	94.30
2	21	11	11	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	264.35	187.78
2	28	11	11	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	192.57	116.00
2	28	11	11	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	297.92	221.35
2	28	11	22	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	247.87	171.30
2	28	11	22	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	383.47	306.90
2	28	19	11	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	258.58	182.01
2	28	19	11	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	384.20	307.63
2	28	19	22	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	309.71	233.14
2	28	19	22	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	460.17	383.60
2	33	11	11	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	201.10	124.53
2	33	11	11	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	311.12	234.55
2	33	11	22	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	256.40	179.83
2	33	11	22	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	396.67	320.10
2	33	19	22	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	317.60	241.03
2	33	19	22	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	471.89	395.32
2	36	11	22	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	259.61	183.04
2	36	11	22	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	401.63	325.06
3	21	11	11	0.49	KINRO VINYL CLEAR (1500)	INSULATED	N/A	50.30	-26.27
3	21	11	11	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	77.82	1.25
3	28	11	11	0.49	KINRO VINYL CLEAR (1500)	INSULATED	N/A	72.00	-4.57
3	28	11	11	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	111.39	34.82
3	28	11	22	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	127.29	50.72
3	28	11	22	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	196.93	120.36
3	28	19	11	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	147.10	70.53
3	28	19	11	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	218.56	141.99
3	28	19	22	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	198.22	121.65
3	28	19	22	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	294.52	217.95
3	33	11	11	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	80.53	3.96
3	33	11	11	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	124.58	48.01
3	33	11	22	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	135.82	59.25
3	33	11	22	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	210.13	133.56
3	33	19	22	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	206.11	129.54
3	33	19	22	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	306.24	229.67
3	36	11	22	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	139.03	62.46
3	36	11	22	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	215.09	138.52

SUBTRACT 2 S.F. OF GLAZING FOR EACH S.F. OF SKYLIGHT AREA

N/A = THIS HOME CANNOT BE BUILT FOR THIS THERMAL ZONE WITH THESE CONDITIONS

DESIGN, CERTIFICATION & ECONOMY TEMPERATURES					
STATE	TYPE	FURNACE	DT	CT	ET
AZ	ELEC	17 KW ELECTRIC FURN-A/C READY UP TO 4 TONS	9	-81	-36
AZ	ELEC	20 KW ELECTRIC FURN-A/C READY UP TO 4 TONS	9	-111	-57
AZ	GAS	56K BTUH 80% AFUE AUTO GAS FURN	9	-51	-15
AZ	GAS	77K BTUH 80% AFUE AUTO GAS FURN	9	-97	-47
CA	ELEC	17 KW ELECTRIC FURN-A/C READY UP TO 4 TONS	22	-81	-36
CA	ELEC	20 KW ELECTRIC FURN-A/C READY UP TO 4 TONS	22	-111	-57
CA	GAS	56K BTUH 80% AFUE AUTO GAS FURN	22	-51	-15
CA	GAS	77K BTUH 80% AFUE AUTO GAS FURN	22	-97	-47
CO	ELEC	17 KW ELECTRIC FURN-A/C READY UP TO 4 TONS	-5	-104	-51
CO	ELEC	20 KW ELECTRIC FURN-A/C READY UP TO 4 TONS	-5	-138	-75
CO	GAS	56K BTUH 80% AFUE AUTO GAS FURN	-5	-69	-28
CO	GAS	77K BTUH 80% AFUE AUTO GAS FURN	-5	-122	-64
NM	ELEC	17 KW ELECTRIC FURN-A/C READY UP TO 4 TONS	1	-81	-36
NM	ELEC	20 KW ELECTRIC FURN-A/C READY UP TO 4 TONS	1	-111	-57
NM	GAS	56K BTUH 80% AFUE AUTO GAS FURN	1	-51	-15
NM	GAS	77K BTUH 80% AFUE AUTO GAS FURN	1	-97	-47
NV	ELEC	17 KW ELECTRIC FURN-A/C READY UP TO 4 TONS	-4	-104	-51
NV	ELEC	20 KW ELECTRIC FURN-A/C READY UP TO 4 TONS	-4	-138	-75
NV	GAS	56K BTUH 80% AFUE AUTO GAS FURN	-4	-69	-28
NV	GAS	77K BTUH 80% AFUE AUTO GAS FURN	-4	-122	-64
UT	ELEC	17 KW ELECTRIC FURN-A/C READY UP TO 4 TONS	0	-104	-51
UT	ELEC	20 KW ELECTRIC FURN-A/C READY UP TO 4 TONS	0	-138	-75
UT	GAS	56K BTUH 80% AFUE AUTO GAS FURN	0	-69	-28
UT	GAS	77K BTUH 80% AFUE AUTO GAS FURN	0	-122	-64

STANDARD OPENINGS						
QTY	SIZE	DESCRIPTION	TYPE	AREA	TOTAL	U VALUE
2	36 x 79	BLANK-INSWING	DOOR	21.78	43.56	0.190
1	30 x 36	SGL HUNG WINDOW	WINDOW	7.68	7.68	
4	30 x 59	SGL HUNG WINDOW	WINDOW	12.47	49.88	
1	46 x 59	SGL HUNG WINDOW	WINDOW	19.01	19.01	
TOTAL WINDOW AREA :					76.57	
SEE THERMAL CHART FOR WINDOW U VALUES						

RECOMMENDED A/C SIZES		
STATE	DESIGN TEMP	TONS
AZ	80- 99	2.0
AZ	100-105	2.5
AZ	106-110	3.0
CA	80- 99	2.0
CA	100-105	2.5
CA	106-110	3.0
CO	80-101	2.0
CO	102-106	2.5
NM	80- 99	2.0
NM	100-105	2.5
NM	106-110	3.0
NV	80-101	2.0
NV	102-106	2.5
UT	80-101	2.0
UT	102-106	2.5

PFS #24 Conforms to HUD MHCSS 4/18/16

FLEETWOOD HOMES

RIVERSIDE
220

v.1.1

PRODUCT NAME
CANYON LAKE

MODEL NO.
15562X

DRAWING TITLE
THERMAL SPECS

DRAWN BY:
MARIBEL L.

DATE:
04/18/16

SHT
TS.1

REV

22CL15562X

OPTIONAL DOOR EQUIVALENT GLAZING AREA			
WALL	WINDOW	DOOR	AREA
11	KINRO VINYL CLEAR (1500)	32 x 76 COTTAGE	23.06
11	KINRO VINYL CLEAR (1500)	32 x 76 COTTAGE-INSWING	8.83
11	KINRO VINYL CLEAR (1500)	32 x 77 COTTAGE	7.88
11	KINRO VINYL CLEAR (1500)	32 x 79 BLANK-INSWING	4.74
11	KINRO VINYL CLEAR (1500)	32 x 79 COTTAGE-INSWING	9.17
11	KINRO VINYL CLEAR (1500)	32 x 79 COTTAGE-INSWING	9.17
11	KINRO VINYL CLEAR (1500)	36 x 78 BLANK-OUTSWING	5.25
11	KINRO VINYL CLEAR (1500)	36 x 79 BLANK-INSWING	5.29
11	KINRO VINYL CLEAR (1500)	36 x 79 COTTAGE-INSWING	10.24
11	KINRO VINYL CLEAR (1500)	36 x 79 GUNSLOT-INSWING	17.61
11	KINRO VINYL CLEAR (1500)	36 x 79 GUNSLOT-INSWING	15.16
11	KINRO VINYL CLEAR (1500)	36 x 79 GUNSLOT-INSWING	10.79
11	KINRO VINYL CLEAR (1500)	36 x 79 GUNSLOT-INSWING	12.53
11	KINRO VINYL CLEAR (1500)	36 x 79 GUNSLOT-INSWING	7.49
11	KINRO VINYL CLEAR (1500)	36 x 80 COTTAGE-INSWING	6.94
11	KINRO VINYL CLEAR (1500)	36 x 96 BLANK-INSWING	6.28
11	KINRO VINYL CLEAR (1500)	5/0 x 6/8 SGD - SAFETY	16.51
11	KINRO VINYL CLEAR (1500)	6/0 x 6/8 SGD - SAFETY	19.81
11	KINRO VINYL CLEAR (1500)	6/0 x 8/0 SGD - SAFETY	28.61
11	KINRO VINYL CLEAR (1500)	72 x 79 FRENCH - SAFETY	26.21
11	KINRO VINYL CLEAR (1500)	72 x 79 FRENCH - SAFETY-INSWIN	26.54
11	KINRO VINYL CLEAR (1500)	8/0 x 6/8 SGD - SAFETY	31.80
11	KINRO VINYL CLEAR (1500)	8/0 x 8/0 SGD - SAFETY	60.77
11	KINRO VINYL LOW-E (1500)	32 x 76 COTTAGE	35.67
11	KINRO VINYL LOW-E (1500)	32 x 76 COTTAGE-INSWING	13.66
11	KINRO VINYL LOW-E (1500)	32 x 77 COTTAGE	12.19
11	KINRO VINYL LOW-E (1500)	32 x 79 BLANK-INSWING	7.33
11	KINRO VINYL LOW-E (1500)	32 x 79 COTTAGE-INSWING	14.18
11	KINRO VINYL LOW-E (1500)	32 x 79 COTTAGE-INSWING	14.18
11	KINRO VINYL LOW-E (1500)	36 x 78 BLANK-OUTSWING	8.12
11	KINRO VINYL LOW-E (1500)	36 x 79 BLANK-INSWING	8.18
11	KINRO VINYL LOW-E (1500)	36 x 79 COTTAGE-INSWING	15.84
11	KINRO VINYL LOW-E (1500)	36 x 79 GUNSLOT-INSWING	27.24
11	KINRO VINYL LOW-E (1500)	36 x 79 GUNSLOT-INSWING	23.45
11	KINRO VINYL LOW-E (1500)	36 x 79 GUNSLOT-INSWING	16.69
11	KINRO VINYL LOW-E (1500)	36 x 79 GUNSLOT-INSWING	19.38
11	KINRO VINYL LOW-E (1500)	36 x 79 GUNSLOT-INSWING	11.58
11	KINRO VINYL LOW-E (1500)	36 x 80 COTTAGE-INSWING	10.73
11	KINRO VINYL LOW-E (1500)	36 x 96 BLANK-INSWING	9.71
11	KINRO VINYL LOW-E (1500)	5/0 x 6/8 SGD - SAFETY	25.54
11	KINRO VINYL LOW-E (1500)	6/0 x 6/8 SGD - SAFETY	30.64
11	KINRO VINYL LOW-E (1500)	6/0 x 8/0 SGD - SAFETY	44.27
11	KINRO VINYL LOW-E (1500)	72 x 79 FRENCH - SAFETY	40.56
11	KINRO VINYL LOW-E (1500)	72 x 79 FRENCH - SAFETY-INSWIN	41.06
11	KINRO VINYL LOW-E (1500)	8/0 x 6/8 SGD - SAFETY	49.19
11	KINRO VINYL LOW-E (1500)	8/0 x 8/0 SGD - SAFETY	94.01
19	KINRO VINYL CLEAR (1500)	32 x 76 COTTAGE	22.74
19	KINRO VINYL CLEAR (1500)	32 x 76 COTTAGE-INSWING	9.58
19	KINRO VINYL CLEAR (1500)	32 x 77 COTTAGE	8.70
19	KINRO VINYL CLEAR (1500)	32 x 79 BLANK-INSWING	5.85
19	KINRO VINYL CLEAR (1500)	32 x 79 COTTAGE-INSWING	9.95
19	KINRO VINYL CLEAR (1500)	32 x 79 COTTAGE-INSWING	9.95
19	KINRO VINYL CLEAR (1500)	36 x 78 BLANK-OUTSWING	6.48
19	KINRO VINYL CLEAR (1500)	36 x 79 BLANK-INSWING	6.53
19	KINRO VINYL CLEAR (1500)	36 x 79 COTTAGE-INSWING	11.11
19	KINRO VINYL CLEAR (1500)	36 x 79 GUNSLOT-INSWING	18.96
19	KINRO VINYL CLEAR (1500)	36 x 79 GUNSLOT-INSWING	16.32
19	KINRO VINYL CLEAR (1500)	36 x 79 GUNSLOT-INSWING	11.61
19	KINRO VINYL CLEAR (1500)	36 x 79 GUNSLOT-INSWING	13.49
19	KINRO VINYL CLEAR (1500)	36 x 79 GUNSLOT-INSWING	8.57
19	KINRO VINYL CLEAR (1500)	36 x 80 COTTAGE-INSWING	8.06
19	KINRO VINYL CLEAR (1500)	36 x 96 BLANK-INSWING	7.76
19	KINRO VINYL CLEAR (1500)	5/0 x 6/8 SGD - SAFETY	17.77
19	KINRO VINYL CLEAR (1500)	6/0 x 6/8 SGD - SAFETY	21.33
19	KINRO VINYL CLEAR (1500)	6/0 x 8/0 SGD - SAFETY	30.08
19	KINRO VINYL CLEAR (1500)	72 x 79 FRENCH - SAFETY	27.42
19	KINRO VINYL CLEAR (1500)	72 x 79 FRENCH - SAFETY-INSWIN	27.76

THERMAL CALCULATION RESULTS									
TZ	CEIL	WALL	FLOOR	U	DESCRIPTION	DUCT TYPE	RESULT	MAX NOM	AVAIL.
2	21	11	11	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	158.07	81.50
2	21	11	11	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	244.55	167.98
2	28	11	11	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	178.22	101.65
2	28	11	11	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	275.72	199.15
2	28	11	22	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	229.55	152.98
2	28	11	22	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	355.13	278.56
2	28	19	11	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	240.79	164.22
2	28	19	11	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	357.77	281.20
2	28	19	22	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	288.25	211.68
2	28	19	22	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	428.28	351.71
2	33	11	11	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	186.14	109.57
2	33	11	11	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	287.98	211.41
2	33	11	22	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	237.47	160.90
2	33	11	22	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	367.38	290.81
2	33	19	22	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	295.57	219.00
2	33	19	22	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	439.16	362.59
2	36	11	22	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	240.45	163.88
2	36	11	22	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	371.99	295.42
3	21	11	11	0.49	KINRO VINYL CLEAR (1500)	INSULATED	N/A	45.28	-31.29
3	21	11	11	0.35	KINRO VINYL LOW-E (1500)	INSULATED	N/A	70.05	-6.52
3	28	11	11	0.49	KINRO VINYL CLEAR (1500)	INSULATED	N/A	65.43	-11.13
3	28	11	11	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	101.22	24.65
3	28	11	22	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	116.75	40.18
3	28	11	22	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	180.63	104.06
3	28	19	11	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	136.50	59.93
3	28	19	11	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	202.81	126.24
3	28	19	22	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	183.96	107.39
3	28	19	22	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	273.32	196.75
3	33	11	11	0.49	KINRO VINYL CLEAR (1500)	INSULATED	N/A	73.35	-3.22
3	33	11	11	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	113.48	36.91
3	33	11	22	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	124.67	48.10
3	33	11	22	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	192.88	116.31
3	33	19	22	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	191.28	114.71
3	33	19	22	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	284.21	207.64
3	36	11	22	0.49	KINRO VINYL CLEAR (1500)	INSULATED	PASS	127.65	51.08
3	36	11	22	0.35	KINRO VINYL LOW-E (1500)	INSULATED	PASS	197.49	120.92
SUBTRACT 2 S.F. OF GLAZING FOR EACH S.F. OF SKYLIGHT AREA									
N/A = THIS HOME CANNOT BE BUILT FOR THIS THERMAL ZONE WITH THESE CONDITIONS									

OPTIONAL DOOR EQUIVALENT GLAZING AREA			
WALL	WINDOW	DOOR	AREA
19	KINRO VINYL CLEAR (1500)	8/0 x 6/8 SGD - SAFETY	33.42
19	KINRO VINYL CLEAR (1500)	8/0 x 8/0 SGD - SAFETY	61.01
19	KINRO VINYL LOW-E (1500)	32 x 76 COTTAGE	33.78
19	KINRO VINYL LOW-E (1500)	32 x 76 COTTAGE-INSWING	14.24
19	KINRO VINYL LOW-E (1500)	32 x 77 COTTAGE	12.93
19	KINRO VINYL LOW-E (1500)	32 x 79 BLANK-INSWING	8.69
19	KINRO VINYL LOW-E (1500)	32 x 79 COTTAGE-INSWING	14.78
19	KINRO VINYL LOW-E (1500)	32 x 79 COTTAGE-INSWING	14.78
19	KINRO VINYL LOW-E (1500)	36 x 78 BLANK-OUTSWING	9.63
19	KINRO VINYL LOW-E (1500)	36 x 79 BLANK-INSWING	9.70
19	KINRO VINYL LOW-E (1500)	36 x 79 COTTAGE-INSWING	16.50
19	KINRO VINYL LOW-E (1500)	36 x 79 GUNSLOT-INSWING	28.17
19	KINRO VINYL LOW-E (1500)	36 x 79 GUNSLOT-INSWING	24.25
19	KINRO VINYL LOW-E (1500)	36 x 79 GUNSLOT-INSWING	17.26
19	KINRO VINYL LOW-E (1500)	36 x 79 GUNSLOT-INSWING	20.05
19	KINRO VINYL LOW-E (1500)	36 x 79 GUNSLOT-INSWING	12.73
19	KINRO VINYL LOW-E (1500)	36 x 80 COTTAGE-INSWING	11.97
19	KINRO VINYL LOW-E (1500)	36 x 96 BLANK-INSWING	11.52
19	KINRO VINYL LOW-E (1500)	5/0 x 6/8 SGD - SAFETY	26.41
19	KINRO VINYL LOW-E (1500)	6/0 x 6/8 SGD - SAFETY	31.69
19	KINRO VINYL LOW-E (1500)	6/0 x 8/0 SGD - SAFETY	44.69
19	KINRO VINYL LOW-E (1500)	72 x 79 FRENCH - SAFETY	40.74
19	KINRO VINYL LOW-E (1500)	72 x 79 FRENCH - SAFETY-INSWIN	41.24
19	KINRO VINYL LOW-E (1500)	8/0 x 6/8 SGD - SAFETY	49.65
19	KINRO VINYL LOW-E (1500)	8/0 x 8/0 SGD - SAFETY	90.65

DESIGN, CERTIFICATION & ECONOMY TEMPERATURES					
STATE	TYPE	FURNACE	DT	CT	ET
AZ	ELEC	17 KW ELECTRIC FURN-A/C READY UP TO 4 TONS	9	-91	-43
AZ	ELEC	20 KW ELECTRIC FURN-A/C READY UP TO 4 TONS	9	-123	-65
AZ	GAS	56K BTUH 80% AFUE AUTO GAS FURN	9	-60	-21
AZ	GAS	77K BTUH 80% AFUE AUTO GAS FURN	9	-108	-55
CA	ELEC	17 KW ELECTRIC FURN-A/C READY UP TO 4 TONS	22	-91	-43
CA	ELEC	20 KW ELECTRIC FURN-A/C READY UP TO 4 TONS	22	-123	-65
CA	GAS	56K BTUH 80% AFUE AUTO GAS FURN	22	-60	-21
CA	GAS	77K BTUH 80% AFUE AUTO GAS FURN	22	-108	-55
CO	ELEC	17 KW ELECTRIC FURN-A/C READY UP TO 4 TONS	-5	-115	-59
CO	ELEC	20 KW ELECTRIC FURN-A/C READY UP TO 4 TONS	-5	-151	-85
CO	GAS	56K BTUH 80% AFUE AUTO GAS FURN	-5	-79	-34
CO	GAS	77K BTUH 80% AFUE AUTO GAS FURN	-5	-135	-73
NM	ELEC	17 KW ELECTRIC FURN-A/C READY UP TO 4 TONS	1	-91	-43
NM	ELEC	20 KW ELECTRIC FURN-A/C READY UP TO 4 TONS	1	-123	-65
NM	GAS	56K BTUH 80% AFUE AUTO GAS FURN	1	-60	-21
NM	GAS	77K BTUH 80% AFUE AUTO GAS FURN	1	-108	-55
NV	ELEC	17 KW ELECTRIC FURN-A/C READY UP TO 4 TONS	-4	-115	-59
NV	ELEC	20 KW ELECTRIC FURN-A/C READY UP TO 4 TONS	-4	-151	-85
NV	GAS	56K BTUH 80% AFUE AUTO GAS FURN	-4	-79	-34
NV	GAS	77K BTUH 80% AFUE AUTO GAS FURN	-4	-135	-73
UT	ELEC	17 KW ELECTRIC FURN-A/C READY UP TO 4 TONS	0	-115	-59
UT	ELEC	20 KW ELECTRIC FURN-A/C READY UP TO 4 TONS	0	-151	-85
UT	GAS	56K BTUH 80% AFUE AUTO GAS FURN	0	-79	-34
UT	GAS	77K BTUH 80% AFUE AUTO GAS FURN	0	-135	-73

STANDARD OPENINGS						
QTY	SIZE	DESCRIPTION	TYPE	AREA	TOTAL	U VALUE
2	36 x 79	BLANK-INSWING	DOOR	21.78	43.56	0.190
1	30 x 36	SGL HUNG WINDOW	WINDOW	7.68	7.68	
4	30 x 59	SGL HUNG WINDOW	WINDOW	12.47	49.88	
1	46 x 59	SGL HUNG WINDOW	WINDOW	19.01	19.01	
TOTAL WINDOW AREA :					76.57	
SEE THERMAL CHART FOR WINDOW U VALUES						

RECOMMENDED A/C SIZES		
STATE	DESIGN TEMP	TONS
AZ	80- 99	2.0
AZ	100-105	2.5
AZ	106-110	3.0
CA	80- 99	2.0
CA	100-105	2.5
CA	106-110	3.0
CO	80-101	2.0
CO	102-106	2.5
NM	80- 99	2.0
NM	100-105	2.5
NM	106-110	3.0
NV	80-101	2.0
NV	102-106	2.5
UT	80-101	2.0
UT	102-106	2.5

PFS #24 Conforms to HUD MHCSS 4/18/16

52' PLAN #1

FLEETWOOD HOMES

RIVERSIDE 220

v.1.1

PRODUCT NAME: CANYON LAKE

MODEL NO.: 15562X

DRAWING TITLE: ALTERNATE 1 THERMAL SPECS

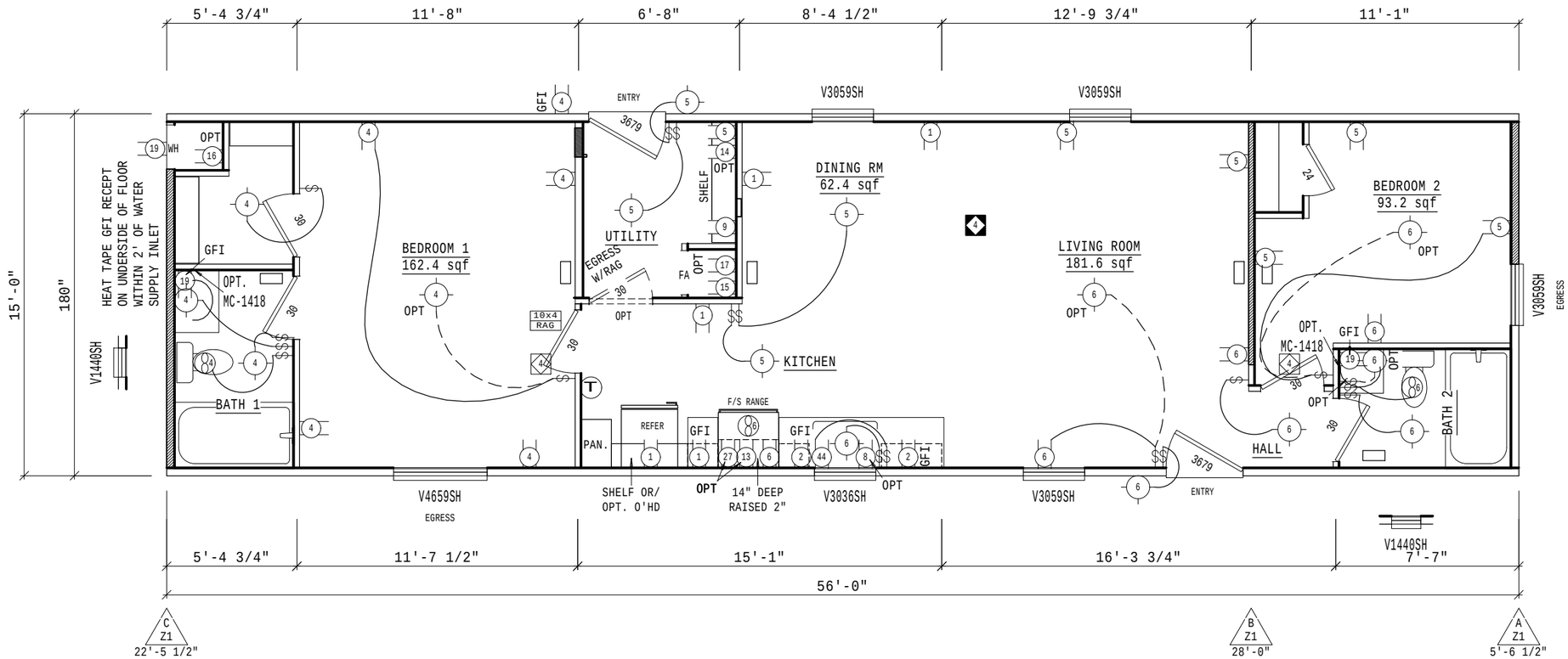
DRAWN BY: MARIBEL L.

DATE: 04/18/16

SHT: TS1.1

REV:

22CL15562Xa1



NOTES:

1. RECEPT SHALL NOT BE INSTALLED WITHIN 30" OF TUB/SHOWER SPACE.
2. ELECTRICAL WALL PLATES SHALL NOT BE INSTALLED WITHIN 6" OF A RANGE OR COOKTOP.

THIS FLOOR PLAN AND ATTACHED OPTION DETAILS (IF APPLICABLE) IS DESIGNED TO MEET THE FOLLOWING STRUCTURAL REQUIREMENTS:
WIND ZONE(S)___1___ ROOF LOAD(S)__20, 30__LBS.

PERIMETER PIERING REQUIRED WHEN ROOF LIVE LOAD > 20 psf

PFS #24 Conforms to HUD MHCSS 4/18/16

SA, CO &/OR COMBO SA/CO

L E G E N D

- RECEPTACLE
- SWITCH
- THERMOSTAT
- SMOKE ALARM
- SMOKE ALARM W/ HUSH BUTTON
- LIGHT FIXTURE
- FLUORESCENT LIGHT
- RECESSED LIGHT
- EXHAUST FAN
- PANEL BOX
- SOLAR TUBE
- AIR SUPPLY
- 14"RETURN AIR
- FAN W/ LIGHT
- RAG RETURN AIR GRILLE
- OVERHEAD REGISTER
- FLOOR REGISTER
- WALL-MOUNTED REGISTER
- CROSS-OVER LOCATION
- SUPPORT POST
- SHEARWALL

HITCH END

A	180 x 56'-0"
B	X
C	X

FLEETWOOD HOMES

RIVERSIDE
220

PRODUCT NAME: CANYON LAKE

MODEL NO.: 15562X

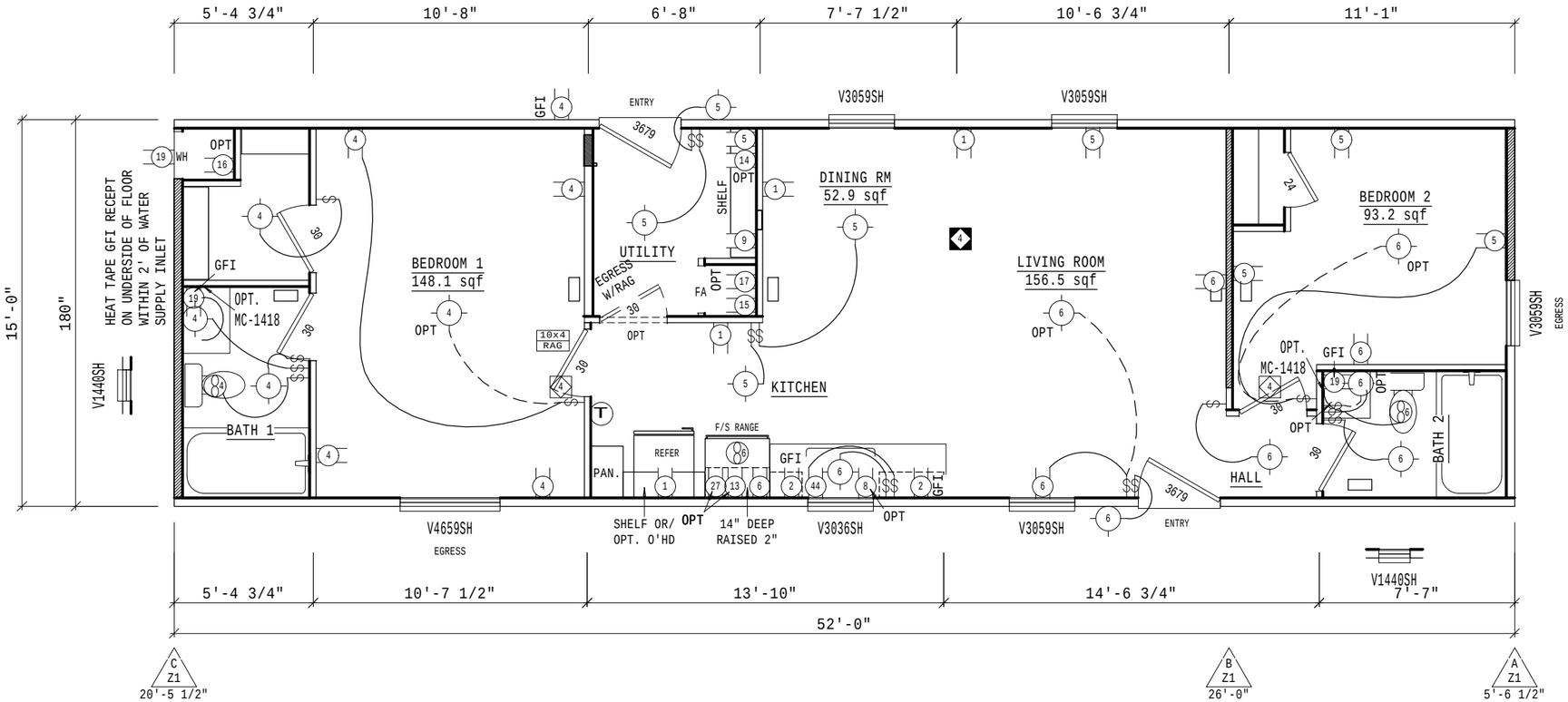
DRAWING TITLE: FLOOR PLAN

DRAWN BY: MARIBEL L.

DATE: 04/18/16

SHT	REV
FP.1	

22CL15562X



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PERIMETER PIERING REQUIRED WHEN ROOF LIVE LOAD > 20 psf

SA, CO &/OR COMBO SA/CO

HITCH END

L E G E N D

- RECEPTACLE
- SWITCH
- THERMOSTAT
- SMOKE ALARM
- SMOKE ALARM W/ HUSH BUTTON
- LIGHT FIXTURE
- FLUORESCENT LIGHT
- RECESSED LIGHT
- EXHAUST FAN
- PANEL BOX
- SOLAR TUBE
- AIR SUPPLY
- 14"RETURN AIR
- FAN W/ LIGHT
- RAG RETURN AIR GRILLE
- OVERHEAD REGISTER
- FLOOR REGISTER
- WALL-MOUNTED REGISTER
- CROSS-OVER LOCATION
- SUPPORT POST
- SHEARWALL

A 180 x 52'-0"
B X
C X

FLEETWOOD HOMES

RIVERSIDE
220

PRODUCT NAME
CANYON LAKE

MODEL NO.
15562X

DRAWING TITLE
ALTERNATE 1 FLOOR PLAN

DRAWN BY: MARIBEL L.

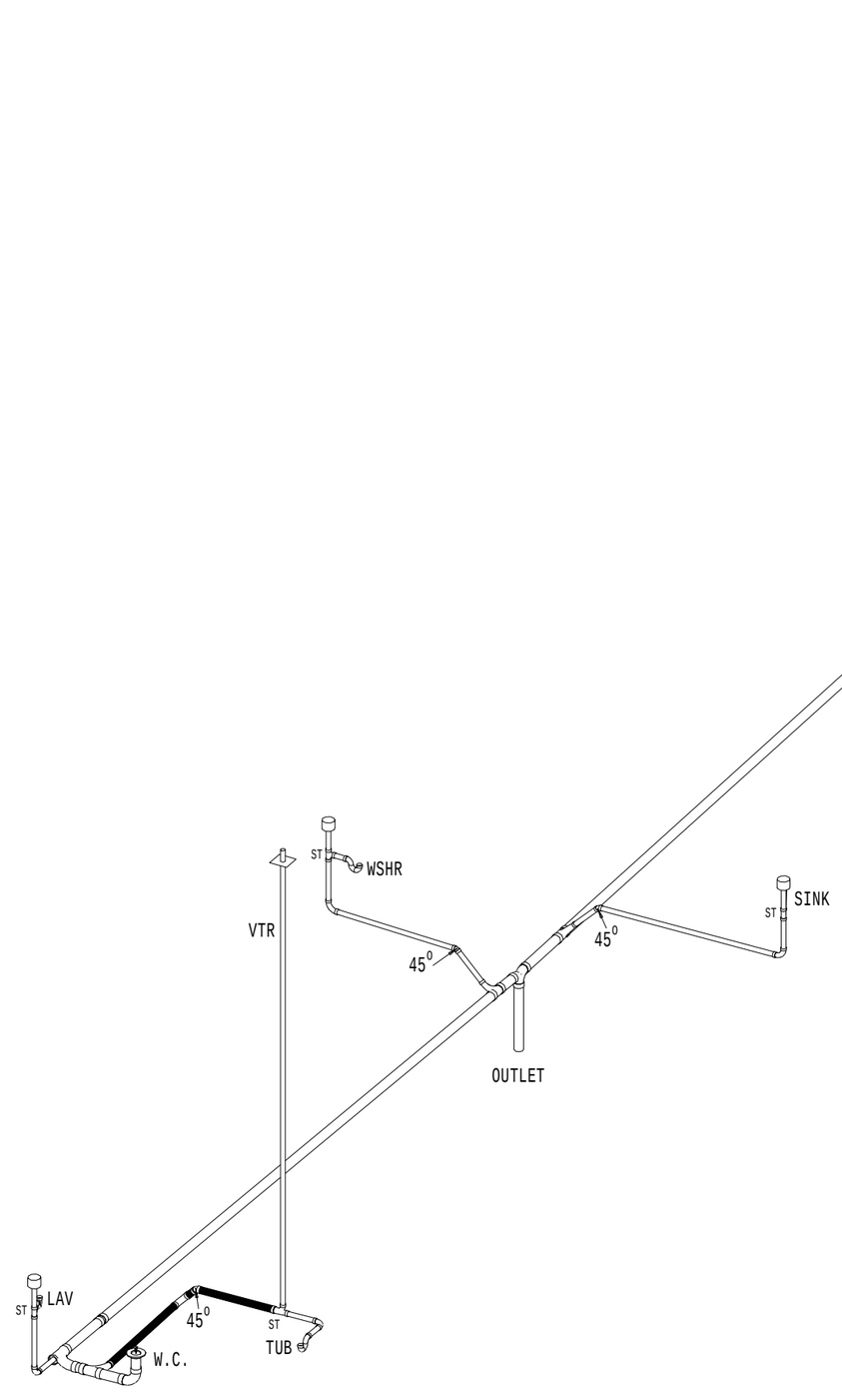
DATE: 04/18/16

SHT FP1.1 | REV

PFS #24 Conforms to HUD MHCSS 4/18/16

52' PLAN #1

22CL15562Xa1



L E G E N D

3 WAY ELL

LTTY

45° WYE

AUTO VENT

ST
SAN TEE

90° ELL

1 1/2" PIPING

2" PIPING

3" PIPING

* INDICATES OPTIONAL SHIP LOOSE PIPE AND ATTACHED FITTINGS.

FLEETWOOD HOMES

RIVERSIDE
220

PRODUCT NAME
CANYON LAKE

MODEL NO.
15562X

DRAWING TITLE
PLUMBING DRAIN

DRAWN BY: MARIBEL L.

DATE: 04/18/16

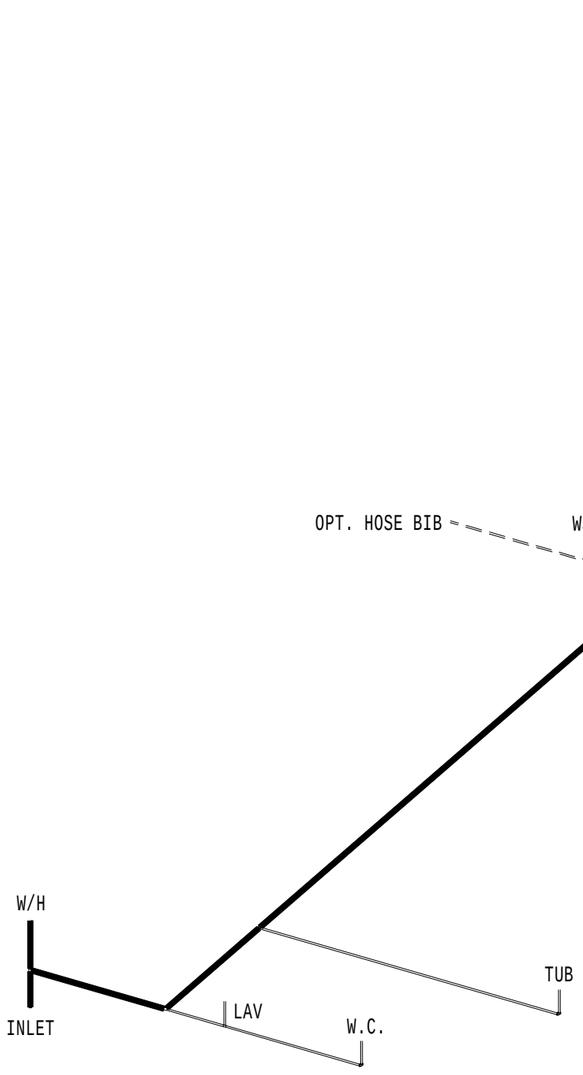
SHT: PLD.1

REV:

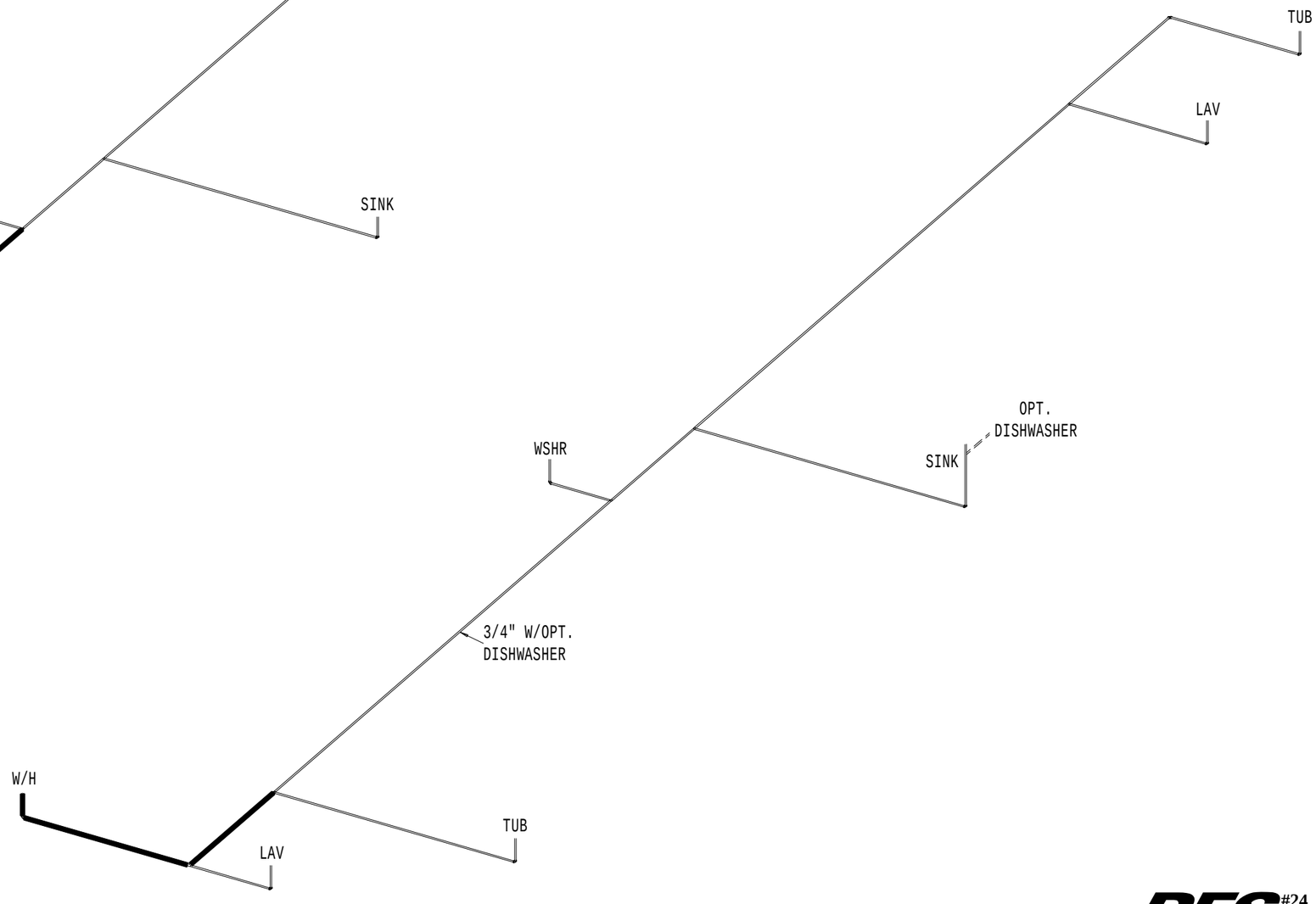
PFS #24 Conforms to HUD MHCSS 4/18/16

22CL15562X

PFS certifies this document is current as of 06/21/2016



COLD WATER PLUMBING



HOT WATER PLUMBING

L E G E N D

TEE

90° ELL

1/2" PIPING

3/4" PIPING

FOR PEX PIPING, SEE ENG. PG. 35-01-0003

FLEETWOOD HOMES

RIVERSIDE
220

PRODUCT NAME
CANYON LAKE

MODEL NO.
15562X

DRAWING TITLE
PLUMBING WATER

DRAWN BY: Sandra R.

DATE: 06/21/16

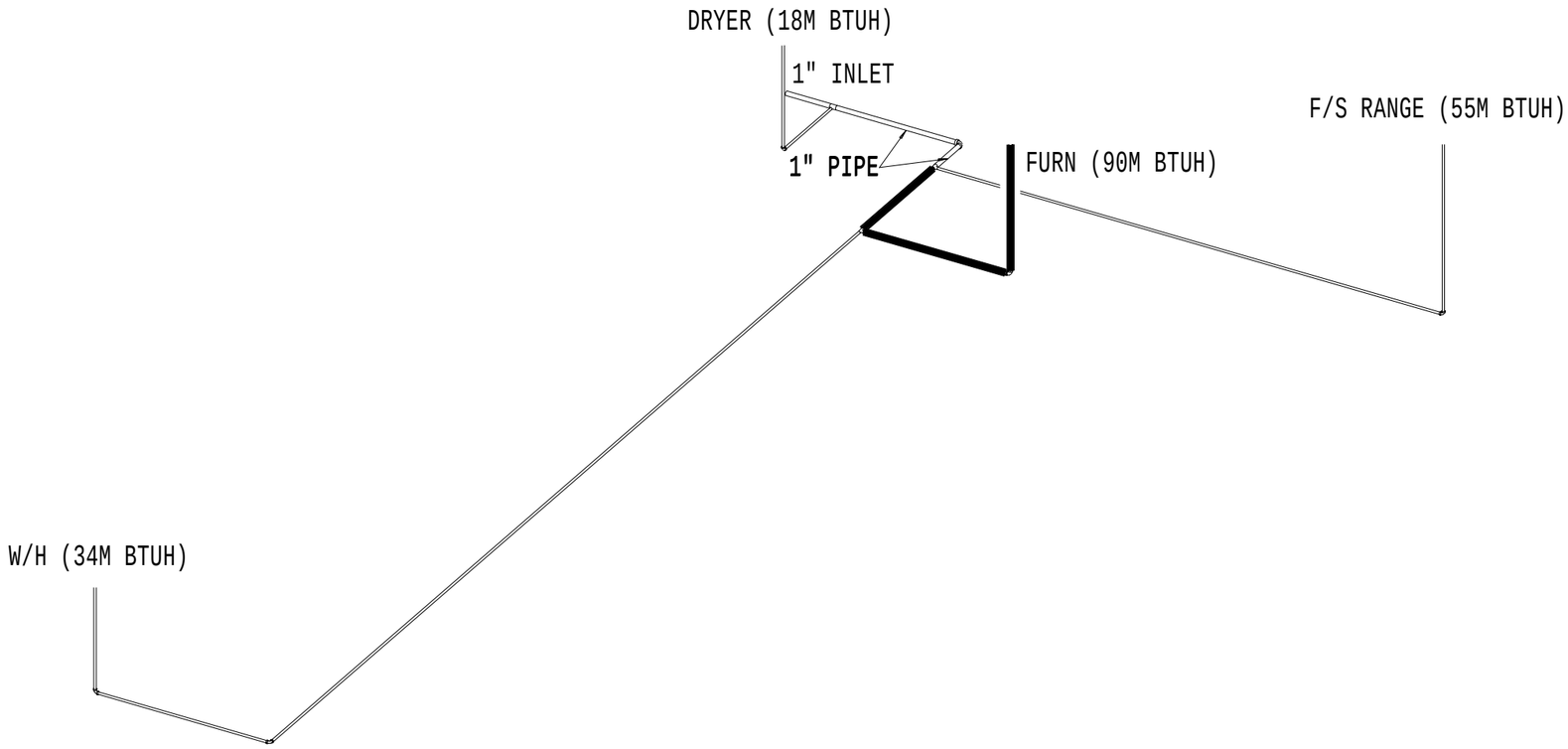
SHT PLW.1

REV A

PFS #24 Conforms to HUD MHCSS 6/21/16

22CL15562X

PFS certifies this document is current as of 06/21/2016



L E G E N D

TEE

90° ELL

1/2" PIPING

3/4" PIPING

1" PIPING

40'COLUMN LENGTH
FOR ENTIRE SYSTEM

FLEETWOOD HOMES

RIVERSIDE
220

PRODUCT NAME
CANYON LAKE

MODEL NO.
15562X

DRAWING TITLE
PLUMBING GAS

DRAWN BY:
MARIBEL L.

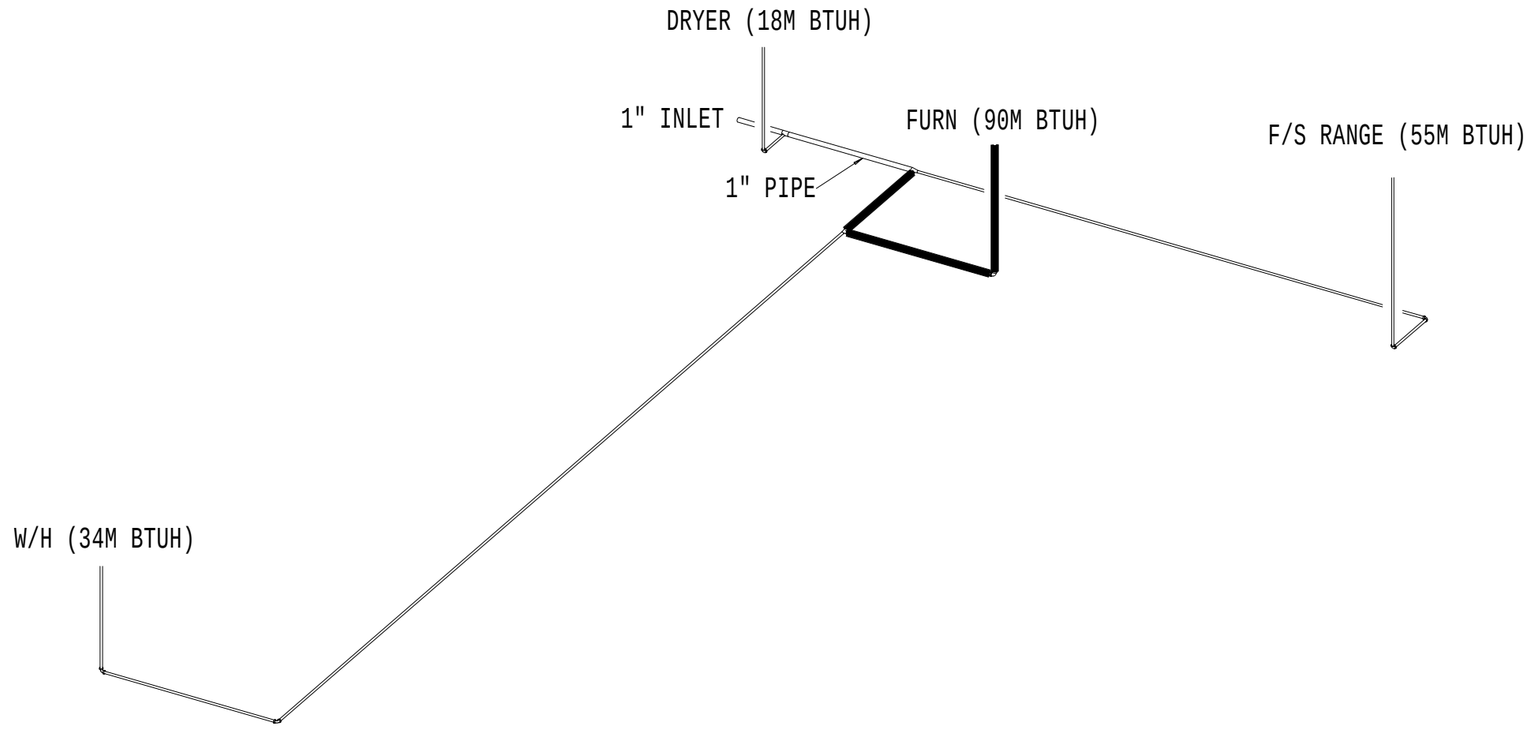
DATE:
04/18/16

SHT
PLG.1

REV

PFS #24 ®
Conforms to
HUD MHCSS
4/18/16

22CL15562X



L E G E N D

TEE

90° ELL

1/2" PIPING

3/4" PIPING

1" PIPING

40'COLUMN LENGTH
FOR ENTIRE SYSTEM

FLEETWOOD HOMES

RIVERSIDE
220

PRODUCT NAME
CANYON LAKE

MODEL NO.
15562X

DRAWING TITLE
ALTERNATE 1
PLUMBING GAS

DRAWN BY: MARIBEL L.

DATE: 04/18/16

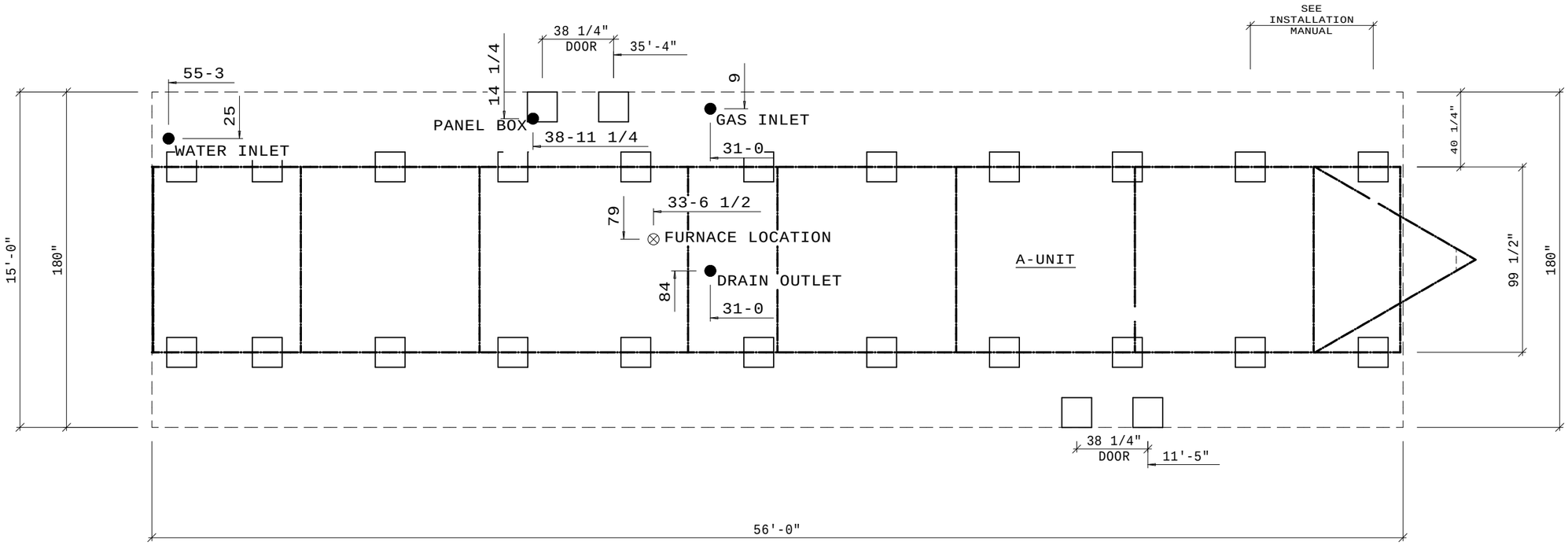
SHT: PLG1.1

REV:

PFS #24 Conforms to HUD MHCSS 4/18/16

52' PLAN #1

22CL15562Xa1



L E G E N D

STANDARD FOOTING

NOTES:
1. THIS DRAWING IS DESIGNED FOR THE STANDARD WIND ZONE AND IS TO BE USED IN CONJUNCTION WITH THE INSTALLATION MANUAL AND ITS SUPPLEMENTS.

2. FOOTINGS ARE SHOWN FOR EXAMPLE ONLY. QUANTITY AND SPACING MAY VARY BASED ON PAD TYPE, SOIL CONDITION, ETC.

3. FOOTING PADS & PIERS ARE REQUIRED AT SUPPORT POSTS. SEE INSTALLATION MANUAL FOR REQUIREMENTS.

FLEETWOOD HOMES

RIVERSIDE
220

PRODUCT NAME
CANYON LAKE

MODEL NO.
15562X

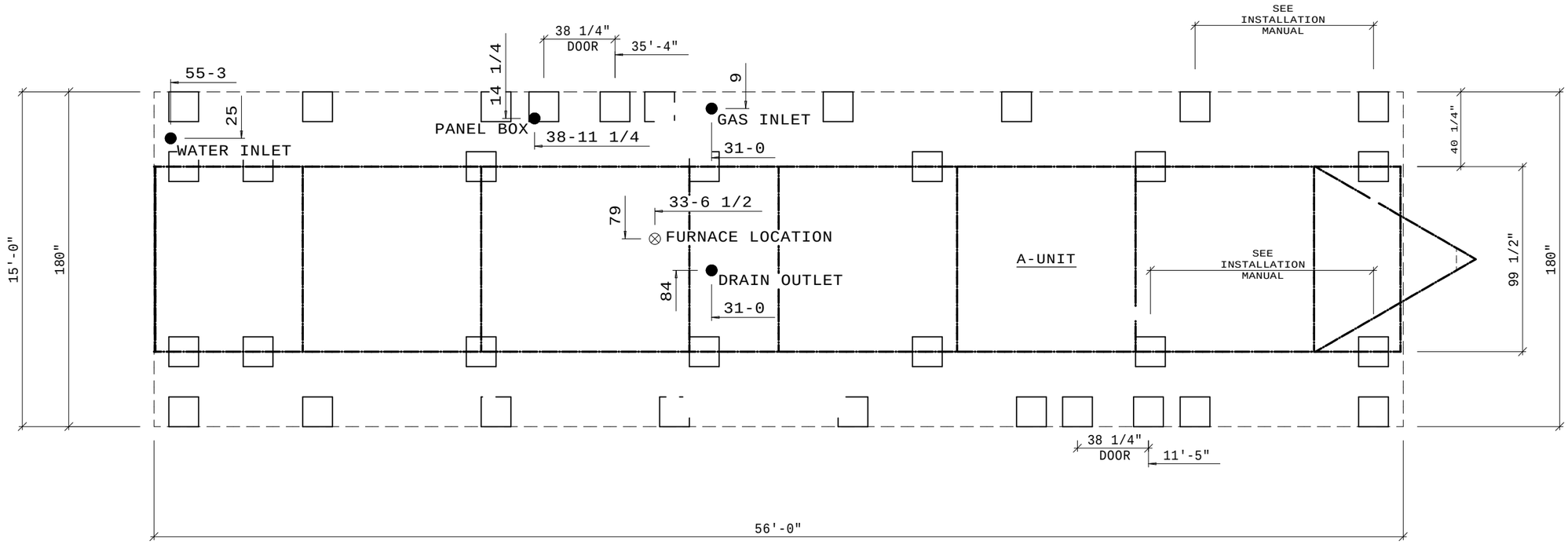
DRAWING TITLE
PIER LAYOUT
20# ROOF LOAD

DRAWN BY: MARIBEL L.

DATE: 04/18/16

SHT	REV
SP.1C.1	

22CL15562X



L E G E N D

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FLEETWOOD HOMES

RIVERSIDE
220

PRODUCT NAME
CANYON LAKE

MODEL NO.
15562X

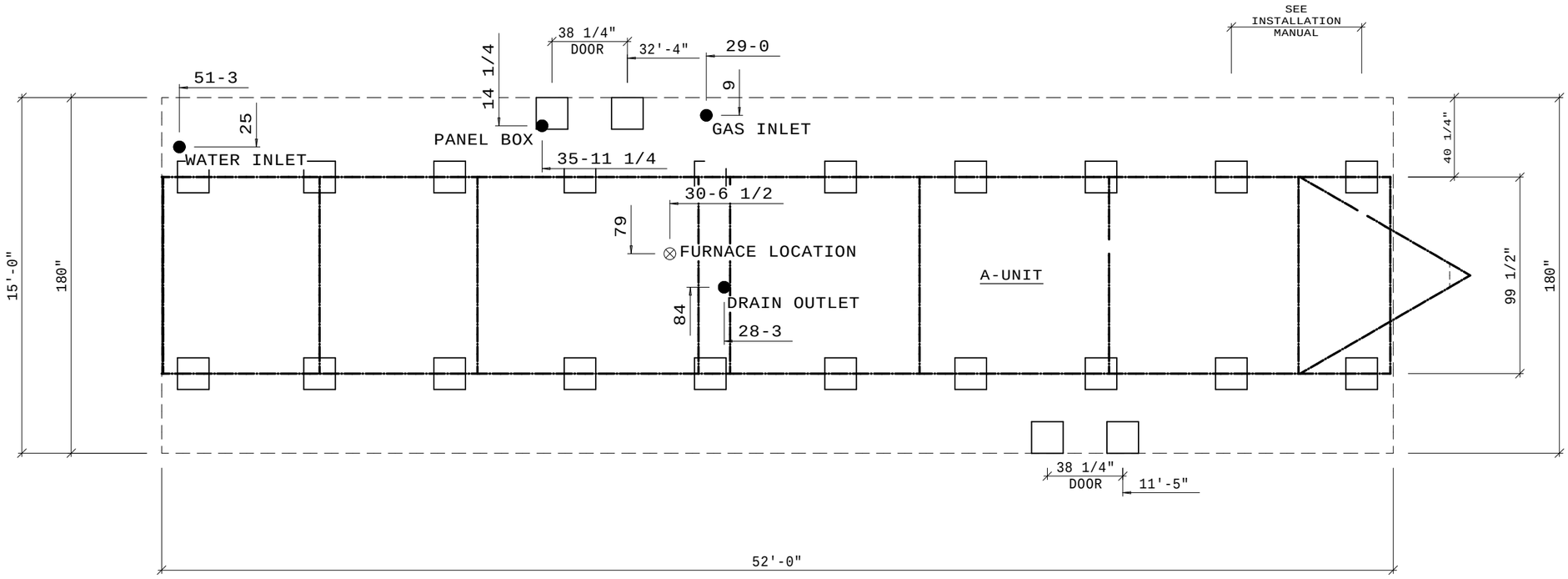
DRAWING TITLE
PIER LAYOUT
30# ROOF LOAD

DRAWN BY: MARIBEL L.

DATE: 04/18/16

SHT	REV
SP.1E.1	

22CL15562X



52' PLAN #1

L E G E N D

STANDARD FOOTING

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FLEETWOOD HOMES

RIVERSIDE
220

PRODUCT NAME
CANYON LAKE

MODEL NO.
15562X

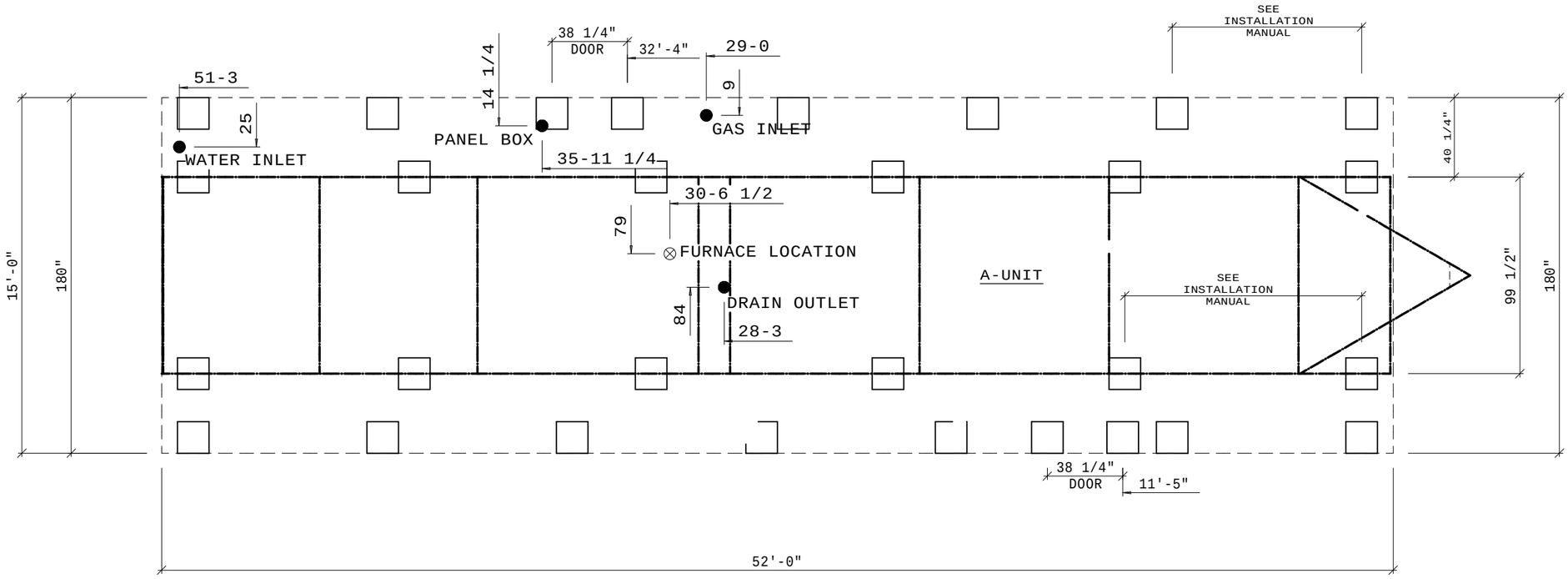
DRAWING TITLE
ALTERNATE 1
PIER LAYOUT
20# ROOF LOAD

DRAWN BY: MARIBEL L.

DATE: 04/18/16

SHT	REV
SP1.1C.1	

22CL15562Xa1



52' PLAN #1

L E G E N D

STANDARD FOOTING

NOTES:
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FLEETWOOD HOMES

RIVERSIDE
220

PRODUCT NAME
CANYON LAKE

MODEL NO.
15562X

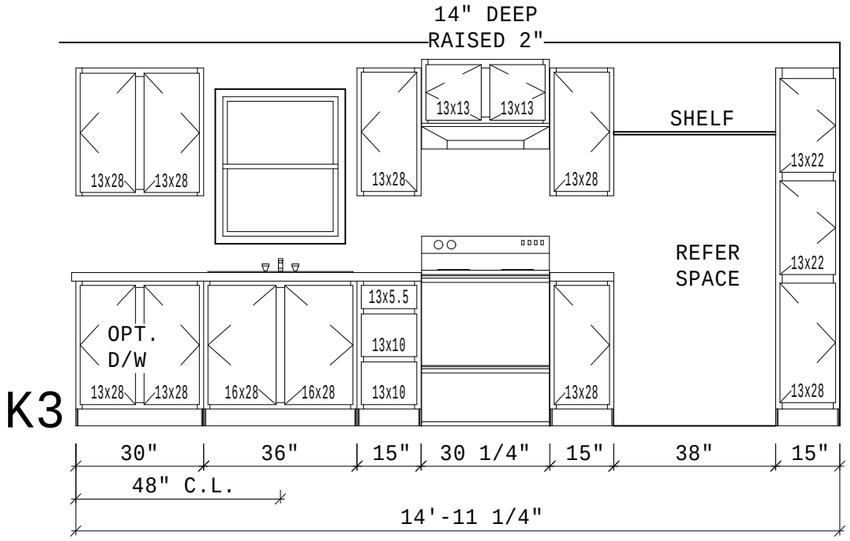
DRAWING TITLE
ALTERNATE 1
PIER LAYOUT
30# ROOF LOAD

DRAWN BY: MARIBEL L.

DATE: 04/18/16

SHT	REV
SP1.1E.1	

22CL15562Xa1



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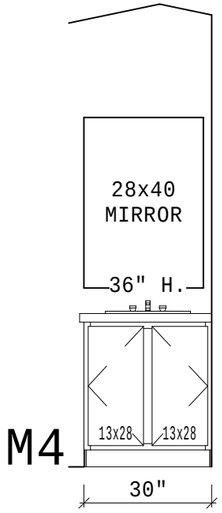
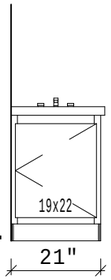
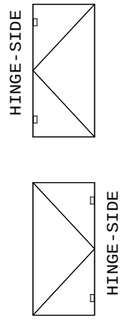


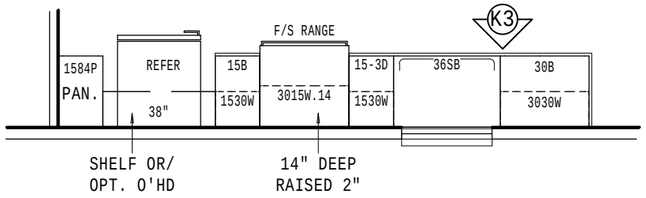
M4

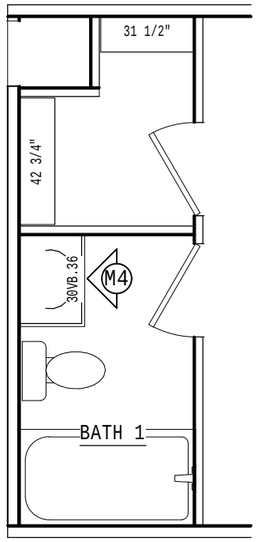


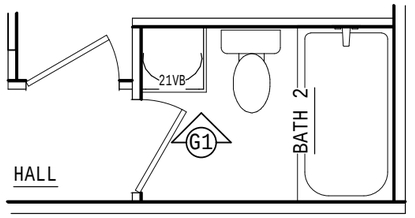
G1



KITCHEN







FLEETWOOD HOMES

RIVERSIDE
220

PRODUCT NAME
CANYON LAKE

MODEL NO.
15562X

DRAWING TITLE
CABINET
ELEVATIONS

DRAWN BY: Sandra R.

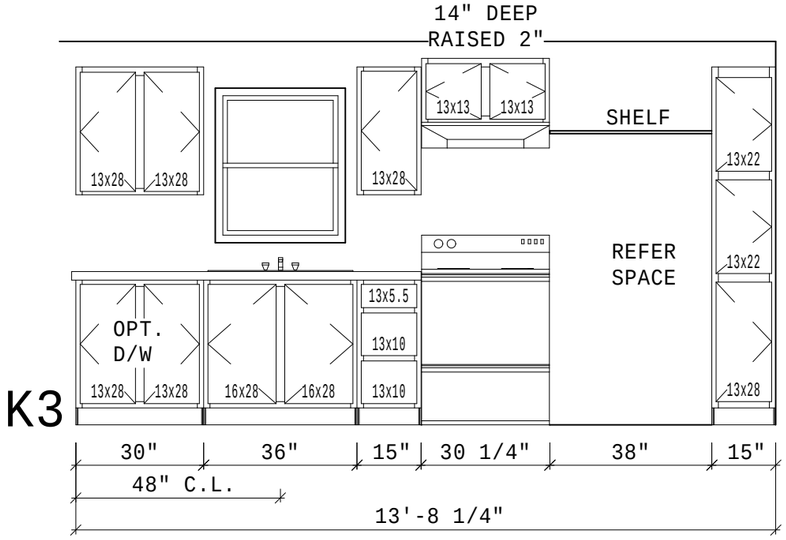
DATE: 05/11/16

SHT CE.1

REV A

22CL15562X

v.1.0



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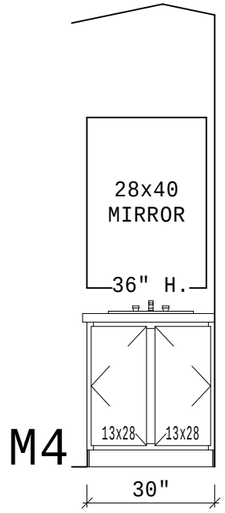

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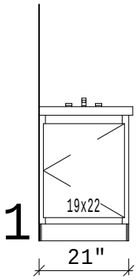
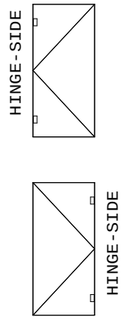
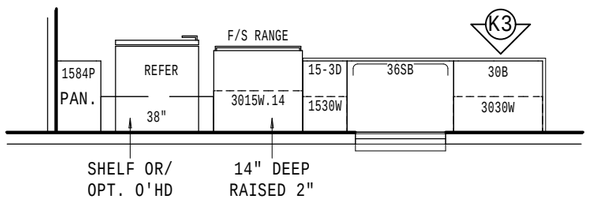
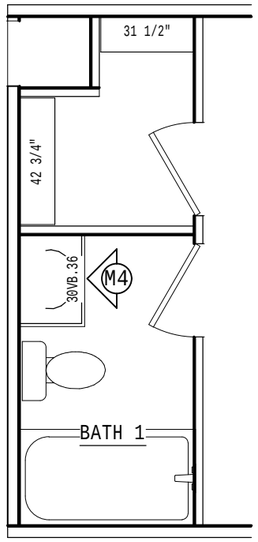


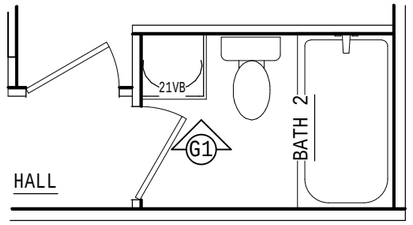
G1



KITCHEN







52' PLAN #1

FLEETWOOD HOMES

RIVERSIDE
220

PRODUCT NAME
CANYON LAKE

MODEL NO.
15562X

DRAWING TITLE
ALTERNATE 1
CABINET
ELEVATIONS

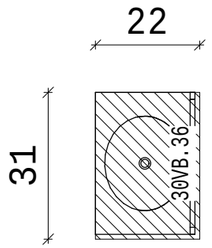
DRAWN BY: Sandra R.

DATE: 05/11/16

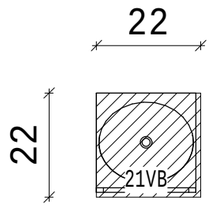
SHT	REV
CE1.1	A

22CL15562Xa1

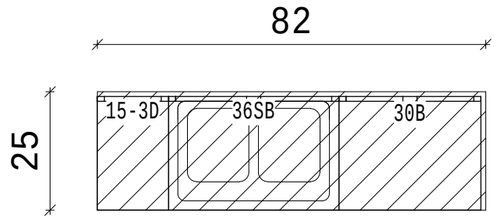
v.1.0



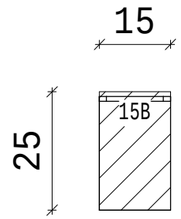
BATH 1
4.74 s.f.



BATH 2
3.36 s.f.



KITCHEN
14.24 s.f.



KITCHEN
2.60 s.f.

FLEETWOOD HOMES

RIVERSIDE
220

v.1.1

PRODUCT NAME
CANYON LAKE

MODEL NO.
15562X

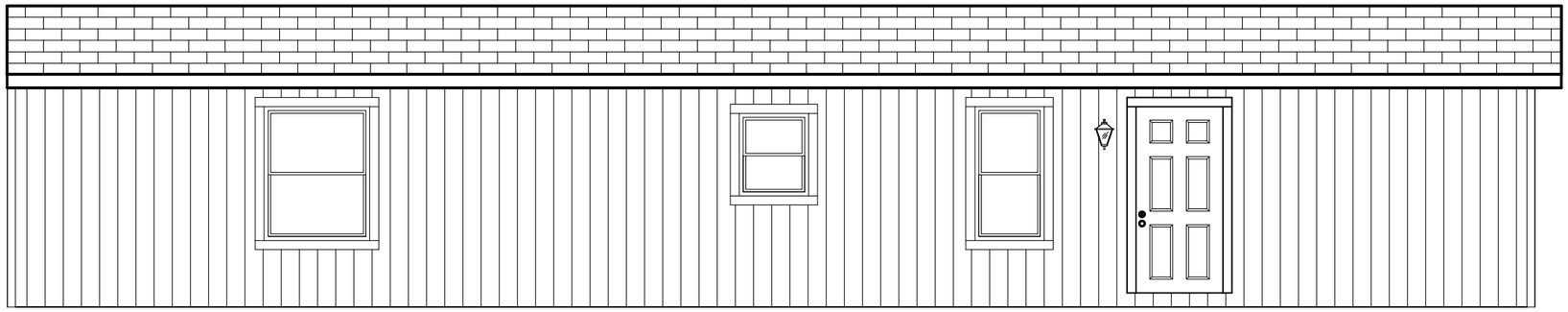
DRAWING TITLE
COUNTERTOPS

DRAWN BY: MARIBEL L.

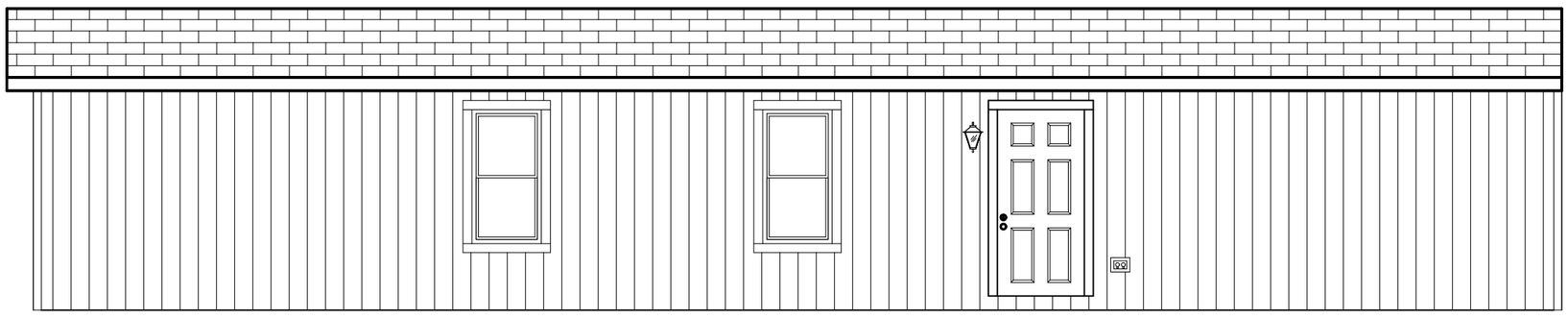
DATE: 04/18/16

SHT	REV
CT.1	

22CL15562X



FRONT VIEW



REAR VIEW

FLEETWOOD HOMES

RIVERSIDE
220

v.1.1

PRODUCT NAME
CANYON LAKE

MODEL NO.
15562X

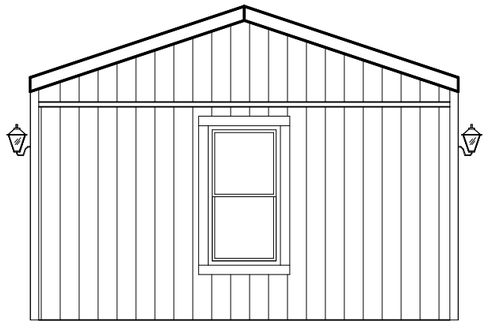
DRAWING TITLE
EXTERIOR ELEVATIONS

DRAWN BY: Sandra R.

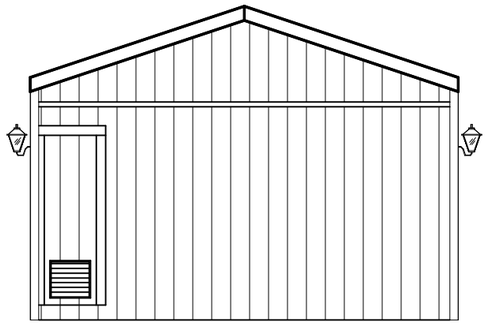
DATE: 05/11/16

SHT	REV
EE.1	A

22CL15562X



RIGHT VIEW



LEFT VIEW

FLEETWOOD HOMES

RIVERSIDE
220

v.1.1

PRODUCT NAME
CANYON LAKE

MODEL NO.
15562X

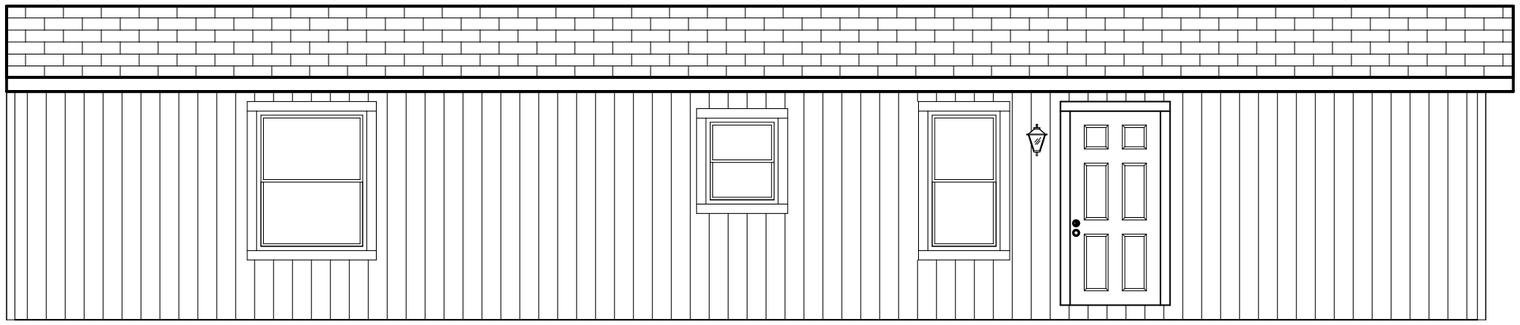
DRAWING TITLE
EXTERIOR ELEVATIONS

DRAWN BY: Sandra R.

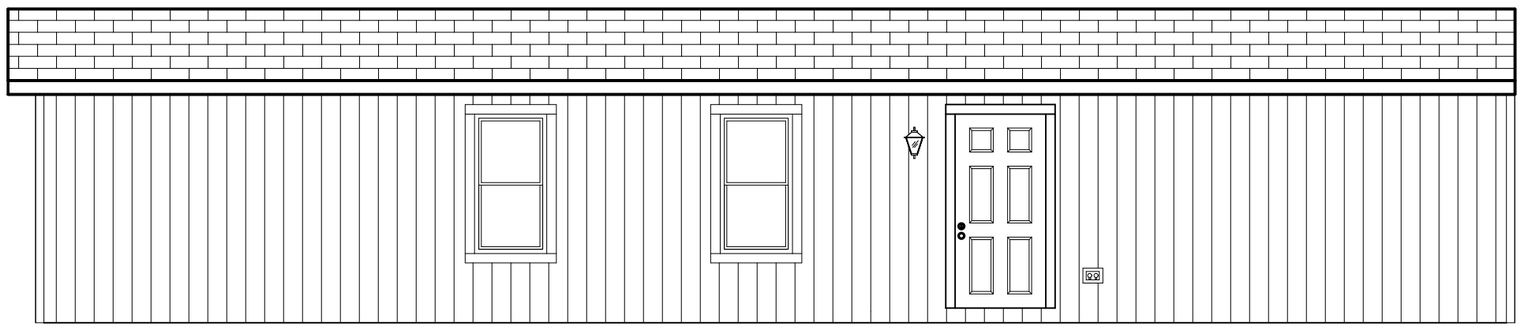
DATE: 05/11/16

SHT	REV
EE.2	A

22CL15562X



FRONT VIEW



REAR VIEW

52' PLAN #1

FLEETWOOD HOMES

RIVERSIDE
220

v.1.1

PRODUCT NAME
CANYON LAKE

MODEL NO.
15562X

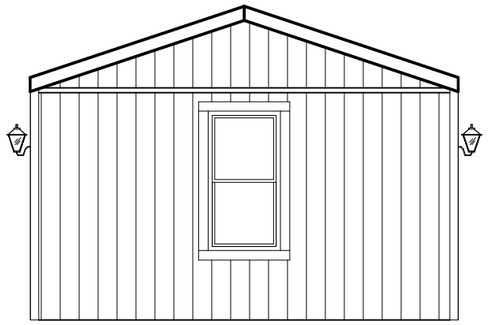
DRAWING TITLE
ALTERNATE 1
EXTERIOR
ELEVATIONS

DRAWN BY: Sandra R.

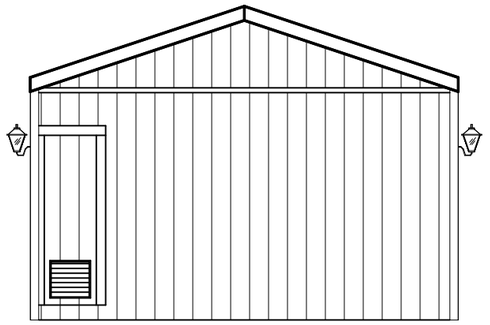
DATE: 05/11/16

SHT	REV
EE1.1	A

22CL15562Xa1



RIGHT VIEW



LEFT VIEW

52' PLAN #1

FLEETWOOD HOMES

RIVERSIDE
220

v.1.1

PRODUCT NAME
CANYON LAKE

MODEL NO.
15562X

DRAWING TITLE
ALTERNATE 1
EXTERIOR
ELEVATIONS

DRAWN BY: Sandra R.

DATE: 05/11/16

SHT	REV
EE1.2	A

22CL15562Xa1

PROJECT SCOPE & RATIONALE:

This project is to construct 3 x 2BR farm labor housing units & barn office w/ 2 full time workers.

A conventional septic system is proposed. Percolation testing done at 3 ft depth resulted in an average of 29 MPI. The required separation to groundwater from 3 ft trench bottoms is 8 ft.

Wet weather testing found groundwater at 14 ft below grade. This indicates that the separation of proposed trench bottom to this highest groundwater level is acceptable at 11 ft

.

The peak sewage flow for this 9.6 acres property is less than 1,500 gpd, thus cumulative impact assessment of groundwater mounding and nitrate are not required.

INFILTRATIVE AREA CALCULATIONS & SPECIFICATIONS

TYPE OF SEPTIC SYSTEM: Conventional Gravity Flow with Infiltration Chambers

DESIGN CALCULATIONS:	DRAINFIELD TRENCH SPECIFICATIONS:
Average Percolation Rate : **29 MPI** *(HOLES 1-6)*	Drainfield Dimensions: **3 ft width x 3 ft depth**
Design Application Rate: **0.57 gal/sq. ft./day**	High Cap Chamber Height: **1.5 ft**
Peak Wastewater Flow: **930 gpd** *(3x2BR + 2 empl. office)*	Slope in Drainfield Area: **9% (flat)**
Required Infiltrative Area: **1,632 ft²** {930 gpd/0.57 gpd/ft²}	Horizontal Drainfield Spacing: **6 ft o.c.** *(minimum)*
Infiltrative Area per Linear Ft Trench: **4 sq. ft.**	Depth to GW Below Trenches: **pending**
Trench Length (each side DV*): **408 ft** {1,632 ft²/4 ft/ft²}	
Reduced length for chambers: **286 ft** {408 - 0.3x408}	

* *DV=Diverter Valve* — ***Required Depth to GW: 8 ft***

GRAVITY FLOW CALCULATIONS:

(flat topography at 100 ft is assumed for conservative calculation)

Chamber Inlet invert elevation (furthest drainfield) = 97.7 ft
Pipe run length tank to drainfield: 75 ft
Septic tank outlet invert elevation: 98.3 ft
Slope of pipe run to furthest chamber inlet: 1.3%

Septic tank burial depth is 6" below grade
Additional soil cover to be added for 12" cover over tank.

PUMPED SEWAGE LINES TO BE APPROVED UNDER BUILDING PERMIT

County of Santa Clara - Department of Environmental Health
SOIL PERCOLATION TEST RECORDED MEASUREMENTS (Electronic Version by Chris Day, R.E.H.S.) **P1-6**
REVISED DATA SHEET

OWNER/APPLICANT:	Joe Chen	**SR #:** 867308	**PLN FILE #:**
LOCATION:	2740 Ferguson Rd., Gilroy, CA APN 841-21-022	**REHS:**	Peter Estes
CONTACT PERSON:	CHRIS DAY, R.E.H.S.	**PHONE:**	650-293-1045
		DATE:	11/24/2021

P. 1 of 1

HOLE #1 — DEPTH: 3 ft *(18 7/8" on ruler)*

TIME START	TIME FINISH	WATER LEVEL START	WATER LEVEL FINISH	Δ MIN	Δ INCH	MPI
3:54	4:24	24 1/2	22 1/4	30	2 1/4	13
4:25	4:55	24 7/8	22	30	2 7/8	10
4:57	5:27	24 7/8	22 3/8	30	2 1/2	12
5:28	5:58	24 7/8	22 1/2	30	2 3/8	13
5:59	6:29	24 7/8	22 3/8	30	2 1/2	12

HOLE #2 — DEPTH: 3 ft *(19 1/2" on ruler)*

TIME START	TIME FINISH	WATER LEVEL START	WATER LEVEL FINISH	Δ MIN	Δ INCH	MPI
3:58	4:29	24	21 1/4	31	2 3/4	11
4:30	5:00	24 3/4	24 1/8	30	5/8	48
5:01	5:31	24 1/2	24 1/4	30	1/4	120
5:32	6:02	25 1/8	24 1/4	30	7/8	34
6:03	6:33	25 1/8	24 1/4	30	7/8	34
6:34	7:04	25 1/8	24 3/8	30	3/4	40

HOLE #3 — DEPTH: 3 ft *(19 1/4" on ruler)*

TIME START	TIME FINISH	WATER LEVEL START	WATER LEVEL FINISH	Δ MIN	Δ INCH	MPI
4:01	4:31	25 3/8	23 5/8	30	1 3/4	17
4:32	5:02	25 1/2	22 3/4	30	2 3/4	11
5:03	5:33	25 1/2	23	30	2 1/2	12
5:34	6:04	25 1/2	23 1/4	30	2 1/4	13

HOLE #4 — DEPTH: 3 ft *(18 3/8" on ruler)*

TIME START	TIME FINISH	WATER LEVEL START	WATER LEVEL FINISH	Δ MIN	Δ INCH	MPI
4:05	4:35	24 1/2	21 1/4	30	3 1/4	9
4:37	5:07	24 1/2	23 1/2	30	1	30
5:08	5:38	24 1/2	23 1/2	30	1	30
5:39	6:09	24 1/2	23 1/2	30	1	30

HOLE #5 — DEPTH: 3 ft *(19" on ruler)*

TIME START	TIME FINISH	WATER LEVEL START	WATER LEVEL FINISH	Δ MIN	Δ INCH	MPI
4:07	4:37	24 1/2	22 3/41	30	2 35/82	12
4:39	5:09	25 1/8	23 1/2	30	1 5/8	18
5:10	5:40	25 1/8	23 5/8	30	1 1/2	20
5:41	6:11	25 1/4	23 5/8	30	1 5/8	18

HOLE #6 — DEPTH: 3 ft *(19 1/2" on ruler)*

TIME START	TIME FINISH	WATER LEVEL START	WATER LEVEL FINISH	Δ MIN	Δ INCH	MPI
4:12	4:42	25	22 3/85	30	2 82/85	10
4:43	5:13	25	22 5/8	30	2 3/8	13
5:14	5:44	25 1/2	23 3/8	30	2 1/8	14
5:45	6:15	25 1/4	23 1/2	30	1 3/4	17
6:17	6:47	25 3/8	23 1/2	30	1 7/8	16
6:47	7:17	25 1/4	23 1/2	30	1 3/4	17

HOLE		1	2	3	4	5	6
Stabilized MPI	R	12	36	12	30	19	17
Adjusted Stabilized MPI	R_1 = R x 1.4	17	50	17	42	27	24
Average Adjusted Stabilized MPI	R_2 = (Σ R_1)/ # Holes	29					
# Bedrooms	FOR OFFICE USE ONLY	Tank Size (Gal)				Leach Line (ft)	

SOIL PROFILE RESULTS CONVENTIONAL SYSTEMS — SP1, 2

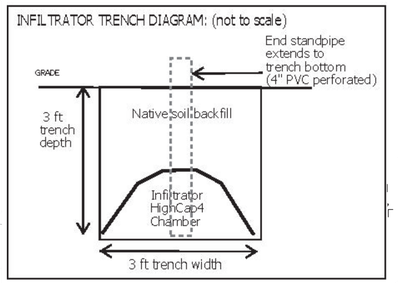
SR #: 867453 867308 DATE OF INSPECTION: 11/12/21
APN #: 841-21-022 OWNER:
APPLICANT:
SITE ADDRESS: 2740 Ferguson Rd Gilroy
CONDUCTED BY: Chris Day CHECKED BY: Peter Estes

HOLE #: SP1 — black clay, slightly loose dry; Brown/Dark Brown Clay slightly sandy; gravel; -mottling

HOLE #: SP2 — gravel; brown sandy clay rocky; end of dig by consultant

COMMENTS:

INFILTRATOR TRENCH DIAGRAM: (not to scale)



SOIL PROFILE RESULTS CONVENTIONAL SYSTEMS

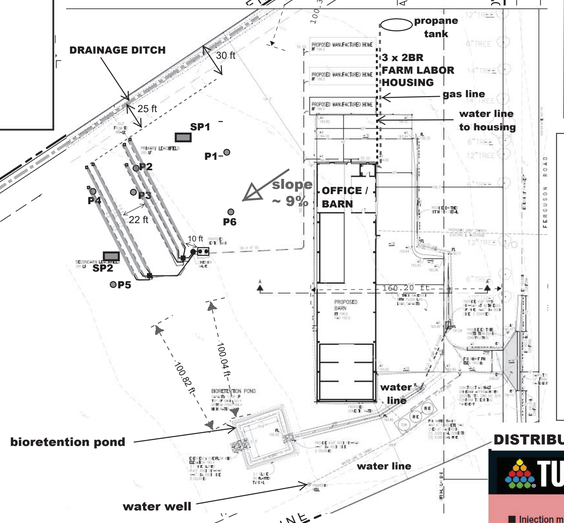
SR #: 867308 DATE OF INSPECTION: 11/19/21
APN #: 841-21-022 OWNER:
APPLICANT:
SITE ADDRESS: 2740 Ferguson Rd Gilroy
CONDUCTED BY: Chris Day CHECKED BY: Peter Estes

HOLE #: SP3 — see soil profile Log; observed water coming from side wall; end of dig groundwater observed at 16'

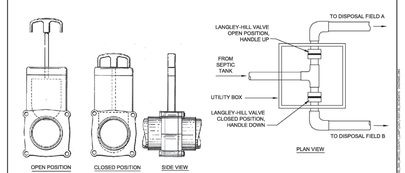
HOLE #:

COMMENTS: wet weather open

SEPTIC PLAN IS OVERLAID W/ CURRENT DRAINAGE PLAN.



DIVERTER VALVE:



DISTRIBUTION BOX (2):

TUF-TITE 4-Hole Distribution Box 4HD2

- Injection molded. Exceptionally strong.
- HDPE is non-corrosive in a septic environment.
- Patented snap-in pipe seals simplify installation.

Inlet invert (from bottom): 9 inch
Outlet invert: 7 inch

Interlocking Lid. Heavy-duty HDPE Lid is ribbed for added strength and rigidity. Slotted sides interlock on the Distribution Box to assure a tight fit.

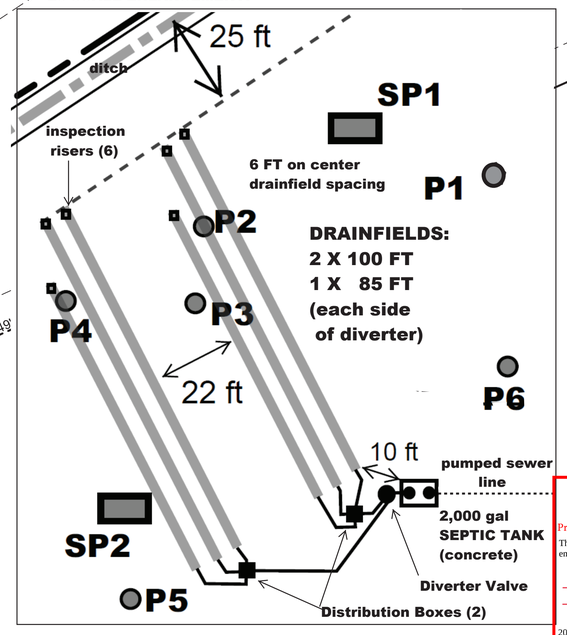
The 4HD2 Distribution Box comes complete with a Regular Lid or an Inspection Port Lid, and 5 snap-in fittings of your choice.

Model B1 Riser. For series B1 Box. Stackable HDPE Risers extend to grade in 6" increments. Accept 11" x 11" lids and grates.

DISTRIBUTION BOXES SHALL BE SET ON CONCRETE

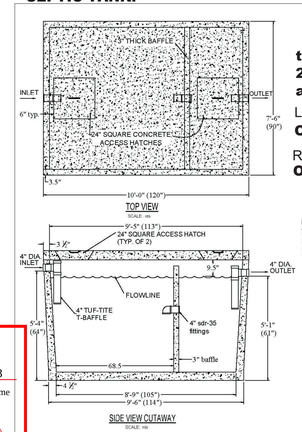
PUMPED SEWAGE LINES FROM HOUSING & OFFICE TO BE APPROVED UNDER PLUMBING PERMIT AND ELECTRICAL PERMITS FROM THE BUILDING DEPARTMENT.

20 SCALE ENLARGEMENT:



TUF-TITE EFFLUENT FILTER:

SEPTIC TANK:



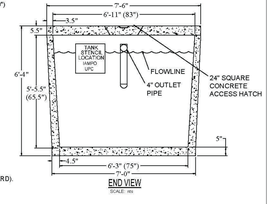
tank to be cast w/ 24" Orenco Riser adaptors.

Lids: **Orenco FLD24 (2)**

Risers: **Orenco RR2412 (2)**

NOTE: THIS TANK CAN BE CAST WITH ORENCO RISER ADAPTERS (24" OR 30") INSTEAD OF CONCRETE PLUGS. PLEASE ASK FOR DETAILS WHEN PLACING ORDER.

NOTE: INLET AND OUTLET PIPES ARE FITTED WITH WATERTIGHT A-LOK PIPE CONNECTIONS (STANDARD).



NOTES:
1). EXCAVATION SPECIFICATIONS:
LENGTH 11' - 0"
WIDTH 9' -0"
DEPTH BELOW INLET 5'-4"
2). DON CHAPIN PRE-CAST MAY MAKE CHANGES TO THE DESIGN AND OR TO THE DIMENSIONS WITHOUT NOTICE. PLEASE CONTACT DON CHAPIN PRE-CAST WHENEVER NECESSARY TO CONFIRM DESIGN CRITERIA.
3). CERTIFIED ENGINEERING IS AVAILABLE UNPON REQUEST.
4). THIS IS ALSO AVAILABLE AS AN H20 RATED ASSEMBLY
5). INTEGRAL TOP TO BODY DESIGN

DON CHAPIN PRE-CAST
2735 BOLSA RD.
HOLLISTER, CA 95023
(831) 630-1042
(831) 630-5763

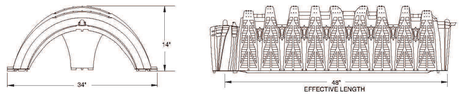
PRE-CAST CONCRETE WATER TIGHT SEPTIC TANK
CAPACITY 2000 GALLONS
MODEL IPS2000

DON CHAPIN PRE-CAST
3/13/09

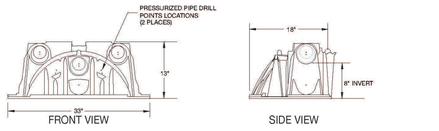
CHAMBERS:

Quick4 Plus™ Series — Quick4 PLUS CHAMBER SYSTEMS

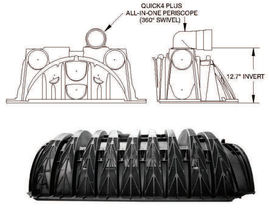
Quick4 Plus High Capacity Chamber



Quick4 Plus All-in-One 12 Endcap



Quick4 Plus All-in-One Periscope



INFILTRATOR WATER TECHNOLOGIES STANDARD LIMITED WARRANTY

(a) The structural integrity of each chamber, endcap and other accessory manufactured by Infiltrator ("Units"), when installed and operated in a leachfield of an onsite septic system in accordance with Infiltrator's instructions, is warranted to the original purchaser ("Holder") against defective materials and workmanship for one year from the date that the septic permit is issued for the septic system containing the Units; provided, however, that if a septic permit is not required by applicable law, the warranty period will begin upon the date that installation of the septic system commences. To exercise its warranty rights, Holder must notify Infiltrator in writing at its Corporate Headquarters in Old Saybrook, Connecticut within fifteen (15) days of the alleged defect. Infiltrator will supply replacement Units for Units determined by Infiltrator to be covered by this Limited Warranty. Infiltrator's liability specifically excludes the cost of removal and/or installation of the Units.

(b) THE LIMITED WARRANTY AND REMEDIES IN SUBPARAGRAPH (a) ARE EXCLUSIVE. THERE ARE NO OTHER WARRANTIES WITH RESPECT TO THE UNITS, INCLUDING NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE

(c) This Limited Warranty shall be void if any part of the chamber system is manufactured by anyone other than Infiltrator. The Limited Warranty does not extend to incidental, consequential, special or indirect damages. Infiltrator shall not be liable for penalties or liquidated damages, including loss of production and profits, labor and materials, overhead costs, or other losses or expenses incurred by the Holder or any third party. Specifically excluded from Limited Warranty coverage are damage to the Units due to ordinary wear and tear, alteration, accident, misuse, abuse or neglect of the Units; the Units being subjected to vehicle traffic or other conditions which are not permitted by the installation instructions; failure to maintain the minimum ground covers set forth in the installation instructions; the placement of improper materials into the system containing the Units; failure of the Units or the septic system due to improper sitting or improper sizing, excessive water usage, improper grease disposal, or improper operation; or any other event not caused by Infiltrator. This Limited Warranty shall be void if the Holder fails to comply with all of the terms set forth in this Limited Warranty. Further, in no event shall Infiltrator be responsible for any loss or damage to the Holder, the Units, or any third party resulting from installation or shipment, or from any product liability claims of Holder or any third party. For this Limited Warranty to apply, the Units must be installed in accordance with all site conditions required by state and local codes; all other applicable laws; and Infiltrator's installation instructions.

(d) No representative of Infiltrator has the authority to change or extend this Limited Warranty. No warranty applies to any party other than the original Holder.

The above represents the Standard Limited Warranty offered by Infiltrator. A limited number of states and counties have different warranty requirements. Any purchaser of Units should contact Infiltrator's Corporate Headquarters in Old Saybrook, Connecticut, prior to such purchase, to obtain a copy of the applicable warranty, and should carefully read that warranty prior to the purchase of Units.

INFILTRATOR® water technologies

4 Business Park Road
P.O. Box 768
Old Saybrook, CT 06475
860-577-7000 • Fax 860-577-7001
1-800-221-4436
www.infiltratorwater.com

PLUS10 0713

Contact Infiltrator Water Technologies' Technical Services Department for assistance at 1-800-221-4436

SEWAGE SYSTEM REVIEW

SANTA CLARA COUNTY
DEPARTMENT OF ENVIRONMENTAL HEALTH

Project Description SR No. SR0867308

Three 2-bedroom Farm Labor Single Family Dwellings and 2 full time employees max

APPROVAL RECOMMENDED

___ With existing System (Existing No. _____)
_X_ Install/modify system per plan (describe below)
[Obtain a permit from Environmental Health]

2000 gallon septic tank w/ 286 + 286 linear feet dispersal field at 4 sqft using Quick4 High Capacity Chambers w/ Diversion Valve

R.E.H.S. Peter Estes Date 02/24/2023

Not A Sewage System Permit. *Plan is void if absent signature.*

OWNER:
Joe Chen
Tel. 408-497-4618
Email: joejchen@gmail.com

PLAN BY: Christopher Day, R.E.H.S.
P.O. Box 26, Redwood City, CA 94064
Tel. 650-293-1045
Email: christopherday@aol.com

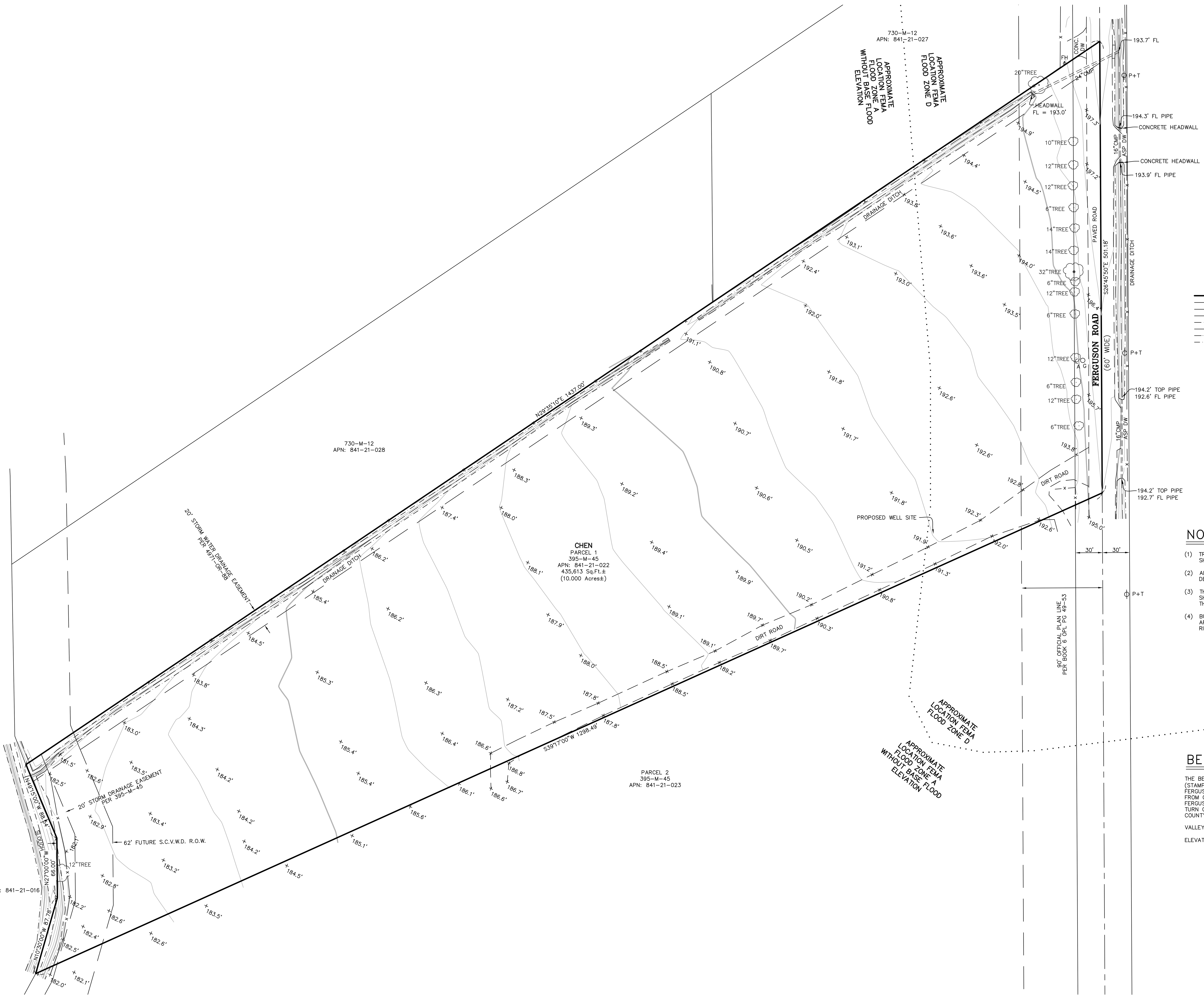
ORIG 6 DEC 2021
REV 1:
REV 2:

2740 Ferguson Rd., Gilroy, CA, 95020
APN 841-21-022

SITE PLAN

SEPTIC SYSTEM DESIGN PLAN
(To Serve Planned 3 X 2BR Labor Housing & Barn w/ Office)

OWTS 1



0 25 50 75 100
1"=50'

LEGEND

▬	PROPERTY BOUNDARY
―	LOT LINE
― – ―	CENTER LINE
— — —	PAVEMENT & DIRT, AS NOTED
– – – –	CONCRETE
―x―	FENCE
―···―	FLOW LINE
–·–·–	GRADE BREAK, TOP OF BANK & TOE OF SLOPE

ABBREVIATIONS

A	ANCHOR
ASP	ASPHALT
CMP	CORRUGATED METAL PIPE
DW	DRIVEWAY
G	GUY ANCHOR
P+T	POWER & TELEPHONE POLE

NOTES

(1) TREE SPECIES AND DRIP LINES ARE APPROXIMATE AND SHOULD BE VERIFIED BY A CERTIFIED ARBORIST.

(2) ALL DISTANCES & DIMENSIONS ARE IN FEET AND DECIMALS THEREOF.

(3) THE UNDERGROUND UTILITIES SHOWN ON THIS MAP, IF SHOWN, ARE APPROXIMATE AND BASED ON EVIDENCE AT THE SURFACE.

(4) BUILDING DIMENSIONS SHOWN ON THIS MAP, IF SHOWN, ARE MEASURED FROM THE TRIM, STUCCO OR SIDING AT RIGHT ANGLES TO THE PROPERTY LINES.

BENCHMARK

THE BENCHMARK USED FOR THIS SURVEY IS A BRASS DISK (STAMPED PP-2) ON TOP OF CONCRETE HEADWALL FOR FERGUSON ROAD OVER CREWS CREEK; 3100 FEET SOUTHEAST FROM CREWS ROAD; LOCATED ON SOUTHWEST SIDE OF FERGUSON ROAD AND 250 FEET NORTHWEST FROM 90 DEGREE TURN ON HIGHWAY 152. UNINCORPORATED SANTA CLARA COUNTY.

VALLEY WATER BENCHMARK : BM018

ELEVATION = 195.41' (NAVD88)

PROFESSIONAL LAND SURVEYOR
GARY D. CARNES
No. 4516
STATE OF CALIFORNIA

[illegible]

Carnes & Ekparian, Inc.

LAND SURVEYORS
9505 SUGAR BABE DRIVE GILROY, CA 95020
T: (408) 847-2013 F: (408) 846-7248
EMAIL: OFFICE@CE-PLS.COM

CARNES & EKPARIAN ★ LAND SURVEYORS

No.	DATE	REVISION
1.	11/09/21	ADDED EASEMENTS PER TITLE REPORT DATED 7/17/2018

TOPOGRAPHIC MAP FOR JOE CHEN 2740 FERGUSON ROAD COUNTY OF SANTA CLARA, CA.

DATE : 11/02/2021
SCALE : 1" = 50'
DRAWN BY : J.H.
PROJ. MANAGER : G.C.

SHEET 1 OF 1
Job No. 21151
DWG: CHEN TP

COUNTY OF SANTA CLARA
General Construction Specifications

GENERAL CONDITIONS

1. ALL CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE SOILS AND/OR GEOTECHNICAL REPORT PREPARED BY GEO-LOGIC ASSOCIATES (PROJECT NO. PA23.1018.00) AND DATED JUNE 1, 2023 THIS REPORT IS SUPPLEMENTED BY: 1) THESE PLANS AND SPECIFICATIONS, 2) THE COUNTY OF SANTA CLARA STANDARD DETAILS. 3) THE COUNTY OF SANTA CLARA STANDARD SPECS, 4) STATE OF CALIFORNIA STANDARD DETAILS, 5) STATE OF CALIFORNIA STANDARD SPECIFICATIONS. IN THE EVENT OF CONFLICT THE FORMER SHALL TAKE PRECEDENCE OVER THE LATTER. THE PERFORMANCE AND COMPLETION OF ALL WORK MUST BE TO THE SATISFACTION OF THE COUNTY.
2. DEVELOPER IS RESPONSIBLE FOR INSTALLATION OF THE IMPROVEMENTS SHOWN ON THESE PLANS AND HE OR HIS SUCCESSOR PROPERTY OWNERS ARE RESPONSIBLE FOR THEIR CONTINUED MAINTENANCE.
3. DEVELOPER SHALL BE RESPONSIBLE FOR CORRECTION OF ANY ERRORS OR OMISSIONS IN THESE PLANS. THE COUNTY SHALL BE AUTHORIZED TO REQUIRE DISCONTINUANCE OF ANY WORK AND SUCH CORRECTION AND MODIFICATION OF PLANS AS MAY BE NECESSARY TO COMPLY WITH COUNTY STANDARDS OR CONDITIONS OF DEVELOPMENT APPROVAL.
4. DEVELOPER SHALL OBTAIN ENCROACHMENT PERMITS FROM THE SANTA CLARA VALLEY WATER DISTRICT AND CALIFORNIA DEPARTMENT OF TRANSPORTATION WHERE NEEDED. COPIES OF THESE PERMITS SHALL BE KEPT AT THE JOB SITE FOR REVIEW BY THE COUNTY'S INSPECTOR.
5. DEVELOPER SHALL REMOVE OR TRIM ALL TREES TO PROVIDE AN UNOBSTRUCTED FIFTEEN (15) FOOT VERTICAL CLEARANCE FOR ROADWAY AREA.
6. THIS PLAN AUTHORIZES THE REMOVAL OF ONLY THOSE TREES WITH TRUNK DIAMETERS GREATER THAN 12 INCHES MEASURED 4.5 FEET ABOVE THE GROUND THAT ARE SHOWN TO BE REMOVED UNLESS AN AMENDED PLAN IS APPROVED OR A SEPARATE TREE REMOVAL PERMIT IS OBTAINED FROM THE PLANNING OFFICE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT REMOVAL OF ADDITIONAL TREES HAS BEEN PERMITTED.
7. DEVELOPER SHALL PROVIDE ADEQUATE DUST CONTROL AS REQUIRED BY THE COUNTY INSPECTOR.
8. ALL PERSONS MUST COMPLY WITH SECTION 4442 OF THE PUBLIC RESOURCES CODE AND SECTION 13005 OF THE HEALTH AND SAFETY CODE RELATING TO THE USE OF SPARK ARRESTERS.
9. UPON DISCOVERING OR UNEARTHING ANY BURIAL SITE AS EVIDENCED BY HUMAN SKELETAL REMAINS OR ARTIFACTS, THE PERSON MAKING SUCH DISCOVERY SHALL IMMEDIATELY NOTIFY THE COUNTY CORONER AT (408) 454-2520 AND LAND DEVELOPMENT ENGINEERING OFFICE AT (408) 299-5730. NO FURTHER DISTURBANCE OF THE SITE MAY BE MADE EXCEPT AS AUTHORIZED BY THE LAND DEVELOPMENT OFFICE IN ACCORD WITH PROVISIONS OF THIS ORDINANCE (COUNTY ORDINANCE CODE SECTION B6-18).
10. THESE PLANS ARE FOR THE WORK DESCRIBED IN THE SCOPE OF WORK ONLY. A SEPARATE PERMIT WILL BE REQUIRED FOR THE SEPTIC LINE CONSTRUCTION.
11. ANY DEVIATION FROM THESE APPROVED PLANS SHALL BE RE-APPROVED IN WRITING BY THE COUNTY ENGINEER PRIOR TO CONSTRUCTION.

CONSTRUCTION STAKING

1. THE DEVELOPER'S ENGINEER IS RESPONSIBLE FOR THE INITIAL PLACEMENT AND REPLACEMENT OF CONSTRUCTION GRADE STAKES. THE STAKES ARE TO BE ADEQUATELY IDENTIFIED, LOCATED, STABILIZED, ETC. FOR THE CONVENIENCE OF CONTRACTORS. LATERAL OFFSET OF STAKES SET FOR CURBS AND GUTTERS SHALL NOT EXCEED 2 1/2 FEET FROM BACK OF CURB.
2. ANY PROPERTY LINE STAKES OR ROAD MONUMENTS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY DEVELOPER'S ENGINEER AND LICENSED LAND SURVEYOR.
3. PROPERTY LINE STAKING MUST BE PERFORMED BY THE PROJECT ENGINEER OR LAND SURVEYOR TO ESTABLISH OR RE-ESTABLISH THE PROJECT BOUNDARY AND SHALL BE INSPECTED BY THE COUNTY INSPECTOR PRIOR TO THE BEGINNING OF THE WORK.
4. PROPER CONSTRUCTION STAKES SHALL BE SET IN THE FIELD BY THE PROJECT ENGINEER OR LAND SURVEYOR AND VERIFIED BY THE COUNTY INSPECTOR PRIOR TO THE COMMENCEMENT OF GRADING.
5. IN ACCORDANCE WITH THE CALIFORNIA PROFESSIONAL LAND SURVEYORS' ACT (BUSINESS AND PROFESSIONS CODE) CHAPTER 15 SECTIONS 8771 AND 8725.1, CALIFORNIA PENAL CODE 605, AND CALIFORNIA GOVERNMENT CODE 27581, ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES THAT WILL OR MAY DISTURB AN EXISTING ROADWAY/STREET MONUMENT, PROPERTY CORNER, OR ANY OTHER PERMANENT SURVEYED MONUMENT AND/OR AS SHOWN ON THIS TENTATIVE MAP SHALL ENSURE THAT A CORNER RECORD AND/OR RECORD OF SURVEY ARE FILED WITH THE OCUNTY SURVEYOR OFFICE PRIOR TO DISTURBING SAID MONUMENTS. ALL DISTURBED OR DESTROYED MONUMENTS SHALL BE RESET AND FILED IN COMPLIANCE WITH SECTION 8771.

CONSTRUCTION INSPECTION

1. CONTRACTOR SHALL NOTIFY PERMIT INSPECTION UNIT, SANTA CLARA COUNTY PRIOR TO COMMENCING WORK AND FOR FINAL INSPECTION OF WORK AND SITE.
2. THE COUNTY REQUIRES A MINIMUM OF 24 HOURS ADVANCE NOTICE FOR GENERAL INSPECTION, 48 HOURS FOR ASPHALT CONCRETE INSPECTION.
3. INSPECTION BY SANTA CLARA COUNTY SHALL BE LIMITED TO INSPECTION OF MATERIALS AND PROCESSES OF CONSTRUCTION TO OBSERVE THEIR COMPLIANCE WITH PLANS & SPECIFICATIONS BUT DOES NOT INCLUDE RESPONSIBILITY FOR THE SUPERINTENDENT OF CONSTRUCTION, SITE CONDITIONS, EQUIPMENT OR PERSONNEL. CONTRACTOR SHALL NOTIFY THE COUNTY LAND DEVELOPMENT INSPECTOR AT PHONE (408) 299-6868 AT LEAST 24 HOURS PRIOR TO COMMENCING WORK AND FOR FINAL INSPECTION OF WORK AND SITE.
4. DEVELOPER AND/OR HIS AUTHORIZED REPRESENTATIVE MUST SUBMIT WRITTEN REQUEST FOR FINAL INSPECTION AND ACCEPTANCE. SAID REQUEST SHALL BE DIRECTED TO THE INSPECTION OFFICE NOTED ON THE PERMIT FORM.
5. THE CONTRACTOR SHALL PROVIDE TO THE COUNTY CONSTRUCTION INSPECTOR WITH PAD ELEVATION AND LOCATION CERTIFICATES, PREPARED BY THE PROJECT ENGINEER OR LAND SURVEYOR, PRIOR COMMENCEMENT OF THE BUILDING FOUNDATION.

SITE PREPARATION (CLEARING AND GRUBBING)

1. EXISTING TREES AUTHORIZED FOR REMOVAL, ROOTS, AND FOREIGN MATERIAL IN AREAS TO BE IMPROVED WILL BE REMOVED TO AN AUTHORIZED DISPOSAL SITE AS FOLLOWS:

A) TO A MINIMUM DEPTH OF TWO FEET BELOW THE FINISHED GRADE OF PROPOSED ROADWAYS (EITHER PRIVATE OR TO BE DEDICATED TO PUBLIC USE)

B) FROM AREAS AFFECTED BY THE PROPOSED GRADING EXCEPT WHERE NOTED ON THE PLANS.

2. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO MOVE OR RELOCATE UTILITY POLES AND OTHER OBSTRUCTIONS IN THE WAY OF CONSTRUCTION.

UTILITY LOCATION, TRENCHING & BACKFILL

1. CONTRACTOR SHALL NOTIFY USA (UNDERGROUND SERVICE ALERT) AT 1-800-277-2600 A MINIMUM OF 24 HOURS BEFORE BEGINNING UNDERGROUND WORK FOR VERIFICATION OF THE LOCATION OF UNDERGROUND UTILITIES.
2. ACCURATE VERIFICATION AS TO SIZE, LOCATION, AND DEPTH OF EXISTING UNDERGROUND CONDUITS OR FACILITIES SHALL BE THE INDIVIDUAL CONTRACTORS RESPONSIBILITY. PLAN LOCATIONS ARE APPROXIMATE AND FOR GENERAL INFORMATION ONLY.
3. ALL UNDERGROUND INSTALLATIONS SHALL BE IN PLACE AND THE TRENCH BACKFILLED AND COMPACTED BEFORE PLACING AGGREGATE BASE MATERIAL OR SURFACE STRUCTURES. SURFACING MAY BE DONE IF THE UTILITY COMPANY CONCERNED INDICATES BY LETTER THAT IT WILL BORE. UNLESS SPECIFICALLY AUTHORIZED BY THE COUNTY, GAS AND WATER MAINS SHALL BE INSTALLED OUTSIDE THE PAVED AREAS.
4. TRENCH BACKFILL IN EXISTING PAVEMENT AREAS SHALL BE SAND MATERIAL IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE SPECIFICATIONS. THE STRUCTURAL SECTION FOR TRENCH REPLACEMENT SHALL CONSIST OF NOT LESS THAN 12 INCHES OF APPROVED AGGREGATE BASE MATERIAL COMPACTED TO A RELATIVE COMPACTION OF AT LEAST 95% AND 4 INCHES OF HOT ASPHALT CONCRETE PLACED IN TWO LIFTS. TRENCH RESTORATION FOR HIGHER TYPE PAVEMENTS SHALL BE MADE IN KIND OR AS DIRECTED BY THE COUNTY.
5. TRENCH BACKFILL IN NEW CONSTRUCTION AREAS SHALL BE SAND MATERIAL COMPACTED TO A RELATIVE COMPACTION OF AT LEAST 90%. THE REQUIREMENT FOR SELECT MATERIAL MAY BE WAIVED BY COUNTY IF THE NATIVE SOIL IS SUITABLE FOR USE AS TRENCH BACKFILL BUT THE COMPACTION REQUIREMENTS WILL NOT BE THEREBY WAIVED.
6. BACKFILL AND TRENCH RESTORATION REQUIREMENTS SHALL APPLY AS MINIMUM STANDARDS TO ALL UNDERGROUND FACILITIES INSTALLED BY OTHER FIRMS OR PUBLIC AGENCIES.

REVISED 11-26-14

RETAINING WALLS

1. REINFORCED CONCRETE AND CONCRETE MASONRY UNIT RETAINING WALLS SHALL HAVE FOUNDATION AND REINFORCEMENT INSPECTED BY THE COUNTY ENGINEERING INSPECTOR AND ENGINEER OF RECORD PRIOR TO POURING THE FOUNDATION AND FORMING THE WALL.
2. SEGMENTAL BLOCK RETAINING WALLS SHALL HAVE FOUNDATION AND REINFORCEMENT INSPECTED BY THE COUNTY ENGINEERING INSPECTOR.

GRADING

1. EXCAVATED MATERIAL SHALL BE PLACED IN THE FILL AREAS DESIGNATED OR SHALL BE HAULED AWAY FROM THE SITE TO A COUNTY APPROVED DISPOSAL SITE. WHERE FILL MATERIAL IS TO BE PLACED ON NATURAL GROUND, IS SHALL BE STRIPPED OF ALL VEGETATION. TO ACHIEVE A PROPER BOND WITH THE FILL MATERIAL, THE SURFACE OF THE GROUND SHALL BE SCARIFIED TO DEPTH OF 6" BEFORE FILL IS PLACED. WHERE NATURAL GROUND IS STEEPER THAN 5:1, IT SHALL BE BENCHED AND THE FILL KEYED IN TO ACHIEVE STABILITY. WHERE NEW FILL IS TO BE PLACED ON EXISTING FILL THE EXISTING FILL SHALL BE REMOVED UNTIL MATERIAL COMPACTED TO 90% RELATIVE COMPACTION IS EXPOSED. THEN THE NEW FILL MATERIAL SHALL BE PLACED AS PER THESE CONSTRUCTION NOTES. FILL MATERIAL SHALL BE PLACED IN UNIFORM LIFTS NOT EXCEEDING 6" IN UNCOMPACTED THICKNESS. BEFORE COMPACTION BEGINS, THE FILL SHALL BE BROUGHT TO A WATER CONTENT THAT WILL PERMIT PROPER COMPACTION BY EITHER 1) AERATING THE FILL IF IT IS TOO WET OR 2) MOISTENING THE FILL WITH WATER IF IT IS TOO DRY. EACH LIFT SHALL BE THOROUGHLY MIXED BEFORE COMPACTION TO ENSURE A UNIFORM DISTRIBUTION OF MOISTURE.
2. EXCESS CUT MATERIAL SHALL NOT BE SPREAD OR STOCKPILED ON THE SITE.
3. SURPLUS EARTH FILL MATERIAL SHALL BE PLACED IN A SINGLE (8" MAX) THICK LAYER COMPACTED TO WITHSTAND WEATHERING IN THE AREA(S) DELINEATED ON THE PLAN.
4. NO ORGANIC MATERIAL SHALL BE PLACED IN ANY FILL. NO TREES SHALL BE REMOVED OUTSIDE OF CUT, FILL OR ROADWAY AREAS.
5. THE UPPER 6" OF SUBGRADE BELOW DRIVEWAY ACCESS ROAD OR PARKING AREA SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY.
6. MAXIMUM CUT SLOPE SHALL BE 2 HORIZONTAL TO 1 VERTICAL. MAXIMUM FILL SLOPE SHALL BE 2 HORIZONTAL TO 1 VERTICAL.

LOCATION	CUT (C.Y.)	FILL (C.Y.)	VERT. DEPTH
RESIDENCE	±7	±111	±0.3/±0.9
DRIVEWAY	±95	±38	±1.3/±0.8
POND	±54	±98	±1.5/±2
TOTAL	±156	±247	

NOTE: FILL VOLUMES INCLUDE 10% SHRINKAGE.
EXCESS MATERIAL SHALL BE OFF HAULED TO A COUNTY APPROVED DUMP SITE.

7. NOTIFY SOILS ENGINEER TWO (2) DAYS PRIOR TO COMMENCEMENT OF ANY GRADING WORK TO COORDINATE THE WORK IN THE FIELD.
8. ALL MATERIALS FOR FILL SHOULD BE APPROVED BY THE SOILS ENGINEER BEFORE IT IS BROUGHT TO THE SITE.
9. THE UPPER 6" OF THE SUBGRADE SOIL SHALL BE SCARIFIED, MOISTURE CONDITIONED AND COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 95%
10. ALL AGGREGATE BASE MATERIAL SHALL BE COMPACTED TO A MINIMUM 95% RELATIVE COMPACTION.
11. THE GEOTECHNICAL PLAN REVIEW LETTER MUST BE REVIEWED AND APPROVED BY THE COUNTY GEOLOGIST PRIOR TO FINAL APPROVAL BY THE COUNTY ENGINEER FOR BUILDING OCCUPANCY.
12. THE PROJECT GEOTECHNICAL ENGINEER SHALL PERFORM COMPACTION TESTING AND PRESENT THE RESULTS TO THE COUNTY ENGINEERING INSPECTOR PRIOR TO THE CONSTRUCTION OF ANY PAVED AREA.
13. GRADING WORK BETWEEN OCTOBER 15TH AND APRIL 15TH IS AT THE DISCRETION OF THE SANTA CLARA COUNTY GRADING OFFICIAL.
14. TOTAL DISTURBED AREA FOR THE PROJECT 46,054 SF.
15. WDID NO.______________________.
16. THE INSPECTOR MAY VERIFY THAT A VALID NOTICE OF INTENT (NOI) HAS BEEN ISSUED BY THE STATE AND THAT A CURRENT AND UP TO DATE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS AVAILABLE ON SITE.

TREE PROTECTION

1. FOR ALL TREES TO BE RETAINED WITH A CANOPY IN THE DEVELOPMENT AREA OR INTERFACES WITH THE LIMITS OF GRADING FOR ALL PROPOSED DEVELOPMENT ON SITE, THE TREES SHALL BE PROTECTED BY THE PLACEMENT OF RIGID TREE PROTECTIVE FENCING, CONSISTENT WITH THE COUNTY INTEGRATED LANDSCAPE GUIDELINES, AND INCLUDE THE FOLLOWING:
   A. FENCING SHOULD BE PLACED ALONG THE OUTSIDE EDGE OF THE DRIPLINE OF THE TREE OR GROVE OF TREES.
   B. THE FENCING SHALL BE MAINTAINED THROUGHOUT THE SITE CONSTRUCTION PERIOD AND SHALL BE INSPECTED PERIODICALLY FOR DAMAGE AND PROPER FUNCTION.
   C. FENCING SHALL BE REPAIRED, AS NECESSARY, TO PROVIDE A PHYSICAL BARRIER FROM CONSTRUCTION ACTIVITIES.
   D. SIGNAGE STATING, "WARNING- THIS FENCING SHALL NOT BE REMOVED WITHOUT PERMISSION FROM THE SANTA CLARA COUNTY PLANNING OFFICE (408) 299-5770. COUNTY OF SANTA CLARA TREE PROTECTION MEASURES MAY BE FOUND AT http://www.sccplanning.gov." SHALL BE PLACED ON THE TREE PROTECTIVE FENCING UNTIL FINAL OCCUPANCY.
2. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY, TREE PROTECTIVE FENCING SHALL BE SECURELY IN PLACED AND INSPECTED BY THE LAND DEVELOPMENT ENGINEERING INSPECTOR.
3. SEE EXISTING TREE PROTECTION DETAILS FOR MORE INFORMATION.

ACCESS ROADS AND DRIVEWAYS

1. DRIVEWAY LOCATIONS SHALL BE AS SHOWN ON THE IMPROVEMENT PLANS WITH CENTERLINE STATIONING. THE MINIMUM CONCRETE THICKNESS SHALL BE 6 INCHES THROUGHOUT (WITH A MAXIMUM APPROACH SLOPE OF 1 1/4 INCHES PER FOOT).
2. ALL DRIVEWAY OR COMMON ACCESS ROAD SECTIONS IN EXCESS OF 15 LONGITUDINAL SLOPE MUST BE PAVED WITH A MINIMUM 2-INCH ASPHALT LIFT OR FULL DEPTH CONCRETE LIFT PRIOR TO ANY COMBUSTIBLE FRAMING.
3. THE OWNER AND PRIME CONTRACTOR ARE RESPONSIBLE FOR MAINTAINING PROJECT SITE ACCESS AND NEIGHBORHOOD ACCESS FOR EMERGENCY VEHICLES AND LOCAL RESIDENTS.
4. ROADWAYS DESIGNATED AS NOT COUNTY MAINTAINED ROADS AS SHOWN ON THE PLAN WILL NOT BE ELIGIBLE FOR COUNTY MAINTENANCE UNTIL THE ROADWAYS ARE IMPROVED (AT NO COST TO THE COUNTY) TO THE PUBLIC MAINTENANCE ROAD STANDARDS APPROVED BY THE BOARD OF SUPERVISORS AND IN EFFECT AT SUCH TIME THAT THE ROADWAYS ARE CONSIDERED FOR ACCEPTANCE INTO THE COUNTY'S ROAD SYSTEM.
5. ALL WORK IN THE COUNTY ROAD RIGHT-OF-WAY REQUIRES AN ENCROACHMENT PERMIT FROM THE ROADS AND AIRPORTS DEPARTMENT. EACH INDIVIDUAL ACTIVITY REQUIRES A SEPARATE PERMIT - I.E. CABLE, ELECTRICAL, GAS, SEWER, WATER, RETAINING WALLS, DRIVEWAY APPROACHES, FENCES, LANDSCAPING, TREE REMOVAL, STORM DRAINAGE IMPROVEMENTS, ETC..

STREET LIGHTING

1. PACIFIC GAS & ELECTRIC ELECTROLIER SERVICE FEE SHALL BE PAID BY THE DEVELOPER AND/OR HIS AUTHORIZED REPRESENTATIVE.

SANITARY SEWER

1. THE SANITARY SEWER AND WATER UTILITIES SHOWN ON THESE PLANS ARE NOT PART OF THIS GRADING PERMIT AND ARE SHOWN FOR REFERENCE ONLY.
2. ALL MATERIALS AND METHODS OF CONSTRUCTION OF SANITARY SEWERS SHALL CONFORM TO THE SPECIFICATIONS OF THE JURISDICTION INVOLVED. INSPECTION OF SANITARY SEWER WORK SHALL BE DONE BY SAID JURISDICTION.

PORTLAND CEMENT CONCRETE

1. CONCRETE USED FOR STRUCTURAL PURPOSES SHALL BE CLASS "A" (6 SACK PER CUBIC YARD) AS SPECIFIED IN THE STATE STANDARD SPECIFICATIONS. CONCRETE PLACED MUST DEVELOP A MINIMUM STRENGTH FACTOR OF 2800 PSI IN A SEVEN-DAY PERIOD. THE CONCRETE MIX DESIGN SHALL BE UNDER THE CONTINUAL CONTROL OF THE COUNTY INSPECTOR.

AIR QUALITY, LANDSCAPING AND EROSION CONTROL

1. WATER ALL ACTIVE CONSTRUCTION AREAS AT LEAST TWICE DAILY.
2. COVER ALL TRUCKS HAULING SOIL, SAND, AND OTHER LOOSE MATERIALS OR REQUIRE ALL TRUCKS TO MAINTAIN AT LEAST TWO FEET OF FREEBOARD.
3. PAVE, APPLY WATER THREE TIMES DAILY, OR APPLY (NON-TOXIC) SOIL STABILIZERS ON ALL UNPAVED ACCESS ROADS, PARKING AREAS AND STAGING AREAS AT CONSTRUCTION SITES.
4. SWEEP DAILY (WITH WATER SWEEPERS) ALL PAVED ACCESS ROADS, PARKING AREAS AND STAGING AREAS AT CONSTRUCTION SITES. THE USE OF DRY POWDER SWEEPING IS PROHIBITED.
5. SWEEP STREETS DAILY (WITH WATER SWEEPERS) IF VISIBLE SOIL MATERIAL IS CARRIED ONTO ADJACENT PUBLIC STREETS. THE USE OF DRY POWDER SWEEPING IS PROHIBITED.
6. ALL CONSTRUCTION VEHICLES, EQUIPMENT AND DELIVERY TRUCKS SHALL HAVE A MAXIMUM IDLING TIME OF 5 MINUTES (AS REQUIRED BY THE CALIFORNIA AIRBORNE TOXIC CONTROL MEASURE TITLE 13, SECTION 2485 OF CALIFORNIA CODE OF REGULATIONS (CCR)). ENGINES SHALL BE SHUT OFF IF CONSTRUCTION REQUIRES LONGER IDLING TIME UNLESS NECESSARY FOR PROPER OPERATION OF THE VEHICLE.
7. ALL VEHICLE SPEEDS ON UNPAVED ROADS SHALL BE LIMITED TO 15 MILES PER HOUR.
8. ALL CONSTRUCTION EQUIPMENT SHALL BE MAINTAINED AND PROPERLY TUNED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. ALL EQUIPMENT SHALL BE CHECKED BY A CERTIFIED MECHANIC AND DETERMINED TO BE RUNNING IN PROPER CONDITION PRIOR TO OPERATION.
9. POST A SIGN THAT IS AT LEAST 32 SQUARE FEET MINIMUM 2 INCHES LETTER HEIGHT VISIBLE NEAR THE ENTRANCE OF CONSTRUCTION SITE THAT IDENTIFIES THE FOLLOWING REQUIREMENTS. OBTAIN ENCROACHMENT PERMIT FOR SIGN FROM ROADS DEPARTMENT OR OTHER APPLICABLE AGENCY IF REQUIRED.
   A. 15 MILES PER HOUR (MPH) SPEED LIMIT
   B. 5 MINUTES MAXIMUM IDLING TIME OF VEHICLES
   C. TELEPHONE NUMBER TO CONTACT THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT REGARDING DUST COMPLAINTS. NOTE PHONE NUMBER OF THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT AIR POLLUTION COMPLAIN HOTLINE OF 1-800-334-6367.
10. ALL FILL SLOPES SHALL BE COMPACTED AND LEFT IN A SMOOTH AND FIRM CONDITION CAPABLE OF WITHSTANDING WEATHERING.
11. ALL EXPOSED DISTURBED AREAS SHALL BE SEEDED WITH BROME SEED SPREAD AT THE RATE OF 5 LB. PER 1000 SQUARE FEET (OR APPROVED EQUAL). SEEDING AND WATERING SHALL BE MAINTAINED AS REQUIRED TO ENSURE GROWTH.
12. ALL DITCHES SHALL BE LINED PER COUNTY STANDARD SD8.
13. ALL STORM DRAINAGE STRUCTURES SHALL BE INSTALLED WITH EFFECTIVE ENTRANCE & OUTFALL EROSION CONTROLS E.G. SACKED CONCRETE RIP-RAP. ENERGY DISSIPATERS SHALL BE INSTALLED AT ALL DITCH OUTFALLS. WHERE OUTFALLS ARE NOT INTO AN EXISTING CREEK OR WATER COURSE, RUNOFF SHALL BE RELEASED TO SHEET FLOW.
14. PRIOR TO GRADING COMPLETION AND RELEASE OF THE BOND, ALL GRADED AREAS SHALL BE RESEEDED IN CONFORMANCE WITH THE COUNTY GRADING ORDINANCE TO MINIMIZE THE VISUAL IMPACTS OF THE GRADE SLOPES AND REDUCE THE POTENTIAL FOR EROSION OF THE SUBJECT SITE.
15. PERMANENT LANDSCAPING SHOWN ON THE ATTACHED LANDSCAPE PLAN MUST BE INSTALLED AND FIELD APPROVED BY THE COUNTY PLANNING OFFICE PRIOR TO FINAL APPROVAL BY THE COUNTY ENGINEER, AND FINAL OCCUPANCY RELEASE BY THE BUILDING INSPECTION OFFICE.
16. THE OWNER SHALL PREPARE AND PRESENT A WINTERIZATION REPORT TO THE COUNTY INSPECTOR FOR REVIEW PRIOR TO OCTOBER 15TH OF EVERY YEAR.
17. THE OWNER, CONTRACTOR, AND ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES SHALL INSTALL AND MAINTAIN CONSTRUCTION BEST MANAGEMENT PRACTICES (BMPS) ON THE PROJECT SITE AND WITHIN THE SANTA CLARA COUNTY ROAD RIGHT-OF-WAY THROUGHOUT THE DURATION OF THE CONSTRUCTION AND UNTIL THE ESTABLISHMENT OF PERMANENT STABILIZATION AND SEDIMENT CONTROL TO PREVENT THE DISCHARGE OF POLLUTANTS INCLUDING SEDIMENT, CONSTRUCTION MATERIALS, EXCAVATED MATERIALS, AND WASTE INTO THE SANTA CLARA COUNTY RIGHT-OF-WAY, STORM SEWER WATERWAYS, ROADWAY INFRASTRUCTURE. BMPS SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING;
   A. PREVENTION OF POLLUTANTS IN STORM WATER DISCHARGES FROM THE CONSTRUCTION SITE AND THE CONTRACTOR'S MATERIAL AND EQUIPMENT LAYDOWN / STAGING AREAS.
   B. PREVENTION OF TRACKING OF MUD, DIRT, AND CONSTRUCTION MATERIALS ONTO THE PUBLIC ROAD RIGHT-OF-WAY.
   C. PREVENTION OF DISCHARGE OF WATER RUN-OFF DURING DRY AND WET WEATHER CONDITIONS ONTO THE PUBLIC ROAD RIGHT-OF-WAY.
18. THE OWNER, CONTRACTOR, AND ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES SHALL ENSURE THAT ALL TEMPORARY CONSTRUCTION FACILITIES, INCLUDING BUT NOT LIMITED TO CONSTRUCTION MATERIALS, DELIVERIES, HAZARDOUS AND NON-HAZARDOUS MATERIAL STORAGE, EQUIPMENT, TOOLS, PORTABLE TOILETS, CONCRETE WASHOUT, GARBAGE CONTAINERS, LAYDOWN YARDS, SECONDARY CONTAINMENT AREAS, ETC. ARE LOCATED OUTSIDE THE SANTA CLARA COUNTY ROAD RIGHT-OF-WAY.
19. EROSION CONTROL PLAN IS A GUIDE AND SHALL BE AMENDED AS NECESSARY TO PREVENT EROSION AND ILLICIT DISCHARGES ON A YEAR AROUND BASIS, DEPENDING ON THE SEASON, WEATHER, AND FIELD CONDITIONS. EROSION CONTROL MEASURES IN ADDITION TO THOSE NOTED IN THE PERMITTED PLANS MAY BE NECESSARY. FAILURE TO INSTALL SITE SITE AND SITUATIONALY APPROPRIATE EROSION CONTROL MEASURES MAY RESULT IN VIOLATIONS, FINES, AND A STOPPAGE OF WORK.

STORM DRAINAGE AND STORMWATER MANAGEMENT

1. DEVELOPER IS RESPONSIBLE FOR ALL NECESSARY DRAINAGE FACILITIES WHETHER SHOWN ON THE PLANS OR NOT AND HE OR HIS SUCCESSOR PROPERTY OWNERS ARE RESPONSIBLE FOR THE ADEQUACY AND CONTINUED MAINTENANCE OF THESE FACILITIES IN A MANNER WHICH WILL PRECLUDE ANY HAZARD TO LIFE, HEALTH, OR DAMAGE TO ADJOINING PROPERTY, CONSISTENT WITH NPDES PERMIT CAS612008 / ORDER NO. R2-2009-0047 AND NPDES PERMIT CAS000004/ ORDER NO. 2013-0001-DWQ.
2. DROP INLETS SHALL BE COUNTY STANDARD TYPE 5 UNLESS OTHERWISE NOTED ON THE PLANS. THE DEVELOPER'S ENGINEER SHALL BE RESPONSIBLE FOR THE PROPER LOCATION OF DROP INLETS. WHERE STREET PROFILE GRADE EXCEEDS 6% DROP INLETS SHALL BE SET AT 500 ANGLE CURB LINE TO ACCEPT WATER OR AS SHOWN ON THE PLANS.
3. WHERE CULVERTS ARE INSTALLED THE DEVELOPER SHALL BE RESPONSIBLE FOR GRADING THE OUTLET DITCH TO DRAIN TO AN EXISTING SWALE OR TO AN OPEN AREA FOR SHEET FLOW.
4. UPON INSTALLATION OF DRIVEWAY CONNECTIONS, PROPERTY OWNERS SHALL PROVIDE FOR THE UNINTERRUPTED FLOW OF WATER IN ROADSIDE DITCHES.
5. THE COUNTY SHALL INSPECT UNDERGROUND DRAINAGE IMPROVEMENTS AND STORMWATER MANAGEMENT FEATURES PRIOR TO BACKFILL.

AS-BUILT PLANS STATEMENT

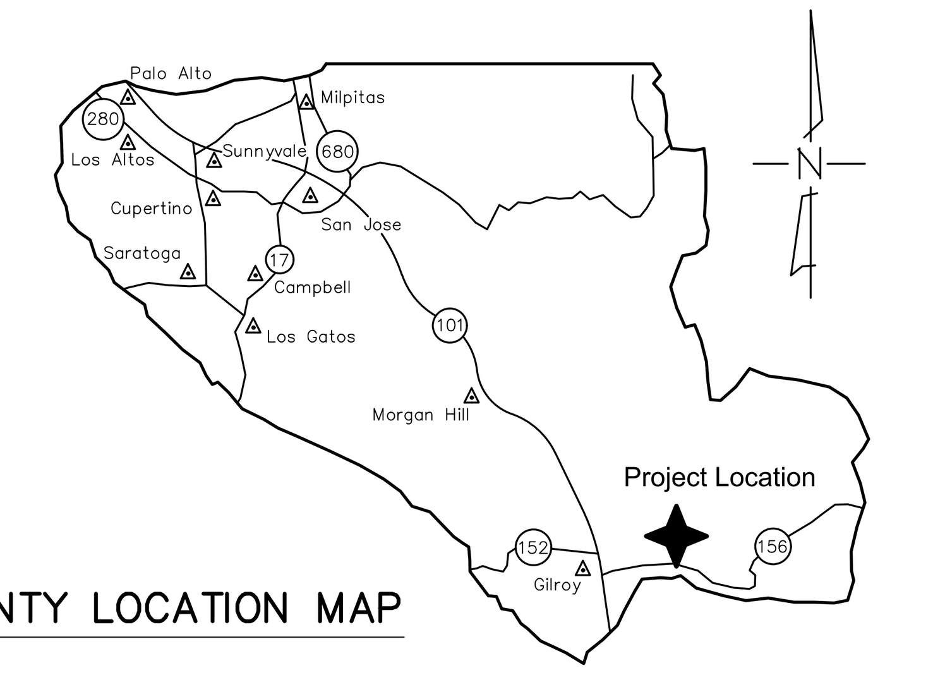
THIS IS A TRUE COPY OF THE AS-BUILT PLANS. THERE (___ WERE) (___ WERE NOT) MINOR FIELD CHANGES - MARKED WITH THE SYMBOL (^). THERE (___WERE) (___ WERE NOT) PLAN REVISIONS INDICATING SIGNIFICANT CHANGES REVIEWED BY THE COUNTY ENGINEER AND MARKED WITH THE SYMBOL △.

DATE__________________ SIGNATURE ______________________________

NOTE: THIS STATEMENT IS TO BE SIGNED BY THE PERSON AUTHORIZED BY THE COUNTY ENGINEER TO PERFORM THE INSPECTION WORK. A REPRODUCIBLE COPYOF THE AS-BUILT PLANS MUST BE FURNISHED TO THE COUNTY ENGINEER AFTERCONSTRUCTION.

GEOTECHNICAL ENGINEER OBSERVATION

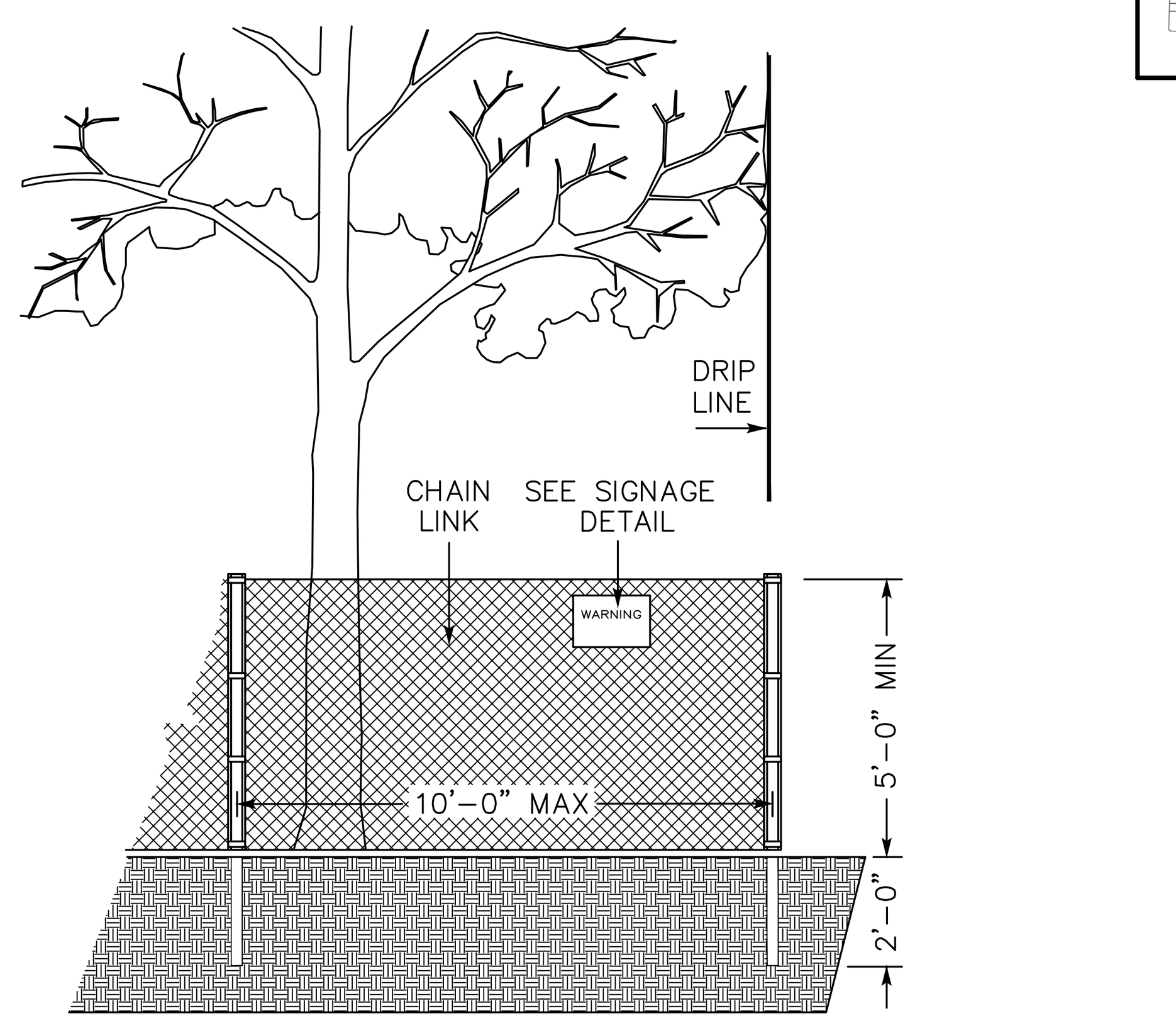
1. A CONSTRUCTION OBSERVATION LETTER FROM THE RESPONSIBLE GEOTECHNICAL ENGINEER AND ENGINEERING GEOLOGIST DETAILING CONSTRUCTION OBSERVATIONS AND CERTIFYING THAT THE WORK WAS DONE IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL AND GEOLOGIC REPORTS SHALL BE SUBMITTED PRIOR TO THE GRADING COMPLETION AND RELEASE OF THE BOND.



COUNTY LOCATION MAP

SURVEY MONUMENT PRESERVATION

1. THE LANDOWNER/CONTRACTOR MUST PROTECT AND ENSURE THE PERPETUATION OF SURVEY MONUMENTS AFFECTED BY CONSTRUCTION ACTIVITIES.
2. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL LOCATE, STAKE, AND FLAG ALL PERMANENT SURVEY MONUMENTS OF RECORD AND ANY UNRECORDED MONUMENTS THAT ARE DISCOVERED THAT ARE WITHIN 50 FEET OF THE CONSTRUCTION ACTIVITY.
3. THE LANDOWNER, CONTRACTOR AND/OR ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES THAT WILL OR MAY DISTURB AN EXISTING MONUMENT, CORNER STAKE, OR ANY OTHER PERMANENT SURVEYED MONUMENT SHALL CAUSE TO HAVE A LICENSED LAND SURVEYOR OR CIVIL ENGINEER, AUTHORIZED TO PRACTICE SURVEYING, ENSURE THAT A CORNER RECORD AND/OR RECORD OF SURVEY ARE FILED WITH THE COUNTY SURVEYOR'S OFFICE PRIOR TO DISTURBING SAID MONUMENTS AND RESET PERMANENT MONUMENT(S) TO PERPETUATE THE LOCATION IF ANY PERMANENT MONUMENT COULD BE DESTROYED, DAMAGED, COVERED, DISTURBED, OR OTHERWISE OBLITERATED. THE LICENSED LAND SURVEYOR OR CIVIL ENGINEER SHALL FILE A CORNER RECORD OR RECORD OF SURVEY WITH COUNTY SURVEYOR PRIOR TO FINAL ACCEPTANCE OF THE PROJECT BY THE LAND DEVELOPMENT ENGINEERING INSPECTOR.



EXISTING TREE PROTECTION DETAILS

1. PRIOR TO THE COMMENCEMENT OF ANY GRADING, TREE PROTECTIVE FENCING SHALL BE IN PLACE IN ACCORDANCE WITH THE TREE PRESERVATION PLAN AND INSPECTED BY A CERTIFIED ARBORIST. THE ARBORIST SHALL MONITOR CONSTRUCTION ACTIVITY TO ENSURE THAT THE TREE PROTECTION MEASURES ARE IMPLEMENTED AND ADHERED TO DURING CONSTRUCTION. THIS CONDITION SHALL BE INCORPORATED INTO THE GRADING PLANS.
2. FENCE SHALL BE MINIMUM 5 FEET TALL CONSTRUCTED OF STURDY MATERIAL (CHAIN-LINK OR EQUIVALENT STRENGTH/ DURABILITY).
3. FENCE SHALL BE SUPPORTED BY VERTICAL POSTS DRIVEN 2 FEET (MIN) INTO THE GROUND AND SPACED NOT MORE THAN 10 FEET APART.
4. TREE FENCING SHALL BE MAINTAINED THROUGHOUT THE SITE DURING THE CONSTRUCTION PERIOD, INSPECTED PERIODICALLY FOR DAMAGE AND PROPER FUNCTION, REPAIRED AS NECESSARY TO PROVIDE A PHYSICAL BARRIER FROM CONSTRUCTION ACTIVITIES, AND REMAIN IN PLACE UNTIL THE FINAL INSPECTION.
5. A SIGN THAT INCLUDES THE WORDS, "WARNING: THIS FENCE SHALL NOT BE REMOVED WITHOUT THE EXPRESSED PERMISSION OF THE SANTA CLARA COUNTY PLANNING OFFICE," SHALL BE SECURELY ATTACHED TO THE FENCE IN A VISUALLY PROMINENT LOCATION.

COUNTY OF SANTA CLARA DEPT. OF ROADS AND AIRPORTS

ISSUED BY: ____________ DATE: ______________

ENCROACHMENT PERMIT NO. ________________

COUNTY OF SANTA CLARA
LAND DEVELOPMENT ENGINEERING & SURVEYING

GRADING/DRAINAGE PERMIT NO. ________________

ISSUED BY: __________ DATE: ______________

NO WORK SHALL BE DONE IN THE COUNTY'S RIGHT-OF-WAY WITHOUT AN ENCROACHMENT PERMIT, INCLUDING THE STAGING OF CONSTRUCTION MATERIAL AND THE PLACEMENT OF PORTABLE TOILETS.

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

ENGINEER'S STATEMENT

I HEARBY STATE THAT THESE PLANS ARE IN COMPLIANCE WITH ADOPTED COUNTY STANDARDS, THE APPROVED TENTATIVE MAP (OR PLAN) AND CONDITIONS OF APPROVAL PERTAINING THERETO DATED 07/08/2022 FILE(S) NO. PLN22-112

DATE ______________ ____________________ 69278
R.C.E. NO.

REGISTERED PROFESSIONAL ENGINEER — AMANDA JOY MUSY-VERDEL — NO. 69278 — CIVIL — STATE OF CALIFORNIA

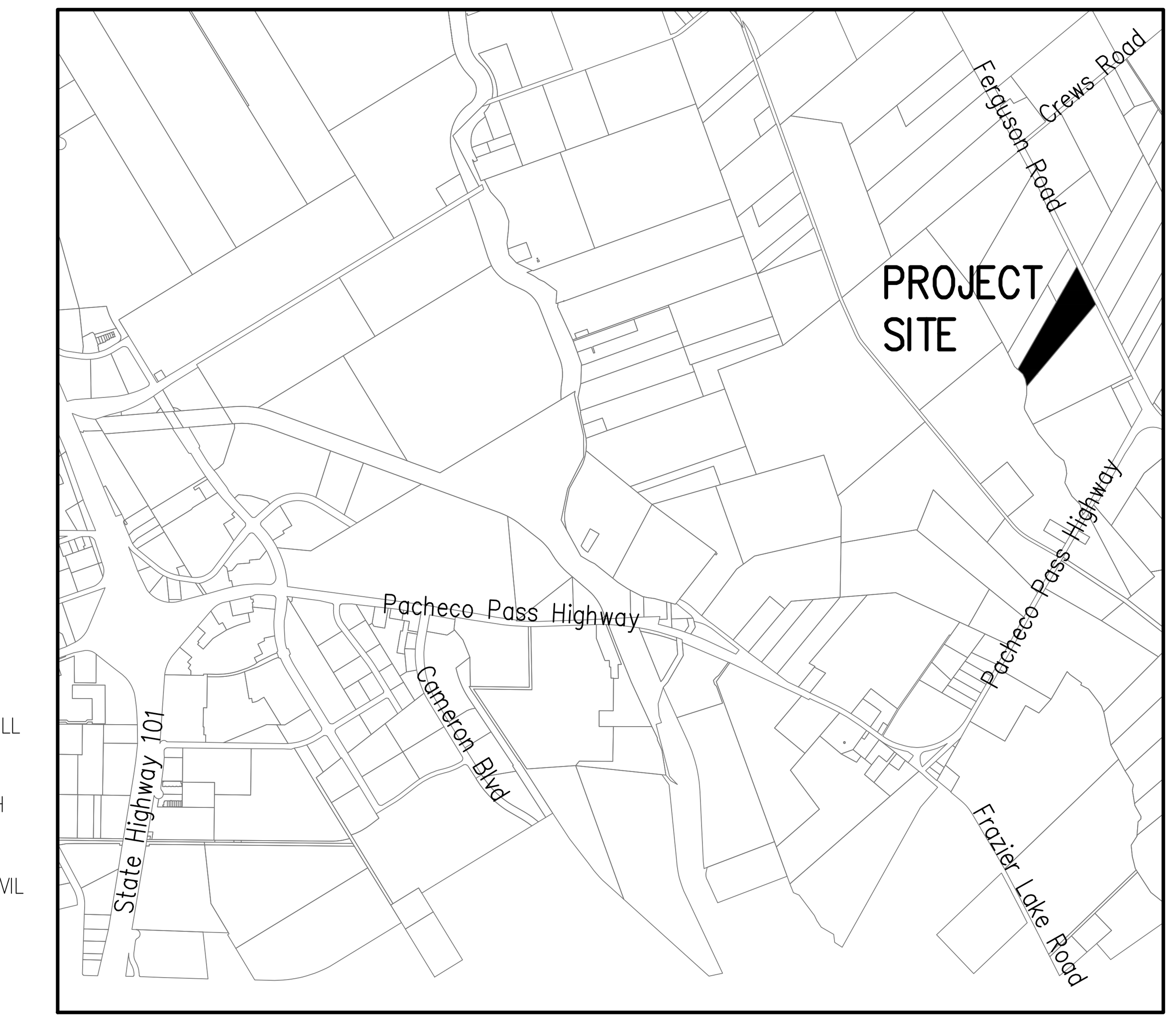
COUNTY ENGINEER'S NOTE

ISSUANCE OF A PERMIT AUTHORIZING CONSTRUCTION DOES NOT RELEASE THE DEVELOPER, PERMITTEE OF ENGINEER FROM RESPONSIBILITY FOR THE CORRECTION OF ERRORS OR OMISSIONS CONTAINED IN THE PLANS. IF, DURING THE COURSE OF CONSTRUCTION, THE PUBLIC INTEREST REQUIRES A MODIFICATION OF (OR DEPARTURE FROM) THE SPECIFICATIONS OF THE PLANS, THE COUNTY SHALL HAVE THE AUTHORITY TO REQUIRE THE SUSPENSION OF WORK, AND THE NECESSARY MODIFICATION OR DEPARTURE AND TO SPECIFY THE MANNER IN WHICH THE SAME IS TO BE MADE.

DATE ______________________ ______________________

DARRELL K.H. WONG

R.C.E. NO. 63958
EXPIRES 9/30/24



VICINITY MAP
NO SCALE

SCOPE OF WORK

1. THE DEVELOPER IS RESPONSIBLE FOR THE INSTALLATION OF THE WORK PROPOSED ON THE EROSION CONTROL PLAN. THE ENGINEER OF RECORD IS RESPONSIBLE FOR THE DESIGN OF THE EROSION CONTROL PLANS AND ANY MODIFICATIONS OF THE EROSION CONTROL PLANS TO PREVENT ILLICIT DISCHARGES FROM THE SITE DURING CONSTRUCTION.
2. A CONSTRUCTION OBSERVATION LETTER FROM THE RESPONSIBLE GEOTECHNICAL ENGINEER AND CERTIFIED ENGINEERING GEOLOGIST DETAILING CONSTRUCTION OBSERVATIONS AND CERTIFYING THAT THE WORK WAS DONE IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL AND GEOLOGICAL REPORTS SHALL BE SUBMITTED PRIOR TO GRADING COMPLETION AND RELEASE OF BOND.

3. CLEAR AND GRUB BUILDING PAD AND DRIVEWAY.
4. BUILDING PAD AND DRIVEWAY GRADING.
5. CONSTRUCT DRIVEWAY
6. CONSTRUCT BIORETENTION POND

SEPARATE PERMIT:

7. INSTALL SEPTIC TANK AND LEACHFIELD
8. WATER SYSTEM
9. INSTALL WHARF FIRE HYDRANT
10. CONSTRUCT BARN
11. CONSTRUCT DRIVEWAY APPROACH

SHEET INDEX

ENGINEER'S NAME: HANNA & BRUNETTI

ADDRESS: 7651 EIGLEBERRY STREET, GILROY CA 95020

PHONE NO. 408 842-2173
FAX NO. 408 842-3662

IMPROVEMENT PLANS

FOR THE
ASSESSORY BUILDING
ON THE LANDS OF CHEN
2740 FERGUSON ROAD, GILROY

PARCEL 1 AS SHOWN UPON THAT CERTAIN PARCEL MAP FILED MAY 10, 1977 IN BOOK 395 OF MAPS, AT PAGE 45
SANTA CLARA COUNTY, CALIFORNIA

A.P.N.: 841-21-022

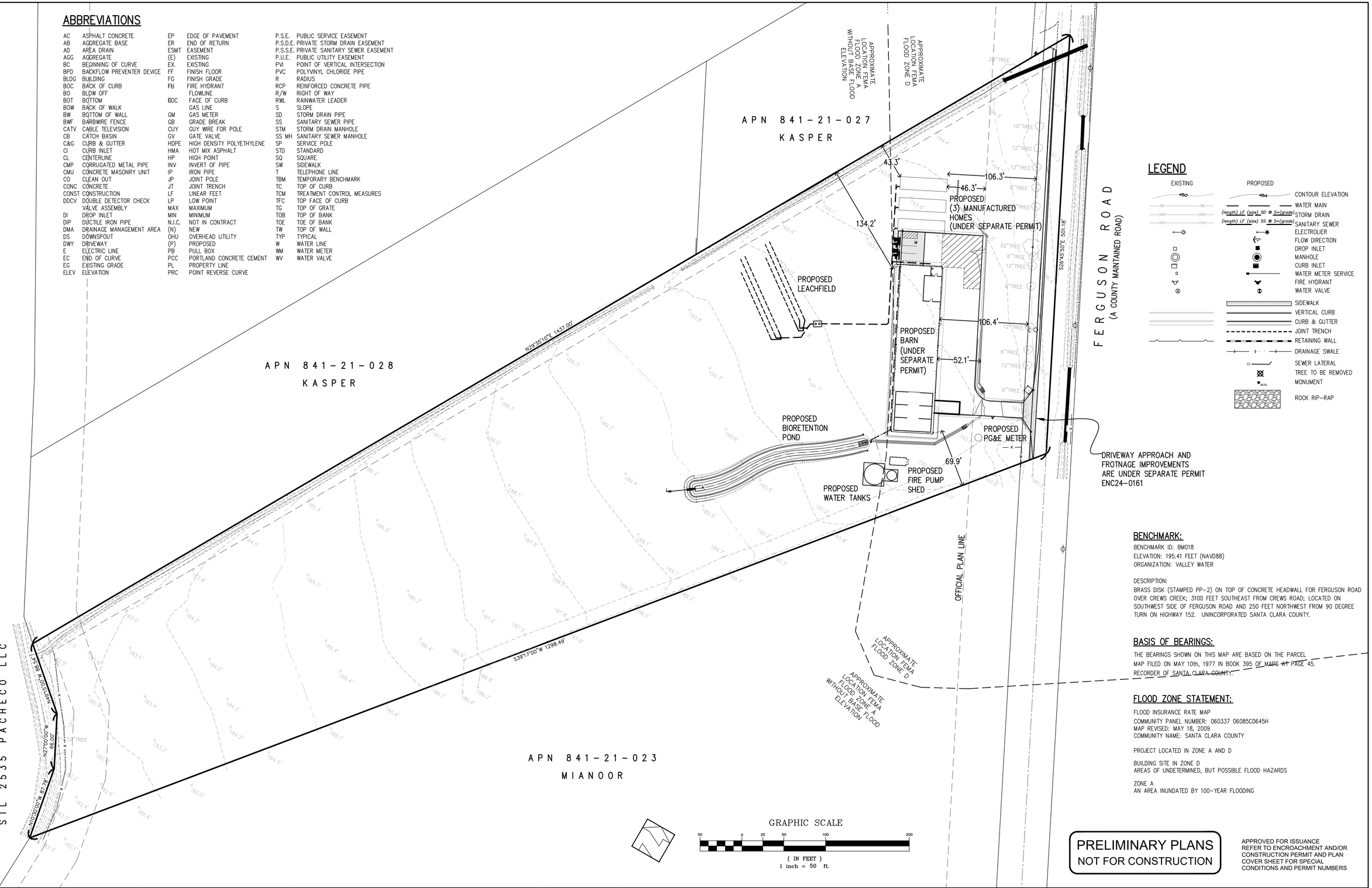
JULY 2024 NO SCALE

Revision 1 Date		APN 841-21-022	Sheet 1 of 9
Revision 2 Date			
Revision 3 Date		Co. File X	

APPLICANT: CHEN ROAD: 2740 FERGUSON ROAD COUNTY FILE NO.: DEV23-2975 JOB NO. 22025

ABBREVIATIONS

AC	ASPHALT CONCRETE	EP	EDGE OF PAVEMENT	P.S.E.	PUBLIC SERVICE EASEMENT
AB	AGGREGATE BASE	ER	END OF RETURN	P.S.D.E.	PRIVATE STORM DRAIN EASEMENT
AD	AREA DRAIN	ESMT	EASEMENT	P.S.S.E.	PRIVATE SANITARY SEWER EASEMENT
AGG	AGGREGATE	(E)	EXISTING	P.U.E.	PUBLIC UTILITY EASEMENT
BC	BEGINNING OF CURVE	EX.	EXISTING	PVI	POINT OF VERTICAL INTERSECTION
BPD	BACKFLOW PREVENTER DEVICE	FF	FINISH FLOOR	PVC	POLYVINYL CHLORIDE PIPE
BLDG	BUILDING	FG	FINISH GRADE	R	RADIUS
BOC	BACK OF CURB	FH	FIRE HYDRANT	RCP	REINFORCED CONCRETE PIPE
BO	BLOW OFF		FLOWLINE	R/W	RIGHT OF WAY
BOT	BOTTOM	FOC	FACE OF CURB	RWL	RAINWATER LEADER
BOW	BACK OF WALK		GAS LINE	S	SLOPE
BW	BOTTOM OF WALL	GM	GAS METER	SD	STORM DRAIN PIPE
BWF	BARBWIRE FENCE	GB	GRADE BREAK	SS	SANITARY SEWER PIPE
CATV	CABLE TELEVISION	GUY	GUY WIRE FOR POLE	STM	STORM DRAIN MANHOLE
CB	CATCH BASIN	GV	GATE VALVE	SS MH	SANITARY SEWER MANHOLE
C&G	CURB & GUTTER	HDPE	HIGH DENSITY POLYETHYLENE	SP	SERVICE POLE
CI	CURB INLET	HMA	HOT MIX ASPHALT	STD	STANDARD
CL	CENTERLINE	HP	HIGH POINT	SQ	SQUARE
CMP	CORRUGATED METAL PIPE	INV	INVERT OF PIPE	SW	SIDEWALK
CMU	CONCRETE MASONRY UNIT	IP	IRON PIPE	T	TELEPHONE LINE
CO	CLEAN OUT	JP	JOINT POLE	TBM	TEMPORARY BENCHMARK
CONC	CONCRETE	JT	JOINT TRENCH	TC	TOP OF CURB
CONST	CONSTRUCTION	LF	LINEAR FEET	TCM	TREATMENT CONTROL MEASURES
DDCV	DOUBLE DETECTOR CHECK VALVE ASSEMBLY	LP	LOW POINT	TFC	TOP FACE OF CURB
		MAX	MAXIMUM	TG	TOP OF GRATE
DI	DROP INLET	MIN	MINIMUM	TOB	TOP OF BANK
DIP	DUCTILE IRON PIPE	N.I.C.	NOT IN CONTRACT	TOE	TOE OF BANK
DMA	DRAINAGE MANAGEMENT AREA	(N)	NEW	TW	TOP OF WALL
DS	DOWNSPOUT	OHU	OVERHEAD UTILITY	TYP	TYPICAL
DWY	DRIVEWAY	(P)	PROPOSED	W	WATER LINE
E	ELECTRIC LINE	PB	PULL BOX	WM	WATER METER
EC	END OF CURVE	PCC	PORTLAND CONCRETE CEMENT	WV	WATER VALVE
EG	EXISTING GRADE	PL	PROPERTY LINE		
ELEV	ELEVATION	PRC	POINT REVERSE CURVE		



LEGEND

EXISTING	PROPOSED
450	454 CONTOUR ELEVATION
(W) (W)	WATER MAIN
(SD) (SD)	(length) LF (size) SD @ S=(grade) STORM DRAIN
(SS) (SS)	(length) LF (size) SS @ S=(grade) SANITARY SEWER
	ELECTROLIER
	FLOW DIRECTION
	DROP INLET
	MANHOLE
	CURB INLET
	WATER METER SERVICE
	FIRE HYDRANT
	WATER VALVE
	SIDEWALK
	VERTICAL CURB
	CURB & GUTTER
	JOINT TRENCH
	RETAINING WALL
	DRAINAGE SWALE
SS	SEWER LATERAL
	TREE TO BE REMOVED
MON	MONUMENT
	ROCK RIP-RAP

BENCHMARK:

BENCHMARK ID: BM018
ELEVATION: 195.41 FEET (NAVD88)
ORGANIZATION: VALLEY WATER

DESCRIPTION:
BRASS DISK (STAMPED PP-2) ON TOP OF CONCRETE HEADWALL FOR FERGUSON ROAD OVER CREWS CREEK; 3100 FEET SOUTHEAST FROM CREWS ROAD; LOCATED ON SOUTHWEST SIDE OF FERGUSON ROAD AND 250 FEET NORTHWEST FROM 90 DEGREE TURN ON HIGHWAY 152. UNINCORPORATED SANTA CLARA COUNTY.

BASIS OF BEARINGS:

THE BEARINGS SHOWN ON THIS MAP ARE BASED ON THE PARCEL MAP FILED ON MAY 10th, 1977 IN BOOK 395 OF MAPS AT PAGE 45. RECORDER OF SANTA CLARA COUNTY.

FLOOD ZONE STATEMENT:

FLOOD INSURANCE RATE MAP
COMMUNITY PANEL NUMBER: 060337 06085C0645H
MAP REVISED: MAY 18, 2009
COMMUNITY NAME: SANTA CLARA COUNTY

PROJECT LOCATED IN ZONE A AND D

BUILDING SITE IN ZONE D
AREAS OF UNDETERMINED, BUT POSSIBLE FLOOD HAZARDS

ZONE A
AN AREA INUNDATED BY 100-YEAR FLOODING

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS

PLAN # _____ OF _____
SHEET _____

REVISIONS:

DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1910
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
OFFICE (408) 842-2173 • FAX (408) 842-3662
EMAIL: ENGINEERING @ HANNABRUNETTI.COM

DATE: JULY 2024
HORIZ. SCALE: 1"=50
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY: _____
DRAWN BY: TM

date: _____
Hanna – Brunetti

Amanda Joy Musy–Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEL
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Site Plan

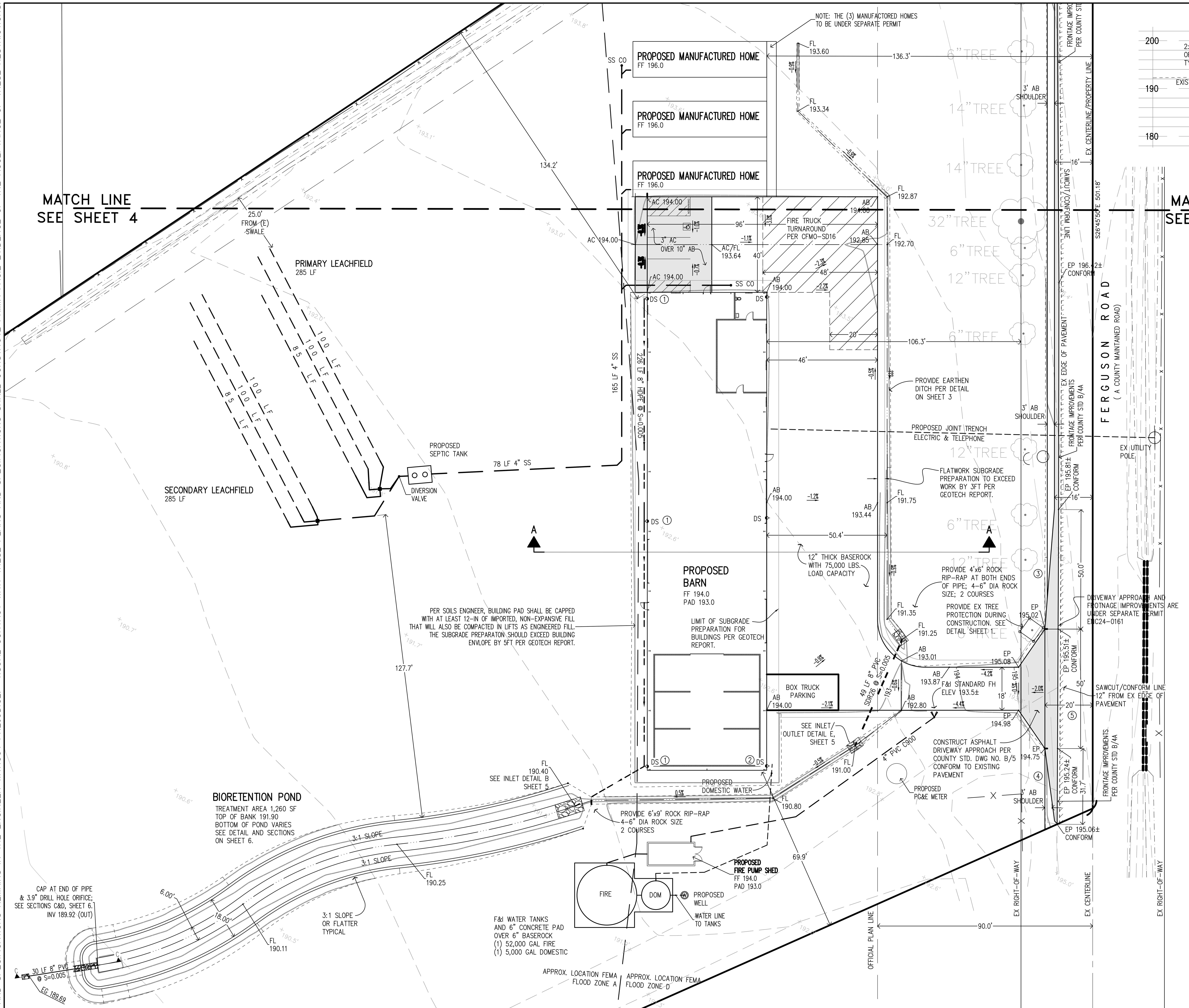
Lands of Chen - 2740 Ferguson Road - apn 841-21-022

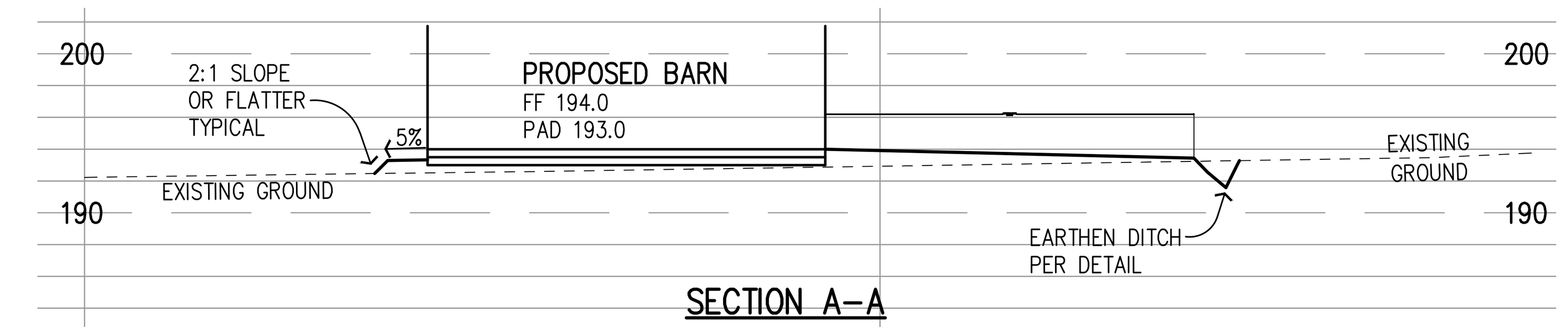
UNINCORPORATED
JULY 2024

SANTA CLARA COUNTY
CALIFORNIA

SHEET 2 OF 9
JOB NO. 22025

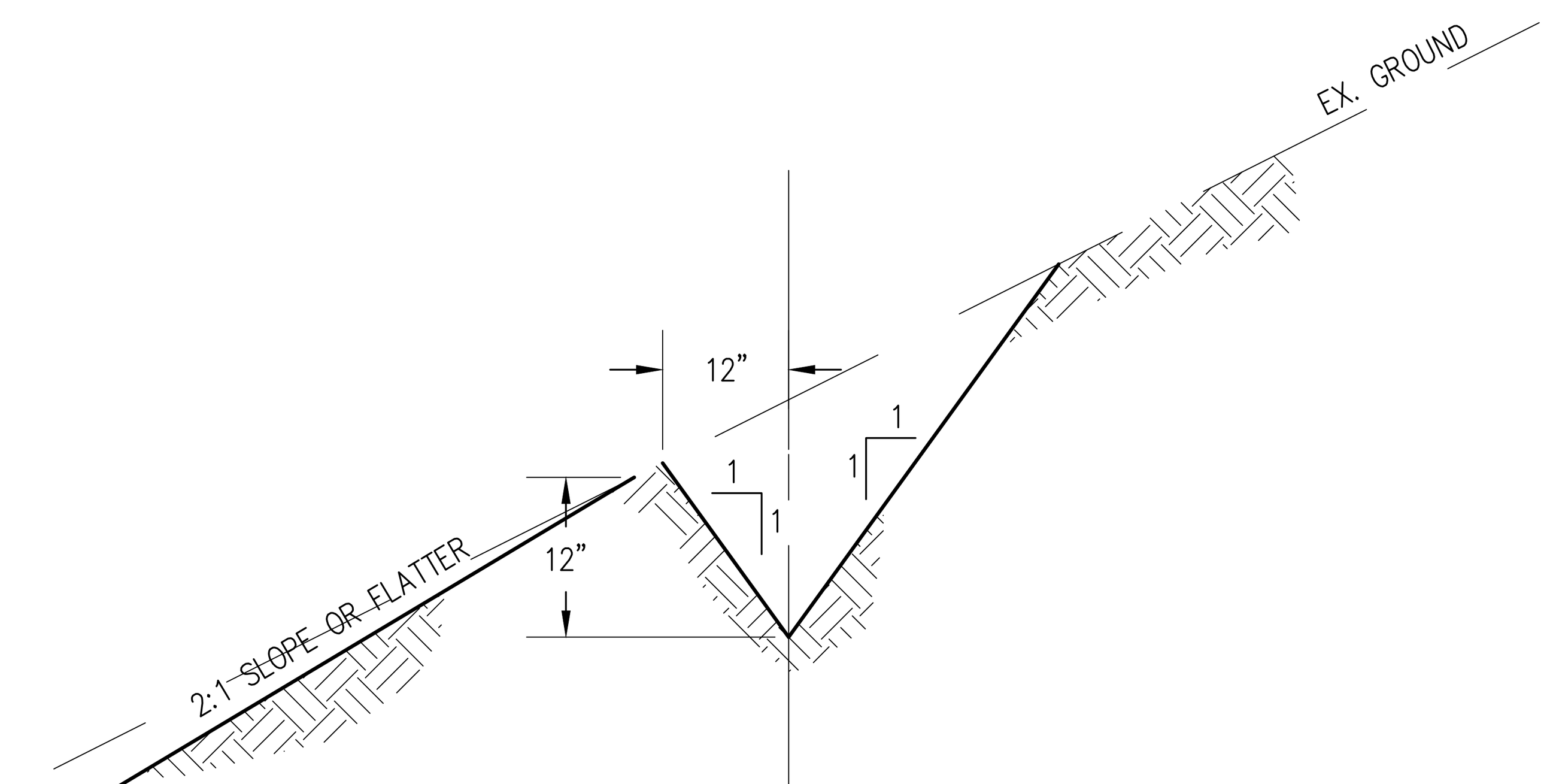
APPLICANT: CHEN | ROAD: 2740 FERGUSON ROAD | COUNTY FILE NO.: DEV23-2975 | JOB NO. 22025


MATCH LINE
SEE SHEET 4
NOTE: THE (3) MANUFACTORED HOMES TO BE UNDER SEPARATE PERMIT
PROPOSED MANUFACTURED HOME
FF 196.0
PROPOSED MANUFACTURED HOME
FF 196.0
PROPOSED MANUFACTURED HOME
FF 196.0
SS CO
FL 193.60
FL 193.34
FL 192.87
FL 192.70
136.3'
134.2'
25.0' FROM (E) SWALE
PRIMARY LEACHFIELD
285 LF
SECONDARY LEACHFIELD
285 LF
100 LF
100 LF
85 LF
PROPOSED SEPTIC TANK
DIVERSION VALVE
78 LF 4" SS
165 LF 4" SS
226 LF 8" HDPE @ S=0.005
AC 194.00
3" AC OVER 10" AB
AC/FL 193.64
96'
40'
FIRE TRUCK TURNAROUND PER CFMO-SD16
AB 194.00
AB 192.85
48'
20'
106.3'
46'
PROVIDE EARTHEN DITCH PER DETAIL ON SHEET 3
PROPOSED JOINT TRENCH ELECTRIC & TELEPHONE
FLATWORK SUBGRADE PREPARATION TO EXCEED WORK BY 3FT PER GEOTECH REPORT.
FL 191.75
AB 193.44
50.4'
12" THICK BASEROCK WITH 75,000 LBS. LOAD CAPACITY
PROPOSED BARN
FF 194.0
PAD 193.0
PER SOILS ENGINEER, BUILDING PAD SHALL BE CAPPED WITH AT LEAST 12-IN OF IMPORTED, NON-EXPANSIVE FILL THAT WILL ALSO BE COMPACTED IN LIFTS AS ENGINEERED FILL. THE SUBGRADE PREPARATON SHOULD EXCEED BUILDING ENVLOPE BY 5FT PER GEOTECH REPORT.
LIMIT OF SUBGRADE PREPARATION FOR BUILDINGS PER GEOTECH REPORT.
PROVIDE 4'x6' ROCK RIP-RAP AT BOTH ENDS OF PIPE; 4-6" DIA ROCK SIZE; 2 COURSES
PROVIDE EX TREE PROTECTION DURING CONSTRUCTION. SEE DETAIL SHEET 1.
FL 191.35
FL 191.25
AB 193.01
AB 193.87
F&I STANDARD FH ELEV 193.5±
EP 195.02
EP 195.08
EP 194.98
EP 194.75
BOX TRUCK PARKING
AB 194.00
AB 192.80
49 LF 8" PVC SDR26 @ S=0.005
SEE INLET/OUTLET DETAIL E, SHEET 5
FL 191.00
4" PVC C900
CONSTRUCT ASPHALT DRIVEWAY APPROACH PER COUNTY STD. DWG NO. B/5 CONFORM TO EXISTING PAVEMENT
PROPOSED PG&E METER
3' AB SHOULDER
FL 190.40
SEE INLET DETAIL B SHEET 5
PROPOSED DOMESTIC WATER
FL 190.80
PROVIDE 6'x9' ROCK RIP-RAP 4-6" DIA ROCK SIZE 2 COURSES
BIORETENTION POND
TREATMENT AREA 1,260 SF
TOP OF BANK 191.90
BOTTOM OF POND VARIES
SEE DETAIL AND SECTIONS ON SHEET 6.
3:1 SLOPE
FL 190.25
CAP AT END OF PIPE & 3.9" DRILL HOLE ORIFICE; SEE SECTIONS C&D, SHEET 6. INV 189.92 (OUT)
6.00'
18.00'
FL 190.11
3:1 SLOPE OR FLATTER TYPICAL
30 LF 8" PVC @ S=0.005
EG 189.69
127.7'
PROPOSED FIRE PUMP SHED
FF 194.0
PAD 193.0
FIRE
DOM
PROPOSED WELL
WATER LINE TO TANKS
F&I WATER TANKS AND 6" CONCRETE PAD OVER 6" BASEROCK
(1) 52,000 GAL FIRE
(1) 5,000 GAL DOMESTIC
69.9'
APPROX. LOCATION FEMA FLOOD ZONE A
APPROX. LOCATION FEMA FLOOD ZONE D
OFFICIAL PLAN LINE
90.0'
EX RIGHT-OF-WAY
EX CENTERLINE
EX CENTERLINE/PROPERTY LINE
FRONTAGE IMPROVEMENTS PER COUNTY STD B/4A
SAWCUT/CONFORM LINE
EX EDGE OF PAVEMENT
S26°45'50"E 501.18'
FERGUSON ROAD
(A COUNTY MAINTAINED ROAD)
EP 196.42± CONFORM
EP 195.81± CONFORM
EP 195.51± CONFORM
EP 195.24± CONFORM
EP 195.06± CONFORM
16'
50.0'
50'
20'
31.7'
EX UTILITY POLE
DRIVEWAY APPROACH AND FROTNAGE IMPROVEMENTS ARE UNDER SEPARATE PERMIT ENC24-0161
SAWCUT/CONFORM LINE 12" FROM EX EDGE OF PAVEMENT
6" TREE
14" TREE
32" TREE
12" TREE
DS
A



SECTION A–A

SCALE: HORIZONTAL 1"=20'
VERTICAL 1"=10'



EARTHEN DITCH

NO SCALE

CONSTRUCTION NOTES:

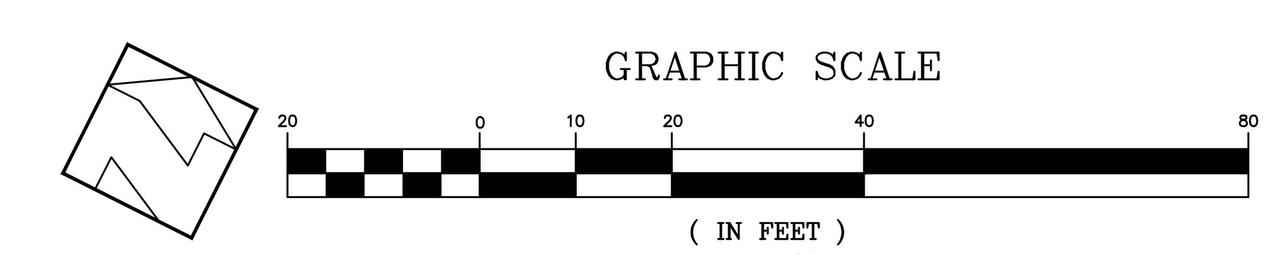
1. CONNECT DOWNSPOUT (DS) TO 8" STORM LINE; TYPICAL
2. PROVIDE SPLASH BLOCK; SEE DETAIL ON SHEET 5
3. TO THE NORTH OF THE DRIVEWAY, CONSTRUCT A 50' TAPER FROM AN 8' AC SHOULDER INTO A 3' AB SHOULDER PER TRAFFIC IMPACT ANALYSIS REVISED OCTOBER, 2024, AND CALTRANS HIGHWAY DESIGN MANUAL, FIGURE 205.1
4. TO THE SOUTH OF THE DRIVEWAY, CONSTRUCT A 31' TAPER FROM AN 8' SHOULDER TO EXISTING AC/CONFORM AT THE END OF THE PROPERTY FRONT.
5. CONSTRUCT 12' LANE AND 8' SHOULDER FOR 50' PER THE TRAFFIC IMPACT ANALYSIS REVISED OCTOBER, 2024.

NOTES:

1. ALL SAWCUT SPOILS SHALL BE VACUUMED.
2. SAWCUT AND REPAVE A MINIMUM 1 FOOT OF FERGUSON ROAD ALONG DRIVEWAY/PROPERTY FRONTAGE IMPROVEMENT LIMITS. MATCH PAVEMENT SECTION IN-KIND AND TO COUNTY STANDARDS.
3. RESTRIPE FOG LINE IN SAWCUT AREA IN-KIND WITH 4-INCH WHITE REFLECTIVE PAVEMENT MARKING AND AS REQUESTED BY COUNTY INSPECTOR AND/OR ENGINEER.

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS

PRELIMINARY PLANS
NOT FOR CONSTRUCTION



PLAN #
SHEET ___ OF ___

REVISIONS:		
DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1910
CIVIL ENGINEERS · LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET · GILROY · 95020 · CALIFORNIA
OFFICE (408) 842-2173 · FAX (408) 842-3662
EMAIL: ENGINEERING @ HANNABRUNETTI.COM

DATE: JULY 2024
HORIZ. SCALE: 1"=20
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY:
DRAWN BY: T.M.

date:
Hanna – Brunetti

Amanda Joy Musy-Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEL
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Grading & Drainage Plan

Lands of Chen - 2740 Ferguson Road - apn 841-21-022

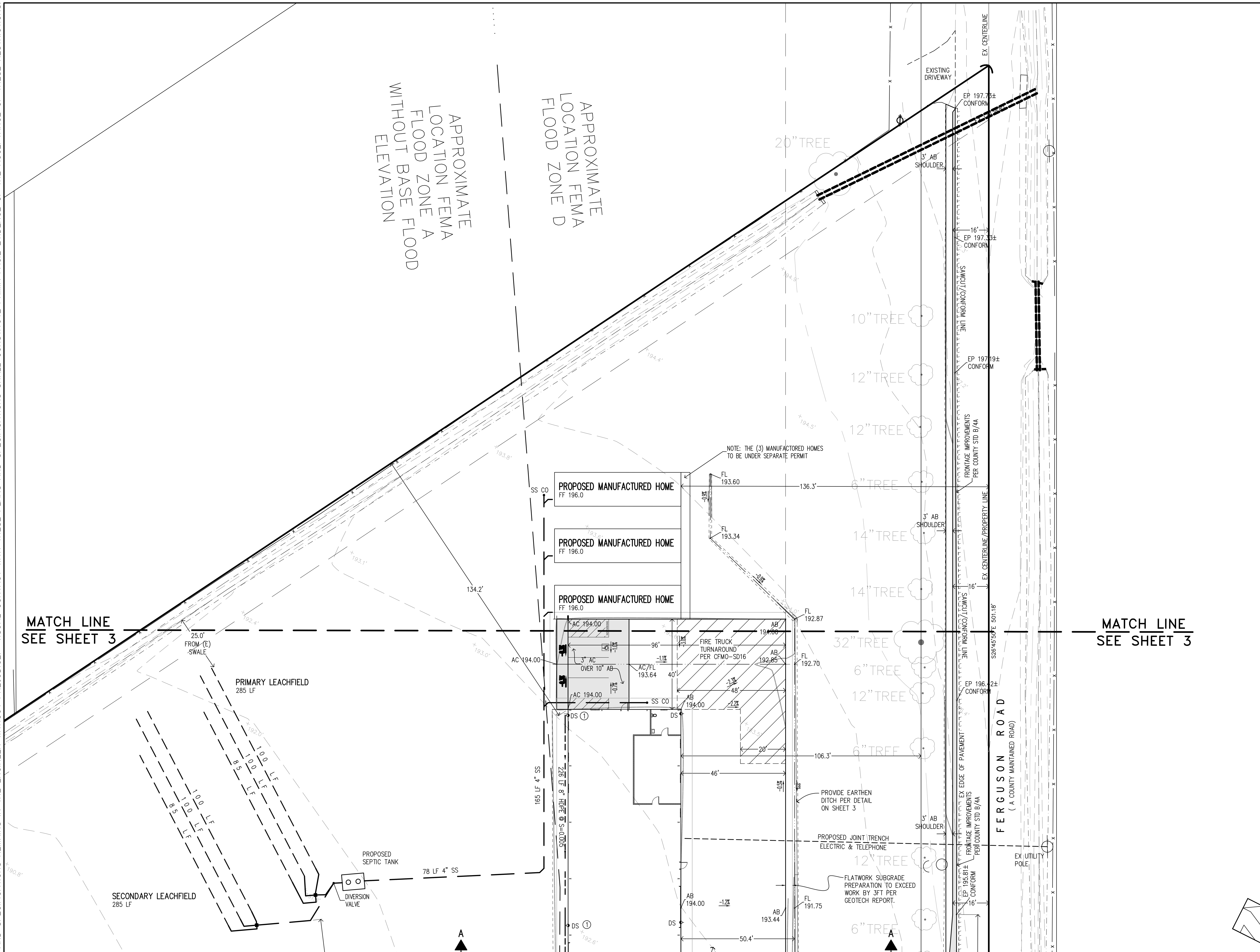
UNINCORPORATED
JULY 2024

SANTA CLARA COUNTY
CALIFORNIA

SHEET
3
OF 9

JOB NO.
22025

APPLICANT: CHEN   ROAD: 2740 FERGUSON ROAD   COUNTY FILE NO.: DEV23-2975   JOB NO. 22025



APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR
CONSTRUCTION PERMIT AND PLAN
COVER SHEET FOR SPECIAL
CONDITIONS AND PERMIT NUMBERS

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

REVISIONS:		
DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1910
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
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DATE: JULY 2024
HORIZ. SCALE: 1"=20'
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY:
DRAWN BY: T.M.

date:
Hanna – Brunetti

Amanda Joy Musy–Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEL
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

UNINCORPORATED
JULY 2024

Grading & Drainage Plan

Lands of Chen - 2740 Ferguson Road - apn 841-21-022

SANTA CLARA COUNTY
CALIFORNIA

SHEET
4
OF 9
JOB NO.
22025

PLAN #
SHEET ___ OF ___

APPLICANT: CHEN ROAD: 2740 FERGUSON ROAD COUNTY FILE NO.: DEV23-2975 JOB NO. 22025

PROJECT NOTES:

1. THE LOCATION OF THE BUILDING PADS AND/OR FOUNDATIONS ARE TO BE ESTABLISHED BY A PERSON AUTHORIZED TO PRACTICE LAND SURVEYING. A LETTER SIGNED AND SEALED BY THAT AUTHORIZED PERSON, STATING THAT HE/SHE HAS LOCATED THE BUILDING CORNERS, AND THEIR LOCATIONS CONFORM TO COUNTY BUILDING SETBACK REQUIREMENTS PER THE APPROVED BUILDING PLANS IS REQUIRED TO BE SUBMITTED TO THE COUNTY ENGINEER.
2. 'THIS PLAN AUTHORIZES THE REMOVAL OF ONLY THOSE TREES WITH TRUNK DIAMETERS GREATER THAN 12 INCHES MEASURED 4.5 FEET ABOVE GROUND WHICH ARE SHOWN TO BE REMOVED. ANY OTHER SUCH TREES ARE NOT TO BE REMOVED UNLESS AN AMENDED PLAN IS APPROVED OR A SEPARATE TREE REMOVAL PERMIT IS OBTAINED FROM THE PLANNING OFFICE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT REMOVAL OF ADDITIONAL TREES HAS BEEN PERMITTED.'
3. NO TREES ARE TO BE REMOVED
4. PRIOR TO GRADING COMPLETION AND RELEASE OF BOND, ALL GRADED AREAS SHALL BE RESEEDED IN CONFORMANCE WITH THE COUNTY GRADING ORDINANCE TO MINIMIZE THE VISUAL IMPACTS OF THE GRADED SLOPES AND REDUCE THE POTENTIAL FOR EROSION ON THE SUBJECT SITE.
5. BOTH DRAINFIELDS MUST BE STAKED AND STRUNG PRIOR TO APPROVAL OF THE SEPTIC DESIGN TO VERIFY THAT THE PROPOSED SEPTIC DESIGN WILL ACTUALLY FIT INTO THE PROPOSED LEACHFIELD AREA, AND CONFORM TO ALL REQUIRED SETBACKS.
6. IF ARCHAEOLOGICAL RESOURCES OR HUMAN REMAINS ARE DISCOVERED DURING CONSTRUCTION, WORK SHALL BE HALTED WITHIN 50 METERS (150 FEET) OF THE FIND UNTIL IT CAN BE EVALUATED BY A QUALIFIED ARCHAEOLOGIST. IF THE FIND IS DETERMINED TO BE SIGNIFICANT, APPROPIATE MITIGATION MEASURES SHALL BE FORMULATED AND IMPLEMENTED.
7. NOTIFY SOILS ENGINEER TWO (2) DAYS PRIOR TO COMMENCEMENT OF ANY GRADING WORK TO COORDINATE THE WORK IN THE FIELD.
8. ALL MATERIALS FOR FILL SHOULD BE APPROVED BY THE SOILS ENGINEER BEFORE IT IS BROUGHT TO THE SITE.
9. IN THE EVENT THAT ARCHEOLOGICAL FEATURES SHOULD BE DISCOVERED AT ANY TIME DURING THE GRADING, SCRAPING OR EXCAVATION, ALL WORK SHOULD BE HALTED IN THE VICINITY OF THE FIND AND AN ARCHAEOLOGIST SHOULD BE CONTACTED IMMEDIATELY TO EVALUATE THE DISCOVERED MATERIAL TO ASSESS ITS AREAL EXTENT, CONDITION, AND SCIENTIFIC SIGNIFICANCE. IF THE DISCOVERED MATERIAL IS DEEMED POTENTIALLY SIGNIFICANT, A QUALIFIED ARCHAEOLOGIST SHOULD MONITOR ANY SUBSEQUENT ACTIVITY IN THE PROXIMITY.
10. IN THE EVENT THAT HUMAN SKELETAL REMAINS ARE ENCOUNTERED, THE APPLICANT IS REQUIRED BY COUNTY ORDINANCE NO. B6-18 TO IMMEDIATELY NOTIFY THE COUNTY CORONER. UPON DETERMINATION BY THE COUNTY CORONER THAT THE REMAINS ARE NATIVE AMERICAN, THE CORONER SHALL CONTACT THE CALIFORNIA NATIVE AMERICAN HERITAGE COMMISSION, PURSUANT TO SUBDIVISION (c) OF SECTION 7050.5 OF THE HEALTH AND SAFETY CODE AND THE COUNTY COORDINATOR OF INDIAN AFFAIRS. NO FURTHER DISTURBANCE OF THE SITE MAY BE MADE EXCEPT AS AUTHORIZED BY THE COUNTY CHAPTER. IF ARTIFACTS ARE FOUND ON THE SITE A QUALIFIED ARCHAEOLOGIST SHALL BE CONTACTED ALONG WITH THE COUNTY PLANNING OFFICE. NO FURTHER DISTURBANCE OF THE ARTIFACTS MAY BE MADE EXCEPT AS AUTHORIZED BY THE COUNTY PLANNING OFFICE.
11. THESE PLANS ARE FOR THE WORK DESCRIBED IN THE SCOPE OF WORK ONLY. A SEPARATE PERMIT WILL BE REQUIRED FOR THE SEPTIC LINE CONSTRUCTION.
12. UPPER 12" OF THE SUBGRADE SOIL SHALL BE SCARIFIED, MOISTURE CONDITIONED AND COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 95%, PER THE GEOTECHNICAL REPORT.
13. ALL AGGREGATE BASE MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 95% RELATIVE COMPACTION.
14. ROADWAYS DESIGNATED AS NOT COUNTY MAINTAINED ROADS AS SHOWN ON THIS PLAN WILL NOT BE ELIGIBLE FOR COUNTY MAINTENANCE UNTIL THE ROADWAYS ARE IMPROVED (AT NO COST TO THE COUNTY) TO PUBLIC MAINTENANCE ROAD STANDARDS APPROVED BY THE BOARD OF SUPERVISORS AND IN EFFECT AT SUCH TIME THAT THE ROADWAYS ARE CONSIDERED FOR ACCEPTANCE INTO THE COUNTY'S ROAD SYSTEM.
15. AN APPROVED RESIDENTIAL FIRE SPRINKLER SYSTEM COMPLYING WITH FIRE MARSHAL STANDARD CFMO-SP6 IS REQUIRED TO BE INSTALLED THROUGHOUT THE STRUCTURE.
16. ALL NEW ON-SITE UTILITIES, MAINS AND SERVICES SHALL BE PLACED UNDERGROUND AND EXTENDED TO SERVE THE PROPOSED RESIDENCE.
17. A CONSTRUCTION OBSERVATION LETTER FROM THE RESPONSIBLE GEOTECHNICAL ENGINEER AND CERTIFIED ENGINEERING GEOLOGIST DETAILING CONSTRUCTION OBSERVATIONS AND CERTIFYING THAT THE WORK WAS DONE IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL AND GEOLOGICAL REPORTS SHALL BE SUBMITTED PRIOR TO GRADING COMPLETION AND RELEASE OF BOND.
18. ALL ROOF RUNOFF SHALL BE DIRECTED TO LANDSCAPED OR NATURAL AREAS AWAY FROM BUILDING FOUNDATIONS, TO ALLOW FOR STORM WATER INFILTRATION INTO THE SOIL AND SHEET FLOW.

NOTE TO CONTRACTOR

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 THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.

NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING SURVEY MONUMENTS AND OTHER SURVEY MARKERS DURING CONSTRUCTION. ALL SUCH MONUMENTS OR MARKER'S DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

WHERE THE FIRM OF HANNA & BRUNETTI DOES NOT PROVIDE CONSTRUCTION STAKES, SAID FIRM WILL ASSUME NO RESPONSIBILITY WHATSOEVER FOR IMPROVEMENTS CONSTRUCTED THEREFROM.

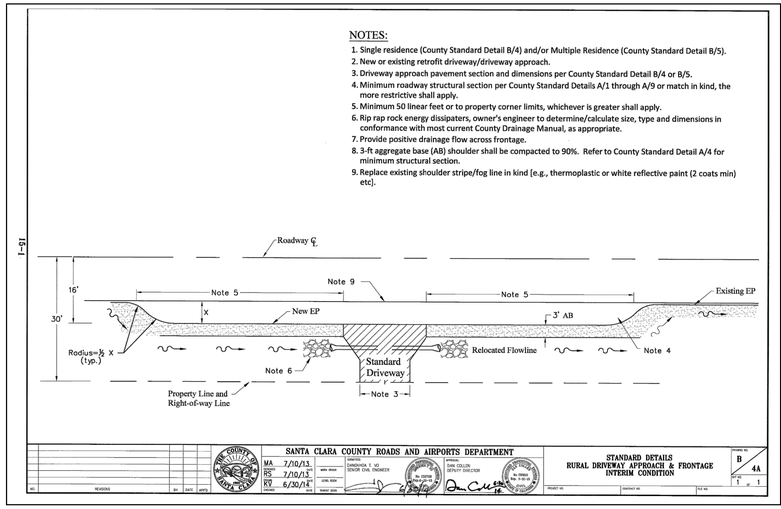
CONTRACTOR TO VERIFY:

CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION OF BUILDING PAD, THE STRUCTURAL SECTION OF FOUNDATION TO DETERMINE BUILDING PAD ELEVATION.

SEE SOILS REPORT AND/OR STRUCTURAL PLANS TO DETERMINE THE ELEVATION OF THE BUILDING FINISH FLOOR AND PAD.

THESE QUANTITIES DO NOT INCLUDE ANY SHRINKAGE, SUBSIDENCE, OVER-EXCAVATION, OR ANY SPECIAL CONDITIONS OR REQUIREMENTS THAT MAY BE SPECIFIED IN THE GEOTECHNICAL INVESTIGATION REPORT. THESE QUANTITIES IN THE AREA FOR PERMIT PURPOSES ONLY. ALL CONTRACTORS BIDDING ON THIS PROJECT SHOULD MAKE THEIR OWN DETERMINATION OF EARTHWORK QUANTITIES PRIOR TO SUBMITTING A BID.

EXCESS MATERIAL SHALL BE OFF-HAULED. IF LOCATION IS WITHIN THE COUNTY A SEPERATED PERMIT SHALL BE REQUIRED.



NOTES:

1. Single residence (County Standard Detail B/4) and/or Multiple Residence (County Standard Detail B/5).
2. New or existing retrofit driveway/driveway approach.
3. Driveway approach pavement section and dimensions per County Standard Detail B/4 or B/5.
4. Minimum roadway structural section per County Standard Details A/1 through A/9 or match in kind, the more restrictive shall apply.
5. Minimum 50 linear feet or to property corner limits, whichever is greater shall apply.
6. Rip rap rock energy dissipaters, owner's engineer to determine/calculate size, type and dimensions in conformance with most current County Drainage Manual, as appropriate.
7. Provide positive drainage flow across frontage.
8. 3-Ft aggregate base (AB) shoulder shall be compacted to 90%. Refer to County Standard Detail A/4 for minimum structural section.
9. Replace existing shoulder stripe/fog line in kind [e.g., thermoplastic or white reflective paint (2 coats min) etc].

SANTA CLARA COUNTY ROADS AND AIRPORTS DEPARTMENT — STANDARD DETAILS — RURAL DRIVEWAY APPROACH & FRONTAGE INTERIM CONDITION — B 4A

Notes for Figure 6H-6—Typical Application 6
Shoulder Work with Minor Encroachment

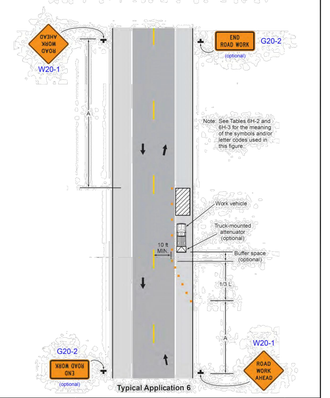
Guidance:
1. All lanes should be a minimum of 10 feet in width as measured to the near face of the channelizing devices.
2. The treatment shown should be used on a minor road having low speeds. For higher-speed traffic conditions, a lane closure should be used.

Option:
3. For short-term use on low-volume, low-speed roadways with vehicular traffic that does not include longer and wider heavy commercial vehicles, a minimum lane width of 9 feet may be used.
4. Where the opposite shoulder is suitable for carrying vehicular traffic and of adequate width, lanes may be shifted by use of closely-spaced channelizing devices, provided that the minimum lane width of 10 feet is maintained.
5. Additional advance warning may be appropriate, such as a ROAD NARROWS sign.
6. Temporary traffic barriers may be used along the work space.
7. The shadow vehicle may be omitted if a taper and channelizing devices are used.
8. A truck-mounted attenuator may be used on the shadow vehicle.
9. For short-duration work, the taper and channelizing devices may be omitted if a shadow vehicle with activated high-intensity rotating, flashing, oscillating, or strobe lights is used.
10. Vehicle hazard warning signals may be used to supplement high-intensity rotating, flashing, oscillating, or strobe lights.

Standard:
11. Vehicle-mounted signs shall be mounted in a manner such that they are not obscured by equipment or supplies. Sign legends on vehicle-mounted signs shall be covered or turned from view when work is not in progress.
12. Shadow and work vehicles shall display high-intensity rotating, flashing, oscillating, or strobe lights.
13. Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights.

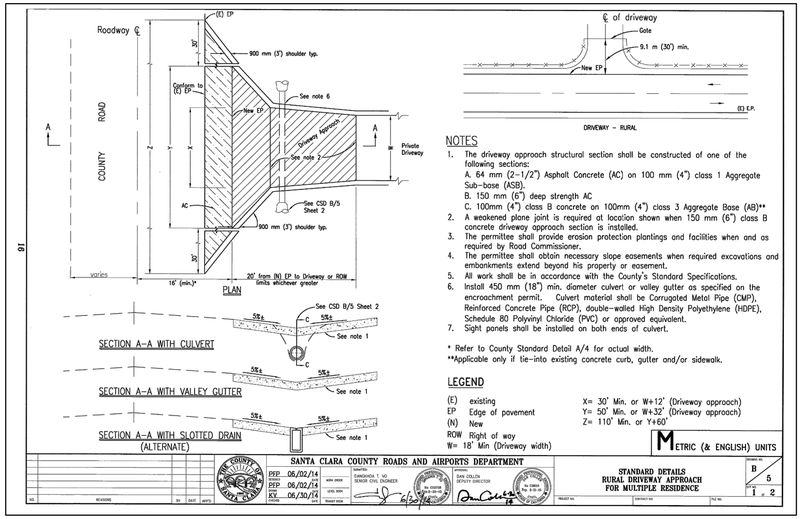
Guidance:
14. All advance warning signs should be placed so that the path of travel for bicycles is not blocked, while maintaining visibility for road users.
15. When existing accommodations for bicycle travel are disrupted or closed in a long-term duration project (see Section 9G.02) and the roadway width is inadequate for allowing bicyclists and motor vehicles to travel side by side, the Bicycle Warning (W11-1) sign and the SHARE THE ROAD (W16-1P) plaque should be used to advise motorists of the presence of bicyclists in the travel way lanes.
16. Except for short durations and mobile operations, when a highway shoulder is occupied and bicyclists would be sharing a lane with vehicular traffic, as a result of the TTC zone, speed reduction countermeasures should be used to reduce traffic speeds in the TTC zone. Refer to Sections 6C.01 and 6D.03.
17. Except for short durations and mobile operations, when a highway shoulder is occupied and bicyclists would be sharing a lane with vehicular traffic, as a result of the TTC zone, before narrowing the outside lane other measures such as widening the outside shoulder to allow bicyclists and motor vehicles to travel side by side through the TTC zone should be considered.
18. If traffic volumes make it feasible, the two left lanes should be merged into one lane to avoid using the shoulder as a traveled way lane and allowing continued use for emergency purposes and bicycle travel.
19. When existing accommodations for bicycle travel are disrupted or closed in a long-term duration project (see Section 9G.02) and the roadway width is inadequate for allowing bicyclists and motor vehicles to travel side by side, a separate path should be considered for bicyclists.

Figure 6H-6. Shoulder Work with Minor Encroachment (TA-6)



Typical Application 6

COUNTY OF SANTA CLARA ROADS AND AIRPORTS DEPARTMENT — STANDARD TRAFFIC CONTROL PLANS - LOCAL SHOULDER WORK — TCP



NOTES

1. The driveway approach structural section shall be constructed of one of the following sections:
   A. 64 mm (2-1/2") Asphalt Concrete (AC) on 100 mm (4") class 1 Aggregate Sub-base (ASB).
   B. 150 mm (6") deep strength AC
   C. 100mm (4") class B concrete on 100mm (4") class 3 Aggregate Base (AB)**
2. A weakened plane joint is required at location shown when 150 mm (6") class B concrete driveway approach section is installed.
3. The permittee shall provide erosion protection plantings and facilities when and as required by Road Commissioner.
4. The permittee shall obtain necessary slope easements when required excavations and embankments extend beyond his property or easement.
5. All work shall be in accordance with the County's Standard Specifications.
6. Install 450 mm (18") min. diameter culvert or valley gutter as specified on the encroachment permit. Culvert material shall be Corrugated Metal Pipe (CMP), Reinforced Concrete Pipe (RCP), double-walled High Density Polyethylene (HDPE), Schedule 80 Polyvinyl Chloride (PVC) or approved equivalent.
7. Sight panels shall be installed on both ends of culvert.

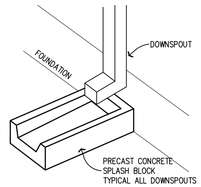
* Refer to County Standard Detail A/4 for actual width.
**Applicable only if tie-into existing concrete curb, gutter and/or sidewalk.

LEGEND

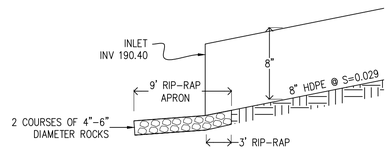
(E) existing
EP Edge of pavement
(N) New
ROW Right of way
W= 18' Min (Driveway width)
X= 30' Min. or W+12' (Driveway approach)
Y= 50' Min. or W+32' (Driveway approach)
Z= 110' Min. or Y+60'

METRIC (& ENGLISH) UNITS

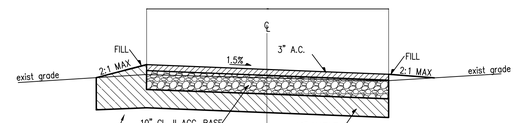
SANTA CLARA COUNTY ROADS AND AIRPORTS DEPARTMENT — STANDARD DETAILS — RURAL DRIVEWAY APPROACH FOR MULTIPLE RESIDENCE — B 5



DOWNSPOUT WITH SPLASH BLOCK DETAIL
NO SCALE



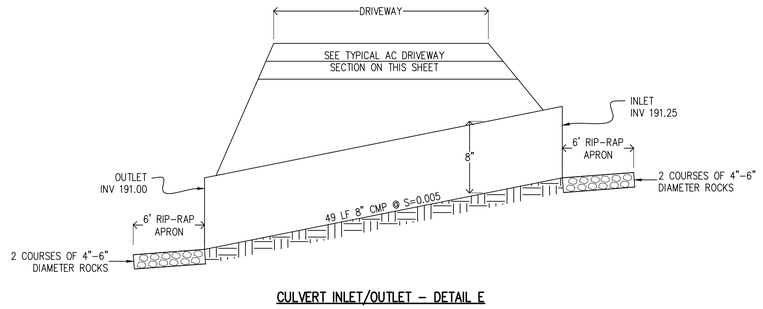
POND INLET - DETAIL B
NOT TO SCALE



SUBGRADE SOILS SHOULD BE SCARIFIED TO A DEPTH OF 12" BELOW STRIPPED GROUND SURFACE, MOISTURE CONDITIONED, AND COMPACTED PER THE GEOTECHNICAL REPORT

TYPICAL AC DRIVEWAY
NO SCALE

NOTE: DRIVEWAY WILL BE MADE OF AN "ALL-WEATHER" MATERIAL CAPABLE OF HOLDING 75,000 POUNDS AS SPECIFIED BY GEOTECHNICAL ENGINEER.



CULVERT INLET/OUTLET - DETAIL E
NOT TO SCALE

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS

PLAN # ____
SHEET ____ OF ____

REVISIONS:

DATE	DESCRIPTION	BY:

HANNA-BRUNETTI EST. 1915
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
OFFICE (408) 842-2173 • FAX (408) 842-3662
EMAIL: ENGINEERING @ HANNABRUNETTI.COM

DATE: JULY 2024
HORIZ. SCALE: 1"=20'
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY: ____
DRAWN BY: TM

date: ____
Hanna - Brunetti

Amanda Joy Musy-Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER — AMANDA JOY MUSY-VERDEL — NO. 69278 — CIVIL — STATE OF CALIFORNIA

REFERENCES

UNINCORPORATED
JULY 2024

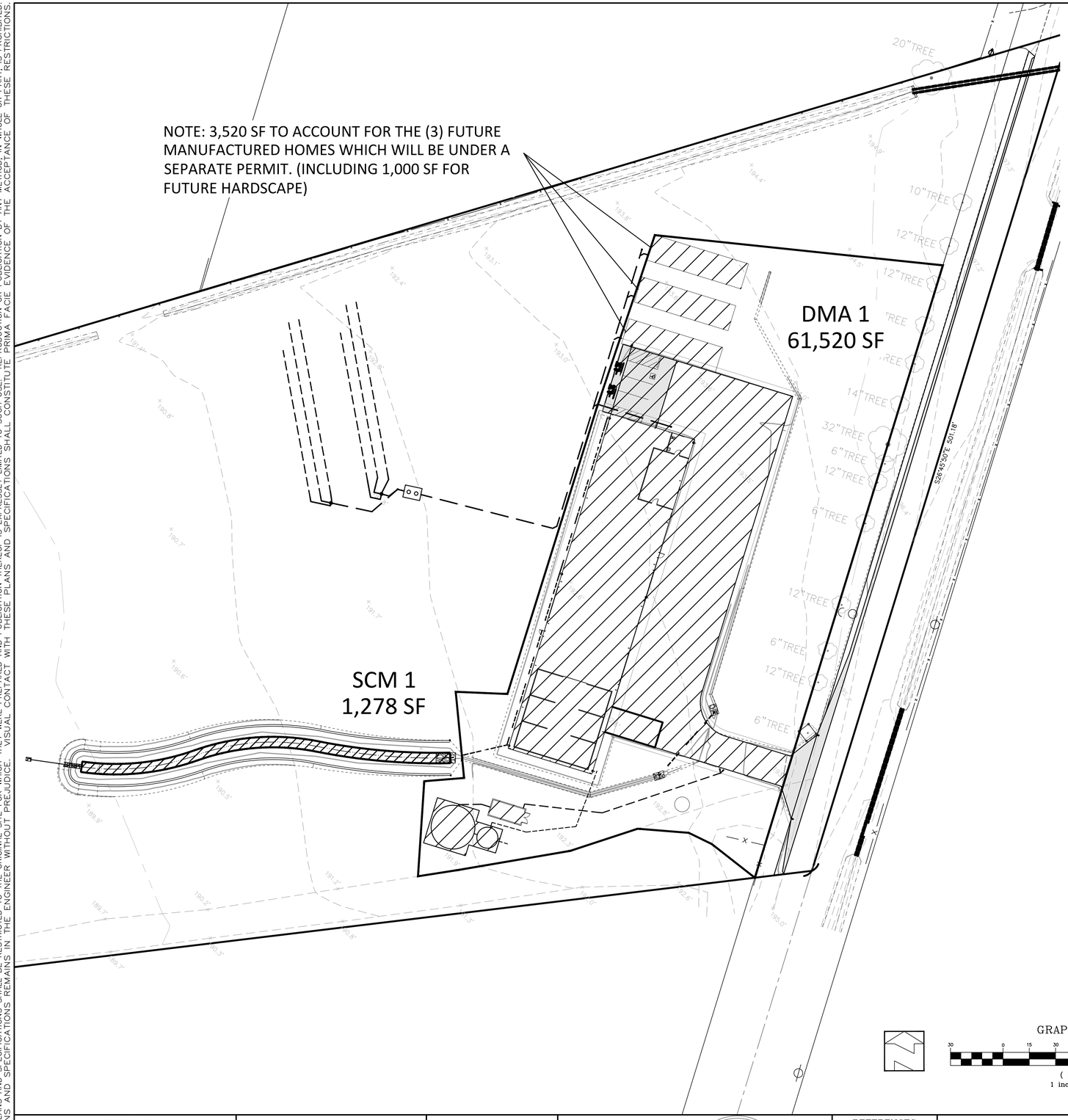
Details, Notes, & Specifications

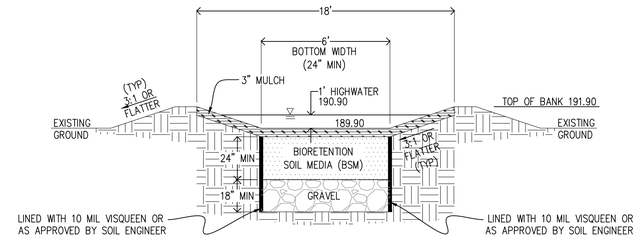
Lands of Chen - 2740 Ferguson Road - apn 841-21-022

SANTA CLARA COUNTY
CALIFORNIA

SHEET 5 OF 9
JOB NO. 22025

APPLICANT: CHEN — ROAD: 2740 FERGUSON ROAD — COUNTY FILE NO.: DEV23-2975 — JOB NO. 22025





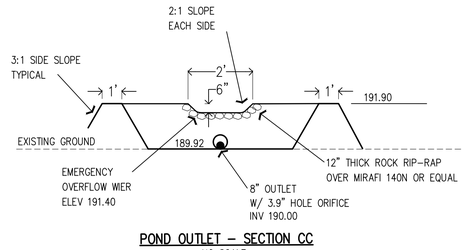
BIORETENTION POND DETAIL
NOT TO SCALE

CONSTRUCTION NOTES

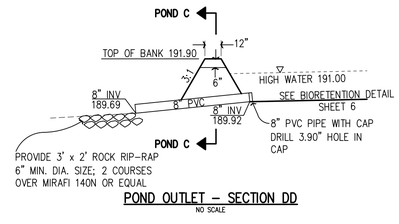
1. SCARIFY SUBGRADE BEFORE INSTALLING BIORETENTION AREA AGGREGATE AND BSM.
2. FACILITY EXCAVATION TO ALLOW FOR SPECIFIED SOIL AND MULCH DEPTHS TO ACHIEVE FINISHED ELEVATIONS ON CIVIL PLANS.
3. COMPACT EACH 6" LIFT OF BSM WITH LANDSCAPE ROLLER OR BY LIGHTLY WETTING. IF WETTING, LET DRY OVERNIGHT BEFORE PLANTING.
4. DO NOT WORK WITHIN BIORETENTION AREA DURING RAIN OR UNDER WET CONDITIONS.
5. KEEP HEAVY MACHINERY OUTSIDE BIORETENTION AREA LIMITS.

DESIGN NOTES

1. FULL DESIGN GUIDANCE PROVIDED IN BIORETENTION TECHNICAL SPECIFICATIONS DOCUMENT.
2. CURB AND SIDEWALK DETAILS MAY BE MODIFIED FOR PROJECT BY GEOTECHNICAL ENGINEER.
3. IF CALTRANS CLASS 2 PERMEABLE IS NOT AVAILABLE, SUBSTITUTE CLASS 3 PERMEABLE WITH AN OVERLYING 3" DEEP LAYER OF 3/4" (NO. 4) OPEN-GRADED AGGREGATE.
4. BIORETENTION SOIL MEDIA (BSM) SPECIFICATION PER BAY AREA STORMWATER MANAGEMENT AGENCIES ASSOCIATION (BASMAA) BIOTREATMENT SOIL MEDIA AND LID PLANT GUIDANCE FOR BIORETENTION TECHNICAL ASSISTANCE MEMO FOR PLANTING.
5. PLANTING DESIGN AND IRRIGATION PER SANTA CLARA COUNTY - SCVURPPP C.3 HANDBOOK.
6. MULCH (OPTIONAL) PER BIORETENTION TECHNICAL SPECIFICATIONS.
7. LOCATE ENERGY DISSIPATION COBBLE PADS AS SPECIFIED IN INLET DETAILS - AVOID DECORATIVE USE.



POND OUTLET – SECTION CC
NO SCALE



POND OUTLET – SECTION DD
NO SCALE

LEGEND

- DMA 1 IMPERVIOUS AREA
- STORMWATER CONTROL MEASURE
- DRAINAGE MANAGEMENT AREA DELINEATION

AREA SUMMARY TABLE

TCM ID	DESCRIPTION OF AREA	TOTAL AREA (SF)	PERVIOUS AREA (SF)	NEW IMPERVIOUS AREA (SF)	STORMWATER CONTROL MEASURE	TREATMENT AREA REQ'D	TREATMENT AREA PROVIDED	TIER 3 RETENTION REQ'D	TIER 3 RETENTION PROVIDED	TIER 4 DETENTION REQ'D	TIER 4 DETENTION PROVIDED
DMA 1	ROOF, PARKING, LANDSCAPE	61,520	33,576	27,944	BIORETENTION POND	1,253 SF (4% RULE)	1,278 SF	741 CF	766 CF	1,431 CF	1,917 CF

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS

PLAN # ____ OF ____
SHEET ____

REVISIONS:

DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1915
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CONSTRUCTION MANAGERS
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DRAWN BY: TM

date: ____
Hanna – Brunetti

Amanda Joy Musy–Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEL
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Stormwater Control Plan

Lands of Chen - 2740 Ferguson Road - apn 841-21-022

UNINCORPORATED
JULY 2024

SANTA CLARA COUNTY
CALIFORNIA

SHEET 6 OF 9

JOB NO. 22025

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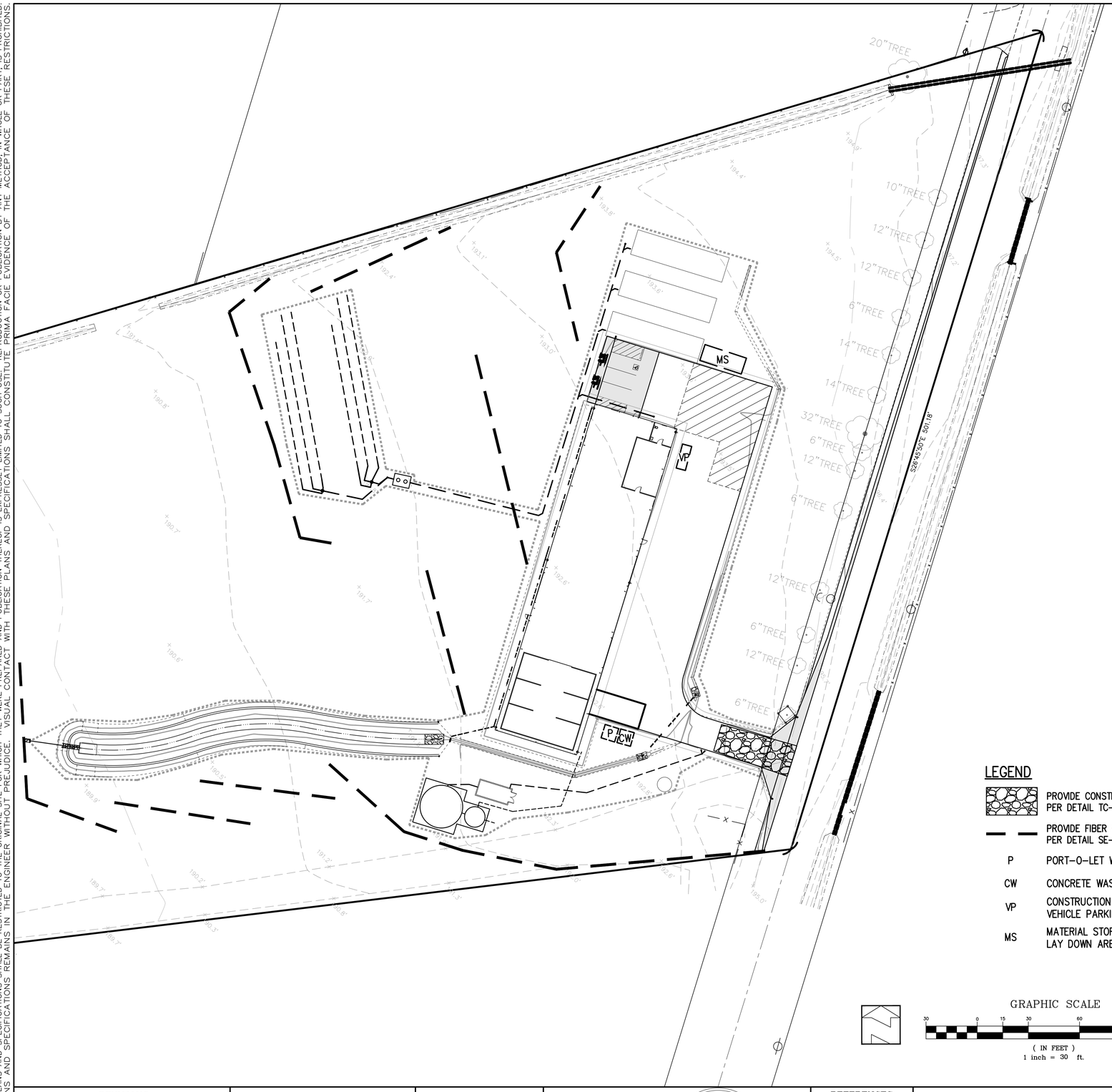


LEGEND

- PROVIDE CONSTRUCTION ENTRANCE/EXIT PER DETAIL TC-1
- PROVIDE FIBER ROLL SLOPE PROTECTION PER DETAIL SE-5
- P — PORT-O-LET WITH SECONDARY CONTAINMENT
- CW — CONCRETE WASH AREA
- VP — CONSTRUCTION TRAILER AND VEHICLE PARKING AREA
- MS — MATERIAL STORAGE AND LAY DOWN AREA

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

EROSION CONTROL NOTES

1. EROSION CONTROL MEASURES SHALL BE EFFECTIVE FOR CONSTRUCTION DURING THE RAINY SEASON; OCTOBER 15 THROUGH APRIL 15.
2. NO STORM WATER RUNOFF SHALL BE ALLOWED TO DRAIN INTO THE EXISTING AND/OR PROPOSED UNDERGROUND STORM SYSTEM UNTIL SUITABLE EROSION CONTROL MEASURES ARE FULLY IMPLEMENTED. NO STORM WATER RUNOFF SHALL BE ALLOWED TO ENTER THE STORM DRAIN SYSTEM THAT IS NOT CLEAR, AND FREE OF SILTS.
3. A FIBER ROLL BARRIER PER "DETAIL SE-5" SHALL BE INSTALL ALONG THE PERIMETER OF THE PROJECT SITE. THE LOCATION OF THE FIBER ROLL ALONG THE PERIMETER SHALL BE ADJUSTED TO ELIMINATE SEDIMENT LADEN RUNOFF FROM LEAVING THE SITE. A FIBER ROLL SHALL ALSO BE REQUIRED AROUND THE PERIMETER OF ANY STOCKPILE OR OTHER SITE OF BARE, LOOSE EARTH.
4. ALL STORM DRAIN MANHOLES, CATCH BASINS, AND/OR DROP INLETS THAT ARE TO ACCEPT STORM WATER SHALL HAVE INLET PROTECTION MEASURES PER DETAIL SE-10. STORM WATER RUNOFF SHALL BE DIRECTED TO THESE INLETS ONLY. STORM DRAIN CATCH BASINS THAT ARE NOT COMPLETE, SHALL BE BLOCKED OFF COMPLETELY.
5. THE NAME, ADDRESS, AND 24 HOUR TELEPHONE NUMBER OF THE PERSON RESPONSIBLE FOR THE IMPLEMENTATION OF THE EROSION CONTROL PLAN SHALL BE PROVIDED TO THE COUNTY.
6. PRIOR TO GRADING, AN ENTRANCE SHALL BE CONSTRUCTED, CONSISTING OF A MINIMUM OF 50 LF OF DRAIN ROCK, 3" IN DIAMETER, PLACED OVER MIRAFI 500X (OR EQUAL) PER DETAIL TC-1. THE ENTRANCE SHALL CONFORM TO "CONSTRUCTION ENTRANCE DETAIL TC-1". THERE SHALL BE ONLY ONE ENTRANCE/EXIT POINT TO THE SITE DURING THE RAINY SEASON. THE LOCATION SHALL BE AS SHOWN ON THESE PLANS, OR AT A LOCATION APPROVED BY THE COUNTY.
7. ALL AREAS OF BARE, TURNED OR DISTURBED EARTH SHALL BE STABILIZED BY USE OF HYDROSEED PER THE TABLE BELOW. ALL STOCKPILES, AND/OR BORROW AREAS SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTROL MEASURES SUCH AS A PERIMETER SILT FENCE, AND OTHER METHODS TO PREVENT ANY EROSION OR SILTS MIGRATION. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED. CHANGES TO THE EROSION CONTROL PLAN SHALL BE MADE TO MEET FIELD CONDITIONS, BUT ONLY WITH THE APPROVAL OF, OR AT THE DIRECTION OF THE COUNTY INSPECTOR. THE STORM DRAIN SYSTEM SHALL MAINTAIN A FORM OF DRAIN INLET PROTECTION UNTIL COUNTY ACCEPTS THE FINAL STREET IMPROVEMENTS. THE DRAIN INLET PROTECTION SHALL BE MAINTAINED, EFFECTIVE AND SUBJECT TO COUNTY INSPECTOR'S APPROVAL.
8. ALL PAVED STREET, AND AREAS ADJACENT TO THE SITE SHALL BE KEPT CLEAR OF EARTH MATERIALS AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO ELIMINATE SEDIMENT LADEN RUNOFF FROM ENTERING THE STORM DRAIN SYSTEM.
9. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSPECT AND REPAIR ALL EROSION CONTROL FACILITIES AT THE END OF EACH DAY DURING THE RAINY SEASON. ANY DAMAGED STRUCTURAL MEASURES ARE TO BE REPAIRED BY END OF THE DAY. TRAPPED SEDIMENT IN "SD INLETS" (AND OTHER EROSION CONTROL MEASURES) SHALL BE REMOVED TO MAINTAIN TRAP EFFIENCY. REMOVED SEDIMENT SHALL BE DISPOSED BY SPREADING ON SITE, WHERE IT WILL NOT MIGRATE.
10. IT IS THE RESPOSIBILITY OF THE CONTRACTOR TO PREVENT THE FORMATION OF AIRBORNE DUST NUISANCE AND SHALL BE RESPOSIBILE FOR ANY DAMAGE RESULTING FROM A FAILURE TO DO SO.
11. ALL DRAIN SWALES SHALL BE PER DETAIL EC-9.
12. INCOMPLETE GRADING SHALL NOT BE ALLOWED. CONTRATOR SHALL MAINATIN A DRAIN PATH AS SHOWN ON THIS PLAN. SAID DRAIN PATH SHALL BE MAINTAINED LINED DRAIN SWALES, AND INLET PROTECTION AT A MINIMUM. IF PONDING DOES OCCUR ON THE SITE AFTER GRADING, THE WATER MUST BE FREE AND CLEAR OF SEDIMENT PRIOR TO DISCHARGE TO THE STORM DRAIN SYSTEM. THIS REQUIREMENT MAY NECESSITATE THE USE OF NATURAL AND/OR MECHANICAL DESILTING METHODS, SUBJECT TO APPROVAL BY THE COUNTY INSPECTOR.
13. F THESE EROSION CONTROL MEASURE PROVE INADEQUATE, STRAW MULCH, TACKIFIER, AND ADDITIONAL HYDROSEEDING MAY BE REQUIRED.

HYDROSEED TABLE

ITEM	LBS/ACRE
COMMON BARLEY	45
ANNUAL RYEGRASS	45
CRIMSON CLOVER	10
FERTILIZER 7-2-3	400
FIBER MULCH	2000
TACKIFIER	100

14. ALL GRADING WORK BETWEEN OCTOBER 15th AND APRIL 15th IS AT THE DISCRETION OF THE SANTA CLARA COUNTY BUILDING OFFICIAL.
15. PROVIDE SHRUBS AND/OR TREES REQUIRED ON SLOPES GREATER THAN 15 FEET IN VERTICAL HEIGHT.
16. THE OWNER/OWNER'S CONTRACTOR, AGENT, AND/OR ENGINEER SHALL INSTALL AND MAINTAIN THROUGHOUT THE DURATION OF CONSTRUCTION AND UNTIL THE ESTABLISHMENT OF PERMANENT STABILIZATION AND SEDIMENT CONTROL WITHIN THE SANTA CLARA COUNTY MAINTAINED ROAD RIGHT OF WAY AND ANY PORTION OF THE SITE WHERE STORM WATER RUN-OFF IS DIRECTLY FLOWING INTO THE SANTA CLARA COUNTY MAINTAINED ROAD RIGHT OF WAY BEST MANAGEMENT PRACTICES (BMP'S) TO PREVENT CONSTRUCTION MATERIALS, EXCAVATED MATERIALS, WASTE MATERIALS, AND SEDIMENT CAUSED BY EROSION FROM CONSTRUCTION ACTIVITIES ENTERING THE STORM DRAIN SYSTEM, WATERWAYS, AND ROADWAY INFRASTRUCTURE. BMP'S SHALL INCLUDE, BUT NOT LIMITED TO, THE FOLLOWING PRACTICES APPLICABLE TO THE PUBLIC ROAD AND EXPRESSWAY FACILITIES:
    A) REDUCTION OF POLLUTANTS IN STORM WATER DISCHARGES FROM THE CONSTRUCTION SITE AND THE CONTRACTOR'S MATERIAL AND EQUIPMENT LAYDOWN/STAGING AREAS.
    B) PREVENTION OF TRACKING OF MUD, DIRT AND CONSTRUCTION MATERIALS ONTO PUBLIC ROAD RIGHT OF WAY.
    C) PREVENTION OF DISCHARGE OF WATER RUNOFF DURING DRY AND WET WEATHER CONDITIONS ONTO PUBLIC ROAD RIGHT OF WAY
17. THE OWNER/OWNER'S CONTRACTOR, AGENT, AND/OR ENGINEER SHALL ENSURE THAT ALL TEMPORARY CONSTRUCTION FACILITIES, INCLUDING BUT NOT LIMITED TO CONSTRUCTION MATERIALS, DELIVERIES, HAZARDOUS AND NON-HAZARDOUS MATERIAL STORAGE, EQUIPMENT, TOOLS, PORTABLE TOILETS, CONCRETE WASHOUT, GARBAGE CONTAINERS, LAYDOWN YARDS, SECONDARY CONTAINMENT AREAS, ETC. ARE LOCATED OUTSIDE THE SANTA CLARA COUNTY MAINTAINED ROAD RIGHT OF WAY AND ANY PORTION OF THE SITE WHERE STORM WATER RUN-OFF IS DIRECTLY FLOWING INTO THE SANTA CLARA COUNTY MAINTAINED ROAD RIGHT OF WAY SHALL HAVE SEASONALLY APPROPRIATE BMP'S INSTALLED AND MAINTAINED AT ALL TIMES.

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS

PLAN # _____ OF _____
SHEET _____

REVISIONS:

DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1910
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
OFFICE (408) 842-2173 • FAX (408) 842-3662
EMAIL: ENGINEERING @ HANNABRUNETTI.COM

DATE: JULY 2024
HORIZ. SCALE: 1"=30'
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY: _____
DRAWN BY: TM

date: _____
Hanna – Brunetti

Amanda Joy Musy-Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEL
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Erosion Control Plan

Lands of Chen - 2740 Ferguson Road - apn 841-21-022

UNINCORPORATED
JULY 2024

SANTA CLARA COUNTY
CALIFORNIA

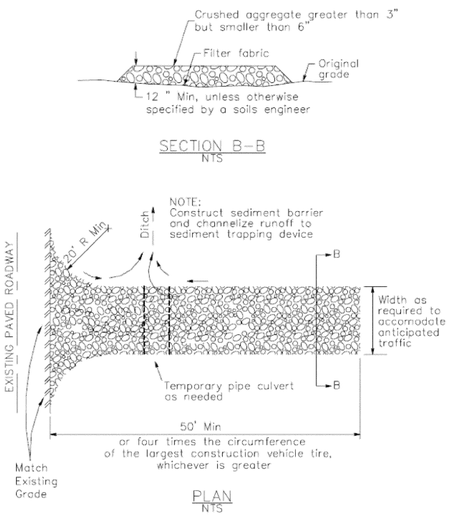
SHEET 7 OF 9

JOB NO. 22025

APPLICANT: CHEN ROAD: 2740 FERGUSON ROAD COUNTY FILE NO.: DEV23-2975 JOB NO. 22025

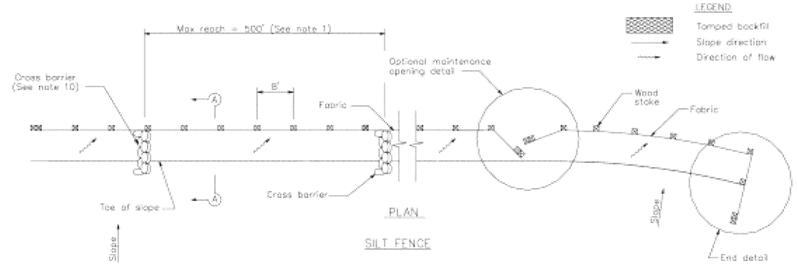
3 Stabilized Construction Entrance/Exit

CASQA Detail TC-1



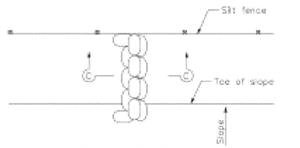
1 Silt Fence

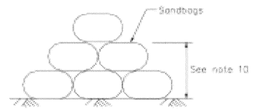
CASQA Detail SE-1



NOTES

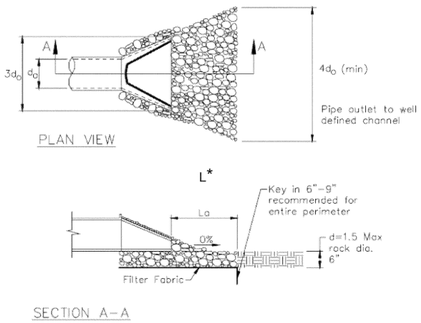
1. Construct the length of each reach so that the change in base elevation along the reach does not exceed 1/3 the height of the linear barrier, in no case shall the reach length exceed 500'.
2. The last 8'–0" of fence shall be turned up slope.
3. Stake dimensions are nominal.
4. Dimension may vary to fit field condition.
5. Stakes shall be spaced at 8'–0" maximum and shall be positioned on downstream side of fence.
6. Stakes to overlap and fence fabric to fold around each stake are full turn. Secure fabric to stake with 4 staples.
7. Stakes shall be driven tightly together to prevent potential flow–through of sediment at joint. The tops of the stakes shall be secured with wire.
8. For end stake, fence fabric shall be folded around two stakes one full turn and secured with 4 staples.
9. Minimum 4 staples per stake. Dimensions shown are typical.
10. Cross barriers shall be a minimum of 1/3 and a maximum of 1/2 the height of the linear barrier.
11. Maintenance openings shall be constructed in a manner to ensure sediment remains behind silt fence.
12. Joining sections shall not be placed at sump locations.
13. Sandbag rows and layers shall be offset to eliminate gaps.





4 Velocity Dissipation Devices

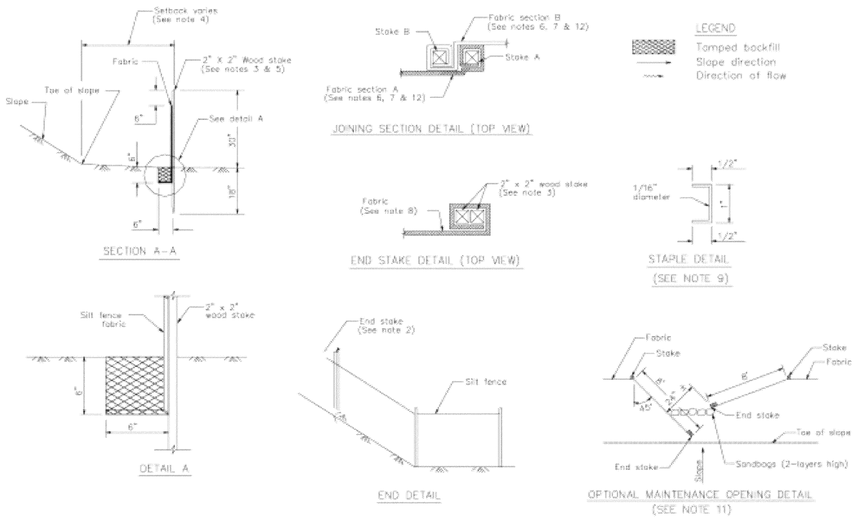
CASQA Detail EC-10



* Length per ABAG Design Standards

2 Silt Fence

CASQA Detail SE-1



Source for Graphics: California Stormwater BMP Handbook, California Stormwater Quality Association, January 2003.
Available from www.cabmphandbooks.com.

STANDARD BEST MANAGEMENT PRACTICE NOTES

1. Solid and Demolition Waste Management: Provide designated waste collection areas and containers on site away from streets, gutters, storm drains, and waterways, and arrange for regular disposal. Waste containers must be watertight and covered at all times except when waste is deposited. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C3) or latest.
2. Hazardous Waste Management: Provide proper handling and disposal of hazardous wastes by a licensed hazardous waste material hauler. Hazardous wastes shall be stored and properly labeled in sealed containers constructed of suitable materials. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-5 to C-6) or latest.
3. Spill Prevention and Control: Provide proper storage areas for liquid and solid materials, including chemicals and hazardous substances, away from streets, gutters, storm drains, and waterways. Spill control materials must be kept on site where readily accessible. Spills must be cleaned up immediately and contaminated soil disposed properly. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-7 to C-8, C-13 to C-14) or latest.
4. Vehicle and Construction Equipment Service and Storage: An area shall be designated for the maintenance, where on-site maintenance is required, and storage of equipment that is protected from stormwater run-on and runoff. Measures shall be provided to capture any waste oils, lubricants, or other potential pollutants and these wastes shall be properly disposed of off site. Fueling and major maintenance/repair, and washing shall be conducted off-site whenever feasible. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C9) or latest.
5. Material Delivery, Handling and Storage: In general, materials should not be stockpiled on site. Where temporary stockpiles are necessary and approved by the County, they shall be covered with secured plastic sheeting or tarp and located in designated areas near construction entrances and away from drainage paths and waterways. Barriers shall be provided around storage areas where materials are potentially in contact with runoff. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-11 to C-12) or latest.
6. Handling and Disposal of Concrete and Cement: When concrete trucks and equipment are washed on-site, concrete wastewater shall be contained in designated containers or in a temporary lined and watertight pit where wasted concrete can harden for later removal. If possible have concrete contractor remove concrete wash water from site. In no case shall fresh concrete be washed into the road right-of-way. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-15 to C-16) or latest.
7. Pavement Construction Management: Prevent or reduce the discharge of pollutants from paving operations, using measures to prevent run-on and runoff pollution and properly disposing of wastes. Avoid paving in the wet season and reschedule paving when rain is in the forecast. Residue from saw-cutting shall be vacuumed for proper disposal. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-17 to C-18) or latest.
8. Contaminated Soil and Water Management: Inspections to identify contaminated soils should occur prior to construction and at regular intervals during construction. Remediating contaminated soil should occur promptly after identification and be specific to the contaminant identified, which may include hazardous waste removal. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-19 to C-20) or latest.
9. Sanitary/Septic Water Management: Temporary sanitary facilities should be located away from drainage paths, waterways, and traffic areas. Only licensed sanitary and septic waste haulers should be used. Secondary containment should be provided for all sanitary facilities. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C-21) or latest.
10. Inspection & Maintenance: Areas of material and equipment storage sites and temporary sanitary facilities must be inspected weekly. Problem areas shall be identified and appropriate additional and/or alternative control measures implemented immediately, within 24 hours of the problem being identified.

STANDARD EROSION CONTROL NOTES

1. Sediment Control Management:

   Tracking Prevention & Clean Up: Activities shall be organized and measures taken as needed to prevent or minimize tracking of soil onto the public street system. A gravel or proprietary device construction entrance/exit is required for all sites. Clean up of tracked material shall be provided by means of a street sweeper prior to an approaching rain event, or at least once at the end of each workday that material is tracked, or, more frequently as determined by the County Inspector. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages B-31 to B-33) or latest.

   Storm Drain Inlet and Catch Basin Inlet Protection: All inlets within the vicinity of the project and within the project limits shall be protected with gravel bags placed around inlets or other inlet protection. At locations where exposed soils are present, staked fiber roles or staked silt fences can be used. Inlet filters are not allowed due to clogging and subsequent flooding. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages B-49 to B-51) or latest.

   Storm Water Runoff: No storm water runoff shall be allowed to drain in to the existing and/or proposed underground storm drain system or other above ground watercourses until appropriate erosion control measures are fully installed.

   Dust Control: The contractor shall provide dust control in graded areas as required by providing wet suppression or chemical stabilization of exposed soils, providing for rapid clean up of sediments deposited on paved roads, furnishing construction road entrances and vehicle wash down areas, and limiting the amount of areas disturbed by clearing and earth moving operations by scheduling these activities in phases.

   Stockpiling: Excavated soils shall not be placed in streets or on paved areas. Borrow and temporary stockpiles shall be protected with appropriate erosion control measures(tarps, straw bales, silt fences, ect.) to ensure silt does not leave the site or enter the storm drain system or neighboring watercourse.
2. Erosion Control: During the rainy season, all disturbed areas must include an effective combination of erosion and sediment control. It is required that temporary erosion control measures are applied to all disturbed soil areas prior to a rain event. During the non-rainy season, erosion control measures must be applied sufficient to control wind erosion at the site.
3. Inspection & Maintenance: Disturbed areas of the Project's site, locations where vehicles enter or exit the site, and all erosion and sediment controls that are identified as part of the Erosion Control Plans must be inspected by the Contractor before, during, and after storm events, and at least weekly during seasonal wet periods. Problem areas shall be identified and appropriate additional and/ or alternative control measures implemented immediately, within 24 hours of the problem being identified.
4. Project Completion: Prior to project completion and signoff by the County Inspector, all disturbed areas shall be reseeded, planted, or landscaped to minimize the potential for erosion on the subject site.
5. It shall be the Owner's/Contractor's responsibility to maintain control of the entire construction operation and to keep the entire site in compliance with the erosion control plan.
6. Erosion and sediment control best management practices shall be operable year round or until vegetation is fully established on landscaped surfaces.

IMPROVEMENT PLANS

FOR THE
ASSESSORY BUILDING
ON THE LANDS OF CHEN
2740 FERGUSON ROAD, GILROY

PARCEL 1 AS SHOWN UPON THAT CERTAIN PARCEL MAP
FILED MAY 10, 1977 IN BOOK 395 OF MAPS, AT PAGE 45
SANTA CLARA COUNTY, CALIFORNIA
A.P.N.: 841-21-022

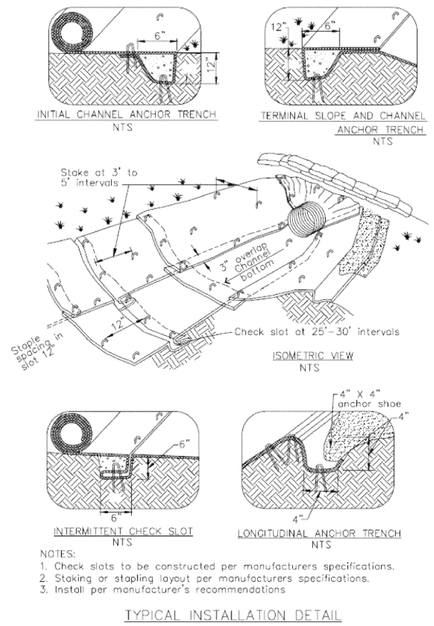
Project Information

Best Management Practices and Erosion Control Details Sheet 1
County of Santa Clara

BMP-1

7 Geotextiles and Mats

CASQA Detail EC-7

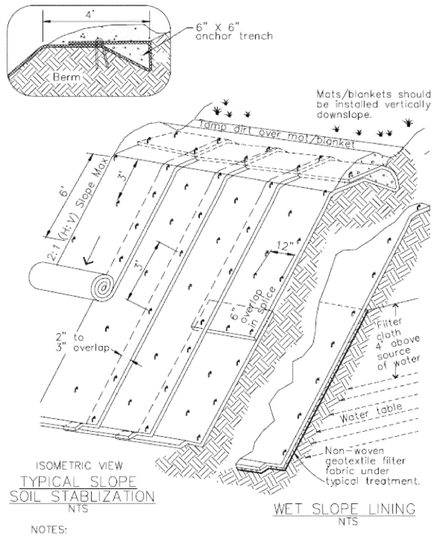


NOTES:
1. Check slots to be constructed per manufacturers specifications.
2. Staking or stapling layout per manufacturers specifications.
3. Install per manufacturer's recommendations

TYPICAL INSTALLATION DETAIL

5 Geotextiles and Mats

CASQA Detail EC-7

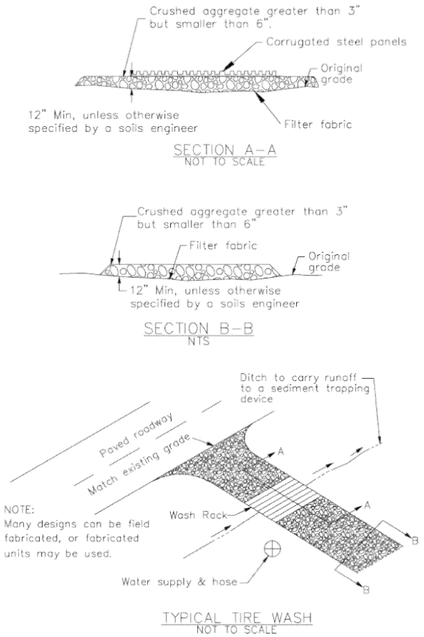


NOTES:
1. Slope surface shall be free of rocks, clods, sticks and grass. Mats/blankets shall have good soil contact.
2. Lay blankets loosely and stake or staple to maintain direct contact with the soil. Do not stretch.
3. Install per manufacturer's recommendations

TYPICAL INSTALLATION DETAIL

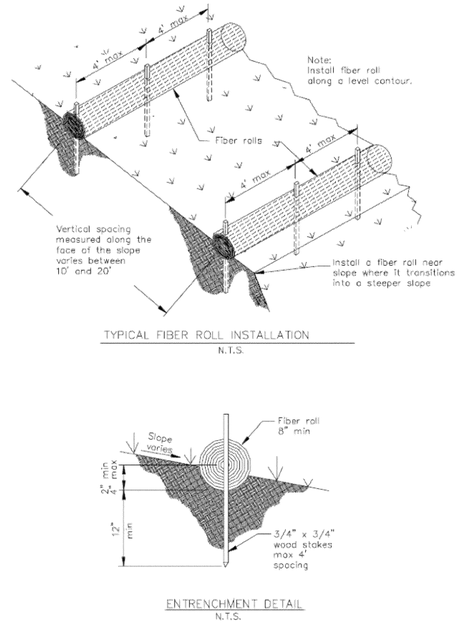
3 Entrance/Outlet Tire Wash

CASQA Detail TC-3



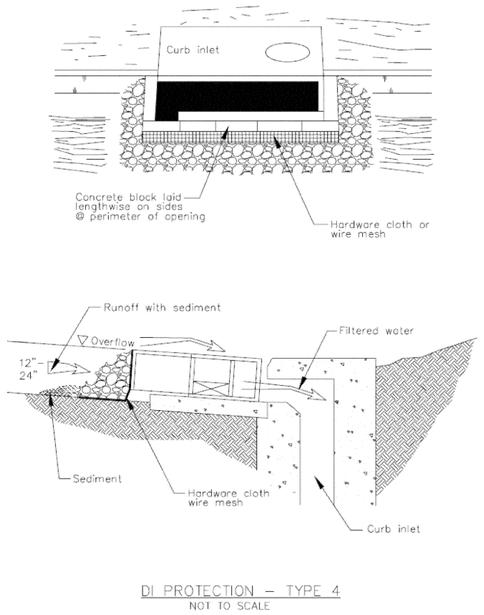
1 Fiber Rolls

CASQA Detail SE-5



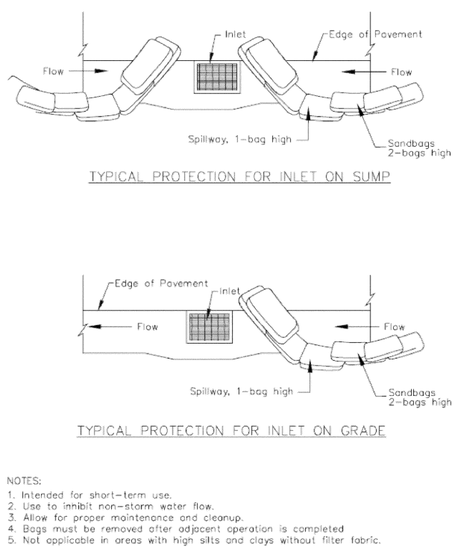
8 Storm Drain Inlet Protection

CASQA Detail SE-10



6 Storm Drain Inlet Protection

CASQA Detail SE-10

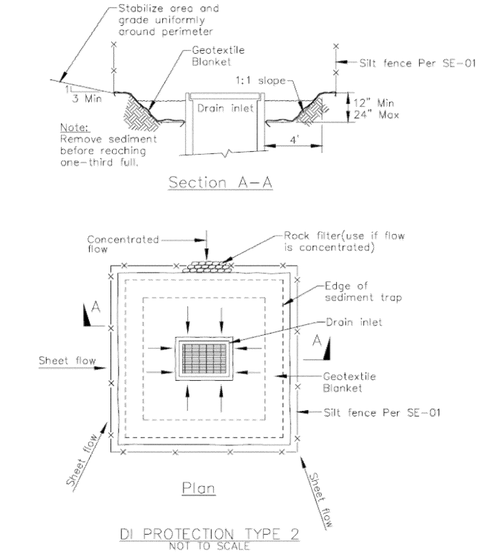


NOTES:
1. Intended for short-term use.
2. Use to inhibit non-storm water flow.
3. Allow for proper maintenance and cleanup.
4. Bags must be removed after adjacent operation is completed
5. Not applicable in areas with high silts and clays without filter fabric.

DI PROTECTION TYPE 3
NOT TO SCALE

4 Storm Drain Inlet Protection

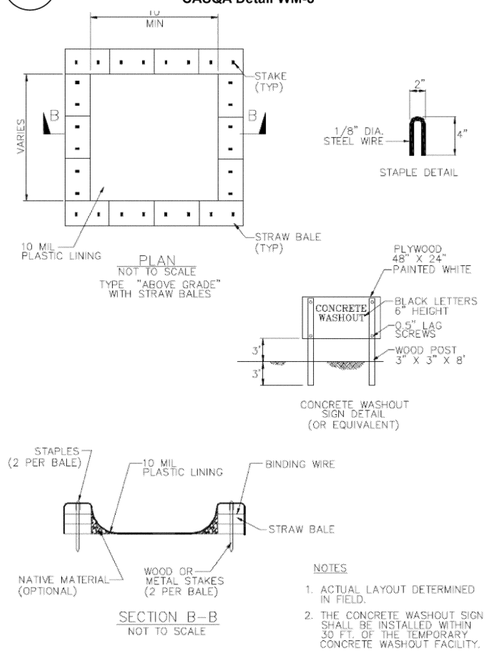
CASQA Detail SE-10



Notes
1. For use in cleared and grubbed and in graded areas.
2. Shape basin so that longest inflow area faces longest length of trap.
3. For concentrated flows, shape basin in 2:1 ratio with length oriented towards direction of flow.

2 Concrete Waste Management

CASQA Detail WM-8



NOTES
1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

Source for Graphics: California Stormwater BMP Handbook, California Stormwater Quality Association, January 2003.
Available from www.cabmphandbooks.com.

Project Information

IMPROVEMENT PLANS

FOR THE
ASSESSORY BUILDING
ON THE LANDS OF CHEN
2740 FERGUSON ROAD, GILROY

PARCEL 1 AS SHOWN UPON THAT CERTAIN PARCEL MAP FILED MAY 10, 1977 IN BOOK 395 OF MAPS, AT PAGE 45 OF MAPS, AT PAGE 45
SANTA CLARA COUNTY, CALIFORNIA

A.P.N.: 841-21-022

Best Management Practices and Erosion Control Details Sheet 2
County of Santa Clara

BMP-2

ABBREVIATIONS

ADA	AMERICAN DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AP	ACCESS PANEL
AFCI	ARC FAULT CIRCUIT INTERRUPTER
A/C (SYMMETRICAL)	AMPERES INTERRUPTING CAPACITY
AS/AF	AMP SWITCH, AMP FUSE
AMP, A	AMPERE
ARCH	ARCHITECTURAL
AWG	AMERICAN WIRE GAUGE
BLDG	BUILDING
BKR	BREAKER
CLG	CEILING
C	CONDUIT
CB	CIRCUIT BREAKER
CKT	CIRCUIT
Δ	DELTA CONNECTED
DIST	DISTRIBUTION
DEG	DEGREE
DWG	DRAWING
D/W	DISH WASHER
EF	EXHAUST FAN
EG	EQUIPMENT GROUND
ELEC	ELECTRICAL
ELEV	ELEVATOR
EQ	EQUIPMENT
EP	EXPLOSION PROOF
FACP	FIRE ALARM CONTROL PANEL
FDR	FEEDER
FLA	FULL LOAD AMPS
FLUOR	FLUORESCENT
G/GRD	GROUND
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
HP	HORSE POWER
HPS	HIGH PRESSURE SODIUM
HVAC	HEATING, VENTILATION, AND AIR CONDITIONING
INCAND	INCANDESCENT
JBX/JBOX	JUNCTION BOX
KVA	KILOVOLT AMPERES
KW	KILOWATTS
KWH	KILOWATTS PER HOUR
KCMIL	THOUSAND CIRCULAR MILS
LCP	LIGHTING CONTROL PANEL
LPS	LOW PRESSURE SODIUM
LTG/LTS	LIGHTING
M	METER
MAX	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MECH	MECHANICAL
MH	METAL HALIDE
MLO	MAIN LUGS ONLY
MIN	MINIMUM
MW	MICROWAVE
(N)	NEW
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NO	NORMALLY OPEN
P	POLE
PB	PULLBOX
PC	PHOTOCELL
PH OR ϕ	PHASE
PWR	POWER
RECPT, REC	RECEPTACLE
REF	REFRIGERATOR
REQD	REQUIRED
RPM	REVOLUTIONS PER MINUTE
ST	SHUNT TRIP
SP	SUMP PUMP
SPEC	SPECIFICATION
SYS	SYSTEMS
SYM	SYMMETRICAL
TEL.COM	TELECOMMUNICATIONS
TV	TELEVISION
TYP	TYPICAL
U/G	UNDERGROUND
UTIL	UTILITY
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	VOLTS
VA	VOLT AMPERE
VD	VOLTAGE DROP
V/ϕ/HZ	VOLTS/PHASE/HERTZ
W	WIRE
WP	WEATHERPROOF
XFMR	TRANSFORMER
XFR	TRANSFER
Y	WYE CONNECTED

ELECTRICAL SYMBOLS

NOTE: 'NL' DENOTES 90 MINUTE BATTERY BACKUP

SYMBOL	MEANING
	SWITCH
	3-WAY SWITCH
	DIMMER SWITCH
	HIGH EFFICACY FIXTURE (CEILING)
	HIGH EFFICACY FIXTURE (WALL)
	HIGH EFFICACY FIXTURE (RECESS)
	PENDANT LIGHT FIXTURE (CEILING)
NL	1'X4' LED STRIP LIGHT
NL	2'X4' LED STRIP LIGHT
	EXHAUST FAN
CO	UL 2034/2075 CARBON MONOXIDE ALARM
S	UL 2034/2075 SMOKE DETECTOR

SYMBOL	MEANING
	ELECTRICAL PANEL
	DUPLEX RECEPTACLE
	240V RECEPTACLE
	FLOOR RECEPTACLE RECEPTACLE
	JUNCTION BOX
NL	RECESSED DOWNLIGHT
HPC-2,4,6	HOMERUN: HPC=PANEL DESTINATION, 2,4,6=CIRCUITS
	CIRCUIT BREAKER
	FUSE
	EXHAUST FAN/LED LIGHT COMBO (RECESSED)
	DOOR BELL
	MANUAL MOTOR RATED SWITCH
	VACANCY SENSOR
	3 POLE DISCONNECT SWITCH
	GROUND

ELECTRICAL GENERAL NOTES

1. The entire installation shall comply with 2020 NEC, 2022 California Energy Code, 2022 California Electrical Code, and all applicable local codes and regulation.

2. All electrical prefabricated equipment shall be designed and constructed in such a manner that all portions, elements, sub-assemblies and/or parts of said equipment, and the equipment as a whole including its attachments, will resist a load which exceeds the force level used to restraint and anchor the equipment to the supporting structure.

3. All electrical materials and equipment shall be new and shall be listed by Underwriter's Laboratories (UL) and bear their label or listed or certified by a nationally recognized testing authority where UL does not have a listing. Custom made equipment shall have complete test data submitted by the manufacturer attesting to its safety. In addition, the materials, equipment, and installation shall comply with the requirements of the following:

American Society of Testing Materials (ASTM)
Insulated Power Cable Engineers Association (IPCEA)
American Standard Association (ASA)
National Fire Protection Association (NFPA)
American National Standard Institute (ANSI)
NEC National Electrical Code (NEC)
Institute of Electrical and Electronic Enginners(IEEE)
All local codes having jurisdiction

Where the codes have different levels of requirements, the most stringent rule shall apply.

4. The contractor shall visit the site including all areas indicated on the drawings. He shall thoroughly familiarize himself with the existing conditions and by submitting a bid, accepts the conditions under which he shall be required to perform his work.

5. It shall be contractor's responsibility to obtain a complete set of contract documents, addenda, drawings and specifications. He shall check the drawings of the other trades and shall carefully read the entire specifications and determine his responsibilities. Failure to do so shall not release the contractor from doing the work in complete accordance with the drawings and specifications.

6. The contractor shall coordinate his work with other trades at the site. Any costs to install work to accomplish said coordination which differs from the work as shown on the drawings shall be incurred by the contractor. Any discrepancies, ambiguities or conflicts shall be brought to the attention of the engineer during bid time for clarification. Any such conflicts not clarified prior to bid shall be subject to the interpretation of the engineer at no additional cost to the owner.

7. The contractor shall provide and keep up-to-date a complete record set of drawings. These prints shall be corrected accordingly and show every change from the original drawings. This set of drawing shall be kept on the job site and shall be used only as a record set. This shall not be construed as authorization for the contractor to make changes in the layout without definite instruction in each case. Upon completion of the work, a set of reproducible contract drawings shall be obtained from the engineer, and all changes as noted on the record set of drawings shall be incorporated on reproducible bond with black ink in a neat, legible, understandable and professional manner per Client's request.

8. In some instance, it may be necessary to defer work in certain areas and locations until such time as existing facilities can be temporarily or permanently rearranged by the owner. Therefore, whenever it becomes necessary for the contractor to perform work under this contract in existing areas in which the owner's work is being performed, the contractor shall advise the owner relative to this requirement and shall follow closely the directive issued by the engineer insofar as time and procedure are concerned.

9. All interruption of electrical power shall be kept to a minimum. However, when an interruption is necessary, the shutdown must be coordinated with the owner 7 days prior to the outage. Any overtime pay and work required to be accomplished on weekends shall be included in the contractor's bid. Work in existing switchboards or panelboards shall be coordinated with the owner prior to removing access panels or doors.

10. It shall be responsibility of the contractor to review and to coordinate with the mechanical, fire protection and plumbing drawings for duct lines and equipment.

11. All equipment mounted on roof for connection of HVAC equipment shall be mounted on unistrut stands utilizing approved pitch pockets, flashing, etc..

12. After all requirements of the specifications and/or the drawings have been fully completed, representatives of the owner will inspect the work. The contractor shall provide competent personnel to demonstrate the operation of any item or system to the full satisfactory of each representative. Final acceptance of the work will be made by the owner after receipt of approval and recommendation of acceptance from each representative.

13. The contractor shall furnish a one year written guarantee of materials and workmanship from the date of substantial completion.

14. Coordinate with other trades as to the exact location and configuration of their respective equipment, supply power and make connection to motors and equipment requiring electrical connections as indicated on the single line diagram, electrical drawings and drawings of other trade. Review the drawings of other trades for control diagram, size and locations of equipment. Disconnect switches, starters, wiring, controls and conduit for mechanical and plumbing operations shall be provided. The contractor shall be responsible for obtaining manufacturer's shop drawings prior to roughing in all conduit to this equipment.

15. Exact method and location of conduit penetration and openings in concrete or masonry walls, gradebeams, floors or structural steel members shall be as directed by the structural engineer. Perform coring, sawcutting, patching, and refinished of walls and surfaces wherever it is necessary to penetrate openings shall be sealed in an approved method to meet the fire rating of the particular wall, floor or ceiling. Exact method and locations of conduit penetrations and openings in concrete walls or floors shall be for UL approved systems.

16. Connections to vibrating equipment, mechanical and plumbing equipment and seismic separations:

Liquid-tight conduit in all locations
Maximum length of flexible conduit runs shall be 6'-0" u.O.N.

17. Equipment outlets, lighting fixtures, conduit, wire and connection methods in HVAC air-plenums shall be approved for use in plenums and shall conform to 2022 CEC.

18. Conduit shall not be installed in any floor slab. Conduit shall be installed concealed in the ceiling space, concealed in walls, or below slab on grade. Unless otherwise noted.

19. Whenever a discrepancy in quantity or size of conduit, wire, equipment devices, circuit breakers, ground fault protection system, etc., (all materials), arises on the drawings or specifications, the contractor shall be responsible for providing and installing all materials and services required by the strictest conditions noted on the drawings or in the specifications to ensure complete and operable systems as required by the owner and engineer.

20. It shall be contractor's responsibility to verify type of ceiling systems and to furnish approved lighting fixtures of the type required for mounting in subject ceiling. Where fixtures are recessed in plaster or drywall ceilings, they shall be complete with necessary mounting hardware and plaster frames.

21. All recessed lighting fixtures, speakers, receptacles, switches, etc., mounted in the fire rated ceilings or walls shall be enclosed with an approved enclosure carrying the same fire rating as the ceiling or wall by this contractor.

22. Utility penetrations of any kind in fire and smoke partitions and ceiling assemblies, shall be firestopped and sealed with an approved material securely installed.

Utility and electrical outlets or boxes shall be securely fastened to the stud of framing of the wall, partition or ceiling assembly. The opening in the gypsum board facing shall be cut so that the clearance between the box and the gypsum board does not exceed 1/8 inch. In smoke walls or partitions, the 1/8 inch clearance shall be filled with an approved fire-rated sealant.

23. Architectural reflected ceiling plans indicating the location of lighting fixtures shall take precedence over the locations of same shown on the electrical drawings. Install the lighting fixtures in any given area to agree with the reflected ceiling plans. Discrepancies shall be brought to the attention of the architect.

24. The exact locations and mounting heights of lighting fixtures located in mechanical equipment spaces and storage shall be coordinated in the field before installation to avoid interferences with ducts, piping and other mechanical equipment and all mounting hardware shall be included in base bid. When locations and mounting heights are determined, obtain approval from the engineer prior to installation.

25. Maximum number of conductors in outlet or junction boxes shall conform to 2022 CEC.

26. The exact locations of all electrical devices and equipment shall be coordinated with the architectural elevations, details or sections prior to installation. All electrical devices and equipment shall be recessed in walls, unless otherwise noted. Outlets not indicated on architectural elevations shall be coordinated with the architect prior to rough-in, unless otherwise noted.

27. Review architectural elevations of casework. Outlets mounted above or below, or adjacent to casework shall be coordinated with the architectural drawings, prior to final rough-in. Electrical drawings shall govern number and type of outlets. However, locations shall be as indicated on architectural elevations. Provide conduit, wires and outlets for work required in casework installations. Reference architectural details for method of routing conduit within casework construction. Provide box extensions through all casework. Finish flush with face of splash, cabinets, etc. Mounting heights of all devices and equipment are from finished floor to center of devices and equipment, unless otherwise noted. Boxes installed in locations not approved by the architect shall be relocated as directed by the architect at no additional cost to the owner.

28. Drawings are diagrammatic only and do not show special conduit routing or lengths required for a complete installation. Routing of raceways shall be at the option of the contractor but shall be in strict compliance with structural requirements and specifications, unless otherwise noted and shall be coordinated with other trades. Do not scale the electrical drawings for locations of any electrical architectural, structural, civil, or mechanical items or features. Refer to architectural and structural dimensional drawings.

29. The equipment grounding conductor runs shall be installed and run continuous from panel to last outlets. This wire shall be pigtailed in each outlet for connection to box and device so that if device is removed, ground will not be interrupted. All equipment grounding conductors shall be insulated green or bare conductors. Alternate methods of identification shall be used.

30. For small ac motors not having built-in thermal overload protection, provide manual motor starters with overload heater elements sized to the nameplate current rating of the motor. Small ac motors with built-in thermal overload protection, provide a horse power rated toggle type disconnect switch.

31. Boxes shall be sized for the number and sizes of conductors and conduit entering the box and equipped with plaster extension rings where required.

32. Lamps: all fixtures shall be high efficacy per CEnC 2022 Table 150.0-A.

33. Where lighting fixtures require the use of acrylic plastic lenses, they shall be 100 percent virgin acrylic thermoplastic, not less than 0.125" thick with an unpenetrated depth of not less than 0.045" equal to ksh-k12, unless otherwise noted.

34. Provide sound insulation at all conduit penetrations at sound barrier rated walls. Typical unless otherwise noted.

35. Where outlets occur at tackable wall panels or other wall finishes, provide extension rings as required so that no space will exist between device plate and backbox, per NEC 370.20, typical. See architectural elevations for wall finishes and locations.

36. All conductors for branch circuits shall be THHN/THWN copper AWG or KCML per NEC table 310.16. Grounding shall be "Green wire" or bare copper wire sizes per NEC table 250.122.

37. Grounding System:
The grounding system shall be derived per NEC 250.50:
A) 10' of meter underground water pipe
B) Meter frame of building or structure where effectively grounded
C) An electrode encased by at least 2" of concrete located within or near the bottom of a concrete foundation that is in direct contact with the earth. 20' zinc galvanized or other electrically conductive steel reinforcing bar or rod of not less than 1/2" in diameter or bare copper conductor not smaller than #4AWG.

38. Listed or labeled equipment shall be installed and used in accordance with any instructions included in the listing or labeling. Section 110.3(b)

39. Contractor must verify locations of all equipment and points of connection and coordinate with construction manager, architect, civil engineer, landscape architect, and utility consultants prior to start of construction. No compensation will be made for relocation of equipment and associated cost.

40. This document is not for bid or construction until the plan has been reviewed and approved by all authorities having jurisdiction and the permit is obtained. No compensation will be made for additional work due to the violation of this requirement.

ELECTRICAL SHEET INDEX

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

REGISTERED PROFESSIONAL ENGINEER
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PROJECT NAME:
CHEN FARM
2740 FERGUSON ROAD
GILROY, CA 95020

SHEET TITLE
ELECTRICAL GENERAL NOTES, SYMBOLS, & SHEET INDEX

DRAWN
GMEP
CHECKED
GMEP
DATE
08/04/23
SCALE
AS NOTED
JOB NO.
23-598
SHEET
E-1.0

ELECTRICAL FEEDER SCHEDULE-AL

OVERCURRENT DEVICE SETTINGS	THREE WIRE + GROUND: FEEDER IDENTIFIER	THREE WIRE + GROUND: ALUMINUM INSULATION PER SPECIFICATIONS
20	3WG20	(3#10 + 1#10G) 3/4"C.
30	3WG30	(3#8 + 1#8G) 3/4"C.
40	3WG40	(3#6 + 1#8G) 3/4"C.
50	3WG50	(3#4 + 1#8G) 1"C.
65	3WG65	(3#3 + 1#6G) 1-1/4"C.
75	3WG75	(3#2 + 1#6G) 1-1/4"C.
90	3WG90	(3#2 + 1#6G) 1-1/4"C.
100	3WG100	(3#1/0 + 1#6G) 1-1/2"C.
120	3WG120	(3#1/0 + 1#4G) 1-1/2"C.
125	3WG125	(3#2/0 + 1#4G) 2"C.
150	3WG150	(3#3/0 + 1#4G) 2"C.
175	3WG175	(3#4/0 + 1#4G) 2"C.
200	3WG200	(3#250KCMIL + 1#2G) 2-1/2"C.
250	3WG250	(3#350KCMIL + 1#2G) 3"C.
300	3WG300	(3#500KCMIL + 1#1G) 3"C.
350	3WG350	2[(3#4/0 + 1#1G) 2"C.]
400	3WG400	2[(3#250KCMIL + 1#1/0G) 2-1/2"C.]

SINGLE-LINE DIAGRAM KEY NOTES

1. VERIFY WITH SERVICE PLANNER FOR AIC RATING AND ELECTRICAL INFORMATION BEFORE ISSUING ANY BID. NOTIFY ENGINEER IMMEDIATELY IF ANY MAJOR DISCREPANCIES OCCUR.
2. PROVIDE SURGE PROTECTIVE DEVICE.
3. THE FUTURE ESS SYSTEM IS COMPOSED OF AN 3KW INVERTER AND BATTERY, WHICH MUST SUPPORT 90 MINUTES AT MINIMUM.
4. DENOTES 200AS/125AF/3P DISCONNECT FOR CONNECTION TO WALK-IN COOLER.

SINGLE-LINE DIAGRAM GENERAL NOTES

a) NOT USED.

b) ALL NEW CIRCUIT BREAKERS, FUSIBLE SWITCHES IN MAINSWITCHBOARD OR PANEL BOARDS SHALL BE SERIES RATED TO MATCH EXISTING AIC RATING OR APPROVED EQUAL OR 65KAIC, UNLESS NOTED OTHERWISE.

c) MOTOR CIRCUIT PROTECTORS SHALL NOT BE A PART OF A SERIES COMBINATION INTERRUPTING RATING.

d) SERIES COMBINATION AIC RATING SHALL NOT BE USED WHEN THE SECONDARY EQUIPMENT IN THE SERIES IS SUBJECTED TO A TOTAL CONNECTED FULL LOAD MOTOR CURRENT OF MORE THAN 1% OF ITS AIC RATING.

e) EQUIPMENT ENCLOSURES SHALL BE CLEARLY MARKED "CAUTION-SERIES RATED SYSTEM - __KAMPS AVAILABLE, IDENTIFIED REPLACEMENT COMPONENTS REQUIRED", IN COMPLIANCE WITH 2022 CEC (2020 NEC) SECTION 110-22. END USE EQUIPMENT SHALL ALSO BE MARKED WITH THE HIGHER SERIES COMBINATION INTERRUPTING RATING AS PER 2022 CEC SECTION 240-83(C). NO EXCEPTION.

f) FUSES SHALL BE PROVIDED WITH REJECTION TYPE FUSE HOLDERS.

g) ELECTRICAL EQUIPMENT SHALL BE LISTED BY THE CITY, WHERE THE PROJECT IS LOCATED, RECOGNIZED ELECTRICAL TESTING LABORATORY OR APPROVED BY THE DEPARTMENT.

h) NO PIPING, DUCTS OR EQUIPMENT FOREIGN TO ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO BE LOCATED WITHIN THE DEDICATED SPACE ABOVE THE ELECTRICAL EQUIPMENT.

ENERGY STORAGE SYSTEM (ESS) READY NOTES

ALL SINGLE-FAMILY RESIDENCES THAT INCLUDE ONE OR TWO DWELLING UNITS SHALL MEET THE FOLLOWING. ALL ELECTRICAL COMPONENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE:

1. AT LEAST ONE OF THE FOLLOWING SHALL BE PROVIDED:

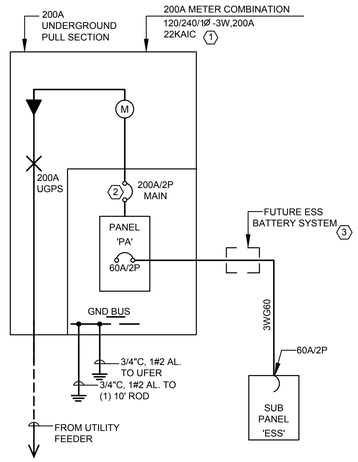
   A. ESS READY INTERCONNECTION EQUIPMENT WITH A MINIMUM BACKED-UP CAPACITY OF 60 AMPS AND A MINIMUM OF FOUR ESS-SUPPLIED BRANCH CIRCUITS, OR

   B. A DEDICATED RACEWAY FROM THE MAIN SERVICE TO A PANELBOARD (SUBPANEL) THAT SUPPLIES THE BRANCH CIRCUITS IN SECTION 150.0(S)(2). ALL BRANCH CIRCUITS ARE PERMITTED TO BE SUPPLIED BY THE MAIN SERVICE PANEL PRIOR TO THE INSTALLATION OF AN ESS. THE TRADE SIZE OF THE RACEWAY SHALL BE NOT LESS THAN 1 INCH. THE PANELBOARD THAT SUPPLIES THE BRANCH CIRCUITS (SUBPANEL) MUST BE LABELED "SUBPANEL SHALL INCLUDE ALL BACKEDUP LOAD CIRCUITS."

2. A MINIMUM OF FOUR BRANCH CIRCUITS SHALL BE IDENTIFIED AND HAVE THEIR SOURCE OF SUPPLY COLLOCATED AT A SINGLE PANELBOARD SUITABLE TO BE SUPPLIED BY THE ESS. AT LEAST ONE CIRCUIT SHALL SUPPLY THE REFRIGERATOR, ONE LIGHTING CIRCUIT SHALL BE LOCATED NEAR THE PRIMARY EGRESS AND AT LEAST ONE CIRCUIT SHALL SUPPLY A SLEEPING ROOM RECEPTACLE OUTLET.

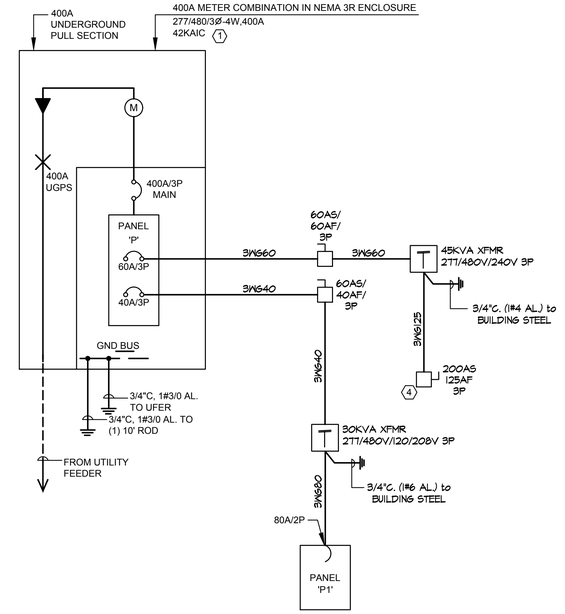
3. THE MAIN PANELBOARD SHALL HAVE A MINIMUM BUSBAR RATING OF 225 AMPS.

4. SUFFICIENT SPACE SHALL BE RESERVED TO ALLOW FUTURE INSTALLATION OF A SYSTEM ISOLATION EQUIPMENT/TRANSFER SWITCH WITHIN 3 FEET OF THE MAIN PANELBOARD. RACEWAYS SHALL BE INSTALLED BETWEEN THE PANELBOARD AND THE SYSTEM ISOLATION EQUIPMENT/TRANSFER SWITCH LOCATION TO ALLOW THE CONNECTION OF BACKUP POWER SOURCE.



TYPICAL SINGLE LINE DIAGRAM- ADU

SCALE: NONE



SINGLE LINE DIAGRAM- BARNHOUSE

SCALE: NONE

LOAD SUMMARY- BARNHOUSE

BUILDING SQUARE FOOTAGE = 6785(BARN) + 770(OFFICE)		WATTAGE = (W/SFT)xSQUARE FEET)
1.	BARN GENERAL POWER (2 WATTS/SQUARE FOOT)	13570 VA
2.	OFFICE GENERAL POWER (3 WATTS/SQUARE FOOT)	2310 VA
3.	OFFICE HVAC (~1.5 TONS)	3120 VA
4.	WALK-IN COOLER (90A @ 3P 240V)	37412 VA
SUBTOTAL		56.4 KVA
POWER FACTOR(80%)		SUBTOTALx1.2 = 67.7 KVA
SAFETY FACTOR		67.7x1.2 = 81.2 KVA
10-YEAR GROWTH FACTOR (10%)		81.2x1.1 = 89.3 KVA
AMPERAGE @277/480V 3 PHASE 4 WIRE		108 AMPS
SERVICE @277/480V 3 PHASE 4 WIRE		400 AMPS

SERVICE LOAD CALCULATION-ADU

Dwelling Information:	
Floor Area:	794SFT
Heater Type:	Electricity
Dryer:	Electricity
Oven:	Electricity
Cooktop:	N/A
General Load:	
Genral Lighting (Floor Area X 3VA/SFT):	2382VA
Small Appliance (3-20ACK By CEC 210.11):	3000VA
Laundry(1-20ACKT By CEC210.11):	1500VA
Bathroom(1-20ACKT By CEC210.11):	0VA
Dishwasher:	1200VA
Microwave Oven:	1500VA
Garbage Disposal:	1200VA
Bathroom Fans:	400VA
Dryer:	5000VA
Oven:	8000VA
Refrigerator:	1000VA
Water Heater:	5000VA
Total General Load:	30182VA
First 10 KVA at 100%:	10000VA
Remainder at 40% (20182VA X 0.4):	8072.8VA
Subtotal General Load:	18072.8VA
Air Conditioning KVA Calculation:	
Outdoor Condensing Unit:	2454VA
Indoor Fan Coil Unit:	540VA
Total AC Load:	2994VA
Calculated Load For Service: (18072.8VA+2994VA)/240V=88A(Service Rating)	
Provided Service Rating:	200A

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

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PROJECT NAME:
CHEN FARM
2740 FERGUSON ROAD
GILROY, CA 95020

SHEET TITLE
ELECTRICAL
SINGLE LINE DIAGRAMS
& LOAD CALCULATIONS

DRAWN
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JOB NO.
23-598
SHEET
E-1.1

PANEL 'P'

LOCATION: EXTERIOR | MAIN (AMP): 400A | BUS RATING: 400A | 277/480 V 3 Ø 4 W | MOUNTING: NEMA 3R

DESCRIPTION	VOLT AMPS ØA	VOLT AMPS ØB	VOLT AMPS ØC	LTG	REC	MIS	CKT NO	BKR	BUS ØA ØB ØC	BKR	CKT NO	MIS	REC	LTG	VOLT AMPS ØA	VOLT AMPS ØB	VOLT AMPS ØC	DESCRIPTION
WALK-IN COOLER	12470						1	60			2				3798			SUBPANEL 'P1'
---		12470					3				4					1280		---
---			12470				5	3			6						180	---
SPARE							7				8							SPACE.
SPARE							9				10							SPACE.
SPARE							11				12							SPACE.
SPARE							13				14							SPACE.
SPACE.							15				16							SPACE.
SPACE.							17				18							SPACE.
SPACE.							19				20							SPACE.
SPACE.							21				22							SPACE.
SPACE.							23				24							SPACE.
SUB-TOTAL	ØA= 16268 VA								ØB= 13750 VA								ØC= 12650 VA	

TOTAL CONNECTED VA	=	42668
LCL @ 125 %	0 =	0
TOTAL OTHER LOAD	=	0
PANEL LOAD	=	42.7KVA
FEEDER AMPS	=	58.7A

NOTES: (1) 42KAIC OR VERIFY W/ SERVICE PLANNER

PANEL 'P1'

LOCATION: ELECTRICAL ROOM | MAIN (AMP): 80A | BUS RATING: 80A | 120/208 V 3 Ø 4 W | MOUNTING: SURFACE

DESCRIPTION	VOLT AMPS ØA	VOLT AMPS ØB	VOLT AMPS ØC	LTG	REC	MIS	CKT NO	BKR	BUS ØA ØB ØC	BKR	CKT NO	MIS	REC	LTG	VOLT AMPS ØA	VOLT AMPS ØB	VOLT AMPS ØC	DESCRIPTION
BARN LIGHTING	1341						1	20-1		20-1	2				1001			OFFICE LTG
BARN FLOOR REC		540					3	20-1		20-1	4					1260		OFFICE REC
BARN WALL REC			1260				5	20-1		20-1	6						180	BATH REC
SPARE							7	20-1		20 / 2	8				1456			HP-18
SPARE							9	20-1			10					1456		---
SPARE							11	20-1		15 / 2	12						104	FC-18 (1)
SPARE							13	20-1			14					104		---
SPACE.							15				16							SPACE.
SPACE.							17				18							SPACE.
SPACE.							19				20							SPACE.
SPACE.							21				22							SPACE.
SPACE.							23				24							SPACE.
SUB-TOTAL	ØA= 3798 VA								ØB= 1800 VA								ØC= 1544 VA	

TOTAL CONNECTED VA	=	7142
LCL @ 125 %	0 =	0
TOTAL OTHER LOAD	=	0
PANEL LOAD	=	7.1KVA
FEEDER AMPS	=	32A

NOTES: (1) 42KAIC OR VERIFY W/ SERVICE PLANNER
(2) VERIFY WITH VENDER AND ALL NECESSARY TRADES FOR ELECTRICAL REQUIREMENTS
(3) REFER TO MECHANICAL DRAWINGS FOR DETAILED EQUIPMENT INFORMATION BEFORE BID AND ROUGH IN.

PANEL 'ESS'

LOCATION: EXTERIOR | MAIN (AMP): 60A | BUS RATING: 100 AMPS | 120/240V 1 Ø 3 W | MOUNTING: NEMA 3R

DESCRIPTION	VOLTAMPS ØA	VOLTAMPS ØB	LTG	REC	MIS	CKT NO	BKR	BUS ØA ØB	BKR	CKT NO	MIS	REC	LTG	VOLTAMPS ØA	VOLTAMPS ØB	DESCRIPTION
GENERAL LTG 1	794					1	20-1		20-1	2				0		SPARE
ENTRY LTG		794				3	20-1		20-1	4					1000	REFRIGERATOR
SPARE	0					5	20-1		20-1	6				0		SPARE
SPARE		0				7	15-1		15-1	8					0	SPARE
SPARE	0					9	15-1		15-1	10				0		SPARE
SPARE		0				11	15-1		15-1	12					0	SPARE
SUB-TOTAL	ØA=1087 VA							ØB= 2087 VA								

TOTAL CONNECTED VA	= 3174
LCL @ 125 %	= 0
TOTAL OTHER LOAD	= 0
PANEL LOAD	= 3.2KVA
FEEDER AMPS	= 17.4A

NOTES: (1) REFER TO MECHANICAL DRAWINGS FOR DETAILED EQUIPMENT INFORMATION BEFORE BID AND ROUGH IN.
(2) REFER TO SINGLE LINE FOR AIC RATING.
(3) BACKFEED TYPE BREAKER RESERVED FOR FUTURE SOLAR PANEL.

PANEL 'PA'

LOCATION: EXTERIOR | MAIN (AMP): M.L.O. | BUS RATING: 225 AMPS | 120/240V 1 Ø 3 W | MOUNTING: NEMA 3R

DESCRIPTION	VOLTAMPS ØA	VOLTAMPS ØB	LTG	REC	MIS	CKT NO	BKR	BUS ØA ØB	BKR	CKT NO	MIS	REC	LTG	VOLTAMPS ØA	VOLTAMPS ØB	DESCRIPTION
SMALL APPS 1	1500					1	20-1		20-1	2				794		GENERAL LTG 1
SMALL APPS 2		1500				3	20-1		20-1	4					794	GENERAL LTG 2
LAUNDRY	1500					5	20-1		15-1	6				0		SPARE
BATH REC		0				7	20-1		15-1	8					95	EXT LTG
FC-18 (1)	324					9	15 / 2		15-1	10				95		EXT REC
----		324				11			15-1	12					1500	MICROWAVE
LIVING REC 1	535					13	20-1		15-1	14				1200		G.D.
LIVING REC 2		535				15	20-1		15-1	16					1200	D.W.
WATER HEATER	0					17	20-1		20 / 2	18				1357		HP-18 (1)
DINING REC (AFCI)		500				19	20-1			20					1357	----
OVEN	4000					21	50		15-1	22				100		CO&SMOKE SENSOR
----		4000				23	2		15-1	24					0	SPARE
HEATER	2500					25	25		30 / 2	26				2500		DRYER
----		2500				27	2			28					2500	----
SPARE	0					29	15-1		60 / 2	30				2500		SUBPANEL 'ESS'
SPARE		0				31	15-1			32					0	----
SUB-TOTAL	ØA= 17199 VA							ØB= 17805 VA								

TOTAL CONNECTED VA	(3) =	21066.8
LCL @ 125 %	=	0
TOTAL OTHER LOAD	=	0
PANEL LOAD	(3) =	21.1KVA
FEEDER AMPS	(3) =	88A

NOTES: (1) REFER TO MECHANICAL DRAWINGS FOR DETAILED EQUIPMENT INFORMATION BEFORE BID AND ROUGH IN.
(2) REFER TO SINGLE LINE FOR AIC RATING.
(3) REFER TO ADU SERVICE LOAD CALCULATION ON SHEET E-1.1.

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

REGISTERED PROFESSIONAL ENGINEER
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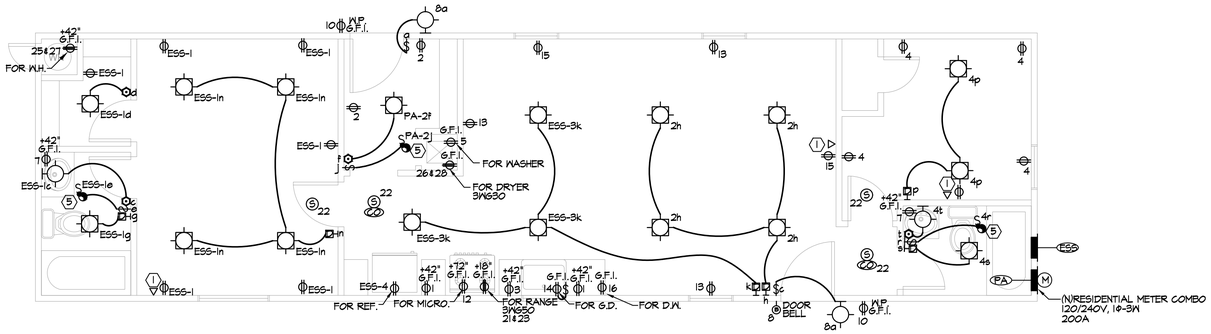
Tel: 949-267-9095

PROJECT NAME:
CHEN FARM
2740 FERGUSON ROAD
GILROY, CA 95020

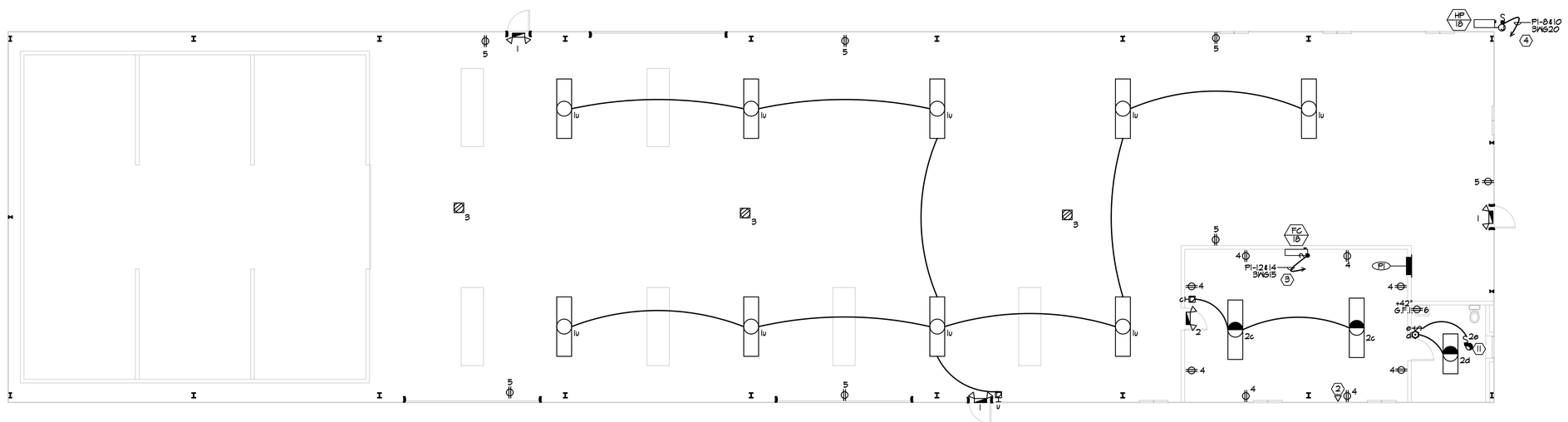
SHEET TITLE
ELECTRICAL PANEL SCHEDULES

DRAWN: GMEP
CHECKED: GMEP
DATE: 08/04/23
SCALE: AS NOTED
JOB NO.: 23-598
SHEET: E-1.2



ELECTRICAL - ADU UNIT PLAN

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



ELECTRICAL - BARNHOUSE PLAN

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

ELECTRICAL GENERAL NOTES

1. ALL FIXTURES TO BE HIGH EFFICACY PER TABLE 150.0-A. ALL OUTDOOR FIXTURES TO BE CONTROLLED BY TIME CLOCK/PHOTOCELL, MOTION SENSOR/PHOTOCELL OR ASTRONOMICAL TIME CLOCK IN ADDITION TO MANUAL ON/OFF SWITCH. MANUAL ON/OFF SWITCH SHALL NOT OVERRIDE AUTOMATIC TIME CLOCK/PHOTOCELL, TIME CLOCK/MOTION SENSOR OR ASTRONOMICAL TIME CLOCK CONTROL.
2. ALL INDOOR LIGHT FIXTURES TO BE CONTROLLED BY DIMMER SWITCH. (EXCEPTIONS: HALLWAYS AND CLOSETS LESS THAN 70SF).
3. THIS DRAWING IS FOR REFERENCE ONLY. WIRE CKT 20 ON THE PLAN TO ALL DETECTORS FOR A COMPLETE AND OPERATIONAL SYSTEM. VERIFY W/LOCAL JURISDICTION FOR ALARM DETECTOR REQUIREMENT BEFORE ROUGH-IN.
4. IN DWELLING AREA SPECIFIED IN CEC 2022 SECTION 210.52, ALL 125-VOLT, 15- AND 20- AMPERE RECEPTACLES SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES.
5. OUTLETS INSTALLED IN FAMILY ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, KITCHENS OR SIMILAR ROOMS OR AREAS WILL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER, COMBINATION-TYPE, INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT.
6. ALL NEW SMOKE ALARMS & CARBON MONOXIDE ALARM ARE 120V HARD-WIRED WITH BATTERY BACKUP AND ARE AUDIBLE IN ALL SLEEPING ROOMS.
7. ELECTRICAL CONTRACTOR MUST VERIFY MECHANICAL EQUIPMENT INFORMATION FOR MECHANICAL DRAWING BEFORE ISSUING ANY BID. NOTIFY ENGINEER IMMEDIATELY IF ANY DISCREPANCY OCCUR.
8. LIGHT FIXTURES ABOVE THE BATH TUB AND ON THE EXTERIOR OF THE BUILDING SHALL BE WET OR DAMP LOCATION RATED PER 410.10(A) AND (D) OF THE CEC.

ELECTRICAL KEY NOTES

1. PROVIDE OUTLET (I)RG6&(I)CAT5. RUN CABLE TO THE CATV BOX AND RUN CAT5 CABLE TO THE APPROPRIATE DESTINATION. VERIFY WITH TV SERVICE PROVIDER AND IT CONSULTANT BEFORE ROUGH-IN.
2. PROVIDE (I)CAT5 DATA JACK AND RUN CAT5 CABLE TO THE DESTINATION SUGGESTED BY THE IT CONSULTANT.
3. PROVIDE 15A/2P MOTOR RATED SWITCH FOR CONNECTION TO THE FC. VERIFY EXACT LOCATION AND ADDITIONAL INFORMATION WITH MECHANICAL DRAWINGS.
4. PROVIDE 30A/2P FUSED DISCONNECT FOR CONNECTION TO THE HP. VERIFY EXACT LOCATION AND ADDITIONAL INFORMATION WITH MECHANICAL DRAWINGS.
5. PROVIDE 15A/1P MOTOR RATED SWITCH FOR CONNECT TO THE EXHAUST FAN. REFER TO MECHANICAL PLAN FOR DETAIL.

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

REGISTERED PROFESSIONAL ENGINEER
GANGYI ZHOU
No. 018959
Exp.12-31-2025
ELECTRICAL
STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
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Tel: 949-267-9095

PROJECT NAME:

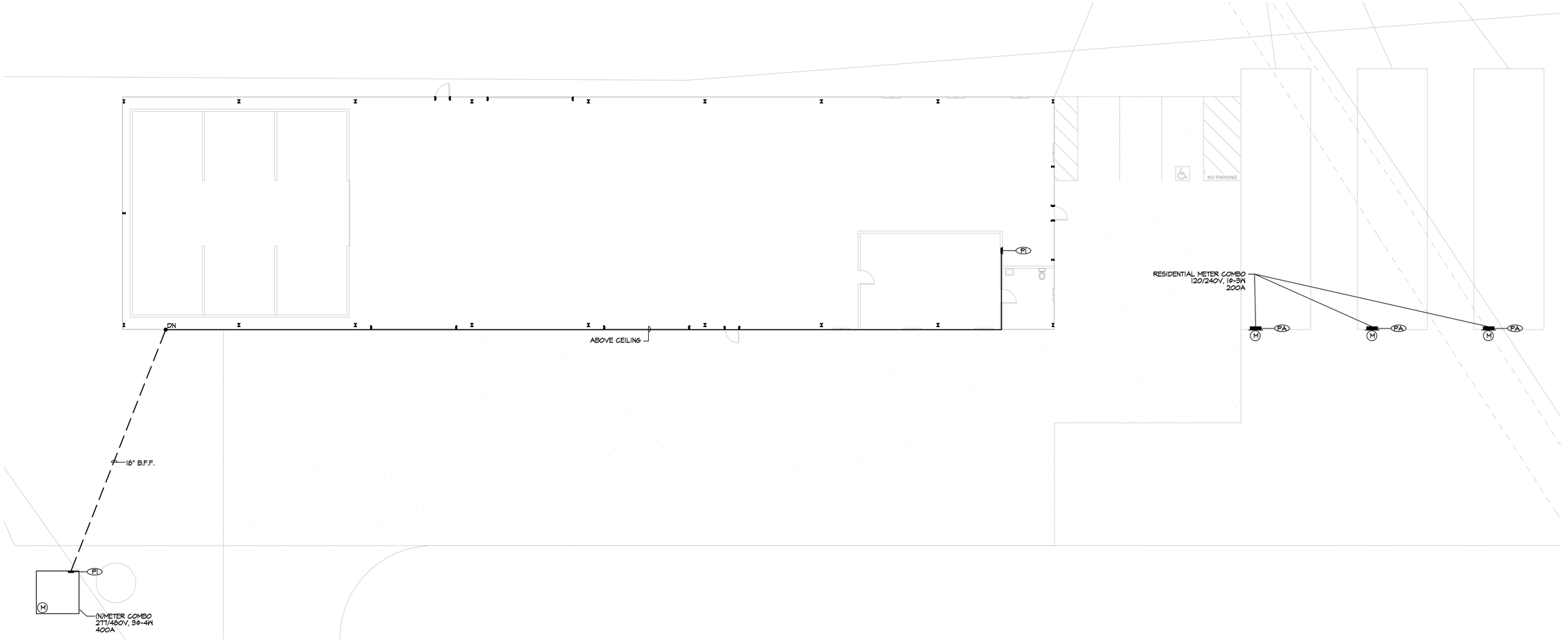
CHEN FARM

2740 FERGUSON ROAD
GILROY, CA 95020

SHEET TITLE

ELECTRICAL UNIT PLANS

DRAWN	GMEP
CHECKED	GMEP
DATE	08/04/23
SCALE	AS NOTED
JOB NO.	23-598
SHEET	E-2.0



ELECTRICAL - ADU UNIT PLAN

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

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

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PROJECT NAME:

CHEN FARM

2740 FERGUSON ROAD
GILROY, CA 95020

SHEET TITLE

ELECTRICAL SITE PLAN

DRAWN GMEP
CHECKED GMEP
DATE 08/04/23
SCALE AS NOTED
JOB NO. 23-598
SHEET

E-3.0

ABBREVIATIONS

AC	AIR CONDITIONING UNIT
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AP	ACCESS PANEL
ARCH	ARCHITECTURAL
BDD	BACK DRAFT DAMPER
BFF	BELOW FINISHED FLOOR
BLDG	BUILDING
BTUH	BRITISH THERMAL UNITS PER HOUR
CD	CONDENSATE DRAIN
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
CP	CONDENSATE PUMP
CU	CONDENSING UNIT
DB	DRY BULB
DS	DUCT SILENCER
ELEC	ELECTRICAL
EF	EXHAUST FAN
(E)	EXISTING
ER	EXHAUST REGISTER
F	DEGREES FAHRENHEIT
FA	FREE AREA
FC	FAN COIL
FD	FIRE DAMPER
FLR	FLOOR
FP	FIRE PUMP
FPM	FEET PER MINUTE
FX	FLEXIBLE CONNECTION
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
HP	HEAT PUMP
HV	HEATING AND VENTILATING UNIT
HX	HEAT EXCHANGER
HZ	HERTZ
ID	INSIDE DIAMETER
LAT	LEAVING AIR TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
LD	LINEAR DIFFUSER
LF	LINEAR FEET
MBH	BTU PER HOUR (X1000)
MC	MECHANICAL CONTRACTOR
MECH	MECHANICAL
MIN	MINIMUM
MUA	MAKE-UP AIR UNIT
(N)	NEW
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NO.	NUMBER
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OAI	OUTSIDE AIR INTAKE
OD	OUTSIDE DIAMETER
PTAC	PACKAGED TERMINAL AIR CONDITIONER
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH GAUGE
RA	RETURN AIR
RAG	RETURN AIR GRILLE
RCP	REFLECTED CEILING PLAN
RHC	REHEAT COIL
RF	RETURN FAN
REQ'D	REQUIRED
RFRG	REFRIGERATOR
RPM	REVOLUTIONS PER MINUTE
RTU	ROOF TOP UNIT
SA	SUPPLY AIR
SCG	SMOKE CONTROL GRILLE
SCH	SCHEDULE
SD	SMOKE DAMPER
SEF	SMOKE EXHAUST FAN
SF	SUPPLY FAN
SP	STATIC PRESSURE
SQ FT	SQUARE FEET
TEMP	TEMPERATURE
TG	TRANSFER GRILLE
THK	THICK
TYP	TYPICAL
U/G	UNDERGROUND
UH	UNIT HEATER
UNO	UNLESS NOTED OTHERWISE
VAV	VARIABLE AIR VOLUME UNIT
V/ø/HZ	VOLTS/PHASE/HERTZ
VD	VOLUME DAMPER
VEL	VELOCITY
VFD	VARIABLE FREQUENCY DRIVE
W	WITH
W/O	WITHOUT
WB	WET BULB
WH	WATER HEATER

MECHANICAL SYMBOLS

SYMBOL	DESCRIPTION
	SUPPLY CEILING DIFFUSER
	SIDE WALL SUPPLY DIFFUSER
	RETURN CEILING DIFFUSER
	SIDEWALL RETURN DIFFUSER
	EXHAUST GRILL OR FAN
	EXHAUST FAN DUCT UP THRU ROOF W/ CAP
	ROUND EXHAUST DUCT UP
T	THERMOSTAT
	FLEXIBLE DUCTWORK
	POINT OF CONNECTION
	HATCH DENOTES DROPPED CEILING
FSD/FD	FIRE SMOKE DAMPER OR FIRE DAMPER (FSD OR FD)

SYMBOL	DESCRIPTION
REGISTER TYPE / AIR QUANTITY (CFM)	SUPPLY CEILING DIFFUSER
	ATTIC ACCESS PANEL
FAN	AIR HANDLER UNIT
CU HP	OUTDOOR AIR COMPRESSOR
SD	SMOKE DETECTOR
	SUPPLY DUCT UP
	RETURN DUCT UP
	SUPPLY AND RETURN DUCT DOWN
	EXHAUST WALL CAP
	OUTSIDE AIR WALL CAP
	MOTORIZED ZONING DAMPER
	KEYED NOTES

GENERAL MECHANICAL NOTES

1. ALL MECHANICAL SYSTEMS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL CODES AND STANDARDS, INCLUDING 2022 CALIFORNIA MECHANICAL CODE, 2022 CALIFORNIA BUILDING CODE, 2022 CALIFORNIA RESIDENTIAL CODE, 2022 CALIFORNIA PLUMBING CODE, 2022 CALIFORNIA FIRE CODE, 2022 CALIFORNIA ELECTRICAL CODE, 2022 CALIFORNIA ENERGY CODE, 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE, TITLE 24 CALIFORNIA CODE OF REGULATIONS, AND VENTILATION REQUIREMENTS PER ASHRAE STD. 62.2-2022.
2. PRIOR TO SUBMITTING BID, CONTRACTOR SHALL SURVEY THE ENTIRE PROJECT SITE AND BECOME THOROUGHLY FAMILIAR WITH ACTUAL EXISTING CONDITIONS. THE INTENT OF WORK IS SHOWN ON THE DRAWINGS AND DESCRIBED HEREIN. BY THE ACT OF SUBMITTING A BID PROPOSAL FOR WORK, THE CONTRACTOR SHALL BE DEEMED TO HAVE MADE SUCH A STUDY AND EXAMINATION AND TO ACCEPT ALL CONDITIONS PRESENT AT SITE. NO REQUEST FOR ADDITIONAL PAYMENT SHALL BE CONSIDERED VALID, DUE TO CONTRACTOR FAILURE TO ALLOW IN COST ESTIMATE FOR CONDITIONS WHICH MAY EXIST.
3. CONTRACTOR BID SHALL NOT BE LIMITED TO THE WORK SHOWN ON THE PLANS AND SPECIFICATIONS. ALL PREMIUM OVERTIME COSTS, UTILITY CHARGES, COST FOR TEMPORARY UTILITY SERVICES, ALL ALTERATION, ALL DEMOLITION AND EXTENSION WORKS, PERMITS, INSPECTION FEES, MISCELLANEOUS CONTINGENCY COST, ETC., SHALL BE INCLUDED IN BID.
4. CONTRACTOR MUST VERIFY LOCATIONS OF ALL EQUIPMENT AND POINTS OF CONNECTIONS AND COORDINATE WITH CONSTRUCTION MANAGER, ARCHITECT, CIVIL ENGINEER, LANDSCAPE ARCHITECT AND UTILITY CONSULTANTS PRIOR TO START OF CONSTRUCTION. NO COMPENSATION WILL BE MADE FOR RELOCATION OF EQUIPMENT AND ASSOCIATED COST.
5. CONTRACT DRAWINGS ARE DIAGRAMMATIC. THE CONTRACTOR MUST FIELD VERIFY THE DRAWINGS PRIOR TO FABRICATION AND CONSTRUCTION. ALL DIMENSIONS SHOWN ON THESE PLANS ARE APPROXIMATE, AND MUST BE CONFIRMED ON SITE.
6. CONTRACTOR SHALL VERIFY ACTUAL EXISTING CONDITIONS AT SITE PRIOR TO SUBMITTING BID.
7. ANY WORK TO BE PERFORMED MUST BE PLANNED IN ADVANCE. SCHEDULING SHALL BE DONE IN COOPERATION WITH CONSTRUCTION MANAGER. INCLUDE ALL PREMIUM TIME CHARGES IN BID TO COVER AFTER-HOURS AND WEEKEND WORK.
8. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL TRADES. COORDINATE THE LOCATIONS OF ALL CEILING DIFFUSERS, REGISTERS AND GRILLES WITH THE ARCHITECTURAL CEILING PLAN, ELECTRICAL LIGHTING LAYOUT, STRUCTURAL FRAMING LAYOUT, AND ARCHITECTURAL ROOM ELEVATIONS. ALL WORK SHALL BE IN ACCORDANCE WITH BEST CONSTRUCTION PRACTICES.
9. THE CONTRACTOR SHALL FURNISH ALL MATERIAL, TOOLS, LABOR, ETC. TO INSTALL A COMPLETE AND FUNCTIONING SYSTEM AS INDICATED ON DRAWINGS.
10. THE CONTRACTOR SHALL REPORT TO THE CONSTRUCTION MANAGER IMMEDIATELY ANY INTERFERENCE BETWEEN TRADES OR WITH BUILDING OBSTRUCTIONS.
11. PROVIDE SHOP DRAWINGS FOR ALL EQUIPMENT, DUCTWORK, PIPING, DAMPERS, ETC. AND SUBMIT IT TO THE CONSTRUCTION MANAGER FOR APPROVAL.
12. ALL DUCTWORK SHALL BE CONSTRUCTED, ERECTED, AND SEALED IN ACCORDANCE WITH THE MOST RESTRICTIVE OF LOCAL REGULATIONS AND PROCEDURES DETAILED IN ASHRAE HANDBOOK OF FUNDAMENTALS OR THE APPLICABLE STANDARDS ADOPTED BY THE SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION AND THE UNIFORM MECHANICAL CODE.
13. FACTORY-MADE AIR DUCTS SHALL NOT BE USED FOR VERTICAL RISERS IN AIR-DUCT SYSTEMS SERVING MORE THAN TWO STORIES (UNLESS ALLOWED BY CHIEF BUILDING INSPECTOR AND THE FIELD INSPECTOR). SUCH DUCTS SHALL NOT PENETRATE CONSTRUCTION WHERE FIRE DAMPERS ARE REQUIRED (CMC SECTION 603.4.).
14. ALL DUCT SIZES ARE CLEAR INSIDE SIZES. OBTAIN APPROVAL FROM CONSTRUCTION MANAGER FOR SIZING OF ANY DUCTWORK, WHERE SIZES ARE NOT SHOWN ON DRAWINGS.
15. MANUAL VOLUME DAMPERS SHALL BE PROVIDED IN ALL DUCT BRANCHES TO INDIVIDUAL BOXES, DIFFUSERS, GRILLES AND REGISTERS AND SHALL BE LOCKED IN THE FINAL POSITION AFTER COMPLETION OF AIR BALANCE.
16. ALL DUCT SHALL BE INSTALLED WITH ACCORDANCE TO MANUFACTURERS GUIDELINES AND CHAPTER 6 OF CMC 2019.
17. TRANSVERSE AND LONGITUDINAL JOINTS FOR ALL SUPPLY AIR DUCTS SHALL BE SEALED WITH APPROVED MASTIC PER SMACNA.
18. COVER ALL WALLS, FLOOR, CEILING AND ROOF OPENINGS LEFT AS THE RESULT OF THE WORK. PROVISIONS SHALL BE MADE TO PROJECT PEOPLE FROM INJURY AND TO PROTECT EQUIPMENT FROM WEATHER.
19. CUTTING OR PENETRATION OF STRUCTURAL MEMBERS MUST BE APPROVED BY THE STRUCTURAL ENGINEER ON RECORD.
20. SEAL ALL PENETRATIONS THROUGH WALLS, CEILINGS, FLOOR, ETC. TO MAINTAIN THE FIRE RATING, AND BUILDING PRESSURIZATION.
21. PROVIDE ANCHORAGE FOR ALL PIPING, DUCTWORK AND EQUIPMENT IN ACCORDANCE WITH THE LATEST EDITION OF GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL SYSTEMS AND PLUMBING PIPING SYSTEMS PER SMACNA.
22. INSTALL ALL DUCT WORK AND PIPING HIGH AS POSSIBLE UNLESS NOTED ON THE PLANS.
23. ALL EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL NECESSARY ACCESSORIES FOR COMPLETE INSTALLATION.
24. CURBS, PLATFORMS, AND FLASHING FOR MECHANICAL EQUIPMENT SHALL BE AS INDICATED ON THE ARCHITECTURAL PLANS AND STRUCTURAL PLANS. COORDINATE EXACT SIZES OF REQUIRED OPENINGS AND SUPPORTS FOR FURNISHED EQUIPMENT.
25. ALL DUCT WORK MUST BE INSULATED OR LINED PER SPECIFICATIONS OR NOTED IN THE DRAWINGS. THE FLEXIBLE DUCT MUST BE INSTALLED PER MANUFACTURER GUIDELINES AND SHALL ELIMINATE RESTRICTION TO AIR FLOW.
26. PRE-INSULATED FLEXIBLE DUCT WORK SHALL BE SUPPORTED AND JOINED TO SHEET METAL PER SMACNA DUCT CONSTRUCTION STANDARDS AND SHALL BE USED WITH A 2" SHEET METAL SADDLE AT EACH SUPPORT HANGER.
27. WHEN FLEXIBLE DUCTWORK IS INSTALLED AS A BRANCH DUCTWORK TO A POINT OF TERMINATION, THE CONTRACTOR MUST UTILIZE ADJUSTABLE SHEET METAL ELBOWS WITH AN ALUMINIZED INSULATION MATCHING THE PRE-INSULATED FLEXIBLE DUCTWORK INSULATING VALUE.
28. METAL DUCTS SHALL COMPLY WITH CMC SECTION 602.6. THE METALS DUCTS SHALL BE SUPPORTED PER THE REQUIREMENTS PER CMC 603.3.
29. ALL HVAC EQUIPMENT SHALL BE U.L. LISTED AND BEAR A U.L. LABELS.
30. MECHANICAL EQUIPMENT, AIR DISTRIBUTION DEVICES, AIR DIFFUSERS, FANS, AND OTHER EQUIPMENT THAT MAY PROJECT SOUND SHALL BE INSTALLED PER MINIMUM REQUIREMENT, CONFORM TO INSTALLATION DETAILS AND RECOMMENDATION IN CHAPTER 52 OF ASHRAE HANDBOOK, "HVAC SYSTEMS AND APPLICATIONS."
31. GUARDS SHALL BE PROVIDED WHERE APPLIANCES, EQUIPMENT, FANS ROOF HATCH OPENINGS OR OTHER COMPONENTS THAT REQUIRE SERVICE ARE LOCATED WITHIN 10 FEET OF A ROOF EDGE OR OPEN SIDE OF WALKING SURFACE AND SUCH EDGE OR OPEN SIDE IS LOCATED MORE THAN 30" ABOVE THE FLOOR, ROOF OR GRADE BELOW. THE GUARD SHALL BE CONSTRUCTED SO AS TO PREVENT THE PASSAGE OF A SPHERE 21" IN DIAMETER. THE GUARD SHALL EXTEND NOT LESS THAN 30" BEYOND EACH END OF SUCH APPLIANCE, EQUIPMENT, FAN OR COMPONENT.
32. COORDINATE THE THERMOSTATS/SENSORS LOCATIONS WITH THE ARCHITECT. ALL THE THERMOSTATS/SENSORS SHALL BE MOUNTED AT 48" ABOVE FINISHED FLOOR TO MEET ADA REQUIREMENTS.
33. THE CONTRACTOR SHALL VERIFY THE INPUT VOLTAGE AND AMPERAGE (HORSEPOWER) RATING OF ALL EQUIPMENT PRIOR TO INSTALLATION.
34. CONTRACTOR SHALL PROVIDE ALL SAFETY MATERIALS AND EQUIPMENT NOT LIMITED TO BARRIERS, SIGNS, LIGHTS, ETC.
35. CONTRACTOR SHALL PROVIDE BARRICADE, SAFETY SIGNS AND OTHER DEVICES TO ISOLATE WORK AREA DURING CONSTRUCTION, UPON CONSTRUCTION MANAGER APPROVAL.
36. CONTRACTOR SHALL REPAIR/PATCH AND WEATHER PROOF ANY OPENING CAUSED BY EQUIPMENT/PIPING INSTALLATION, AND SHALL PAINT WHERE NECESSARY.
37. THE CONTRACTOR SHALL THOROUGHLY CLEAN THE UNITS, REMOVE ALL PACKING LABELS, STICKERS AND ANY CRATING DEBRIS, AND LEAVE ALL INSTALLATION FINISHED AND READY FOR OPERATION.
38. AFTER COMPLETION, THE COMPLETE SYSTEM SHALL BE TESTED AND BALANCED. ANY ADDITIONAL BALANCING DEVICES REQUIRED FOR PROPER BALANCING SHALL BE INSTALLED. PRIOR TO BALANCING ALL FILTERS SHALL BE REPLACED WITH NEW CLEAN FILTERS PLACED IN THE RETURN GRILLES.
39. UPON COMPLETION OF PROJECT AND PRIOR TO ACCEPTANCE OF THE WORK BY THE CONSTRUCTION MANAGER, CONTRACTOR SHALL FURNISH TO HIM FOUR (4) COPIES OF OPERATION AND MAINTENANCE MANUAL OF EQUIPMENT BOUND IN BOOK FORM AND INDEXED. MANUAL SHALL CONTAIN PARTS LIST, RECOMMENDED PERIODS OF INSPECTION, ETC., AND NAME, ADDRESS AND PHONE NUMBER OF ALL SUPPLIERS.
40. THE CONTRACTOR SHALL PREPARE ONE (1) SET OF "RECORD DRAWINGS" PLANS AND KEEP AT JOB SITE FOR REVIEW BY THE CONSTRUCTION MANAGER. ANY CHANGES FROM THE DESIGN DRAWINGS SHALL BE NOTED WITH RED INK. UPON COMPLETION OF PROJECT THE CONTRACTOR SHALL SUBMIT THE PLANS TO THE CONSTRUCTION MANAGER.
41. COMPLETE INSTALLATION SHALL BE GUARANTEED, AND CONTRACTOR SHALL PROVIDE 1 YEAR SERVICE, INCLUDING PARTS AND LABOR.
42. THE CONTRACTOR SHALL FURNISH A TRAINED AND COMPETENT SERVICE ENGINEER TO INSTRUCT THE OPERATORS IN THE OPERATION AND MAINTENANCE OF THE SYSTEM.
43. EACH SINGLE SYSTEM HEATING OR COOLING AIR IN EXCESS OF 2,000 CUBIC FEET PER MINUTE SHALL BE EQUIPPED WITH AN AUTOMATIC SHUTOFF ACTIVATED BY SMOKE DETECTORS PER 2019 CMC SECTION 608.
44. ALL DUCT SMOKE DETECTORS SHALL BE FURNISHED AND WIRED BY DIV. 16, INSTALLED BY DIV. 15. DETECTOR SAMPLING TUBES TO HAVE AN ACCESS DOOR MAKING SAMPLING TUBES READILY ACCESSIBLE.
45. PROVIDE CEILING ACCESS PANELS IN ALL NON-ACCESSIBLE CEILINGS FOR VALVES, CLEANOUTS, AND DAMPERS. REFER TO ARCHITECTURAL PLANS FOR LOCATIONS.
46. HVAC SYSTEM INSTALLERS SHALL BE TRAINED AND CERTIFIED IN THE PROPER INSTALLATION OF HVAC SYSTEMS AND EQUIPMENT BY A RECOGNIZED TRAINING OR CERTIFICATION PROGRAM
47. FIRE PLACES MUST BE DIRECT-VENT SEALED-COMBUSTION CHAMBER TYPE PER CGBSC 4.503. NO WOOD BURNING FIREPLACE IS PERMITTED PER AQMD REGULATIONS.
48. ALL NEW WINDOWS AND DOORS SHALL HAVE A LABEL INDICATING THE U-FACTOR AND SHGC.
49. AT THE TIME OF ROUGH INSTALLATION, DURING STORAGE ON THE CONSTRUCTION SITE AND UNTIL FINAL STARTUP OF HEATING, COOLING AND VENTILATING EQUIPMENT, ALL DUCT AND OTHER RELATED AIR INTAKE AND DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED.
50. EACH BATHROOM SHALL BE MECHANICALLY VENTILATED AND SHALL COMPLY WITH THE FOLLOWING:
    - 50.1. FANS SHALL BE ENERGY STAR COMPLIANT AND BE DUCTED TO TERMINATE OUTSIDE THE BUILDING.
    - 50.2. UNLESS FUNCTIONING AS A COMPONENT OF A WHOLE HOUSE VENTILATION SYSTEM, FANS MUST BE CONTROLLED BY A HUMIDITY CONTROL.
      - 50.2.1. HUMIDITY CONTROLS SHALL BE CAPABLE OF MANUAL OR AUTOMATIC ADJUSTMENT BETWEEN A RELATIVE HUMIDITY RANGE OF LESS THAN 50% TO A MAXIMUM OF 80%.
      - 50.2.2. A HUMIDITY CONTROL MAY BE A SEPARATE COMPONENT TO THE EXHAUST FAN AND IS NOT REQUIRED TO BE INTEGRAL OR BUILT-IN
51. BUILDING CONTAINS A WHOLE HOUSE EXHAUST FAN. ITS COVERS OR LOUVERS SHALL HAVE A MINIMUM OF R-4.2 INSULATION.
52. AIR CONDITIONING AND HEATING FILTER SHALL BE RATED AT MERV 13 MINIMUM. THE DUCT SYSTEM MUST BE DESIGN ACCOUNTING FOR THE PRESSURE DROP ACROSS THE FILTER.
53. THE INSTALLING CONTRACTOR MUST PROVIDE SEISMIC BRACING OF ALL MECHANICAL EQUIPMENT, PIPING AND DUCT WORK IN ACCORDANCE WITH REQUIREMENTS OF THE 2019 CBC FOR " SEISMIC DESIGN CATEGORY."
54. WHERE ANCHORAGE DETAILS ARE NOT SHOWN ON THE PLANS, THE FIELD CONTRACTOR MUST VERIFY AND GET APPROVAL FOR THE INSTALLATION FROM THE MECHANICAL ENGINEER AND THE STRUCTURAL ENGINEER.

AIR SYSTEM DESIGN CRITERIA

CITY	SAN JOSE
COUNTY	SAN JOSE
CLIMATE ZONE	04
SUMMER OUTDOOR DESIGN TEMP. (DRY-BULB)	86 DEG F
SUMMER COINCIDENT WET-BULB TEMP.	68 DEG F
SUMMER DAILY RANGE	26 DEG F
WINTER OUTDOOR DESIGN TEMP. (DRY BULB)	29 DEG F
SUMMER INDOOR DESIGN TEMP. (DRY BULB)	75 DEG F
WINTER INDOOR DESIGN TEMP. (DRY BULB)	68 DEG F

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

REGISTERED PROFESSIONAL ENGINEER
GANGYI ZHOU
No. M34279
Exp.12-31-2024
MECHANICAL
STATE OF CALIFORNIA

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PROJECT NAME:
CHEN FARM
2740 FERGUSON ROAD
GILROY, CA 95020

SHEET TITLE
MECHANICAL
HVAC NOTES, SYMBOLS & SHEET INDEX - MANUFACTURED HOMES

DRAWN: GMEP
CHECKED: GMEP
DATE: 08/04/23
SCALE: AS NOTED
JOB NO.: 23-598
SHEET: M-3.0

RECTANGULAR DUCT SIZE ESTIMATE

DESIGN CFM	DUCT HEIGHT - NET INSIDE DIMENSION IN INCHES 4"	CFM	6"	CFM	8"	CFM	10"	CFM	12"
60	6X4	60	4X6	90	4X8	120	4X10	150	4X12
90	8X4	110	6X6	160	6X8	215	6X10	270	6X12
120	10X4	160	8X6	230	8X8	310	8X10	400	8X12
150	12X4	215	10X6	310	10X8	430	10X10	550	10X12
180	14X4	270	12X6	400	12X8	550	12X10	680	12X12
210	16X4	320	14X6	490	14X8	670	14X10	800	14X12
240	18X4	375	16X6	580	16X8	800	16X10	950	16X12
270	20X4	430	18X6	670	18X8	930	18X10	1100	18X12
300	22X4	490	20X6	750	20X8	1060	20X10	1250	20X12
330	24X4	540	22X6	840	22X8	1200	22X10	1400	22X12
		600	24X6	930	24X8	1320	24X10	1600	24X12
		650	26X6	1020	26X8	1430	26X10	1750	26X12
		710	28X6	1100	28X8	1550	28X10	1950	28X12
		775	30X6	1200	30X8	1670	30X10	2150	30X12
40	21/2X10			1300	32X8	1800	32X10	2300	32X12
70	21/2X14			1400	34X8	1930	34X10	2450	34X12
150	21/2X30			1500	36X8	2060	36X10	2600	36X12
		100	31/2X14			2200	38X10	2750	38X12
		220	31/2X30			2350	40X10	2900	40X12
								3050	42X12

RECTANGULAR SHEET METAL DUCT = .07" ON MOST METAL DUCT CALCULATORS

FLEXIBLE DUCT

DUCT SIZE	DESIGN SUPPLY AIRFLOW (CFM)	DESIGN RETURN AIRFLOW (CFM)
5"	60	54
6"	100	90
7"	150	135
8"	240	216
9"	300	270
10"	400	360
12"	650	585
14"	1000	900
16"	1400	1270
18"	2000	1800
20"	2500	2250

FLEX DUCT =.1" ON MOST METAL DUCT CALCULATOR

ROUND METAL PIPE

DUCT SIZE	DESIGN AIRFLOW (CFM)
5"	60
6"	100
7"	150
8"	240
9"	300
10"	400
12"	650
14"	1000
16"	1400
18"	2000
20"	2500

ROUND METAL PIPE =.1" ON METAL DUCT CALCULATORS

AIR DISTRIBUTION DEVICE SCHEDULE

TAG ON PLANS	MANUFACTURER & MODEL #	APPLICATION & TYPE	BLOWPATTERN	NECK SIZE	REMARKS
CS-2	SHOEMAKER 850 OR EQUAL	CEILING OR SIDEWALL MOUNTED	2-WAY	SEE PLANS	CEILINGS OR SIDEWALL STAMPED DIFFUSER W/ LEVER OPERATED OPPOSED BLADE DAMPER
CS-3	SHOWMAKER 845 OR EQUAL	SEE DWGS	3-WAY	SEE PLANS	CEILING OR SIDE WALL STAMPED DIFFUSER W/ LEVER OPERATED OPPOSED BLADE DAMPER
CS-4	SHOEMAKER 150 OR EQUAL	SEE DWGS	4-WAY	SEE PLANS	CEILING STAMPED DIFFUSER W/ LEVER OPERATED OPPOSED BLADE DAMPER
CRG	SHOEMAKER FG OR EQUAL	SEE DWGS	------	SEE PLANS	CEILING STAMPED FACE FILTER GRILL MINIMUM MERV 13 FILTER

NOTES:
1. CRG SHALL HAVE MAXIMUM FACE VELOCITY OF 450 FPM WITH A 1" FILTER NOT LESS THAN MERV 13 W/ MAX. PRESSURE DROP OF 0.2" W.C. FOR FILTER AND GRILL.
B. CONTRACTOR TO USE OR EQUAL REGISTERS. THE THROW PATTERNS SHALL BE MATCHED PER THE PLANS. BASE THE ALTERNATE SELECTION BASE ON MAXIMUM PRESSURE DROP OF 0.04" W.C. THE VELOCITY AT THE FACE SHALL NOT EXCEED 700 FPM.

FAN SCHEDULE

EF

EQUIPMENT NO.	SERVICE	LOCATION	CFM	STATIC PRESS. (IN W.G.)	MOTOR WATTS	MOTOR HP	MOTOR RPM	MOTOR VOLT.-PH.-CY.	MANUFACTURER & MODEL	SONES	OPTIONS-ACCESSORIES
EF B	BATHROOM	CEILING	84	0.25	37.0	--	--	120-1-60	AIRKING E80SH W/ BOOST	0.7	BACK DRAFT DAMPER CONTROLLED BY BUILT IN HUMIDITY SENSOR OPER. WT. = 17.0 LBS
EF BH	BATHROOM	CEILING	60	0.25	7.3	--	--	120-1-60	AIRKING D4SH	0.3	BACK DRAFT DAMPER CONTROLLED BY SWITCH (CONTINUOUS OPERATION WHILE HOUSE IS OCCUPIED) OPER. WT. = 17.0 LBS

NOTES:
VERIFY WITH ARCHITECT/OWNER FOR EXACT MODEL NUMBER BEFORE ROUGH-IN.
ALL EXHAUST FANS TO BE ENERGY STAR CERTIFIED.

SPLIT SYSTEM OUTDOOR HEAT PUMP CONDENSING UNIT

HP

EQUIPMENT NO.	MANUFACTURER & MODEL NO.	SERVICE	HEATING CAPACITY (BTU/HR)	HSPF OR COP	COOLING CAPACITY (B.T.U/HR)	SEER2/ EER2	ELECTRICAL V.-PH.-CY.	ELECTRICAL MCA	ELECTRICAL MOCP	OPERATING WEIGHTS (LBS)	REFRIGERANT TUBE LIQUID	REFRIGERANT TUBE VAPOR	REMARKS
HP 24	CARRIER GH5SAN42400A OR EQUAL	SEE PLAN	23,200	7.8 HSPF2	23200	15.2/12.0	208/230-1-60	14.5	25	153	3/8	5/8	1.

NOTES:
1. PROVIDE ALL REQUIRED MATERIALS & INSULATED REFRIGERANT LINES FOR COMPLETE INSTALLATION, SIZE RS/RL PIPING PER MANUFACTURERS GUIDELINES.

SPLIT SYSTEM AIR HANDLER FAN COIL UNITS SCHEDULE

FC

EQUIPMENT NO.	MANUFACTURER & MODEL NO.	SERVICE	SUPPLY AIR (CFM)	OUTSIDE AIR (CFM)	E.S.P. (IN W.G.)	ELECTRICAL V.-PH.-CY.	ELECTRICAL MCA	OPERATING WEIGHTS (LBS)	REMARKS
FC 24	CARRIER FMC4Z24**AL* OR EQUAL	SEE PLAN	800	--	0.13	208/230-1-60	2.6	109	1. 2. 3. 4. 5.

NOTES:
1. PROVIDE REQUIRED ACCESS TO INDOOR UNIT PER CMC.
2. PROVIDE PROGRAMMABLE ROOM THERMOSTAT FOR EACH FAU/FC UNIT.
3. PROVIDE CONTROL WIRING, CONDUIT, ETC. FOR A COMPLETE AND OPERABLE SYSTEM.
4. PROVIDE SECONDARY CONDENSATE DRAIN PAN FOR ALL DX COILS.
5. PROVIDE MERV 13 FILTER AT RETURN AIR PLENUM CONNECTION TO UNIT.

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

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No. M34279
Exp.12-31-2024
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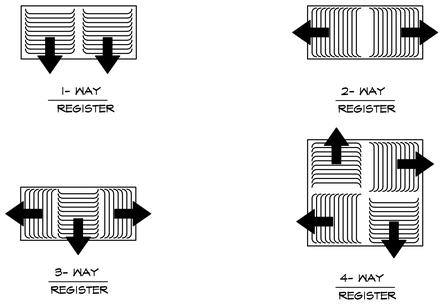
PROJECT NAME:
CHEN FARM
2740 FERGUSON ROAD
GILROY, CA 95020

SHEET TITLE
MECHANICAL
HVAC EQUIPMENT SCHEDULES - MANUFACTURED HOMES

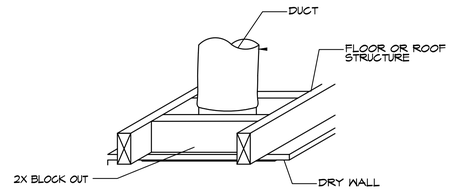
DRAWN: GMEP
CHECKED: GMEP
DATE: 08/04/23
SCALE: AS NOTED
JOB NO.: 23-598
SHEET: M-3.1



COMMOM TYPES OF DIRECTIONAL REGISTERS

SCALE: NONE

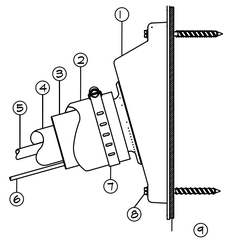
7



TYPICAL REGISTER BLOCK OUT

SCALE: NONE

6

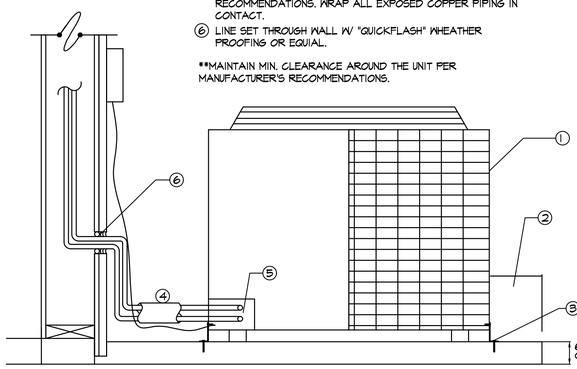


1. EXTERIOR WALL OR PARAPET WALL SEAL PENETRATION OUTLET WITH ELASTOMERIC LINE-SET COMPRESSION SLEEVE TYPE "TITAN6530" BY AIREX MANUFACTURING INC.
2. INSULATION PROTECTIVE PVC COVER TYPE "E-FLEX GUARD" BY AIREX MANUFACTURING INC.
3. ELASTOMERIC LINE-SET COMPRESSION & ANTI-VIBRATION SLEEVE (COMPONENT OF REFERENCE 1 "TITAN 6530")
4. #/8" INSULATION FOR REFRIGERATION SUCTION LINE TYPE "_____"
5. #/8" REFRIGERATION SUCTION LINE TYPE "_____" COPPER
6. #/8" REFRIGERATION LIQUID LINE TYPE "_____" COPPER
7. MECHANICAL CONNECTION SECURED WITH STAINLESS STEEL CLAMP (COMPONENT OF REFERENCE 1 "TITAN 6530")
8. WALL FASTENERS SELF-TAPPING 3/8" HEX HEAD 1/4" DIAMETER ALL MATERIAL ANCHORS SCREWS WITH ELASTOMERIC WASHERS (COMPONENT OF REFERENCE 1 "TITAN 6530")
9. WALL SURFACE SEAL ELASTOMERIC GASKET (COMPONENT OF REFERENCE 1 "TITAN 6530")

PIPE PENETRATION DETAIL

SCALE: NONE

5



1. CONDENSING UNIT
2. EXTEND PAD A MIN. OF 4" FROM UNIT ON ALL SIDES. COORDINATE SIZE WITH CONDENSING UNIT USED.
3. STRAP A/C TO CONC SALB WITH ANCHOR BOLD/SCREW-PER A/C MANUFACTURER RECOMMENDATION AT ALL SIDES.
4. REFER TO "PIPE PENETRATION DETAIL"
5. LIQUID LINE AND INSULATED SUCTION LINE. SIZE PER RECOMMENDATIONS. WRAP ALL EXPOSED COPPER PIPING IN CONTACT.
6. LINE SET THROUGH WALL W/ "QUICKFLASH" WHEATHER PROOFING OR EQUIAL.

**MAINTAIN MIN. CLEARANCE AROUND THE UNIT PER MANUFACTURER'S RECOMMENDATIONS.

CONDENSING UNIT INSTALLATION ON GRADE

SCALE: NONE

4

DRYER VENT SIZING

DRYER VENT SIZE	LT	REMARK
4"	14'-0"	①
5"	34'-0"	②

CLOTHES DRYER VENT SHALL NOT EXCEED A TOTAL COMBINED HORIZ. AND VERT. LENGTH OF 14' FOR 4" AND 34' FOR 5", INCLUDING TWO 90- DEGREE ELBOWS. TWO FEET SHALL BE DEDUCTED FOR EACH 90- DEGREE ELBOW IN EXCESS OF TWO. SECTION 504.4.2.1 OF THE CMC., FLEX DUCT PORTION CANNOT BE CONCEALED WITHIN BUILDING CONSTRUCTION AS PROPOSED

NOTES:

1. FOR A 4" GALVANIZED DRYER VENT DUCT
   IF: L1= 8'
   THEN: L2 = 14' - 8' = 6'
2. FOR AN EQUIVALENT 5" GALVANIZED DRYER VENT DUCT
   IF: L1= 8'
   THEN: L2 = 34' - 8' = 26'

CFM = VELOCITY X AREA
CFM 4" = CFM 5"

V4" X A4" = V5" X A5"
V4" X (3.14 X D4"^)/4 = V5" X (3.14 X D5"^)/4
V4" = 5"/4" X V5" = 1.5625 V5"

FRICTION 4" = FRICTION 5" =
= (f X L4" X V4"^)/2g = (f X L5" X V5"^)/2g =
= (f X L4" X (1.5625 V5")^)/2g= (f X L5" X V5"^)/2g

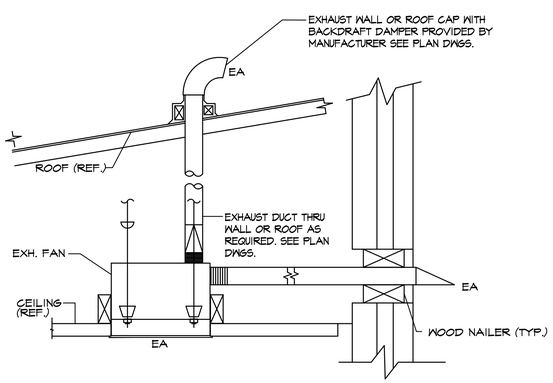
L5" = (1.5625)^ X L4" = 2.44 X L4"
L4" = 14 ft
L5" = 2.44 X 14' = 34 ft

34 FEET OF 5" DUCTWORK IS EQUAL TO 14 FEET OF 4" DUCTWORK (WITH THE SAME AIRFLOW AND PRESSURE DROP).

SEE DRYER VENT SIZING TABLE BELOW

LEGEND

1	EYEBROW W / BACKDRAFT DAMPER MAINTAIN MIN. 3' AWAY FROM OPENINGS INTO BUILDINGS. (CMC CHAPTER 5)
2	DRYER VENT TO ROOF WHERE SHOWN OR NOTED ON MECH. DWGS.
3	JOIST, SEE STRUCT. DWGS. (TYPICAL)
4	FLOOR - CEILING ASSEMBLY
5	APPROVED FLEXIBLE DUCT CONNECTORS NOT MORE THAN 6FT. IN LENGTH MAY BE USED (FLEXIBLE DUCT CONNECTORS SHALL NOT BE CONCEALED WITHIN BUILDING CONSTRUCTION)
6	DRYER DUCT SHALL NOT BE CONNECTED W / SHEET METAL SCREWS PR OTHER FASTENERS WHICH WILL OBSTRUCT THE AIR FLOW. (TYPICAL)
7	DRYER DUCT SHALL BE OF MIN. 26 GAUGE SHEET METAL AND SHALL HAVE SMOOTH INTERIOR SURFACES (TYPICAL)
8	FIRE CAULK AT PLATE PENETRATION (TYPICAL)

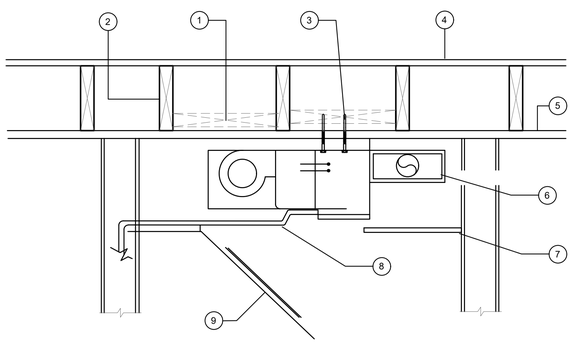


CEILING TYPE EXHAUST FAN

SCALE: NONE

3

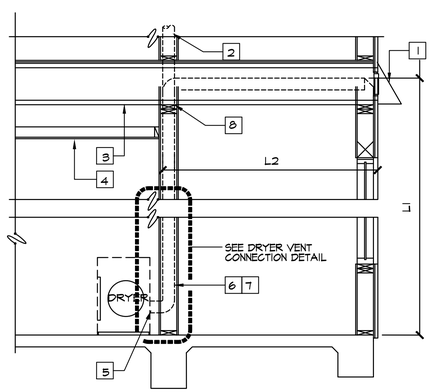
1. 2X6 BLOCKING
2. STRUCTURAL JOIST
3. 1/4" LAG SCREW W/ 2 1/2" PENETRATION
4. FLOOR ABOVE
5. FLOOR STRUCTURE WHERE OCCURS.
6. SEALED SUPPLY AIR PLENUM
7. NON- RATED SOFFIT
8. 3/4" CONDENSATE DRAIN W/ TRAP.
9. FACTORY SUPPLIED LOUVERED ACCESS PANEL (BUILT IN GRILL PER THE UNIT PLANS. PROVIDE MERV 13 FILTER AT THE GRILL



CEILING FAN COIL UNIT INSTALLATION

SCALE: NONE

2



DRYER VENT W/ MAX LENGTH CALC OPTION

SCALE: NONE

1

REVISIONS

NO.	DATE	DESCRIPTION

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PROJECT NAME:
CHEN FARM
2740 FERGUSON ROAD
GILROY, CA 95020

SHEET TITLE
MECHANICAL
HVAC DETAILS - MANUFACTURED HOMES

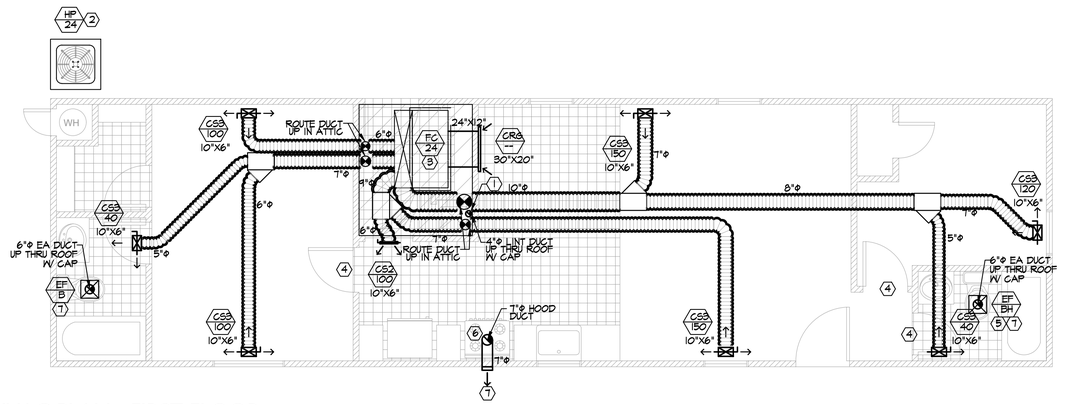
DRAWN
GMEP
CHECKED
GMEP
DATE
08/04/23
SCALE
AS NOTED
JOB NO.
23-598
SHEET
M-3.2

HVAC GENERAL NOTES

1. REFER TO SHEET M-1.0 FOR LEGENDS AND GENERAL NOTES.
2. REFER TO SHEET M-1.1 FOR EQUIPMENT SCHEDULES.
3. REFER TO DRAWING M-1.2 FOR TYPICAL MECHANICAL DETAILS.
4. THE DUCT ROUTING SHOWN ON PLANS ARE SCHEMATIC ONLY. VERIFY WITH STRUCTURAL AND ALL OTHER PARTIES REGARDING ANY DISCREPANCY AND REPORT TO THE MECHANICAL ENGINEER FOR APPROVAL.
5. REFER TO THE ARCHITECTURAL DRAWINGS FOR FINALIZED CEILING HEIGHTS.
6. FIRE SEAL ALL THE PENETRATIONS AS REQUIRED PER CMC AND CBC CODE REQUIREMENTS.
7. PROVIDE A MINIMUM OF 100 SQ. IN FREE AREA OPENING(S) INTO LAUNDRY ROOM FOR MAKE-UP AIR AS REQUIRED BY CODE (CMC 504.4.1).
8. ALL TERMINATION OF ENVIRONMENTAL AIR DUCTS MUST BE LOCATED 3 FEET AWAY FROM ANY OPENINGS INTO THE BUILDING.
9. OUTSIDE FRESH AIR INTAKES MUST BE 10 FEET FROM ANY PLUMBING VENTS AND EXHAUST VENTS.
10. IF HUMIDISTAT IS REQUIRED, LOCATE IT ADJACENT TO THERMOSTAT.
11. CONDENSATE PIPING FOR ALL INDOOR AIR HANDLERS SHALL FALL UNDER THE CONTRACTOR WORK SCOPE. COORDINATE WITH THE HVAC SUB ACCORDINGLY.
12. THE DEDICATED WHOLE HOUSE VENTILATION FAN MUST BE OPERATING 24/7 WHILE THE HOUSE IS OCCUPIED. THE FAN MUST BE INSTALLED PER MANUFACTURER GUIDELINES WITH ON-OFF SWITCH. PROVIDE A LABEL NEXT TO THE SWITCH WITH CLEARLY WRITTEN TEXT NO SMALLER THAN 12 POINT ARIAL TYPE, "THE FAN MUST BE ON 24/7 WHILE THE HOUSE IS OCCUPIED, UNLESS THERE IS SEVERE OUTDOOR AIR CONTAMINATION."
13. KITCHEN HOOD SHALL BE PROVIDED WITH MINIMUM 100 CFM OF EXHAUST AIR RATING AT 0.25" W.C.
14. "REGISTERED" COPY OF THE CF-2R FORMS SHALL BE SUBMITTED PRIOR TO FINAL INSPECTION, SIGNED BY HERS RATER, FOR FIELD VERIFICATION AND DIAGNOSTIC TESTING.
15. INSTALLING CONTRACTOR SHALL FILL OUT CF-3R FORMS AND SHALL HAVE IT READILY AVAILABLE TO THE INSPECTOR.
16. ALL INSTALLED FIRE PLACES MUST BE SEALED COMBUSTION TYPE AND MUST BE VENTED TO THE EXTERIOR.

HVAC KEYED NOTES

1. CAP SHOULD BE LISTED FOR CLOTH DRYER VENTING (DRYER JACK). DRYER DUCT TO VENT TO EXTERIOR WITH BACKDRAFT DAMPER. CONTRACTOR TO INSTALL DRYER EXHAUST DUCT PER MANUFACTURER INSTALLATION GUIDELINES.
2. PROVIDE RS/RL PIPING SIZE PER MANUFACTURER'S GUIDELINES. ROUTE FROM REMOTE CONDENSATE UNIT TO THE INDOOR AIR HANDLER. VERIFY CONDENSER LOCATIONS WITH ALL RELEVANT DESIGN PARTIES BEFORE INSTALLATION.
3. THE 3/4" PRIMARY CONDENSATE LINE TO THE LAVATORY TAILPIECE. SECONDARY CONDENSATE TO DRAIN TO THE EXTERIOR ABOVE A WINDOW OR PROVIDE A SENSOR TO SHUT-OFF UNIT UPON DETECTION OF WATER. COORDINATE WITH THE PLUMBER.
4. PROVIDE 1/2" DOOR UNDER CUT, TOP GRILL OR JUMPER DUCT
5. THIS FAN DENOTES THE WHOLE HOUSE VENTILATION FAN. THE FAN TO RUN CONTINUOUSLY WHILE THE HOUSE IS OCCUPIED. CLEARLY LABEL NEXT TO THE SWITCH.
6. CONNECT KITCHEN HOOD (MIN. 100 CFM) TO 7"Φ KITCHEN HOOD EXHAUST AIR DUCT (MIN. 6"Φ). THE HOOD MUST VENT TO THE EXTERIOR W/ BACKDRAFT DAMPER. VERIFY W/ ARCH OR OWNER BEFORE ROUGH IN.
7. EXHAUST OUTLET TERMINATES 3' AWAY FROM OPENINGS INTO THE BUILDING AND 3' AWAY FROM THE PROPERTY LINE. SEE CIVIL DRAWINGS AND ARCHITECTURAL DRAWINGS FOR PROPERTY LINE DETAILS.



HVAC PLAN - FIRST FLOOR

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

PRESCRIPTIVE DUCT SIZING REQUIREMENTS (FROM ASHRAE 62.2)
IN ORDER TO COMPLY WITH THE PRESCRIPTIVE DUCT SIZING REQUIREMENTS OF ASHRAE 62.2,A VENTILATION FAN MUST BE SELECTED THAT IS RATED TO PROVIDE AT A MINIMUM THE REQUIRED VENTILATION AIRFLOWAT 0.25 IN.W.G.AND THE DUCTS MUST BE SIZED IN ACCORDANCE WITH THE SPECIFICATIONS GIVEN IN TABLE 7.1,BELOW.

TABLE 7.1

Duct Type	Flex Duct				Smooth Duct			
Fan Rating (cfm @ 0.25"w.c.)	50	80	100	125	50	80	100	125
	Maximum Allowable Duct Length (ft)							
Diameter,(in)	Flex Duct				Smooth Duct			
3	X	X	X	X	5	X	X	X
4	70	3	X	X	105	35	5	X
5	NL	70	35	20	NL	135	85	55
6	NL	NL	125	95	NL	NL	NL	145
7 and above	NL	NL	NL	NL	NL	NL	NL	NL

This table assumes no elbow. Deduct 15 ft of allowable duct length for each turn, elbow, or fitting. Interpolation and extrapolation in Table 7.1 is not allowed. For fan ratings not listed, use the next higher value. This table is not applicable for fan ratings > 125cfm.
NL = no limit on duct length of this size.
X = not allowed, any length of duct of this size with assumed turns and fittings will exceed the rated pressured drop (0.25 in w.g.)
Note: water gauge(w.g). is the same as water column(w.c.)

WHOLE UNIT VENTILATION CALCULATION (ASHRAE 62.2) CONTINUOUSLY

LOCATION	PLAN 1
FLOOR AREA (SQFT)	793
NO. OF BEDROOMS	2
VENTILATION RATE (CFM) = 0.03(SQFT)+7.5(BEDROOMS+1)	46.3
DESIGNED VENTILATION (CFM)	60

REVISIONS

NO.	DATE	DESCRIPTION

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PROJECT NAME:
CHEN FARM
2740 FERGUSON ROAD
GILROY, CA 95020

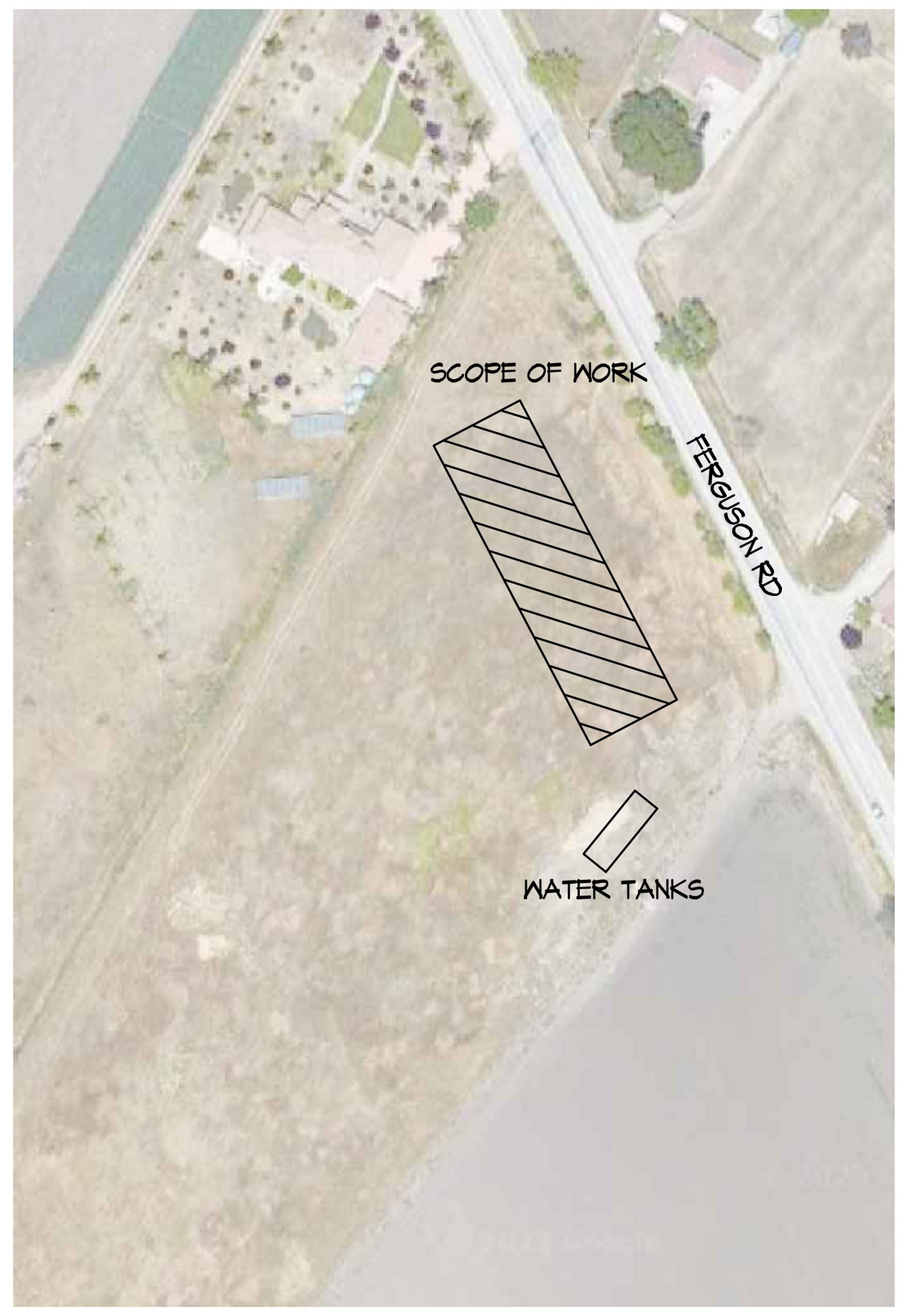
SHEET TITLE
MECHANICAL
HVAC PLAN - MANUFACTURED HOMES

DRAWN: GMEP
CHECKED: GMEP
DATE: 08/04/23
SCALE: AS NOTED
JOB NO.: 23-598
SHEET: M-4.0

SCOPE OF WORK

NEW HOUSING WITH NEW PLUMBING, AND NEW BARN WITH NEW RESTROOM AND SUPPORTING PLUMBING.

NOTE: CONTRACTOR IS TO VERIFY EXISTING CONDITIONS BEFORE BID.



KEY PLAN

SCALE:NONE

FIXTURE SCHEDULE

ITEM	DESCRIPTION	MAKE/MODEL	TRAP	WASTE	VENT	COLD WATER	HOT WATER	REMARKS
WC-1	WATER CLOSET, TANK TYPE	KOHLER OR EQUAL	--	3"	2"	1/2"	-	1.28 GPF. VERIFY W/ OWNER OR ARCHITECT FOR EXACT FIXTURE SPECIFICATION BEFORE PURCHASING FIXTURE
WC-2	WATER CLOSET, TANK TYPE	KOHLER OR EQUAL	--	3"	2"	1/2"	-	1.28 GPF. VERIFY W/ OWNER OR ARCHITECT FOR EXACT FIXTURE SPECIFICATION BEFORE PURCHASING FIXTURE
L-1	LAVATORY	KOHLER OR EQUAL	1-1/2"	2"	1-1/2"	1/2"	1/2"	1.2 GPM FAUCET. VERIFY SELECTION W/ ARCH & OWNER.
L-2	LAVATORY	KOHLER OR EQUAL	1-1/2"	2"	1-1/2"	1/2"	1/2"	1.2 GPM FAUCET. VERIFY SELECTION W/ ARCH & OWNER.
S-1	KITCHEN SINK	TBD	1-1/2"	2"	1-1/2"	1/2"	1/2"	1.8 GPM FAUCET. SELECTION TBD BY OWNER.
TUB-1	BATHTUB	TBD	1-1/2"	2"	1-1/2"	1/2"	1/2"	VERIFY W/ OWNER OR ARCHITECT FOR EXACT FIXTURE SPECIFICATION BEFORE PURCHASING FIXTURE
W/D-1	WASHER/DRYER	TBD	2"	2"	1-1/2"	1/2"	1/2"	SELECTION TBD BY OWNER.
DW-1	DISHWASHER	TBD	-	-	-	-	1/2"	SELECTION TBD BY OWNER.
HBB-1	HOSE BIBB	TBD	-	-	-	3/4"	-	SELECTION TBD BY OWNER. PROVIDE ANTI-SIPHON DEVICE.
IWH-1	INSTA-HOT WATER HEATER	CHRONOMITE SR20L OR EQUAL	-	-	-	3/4"	3/4"	CHRONOMITE SR20L 120V 2400W 1 PHASE OR EQUAL. VERIFY W/ OWNER OR ARCHITECT FOR EXACT FIXTURE SPECIFICATION BEFORE PURCHASING FIXTURE

*PLUMBING FIXTURES MUST COMPLY WITH GREEN BUILDING STANDARDS

HYBRID WATER HEATER SCHEDULE

ITEM NO.	MANUFACTURER	MAKE/MODEL	CAPACITY	ENERGY FACTOR (EFFICIENCY)	ELEC DATA	UEF 1ST HOUR RATING (GPH)	SET POINT TEMPERATURE	DIMENSIONS	REMARKS
WH-1	RHEEM OR EQUAL	PRO H40 T2 RH310BM	36 GALLONS	3.5	4.5 KW 208/240V 1PHASE 30AMP	60	120° F	62.5"H (78.9"H W/DUCT) X 20.25"%	REFER TO WATER HEATER DETAIL.

GENERAL PLUMBING NOTES

1. EXISTING CONDITIONS ARE BASED ON LIMITED FIELD VERIFICATION. CONTRACTOR SHALL ADJUST TO ACTUAL FIELD CONDITIONS AT NO ADDITIONAL EXPENSE TO THE TENANT.
2. ALL CONTRACTORS SHALL REVIEW A COMPLETE SET OF CONSTRUCTION DOCUMENTS. PLUMBING CONTRACTOR SHOULD COORDINATE HIS WORK WITH ALL OTHER TRADES. THIS INCLUDES COORDINATING THE LOCATION AND SIZE OF ALL OPENINGS, LOCATIONS OF EQUIPMENT PAD, AND CHANGES OF ELEVATIONS.
3. CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH DEMOLITION RESPONSIBLE TO BIDDING AND START OF WORK. CONTRACTOR IS RESPONSIBLE ALL EXISTING AS REQUIRED FOR INSTALLATION/CONSTRUCTION OF NEW WORK.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL EXISTING CONDITIONS PRIOR TO SUBMITTING HIS BID. VERIFY LOCATION, ELEVATIONS, AND SIZES OF ALL EXISTING PLUMBING AND INFORM THE ARCHITECT OF ANY DISCREPANCIES. NO ADDITIONAL COMPENSATION WILL BE MADE FOR ANY EXTRAS DUE TO CONTRACTOR'S FAILURE TO VISIT THE JOBSITE AND/OR PREDETERMINE ALL EXISTING CONDITIONS BEFORE SUBMITTING HIS BID. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ARCHITECT FOR RESOLUTION. NO EXCEPTION.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR THE FIELD VERIFICATION OF ALL UTILITY RUNS, UNDERGROUND AND ABOVE GROUND PIPING AND/OR OTHER IMPROVEMENTS LOCATED ON THE PREMISES. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR ALL COSTS RELATING TO THE RELOCATION OF, DAMAGE TO, REPAIR OF ANY EXISTING UTILITY RUNS AND/OR IMPROVEMENTS WHICH ARE DAMAGED AS A RESULT OF WORK IN OR AROUND THE PREMISES.
6. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT SPECIFICATIONS, LOCATIONS AND MOUNTING HEIGHTS OF ALL PLUMBING FIXTURES. NO EXCEPTION.
7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PREPARE ACCURATE AS-BUILT DRAWINGS DURING CONSTRUCTION AND SUBMIT FOR APPROVAL UPON COMPLETION OF INSTALLATION.
8. CONTRACTOR SHALL FINISH ALL MATERIALS, LABOR, EQUIPMENT, TRANSPORTATION AND SERVICES REQUIRED FOR COMPLETING THE WORK. ALL MATERIALS AND WORK SHALL COMPLY WITH APPLICABLE CODES AND REGULATIONS AND MEET THE APPROVAL OF STATE & LOCAL JURISDICTION.
9. WATER HEATER SHALL BE CERTIFIED BY THE MANUFACTURER AND MUST COMPLY WITH THE EFFICIENCY STANDARDS OF THE CALIFORNIA ENERGY COMMISSION, 2019 EDITION.
10. ALL HOT WATER PIPING SHALL BE INSULATED WITH ARMSTRONG "ARMAFLEX" INSULATION PER SECTION 609.12 OF THE 2022 PLUMBING CODE AND TABLE 120.3-A, SECTION 120.3 OF THE 2022 CALIFORNIA ENERGY CODE.
11. CONTRACTOR SHALL VERIFY WATER PRESSURE CONDITIONS AT THE PROJECT SITE. CONTRACTOR SHALL PROVIDE INSTALL A PRESSURE REGULATOR WHERE THE SUPPLY PRESSURE EXCEEDS 80 PSI.
12. ALL PIPING SHALL BE SUPPORTED AT INTERVAL NOT TO EXCEED THOSE SHOWN IN CPC TABLE 313.3
13. ALL POTABLE WATER OUTLETS WITH HOSE ATTACHMENTS, SUCH AS HOSE BIBS, AND MOP SINKS ARE TO BE PROVIDED WITH A BACKFLOW/ANTI-SIPHON DEVICE.
14. ALL CONCEALED PIPING SHALL BE INSTALLED PER CALIFORNIA PLUMBING CODE 2022. NO EXCEPTION.
15. LAVATORIES IN PUBLIC RESTROOMS SHALL BE LIMITED TO 0.5GPM
16. ALL FAUCETS SHALL COMPLY WITH CALIFORNIA PROPOSITION 65 AND SHALL BE CERTIFIED TO NSF STANDARD 61 SECTION 9 FOR DRINKING WATER COMPONENTS.
17. ALL REQUIRED CLEANOUTS SHALL BE INSTALLED AS PER SEC. 707.0 & 719.0 OF THE 2022 CALIFORNIA PLUMBING CODE.
18. FLOOR DRAINS OR SIMILAR TRAPS DIRECTLY CONNECTED TO THE DRAINAGE SYSTEM AND SUBJECT TO INFREQUENT USE SHALL BE PROVIDED WITH AN APPROVED AUTOMATIC MEANS OF MAINTAINING THEIR WATER SEALS.
19. NEW WATER CLOSET AND ASSOCIATED FLUSHMETER VALVES SHALL BE NO MORE THAN 1.28 GALLONS PER FLUSH AND SHALL MEET THE AMERICAN STANDARDS INSTITUTE STANDARD A112.19.2 H&S CODE, SECTION 17921.3(B).
20. NEW URINALS AND ASSOCIATED FLUSHMETER VALVES SHALL BE NO MORE THAN 0.125 GALLONS PER FLUSH AND SHALL MEET THE AMERICAN STANDARDS INSTITUTE STANDARD A112.19.2 H&S CODE, SECTION 17921.3(B).
21. ALL PLUMBING VENTS SHALL TERMINATE NOT LESS THAN TEN(10) FEET FROM OR AT LEAST THREE (3) FEET ABOVE ANY DOOR, OPENING, FRESH AIR INTAKE OR VENT SHAFT.
22. SLOPE ALL CONDENSATE DRAIN LINES AT 1% AND SLOPE ALL SEWER PIPING MINIMUM OF 2%.
23. WASTE & VENT PIPING MATERIAL: SHALL BE ABS/PVC OR AB&I SERVICE WEIGHT CAST IRON NO-HUB SOIL PIPE AND FITTINGS WITH NO-HUB CLAMPS. MUST CONFORM TO CISPI STANDARD 301.04a & 310.04 AND CLEARLY MARKED WITH THE CAST IRON SOIL PIPE INSTITUTE TRADEMARK, MANUFACTURER'S NAME AND COUNTRY OF ORIGIN. ABS/PVC CAN BE USED IF ALLOWED BY LOCAL AUTHORITY HAVING JURISDICTION.
24. WRAP ALL IRON AND COPPER PIPE AND FITTINGS BELOW SLAB OR GRADE WITH 8 MIL POLYETHYLENE WRAP AND 6" MINIMUM ENVELOPE OF CLEAN SAND. ALL ROUND PIPE IN ACCORDANCE WITH NSI/AWWA STANDARD C105/A21.5-82.
25. WATER PIPE SHALL BE TYPE "L" ABOVE GRADE, HARD DRAWN COPPER TUBING, WITH WROUGHT COPPER FITTINGS, SOLDER ALL JOINTS WITH LEAD-FREE SOLDER.
26. CONDENSATE DRAIN PIPE SHALL BE TYPE "DWV" HARD DRAWN COPPER TUBING WITH WROUGHT COPPER FITTINGS, 50-50 SOLDERED JOINTS. INSULATE ALL CONDENSATE DRAIN PIPING WITHIN BUILDING INTERIOR.
27. NEW OR REPAIRED PORTABLE WATER SYSTEMS SHALL BE DISINFECTED PRIOR TO USE ACCORDING TO THE METHODS IN CPC 2022 609.10. NO EXCEPTION.
28. CONTRACTOR TO PROVIDE THERMOSTATIC MIXING VALVES FOR PUBLIC-USE LAVATORIES TO LIMIT TEMPERATURE TO A MAXIMUM OF 120 DEGREES FAHRENHEIT (2022 CPC 407.3).
29. THIS DOCUMENT IS NOT FOR BID OR CONSTRUCTION UNTIL THE PLAN HAS BEEN REVIEWED AND APPROVED BY ALL AUTHORITIES HAVING JURISDICTION AND THE PERMIT IS OBTAINED. NO COMPENSATION WILL BE MADE FOR ADDITIONAL WORK DUE TO THE VIOLATION OF THIS REQUIREMENT.
30. THIS PROJECT MUST COMPLY WITH THE CALIFORNIA PLUMBING CODE 2022.

TYPICAL WATER CALCULATIONS

STREET PRESSURE*: 65 MIN. / 75 MAX.

PRESSURE CALCULATION		UNIT	VALUE
3.	10 FT STATIC LOSS	PSI	4.3
4.	MIN. PRESSURE REQUIRED	PSI	20.0
	TOTAL LOSSES	PSI	24.3
5.	MIN. STREET PRESSURE	PSI	65.0
7.	PRESSURE AVAILABLE FOR FRICTION	PSI	40.7
8.	ACTUAL LENGTH OF SYSTEM	FT	458
9.	DEVELOPED LENGTH (130% OF ITEM 8)	FT	595.4
10.	AVERAGE PRESSURE DROP	PSI/100FT	6.8

PEX PIPE SIZING CHART

FOR VELOCITY OF 10FPS (CW) AND 8FPS(HW); PRESSURE LOSS PER 100FT IN PSI=7.0

PIPE SIZE	COLD WATER		HOT WATER	
	TANK FU	GPM	FU	GPM
1/2"	1	2.0	1	2.2
3/4"	6	5.1	6	5.7
1"	13	10.3	15	11.2
1-1/4"	25	17.6	28	19.3
1-1/2"	48	27.6	54	30.3
2"	160	57.1	134	51.9

BASED ON UPONOR AQUAPEX PRESSURE LOSS TABLES IN CH 4 OF THE PLUMBING DESIGN ASSISTANCE MANUAL

COPPER TYPE L PIPE SIZING CHART

FOR VELOCITY OF 8FPS (CW) AND 5FPS(HW); PRESSURE LOSS PER 100FT IN PSI=7.0

PIPE SIZE	COLD WATER			HOT WATER	
	TANK FU	F.V. FU	GPM	TANK FU	GPM
1/2"	2	-	2.5	2	2.5
3/4"	8	-	7	8	7
1"	21	-	15	16	12
1 1/4"	46	10	27	28	19
1 1/2"	99	33	43	46	27
2"	254	132	76	119	48
2 1/2"	455	329	115	245	74
3"	719	666	165	406	105
3 1/2"	1091	1091	220	585	140
4"	1668	1668	290	840	185

BASED ON CHART A 105.1(1) OF APPENDIX A IN THE CALIFORNIA PLUMBING CODE(CPC2022)

PIPING SYMBOLS

SYMBOL	MEANING
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	DOMESTIC H.W. CIRCULATING
	SANITARY SEWER
	VENT PIPING
	STORM DRAIN PIPING
	GREASE WASTE
G	GAS
CD	CONDENSATE DRAIN

SYMBOL	MEANING
⊡	FLOOR SINK
⊖	FLOOR CLEANOUT
⊩—	WALL CLEANOUT
◍	FLOOR DRAIN
	GAS COCK
TUB-1	PLUMBING FIXTURE
	CONNECT TO EXISTING
⋈	SHUT-OFF VALVE
	RECIRCULATION PUMP
—]	PIPE CAP
	PIPE ELBOW DOWN
—○	PIPE ELBOW UP

FIXTURE UNIT CALCULATIONS FOR BARN

FIXTURE TYPE	QTY	DOMESTIC WATER				DRAINAGE	
		FIXTURE DEMAND	HOT DEMAND	TOTAL WATER DEMAND (WSFU)	TOTAL HOT WATER DEMAND	DFU	TOTAL
WATER CLOSET, FLUSH TANK	1	3.0	0.0	3.0	0.0	4	4
LAVATORY	1	1.0	1.0	1.0	1.0	1	1
HOSE BIBB	1	2.5	0.0	2.5	0.0	1	1
TOTAL FIXTURE UNITS				6.5	1.0		6
EQUIVALENT WATER DEMAND IN GPM				4	2		
REQUIRED MINIMUM PIPE SIZE				3/4"	1/2"		2"

FIXTURE UNIT CALCULATIONS FOR MANUFACTURED HOUSES (3)

FIXTURE TYPE	QTY	DOMESTIC WATER							DRAINAGE	
		COLD WATER FIXTURE UNITS (CWFU)	HOT WATER FIXTURE UNITS (HWFU)	75% COLD WATER FIXTURE DEMAND	75% HOT WATER FIXTURE DEMAND	TOTAL COLD WATER DEMAND (CWFU)	75% TOTAL COLD WATER DEMAND (CWFU)	75% TOTAL HOT WATER DEMAND (HWFU)	DRAINAGE FIXTURE UNITS (DFU)	TOTAL (DFU)
WATER CLOSET, TANK TYPE	2	2.5	0.0	-	0.0	5.0	5.0	0.0	3	6
BATHTUB	2	4.0	4.0	3.0	3.0	8.0	6.0	6.0	2	4
LAVATORY	2	1.0	1.0	0.75	0.75	2.0	1.5	1.5	1	2
DISHWASHER	1	1.5	1.5	-	1.5	1.5	0.0	1.5	0	0
CLOTHES WASHER	1	4.0	4.0	3.0	3.0	4.0	3.0	3.0	3	3
KITCHEN SINK	1	1.5	1.5	1.125	1.125	1.5	1.125	1.125	2	2
HOSE BIBB	1	2.5	0.0	-	0.0	2.5	2.5	0.0	0	0
HOSE BIBB (EACH ADDITIONAL)	2	1.0	0.0	-	0.0	2.0	2.0	0.0	0	0
TOTAL FIXTURE UNITS						24.5	19.125	13.125		17
EQUIVALENT WATER DEMAND IN GPM						18	14	11		
REQUIRED MINIMUM PIPE SIZE						1-1/4"	1-1/4"	1"		3"

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

REGISTERED PROFESSIONAL ENGINEER
GANGYI ZHOU
No. M34279
Exp.12-31-2024
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MECHANICAL
STATE OF CALIFORNIA

G MEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
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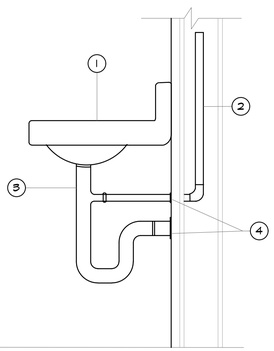
Tel: 949-267-9095

PROJECT NAME: CHEN FARM
2740 FERGUSON ROAD
GILROY, CA 95020

SHEET TITLE: PLUMBING GENERAL NOTES

DRAWN: GMEP
CHECKED: GMEP
DATE: 08/04/23
SCALE: AS NOTED
JOB NO.: 23-598
SHEET: P-1.0

PRIMARY CONDENSATE TERMINATION DETAIL



KEYED NOTES:

1. LAVATORY OR SINK
2. 3/4" CONDENSATE PIPE
3. TAILPIECE
4. ESCUTCHEON PLATE

NOTE
SEE ARCHITECT'S DRAWING FOR ACCESSIBLE REQUIREMENTS

SCALE:NONE

1

TYPICAL CONDENSATE PIPE DETAIL

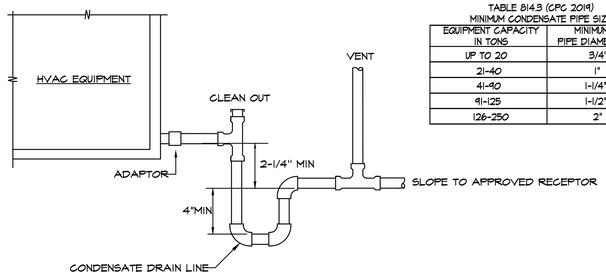


TABLE 814.3 (CPC 2019)
MINIMUM CONDENSATE PIPE SIZE

EQUIPMENT CAPACITY IN TONS	MINIMUM PIPE DIAMETER
UP TO 20	3/4"
21-40	1"
41-90	1-1/4"
91-125	1-1/2"
126-250	2"

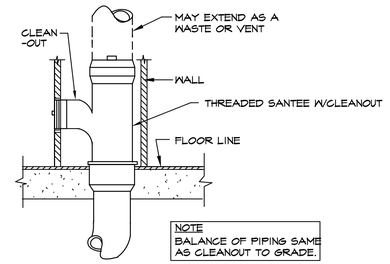
NOTES:

1. ALL INTERIOR CONDENSATE DRAIN PIPING SHALL BE INSULATED
2. SLOPE ALL CONDENSATE DRAIN LINES AT 1%.
3. ROUTE CONDENSATE DRAIN TO TAILPIECE OF NEAREST LAVATORY OR OTHER APPROVED LOCATION
4. ROUTE SECONDARY CONDENSATE DRAIN TO EXTERIOR OR PROVIDE A SHUT-OFF FLOAT SWITCH

SCALE:NONE

2

TYPICAL WALL CLEANOUT

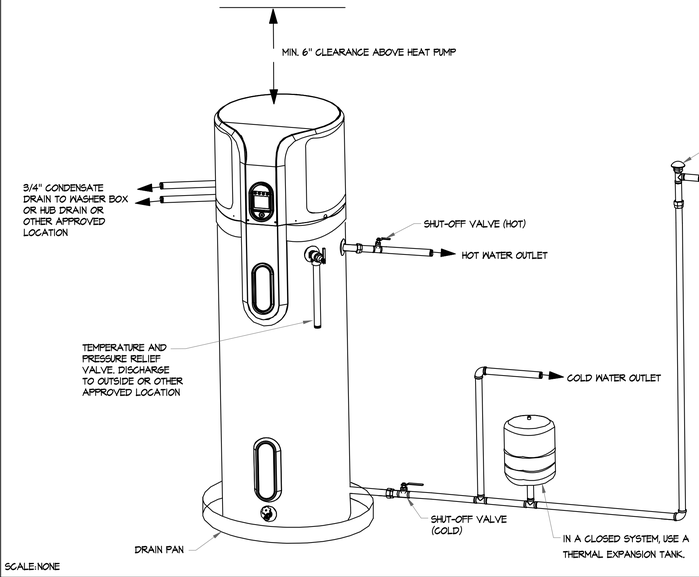


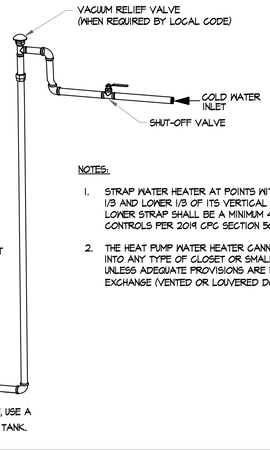
NOTE
BALANCE OF PIPING SAME AS CLEANOUT TO GRADE.

SCALE:NONE

3

HEAT PUMP WATER HEATER DETAIL





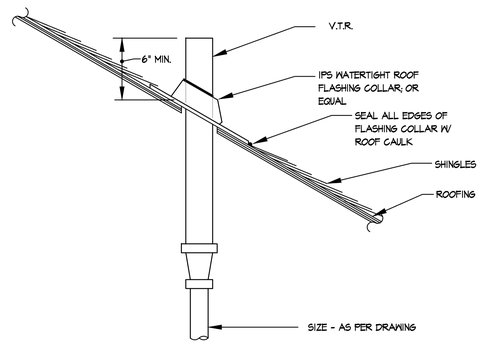
NOTES:

1. STRAP WATER HEATER AT POINTS WITHIN THE UPPER 1/3 AND LOWER 1/3 OF ITS VERTICAL DIMENSION. THE LOWER STRAP SHALL BE A MINIMUM 4" ABOVE CONTROLS PER 2019 CPC SECTION 507.2.
2. THE HEAT PUMP WATER HEATER CANNOT BE PLACED INTO ANY TYPE OF CLOSET OR SMALL ENCLOSURE, UNLESS ADEQUATE PROVISIONS ARE MADE FOR AIR EXCHANGE (VENTED OR LOUVERED DOORS, ETC.)

SCALE:NONE

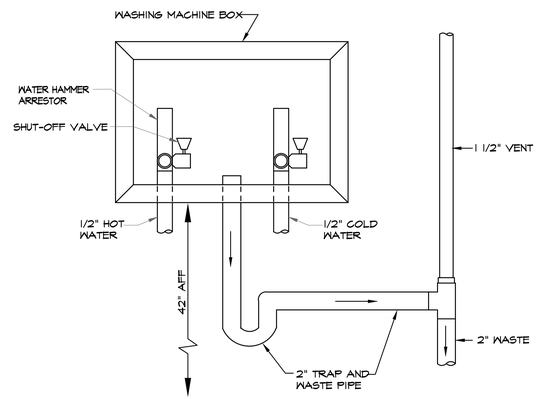
4

PLUMBING VENT THROUGH ROOF



5

TYPICAL WASHING MACHINE BOX



SCALE:NONE

6

REVISIONS

NO.	DATE	DESCRIPTION

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PROJECT NAME:
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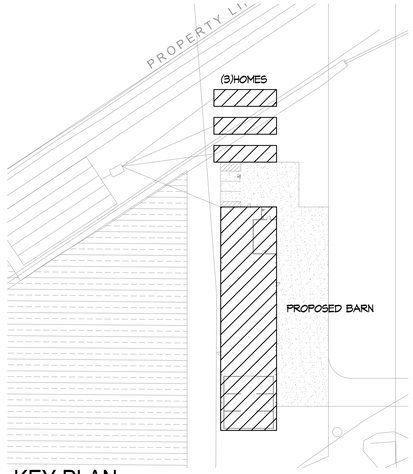
GILROY, CA 95020

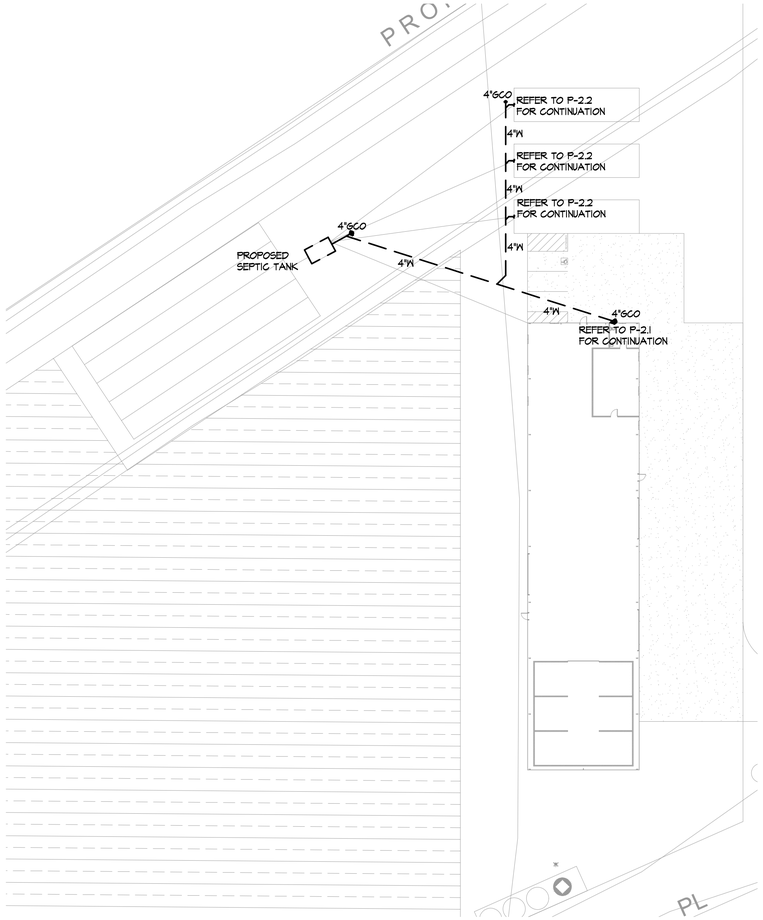
SHEET TITLE
PLUMBING DETAILS

DRAWN: GMEP
CHECKED: GMEP
DATE: 08/04/23
SCALE: AS NOTED
JOB NO.: 23-598
SHEET: P-1.1



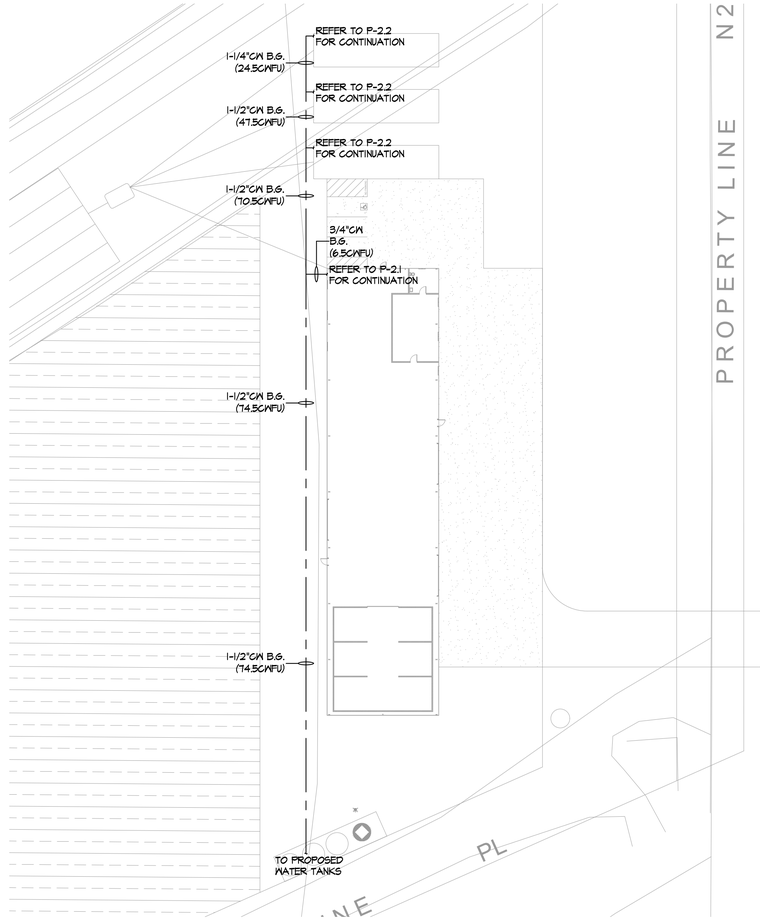
KEY PLAN

SCALE: NONE



PLUMBING - SITE PLAN - WASTE

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



PLUMBING - SITE PLAN - COLD WATER

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

REVISIONS		
NO.	DATE	DESCRIPTION

SEAL:

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PROJECT NAME:

CHEN FARM

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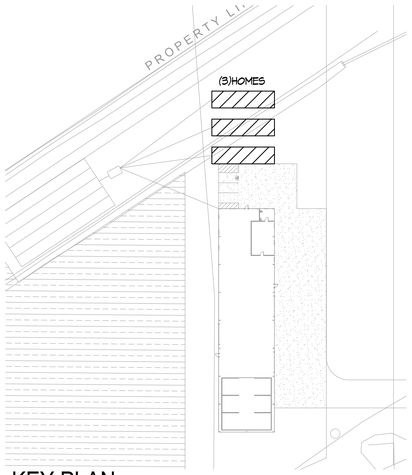
GILROY, CA 95020

SHEET TITLE

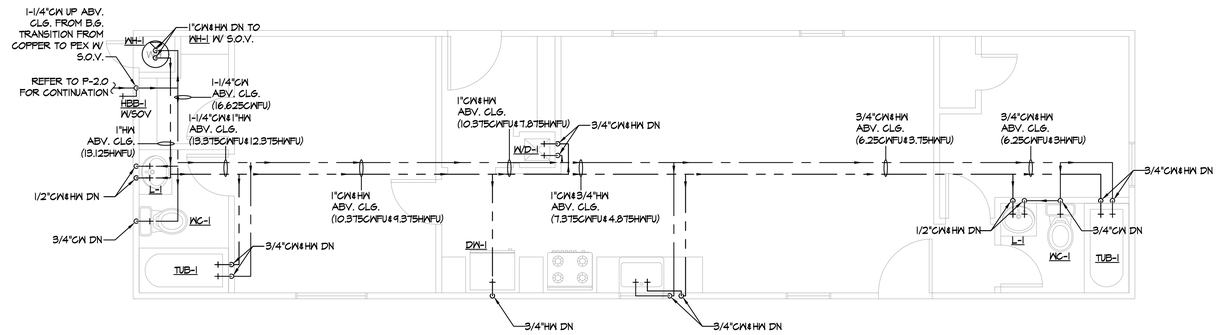
PLUMBING - SITE PLAN
COLD WATER
WASTE

DRAWN	GMEP
CHECKED	GMEP
DATE	08/04/23
SCALE	AS NOTED
JOB NO.	23-598
SHEET	P-2.0



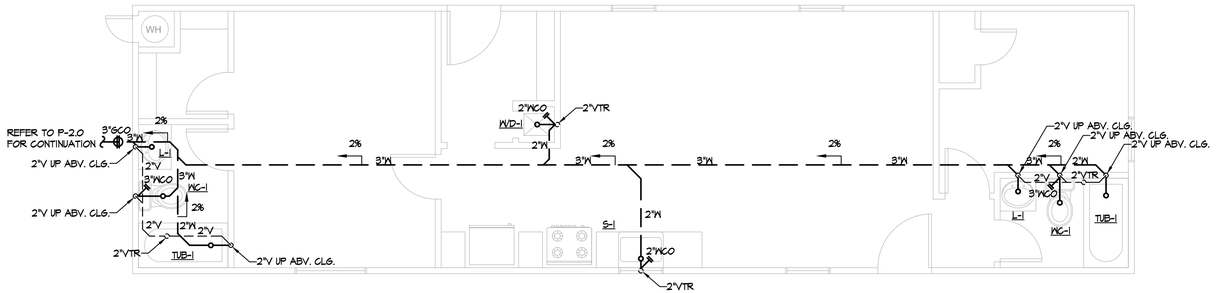
KEY PLAN

SCALE:NONE



PLUMBING - MANUFACTURED HOME (3) - COLD/HOT WATER

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



PLUMBING - MANUFACTURED HOME (3) - WASTE & VENT

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

REVISIONS		
NO.	DATE	DESCRIPTION

SEAL:

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PROJECT NAME:

CHEN FARM

2740 FERGUSON ROAD
GILROY, CA 95020

SHEET TITLE

PLUMBING - HOMES
COLD/HOT WATER
WASTE & VENT

DRAWN	GMEP
CHECKED	GMEP
DATE	08/04/23
SCALE	AS NOTED
JOB NO.	23-598
SHEET	P-2.2