

**CITY OF ST. HELENA
PLANNING DEPARTMENT 1480 MAIN STREET- ST. HELENA, CA 94574
PLANNING COMMISSION**

SEPTEMBER 6, 2016

AGENDA ITEM: 8

FILE NUMBER: PL16-053

SUBJECT: Request by Jeff Zimmerman on behalf of William J. Koman for Design Review approval to make minor design changes to a previously approved (#PL15-059) new single-family home, second unit and garage on the property located at 603 Fulton Lane in the A-20: Twenty Acre Agriculture district.

PREPARED BY: Aaron Hecock, Senior Planner

REVIEWED BY: Noah Housh, Planning Director

APPLICATION FILED: 07/13/16

ACCEPTED AS COMPLETE: 08/18/16

LOCATION OF PROPERTY: 603 Fulton Lane

APN: TBD / 009-050-001

GENERAL PLAN/ZONING: Agriculture/A-20: Twenty Acre Agriculture

APPLICANT: Jeff Zimmerman

PHONE: (415) 289-0660

PROJECT DESCRIPTION

As detailed on sheet 6 of the revised plan set, proposed changes to the previously approved new home include the following:

- *The garage moved forward 5 feet and the guest suite moved 2 feet farther from the side property line;*
- *Square footage was removed from the main residence on the left side and on the front right;*
- *The front pantry was slightly enlarged and square footage was added to the master suite and master bath;*
- *A new approximately 280-sf den was added to the interior of the home; and*
- *A new 117-sf accessory structure was added to the rear of the property.*

In total, 615-sf is being removed from the previous submittal and 662-sf is being added for a 47-sf net gain in square footage. In addition to the floor plan changes, several exterior design and material changes are also proposed, these include: the addition of transparent lattice to the front gable of the home; the roof color has been darkened; the garage siding went from metal to limestone masonry; and several other minor changes were made to the rear and courtyard of the home as detailed in the plans.

ANALYSIS

****Please see the previously prepared staff report attached for additional technical analysis.***

CEQA

The project is exempt from the requirements of CEQA pursuant to Section 15303, which exempts the construction or conversion of small structures including single-family residences, garages, pools, etc.

GENERAL PLAN/ZONING

The property has a General Plan designation of "Agricultural" and a Zoning Designation of A-20: Twenty-Acre Agriculture. This designation provides for agricultural and winery uses with restricted single family residential uses. Pursuant to §17.20.060(B) of the St. Helena Municipal Code (SHMC), for lots less than two acres in area, the development regulations and floor area ratio shall be the same as those for the LR:1A: Low Density Residential One Acre minimum zoning district (Chapter 17.36). As the subject property is ½ acre in size, the LR:1A development standards apply.

As far as the Floor Area Ratio (F.A.R.) is concerned, a ½ acre parcel has a maximum F.A.R. of .205 which would allow a maximum gross floor area of 4,465-sf (excluding any applicable F.A.R. exemptions). The applicant is proposing an approximately 3,848-sf home with a 370-sf guest cottage and 439-sf garage (4,657-sf total). With the 200-sf F.A.R. exemption for covered parking, the project's gross square footage is 4,457-sf which is approximately 8-sf less than the maximum permitted. The garage is setback approximately 20' from the front property line and the guest unit is approximately 25' from the front property line while a majority of the main structure is setback approximately 57' from the front property line. The project meets all the development standards required in the LR:1A district.

DESIGN REVIEW

The purpose of design review is to, among other things, promote the qualities that bring value to the community and foster attractiveness and functional utility of the community as a place to live and work. The following design criteria should be considered by the Planning Commission in review of this application (Zoning Ordinance Section 17.164.030):

1. Consistency and compatibility with applicable elements of the general plan;
2. Compatibility of design with the immediate environment of the site;
3. Relationship of the design to the site;
4. Determination that the design is compatible in areas considered by the board as having a unified design or historical character;
5. Whether the design promotes harmonious transition in scale and character in areas between different designated land uses;
6. Compatibility with future construction both on and off the site;
7. Whether the architectural design of structures and their materials and colors are appropriate to the function of the project;
8. Whether the planning and siting of the various functions and buildings on the site create an internal sense of order and provide a desirable environment for occupants, visitors and the general community;

9. Whether the amount and arrangement of open space and landscaping are appropriate to the design and the function of the structures;
10. Whether sufficient ancillary functions are provided to support the main functions of the project and whether they are compatible with the project's design concept;
11. Whether access to the property and circulation systems are safe and convenient for pedestrians, cyclists and vehicles;
12. Whether natural features are appropriately preserved and integrated with the project;
13. Whether the materials, textures, colors and details of construction are an appropriate expression of its design concept and function and whether they are compatible with the adjacent and neighboring structure and functions;
14. In areas considered by the board as having a unified design character or historical character, whether the design is compatible with such character;
15. Whether the landscape design concept for the site, as shown by the relationship of plant masses, open space, scale, plant forms and foliage textures and colors create a desirable and functional environment and whether the landscape concept depicts an appropriate unity with the various buildings on the site;
16. Whether plant material is suitable and adaptable to the site, capable of being properly maintained on the site, and is of a variety which is suitable to the climate of St. Helena;
17. Whether sustainability and climate protection are promoted through the use of green building practices such as appropriate site/architectural design, use of green building materials, energy efficient systems and water efficient landscape materials.

The proposed home would be located near the center of the parcel and setback at greater distances than required from the front and rear property lines. While the proposed home is quite large, it is only one-story in height and is located in a rural area where large homes on larger than average parcels are common. There are no properties near the proposed project site that would be in anyway negatively affected by the development of the project at this location. For these reasons, staff believes that the proposed project is consistent with the required design review findings listed above.

CORRESPONDENCE

At the time of packet distribution staff had received no letters in support or opposition to this application.

STAFF RECOMMENDATION

Staff finds that the proposed changes in the project design are in character with the A-20 district and that they will not negatively affect surrounding properties or the rural character of Fulton Lane. Because of this staff concludes that the appropriate findings can be made and recommends that the Planning Commission:

1. The project is exempt from the requirements of CEQA pursuant to Section 15303, which exempts the construction or conversion of small structures including single-family residences, garages, pools, etc.
2. Accept the required findings and approve design review for the proposed design changes to the previously approved new single-family home at 603 Fulton Lane.

ATTACHMENTS

1. Resolution / Conditions of Approval
2. Applicant Description
3. Revised Plan Set
4. Previously Approved Application

**CITY OF ST. HELENA PLANNING COMMISSION
RESOLUTION
DESIGN REVIEW NO. PL16-053
GRANTED TO 603 FULTON LANE**

PROPERTY OWNER: William J. Koman

APN: TBD

Recitals

1. On April 19, 2016 the City of St. Helena Planning Commission granted Design Review approval to construct a new single-family home, second unit and garage on the property which would become 603 Fulton Lane pending Final Map approval.
2. On August 9, 2016 the St. Helena City Council approved the Final Parcel Map to subdivide 601 Fulton Lane into two parcels thereby creating the property known as 603 Fulton Lane.
3. This is a request by Jeff Zimmerman on behalf of William J. Koman for Design Review approval to make minor design changes to a previously approved (#PL15-059) new single-family home, second unit and garage on the property located at 603 Fulton Lane in the A-20: Twenty Acre Agriculture district.
4. The Planning Commission of the City of St. Helena, State of California, held a duly noticed public hearing on September 6, 2016 to consider the revised design review.

Resolution

- A. In making the findings in this Resolution, the Planning Commission relied upon and hereby incorporates by reference all of the documents referenced in this Resolution and the associated staff reports, City files for this matter, correspondence, presentations and other materials.
- B. The Planning Commission hereby finds that the project is exempt from the California Environmental Quality Act ("CEQA") pursuant to Section 15303, which exempts the construction or conversion of small structures including single-family residences, garages, pools, etc.
- C. The Planning Commission determines the project is in compliance with the following Design Review criteria of Municipal Code Section 17.164.030:
 1. *Consistency and compatibility with applicable elements of the general plan;*
 2. *Compatibility of design with the immediate environment of the site;*
 3. *Relationship of the design to the site;*
 4. *Determination that the design is compatible in areas considered by the board as having a unified design or historical character;*
 5. *Whether the design promotes harmonious transition in scale and character in areas between different designated land use;*
 6. *Compatibility with future construction both on and off the site;*
 7. *Whether the architectural design of structures and their materials and colors are appropriate to the function of the project;*

8. *Whether the planning and siting of the various functions and buildings on the site create an internal sense of order and provide a desirable environment for occupants, visitors and the general community;*
9. *Whether the amount and arrangement of open space and landscaping are appropriate to the design and the function of the structures;*
10. *Whether sufficient ancillary functions are provided to support the main functions of the project and whether they are compatible with the project's design concept;*
11. *Whether access to the property and circulation systems are safe and convenient for pedestrians, cyclists and vehicles;*
12. *Whether natural features are appropriately preserved and integrated with the project;*
13. *Whether the materials, textures, colors and details of construction are an appropriate expression of its design concept and function and whether they are compatible with the adjacent and neighboring structure and functions;*
14. *In areas considered by the board as having a unified design character or historical character, whether the design is compatible with such character;*
15. *Whether the landscape design concept for the site, as shown by the relationship of plant masses, open space, scale, plant forms and foliage textures and colors create a desirable and functional environment and whether the landscape concept depicts an appropriate unity with the various buildings on the site;*
16. *Whether plant material is suitable and adaptable to the site, capable of being properly maintained on the site, and is of a variety which is suitable to the climate of St. Helena;*
17. *Whether sustainability and climate protection are promoted through the use of green building practices such as appropriate site/architectural design, use of green building materials, energy efficient systems and water efficient landscape materials.*

Planning Department Conditions of Approval

- D. The Planning Commission approves design review for the above-described project with the following conditions of approval. The project shall be in conformance with all city ordinances, rules, regulations and policies in effect at the time of issuance of a building permit. The conditions noted below are particularly pertinent to this permit and shall not be construed to permit violation of other laws and policies not so listed.
 1. Design review approval shall be vested within one (1) year from the date of final action. A building permit for the use allowed under this approval shall have been obtained within one (1) year from the effective date of this action or the approval shall expire, provided however that the approval may be extended for up to two (2) one-year periods pursuant to the St. Helena Municipal Code, Section 17.08.130, Extension of Permits and Approvals. Any request for an extension of this approval shall be justified in writing and received by the Planning Department at least thirty (30) days prior to expiration.

2. The approvals shall not become effective until fourteen (14) calendar days after approval, providing that the action is not appealed by the City Council or any other interested party within that 14-day period.
3. All required fees, including planning fees, development impact fees, residential in-lieu housing fees, building fees, toilet retrofit fees, and St. Helena Unified School District fees shall be paid prior to issuance of a building permit. Fees shall be those in effect at the time of the issuance of the building permit.
4. In any action or proceeding to attack, challenge, invalidate, set aside, void or annul the City's approval of applicant's Project, in whole or in part, applicant shall defend, at its own expense and without any cost to the City, and with counsel acceptable to the City, and shall fully and completely indemnify and hold the City, its agents, officers, and employees harmless from and against any and all claims, causes of action, damages, costs, attorney's fees and liability of any kind, so long as the City reasonably promptly notifies the applicant of any such claim, action, or proceedings and the City cooperates fully in the defense of the action or proceedings.
5. Provided they are in general compliance with this approval, minor modifications may be approved by the Planning Director.
6. Pursuant to St. Helena Municipal Code Section 17.08.110, this permit shall run with the land and shall be binding upon all parties having any right, title or interest in the real property or any part thereof, their heirs, successors and assigns, and shall inure to their benefit and benefit of the City of St. Helena.
7. The primary purpose of this review is for compliance with the General Plan and Zoning Ordinance. The property owners or their designee shall be responsible for meeting with the Building Official, Fire Inspector and or Public Works Department to review compliance with Building Codes, Fire Codes and specific Public Works Standards including fire protection systems and any applicable accessibility standards of Title 24.
8. Construction shall be in compliance with plans submitted and reviewed by the Planning Commission on September 6, 2016, except as modified herein.
9. Exterior lighting shall be directed or shielded to prevent glare onto the public roadway or adjacent properties.
10. Property owners shall recognize that there exists a right to farm properties within the district and in the vicinity of the district. There is a good faith expectation that no complaints will occur regarding legal, normal agricultural activities on properties in the district or in the vicinity of the district. Such activities may include day or night disbursement of chemicals, and creation of dust, noise, or fumes.
11. To reduce disturbance of residents in the project vicinity, construction activities which generate noise that can be heard at the property line of any parcel of real property within the City limits shall be limited to 8:00 a.m. to 5:00 p.m. Monday through Saturday. Delivery of materials/equipment and cleaning and servicing of machines/equipment shall be limited to 7:00 a.m. to 6:00 p.m. Exceptions to these time restrictions may be granted by the Public Works Director for one of the following reasons: (1) inclement weather affecting work, (2) emergency work, or (3) other work,

if work and equipment will not create noise that may be unreasonably offensive to neighbors as to constitute a nuisance. The City Engineer must be notified and give approval in advance of such work. No construction activities shall occur on Sundays or federal or local holidays that generate noise that can be heard at the property line of any parcel of real property within the City limits.

12. No development shall be allowed within the designated 100 year flood zone.
13. The project shall comply with all housing allocation requirements per the City's Growth Management System at the time building permits are issued.

Public Works Department Conditions of Approval

14. Approval of this project shall be subject to the requirements of, and all improvements shall be designed and constructed in accordance with, the most current version at the time of improvement plan submittal, Caltrans Standards and Specifications, the City of St. Helena Municipal Code, the St. Helena Water and Sewer Standards, the St. Helena Street, Storm Drain and Sidewalk Standards, and all current federal, state and county codes governing such improvements.
15. The improvement plans shall include all grading, hardscape, landscape, drainage and utilities as shown on the conditionally approved Vesting Tentative Map package as well as those agreed to in public hearings and those required by the municipal codes in effect based on the vesting status of the map.
16. The developer shall construct all on and offsite improvements in accordance with improvement plans and supporting calculations and documentation that are prepared by a registered Civil Engineer and reviewed and approved by the City of St. Helena Public Works Department. The improvement plans shall include detailed designs for all on and off site utilities, water, sewer, grading, drainage, erosion control and paving.
17. For any improvements outside the existing building envelope, a grading and drainage plan showing topographic data, all easements, infrastructure onsite and directly adjoining, and an erosion control plan shall be submitted for review and approval by the City Engineer prior to the issuance of a building permit. If the project entails more than 50 cubic yards of soil disturbance, 10,000 square feet of disturbance area, a cut or fill of 3 feet or more, or alteration of any drainage pattern, a grading permit shall be required.
18. Drainage needs to be routed to prevent inundation of neighboring properties. Grading and/or site improvement plans shall show how 2-year and 10-year storm flows shall be infiltrated on site and/or diverted at the property lines to prevent inundation of neighboring properties.

19. Prepare and implement a Stormwater Control Plan as required by the Bay Area Stormwater Management Agencies Association (BASMAA) Post-Construction Manual, dated July 14, 2014.
20. Erosion and sediment control plans shall conform to the latest State and City codes at a minimum.
21. If the proposed/new landscaping involves an area greater than 500 square feet or rehabilitation of more than 2,500 square feet, the proposed landscaping shall comply with the State's Model Water Efficient Landscape Ordinance (MWELO).
22. The applicant shall incorporate water conservation practices into the proposed project per the Theoretical Water Use Report prepared by Delta Consulting and Engineering, dated April 8, 2016. Any and all non-conforming appliances and plumbing fixtures shall be removed from the premises. The water conservation requirements shall be replicated in full on the architectural plans. The water analysis shall be replicated on the building plans prior to building permit approval. Off-site retrofits are required, as determined by the Director of Public Works. All off-site retrofits shall be completed and provided to the City prior to building occupancy of any building.
23. The applicant shall install an approved backflow device behind the water meter prior to Certificate of Occupancy. Any new and modified existing water laterals, meters and backflow prevention devices shall be required and constructed in accordance with the current requirements of the City of St. Helena's Water Standards and the California Department of Health Standards. Existing meter boxes located within a driveway shall be retrofitted with a traffic-rated box. New laterals shall be located perpendicular to the water main and outside any driveway/drive aisle.
24. Remodels or new construction which requires fire sprinklers shall install an appropriately-sized water service with appropriate backflow and meter devices prior to Certificate of Occupancy. Fire system calculations shall be submitted with the Grading and Drainage Plan to verify fire service lateral and meter sizing. Deferred submittals are not accepted.
25. No construction may commence until adequate access to fire water supply is available to building sites as approved by the Fire Chief.
26. The applicant shall conform to Napa County Department of Environmental Management's regulations, policies & guidelines for the design/ construction of septic systems.
27. The applicant shall repair all public improvements that are damaged by the construction process in accordance with the City Water/Sewer/Street/Storm Drain/Sidewalk Standards prior to Certificate of Occupancy.

28. Existing streets being cut by new utility services will require edge grinding and an A.C. overlay per City standards, extent to be determined by the Public Works Department.
29. An encroachment permit shall be required for any work performed in the public right of way. Improvements on private shared roadways will require approval by all parties of ownership of the access easements.

Building Department Conditions of Approval

30. The applicant will be required to comply with the codes adopted at the time the applicant applies for a building permit. At this time the City of St. Helena utilizes the 2013 Title 24 codes.
31. When submitting plans for a building permit, the plans shall include all documentation listed on the building permit application checklist.
32. The applicant shall provide a construction waste management plan with the building permit application.
33. The plans for construction shall include a checklist for compliance with the California Green Buildings Standards Code, mandatory measures. Provide a reference on the checklist indicating where the mandatory measures can be found on the plans.
34. When submitting plans, the title page shall include all information referenced on the building permit application checklist Title Page requirements.
35. Building Permit application materials and plans shall include any documentation pertaining to special loads applicable to the design and the specified section of the code that addresses the condition; special inspections for any systems or components requiring special inspection; requirements for seismic resistance; and a complete list of deferred submittals at time of application. Any deferral of the required submittal items shall have prior approval of the Building Official however deferral of fire sprinkler design is not allowed.

I HEREBY CERTIFY that the foregoing design review was duly and regularly approved by the Planning Commission of the City of St. Helena at a regular meeting of said Planning Commission held on September 6, 2016 by the following roll call vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED:

Grace Kistner
Chair, Planning Commission

ATTEST:

Noah Housh
Planning Director



St Helena Planning Commission

revisiting 603 Fulton Lane

architecture
planning
development

This home, 603 Fulton Lane, previously approved by your board, now has a real Owner, the Koman's. They are hoping to add a few personal touches and make some minor refinements to better fit their needs. I hope you find our alterations to be an improvement of the overall design and as the architect, we relished the opportunity to re-visit this home and feel its only gotten better.

Sausalito
100 Gate 6 Road
Sausalito CA 94965
Tel: 415 289 0660

The changes are minor and I will attempt to lay them out for your review. Please start on Sht. 6 of the revised submission:

Sonoma
1707 Denmark Street
Sonoma CA 95476
Tel: 707 933 0442
www.zmanarch.com

This plan quickly illustrates the proposed changes. The red color shows areas to be removed, where blue shows where additions are to be made.

1. Starting on the bottom of the Sht. 6; the garage moved towards the street, five ft. The Guest Suite moved away from the adjacent side property line by two ft. The areas remain unchanged.
2. Moving up the plan from Guest Suite, the building was trimmed significantly in length and width, from the backside of Living, up along side from Office to Master Bath. See the red "L" shape.
3. Both the Master Bath and Bedroom were added to, blue rectangle along the rear.
4. Moving to the right rear, an Accessory Bldg was added. Totaling 117 sqft (under 120 max).
5. A den was added w/in the courtyard, in blue. This is the big adjustment to the original submittal, placed where it can't be seen. This new Den is the blue box above Family Room.
6. Just below the new den, areas were swapped in the area of the Pantry and Utility Rooms.

Overall net gain is 47 sqft. The building still complies at 4,457 sqft w/an allowable area of 4,459 sqft. for this site.

Now turn to Sheet 3, the top view is new, bottom view was previously approved. Note the major change here lies in the center of the composition, where the addition of a transparent lattice form softens the white clapboard entry gable. A comment from the public following the presentation, complementing our design and asking if we might try to soften the white gable entry gable form. We took note, made changes and we feel the addition of the transparent lattice gable achieves what the comment was addressing and improves the buildings presence along Fulton Lane.

In other changes, the roof color was darkened to be less reflective and the garage siding was changed from Metal siding, to a Limestone masonry finish. Sht 8 shows the garage change more clearly.

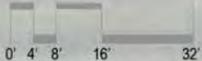
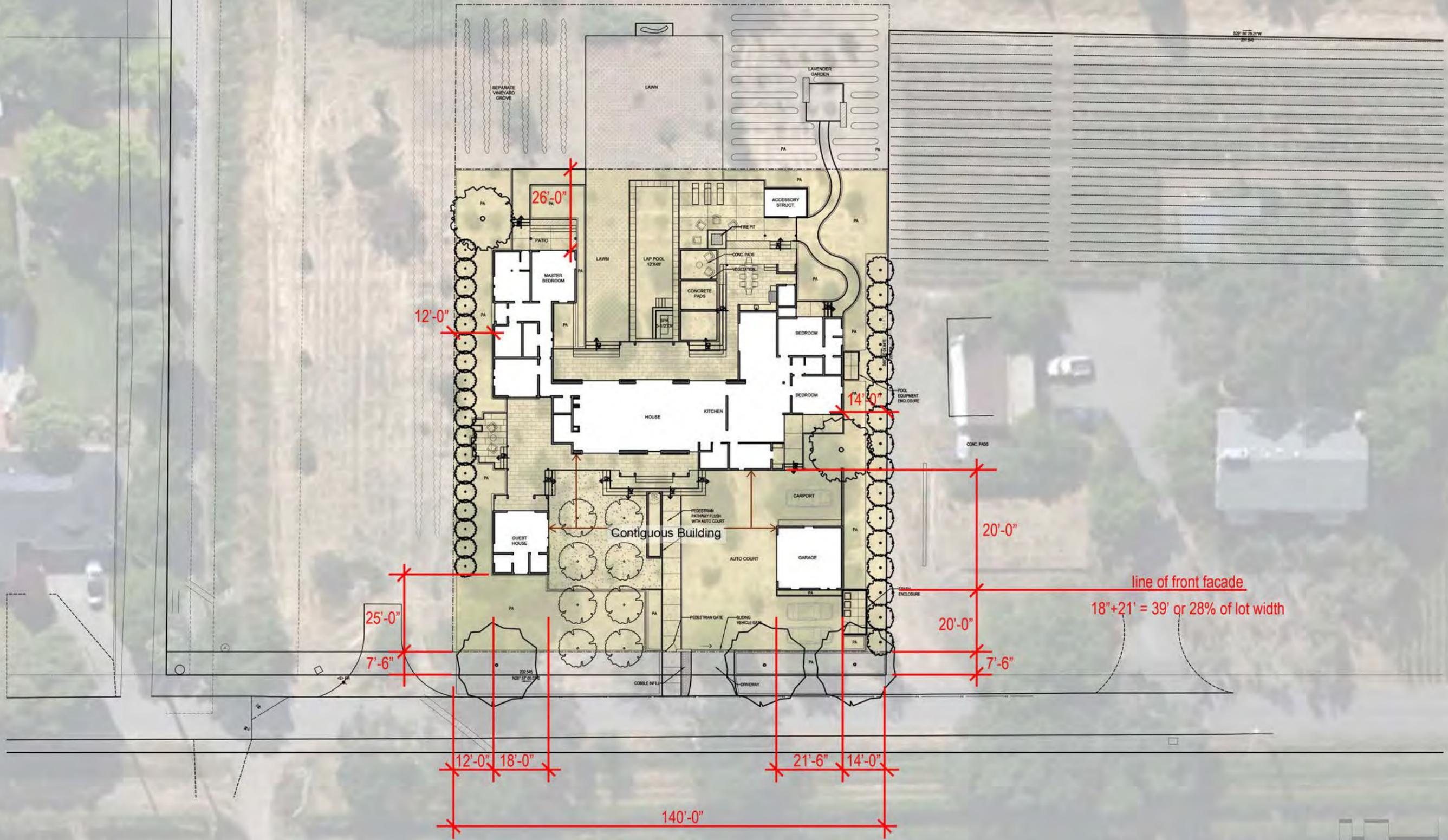
Sheet 4, illustrates minor revisions to the rear of the building. The rear gable was simplified, pulling away from the rear overhang/porch. The Master Bedroom on the right has a smaller window fronting the courtyard/pool area and the pool has been re-oriented 90 degrees aligning now on axis with the entry and rear gables.

We feel that the bldg. has been improved w/these minor tweaks and that the added area is concentrated to the rear of the property and virtually hidden to public view.

Thanks, Jeff Zimmerman



Not To Scale





New Street Frontage Perspective -Facing Southeast-



Previous Street Frontage Perspective -Facing Southeast-



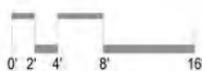
New Back Patio Perspective -Facing Northwest-



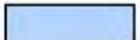
Previous Back Patio Perspective -Facing Northwest-

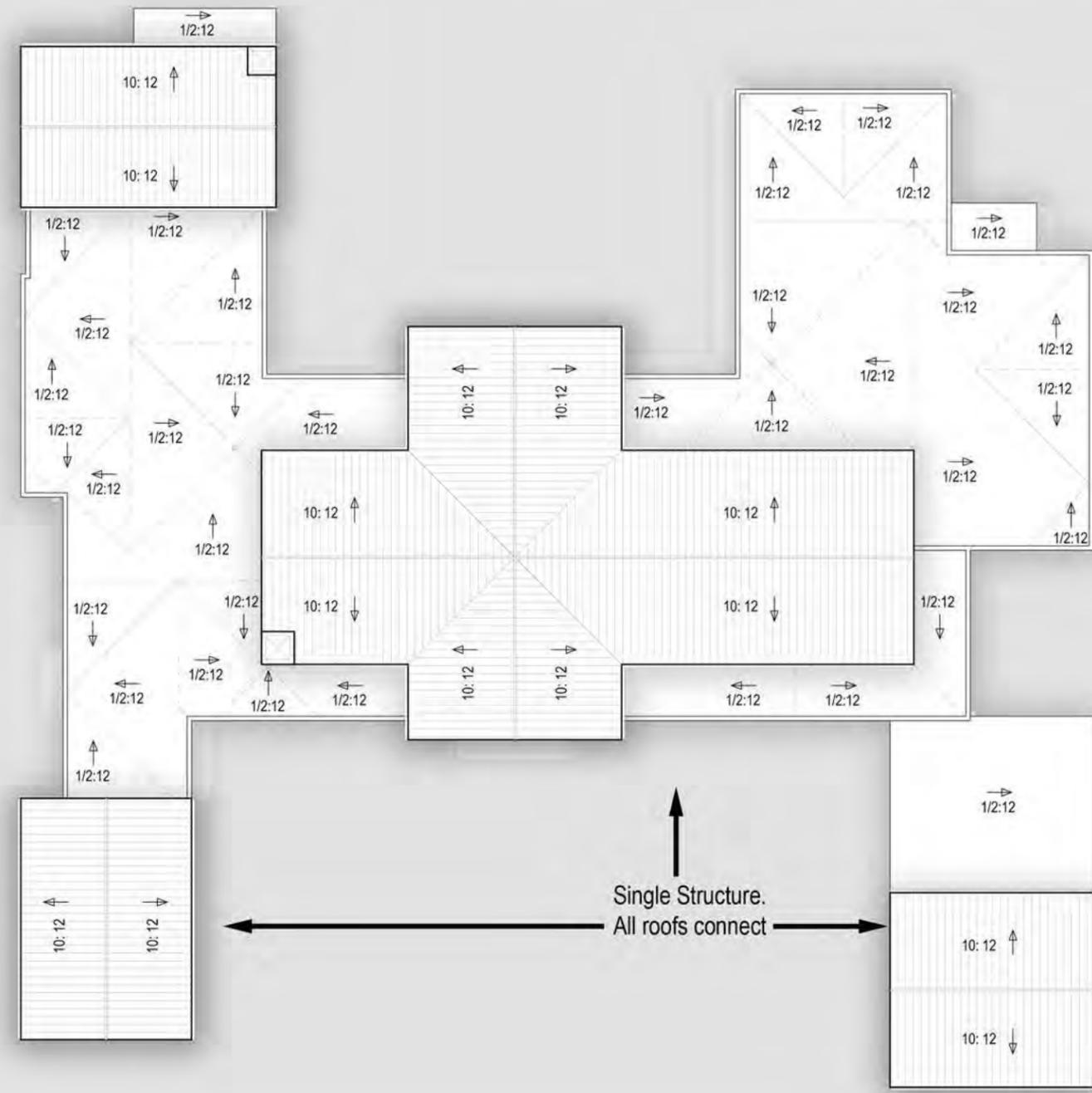
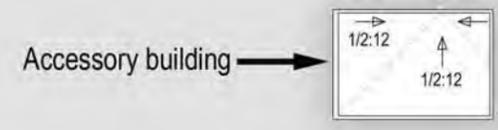


SITE + BUILDING DATA		
Site Area	21,780 sqft	0.5 AC
Zoning	Low density residential (LR-1A) Part of A - 20 Lot	
Allowable FAR by Zoning - 35%	7,623 sqft	
Allowable FAR by Zoning Ch (based on Site Area)	4,459 sqft	
	21,780 sqft (site) x0.205	
Conditioned Building Area	4,218 sqft	
Un-Conditioned Building Area	439 sqft	
Garage over 200 sqft exemption	minus 200 sqft	
TOTAL FAR APPLYING CODE	4,457sqft	



BUILDING FOOTPRINT

	sq. ft. removed from previous submittal 615 sqft
	sq. ft. added from previous submittal 662 sqft + accessory building (<120 sqft)
	net change +47 sqft





northeast (private drive) elevation



southeast (rear yard) elevation

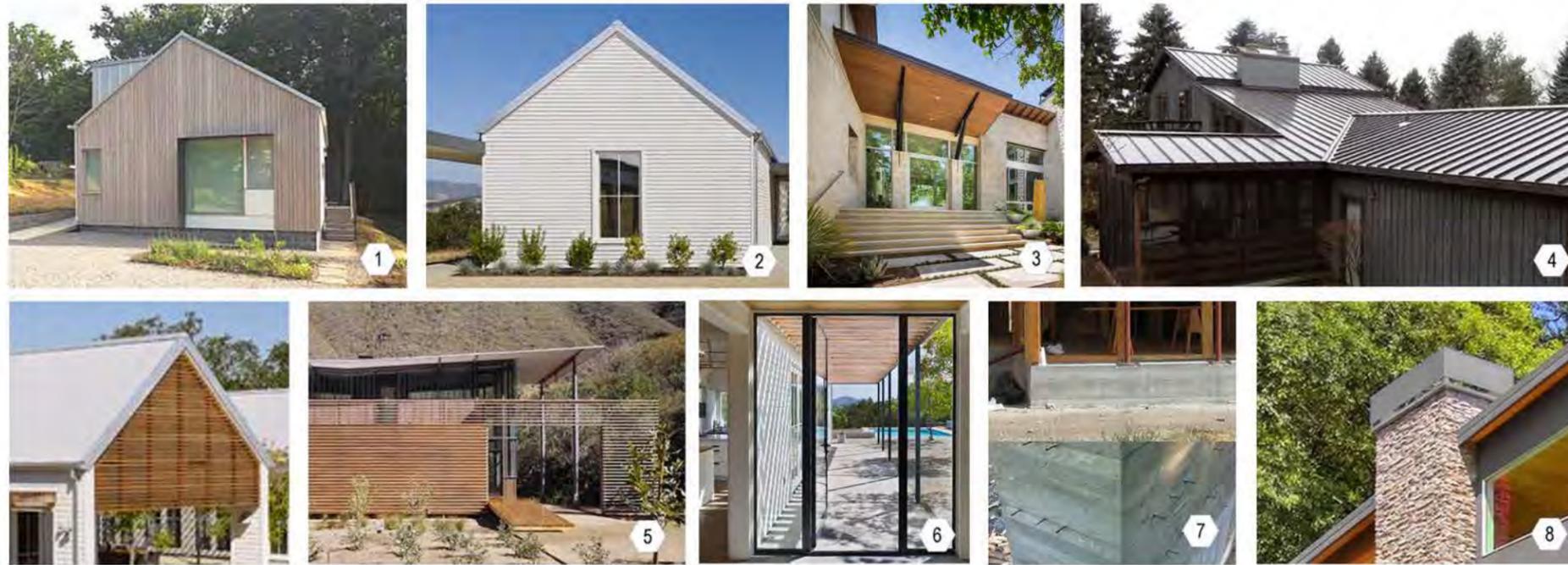


southwest (side yard) elevation



northwest (streetside and entry) elevation

- MAJOR EXTERIOR MATERIALS**
- 4x vertical natural cedar siding (bleaching oil stain) 1
 - 8" horizontal shiplap siding (white) 2
 - cut limestone veneer siding 3
 - standing seam metal roof w kynar pvdf coating (dark bronze) 4
 - cedar screening over frame (bleaching oil stain) 5
 - black anodized aluminum windows 6
 - board form concrete foundation walls where exposed 7
 - chimney shroud to match roofing 8



living volume section - northeast



living volume section - southwest

- MAJOR EXTERIOR MATERIALS**
- 1 4x vertical natural cedar siding (bleaching oil stain)
 - 2 8" horizontal shiplap siding (white)
 - 3 cut limestone veneer siding
 - 4 standing seam metal roof w kynar pvdf coating (dark bronze)
 - 5 cedar screening over frame (bleaching oil stain)
 - 6 black anodized aluminum windows
 - 7 board form concrete foundation walls where exposed
 - 8 chimney shroud to match roofing



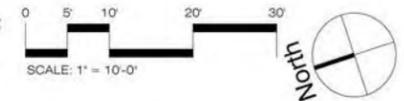
603 FULTON LANE
 603 FULTON LANE, ST. HELENA,
 CALIFORNIA, 94574

Date: 07-07-16 Issue: Design Review

SITE PLAN

Drawn by: RP
 Checked by: JM

L0.0



FULTON AVE.

LEGEND

- | | | | | |
|---|---|---|-----|--|
| 1 | ⊕ | PATH LIGHT,
BEGA, Model# B77237, Bronze color,
3.4 Watt LED | -G- | NATURAL GAS LINE FROM
HOUSE |
| 2 | ⊕ | WALL LIGHT,
W.A.C. Lighting-Model: #WL-LED100,
3000k, Bronze color | -E- | 120 VOLT ELECTRICAL LINE
IN CONDUIT |
| 3 | ⊕ | UNDERWATER LIGHT:
Atlantic, Model #SOLW2,
877.807.6637 | ⊕ | GFCI RECPTACLE - Wall
mounted |
| 4 | — | IN-STEP LIGHT:
Diode LED wet blaze tape light w/low
profile aluminum channel and diffusing
cover | \$ | SWITCH LOCATION |
| | ⊕ | SPA/POOL LIGHT:
By contractor | | |

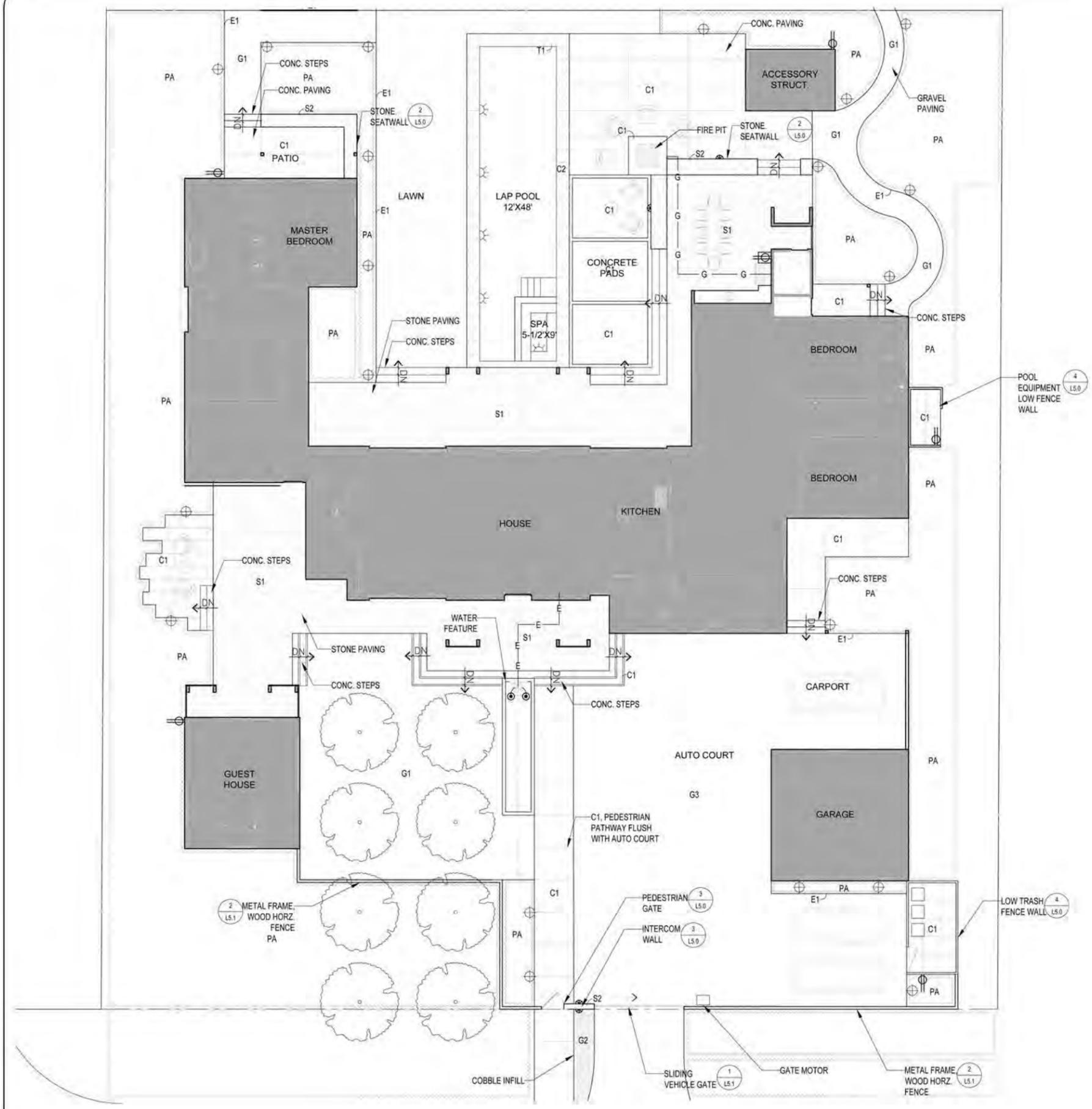
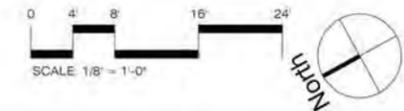
MATERIAL SCHEDULE

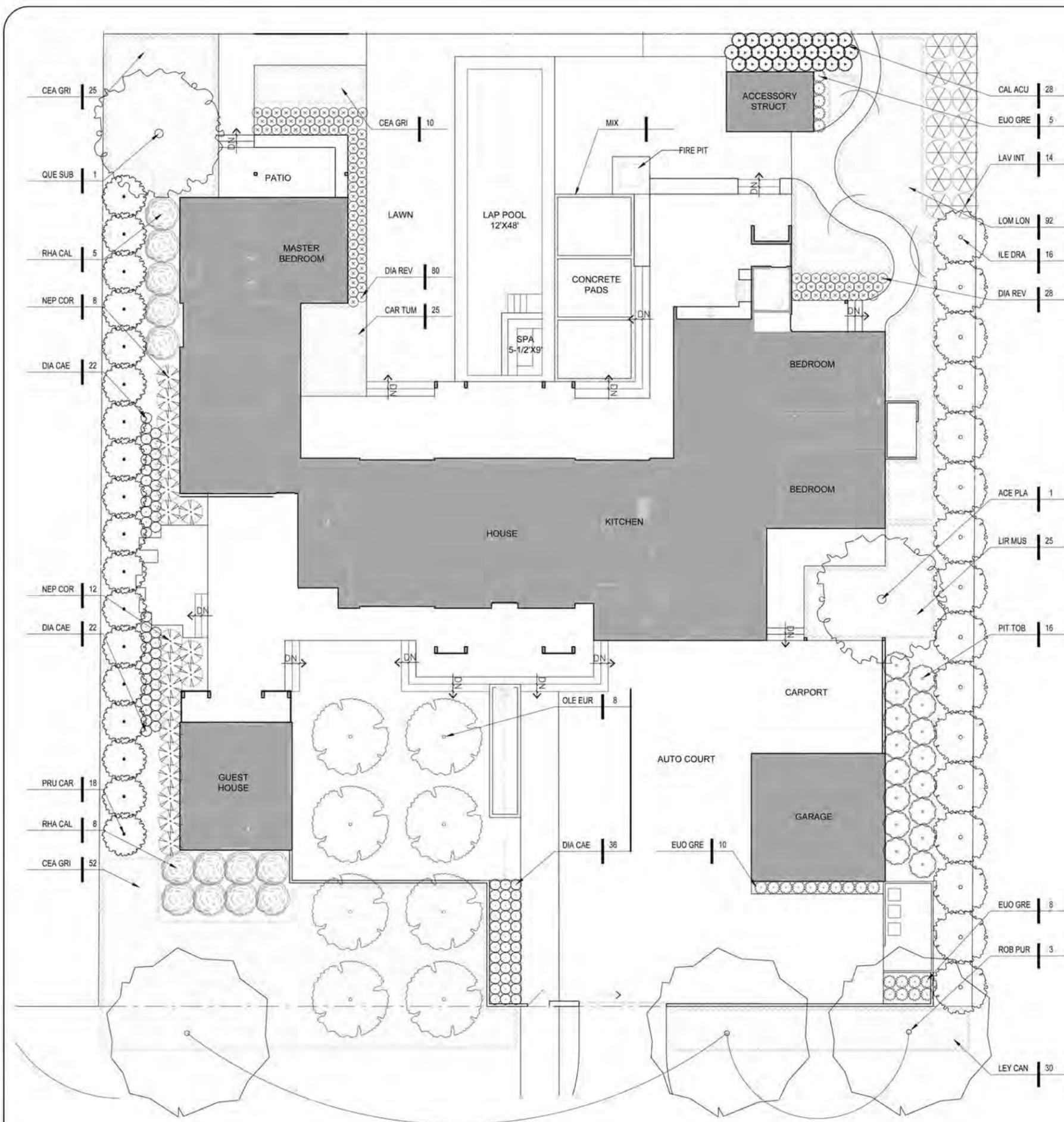
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|----|--|----|--|
| C1 | CONCRETE PAVING
Sand blast finish cast in place concrete.
Deep scores 1" deep, tooled to 3/8". Buff
Tone | G2 | COBBLE/GRAVEL
Tan decorative rounded pebbles. |
| C2 | POOL COPING / WALL CAP
Precast concrete w/ eased edges,
Color: Buff | G3 | CHIP SEAL-
Tan Color, See Civil |
| E1 | STEEL EDGING
By JD Russell (800)888-7425, or approved
equal 3/4" min thickness, 5" min depth | S1 | LIMESTONE PAVING
Haussman Natural Stone, Bordeaux Gris
Leather Finish, size 12"x24", Staggered
Pattern 510.782.5100 |
| G1 | GRAVEL- Tan color D.G. w/ integral
stabilizer over crushed rock base.
Contractor to submit samples of
decomposed granite and stabilizer cut sheet
to Landscape Architect for approval. | S2 | LIMESTONE VENEER
Horizontally Coarsed Stone Wall Veneer,
Warm EarthTone |
| | | T1 | POOL TILE- TBD |

NOTE:
Provide samples in field of all metal, stone, concrete, stains for Owner approval
prior to ordering & installation

ABBREVIATIONS

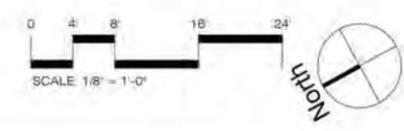
- | | |
|-----|---|
| ⊕ | DETAIL CALL-OUT
DETAIL #
DETAIL SHEET |
| ↔ | STEPS W/ DIRECTION
DOWN SHOWN |
| (N) | NEW |
| (E) | EXISTING |
| PA | PLANTING AREA |
| TYP | TYPICAL |





PLANTING LEGEND						
QTY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	COMMENTS	WUCOLS
TREES						
1	ACE PLA	ACER PLATANOIDES COLUMNARE	NORWAY MAPLE	36" BOX	STANDARD 10'X12'	M
0	OLE EUR	OLEA EUROPAEA SWAN HILL	SWAN HILL OLIVE	36" BOX	STANDARD	L
1	QUE SUB	QUERCUS SUBER	CORK OAK	36" BOX		L
3	ROB PUR	ROBINIA PURPLE ROSE	BLACK LOCUST	36" BOX	STANDARD	L
SHRUBS & PERENNIALS						
28	CAL ACU	CALAMAGROSTIS FLOJOBA	KARL FORESTER	5 GAL		L
25	CAR TUM	CAREX TUMULICOLA	FOOTHILL SEDGE	1 GAL		L
87	CEA GRI	CELANOTHUS GRISSEBUS HORIZONTALIS	CARMEL CREEPER	1 GAL		L
80	DIA CAE	DIANELLA CAERULEA	LITTLE BECCA FLAX LILY	5 GAL		M
108	DIA REV	DIANELLA REVOLUTA LITTLE REV	LITTLE REV FLAX LILY	1 GAL		L
23	ELO GRE	EUONYMUS GREEN SPIRE	GREEN SPIRE EUONYMUS	15 GAL		L
14	LAV GRO	LAVANDULA INTERMEDIA 'ROSSO'	LAVANDIN	5 GAL		L
16	ILE DRA	ILEX AQUIPERNYI 'MESCHICK DRAGON LADY'	ILEX DRAGON LADY	8&8		L
25	LIR MUS	LIRIOPE MUSCARI	LILY TURF	1 GAL		M
30	LEY CAN	LEYMUS CONDENSATUS 'CANYON PRINCE'	CANYON PRINCE WILD RYE	1 GAL		L
92	LOM LON	LOMANDRA LONGIFOLIA BREEZE	DWARF MAT RUSH	1 GAL		L
20	NEP COR	NEPHROLEPS CORDIFOLIA	SWORD FERN	1 GAL		M
16	PIT TOB	PITTOSPORUM TOBIRA 'VARIEGATA'	MOCK ORANGE	5 GAL		L
12	RHA CAL	RHAMNUS CALIFORNICA 'EVE CASE'	COFFEEBERRY	5 GAL		L
80 sqft. MIX						
	THY PSE	THYMUS PSEUDOLANUGINOSUS	WOOLY THYME	4" POT		L
	DYM MAR	DYMONDIA MARGARETAE	SILVER CARPET	4" POT		L
TURF						
945	S00	DWARF TALL & BONSAI FESCUE	PACIFIC S00 OR EQUAL		DROUGHT TOLERANT, LOW MAINTENANCE	M

NOTE
TOTAL PLANTING AREA USING DRIP/BUBBLERS IS 9198 SQ. FT.



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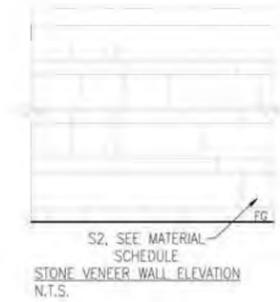
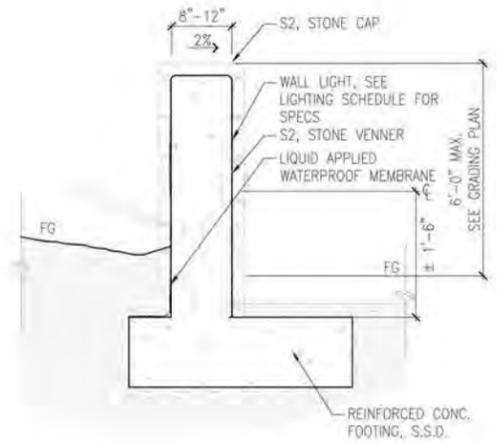
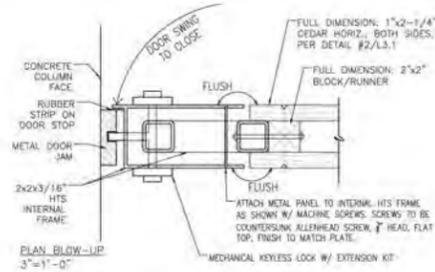
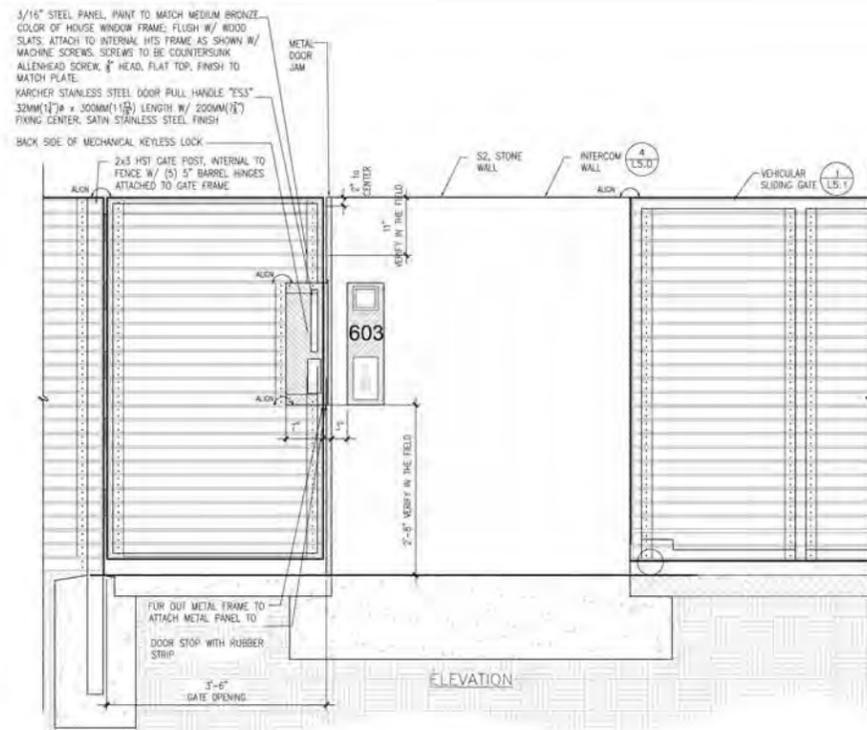
603 FULTON LANE
603 FULTON LANE, ST. HELENA,
CALIFORNIA, 94574

Date: 07-07-16 Issue: Design Review

PLANTING PLAN

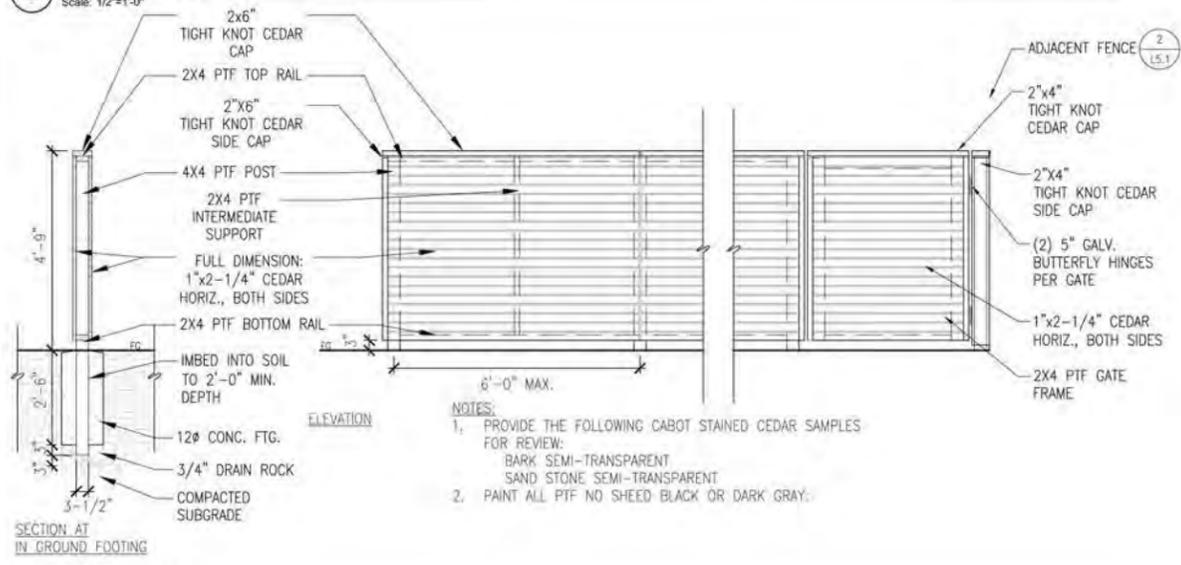
Drawn by: RP
Checked by: JM

L3.0

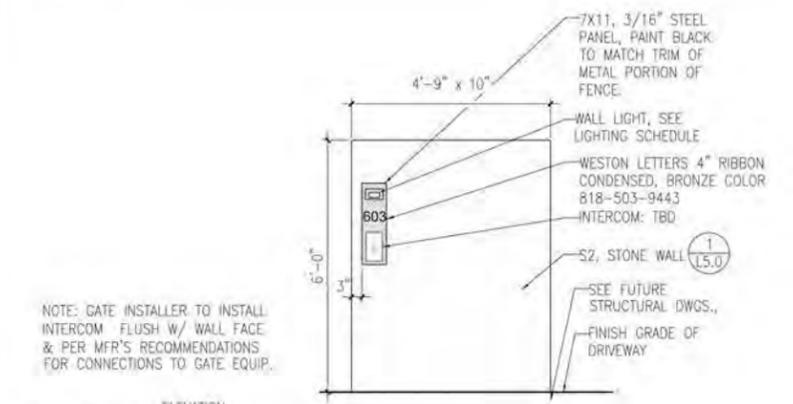


NOTES:
REVIEW LAYOUT IN THE FIELD FOR APPROVAL BY L.A.

3 PEDESTRIAN GATE
Scale: 1/2"=1'-0"

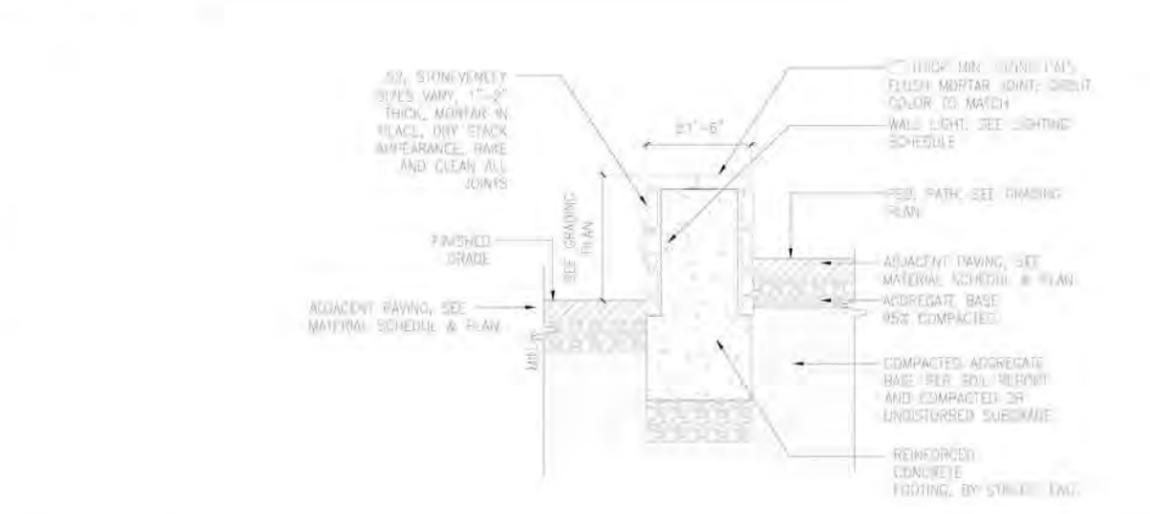


4 LOW FENCE
Scale: 1/2"=1'-0"



5 INTERCOM WALL
Scale: 1/2"=1'-0"

1 STONE WALL
Scale: 1"=1'-0"

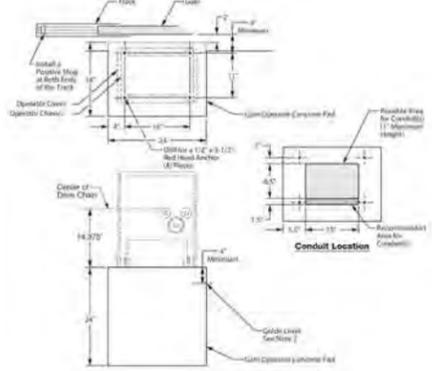


2 STONE SEATWALL
Scale: 1"=1'-0"

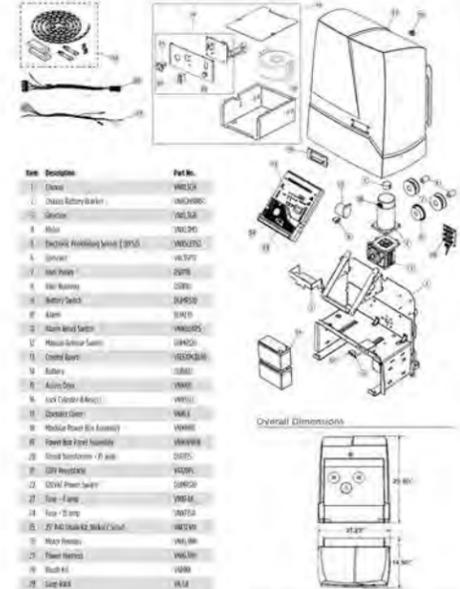
GATE OPERATOR INSTALLATION

Concrete Pad Option

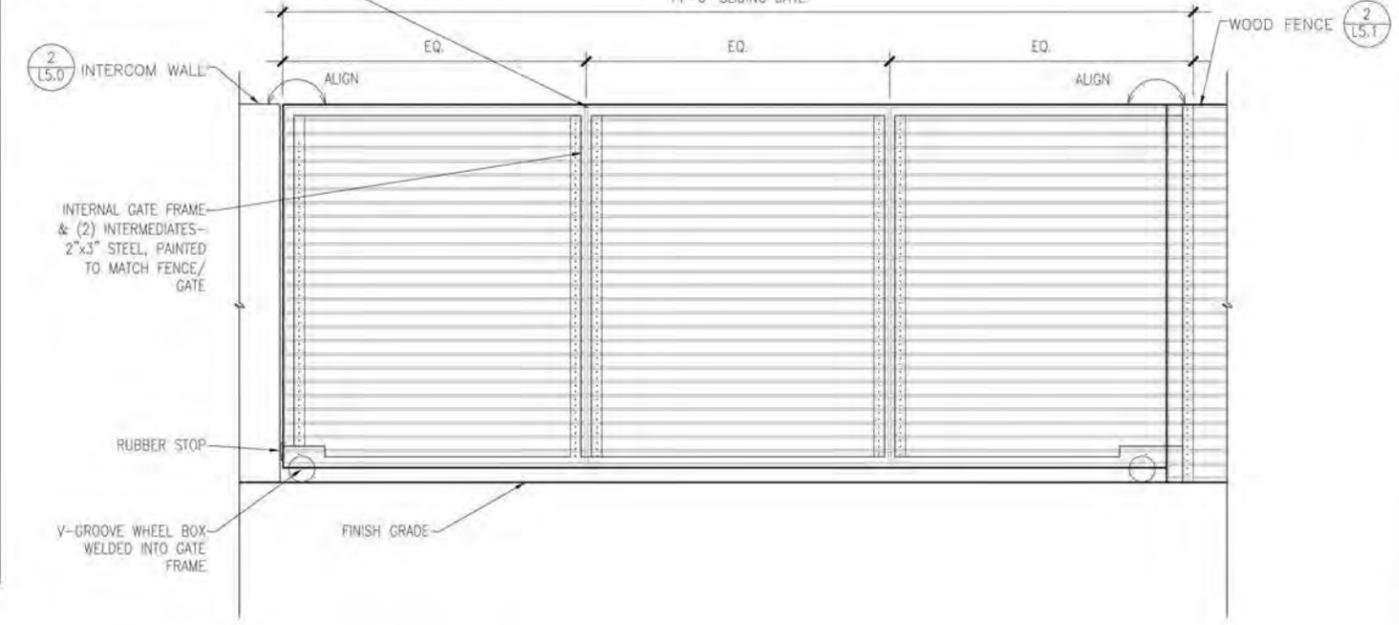
- Follow the local building code to determine the required depth of the concrete pad.
- Pad measurements recommended by Viking Access Systems are at least: 24" long, 18" wide and 24" deep to ensure the stable operation of the operator, and a minimum of 4" above level grade to avoid any flooding of the machinery.
- Provide a sufficient number of conduit pathways for all low-voltage accessories such as loop detector leads, maglock, non-contact sensors, contact sensors, safety and other commands. Also provide conduit for the power supply to the operator.
- DO NOT run low voltage and high voltage wiring in the same conduit.
- Provide at least 12" separation between low and high-voltage conduits.



PARTS DIAGRAM:



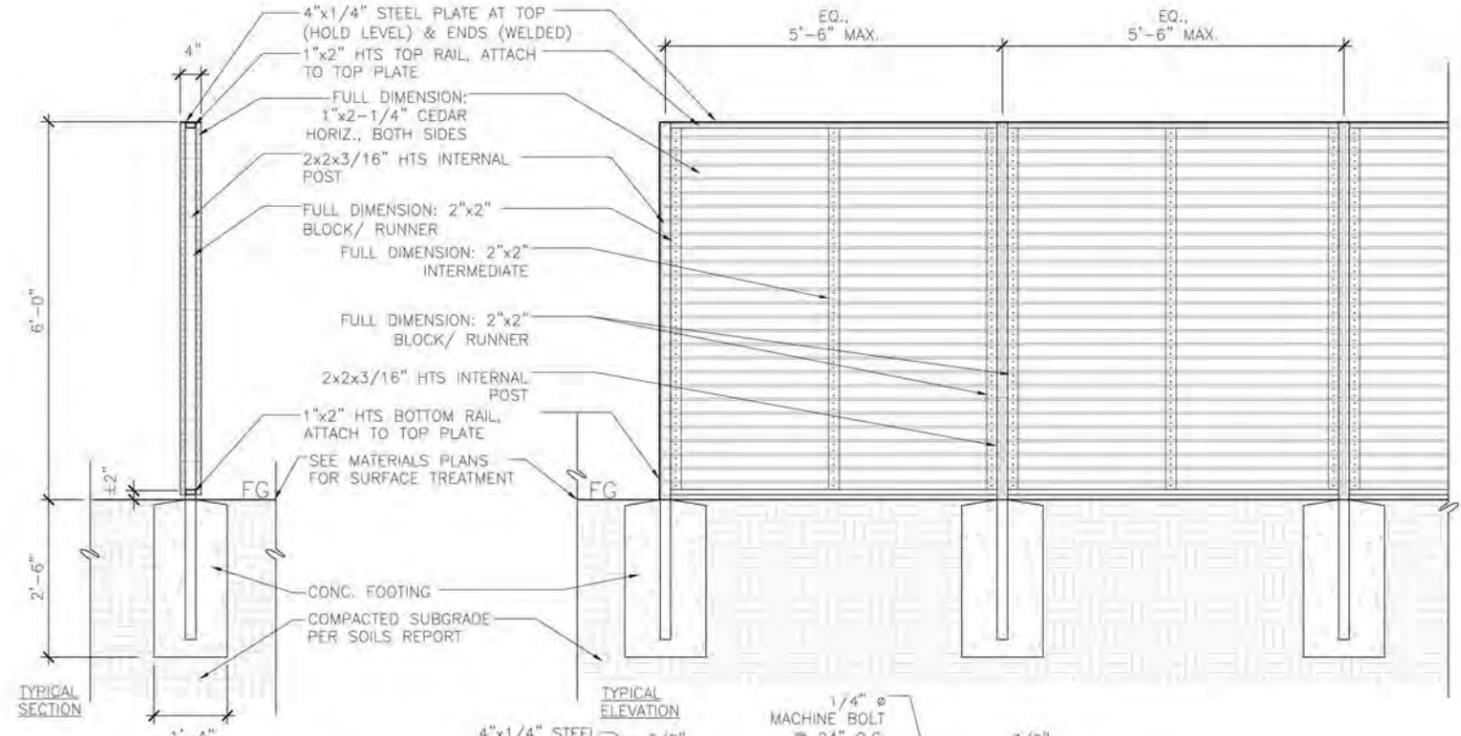
SLIDING VEHIC. GATE, SIM. TO FENCE W/ METAL FRAME & WOOD HORIZ. PANELS APPEAR EQUAL WHEN GATE IS CLOSED.



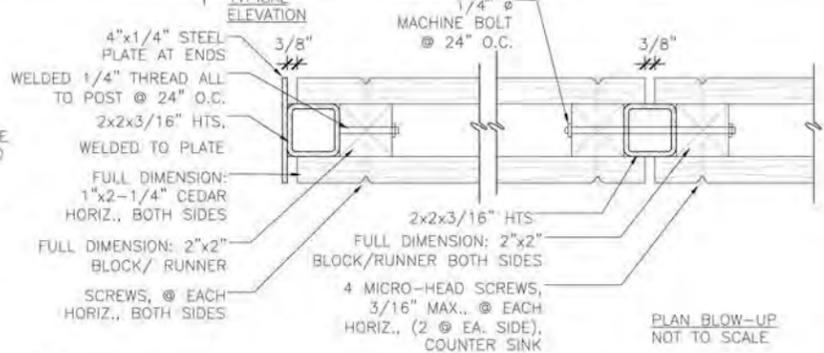
SLIDING GATE MOTOR BY VIKING ACCESS SYSTEMS, MODEL K-2, (800) 908-0884

1 VEHICLE GATE

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



- NOTES:
- ALL POSTS AND RAILS TO BE STEEL, 3/16" THICKNESS, PAINTED BLACK.
 - SCREWS & BOLTS TO BE NON-CORROSIVE METAL. WELD FRAME CONNECTIONS. GRIND ALL EDGES TO BE CLEAN.
 - ALL WOOD TO BE CLEAR CEDAR.
 - PROVIDE THE FOLLOWING CABOT STAINED WOOD SAMPLES FOR REVIEW: BARK SEMI-TRANSPARENT SAND STONE SEMI-TRANSPARENT



2 METAL FRAME, WOOD HORIZONTAL FENCE

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

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603 FULTON LANE
603 FULTON LANE, ST. HELENA,
CALIFORNIA, 94574

Date: 07-07-16 Issue: Design Review

DETAILS

Drawn by: RP
Checked by: JM

L5.1

**CITY OF ST. HELENA
PLANNING DEPARTMENT 1480 MAIN STREET- ST. HELENA, CA 94574
PLANNING COMMISSION**

APRIL 19, 2016

AGENDA ITEM: 9

FILE NUMBER: PL15-059

SUBJECT: Request by Brad Oldenbrook of Fulton Lane Estates, LLC for Design Review approval to construct a new single-family home, second unit and garage on the property located at 603 Fulton Lane in the A-20: Twenty Acre Agriculture district.

PREPARED BY: Aaron Hecock, Senior Planner

REVIEWED BY: Noah Housh, Planning Director

APPLICATION FILED: 10/14/15

ACCEPTED AS COMPLETE: 02/24/16

LOCATION OF PROPERTY: 603 Fulton Lane

APN: TBD / 009-050-001

GENERAL PLAN/ZONING: Agriculture/A-20: Twenty Acre Agriculture

APPLICANT: Brad Oldenbrook

PHONE: (415) 867-9595

BACKGROUND

On November 25, 2014 the St. Helena City Council gave the applicant approval (Resolution No. 2014-97 attached) to subdivide an existing 14.13 acre parcel into two parcels, one parcel consisting of 13.63 acres in area and the second parcel consisting of .5 acres (as required by the General Plan and Zoning Code). Typically, parcel map approval would go before the Planning Commission for approval however, in this case the approval went before the City Council because of consistency issue between the General Plan and the Zoning Ordinance.

Municipal Code Section 16.32.160 (Sewage Disposal) requires a minimum parcel size of 5 acres in order to be served by a septic system. This is inconsistent with a General Plan and Zoning requirement (discussed in more detail below) that any new parcel created in the A-20 zone cannot exceed one half acre in size. It was the position of the City Attorney that in this situation the one half acre maximum lot size requirement take precedence over the five acre minimum lot size. This is due in large part to the fact that the one half acre lot size wording is explicitly supported by the General Plan, which is not the case with the five acre minimum requirement for a septic field.

This project is dependent on approval of an amended parcel map accompanying the application for 601 Fulton Lane. Should the amended parcel map for 601 Fulton Lane not be approved this project cannot be approved as proposed and must be modified.

PROJECT DESCRIPTION

As proposed, this ½ acre parcel would be more of a square shape than originally proposed with approximate dimensions of 140' x 156'. It is located along Fulton Avenue approximately ½ mile northeast of the existing rail line. Surrounding land uses are primarily agricultural, and contain single family homes on large lots with extensive vineyards. The project site is currently vacant and does not contain any active agricultural uses.

The applicant is seeking design review approval to construct a new, 3,795-sf, one-story, single-family residence with an approximately 370-sf guest suite, 439-sf garage, and outdoor entertaining and kitchen area. The proposed new single-story home would have a maximum height of 25' at the highest ridgeline. The exterior would be finished with a variety of materials including vertical cedar, horizontal shiplap, and metal siding; aluminum windows; concrete walls; and a standing seam metal roof.

ANALYSIS

CEQA

The project is exempt from the requirements of CEQA pursuant to Section 15303, which exempts the construction or conversion of small structures including single-family residences, garages, pools, etc.

GENERAL PLAN/ZONING

The property has a General Plan designation of "Agricultural" and a Zoning Designation of A-20: Twenty-Acre Agriculture. This designation provides for agricultural and winery uses with restricted single family residential uses. Pursuant to §17.20.060(B) of the St. Helena Municipal Code (SHMC), for lots less than two acres in area, the development regulations and floor area ratio shall be the same as those for the LR:1A: Low Density Residential One Acre minimum zoning district (Chapter 17.36). As the subject property is ½ acre in size, the LR:1A development standards apply.

As far as the Floor Area Ratio (F.A.R.) is concerned, which is a measure of the building intensity of the project in relation to the site; a ½ acre parcel has a maximum F.A.R. of .204 which would allow a maximum gross floor area of 4,443-sf (excluding 400-sf of second unit space and 200-sf of garage space or 5,043-sf total). The applicant is proposing an approximately 3,795-sf home with a 370-sf guest cottage and 439-sf garage (4,604-sf total or 439-sf less than the maximum permitted). With the 200-sf F.A.R. exemption for covered parking, the project's gross square footage is 4,404-sf. The guest unit and garage are setback approximately 25' from the front property line while a majority of the main structure is setback approximately 57' from the front property line. The project meets all the development standards required in the LR:1A district.

TRAFFIC AND CIRCULATION

The site has vehicular access from Fulton Lane. Fulton Lane is a rural standard road adjacent to the project site. A condition has been added requiring the project to fund their "fair share" of any future improvements to Fulton Lane when and if the road is improved, along with frontage improvements. A north/south connection between Pratt Avenue and Starr Avenue has been identified as a right-of-way preserve for a future collector street in the 1993 General Plan. This identified right-of-way preserve runs along the western border of the project site. While the future extension of Adams Street to the Silverado Trail will remain in the 2035 General Plan, the identified right-of-way preserve extension from Pratt Avenue to Starr Avenue (western border of the project site) will be removed from consideration in the forthcoming 2035 General Plan. The Planning Commission should consider if this right-of-way preserve area along the western border of the project site should require dedication from the applicant to the City.

WATER

The site has access to City water (there is a 35 foot wide water line easement running through the property). The proposed project is required to comply with the City's Water Neutrality Policy. As the property is currently undeveloped, the project would typically need to provide off-site retrofits in order to offset projected future water use. However, due to a lack of available retrofits, the applicant has proposed to make a monetary contribution (\$16,000) to help fund a leak study as an alternative to installing offsite retrofits (see the attached Water Use Report). At the April 12, 2016 meeting of the St. Helena City Council, the Council rejected this approach to achieve water neutrality. Therefore, the applicant will be required to make off-site retrofits in order to achieve water neutrality.

WASTE WATER

The closest City sewer line to the site is located over a half mile away on Fulton Lane near the existing railroad crossing. The site is located outside the Urban Limit Line, and City requirements prohibit the City extending sewer service outside the Urban Limit Line. As a result, this parcel will be required to rely on septic systems in the short and long term. A Septic Feasibility Report dated September 10, 2014 was submitted by the applicant, a copy of which is attached. This report documents that septic systems can be installed and operated to adequately serve the property. This property requires that the septic distribution and leach fields be located "off-site" on the much larger 601 Fulton Lane property. The attached Septic Feasibility report documents the location of the septic fields on 601 Fulton Lane that will be serving both properties. Conditions have been added ensuring the necessary easements are put in place to allow for the ongoing operation and maintenance of 603's septic fields that are located "off-site" on 601. The conditions also ensure the septic facilities are located outside of Flood Zone AE (100 year flood zone), at least 50 feet away from neighboring properties, and are engineered to avoid any impacts of the new septic fields on both existing wells and existing septic facilities in the surrounding area.

It should be noted that there is a Municipal Code requirement concerning waste water that requires a minimum parcel size of 5 acres in order to be served by a septic system. This is inconsistent with the previously mentioned General Plan and Zoning

requirement that any new parcel created in the A-20 zone cannot exceed one half acre in size. It is the position of the City Attorney that in this situation the one half acre maximum lot size requirement take precedence over the five acre minimum lot size. This is due in large part to the fact that the one half acre lot size wording is explicitly supported by the General Plan, which is not the case with the five acre minimum requirement for a septic field.

DESIGN REVIEW

The purpose of design review is to, among other things, promote the qualities that bring value to the community and foster attractiveness and functional utility of the community as a place to live and work. The following design criteria should be considered by the Planning Commission in review of this application (Zoning Ordinance Section 17.164.030):

1. Consistency and compatibility with applicable elements of the general plan;
2. Compatibility of design with the immediate environment of the site;
3. Relationship of the design to the site;
4. Determination that the design is compatible in areas considered by the board as having a unified design or historical character;
5. Whether the design promotes harmonious transition in scale and character in areas between different designated land uses;
6. Compatibility with future construction both on and off the site;
7. Whether the architectural design of structures and their materials and colors are appropriate to the function of the project;
8. Whether the planning and siting of the various functions and buildings on the site create an internal sense of order and provide a desirable environment for occupants, visitors and the general community;
9. Whether the amount and arrangement of open space and landscaping are appropriate to the design and the function of the structures;
10. Whether sufficient ancillary functions are provided to support the main functions of the project and whether they are compatible with the project's design concept;
11. Whether access to the property and circulation systems are safe and convenient for pedestrians, cyclists and vehicles;
12. Whether natural features are appropriately preserved and integrated with the project;
13. Whether the materials, textures, colors and details of construction are an appropriate expression of its design concept and function and whether they are compatible with the adjacent and neighboring structure and functions;
14. In areas considered by the board as having a unified design character or historical character, whether the design is compatible with such character;
15. Whether the landscape design concept for the site, as shown by the relationship of plant masses, open space, scale, plant forms and foliage textures and colors create a desirable and functional environment and whether the landscape concept depicts an appropriate unity with the various buildings on the site;
16. Whether plant material is suitable and adaptable to the site, capable of being properly maintained on the site, and is of a variety which is suitable to the climate of St. Helena;
17. Whether sustainability and climate protection are promoted through the use of green building practices such as appropriate site/architectural design, use of

green building materials, energy efficient systems and water efficient landscape materials.

The proposed home would be located near the center of the parcel and setback at greater distances than required from the front and rear property lines. While the proposed home is quite large, it is only one-story in height and is located in a rural area where large homes on larger than average parcels are common. There are no properties near the proposed project site that would be in anyway negatively affected by the development of the project at this location. For these reasons, staff believes that the proposed project is consistent with the required design review findings listed above.

CORRESPONDENCE

At the time of packet distribution staff had received no letters in support or opposition to this application.

STAFF RECOMMENDATION

Staff finds that the proposed project is in character with the A-20 district and that proposed changes will not negatively affect surrounding properties or the rural character of Fulton Lane. Because of this staff concludes that the appropriate findings can be made and recommends that the Planning Commission:

1. The project is exempt from the requirements of CEQA pursuant to Section 15315, which exempts the subdivision of four or fewer parcels and Section 15303, which exempts the construction or conversion of small structures including single-family residences, garages, pools, etc.
2. Accept the required findings and approve design review for the proposed new construction at 603 Fulton Lane.

ATTACHMENTS

1. Resolution / Conditions of Approval
2. APN Map
3. Aerial View
4. Project Plans and Renderings
5. Water Neutrality Analysis
6. Septic Feasibility Report

**TENTATIVE PARCEL MAP AND DESIGN REVIEW NO. PL15-059
CITY OF ST. HELENA, STATE OF CALIFORNIA
GRANTED TO 603 FULTON LANE**

PROPERTY OWNER: Brad Oldenbrook

APN: 009-050-001

Recitals

1. Request by Brad Oldenbrook of Fulton Lane Estates, LLC for Design Review approval to construct a new single-family home, second unit and garage on the property located at 603 Fulton Lane in the A-20: Twenty Acre Agriculture district.
2. The Planning Commission of the City of St. Helena, State of California, held a duly noticed public hearing on April 19, 2016 to consider the revised parcel map and design review.

Resolution

- A. In making the findings in this Resolution, the Planning Commission relied upon and hereby incorporates by reference all of the documents referenced in this Resolution and the associated staff reports, City files for this matter, correspondence, presentations and other materials.
- B. The Planning Commission hereby finds that the project is exempt from the California Environmental Quality Act ("CEQA") pursuant to Section 15303, which exempts the construction or conversion of small structures including single-family residences, garages, pools, etc.
- C. The Planning Commission determines the project is in compliance with the following Design Review criteria of Municipal Code Section 17.164.030:
 1. *Consistency and compatibility with applicable elements of the general plan;*
 2. *Compatibility of design with the immediate environment of the site;*
 3. *Relationship of the design to the site;*
 4. *Determination that the design is compatible in areas considered by the board as having a unified design or historical character;*
 5. *Whether the design promotes harmonious transition in scale and character in areas between different designated land use;*
 6. *Compatibility with future construction both on and off the site;*
 7. *Whether the architectural design of structures and their materials and colors are appropriate to the function of the project;*
 8. *Whether the planning and siting of the various functions and buildings on the site create an internal sense of order and provide a desirable environment for occupants, visitors and the general community;*
 9. *Whether the amount and arrangement of open space and landscaping are appropriate to the design and the function of the structures;*
 10. *Whether sufficient ancillary functions are provided to support the main functions of the project and whether they are compatible with the project's design concept;*

11. *Whether access to the property and circulation systems are safe and convenient for pedestrians, cyclists and vehicles;*
12. *Whether natural features are appropriately preserved and integrated with the project;*
13. *Whether the materials, textures, colors and details of construction are an appropriate expression of its design concept and function and whether they are compatible with the adjacent and neighboring structure and functions;*
14. *In areas considered by the board as having a unified design character or historical character, whether the design is compatible with such character;*
15. *Whether the landscape design concept for the site, as shown by the relationship of plant masses, open space, scale, plant forms and foliage textures and colors create a desirable and functional environment and whether the landscape concept depicts an appropriate unity with the various buildings on the site;*
16. *Whether plant material is suitable and adaptable to the site, capable of being properly maintained on the site, and is of a variety which is suitable to the climate of St. Helena;*
17. *Whether sustainability and climate protection are promoted through the use of green building practices such as appropriate site/architectural design, use of green building materials, energy efficient systems and water efficient landscape materials.*

Planning Department Conditions of Approval

- D. The Planning Commission approves the parcel map and design review for the above-described project with the following conditions of approval. The project shall be in conformance with all city ordinances, rules, regulations and policies in effect at the time of issuance of a building permit. The conditions noted below are particularly pertinent to this permit and shall not be construed to permit violation of other laws and policies not so listed.
1. Design review approval shall be vested within one (1) year from the date of final action. A building permit for the use allowed under this approval shall have been obtained within one (1) year from the effective date of this action or the approval shall expire, provided however that the approval may be extended for up to two (2) one-year periods pursuant to the St. Helena Municipal Code, Section 17.08.130, Extension of Permits and Approvals. Any request for an extension of this approval shall be justified in writing and received by the Planning Department at least thirty (30) days prior to expiration.
 2. The approvals shall not become effective until fourteen (14) calendar days after approval, providing that the action is not appealed by the City Council or any other interested party within that 14-day period.
 3. All required fees, including planning fees, development impact fees, residential in-lieu housing fees, building fees, toilet retrofit fees, and St. Helena Unified School District fees shall be paid prior to issuance of a building permit. Fees shall be those in effect at the time of the issuance of the building permit.

4. In any action or proceeding to attack, challenge, invalidate, set aside, void or annul the City's approval of applicant's Project, in whole or in part, applicant shall defend, at its own expense and without any cost to the City, and with counsel acceptable to the City, and shall fully and completely indemnify and hold the City, its agents, officers, and employees harmless from and against any and all claims, causes of action, damages, costs, attorney's fees and liability of any kind, so long as the City reasonably promptly notifies the applicant of any such claim, action, or proceedings and the City cooperates fully in the defense of the action or proceedings.
5. Provided they are in general compliance with this approval, minor modifications may be approved by the Planning Director.
6. Pursuant to St. Helena Municipal Code Section 17.08.110, this permit shall run with the land and shall be binding upon all parties having any right, title or interest in the real property or any part thereof, their heirs, successors and assigns, and shall inure to their benefit and benefit of the City of St. Helena.
7. The primary purpose of this review is for compliance with the General Plan and Zoning Ordinance. The property owners or their designee shall be responsible for meeting with the Building Official, Fire Inspector and or Public Works Department to review compliance with Building Codes, Fire Codes and specific Public Works Standards including fire protection systems and any applicable accessibility standards of Title 24.
8. Construction shall be in compliance with plans submitted and reviewed by the Planning Commission on April 19, 2016, except as modified herein.
9. Exterior lighting shall be directed or shielded to prevent glare onto the public roadway or adjacent properties.
10. Property owners shall recognize that there exists a right to farm properties within the district and in the vicinity of the district. There is a good faith expectation that no complaints will occur regarding legal, normal agricultural activities on properties in the district or in the vicinity of the district. Such activities may include day or night disbursement of chemicals, and creation of dust, noise, or fumes.
11. To reduce disturbance of residents in the project vicinity, construction activities which generate noise that can be heard at the property line of any parcel of real property within the City limits shall be limited to 8:00 a.m. to 5:00 p.m. Monday through Saturday. Delivery of materials/equipment and cleaning and servicing of machines/equipment shall be limited to 7:00 a.m. to 6:00 p.m. Exceptions to these time restrictions may be granted by the Public Works Director for one of the following reasons: (1) inclement weather affecting work, (2) emergency work, or (3) other work, if work and equipment will not create noise that may be unreasonably offensive to neighbors as to constitute a nuisance. The City Engineer must be notified and give approval in advance of such work. No construction activities shall occur on Sundays or federal or local holidays that generate noise that can be heard at the property line of any parcel of real property within the City limits.
12. No development shall be allowed within the designated 100 year flood zone.

Public Works Department Conditions of Approval

13. Approval of this project shall be subject to the requirements of, and all improvements shall be designed and constructed in accordance with, the most current version at the time of improvement plan submittal, Caltrans Standards and Specifications, the City of St. Helena Municipal Code, the St. Helena Water and Sewer Standards, the St. Helena Street, Storm Drain and Sidewalk Standards, and all current federal, state and county codes governing such improvements.
14. The improvement plans shall include all grading, hardscape, landscape, drainage and utilities as shown on the conditionally approved Vesting Tentative Map package as well as those agreed to in public hearings and those required by the municipal codes in effect based on the vesting status of the map.
15. The developer shall construct all on and offsite improvements in accordance with improvement plans and supporting calculations and documentation that are prepared by a registered Civil Engineer and reviewed and approved by the City of St. Helena Public Works Department. The improvement plans shall include detailed designs for all on and off site utilities, water, sewer, grading, drainage, erosion control and paving.
16. For any improvements outside the existing building envelope, a grading and drainage plan showing topographic data, all easements, infrastructure onsite and directly adjoining, and an erosion control plan shall be submitted for review and approval by the City Engineer prior to the issuance of a building permit. If the project entails more than 50 cubic yards of soil disturbance, 10,000 square feet of disturbance area, a cut or fill of 3 feet or more, or alteration of any drainage pattern, a grading permit shall be required.
17. Drainage needs to be routed to prevent inundation of neighboring properties. Grading and/or site improvement plans shall show how 2-year and 10-year storm flows shall be infiltrated on site and/or diverted at the property lines to prevent inundation of neighboring properties.
18. Prepare and implement a Stormwater Control Plan as required by the Bay Area Stormwater Management Agencies Association (BASMAA) Post-Construction Manual, dated July 14, 2014.
19. Erosion and sediment control plans shall conform to the latest State and City codes at a minimum.
20. If the proposed/new landscaping involves an area greater than 500 square feet or rehabilitation of more than 2,500 square feet, the proposed landscaping shall comply with the State's Model Water Efficient Landscape Ordinance (MWELO).

21. The applicant shall incorporate water conservation practices into the proposed project per the Theoretical Water Use Report prepared by Delta Consulting and Engineering, dated April 8, 2016. Any and all non-conforming appliances and plumbing fixtures shall be removed from the premises. The water conservation requirements shall be replicated in full on the architectural plans. The water analysis shall be replicated on the building plans prior to building permit approval. Off-site retrofits are required, as determined by the Director of Public Works. All off-site retrofits shall be completed and provided to the City prior to building occupancy of any building.
22. The applicant shall install an approved backflow device behind the water meter prior to Certificate of Occupancy. Any new and modified existing water laterals, meters and backflow prevention devices shall be required and constructed in accordance with the current requirements of the City of St. Helena's Water Standards and the California Department of Health Standards. Existing meter boxes located within a driveway shall be retrofitted with a traffic-rated box. New laterals shall be located perpendicular to the water main and outside any driveway/drive aisle.
23. Remodels or new construction which requires fire sprinklers shall install an appropriately-sized water service with appropriate backflow and meter devices prior to Certificate of Occupancy. Fire system calculations shall be submitted with the Grading and Drainage Plan to verify fire service lateral and meter sizing. Deferred submittals are not accepted.
24. No construction may commence until adequate access to fire water supply is available to building sites as approved by the Fire Chief.
25. The applicant shall conform to Napa County Department of Environmental Management's regulations, policies & guidelines for the design/ construction of septic systems.
26. The applicant shall repair all public improvements that are damaged by the construction process in accordance with the City Water/Sewer/Street/Storm Drain/Sidewalk Standards prior to Certificate of Occupancy.
27. Existing streets being cut by new utility services will require edge grinding and an A.C. overlay per City standards, extent to be determined by the Public Works Department.
28. An encroachment permit shall be required for any work performed in the public right of way. Improvements on private shared roadways will require approval by all parties of ownership of the access easements.

Building Department Conditions of Approval

29. The applicant will be required to comply with the codes adopted at the time the applicant applies for a building permit. At this time the City of St. has the 2013 Title 24 codes, parts: 1-Administrative, 2.5- Residential Building, 3-Electrical, 4-Mechanical, 5- Plumbing, 6-Energy, 9-Fire, 11-Green Building Standards, and Part 12, Referenced Standards codes adopted.
30. When submitting plans for a building permit, the plans shall include a. Title page. b. Site plan. c. Foundation plan and footings detail. d. Floor plan. e. Floor framing plan. f. Framing plan. g. Roof framing plan. h. Elevations of all sides. i. Cross sections. J. Window and door schedule. k. Electric plan. l. Plumbing plan. m. Mechanical plan. n. Energy plan, calculations, and report or analysis. o. Structural calculation.
31. The applicant shall provide a construction waste management plan.
32. The plans for construction shall include a checklist for compliance with the California Green Buildings Standards Code, mandatory measures. Provide a reference on the checklist indicating where the mandatory measures can be found on the plans.
33. When submitting plans, the title page shall include: a. Parcel number, b. job site address, c. Architect/Engineer/Geotechnical/Design professional information such as name, address, phone number, email address etc., d. date, e. work description, f. design codes, g. square footage, if it is an addition to existing structure, include square footage of existing and proposed, conditioned/unconditioned, h. construction type, i. use and occupancy, j. table of contents/page numbers, k. live loads, floor and roof, all required demand loads, l. fire hazard severity zone if applicable, m. wind design data regardless of whether seismic loads govern the design of the lateral-force-resisting system of the building. Include basic wind speed, wind importance factor, and occupancy category, wind exposure, applicable internal pressure coefficient and components and cladding, n. seismic design data, include seismic zone information regardless of whether seismic loads govern the design of the lateral-force-resisting system of the building, o. flood design data such as when buildings in whole or in part are in flood hazard areas. Documentation pertaining to design shall be included, p. special loads that are applicable to the design of the building shall be indicated, along with the specified section of the code that addresses the condition, q. special inspections for those systems and components requiring special inspection, the requirements for seismic resistance must be included, r. a complete list of deferred submittals at time of application. Any deferral of the required submittal items shall have prior approval of the Building Official. NOTE: deferral of fire sprinklers are not allowed.
34. Ask for and use Building Department submittal checklist.

I HEREBY CERTIFY that the foregoing design review was duly and regularly approved by the Planning Commission of the City of St. Helena at a regular meeting of said Planning Commission held on April 19, 2016 by the following roll call vote:

AYES: *Commissioners Koberstein, Sweeney, Monnette, Kistner, Chair Parker*
NOES: *None*
ABSENT: *None*
ABSTAIN: *None*

APPROVED:

ATTEST:



Sarah Parker
Chair, Planning Commission



Noah Housh
Planning Director

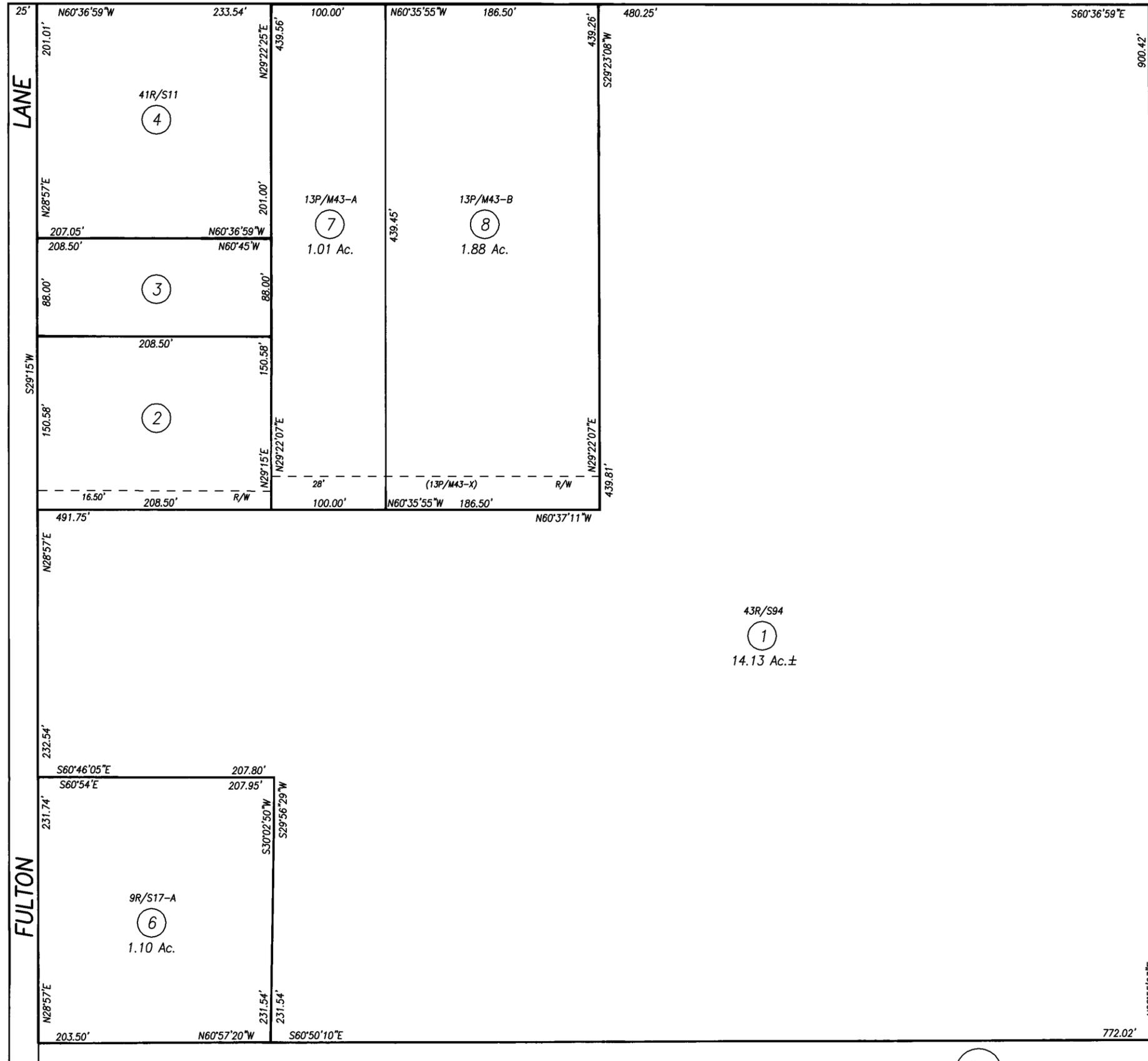
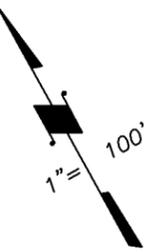
COUNTY ASSESSOR'S PARCEL MAP

PTN. RANCHO CARNE HUMANA

Tax Area Code
3000

9-05

03



03

03

	11-23-71
	12-26-72
	10-5-82
	12-14-88
050-04 RS	2-15-13
050-01 RS	6-11-14
REVISION	DATE

1971

03

9-05



603 Fulton Ln

Fulton Ln

Hunt Ave

Starr Ave

Meadowcreek Cir

Del Campo Ct

San Juan Ct

Laguna Seca Ct

Paseo Grand Dr

Redondo Ct

© 2016 Google

Google earth

38°30'44.79" N 122°27'59.64" W elev 214 ft eye alt 3499 ft

1993



603 Fulton Lane
-Proposed Project-

601 Fulton Lane
to be submitted under
seperate application

Not To Scale

ZIMMERMAN + ASSOCIATES

ZA

Sausalito
100 Gate 6 Road
Sausalito, CA 94965
Tel 415.289.0660

Sonoma
1707 Denmark St.
Sonoma, CA 95476
Tel 707.933.0442

603 FULTON

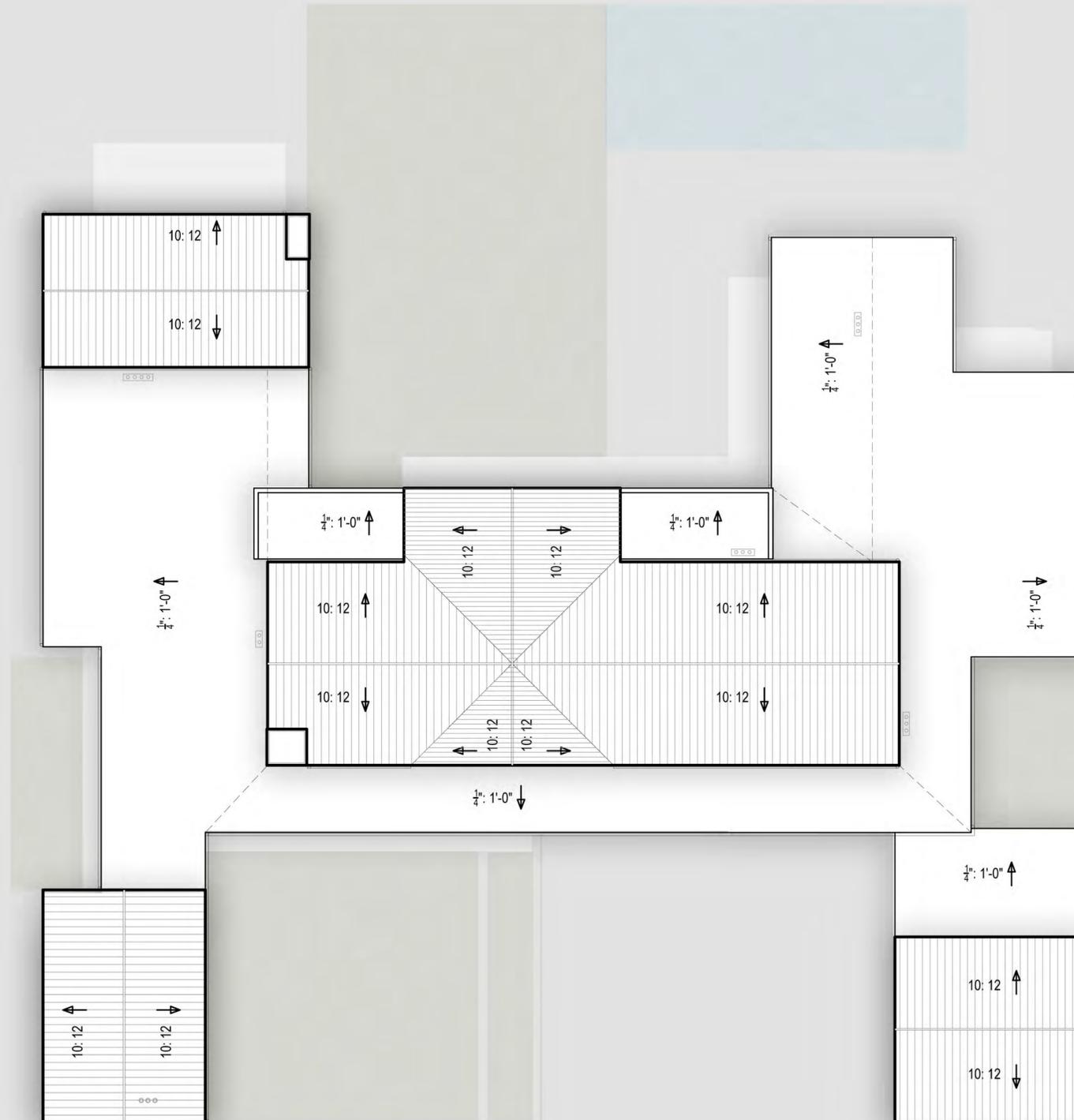
Single Family Residence
603 Fulton Ln. St. Helena

PLOT PLAN

2015.18
09 October 2015



SITE + BUILDING DATA		
Site Area	21,780 sqft	0.5 AC
Zoning	Low density residential (LR-1A) Part of A - 20 Lot	
Allowable FAR by Zoning - 35%	7,623 sqft	
Allowable FAR by Zoning Ch (based on Site Area)	21,780 sqft (site) x0.205	4,459 sqft
Conditioned Building Area	4,165 sqft	
Three Bedroom + Guest House		
Un-Conditioned Building Area	439 sqft	
2-Car Garage		
Garage over 200 sqft exemption	minus 200 sqft	
TOTAL FAR APPLYING CODE	4,404sqft	



ZIMMERMAN + ASSOCIATES

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 Tel 415.289.0660

Sonoma
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 Sonoma, CA 95476
 Tel 707.933.0442

603 FULTON

Single Family Residence
 603 Fulton Ln. St. Helena

ROOF PLAN

2015.18
 09 October 2015



northeast (private drive) elevation



southeast (rear yard) elevation

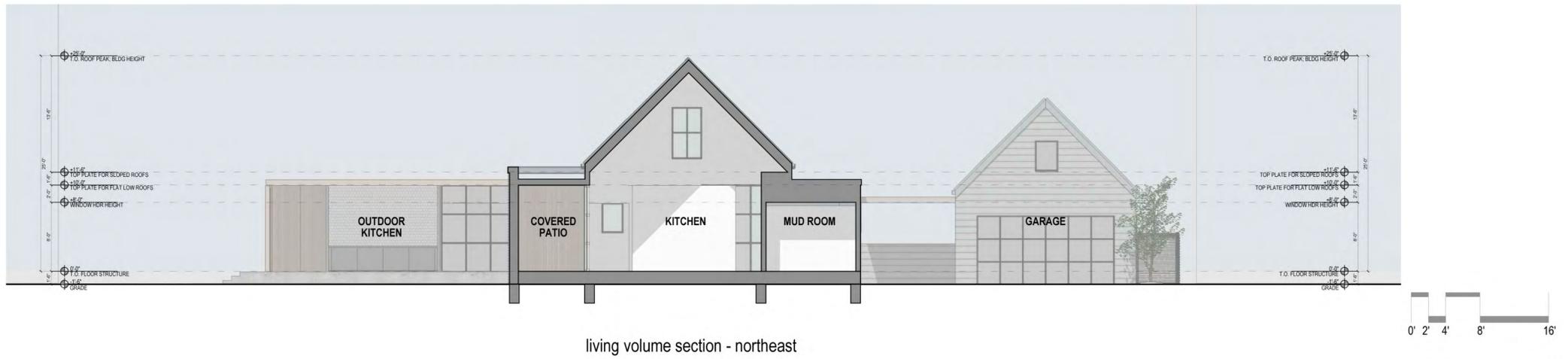
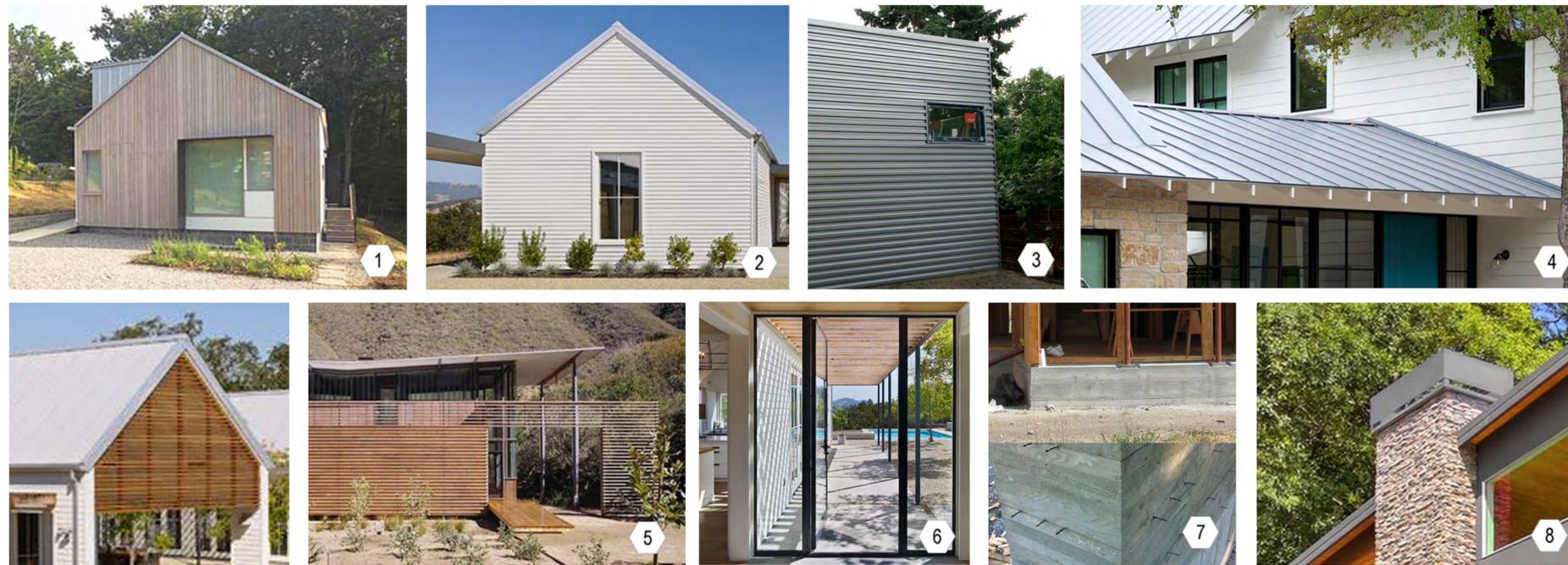


southwest (side yard) elevation



northwest (streetside and entry) elevation

- MAJOR EXTERIOR MATERIALS**
- 4x vertical natural cedar siding (bleaching oil stain) ①
 - 8" horizontal shiplap siding (white) ②
 - corrugated zincalume metal siding (cool gray) ③
 - standing seam zincalume metal roof (cool gray) ④
 - cedar screening over frame (bleaching oil stain) ⑤
 - black anodized aluminum windows ⑥
 - board form concrete foundation walls where exposed ⑦
 - zincalume chimney shroud to match roofing ⑧



- MAJOR EXTERIOR MATERIALS**
- 4x vertical natural cedar siding (bleaching oil stain) ①
 - 8" horizontal shiplap siding (white) ②
 - corrugated zincalume metal siding (cool gray) ③
 - standing seam zincalume metal roof (cool gray) ④
 - cedar screening over frame (bleaching oil stain) ⑤
 - black anodized aluminum windows ⑥
 - board form concrete foundation walls where exposed ⑦
 - zincalume chimney shroud to match roofing ⑧



Street Frontage Perspective -Facing Southeast-



Back Patio Perspective -Facing North-



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603 FULTON

Single Family Residence
603 Fulton Ln. St. Helena

PERSPECTIVES

2015.18
09 October 2015



Fulton Lane Structures



Property Frontage Viewing SW

Neighboring Property Line Viewing SW

Neighboring House to SW



Fulton Lane NE Street View

Fulton Lane SW Street View

Property From Fulton Lane Viewing North

From Property Viewing North

From Property Viewing NW



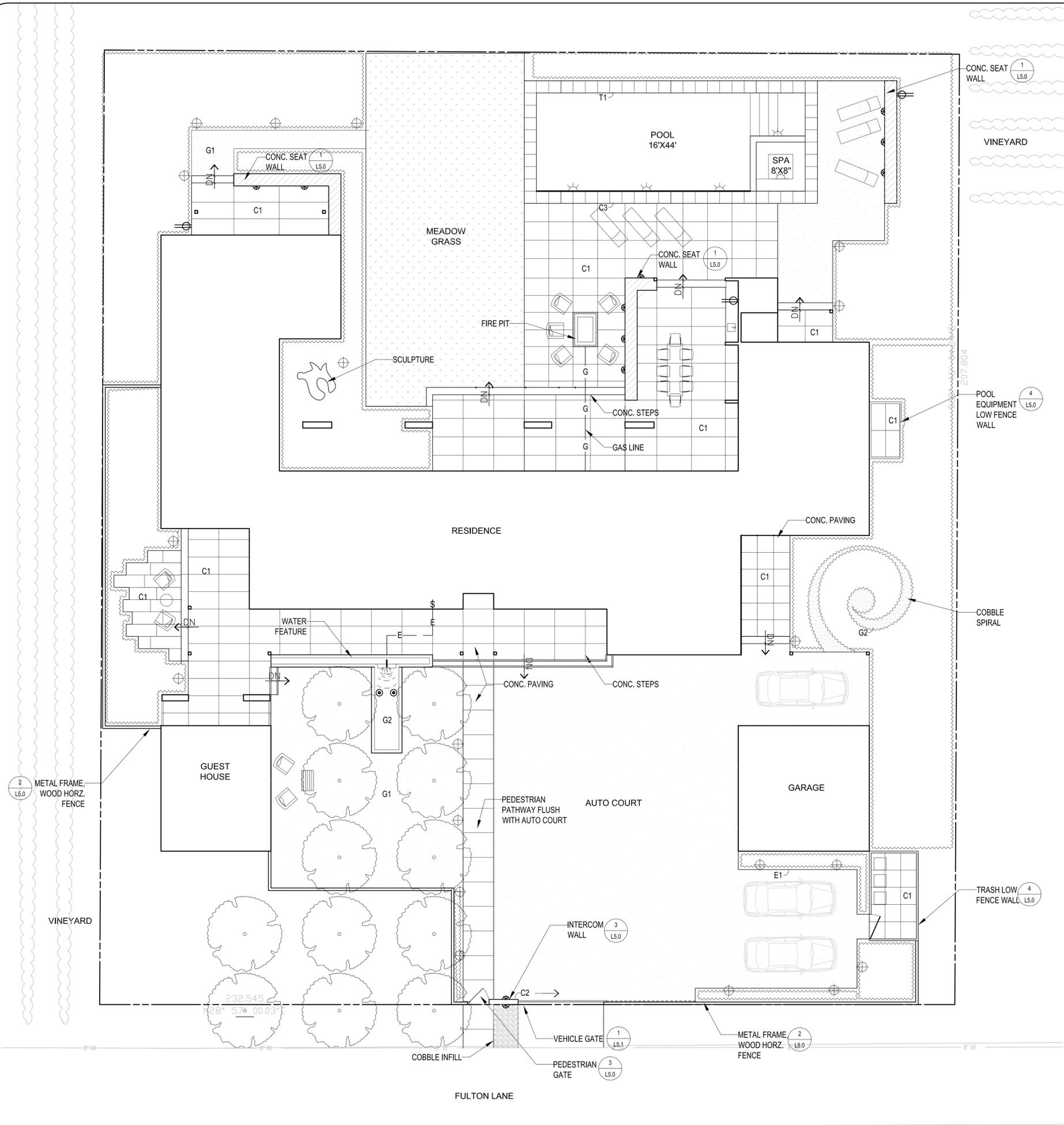
ZIMMERMAN + ASSOCIATES

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603 FULTON

Single Family Residence
603 Fulton Ln. St. Helena



LEGEND

- WALL LIGHT, W.A.C. Lighting-Model: #WL-LED100, 3000k, Stainless Steel color
- PATH LIGHT, Lumiere, Model:# 205 Cambria, Stainless Steel color, 6 watt LED
- UNDERWATER LIGHT: Atlantic, Model #SOLW2, 877.807.6637
- IN-STEP LIGHT: Diode LED wet blaze tape light w/low profile aluminum channel and diffusing cover
- SPA/POOL LIGHT: By contractor
- G- NATURAL GAS LINE FROM HOUSE
- E- 120 VOLT ELECTRICAL LINE IN CONDUIT
- GFCI RECP TACLE - Wall mounted
- \$ SWITCH LOCATION

MATERIAL SCHEDULE

- | | |
|---|---|
| <p>C1 CONCRETE PAVING
Sand blast finish cast in place concrete. Deep scores 1" deep, tooled to 3/8". Buff Tone</p> <p>C2 BOARD FORM CONCRETE WALLS - Rough-sawn 2x6 cedar board-form finish with 3/16" gaps. Integral color: Warm Gray. Provide (2) 24" x24" color and finish samples-one with spec above and another after review/ adjustment</p> <p>C3 POOL COPING / WALL CAP
Precast concrete w/ eased edges, Color: Buff</p> <p>E1 STEEL EDGING
By JD Russell (800)888-7425, or approved equal 1/4" min thickness, 5" min depth</p> | <p>G1 GRAVEL- Tan color D.G. w/ integral stabilizer over crushed rock base. Contractor to submit samples of decomposed granite and stabilizer cut sheet to Landscape Architect for approval.</p> <p>G2 COBBLE/GRAVEL
Tan decorative rounded pebbles.</p> <p>G3 CHIP SEAL-
Tan Color, See Civil</p> <p>T1 POOL TILE- TBD</p> |
|---|---|

ABBREVIATIONS

- DETAIL CALL-OUT
DETAIL #
DETAIL SHEET
- STEPS W/ DIRECTION
DOWN SHOWN
- (N) NEW

(E) EXISTING

PA PLANTING AREA

TYP TYPICAL

STUDIO GREEN
Landscape Architecture
232 Sir Francis Drake Blvd.
San Anselmo, CA 94960
Phone: (415) 721-0905
Fax: (415) 721-0910
www.studiogreen.com
Email: info@studiogreen.com



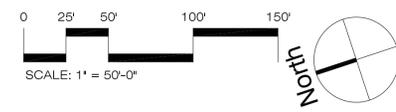
603 FULTON LANE
603 FULTON LANE, ST. HELENA,
CALIFORNIA, 94574

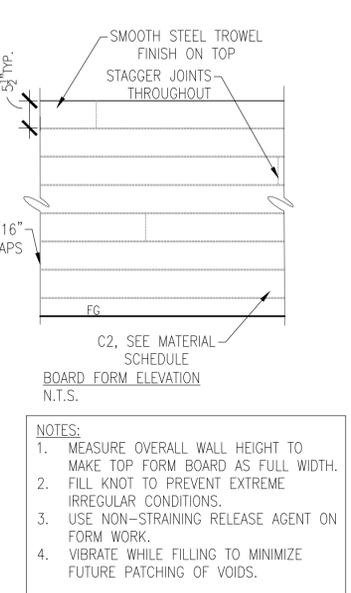
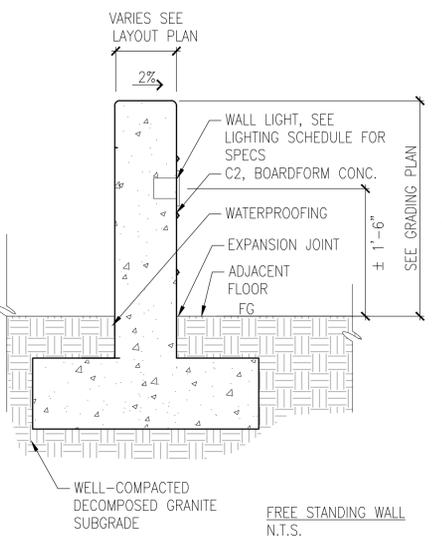
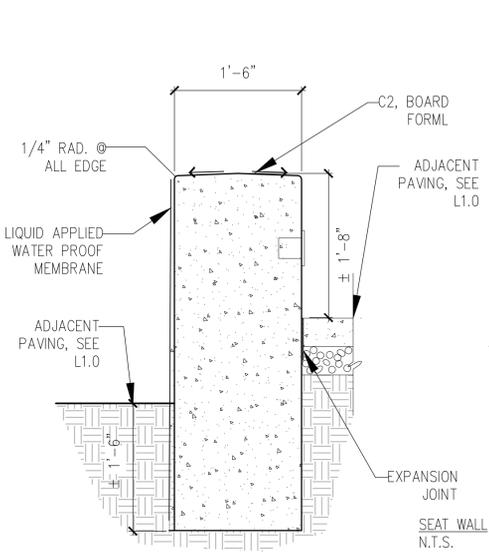
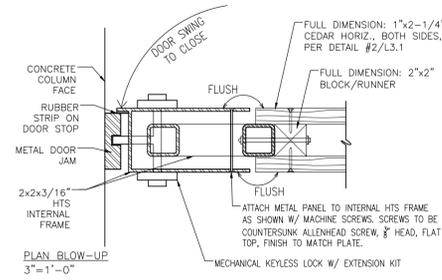
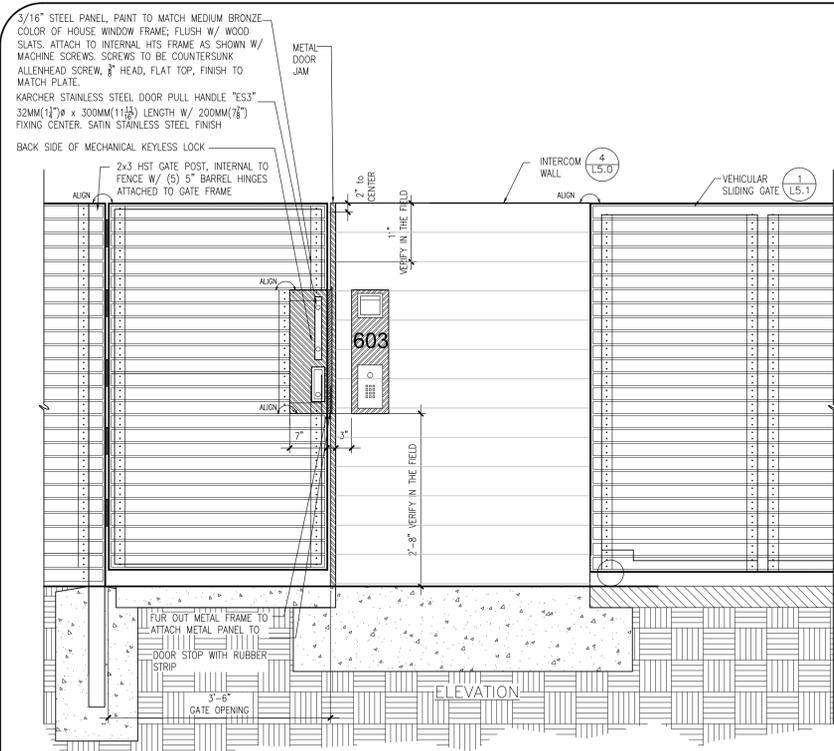
Date: 10-09-15 Issue: DESIGN REVIEW

MATERIALS, CALLOUT PLAN

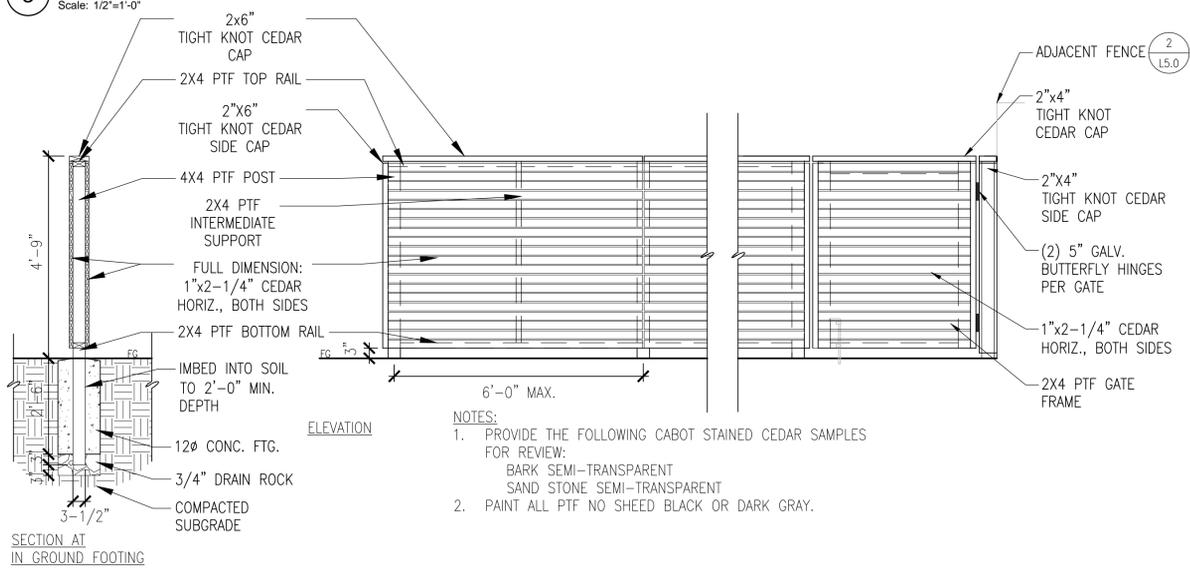
Drawn by: RP
Checked by: JM

L1.0

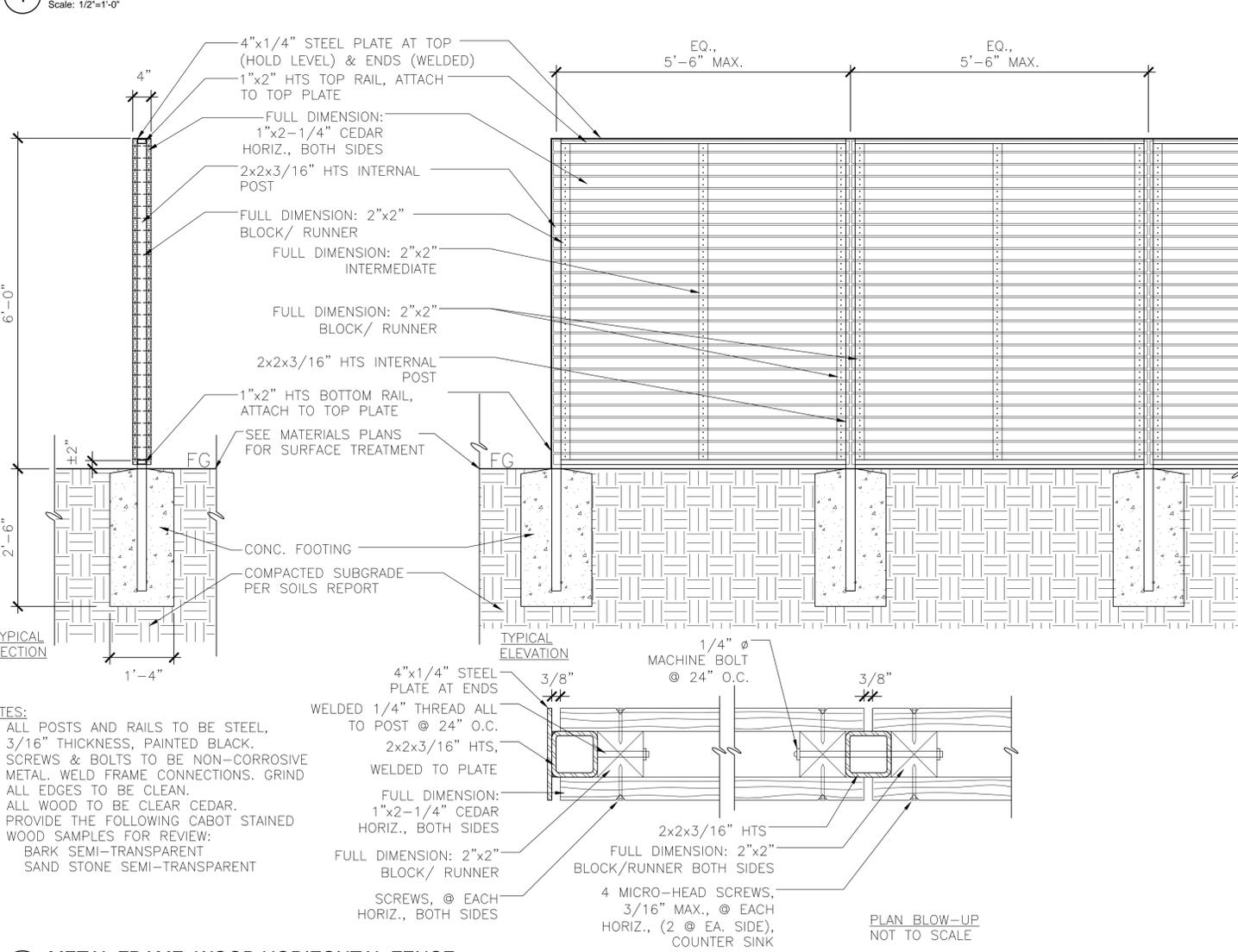




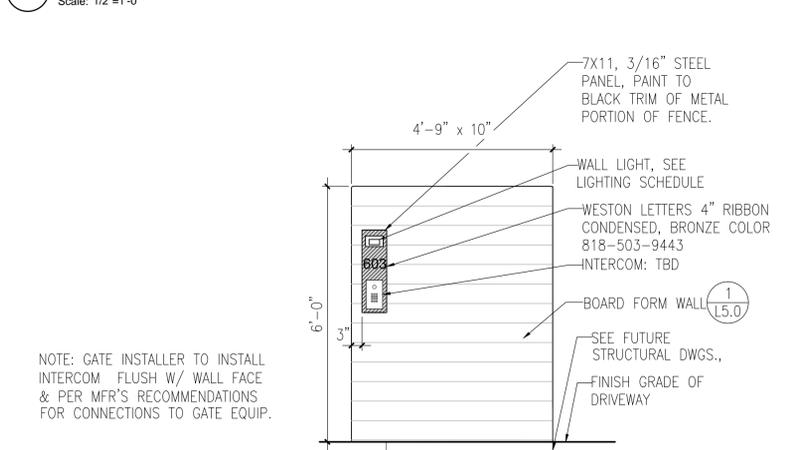
3 PEDESTRIAN GATE
Scale: 1/2"=1'-0"



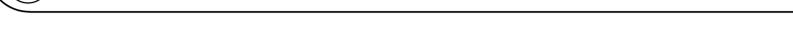
1 CONC. WALL
Scale: 1/2"=1'-0"



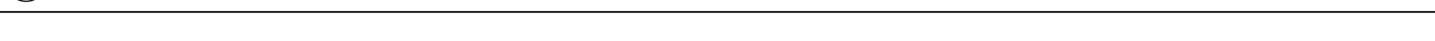
4 LOW FENCE
Scale: 1/2"=1'-0"



5 INTERCOM WALL
Scale: 1/2"=1'-0"



2 METAL FRAME, WOOD HORIZONTAL FENCE
Scale: 3/4"=1'-0"





**THEORETICAL
WATER USE REPORT**

FOR

601 AND 603 FULTON LANE

LOCATED AT

601 AND 603 FULTON LANE
ST. HELENA, CA 94574
APN: 009-050-001

COUNTY: NAPA

INITIAL SUBMITTAL: DECEMBER 2, 2015
REVISION 1: FEBRUARY 10, 2016
REVISION 2: APRIL 8, 2016

PREPARED FOR REVIEW BY:
CITY OF ST. HELENA DEPARTMENT OF PUBLIC WORKS
1480 MAIN STREET
ST. HELENA, CA 94574



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I. BACKGROUND & INTRODUCTION

The subject parcels located at 601 and 603 Fulton Lane in St. Helena are a recently created parcel via an approved vesting tentative vesting map per City of St. Helena Resolution 2014-97 based on Parcel Map PL14-0389. The two parcels are currently a flat, empty lot with no site improvements. The owner of the parcels propose to construct a new single family residence, new guest home, new pool, new garage, and associated infrastructure on each parcel.

The City of Saint Helena current definition of 'Safe Water Yield' requires all new development within the city be water-neutral. This means the post-construction water use of a property must be less than or equal to the pre-construction water use. This report discusses the existing and proposed internal water demand for the two properties, with a focus on water reduction measures.

II. WATER-USE ANALYSIS

A. Baseline Water Use

The baseline water uses for the two parcels are based on the existing water-use from both the domestic (internal) water features and the irrigation (external) water-use. For both parcels, there are no histories of either internal or external water usage on the two parcels. Therefore, the baseline water usages for the two parcels are zero gallons per day.

B. Proposed Internal Water Demand with Water Reduction Measures

By utilizing low-flow and water-efficient fixtures in the proposed residence, the estimated water usage associated with the proposed improvements will be able to be minimized per parcel. Each parcel proposes a total of five new bedrooms between the main residence and the guest cottage. This report estimates 2- persons will occupy each bedroom in the proposed residence, for a total of ten persons living in the main house and guest house on each parcel. The daily and annual water demands for the interior water use of each parcel after construction is complete is able to be estimated as follows:

PROPOSED RESIDENTIAL DAILY WATER USE WITH LOW FLOW FIXTURES							
	Average Flow	Duration	Daily Use	Occupants	Total Daily Water Use	Total Annual Water Use	Total Annual Water Use
Toilet	1.28 gpf		3	10	38.4 gal	14,016 gal	0.04 af
Lavatory Faucet	1.5 gpm	0.25 min	3	10	11.25 gal	4,106.25 gal	0.01 af
Kitchen Faucet	1.5 gpm	4 min	1	10	60.0 gal	21,900 gal	0.07 af
Shower Head	1.5 gpm	8 min	1	10	120 gal	43,800 gal	0.13 af
Bath	22 gal		0.1	10	22.0 gal	8,030 gal	0.02 af
Clothes Washer	12 gal per load		0.1	10	12.00 gal	4,380.0 gal	0.01 af
Dish Washer	4 gal per cycle		0.1	10	4 gal	1,460 gal	0.00 af
Total					267.65 gal	97,692 gal	0.30 af

Assumptions:

- 1.) One load of laundry completed per day
- 2.) Dish washer is ran once per day
- 3.) One bath is taken every other day

Utilizing water fixtures and appliances with the flow ratings specified in the above table will limit the proposed water usage to 268 gallons per day or 0.30 acre-feet per parcel.

C. Proposed External Water Demand

In reviewing the project site plans, each parcel proposes three external water uses:

- 1.) Shrubs, plants, and trees requiring drip irrigation
- 2.) Lawn requiring spray irrigation
- 3.) Pool, requiring water replenishment due to evaporation

Both 601 and 603 Fulton Lane’s water use for the landscaping will be utilizing the City’s water. For the purpose of this report, the landscaping’s water use has been estimated based on City and State Water Efficient Landscape Ordinance (WELO) and the landscaping plans prepared by Studio Green Architecture. Based on the WELO and the landscaping plans, 601 Fulton Lane’s Landscaping will use 536 gallons per day or 0.60 acre-feet per year and 603 Fulton Lane’s Landscaping will use 304 gallons per day or 0.34 acre-feet per year.

The water replenishment for the pool on both parcels will be trucked in from an approved off-site source. The City’s water shall not be utilized for the pool replenishment.

D. Proposed Total Water Demand

Each parcel’s total water use is comprised of the internal water use generated from the residence and from the external water use generated by the landscaping. Please see the table below for a summary of the total water use per parcel:

PROPOSED WATER DEMAND			
601 Fulton Lane	Total Daily Water Use	Total Annual Water Use	Total Annual Water Use
Internal Water Use	268 gal	97,692 gal	0.30 af
External Water Use	536 gal	195,497 gal	0.60 af
Total	803 gal	293,190 gal	0.90 af
603 Fulton Lane			
Internal Water Use	268 gal	97,692 gal	0.30 af
External Water Use	304 gal	110,782 gal	0.34 af
Total	571 gal	208,474 gal	0.64 af

The total water use for 601 and 603 Fulton Lane is estimated at 803 gallons per day or 0.90 acre-feet per year and 571 gallons per day or 0.64 acre-feet per year respectively.



III. OFF-SITE RETROFITS

As previously discussed, there are no baseline water usages for either parcel. Therefore, there are no opportunities to retrofit fixtures or irrigation on either parcel to mitigate the proposed water usage. In order to be water neutral, 601 Fulton lane and 603 Fulton Lane will be required to reduce the overall water usage in the City of St. Helena Municipal Water System by 803 gallons per day and 571 gallons per day respectively.

Prior to any retrofits, a baseline needs to be established to have a measureable means of reducing the water use in the City of St. Helena. For the purpose of this report, the offsite retrofits consists of a typical residence with regular water fixtures and converting the same residence to use low-flow water fixtures. A typical residence consists of a three bedroom, two bathroom household with a total of six people. Retrofitting a typical residence to utilize low-flow water fixtures will provide a water savings per residence. Once the water savings per retrofitted residence are known, each parcel will be able to determine how many residences will be needed to retrofit to offset the increased water use.

Per discussion with the City of St. Helena Public Works Department, a calculation study has been prepared to determine the numbers of offsite residential retrofits are required to save 625 gallons per day and 446 gallons per day in the City of St. Helena.

See below for the breakdown of a typical residential water use without any low-flow retrofits.

TYPICAL RESIDENTIAL DAILY WATER USE (NOT LOW FLOW)

	Average Flow	Duration	Daily Use	Occupants	Total Daily Water Use	Total Annual Water Use	Total Annual Water Use
2 Toilet	1.60 gpf		3	6	28.8 gal	10,512 gal	0.03 af
2 Lavatory Faucet	2.2 gpm	0.25 min	3	6	9.90 gal	3,613.50 gal	0.01 af
1 Kitchen Faucet	2.2 gpm	4 min	1	6	52.8 gal	19,272 gal	0.06 af
2 Shower Head	2.5 gpm	8 min	1	6	120 gal	43,800 gal	0.13 af
Total					211.50 gal	77,198 gal	0.24 af

Based on these calculations, a typical residential water use is estimated to use 212 gallons per day.

Retrofitting that same residence with low flow fixtures, the typical water use is able to be calculated below:

RESIDENTIAL DAILY WATER USE WITH LOW FLOW FIXTURES

	Average Flow	Duration	Daily Use	Occupants	Total Daily Water Use	Total Annual Water Use	Total Annual Water Use
2 Toilet	1.28 gpf		3	6	23.0 gal	8,410 gal	0.03 af
2 Lavatory Faucet	1.5 gpm	0.25 min	3	6	6.75 gal	2,463.75 gal	0.01 af
1 Kitchen Faucet	1.5 gpm	4 min	1	6	36.0 gal	13,140 gal	0.04 af
2 Shower Head	1.5 gpm	8 min	1	6	72 gal	26,280 gal	0.08 af
Total					137.79 gal	50,293 gal	0.15 af

Based on these calculations, a typical residential water use is estimated a typical residence is estimated to use 138 gallons per day.



By retrofitting a standard 3 bedroom, 2 bathroom residence, the City of St. Helena are able to save approximately 74 gallons per day from the municipal water system. See the table below for a summary of the estimated water use.

PROPOSED WATER USE SAVINGS

	Gallons		Acre Feet
	Daily	Annual	Annual
Regular-Flow Residence	212	77,198	0.24
Low-Flow Residence	138	50,293	0.15
Savings	74	127,491	0.39

In order for each parcel to be water neutral with the proposed development, the owner needs to retrofit eleven typical residences for 601 Fulton lane and eight typical residences for 603 Fulton Lane in the City of St. Helena. See the table below for a summary of the number of retrofits needed.

RETROFITS REQUIRED FOR 601 FULTON LANE

	Gallons		Acre Feet
	Daily	Annual	Annual
601 Fulton Lane Water Use	803	293,095	0.90
Water Savings per residence	74	26,904	0.08
Number of residences Needed to Retrofit	11		

RETROFITS REQUIRED FOR 603 FULTON LANE

	Gallons		Acre Feet
	Daily	Annual	Annual
603 Fulton Lane Water Use	571	208,415	0.64
Water Savings per residence	74	26,904	0.08
Number of residences Needed to Retrofit	8		

Due to the difficulty in identifying applicable residential retrofit opportunities and per conversations between the project owner and the City of St. Helena's Public Works Director, the owner proposes a monetary contribution to a leak study as an alternative to installing offsite retrofits. To determine the monetary contribution amount, a cost analysis has been prepared to determine the total cost required to retrofit the typical residences. See Appendix 3 for the breakdown of the material and labor cost of the retrofits for the above noted residences. Based on research and typical industry standards, the estimated total cost required to retrofit the eleven residences for 601 Fulton Lane is \$21,769.00 and the total estimated cost required to retrofit eight residences for 603 Fulton lane is \$15,832.00.

Given the above noted estimates, the owner is proposing a \$22,000 contribution for 601 Fulton Lane's water use and \$16,000 monetary contribution for 603 Fulton Lane's water use to the City of St. Helena as an alternative to installing the offsite retrofits.



IV. CONCLUSION

The proposed site improvements on the newly created 601 and 603 Fulton Lane will increase the water demand on the City of St. Helena Municipal Water System by approximately 803 and 571 gallons per day respectively. The owner is proposing a \$38,000 (\$22,000 for 601 Fulton Lane and \$16,000 for 603 Fulton Lane) monetary contribution to the leak study as an alternative to providing the offsite retrofits. By doing this, the water use for both 601 Fulton Lane and 603 Fulton Lane will meet the City of St. Helena's water neutral requirement.



Appendix 1:
Water Efficient Product Information



Gravity Series

Model

WETS 9000-1.28

Two Piece Floor Mounted Elongated Toilet Tank System

DESCRIPTION

Complete two piece vitreous china, elongated, floor mounted toilet tank system.

Flush Cycle

- Model WETS-9000.9010-1.28 gpf/4.8 Lpf (Left Handle)
 - ST-9000-A 1.28 Bowl
 - ST-9010-A 1.28 Left Handle Tank
- Model WETS-9000.9110-1.28 gpf/4.8 Lpf (Right Handle)
 - ST-9000-A 1.28 Bowl
 - ST-9110-A 1.28 Right Handle Tank



Left Handle Model Shown

SPECIFICATIONS

Quiet, two piece toilet tank system with vitreous china floor mounted elongated water closet and compact tank for left handle or right handle with the following features:

Two Piece Toilet System

- Contemporary design
- Siphon jet flushing action
- Depending on model selected, available with a right or left handle
- Quiet powerful gravity flush
- Elongated bowl
- 12" rough-in
- 3" valve opening for better flush performance
- Vitreous china
- Integral trap
- Color matched floor caps
- 2 1/8" fully glazed trapway
- Water pressure range: 25 to 80 PSI
- Tank and bowl must be ordered as two (2) separate items
- Water spot area 7 7/8" x 6 1/4"
- Easy handle actuation
- Water supply not included
- Toilet seat not included
- Compatible with toilet seat models: Olsonite 10CT, Bemis 1955CT & Church Commercial 295CT
- Toilet tank system is in compliance to the applicable sections of ASME A112.19.2/CSA B45.0/CSA B45.1

FEATURES

Performance

Sloan's toilet tank system incorporates a high performance flapper flush valve to ensure an efficient and optimum flushing performance. 3" valve opening offers better waste removal and powerfully clears the bowl.

Colors and Accessories

Available in the color White with polished chrome left or right trip handle. For additional information refer to our price book.

Functional

The tank valve provides a 1.28 gpf low consumption flush. Durable construction provides non-corrosive dependability. Anti-siphon ballcock allows reliable operation at high or low water pressures. Adjustment screw allows water level adjustment for individual preference.

Economical

High Efficiency Toilet tank system provides additional savings in water usage. Reduces maintenance and operation costs. Designed for commercial use and also ideal for residential.

Warranty

3 year (limited)

Product Specification

Elongated toilet tank system shall be made of vitreous china. Toilet tank system shall be installed at required height of 29" from floor to top of tank fixture. Toilet tank system shall be floor mounted. Toilet tank system shall include floor mount bolts and caps. Toilet tank system shall be a high efficiency 1.28 gpf. Toilet tank system shall be Sloan model WETS-9000.9010-1.28 (left handle) or Sloan model WETS-9000.9110-1.28 (right handle).



Listed by I.A.P.M.O.

This space for Architect/Engineer approval

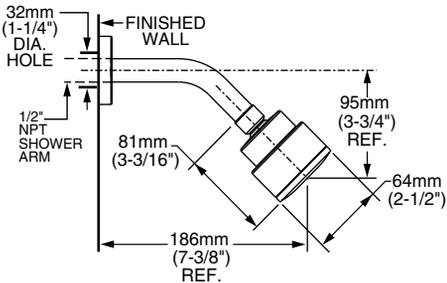
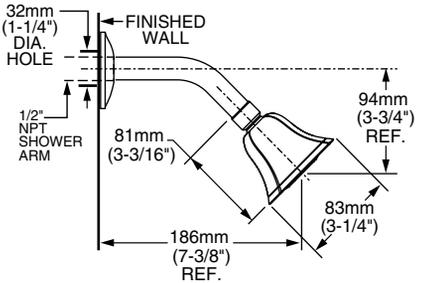
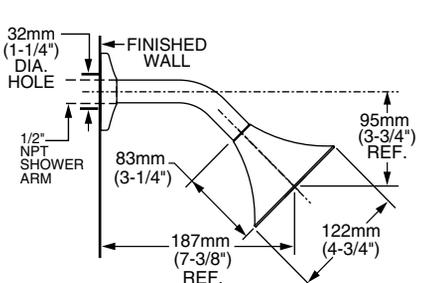
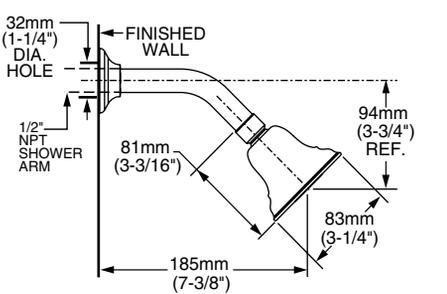
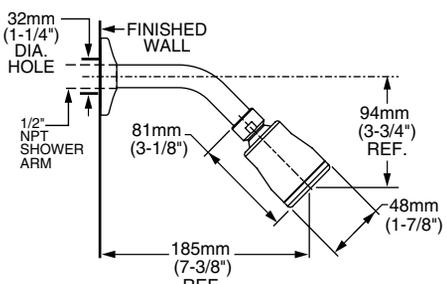
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Model Specified	Quantity
Variations Specified	
Customer/Wholesaler	
Contractor	
Architect	

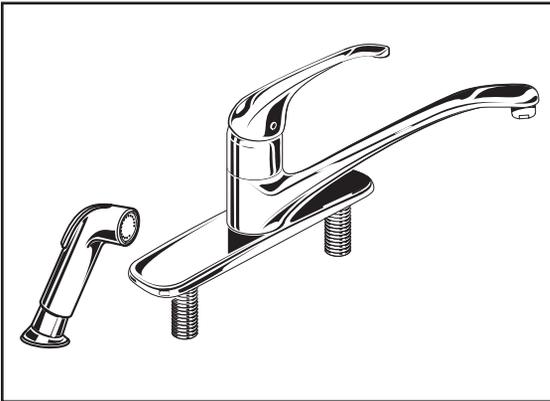
The information contained in this document is subject to change without notice.



Sloan Valve Company
 10500 Seymour Avenue
 Franklin Park, IL 60131
 Phone: 1-800-9-VALVE-9 (982-5839)
 or 1-847-671-4300
 Fax: 1-800-447-8329
 or 1-847-671-4380
 www.sloanvalve.com

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Rev. 0b (07/10)

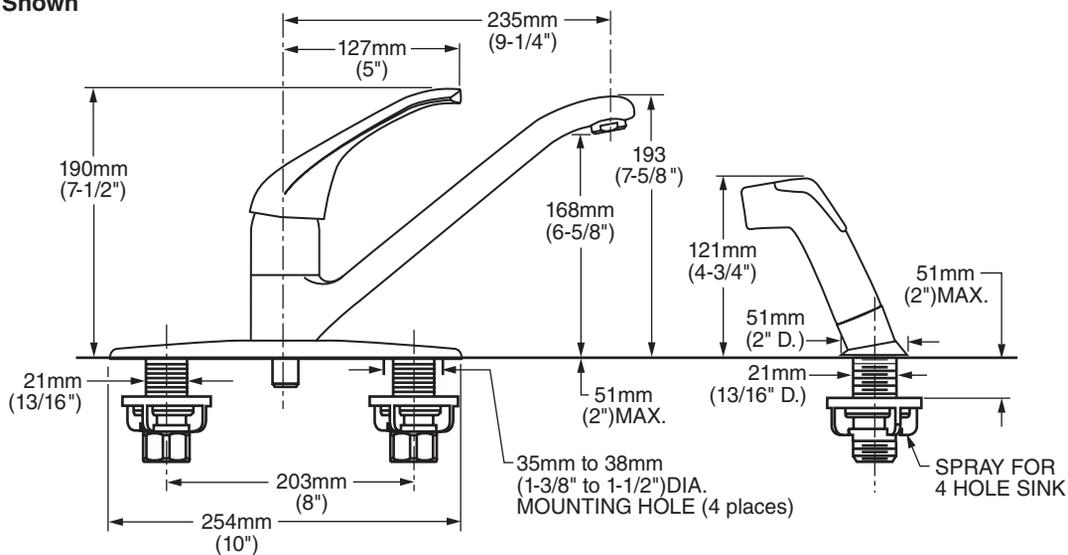
Model #	Description	Finishes	Roughing-In Dimensions
<p>1660.631</p>  <p>1660.611</p> 	<p>MODERN FloWise® WATER SAVING SHOWERHEAD</p> <ul style="list-style-type: none"> • Up to 40% water savings • Turbine Spray at Max. 1.5 gpm/5.7L/min. • Angle adjustable <p>MODERN FloWise® WATER SAVING SHOWERHEAD</p> <ul style="list-style-type: none"> • Showerhead only • Max. 1.5 gpm/5.7L/min. 	<p>.002 Polished Chrome .075 Stainless Steel (PVD) .295 Satin Nickel (PVD)</p>	 <p>32mm (1-1/4") DIA. HOLE FINISHED WALL 1/2" NPT SHOWER ARM 81mm (3-3/16") 186mm (7-3/8") REF. 95mm (3-3/4") REF. 64mm (2-1/2")</p>
<p>1660.831</p>  <p>1660.811</p> 	<p>SQUARE FloWise® WATER SAVING SHOWERHEAD</p> <ul style="list-style-type: none"> • Up to 40% water savings • Turbine Spray at Max. 1.5 gpm/5.7L/min. • Angle adjustable <p>SQUARE FloWise® WATER SAVING SHOWERHEAD</p> <ul style="list-style-type: none"> • Showerhead only • Max. 1.5 gpm/5.7L/min. 	<p>.002 Polished Chrome .068 Blackened Bronze (PVD) .295 Satin Nickel (PVD)</p>	 <p>32mm (1-1/4") DIA. HOLE FINISHED WALL 1/2" NPT SHOWER ARM 81mm (3-3/16") 186mm (7-3/8") REF. 94mm (3-3/4") REF. 83mm (3-1/4")</p>
<p>1660.732</p>  <p>1660.715</p> 	<p>TRANSITIONAL FloWise® WATER SAVING SHOWERHEAD</p> <ul style="list-style-type: none"> • Up to 40% water savings • Turbine Spray at Max. 1.5gpm/5.7L/min. • Angle adjustable <p>TRANSITIONAL FloWise® WATER SAVING SHOWERHEAD</p> <ul style="list-style-type: none"> • Showerhead only • Max. 1.5 gpm/5.7L/min. 	<p>.002 Polished Chrome .099 Polished Brass (PVD) .075 Stainless Steel (PVD) .295 Satin Nickel (PVD)</p>	 <p>32mm (1-1/4") DIA. HOLE FINISHED WALL 1/2" NPT SHOWER ARM 83mm (3-1/4") 187mm (7-3/8") REF. 95mm (3-3/4") REF. 122mm (4-3/4")</p>
<p>1660.131</p>  <p>1660.111</p> 	<p>TRADITIONAL FloWise® WATER SAVING SHOWERHEAD</p> <ul style="list-style-type: none"> • Up to 40% water savings • Turbine Spray at Max. 1.5 gpm/5.7L/min. • Angle adjustable <p>TRADITIONAL FloWise® WATER SAVING SHOWERHEAD</p> <ul style="list-style-type: none"> • Showerhead only • Max. 1.5 gpm/5.7L/min. 	<p>.002 Polished Chrome .068 Blackened Bronze (PVD) .295 Satin Nickel (PVD)</p>	 <p>32mm (1-1/4") DIA. HOLE FINISHED WALL 1/2" NPT SHOWER ARM 81mm (3-3/16") 185mm (7-3/8") REF. 94mm (3-3/4") REF. 83mm (3-1/4")</p>
<p>1660.731</p>  <p>1660.710</p> 	<p>FloWise® WATER SAVING SHOWERHEAD</p> <ul style="list-style-type: none"> • Up to 40% water savings • Turbine Spray at Max. 1.5 gpm/5.7L/min. • Angle adjustable <p>FloWise® WATER SAVING SHOWERHEAD</p> <ul style="list-style-type: none"> • Showerhead only • Max. 1.5 gpm/5.7L/min. 	<p>.002 Polished Chrome .068 Blackened Bronze (PVD) .075 Stainless Steel (PVD) .099 Polished Brass (PVD) .295 Satin Nickel (PVD)</p>	 <p>32mm (1-1/4") DIA. HOLE FINISHED WALL 1/2" NPT SHOWER ARM 81mm (3-1/8") 185mm (7-3/8") REF. 94mm (3-3/4") REF. 48mm (1-7/8")</p>



4205.001 Shown

MODEL NUMBER:

- 4205.001 Kitchen Faucet**
Metal Lever Handle. Separate color-matched handspray.
- 4205.001.F15 Kitchen Faucet**
Same as above. 1.5gpm flow rate.
- 4205.000 Kitchen Faucet**
Metal Lever Handle. Less handspray.
- 4205.000.F15 Kitchen Faucet**
Same as above. 1.5gpm flow rate.



GENERAL DESCRIPTION:

Washerless 47mm ceramic disc valve cartridge with integral hot limit safety stop. Cast brass waterway with 1/2" male inlet shanks. Cast brass 9-1/4" (235mm) swivel spout, metal escutcheon plate (escutcheon size 10" L x 2-5/16" W), and metal handle. 2.2gpm/8.3L/min. maximum flow rate, 1.5gpm/5.7 L/min. maximum flow rate for F15 models.

PRODUCT FEATURES:

- Ceramic Disc Valve Cartridge:** Assures a lifetime of drip-free performance.
- Cast Brass Waterway, Cast Brass Spout:** Highest quality faucet materials for durability and long life.
- Higher and Longer Spout:** Spout designed to allow more room under spout and extended reach into the sink.
- Memory Position Valving:** Allows user to turn valve on and off at preferred temperature setting without readjusting handle position each time.
- Adjustable Hot Limit Safety Stop:** Limits the amount of hot water allowed to mix with cold. Reduces the risk of accidental scalding.
- Lead Free:** Faucet contains $\leq 0.25\%$ total lead content by weighted average.
- Simple Installation:** Fast and easy one person installation. Faucet drops in from top. Quick-spin nuts secure faucet in place.

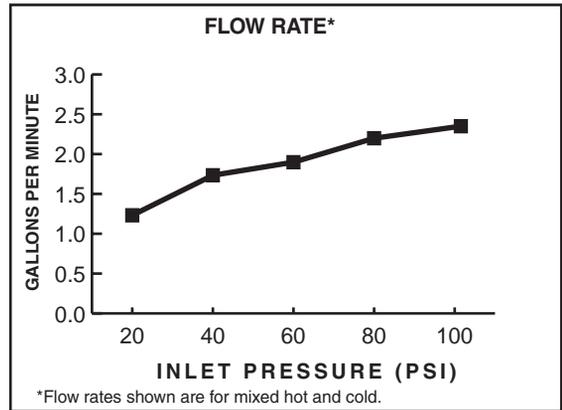
SUGGESTED SPECIFICATION:

Single control kitchen faucet shall feature a cast brass body and swivel spout, and all metal handle. Shall also feature washerless 47mm ceramic disc valve cartridge with integral hot limit safety stop. Fitting shall be American Standard Model # 4205.00____.

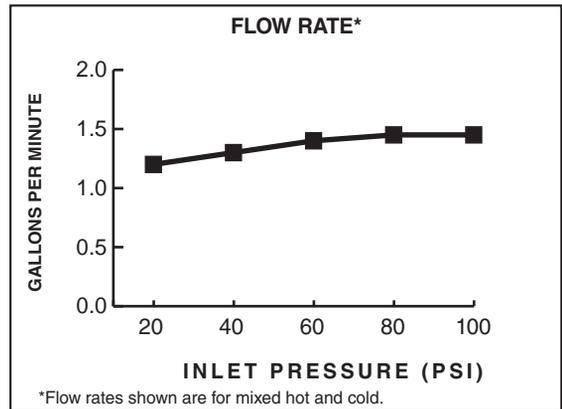
CODES AND STANDARDS

These products meet or exceed the following codes and standards:

- ANSI A117.1**
- ASME A112.18.1**
- CSA B 125**
- NSF 61/Section 9 & Annex G**



2.2gpm/8.3L/min. FLOW RATE



1.5gpm/5.7 L/min. FLOW RATE

Product Number	Description	Finish
		Polished Chrome
		002
4205.001	Kitchen faucet. Cast brass waterway with 1/2" male inlet shanks. Separate handspray.	
4205.001.F15	Same as above. 1.5gpm/5.7 L/min. flow rate.	
4205.000	Kitchen faucet. Cast brass waterway with 1/2" male inlet shanks. Less handspray.	
4205.000.F15	Same as above. 1.5gpm/5.7 L/min. flow rate.	

 Meets the American Disabilities Act Guidelines and **ANSI A117.1** Requirements for the physically challenged.

CENTERSET BATHROOM SINK FAUCET K-15583

Features

- Metal construction
- One-piece, self-contained ceramic disc valve allows both volume and temperature control
- Temperature memory allows faucet to be turned on and off at any temperature setting
- High-temperature limit setting for added safety
- 4-1/4" (108 mm) spout reach
- Stationary spout
- Metal throat plate
- For 4" (102 mm) centers
- Pop-up drain with tailpiece
- Available with flexible connections or ground joints
- 1.5 gallons (5.7 liters) per minute maximum flow rate

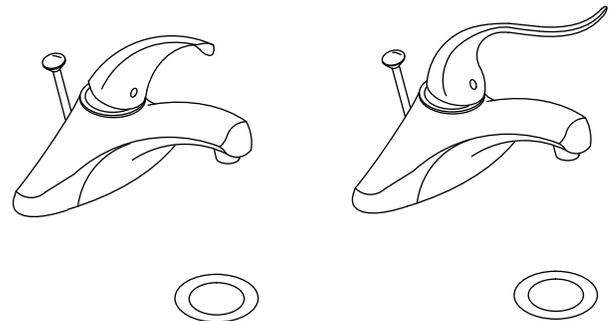
ADA CSA B651 OBC



Codes/Standards Applicable

Specified model meets or exceeds the following at date of manufacture:

- ADA
- ICC/ANSI A117.1
- CSA B651
- OBC
- ASME A112.18.1/CSA B125.1
- NSF 61
- All applicable US Federal and State material regulations
- EPA WaterSense®



K-15583-F
K-15583-P

K-15583-F5
K-15583-5P

Colors/Finishes

- CP: Polished Chrome

Specified Model

Model	Description	Colors/Finishes
K-15583-F	Centerset bathroom sink faucet – 4-1/2" (114 mm) lever handle and flexible connections	<input type="checkbox"/> CP
K-15583-P	Centerset bathroom sink faucet – 4-1/2" (114 mm) lever handle and ground joints	<input type="checkbox"/> CP
K-15583-F5	Centerset bathroom sink faucet – 5-3/4" (146 mm) lever handle and flexible connections	<input type="checkbox"/> CP
K-15583-5P	Centerset bathroom sink faucet – 5-3/4" (146 mm) lever handle and ground joints	<input type="checkbox"/> CP

Optional Accessories

1160594	Large Spray 0.35 gpm (1.32 lpm) – Insert only	<input type="checkbox"/> NA
_____	Additional flow options are available (refer to the Price Book)	<input type="checkbox"/> NA

Product Specification

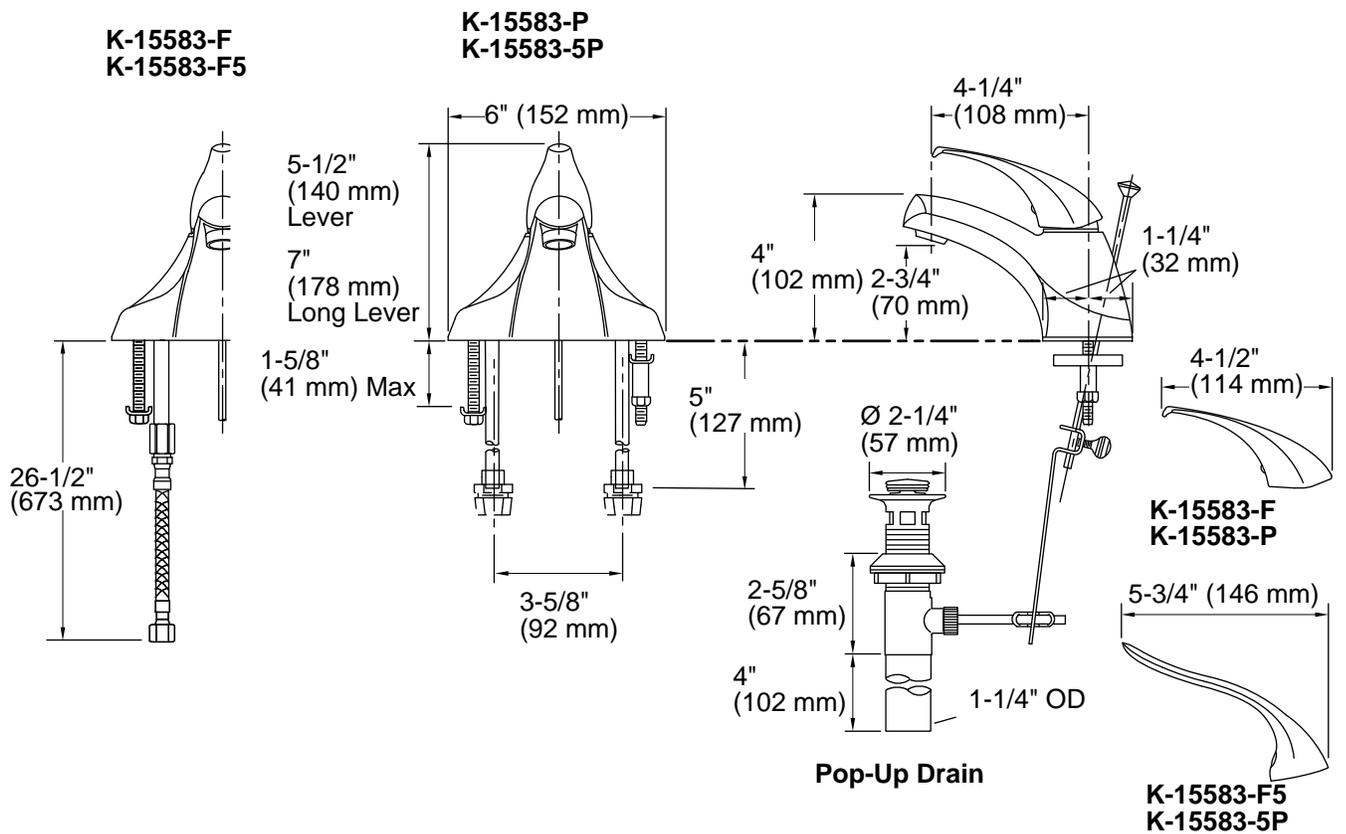
The single-handle centerset bathroom sink faucet shall be of metal construction. Product shall feature a one-piece, self-contained ceramic disc valve, which allows both volume and temperature control. Product shall feature temperature memory, allowing the faucet to be turned on and off at any temperature setting, and includes a high-temperature limit stop for added safety. Product shall feature a 4-1/4" (108 mm) spout reach, stationary spout, metal throat plate, and pop-up drain with tailpiece. Product shall be for 4" (102 mm) centers. Product shall be available with flexible connections or ground joints. Faucet shall be Kohler Model K-15583-____-CP

CORALAIS®

Installation Notes

Install this product according to the installation guide.

ADA, CSA B651, OBC compliant when installed to the specific requirements of these regulations.



Product Diagram

DESCRIPTION

Complete two piece vitreous china, elongated, floor mounted toilet tank system.

Flush Cycle

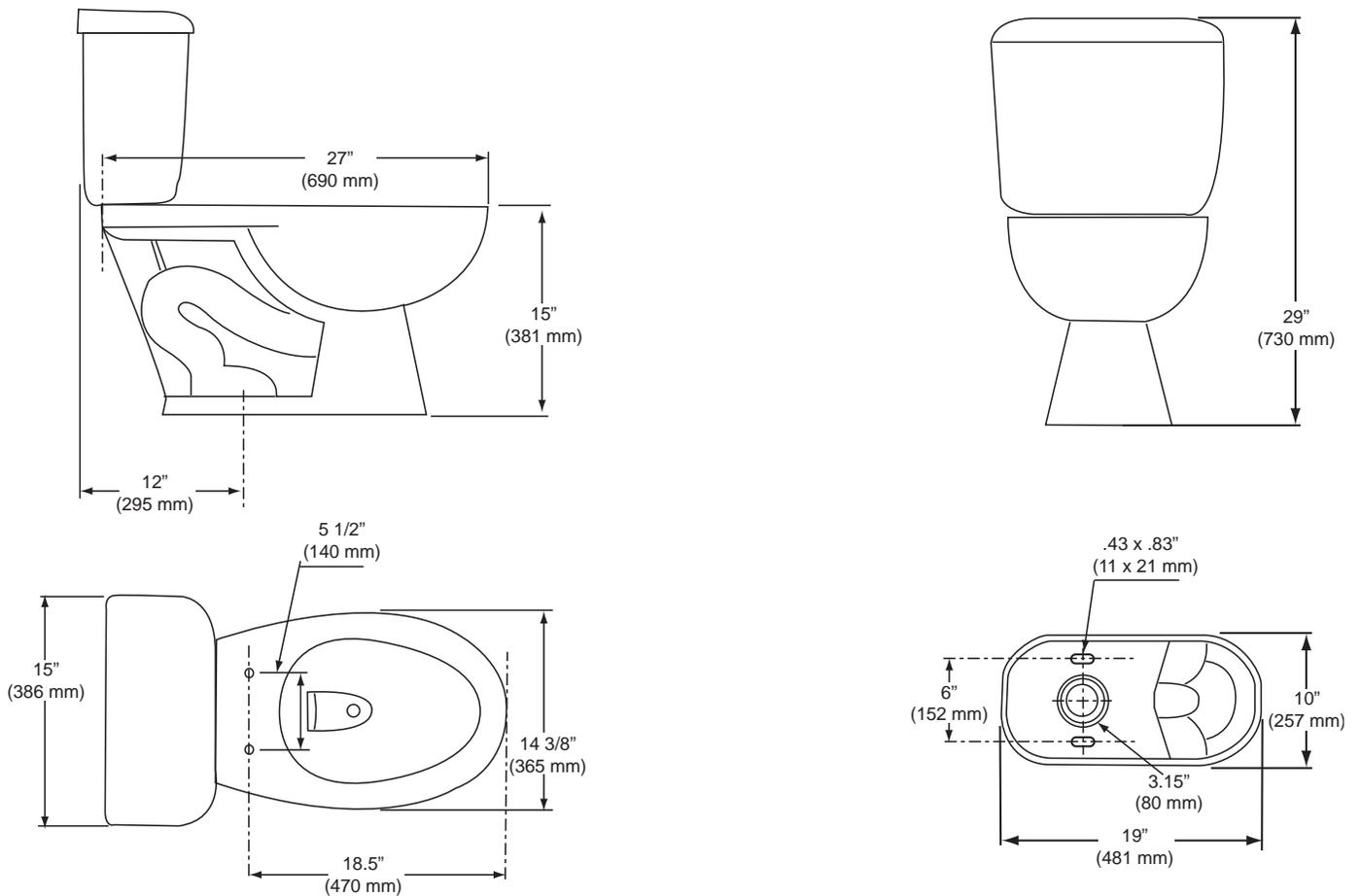
□ Model WETS-9000.9010-1.28 gpf/4.8 Lpf (Left Handle)

- ST-9000-A 1.28 Bowl
- ST-9010-A 1.28 Left Handle Tank

□ Model WETS-9000.9110-1.28 gpf/4.8 Lpf (Right Handle)

- ST-9000-A 1.28 Bowl
- ST-9110-A 1.28 Right Handle Tank

DIMENSIONS/ROUGH-IN



SLOAN VALVE COMPANY • 10500 SEYMOUR AVENUE • FRANKLIN PARK, IL 60131

Phone: 1-800-9-VALVE-9 or 1-847-671-4300 • Fax: 1-800-447-8329 or 1-847-671-4380 • www.sloanvalve.com



Appendix 2:
Architectural Plans

FOOT PATH

4
15.0 WIRE FENCE

VINEYARD

EASEMENT

AUTO COURT

MAIN HOUSE

VINEYARD

SCREENING OLIVES

MAIN DRIVEWAY

VINEYARD

603 FULTON LANE PROPERTY

SHED

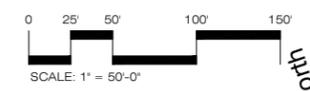
VEHICLE GATE

FULTON LANE

CONC. WALL

EXISTING VINEYARD

DIRT ROAD



STUDIO GREEN
 Landscape Architecture
 232 Sir Francis Drake Blvd.
 San Anselmo, CA 94960
 Phone: (415) 721-2905
 Fax: (415) 721-0910
 www.studiogreen.com
 email: info@studiogreen.com

601 FULTON LANE
 601 FULTON LANE, ST. HELENA,
 CALIFORNIA, 94574

Date:	Issue:
12-01-15	Design
	Review

**OVERALL
SITE
PLAN**

Drawn by: RP
 Checked by: JM

L0.0



Appendix 3:
Fulton Lane Retrofit Cost

601 FULTON LANE RETROFITS

Residential Retrofit Project - Retrofit a 3 Bedroom, 2 Bathroom Residence

TYPICAL RESIDENTIAL DAILY WATER USE (NOT LOW FLOW)

	Average Flow	Duration	Daily Use	Occupants	Total Daily Water Use	Total Annual Water Use	Total Annual Water Use
2 Toilet	1.60 gpf		3	6	28.8 gal	10,512 gal	0.03 af
2 Lavatory Faucet	2.2 gpm	0.25 min	3	6	9.90 gal	3,613.50 gal	0.01 af
1 Kitchen Faucet	2.2 gpm	4 min	1	6	52.8 gal	19,272 gal	0.06 af
2 Shower Head	2.5 gpm	8 min	1	6	120 gal	43,800 gal	0.13 af
Total					211.50 gal	77,198 gal	0.24 af

RESIDENTIAL DAILY WATER USE WITH LOW FLOW FIXTURES

	Average Flow	Duration	Daily Use	Occupants	Total Daily Water Use	Total Annual Water Use	Total Annual Water Use
2 Toilet	1.28 gpf		3	6	23.0 gal	8,410 gal	0.03 af
2 Lavatory Faucet	1.5 gpm	0.25 min	3	6	6.75 gal	2,463.75 gal	0.01 af
1 Kitchen Faucet	1.5 gpm	4 min	1	6	36.0 gal	13,140 gal	0.04 af
2 Shower Head	1.5 gpm	8 min	1	6	72 gal	26,280 gal	0.08 af
Total					137.79 gal	50,293 gal	0.15 af

PROPOSED WATER USE SAVINGS

	Gallons		Acre Feet
	Daily	Annual	Annual
Regular-Flow Residenc	212	77,198	0.24
Low-Flow Residence	138	50,293	0.15
Savings	74	127,491	0.39

RETROFITS REQUIRED FOR 601 FULTON LANE

	Gallons		Acre Feet
	Daily	Annual	Annual
601 Fulton Lane Water Use	803	293,095	0.90
Water Savings per residence	74	26,904	0.08
Number of residences Needed to Retrofit	11		

601 FULTON LANE RETROFITS

Number of residences Needed to Retrofit	11		
2 Toilets per residence	Source of purchase:	Kohler Low Flow Toilet (See Source Below)	
2 Lavatory Faucets per residence	Source of purchase:	American Standard Faucet (See Source Below)	
2 Shower Heads per residence	Source of purchase:	American Standard Shower Head (See Source Below)	
1 Kitchen Faucet per residence	Source of purchase:	American Standard Kitchen Faucet (See Source Below)	

Material Cost per residence	Qty	Cost per Unit*	Total Cost
Toilets	2	\$305.00	\$610.00
Lavatory Faucets	2	\$155.00	\$310.00
Kitchen Faucets	1	\$135.00	\$135.00
Shower Heads	2	\$207.00	\$414.00
Total Cost per residence			\$1,469.00

Installation Cost per residence	Hour	Qty	Cost per Hour*	Total Cost
Toilets	1.5	2	\$60.00	\$180.00
Lavatory Faucets	1.5	2	\$60.00	\$180.00
Kitchen Faucets	1.5	1	\$60.00	\$90.00
Shower Heads	0.5	2	\$60.00	\$60.00
Total cost per residence				\$510.00

Total cost per retrofitted residence \$1,979.00

Total Material Cost (11 residences)	Qty	Cost per Unit*	Total Cost
Toilets	22	\$305.00	\$6,710.00
Lavatory Faucets	22	\$155.00	\$3,410.00
Kitchen Faucets	11	\$135.00	\$1,485.00
Shower Heads	22	\$207.00	\$4,554.00
Total Cost			\$16,159.00

Total Installation Cost (11 residences)	Hour	Qty	Cost per Hour*	Total Cost
Toilets	1.5	22	\$60.00	\$1,980.00
Lavatory Faucets	1.5	22	\$60.00	\$1,980.00
Kitchen Faucets	1.5	11	\$60.00	\$990.00
Shower Heads	0.5	22	\$60.00	\$660.00
Total Cost				\$5,610.00

Total cost for 601 Fulton Lane Project (11 residence: \$21,769.00

*List of Sources

Kohler Low Flush Toilet:

<http://www.us.kohler.com/us/Cimarron-Comfort-Height-two-piece-round-front-1.28-gpf-toilet-with-AquaPiston-flush-technology-and-left-hand-trip-lever/productDetail/toilets/428991.htm>

American Standard Bathroom Sink: <http://www.wayfair.com/American-Standard-Tropic-Centerset-Bathroom-Sink-Faucet-with-Double-Lever-Handles-7>

American Standard Kitchen Faucet: <http://www.wayfair.com/American-Standard-Monterrey-Double-Handle-Top-Mount-Faucet-6409170-ASD7947.html>

American Standard Shower Head: <http://www.wayfair.com/American-Standard-Berwick-Volume-Shower-Faucet-Trim-Kit-T430.501-ASD7403.html>

Source of Cost per Hour: <http://www.angieslist.com/articles/how-much-does-it-cost-hire-handyman.htm>

603 FULTON LANE RETROFITS

Residential Retrofit Project - Retrofit a 3 Bedroom, 2 Bathroom Residence

TYPICAL RESIDENTIAL DAILY WATER USE (NOT LOW FLOW)

	Average Flow	Duration	Daily Use	Occupants	Total Daily Water Use	Total Annual Water Use	Total Annual Water Use
2 Toilet	1.60 gpf		3	6	28.8 gal	10,512 gal	0.03 af
2 Lavatory Faucet	2.2 gpm	0.25 min	3	6	9.90 gal	3,613.50 gal	0.01 af
1 Kitchen Faucet	2.2 gpm	4 min	1	6	52.8 gal	19,272 gal	0.06 af
2 Shower Head	2.5 gpm	8 min	1	6	120 gal	43,800 gal	0.13 af
Total					211.50 gal	77,198 gal	0.24 af

RESIDENTIAL DAILY WATER USE WITH LOW FLOW FIXTURES

	Average Flow	Duration	Daily Use	Occupants	Total Daily Water Use	Total Annual Water Use	Total Annual Water Use
2 Toilet	1.28 gpf		3	6	23.0 gal	8,410 gal	0.03 af
2 Lavatory Faucet	1.5 gpm	0.25 min	3	6	6.75 gal	2,463.75 gal	0.01 af
1 Kitchen Faucet	1.5 gpm	4 min	1	6	36.0 gal	13,140 gal	0.04 af
2 Shower Head	1.5 gpm	8 min	1	6	72 gal	26,280 gal	0.08 af
Total					137.79 gal	50,293 gal	0.15 af

PROPOSED WATER USE SAVINGS

	Gallons		Acre Feet
	Daily	Annual	Annual
Regular-Flow Residenc	212	77,198	0.24
Low-Flow Residence	138	50,293	0.15
Savings	74	127,491	0.39

RETROFITS REQUIRED FOR 603 FULTON LANE

	Gallons		Acre Feet
	Daily	Annual	Annual
603 Fulton Lane Water Use	571	208,415	0.64
Water Savings per residence	74	26,904	0.08
Number of residences Needed to Retrofit	8		

603 FULTON LANE RETROFITS

Number of residences Needed to Retrofit	8		
2 Toilets per residence	Source of purchase:	Kohler Low Flow Toilet (See Source Below)	
2 Lavatory Faucets per residence	Source of purchase:	American Standard Faucet (See Source Below)	
2 Shower Heads per residence	Source of purchase:	American Standard Shower Head (See Source Below)	
1 Kitchen Faucet per residence	Source of purchase:	American Standard Kitchen Faucet (See Source Below)	

Material Cost per residence	Qty	Cost per Unit*	Total Cost
Toilets	2	\$305.00	\$610.00
Lavatory Faucets	2	\$155.00	\$310.00
Kitchen Faucets	1	\$135.00	\$135.00
Shower Heads	2	\$207.00	\$414.00
Total Cost per residence			\$1,469.00

Installation Cost per residence	Hour	Qty	Cost per Hour*	Total Cost
Toilets	1.5	2	\$60.00	\$180.00
Lavatory Faucets	1.5	2	\$60.00	\$180.00
Kitchen Faucets	1.5	1	\$60.00	\$90.00
Shower Heads	0.5	2	\$60.00	\$60.00
Total cost per residence				\$510.00

Total cost per retrofitted residence \$1,979.00

Total Material Cost (8 residences)	Qty	Cost per Unit*	Total Cost
Toilets	16	\$305.00	\$4,880.00
Lavatory Faucets	16	\$155.00	\$2,480.00
Kitchen Faucets	8	\$135.00	\$1,080.00
Shower Heads	16	\$207.00	\$3,312.00
Total Cost			\$11,752.00

Total Installation Cost (8 residences)	Hour	Qty	Cost per Hour*	Total Cost
Toilets	1.5	16	\$60.00	\$1,440.00
Lavatory Faucets	1.5	16	\$60.00	\$1,440.00
Kitchen Faucets	1.5	8	\$60.00	\$720.00
Shower Heads	0.5	16	\$60.00	\$480.00
Total Cost				\$4,080.00

Total cost for 603 Fulton Lane Project (8 residences) \$15,832.00

*List of Sources

Kohler Low Flush Toilet:
<http://www.us.kohler.com/us/Cimarron-Comfort-Height-two-piece-round-front-1.28-gpf-toilet-with-AquaPiston-flush-technology-and-left-hand-trip-lever/productDetail/toilets/428991.htm>

American Standard Bathroom Sink: <http://www.wayfair.com/American-Standard-Tropic-Centerset-Bathroom-Sink-Faucet-with-Double-Lever-Handles-7>

American Standard Kitchen Faucet: <http://www.wayfair.com/American-Standard-Monterrey-Double-Handle-Top-Mount-Faucet-6409170-ASD7947.html>

American Standard Shower Head: <http://www.wayfair.com/American-Standard-Berwick-Volume-Shower-Faucet-Trim-Kit-T430.501-ASD7403.html>

Source of Cost per Hour: <http://www.angieslist.com/articles/how-much-does-it-cost-hire-handyman.htm>

DELTA CONSULTING & ENGINEERING
OF ST. HELENA



SEPTIC FEASIBILITY REPORT

FOR THE

FULTON LANE SUBDIVISIONS (VESTING TENTATIVE PARCEL MAP)

PROJECT LOCATED AT

601 FULTON LANE (APPROXIMATE)
SAINT HELENA, CALIFORNIA 94574

COUNTY: NAPA
APN: 009-050-001

SEPTEMBER 10, 2014

PREPARED FOR REVIEW BY:

CITY OF SAINT HELENA &

NAPA COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES
1195 THIRD STREET
NAPA, CA 94559



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I. INTRODUCTION

The owner of parcel 009-050-001 is applying to the City of Saint Helena for a Vesting Tentative Parcel Map to subdivide the current parcel into two smaller parcels. The parcel is undeveloped except for a City of Saint Helena water main that passes through the parcel, as well as storm water drainage features used to carry runoff through the site. At this time, a connection to the city's municipal sewer system is not available in the area of the parcel. Because on-site wastewater treatment must be used for the subdivided parcels, the City of Saint Helena has required that a septic feasibility report be reviewed by Napa County Environmental Services.

The existing parcel is 14.13 acres. According to the Vesting Tentative Parcel Map in **Appendix 1**, the existing parcel will be subdivided as described below:

- Parcel 1 – 13.63 Acres (Estate Residence & Vineyards)
- Parcel 2 – 0.50 Acres (Single Family Residence)

A site evaluation was conducted in January 2014 to evaluate the suitability of soils for on-site wastewater treatment. The site evaluation yielded two areas on the existing parcel suitable for the installation of wastewater dispersal systems. However, both areas are located on Parcel 1 of the proposed subdivision map. Therefore, wastewater from Parcel 2 must be transmitted to Parcel 1 for final disposal. This report has been prepared to determine the feasibility of dispersing the wastewater from each parcel on Parcel 1. Although all domestic wastewater is proposed to be dispersed on Parcel 1, each parcel will have its own independent wastewater treatment system.

II. SITE EVALUATION

A site evaluation approved by Napa County Environmental Services is required to determine if the soils on-site are acceptable for the subsurface dispersal of wastewater. Delta Consulting & Engineering performed a site evaluation (E14-00052) on January 31, 2014 to locate potential areas for wastewater dispersal systems on the owner's parcel. A total of sixteen (16) test pits were excavated in three different areas of the parcel. The site evaluation denoting the test pit locations and soil findings can be found in **Appendix 2** of this report.

Area 1 contains six test pits. Test pits 1-3 are located on the proposed Parcel 4, and test pits 4-6 are located on the proposed Parcel 3. Due to mottling in test pits 1, 4, 5, and 6, the soil in Area 1 is not adequate for a wastewater dispersal field.

Area 2, located on the east side of the proposed Parcel 2, contains test pits 7-12. The soil in these test pits were all classified as Sandy Clay Loam with Moderate, Sub-Blocky structure. The acceptable soil depth in the pits ranged from 24"-34." All test pits are acceptable for a sub-surface drip dispersal system with a wastewater application rate of 0.6 gallons/day/ft².

Area 3, located on the southwest side of the proposed Parcel 2, contains test pits 13-16. The soil in these test pits were all classified as Sandy Clay Loam with Moderate, Sub-Blocky structure. The acceptable soil depth in the pits ranged from 27"-30." All test pits are acceptable for a sub-surface drip dispersal system with a wastewater application rate of 0.6 gallons/day/ft².



III. PROPOSED WASTEWATER TREATMENT SYSTEMS

A. Wastewater Generation

The Vesting Tentative Parcel Map only proposes residential structures as potential sources of wastewater generated on-site. Therefore, only residential domestic wastewater will be accounted for. The amount of domestic wastewater generated is dependent on the number of bedrooms proposed per parcel. The table below shows the proposed use for each proposed parcel. Estimates for domestic wastewater generated per bedroom are based on Napa County Regulations¹.

Proposed Domestic Wastewater Generation			
Parcel #	Bedroom Count	Gallons/Day/Bedroom	Gallons/Day/Parcel
1	5	120	600
2	5	120	600

B. Wastewater Treatment System – Parcel Configuration

Each parcel will have its own independent functioning wastewater treatment and dispersal system. However, all dispersal areas will be located on Parcel 1. Parcel 1 shall grant an access and utility easement to Parcel 2 for the primary and reserve wastewater dispersal areas. Parcel 2 will use a lift station tank to pump wastewater to its respective treatment, dosing tank and dispersal field on Parcel 2. In total, there will be two separate dosing tanks and two separate dispersal areas. Additionally, the reserve area for each system will be located on Parcel 2. Access and utility easements will be granted between the parcels to construct and maintain each wastewater dispersal system. See **Appendix 3** for exhibits showing the location of proposed easements.

C. Parcel 1: Proposed Wastewater Treatment System

Based on the available soil depth on-site, a Sub-Surface Drip System is required. In order to install this type of system, the wastewater must be treated to secondary standards before dispersal to the soils on-site. This requires the wastewater to be treated to reduce the Total Suspended Solids (TSS) and 5-Day Biochemical Oxygen Demand (BOD5) to concentrations at or below 30 mg/L. Several pieces of equipment will be needed to achieve these treatment levels. The flow chart below estimates the equipment that will be used to reduce the TSS and BOD5 to acceptable levels for sub-surface dispersal.

¹ Napa County Regulations for Design, Construction, and Installation of Alternative Sewage Treatment Systems, Appendix 1, Table 4, 2006.

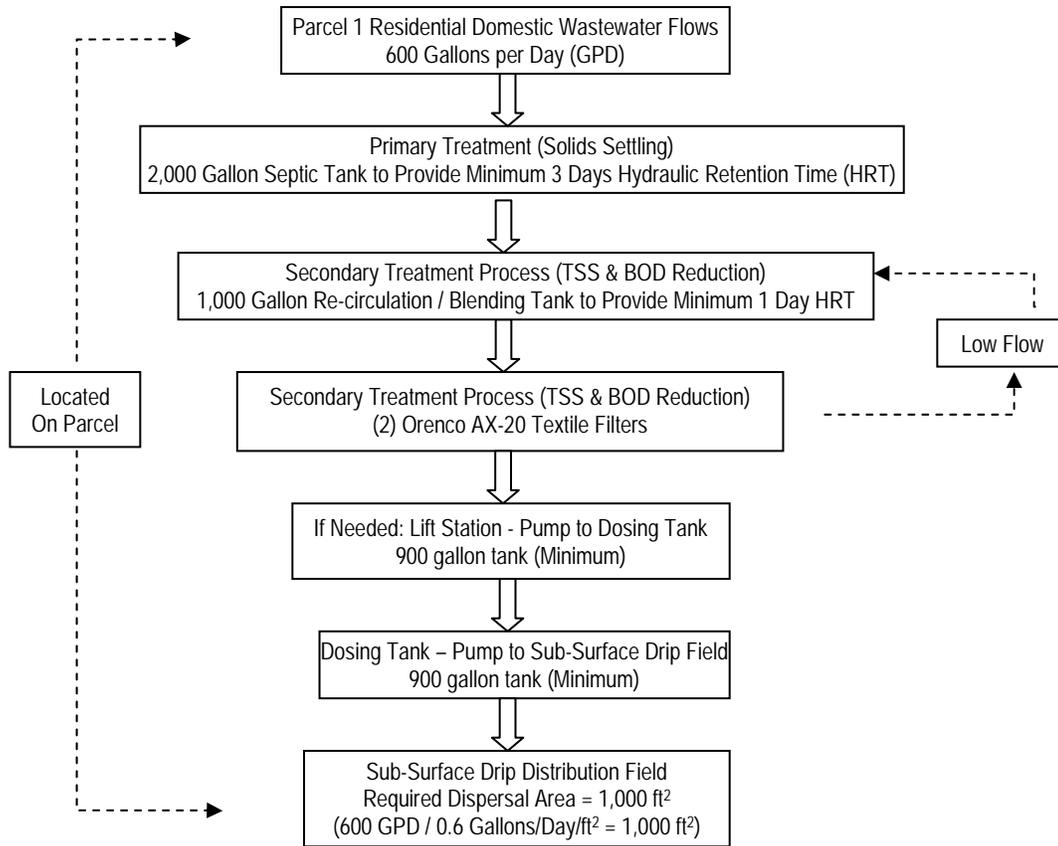


Figure 1: Parcel 1 Wastewater Treatment System Flow Chart

The tanks and treatment equipment locations will be determined once a site plan has been developed for the residential structures on the parcel. The primary sub-surface drip dispersal area will be centered over Test Pit #7 located in Area 2 of the site evaluation report. The 200% reserve area will be located in Area 2 of the site evaluation report. See Appendix 3 for the proposed primary and reserve areas.

D. Parcel 2: Proposed Wastewater Treatment System

Based on the available soil depth on-site, a Sub-Surface Drip System is required. In order to install this type of system, the wastewater must be treated to secondary standards before dispersal to the soils on-site. This requires the wastewater to be treated to reduce the Total Suspended Solids (TSS) and 5-Day Biochemical Oxygen Demand (BOD5) to concentrations at or below 30 mg/L. Several pieces of equipment will be needed to achieve these treatment levels. The flow chart below estimates the equipment per parcel that will be used to reduce the TSS and BOD5 to acceptable levels for sub-surface dispersal.

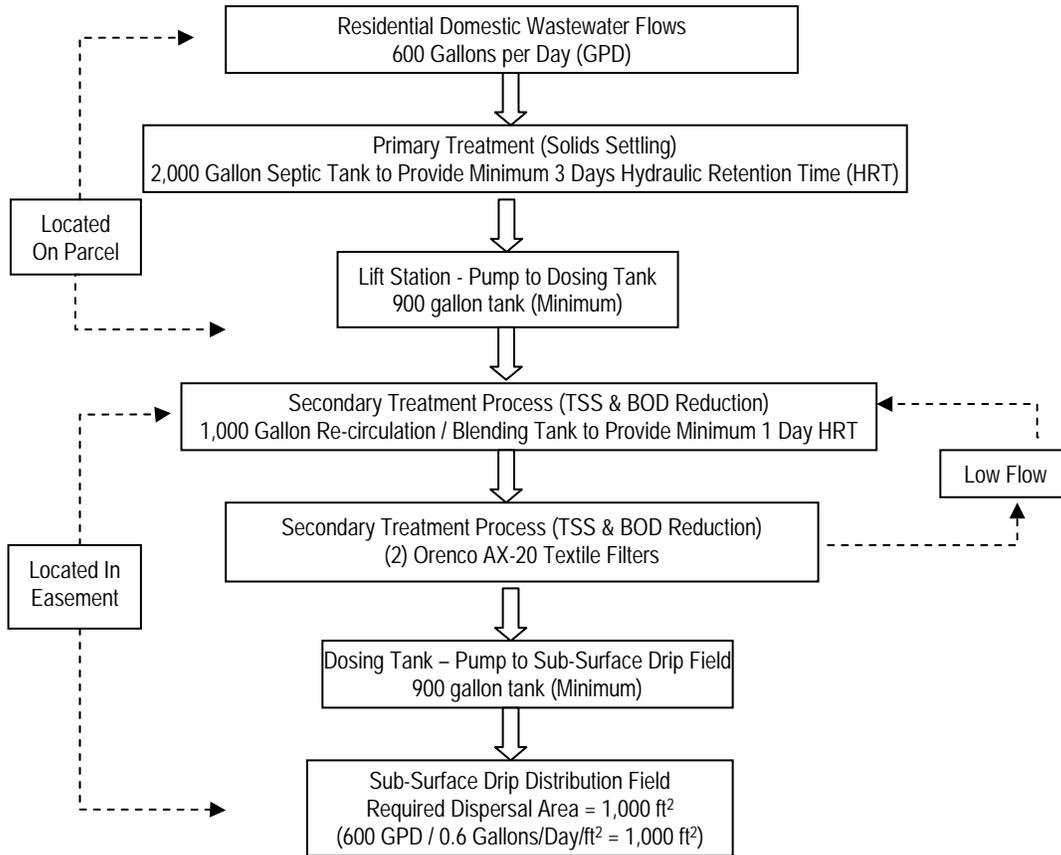


Figure 2: Parcel 2 Wastewater Treatment System Flow Chart

The tanks and treatment equipment locations will be determined once a site plan has been developed for the residential structures on the parcels. The primary sub-surface drip dispersal area will be centered over Test Pits #16 and located in Area 3 of the site evaluation report. The 200% reserve area will be located in Area 2 of the site evaluation report. See Appendix 3 for the proposed primary and reserve areas as well as the proposed extents of their access and utility easements.



IV. CONCLUSION

The owner of parcel 009-050-036 is currently applying to the City of Saint Helena for a Vesting Tentative Parcel Map to subdivide the parcel into two smaller parcels. Currently, a municipal sewer system connection is not available for the parcels. Therefore, domestic wastewater must be treated and disposed of on-site. Because the City of Saint Helena does not regulate on-site wastewater treatment systems, a septic feasibility report must be approved by Napa County Environmental Services prior to the City granting approval of the owners Vesting Tentative Parcel Map.

A site evaluation (E14-00052) for the parcel was conducted by this office in January 2014 and found two areas appropriate for wastewater dispersal using a sub-surface drip system. However, the acceptable dispersal field locations are all on Parcel 1 of the proposed subdivision. Wastewater from Parcel 2 will be pumped to its designated sub-surface drip dispersal system located on Parcel 1. Parcel 2 will require access and utility easements for the construction and maintenance of their systems. Parcel 1 proposes a 5 bedroom residential estate development and vineyards. Parcel 2 proposes a single family residential development with 5 bedrooms.

With the proposed wastewater treatment equipment and dispersal field layouts outlined in this report, the Fulton Lane Subdivisions are capable of treating and dispersing the wastewater generated by the proposed developments on each parcel.



V. APPENDIX

- 1 Vesting Tentative Parcel Map
- 2 Site Evaluation Report
- 3 Wastewater System & Easement Locations

DELTA CONSULTING & ENGINEERING
OF ST. HELENA



APPENDIX 1:
VESTING TENTATIVE PARCEL MAP

SYMBOL LEGEND

	UTILITY POLE		SEWER MANHOLE/RISER WITH ID #
	WELL TYPE MONUMENT		STORM DRAIN MANHOLE WITH ID #
	SIGN		WATER VALVE
	WELL		WATER SERVICE & DCV
	STREET LIGHT		FDC/FV WITH CHECK VALVE
	TREE		FIRE HYDRANT WITH GATE VALVE
	SANITARY SEWER		CLEANOUT
	GAS LINE		PROPOSED CONTOUR
	WATER LINE		SOLID STORM DRAIN
	EXISTING CONTOUR		PERFORATED STORM DRAIN
	TOPOG BANK GRADEBREAK		GRADE SWALE
	PROPERTY LINE		OVERLAND RELEASE ROUTE
	CENTERLINE		

ABBREVIATIONS

AB	AGGREGATE BASE	FB	FIRE HYDRANT	PW	PROCESS WASTE
AC	ASPHALT CONCRETE	FIRM	FLOOD INSURANCE RATE MAP	R	RADARS
AD	AREA DRAIN	FL	FLOW LINE	RC	RELATIVE COMPACTION
ARY	AIR RELEASE VALVE	FM	FORCE MAIN	RT	RIGHT
BC	BENCH CURVE	FS	FRESH SURFACE	ROW	RIGHT OF WAY
BCE	BANK FLOOD ELEVATION PER FROM	GR	GRADE BREAK	RWL	RAN WATER LEADER
BM	BENCHMARK	CL	GUTTER LINE	RCP	RENFORCED CONCRETE PIPE
BO	BLOWOFF	GR	GRAVEL	S	SOUTH
BRC	BEGIN CURB RETURN	HP	HIGH POINT	S	SLOPE (FEET/FOOT)
BVC	BEGIN VERTICAL CURVE	INST	INSTALL	SAD	SEE ARCHITECTURAL DRAWINGS
BS	BOTTOM OF STAIRS	INV	INVERT	SDP	STORM DRAIN
BSW	BACK OF SIDEWALK	IP	IRON PIPE	SDP	SUBDRAIN PIPE
CB	CATCH BASIN	IR	IRON RISE	SED	SEE ELECTRICAL DRAWINGS
CAG	CURB AND GUTTER	IR	IRIGATION	SLD	SEE LANDSCAPE DRAWINGS
CMU	CONCRETE MASONRY UNIT	JP	JOINT POLE	SLV	SLEEVE
CP	CONCRETE PIPE	LF	LEAFAL FEET/FOOT	SMD	SEE MECHANICAL DRAWINGS
C	CENTERLINE	LB	LAMP BOLE	SFD	SEE PLUMBING DRAWINGS
CO	CLEANOUT	LP	LOW POINT	SS	SANITARY SEWER
COMM	COMMUNICATION	LI	MANHOLE	SSCO	SANITARY SEWER CLEAN OUT
CY	CHECK VALVE	MOU	MOVEMENT	SSHI	SANITARY SEWER FRESH HOLE
CW	COLD WATER	N	NORTH	SSMI	SANITARY SEWER MANHOLE
DCV	DOUBLE CHECK VALVE	N-	NEW	STA	STATION
DG	DECOMPOSED GRANITE	OC	OR CENTER	STD	STANDARD
DIP	DUCTILE IRON PIPE	OG	ORIGINAL GROUND	SW	SEWALK
DS	DOWNSPOUT	OH	OVERHEAD	TC	TOP OF CURB
DW	DRIVEWAY/DOMESTIC WASTE	OHL	OVERHEAD LINE	TFC	TOP FACE OF CURB
DWG	DRAWING	-P-	PROPOSED	TOC	TOP OF CONCRETE
EC	END OF CURVE	PCC	PORTLAND CONCRETE CEMENT	TS	TOP OF STAIRS
E	EAST	PD	PRESSURE DISTRIBUTION	TW	TOP OF WALL
-E-	EXISTING	PGAE	PACIFIC GAS AND ELECTRIC	TFP	TYPICAL
ECR	END CURB RETURN	PI	PORT OF INTERSECTION	UG	UNDERGROUND
EG	EXISTING GROUND	PV	POST INDICATOR VALVE	VC	VERTICAL CURVE
EGR	EDGE OF GRAVEL	¶	PROPERTY LINE	VG	VALLEY GUTTER
EP	EDGE OF PAVEMENT	PRC	POINT OF REVERSE CURVE	W	WEST
EV	END VERTICAL CURVE	PSI	PUNTS PER SQUARE INCH	WM	WATER METER
FC	FACE OF CURB	PUE	PUBLIC UTILITY EASEMENT	WS	WATER SERVICE
FDC	FIRE DEPT. CONNECTION	PVC	POLYVINYL CHLORIDE	WV	WATER VALVE
FG	FINISH GRADE	PVI	POINT OF VERTICAL INTERSECTION		

SURVEY NOTES

1. THE BOUNDARY ON THESE DRAWINGS DOES NOT REPRESENT A PROPERTY LINE SURVEY. PROPERTY LINES SHOWN HEREON ARE BASED ON RECORD DATA, AND MAY NOT REPRESENT THE TRUE POSITIONS OF THE LINES.
2. THE TOPOGRAPHY IS BASED FIELD SURVEYS BY ALBION SURVEYS, INC.
3. DELTA CONSULTING & ENGINEERING ASSUMES NO LIABILITY, REAL OR ALLEGED, REGARDING THE ACCURACY OF THE TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS.
4. CONTRACTOR SHALL PROTECT EXISTING SURVEY MONUMENTS OR REPLACE THEM AT HIS OWN EXPENSE.

PARCEL SUMMARY

EXISTING	615,503 SF	14.13 ACRES
PROPOSED		
PARCEL 1:	593,723 SF	13.63 ACRES
PARCEL 2:	21,780 SF	0.50 ACRES
TOTAL:	615,503 SF	14.13 ACRES

STATEMENT OF PURPOSE

THE PURPOSE OF THIS PROJECT IS TO SUBDIVIDE AN EXISTING 14.13 ACRE PARCEL INTO 2 INDIVIDUAL PARCELS. THE EXISTING PARCEL IS UNDEVELOPED. PARCEL ONE OF THE SUBDIVIDED LOT WILL REMAIN UNDEVELOPED, WHILE THE PARCELS TWO THROUGH FOUR WILL BE DEVELOPED. THIS VESTING TENTATIVE MAP HAS BEEN CREATED TO ALLOW THE FUTURE CONSTRUCTION OF DRIVEWAY ENTRANCES AND CONNECTIONS TO THE CITY OF ST HELENA WATER SUPPLY FOR PARCELS TWO, THREE, AND FOUR. PARCELS TWO, THREE, AND FOUR WILL EACH HAVE THEIR OWN DRIVEWAY ENTRANCE AND WATER CONNECTION ON THE FRONTAGE WITH FULTON LANE. NO EASEMENTS ARE PROPOSED FOR THIS PROJECT.

PROJECT INFORMATION

OWNER/SUBDIVIDER: FULTON LANE ESTATES LLC
P.O. BOX 603
CORTE MADERA, CA 94976
BRAD OLDENBROOK
415/867-9595

SITE ADDRESS: 601 FULTON LANE
ST. HELENA, CA 94574

ASSESSOR PARCEL # 009 050 001
PARCEL SIZE: 94% 57P9G-
ZONING: AG, AGRICULTURAL

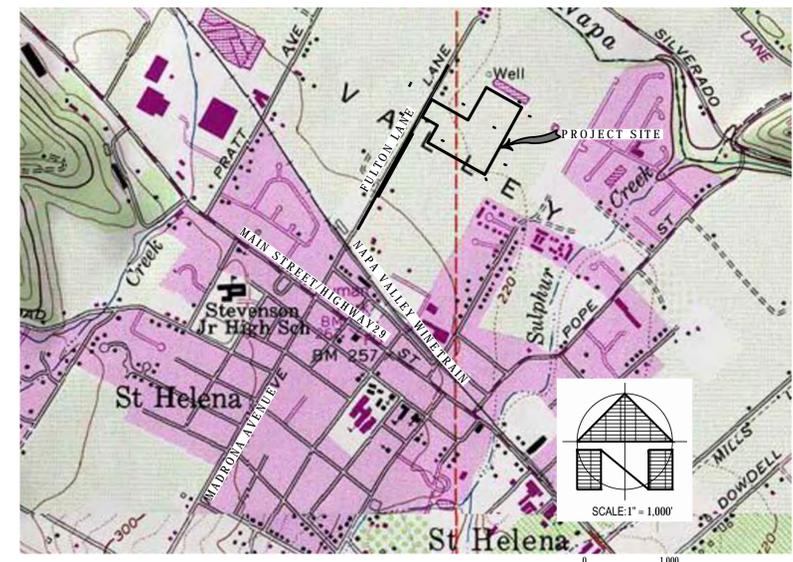
SURVEYOR: ALBION SURVEYS INC
1113 HUNT AVENUE
ST. HELENA, CA 94574
JOHN WEBB, P.L.S.
707/963-1217

CIVIL ENGINEER: DELTA CONSULTING & ENGINEERING, INC.
1104 ADAMS STREET, SUITE 203
ST. HELENA, CA 94574
DANE HOMER / ANDREW SIMPSON
707/963-8456

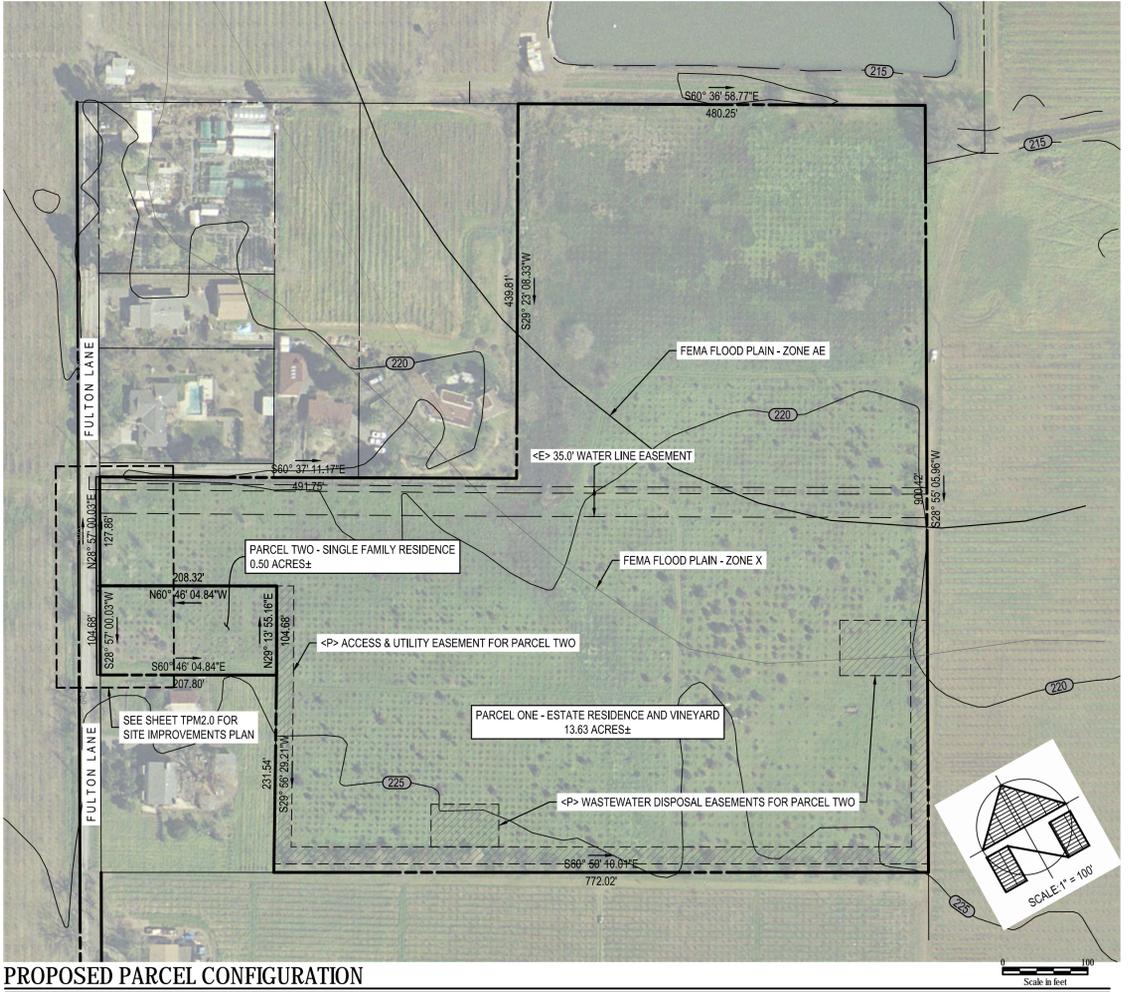
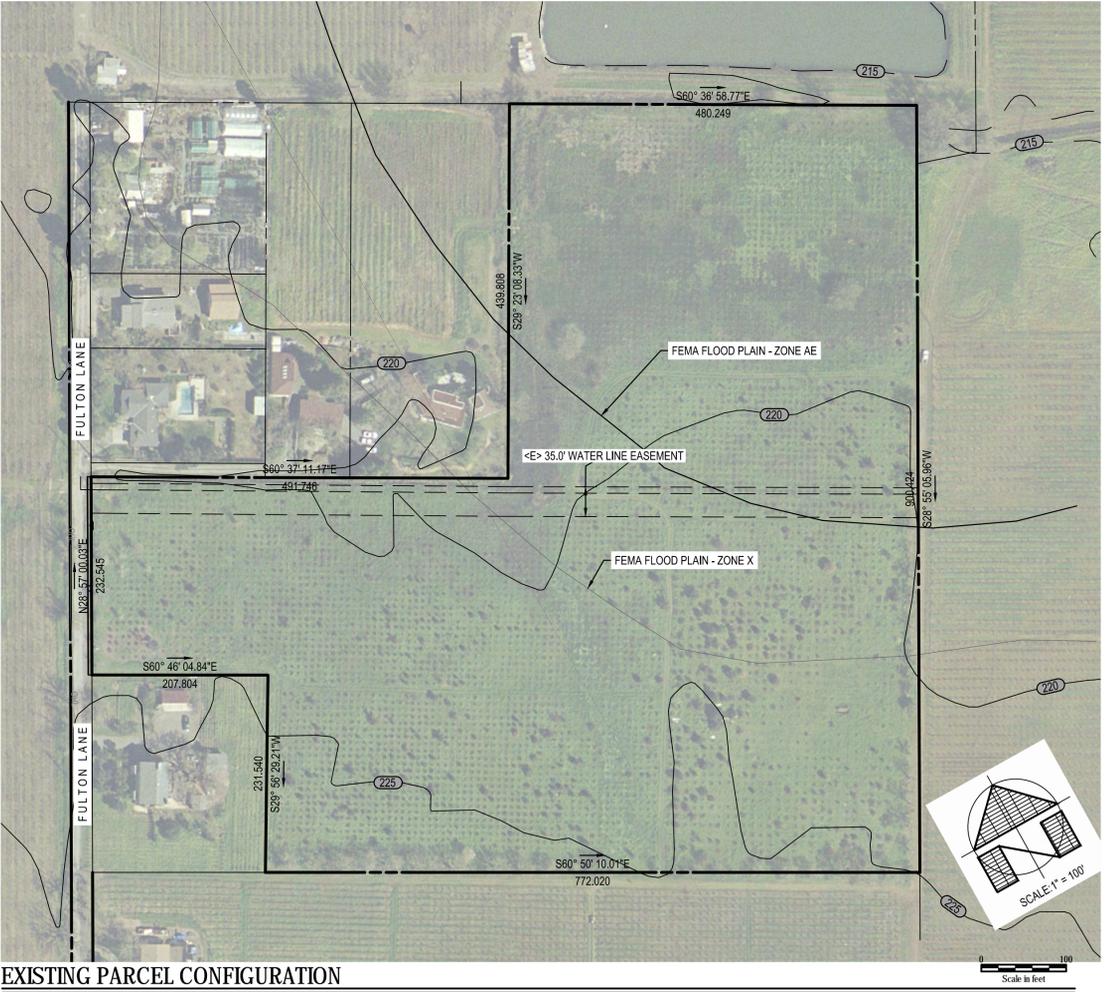
SHEET INDEX

VTM 1.0 COVER SHEET
VTM 2.0 SITE IMPROVEMENTS PLAN

VESTING TENTATIVE PARCEL MAP FOR: FULTON LANE PARCEL MAP APN: 009-050-001 ST. HELENA, CALIFORNIA, 94574



LOCATION MAP
TOPOGRAPHIC MAPPING FROM USGS 7.5' QUADRANGLE MAPS, MAP NAME: ST. HELENA



REVISIONS

09/09/14	ADDED TOPOGRAPHIC CONTOUR DATA AND AERIAL IMAGERY TO DETAIL THE TOPOGRAPHY 100FT AROUND THE PROPERTY BOUNDARY
08/28/14	PERMIT SET
09/09/14	REVISION SET
	REDUCED THE PARCEL COUNT FROM FROM (4) TO TWO (2)

DELTA CONSULTING & ENGINEERING
OF ST. HELENA

1104 ADAMS STREET, SUITE 203 - ST. HELENA, CALIFORNIA 94574
707/963-8456 + 707/963-8528 FAX

VESTING TENTATIVE PARCEL MAP
COVER SHEET

FULTON LANE PARCEL MAP
601 FULTON LANE
ST. HELENA, CA 94574
APN: 009-050-001

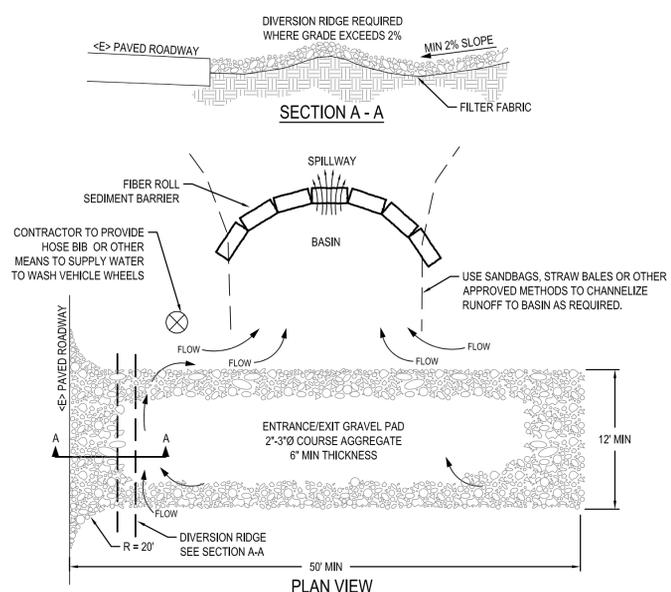


EVERY PERSON PLANNING TO DIG
CALL USA AT 1-800-277-2009

FOR MORE INFORMATION
SEE WWW.USANONLINE.ORG

DATE: 09/09/14
ISSUE: PERMIT SET
REVISION SET

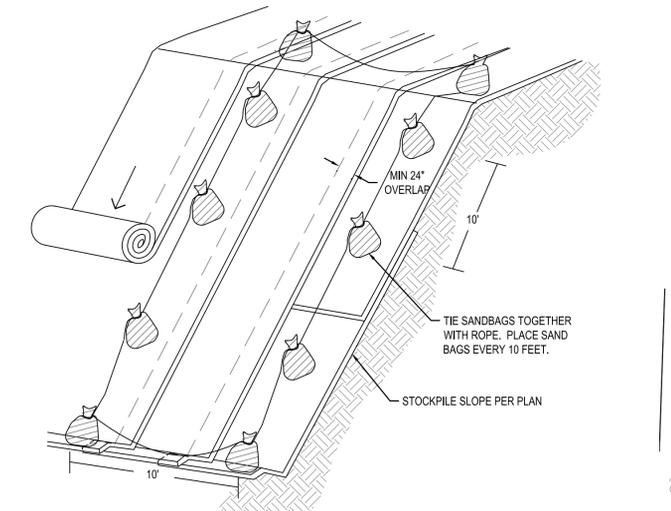
SHEET:
VTM1.0



DESIGN AND CONSTRUCTION SPECIFICATIONS

1. THE MATERIAL FOR THE PAD SHALL BE 2 TO 3 INCH DIAMETER COURSE AGGREGATE.
2. THE THICKNESS OF THE PAD SHALL NOT BE LESS THAN 6 INCHES.
3. THE WIDTH OF THE PAD SHALL NOT BE LESS THAN THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
4. THE LENGTH OF THE PAD SHALL BE AS REQUIRED, BUT NOT LESS THAN 50 FEET.
5. THE ENTRANCE/EXIT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
6. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY SHALL BE REMOVED IMMEDIATELY.
7. WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
8. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE THROUGH USE OF SAND BAGS, GRAVEL, BOARDS OR OTHER APPROVED METHODS.

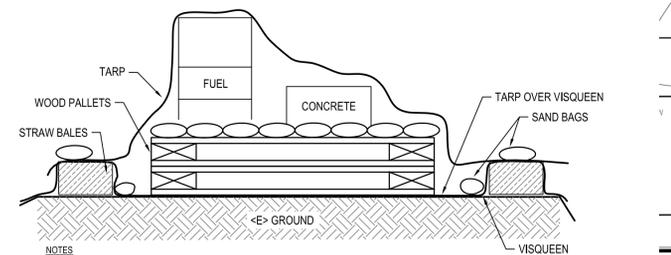
1 CONSTRUCTION ENTRANCE/EXIT NOT TO SCALE



NOTES

1. STOCKPILE SHALL BE COVERED WITH VISQUEEN OR EQUIVALENT.
2. COVER SHALL BE INSTALLED VERTICALLY DOWNSLOPE.
3. COVER SHALL BE INSTALLED SECURELY IN ORDER TO PROTECT FROM WIND AND RAIN.
4. STOCKPILE SHALL BE PROTECTED FROM RUN-ON BY INSTALLING SEDIMENT BARRIERS AROUND TOE OF PILE.

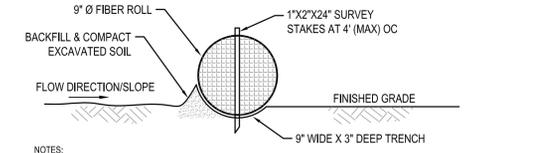
2 STOCKPILE COVER NOT TO SCALE



NOTES

1. BUILD TO SIZE SPECIFIED ON PLANS OR AS NECESSARY TO PROTECT MATERIALS.
2. EXISTING GROUND SHALL BE PROTECTED BY A LAYER OF 6 MIL MINI VISQUEEN PLUS A TARP OVER THE VISQUEEN LAYER.
3. VISQUEEN, SANDBAGS, AND STRAW BALES SHALL ACT AS A BASIN FOR CONTAINMENT OF ANY SPILLS.
4. TARP SHALL BE PLACED OVER CONSTRUCTION MATERIALS NIGHTLY. TARP SHALL BE SECURED USING SANDBAGS.

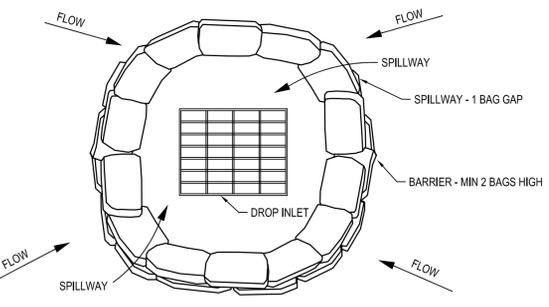
3 COVERED MATERIAL STORAGE AREA NOT TO SCALE



NOTES

1. FIBER ROLLS SHALL BE PLACED 'ON CONTOUR' (PARALLEL TO CONTOUR), PERPENDICULAR TO WATER MOVEMENT AND IN SUCH A WAY TO NOT CONCENTRATE WATER FLOWS.
2. ENDS OF THE ROLLS SHALL BE TURNED UP SLOPE TO PREVENT RUN-OFF FROM GOING AROUND THE ROLLS.
3. EXCAVATE SHALLOW TRENCH. TRENCH DEPTH SHALL BE 1/4 TO 1/3 OF THE DIAMETER OF THE ROLL AND THE WIDTH SHALL BE EQUAL TO THE DIAMETER. LAY FIBER ROLL IN TRENCH AND STAKE.
4. IF MORE THAN ONE ROLL IS NEEDED, ROLLS SHALL OVERLAP AND NOT ABUT. OVERLAP SHALL BE A MINIMUM OF 2 FEET.
5. STAKE FIBER ROLLS AT 4 FOOT (MAXIMUM) INTERVALS. IF GROUND IS IMPENETRABLE, PRE-DRILL HOLE PRIOR TO STAKE INSTALLATION.
6. FIBER ROLLS LAID ON THE GROUND WILL BE REQUIRED TO BE REMOVED AND RE-INSTALLED CORRECTLY.

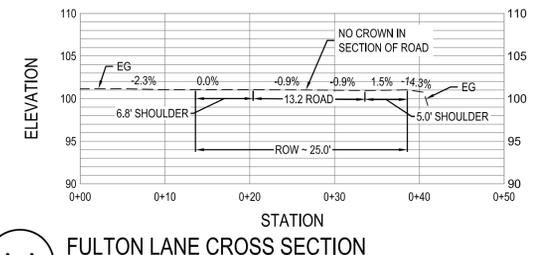
4 FIBER ROLL SEDIMENT BARRIER NOT TO SCALE



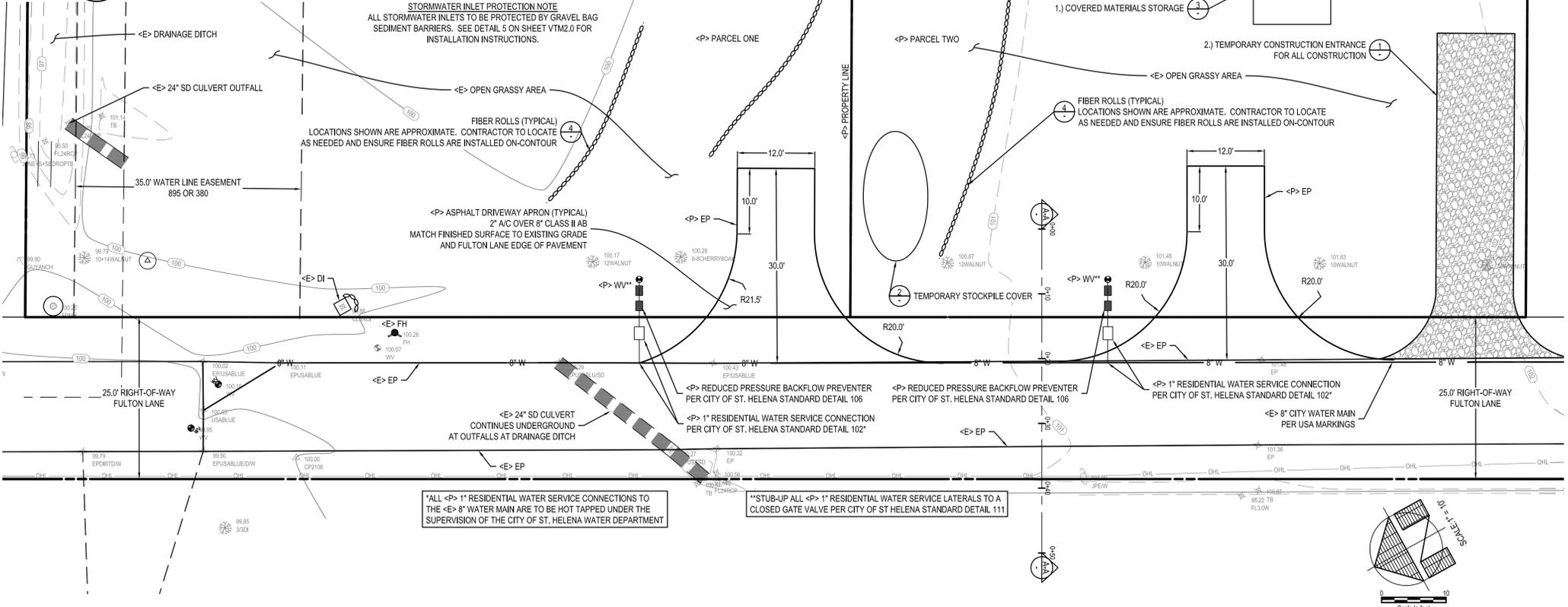
NOTES

1. BAGS SHALL BE EITHER BURLAP OR WOVEN GEOTEXTILE FABRIC.
2. BAGS SHALL BE FILLED WITH 1/2 INCH TO 1 INCH CLEAN CRUSHED ROCK.
3. BAGS SHALL BE OVERLAPPED AND PACKED TIGHTLY TOGETHER. LEAVE A ONE SANDBAG GAP IN THE TOP ROW TO PROVIDE A SPILLWAY FOR OVERFLOW.
4. GRAVEL BAG BARRIER MAY BE USED DURING ROUGH GRADING OR AFTER FINISH SURFACE INSTALLATION TO PROTECT DROP INLET.
5. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT.

5 GRAVEL BAG SEDIMENT BARRIER DROP INLET NOT TO SCALE



A-A FULTON LANE CROSS SECTION



STORMWATER INLET PROTECTION NOTE
ALL STORMWATER INLETS TO BE PROTECTED BY GRAVEL BAG SEDIMENT BARRIERS. SEE DETAIL 5 ON SHEET VTM2.0 FOR INSTALLATION INSTRUCTIONS.

LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR TO LOCATE AS NEEDED AND ENSURE FIBER ROLLS ARE INSTALLED ON-CONTOUR

FIBER ROLLS (TYPICAL)
LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR TO LOCATE AS NEEDED AND ENSURE FIBER ROLLS ARE INSTALLED ON-CONTOUR

1) COVERED MATERIALS STORAGE

2) TEMPORARY CONSTRUCTION ENTRANCE FOR ALL CONSTRUCTION

3) TEMPORARY STOCKPILE COVER

4) TEMPORARY CONSTRUCTION ENTRANCE FOR ALL CONSTRUCTION

5) TEMPORARY CONSTRUCTION ENTRANCE FOR ALL CONSTRUCTION

6) TEMPORARY CONSTRUCTION ENTRANCE FOR ALL CONSTRUCTION

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EROSION CONTROL NOTES

1. GRADING ON THE SITE WILL BE LIMITED TO THE AREAS SHOWN ON THE PLAN.
2. ALL MOVEMENT OF EARTH SHALL COMPLY WITH THE SPECIFICATIONS CONTAINED IN THE NAPA COUNTY GRADING ORDINANCE AND THE EROSION CONTROL PLAN.
3. CHANGES TO THIS EROSION AND SEDIMENT CONTROL PLAN TO MEET FIELD CONDITIONS WILL BE MADE ONLY WITH THE APPROVAL OF OR AT THE DIRECTION OF THE DIRECTOR OF PUBLIC WORKS.
4. BETWEEN OCTOBER 15 AND APRIL 1, EROSION CONTROL MEASURES WILL BE INSPECTED AND REPAIRED AT THE END OF EACH WORKING DAY AND/OR AT THE END OF A STORM EVENT. ALL PAVED AREAS WILL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE WILL BE MAINTAINED SO THAT A MINIMUM OF SEDIMENT-LOADED RUNOFF LEAVES THE SITE.
5. THE CONTRACTOR WILL INFORM ALL CONSTRUCTION SITE WORKERS ABOUT THE MAJOR PROVISIONS OF THE EROSION AND SEDIMENT CONTROL PLAN AND SEEK THEIR COOPERATION IN AVOIDING THE DISTURBANCE OF THESE CONTROL MEASURES.

VEGETATION REMOVAL CONSISTS OF CLEARING BRUSH, GRASSES, AND PLANTS FROM THE SITE. ALL ORGANIC MATERIAL SHALL BE MULCHED AND SPREAD ON-SITE.

COVER CROP MAINTENANCE:
A PERMANENT COVER CROP SHALL BE PLANTED PRIOR TO OCTOBER 15. THIS COVER CROP MAY BE MOWED EACH SPRING AFTER THE SEED HAS FULLY MATURED (HARD DOUGH STAGE) TO ENSURE ANNUAL GRASS SPECIES REGENERATION FOR THE FOLLOWING YEAR. MINIMUM MOWING HEIGHT OF 4" SHALL BE MAINTAINED FOR ESTABLISHING ANNUAL AND PERENNIAL GRASSES. NO RIPPING OR OTHER TILLAGE SHALL TAKE PLACE WITHIN THESE AREAS AFTER THE COMPLETION OF GRADING. OPTIMALLY, A GROUND COVER OF 70% OR GREATER WILL BE OBTAINED WITH THE OWNER BEING RESPONSIBLE FOR RESEEDING AND MAINTENANCE IN ORDER TO REACH THE DESIRED DEGREE OF COVER.

HYDRAULIC SEEDING REQUIREMENTS:
ALL GRADED OR DISTURBED AREAS SHALL BE SEEDDED IMMEDIATELY AFTER GRADING IS COMPLETE. SEED AND FERTILIZER SHALL BE APPLIED HYDRAULICALLY OR BROADCAST AT THE RATES SPECIFIED BELOW:

EXAMPLE SEEDING REQUIREMENTS:

ITEM	DESCRIPTION	LB/ACRE
SEED	'BLANDO' BROME	15
	ZORRO FESCUE	6
	CRIMSON CLOVER	3
	ROSE CLOVER	6
FERTILIZER	AMMONIUM PHOSPHATE SULFATE (16-20-0)	200-240

AN ALTERNATE SEED MIX AND/OR FERTILIZER MAY BE USED AFTER REVIEW AND APPROVAL BY NAPA COUNTY

SEED SHALL NOT REMAIN IN THE SLURRY LONGER THAN 30 MINUTES. FERTILIZERS SHALL NOT REMAIN IN THE SLURRY LONGER THAN 2 HOURS. AREAS TO BE HYDROSEEDED SHALL BE SCARIFIED TO A DEPTH OF 4" TO 8" AND DRESSED TO PROVIDE A REASONABLY SMOOTH FIRM SURFACE. THE SLURRY SHALL BE APPLIED IN A UNIFORM MANNER AT A RATE THAT IS NON-EROSIVE AND MINIMIZES RUNOFF.

ALL VINEYARD AVENUES SHALL HAVE 'TAWN' TALL FESCUE ADDED TO THE SEED MIX AT 5 LB/ACRE.

AN ALTERNATE SEED MIX AND/OR FERTILIZER MAY BE USED AFTER REVIEW AND APPROVAL BY NAPA COUNTY.

EROSION CONTROL MEASURES AND BEST MANAGEMENT PRACTICES TO BE INSTALLED AND MAINTAINED:

FIBER ROLLS SHALL BE EXPLICITLY INSTALLED ON CONTOURS AT THE LOCATIONS SHOWN ON THE PLAN IN ACCORDANCE WITH DETAIL 4 THIS SHEET. FIBER

ROLLS SHALL NOT BE INSTALLED ON ANY CROSS SLOPES. FIBER ROLLS DO NOT REQUIRE REMOVAL AND CAN BE ABANDONED IN PLACE.

STOCKPILING:
ALL STOCKPILES SHALL BE PLACED A MINIMUM OF 50 FEET FROM ANY WATERCOURSE. STOCKPILES SHALL BE PROTECTED FROM RUN-ON BY THE USE OF TEMPORARY SEDIMENT BARRIERS SUCH AS SILT FENCES, FIBER ROLLS, OR STRAW BALES. SEE PLANS. STOCKPILE SHALL BE COVERED NIGHTLY. SEE DETAIL 3 FOR INSTALLATION. STOCKPILES THAT SHALL REMAIN OVER A RAINY SEASON SHALL BE SEEDDED PER HYDRO SEEDING REQUIREMENTS AND COVERED WITH EROSION CONTROL, BLANKETS, CROP COVER SHALL BE PLANTED PRIOR TO OCTOBER 15. SEE COVER CROP MAINTENANCE NOTES FOR ADDITIONAL REQUIREMENTS.

STRAW MULCH:
SHALL BE SPREAD OVER ALL DISTURBED AND SEEDDED AREAS. THE MULCH SHALL BE SPREAD MECHANICALLY OR BY HAND AT A RATE OF 2 TONS/ACRE.

COVERED MATERIAL STORAGE AREA:
ALL CONSTRUCTION MATERIALS INCLUDING, BUT NOT LIMITED TO PLASTER, PETROLEUM PRODUCTS, ASPHALT AND CONCRETE COMPONENTS, HAZARDOUS CHEMICALS, SHALL BE STORED IN A COVERED, CONTAINED AREA, TO PREVENT POLLUTION OF ANY WATERCOURSE. SEE DETAIL 3 THIS SHEET. MATERIAL DATA SAFETY SHEETS SHALL BE AVAILABLE FOR ALL MATERIALS STORED. MATERIALS SHALL BE COVERED AND SECURED NIGHTLY.

CONCRETE WASHOUT:
CONCRETE WASHOUT SHALL BE PROVIDED TO WASH TOOLS AND OTHER ITEMS USED DURING CONSTRUCTION. CONTRACTOR SHALL PROVIDE A PREFABRICATED CONCRETE WASHOUT, HARDENED AND SETTLED CONCRETE SHALL BE DISPOSED OF IN AN APPROVED DISPOSAL FACILITY.

DROP INLET PROTECTORS:
EVERY DI RECEIVING STORMWATER SHALL BE PROTECTED WITH AN INLET BARRIER. SEE DETAIL 5 THIS SHEET. DROP INLET SEDIMENT BARRIER, STRAW BALES ARE NOT EFFICIENT INLET PROTECTORS. DI INLET PROTECTORS SHALL BE INSPECTED BEFORE AND AFTER EACH STORM EVENT.

SWEEPING:
PUBLIC AND PRIVATE ROADS SHALL BE SWEEPED NIGHTLY TO REMOVE ANY SEDIMENT GENERATING FROM THE PROJECT SITE. SWEEPING IS NOT EFFECTIVE WHEN THE SEDIMENT IS WET OR CAKED. SCRAPE CAKED SOIL PRIOR TO SWEEPING. KICK BROOMS AND SWEEPER ATTACHMENTS SHALL NOT BE USED AS A SWEEPING TOOL. IF THE COLLECTED MATERIAL IS FREE OF DEBRIS AND TRASH CONSIDER INCORPORATING BACK INTO THE PROJECT SITE, OTHERWISE DISPOSE OF IN AN APPROVED LOCATION.

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE:
GRAVEL CONSTRUCTION ENTRANCE SHALL BE LOCATED AS SHOWN ON THESE PLANS OR ANOTHER LOCATION APPROVED BY OWNER AND CONTRACTOR AND ACCORDING TO DETAIL 1 THIS SHEET. HOSE BIB AND HOSE SHALL BE PROVIDED TO CLEAN VEHICLES BEFORE ENTERING THE PUBLIC RIGHT-OF-WAY TO PREVENT THE TRACKING OF MUD AND SEDIMENT ONTO THE PUBLIC RIGHT-OF-WAY. COLLECTED SEDIMENT SHALL BE DISPOSED OF IN AN APPROVED DISPOSAL FACILITY.

CONTRACTOR SHALL COORDINATE THE FOLLOWING INSTALLATION INSPECTIONS:

1. PRE-INSTALLATION MEETING AT SITE.
2. POST-INSTALLATION INSPECTION MEETING AT SITE.
3. SCHEDULE COUNTY INSPECTIONS IN ADDITION TO THESE MEETINGS.

CONTRACTOR SHALL LEAD THE FOLLOWING MAINTENANCE RESPONSIBILITIES:

1. PREVIEW SWPPP OR SOMP.
2. PROVIDE IRRIGATION (A SIMPLE LAWN SPRINKLER) TO ALL SEEDED AREAS TO PROMOTE SEED GERMINATION PRIOR TO THE BEGINNING OF RAINY SEASON.
3. INSPECT ALL EROSION CONTROL MEASURES PRIOR TO ALL RAIN EVENTS.
4. MAKE NECESSARY REPAIRS OR PROVIDE MAINTENANCE OF ANY SEDIMENT BUILDUP WHICH MAY HAVE ACCUMULATED.
5. INSPECT ALL EROSION CONTROL MEASURES DURING HEAVY STORM EVENTS AND MAKE EMERGENCY REPAIRS OR ADDITIONS WHERE NECESSARY.
6. INSPECT ALL EROSION CONTROL MEASURES AFTER RAIN EVENTS. REPAIRS SHALL BE PROMPTLY PERFORMED.
7. CONTACT DESIGN ENGINEER FOR QUESTIONS OR TO PROVIDE FEEDBACK ON TROUBLE AREAS.

CONTRACTOR IS RESPONSIBLE FOR TRAINING ALL SUBCONTRACTORS ON PROPER STORMWATER MANAGEMENT. NO ADDITIONAL GRADING SHALL COMMENCE WITHOUT PROPER PERMITTING.

CONTRACTOR SHALL MAINTAIN RECORDS OF ALL EROSION CONTROL MEASURES AND BEST MANAGEMENT PRACTICES INSTALLED AND MAINTAINED. THESE RECORDS SHALL BE MADE AVAILABLE TO THE CITY OF ST. HELENA AND THE NAPA COUNTY GRADING AND EROSION CONTROL DIVISION. THESE RECORDS SHALL BE MAINTAINED FOR THE LIFE OF THE PROJECT AND FOR A PERIOD OF 10 YEARS AFTER THE COMPLETION OF THE PROJECT. THE CONTRACTOR SHALL SUBMIT THESE RECORDS TO THE CITY OF ST. HELENA AND THE NAPA COUNTY GRADING AND EROSION CONTROL DIVISION AT THE END OF THE PROJECT. THESE RECORDS SHALL BE MAINTAINED FOR THE LIFE OF THE PROJECT AND FOR A PERIOD OF 10 YEARS AFTER THE COMPLETION OF THE PROJECT. THE CONTRACTOR SHALL SUBMIT THESE RECORDS TO THE CITY OF ST. HELENA AND THE NAPA COUNTY GRADING AND EROSION CONTROL DIVISION AT THE END OF THE PROJECT.

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OF ST. HELENA
1104 ADAMS STREET, SUITE 203 - ST. HELENA, CALIFORNIA 94574
707-963-8456 + 707-963-8528 FAX

VESTING TENTATIVE PARCEL MAP
SITE IMPROVEMENTS PLAN

FULTON LANE PARCEL MAP
601 FULTON LANE
ST. HELENA, CA 94574
APN: 009-050-001

REGISTERED PROFESSIONAL ENGINEER
DAVE E. HONE
No. 81942
Exp. 03-31-16
CIVIL
STATE OF CALIFORNIA

EVERY PERSON PLANNING TO DIG
CALL USA AT 1-800-272-2869

DATE: 08/28/14
ISSUE: PERMIT SET
09/09/14
REVISION SET

SHEET:
VTM2.0

DELTA CONSULTING & ENGINEERING
OF ST. HELENA



APPENDIX 2:
SITE EVALUATION REPORT

1

Test Pit #

PLEASE PRINT OR TYPE ALL INFORMATION

Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			
0-20	G	20	SCL	M-SB	SH	FRB	S	F/F	F/M	N/A
20-64		10	SCL							C/M/D

2

Test Pit #

Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			
0-6			TOPSOIL							
6-24	G	35	SCL	W-SB	S	VFRB	SS	F/F	F/M	N/A
24-52		>50	SCL							F/F/D

3

Test Pit #

Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			
0-6			TOPSOIL							
6-27	G	25	SCL	W-SB	S	VFRB	SS	F/F	F/F	N/A
27-48		45	SCL							F/M/D

4

Test Pit #

PLEASE PRINT OR TYPE ALL INFORMATION

Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			
0-6			TOPSOIL							
6-18	G	30	SCL	W-SB	S	VFRB	SS	F/F	F/F	N/A
18-48		>50	SCL							C/M/D

5

Test Pit #

Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			
0-6			TOPSOIL							
6-20	G	35	SCL	W-SB	S	VFRB	SS	F/F	F/F	N/A
20-52		>50	SCL							C/M/D

6

Test Pit #

Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			
0-6			TOPSOIL							
6-22	G	30	SCL	W-SB	S	VFRB	SS	F/F	F/F	N/A
22-52		>50	SCL							C/M/D

7

Test Pit #

PLEASE PRINT OR TYPE ALL INFORMATION

Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			
0-6			TOPSOIL							
6-27	G	10	SCL	M-SB	SH	VFRB	SS	F/F	F/M	N/A
27-60		>50	SCL							C/F/Ft

8

Test Pit #

Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			
0-9			TOPSOIL							
9-30	C	45	SCL	M-SB	SH	VFRB	SS	F/F	F/M	N/A
30-60		>50	SCL							

9

Test Pit #

Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			
0-6			TOPSOIL							
6-30	G	10	SCL	M-SB	SH	VFRB	SS	F/F	F/M	N/A
30-62		>50	SCL							C/F/Ft

10

Test Pit #

PLEASE PRINT OR TYPE ALL INFORMATION

Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			
0-9			TOPSOIL							
9-27	G	45	SCL	W-SB	SH	VFRB	SS	C/F	C/F	N/A
27-65		>50	SCL							

Test Pit #

11

Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			
0-9			TOPSOIL							
9-24	C	30	SCL	M-SB	SH	FRB	SS	F/F	F/M	N/A
24-62		>50	SCL							

Test Pit #

12

Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			
0-12			TOPSOIL							
12-34	C	40	SCL	M-SB	SH	VFRB	SS	F/F	F/M	N/A
34-54		40	SCL							F/F/Ft

13

Test Pit #

PLEASE PRINT OR TYPE ALL INFORMATION

Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			
0-30	G	<10	SCL	M-SB	S	FRB	SS	F/F	F/F	N/A
30-60		25	SCL							C/M/D

Test Pit #

14

Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			
0-30	G	<10	SCL	M-SB	SH	FRB	SS	F/F	F/F	N/A
30-60		<10	SCL							F/M/Ft

Test Pit #

15

Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			
0-27	G	10	SCL	M-SB	SH	FRB	SS	F/F	F/F	N/A
27-60		20	SCL							F/F/Ft

16

Test Pit #

PLEASE PRINT OR TYPE ALL INFORMATION

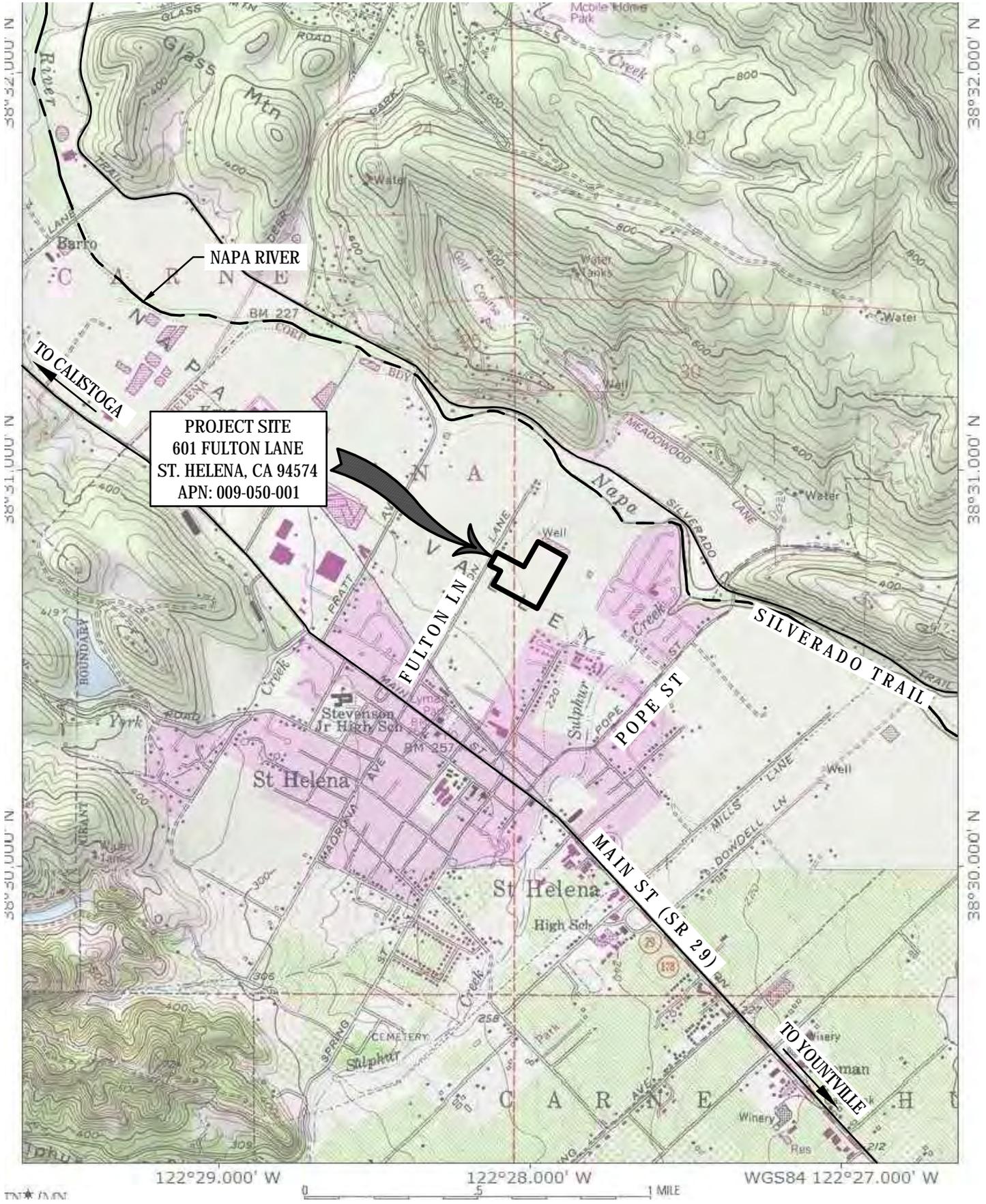
Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			
0-30	G	10	SCL	M-SB	SH	FRB	SS	F/F	F/F	N/A
30-60		20	SCL							F/F/D

Test Pit #

Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			

Test Pit #

Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure	Consistence			Pores	Roots	Mottling
					Side Wall	Ped	Wet			



**SITE EVALUATION
VICINITY MAP**

DELTA CONSULTING & ENGINEERING OF ST. HELENA 1104 ADAMS STREET, SUITE 203 - ST. HELENA, CALIFORNIA 94574 707-963-8456 + 707-963-8528 FAX	
DATE: 02/03/14	JOB # N-102
SCALE: 1"=2000'	APN: 009-050-001

SHEET
1
OF
1



AREA 1
SEE SHEET 2

AREA 3
SEE SHEET 4

AREA 2
SEE SHEET 3

APN: 009-050-001

FULTON LANE

APPROXIMATE PROPERTY LINE



SCALE: 1"=100'

APN: 009-050-002

APN: 009-050-008

Attachment 2

100' WELL SETBACK

APPROXIMATE PROPERTY LINE

25' SWALE SETBACK

01/31/2014
TP #04
18"/MOTTLING

01/31/2014
TP #05
20"/MOTTLING

01/31/2014
TP #06
22"/MOTTLING

01/31/2014
TP #03
27"/SCL

01/31/2014
TP #02
24"/SCL

01/31/2014
TP #01
20"/MOTTLING

APN: 009-050-001

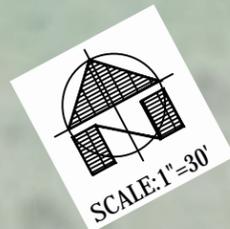
10' P/L SETBACK

100' WELL SETBACK

APPROXIMATE PROPERTY LINE

APN: 009-050-006

<E> WELL



FULTON LANE

~20' TO
<E> EP

SITE EVALUATION
TEST PIT MAP - AREA 1
ST. HELENA, CA

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OF ST. HELENA
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DATE: 02/03/14
SCALE: 1"=30'
JOB #: N-102
APN: 009-050-001



SITE EVALUATION
TEST PIT MAP - AREA 2

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 1104 ADAMS STREET, SUITE 203 - ST. HELENA, CALIFORNIA 94574
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DATE: 02/03/14
 SCALE: 1"=30'
 JOB #: N-102
 APN: 009-050-001



SITE EVALUATION
TEST PIT MAP - AREA 3

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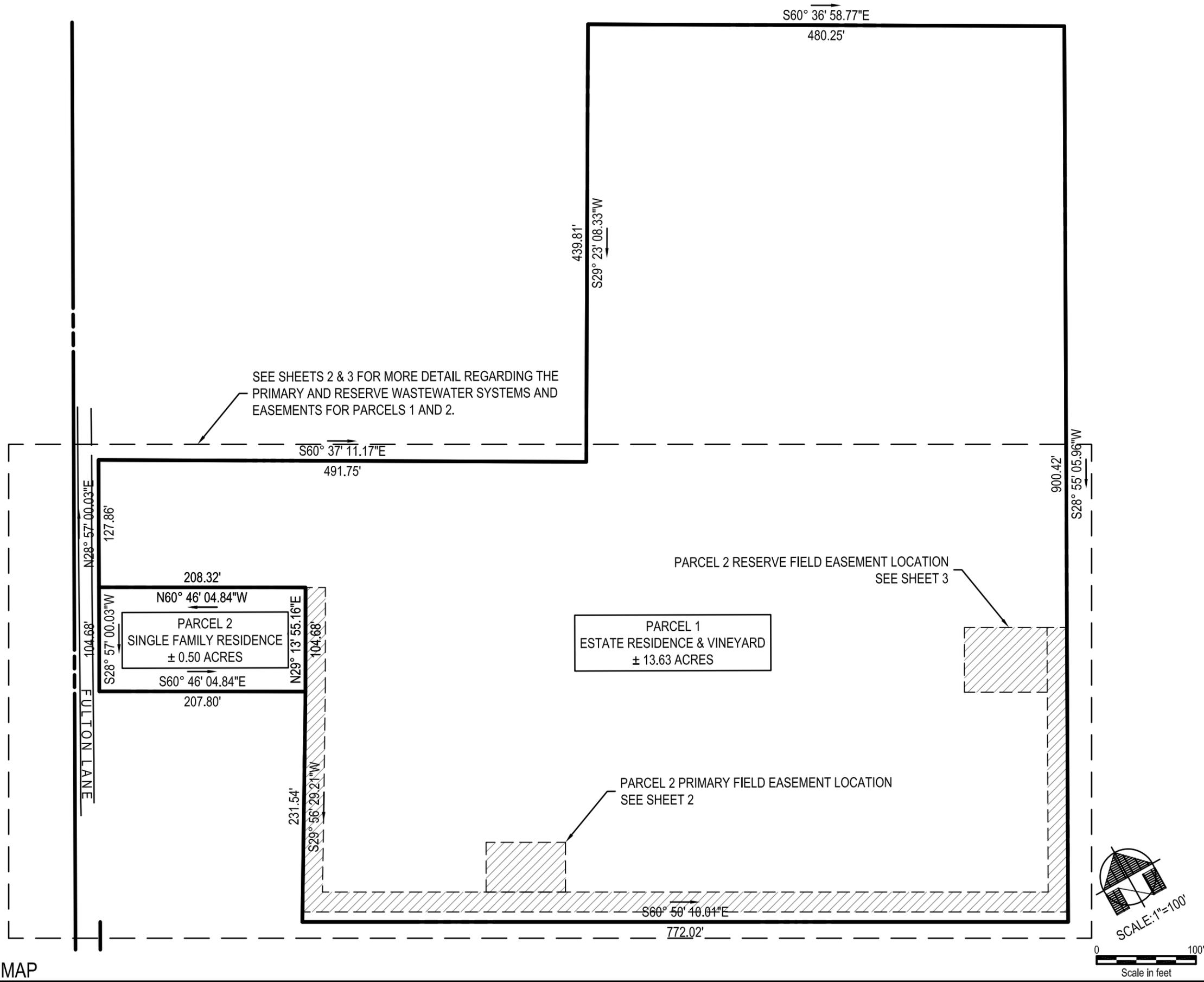
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 JOB #: N-102
 APN: 009-050-001





APPENDIX 3:
WASTEWATER SYSTEM & EASEMENT LOCATIONS

SITE MAP



SEPTIC FEASIBILITY
SITE MAP

CALIFORNIA

SAINT HELENA

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707-963-8456 + 707-963-8528 FAX

DATE: 09-09-14

SCALE: 1"=100'

JOB #: N-133

APN: 009-050-001

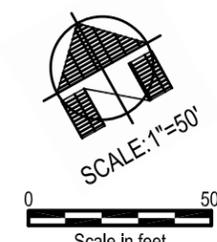
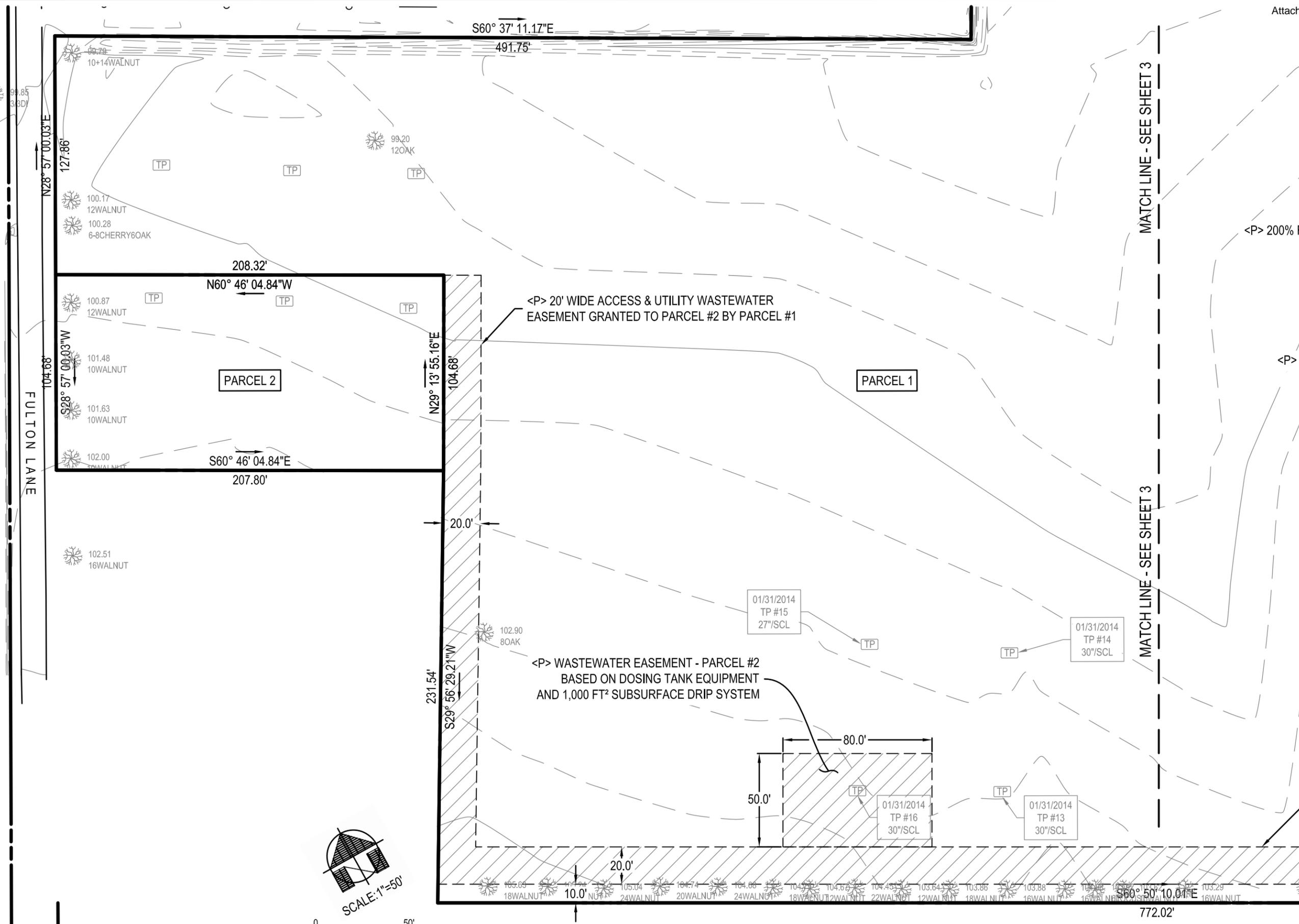
1
OF
3

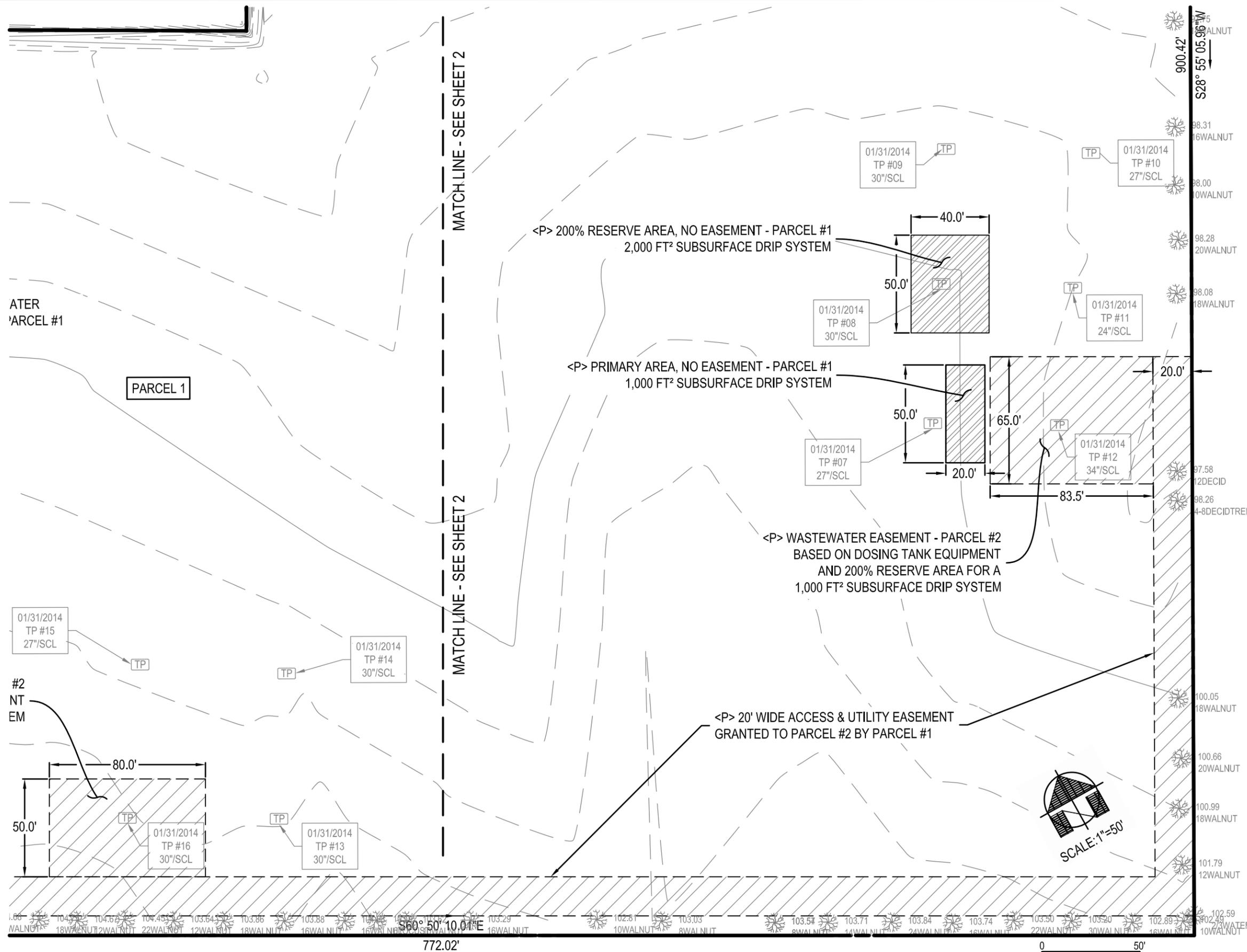
SEPTIC FEASIBILITY
PROPOSED WASTEWATER SITE LAYOUT
SAINT HELENA
CALIFORNIA

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OF ST. HELENA
1104 ADAMS STREET, SUITE 203 - ST. HELENA, CALIFORNIA 94574
707-963-8456 + 707-963-8528 FAX

DATE: 09-09-14
SCALE: 1"=50'
JOB #: N-133
APN: 009-050-001

PROPOSED WASTEWATER EASEMENT





PROPOSED WASTEWATER EASEMENTS & PARCEL #1 SYSTEM LAYOUT

SEPTIC FEASIBILITY
PROPOSED WASTEWATER SITE LAYOUT
SAINT HELENA
CALIFORNIA

DELTA CONSULTING & ENGINEERING
OF ST. HELENA
1104 ADAMS STREET, SUITE 203 - ST. HELENA, CALIFORNIA 94574
707-963-8456 + 707-963-8528 FAX

DATE: 09-09-14
SCALE: 1"=50'
JOB #: N-133
APN: 009-050-001

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