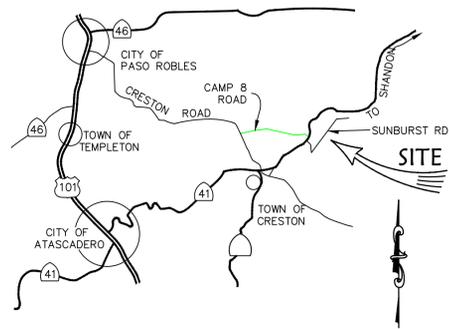


VICINITY MAP

Not to Scale

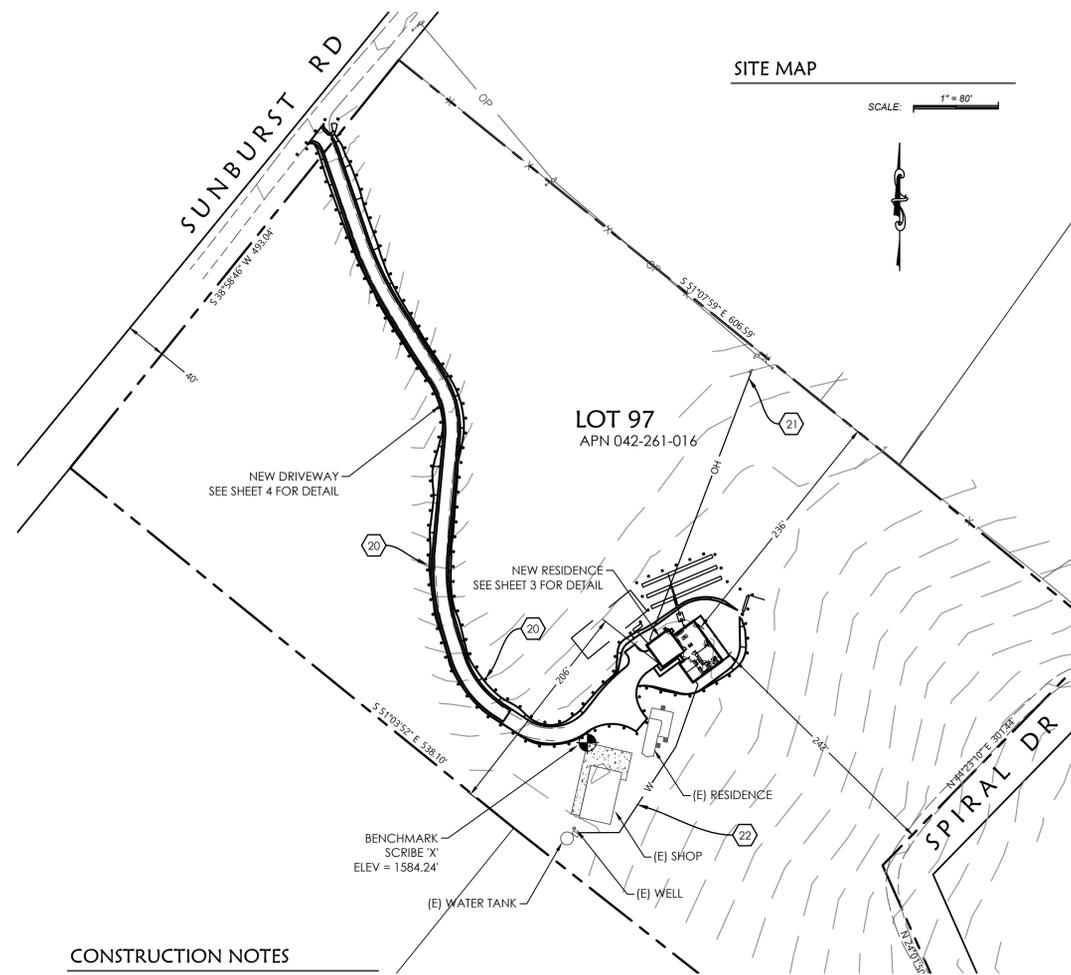


Juengermann - Sunburst Road - Grading, Drainage & Erosion Control Plan

PROJECT DESCRIPTION: Single family residence.

SITE MAP

SCALE: 1" = 80'



LEGAL DESCRIPTION

LOT 97, OF ASSOCIATED ALMOND ORCHARDS SITUATED AS FILED IN BOOK 2, PAGE 31, OF MAPS APN 042-261-016

BENCHMARK

TBM = TOP OF A SCRIBED 'X' (TCS#71) AS SHOWN AT THE NORTH WEST CORNER OF THE CONCRETE PAD AROUND THE SHOP BUILDING ELEVATION = 1584.24 FEET (WGS84 - GEOID 03 ORTHOMETRIC HEIGHT PER GPS OBSERVATIONS)

OWNER

ALLEN & DEBORAH JUENGERMANN
715 Cornwall Dr.
Oxnard, CA 93035

SURVEYOR

Twin Cities Surveying, Inc.
615 Main Street, Ste. C
Templeton, CA 93465
(805) 434-1834

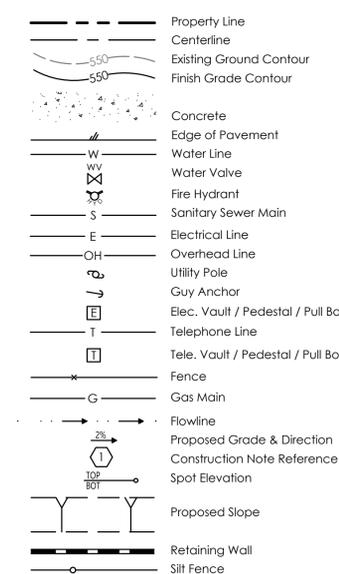
CONSTRUCTION NOTES

- (20) Limits of disturbance, typ.
- (21) Approximate location of PG&E and telephone. Extend overhead to serve new residence.
- (22) Extend water service to serve new residence.

ABBREVIATIONS

AC	Asphalt Concrete Paving
AP	Angle Point
CO	Clean-out
CL	Centerline
CONC	Concrete
CONST	Construction
DIA & Ø	Diameter
ELEV	Elevation
EXIST & ()	Existing
FF	Finished Floor
FS	Finished Surface
FH	Fire Hydrant
FL	Flow Line
G	Grade Break
GB	Grade Break
GR	Finished Grade
HDPE	Hi-Density Polyethylene
HP	High Point
INV	Invert Elevation
LT	Left
LF	Linear Feet
LP	Low Point
MH	Manhole
P	Power
PC	Point Of Curvature
PL	Property Line
PRC	Point Of Reverse Curvature
PT	Point Of Tangency
PUE	Public Utility Easement
PVC	Polyvinyl Chloride
R	Radius
RT	Right
RP	Radius Point
RW	Right-of-way
S	Slope
SD	Storm Drain
SS	Sanitary Sewer
STA	Station
T	Telephone
TW	Top Of Wall
TP	Typical
W	Water

LEGEND



APPLICABLE CODES

- 2013 Building Standards Codes
- California Building Code, Vols 1 & 2 (2012 IRC)
- California Residential Code (New) (2012 IRC)
- California Plumbing Code (2012 UPC)
- California Mechanical Code (2012 UMC)
- California Electrical Code (2011 NEC)
- California Energy Code (v.2008 until 7/1/2014)
- California Green Building Code
- California Fire Code (2012 IFC)
- California Reference Standards Code
- County Building and Construction Ordinance - Title 19
- County Coastal Zone Land Use Ordinance - Title 23
- County Fire Code Ordinance - Title 16
- County Land Use Ordinance - Title 22

PROJECT STATISTICS

Cut 400 CY±, Fill 290 CY±, Total 690 CY±
Max. cut = 3.4 ft, Max. fill = 2.3 ft
Average slope > 10 %
Area of site disturbance = 31,000 sf± (0.71 ac)
Impervious area = 2580 sf±
Parcel Area = 10.18 ac±

GENERAL NOTES

1. No construction shall be started without plans approved by the County Building Department. The Building Department shall be notified at least 24 hours prior to starting of construction and of the time location of the preconstruction conference. Any construction performed without approved plans or prior notification to the Building Department will be rejected and will be at the contractor's and/or owner's risk.
2. For any construction performed that is not in compliance with plans or permits approved for the project the Building Department may revoke all active permits and recommend that County Code Enforcement provide a written notice or stop work order in accordance with Section 22.52.140 [23.10] of the Land Use Ordinance.
3. All construction work and installations shall conform to the most current County of San Luis Obispo Public Improvement Standards and all work shall be subject to the approval of the Building Department.
4. The project owner and contractor shall be responsible for providing and/or maintaining all weather access at all times to existing properties located in the vicinity of work. Additionally, they shall be responsible for maintaining all existing services, including utility, garbage collection, mail distribution, etc., to all existing properties located in the vicinity of work.
5. On-site hazards to public safety shall be shielded by construction fencing. Fencing shall be maintained by the project owner and contractor until such time that the project is completed and occupied, potential hazards have been mitigated, or alternative protective measures have been installed.
6. Soils tests shall be done in accordance with the County Public Improvement Standards, Section 3.2.3. All tests must be made within 15 days prior to the placing material. The test results shall clearly indicate the location and source of the material.
7. Roadway compaction tests shall be made on subgrade material, aggregate base material, and material as specified by the Soils Engineer. Said tests shall be made prior to the placement of the next material lift.
8. Subgrade material shall be compacted to a relative compaction of 95% in the zone between finished subgrade elevation and a minimum of 1-foot below. All material in fill sections below the zone mentioned above shall be compacted to 90% relative compaction.
9. A registered civil engineer shall certify that the improvements when completed are in accordance with the plans prior to the request for a final inspection. Record Drawings shall be prepared after construction is completed. The civil engineer certifying the improvements and preparing as-built plans may be present when the final inspection is made by the County.
10. An Engineer of Work Agreement and an Engineer Checking and Inspection Agreement are required prior to the start of construction. The Building Department shall be notified in writing of any changes to the Engineer of Work Agreement. Construction shall not proceed without an Engineer of Work.
11. All utility companies shall be notified prior to the start of construction.
12. A County Encroachment Permit is required for all work done within the County right-of-way. The Encroachment Permit may establish additional construction, utility and traffic control requirements.
13. The County Inspector acting on behalf of the County Building Department may require revisions in the plans to solve unforeseen problems that may arise in the field. All revisions shall be subject to the approval of the Developer's Engineer of Work.
14. The structural section shall be based on soils tests taken at the time of construction and using a Traffic Index of 1 (road name). The structural section shall be approved by the Building Department prior to road construction.
15. Hydro-seeding or other permanent erosion control shall be placed and established with 90% coverage on all disturbed surfaces (other than paved or gravel surfaces) prior to the final inspection.
16. For any public improvements to be maintained by the County, if environmental permits from the U.S. Army Corps of Engineers, the California Regional Water Quality Control Board/State Water Resources Control Board, or the California Department of Fish & Game are required, the Developer shall: a. submit a copy of all such completed permits to the County Building Department OR, b. document that the regulatory agencies determined that said permit is not required; prior to acceptance of the completed improvements for County maintenance and release of improvement security. Any mitigation monitoring required by said permits will remain the responsibility of the Developer.

17. When the project site earthwork is not intended to balance then a separate grading permit for the sending or receiving property may be required. A copy of the permit/s or evidence that no permits are required shall be submitted to the Department prior to commencing project earthwork.

GRADING NOTES

1. All grading construction shall conform to the applicable codes as noted under "Applicable Codes" heading.
2. The developer shall be responsible for scheduling a pre-construction meeting with the County and other affected agencies. The contractor shall notify the County Building Department at least 24 hours prior to any work being performed, and arrange for inspection.
3. Grading shall comply with the recommendations of the preliminary soils report by Beacon Geotechnical, Inc., date December 29, 2014, filed with the County of San Luis Obispo.
4. Estimated earth quantities:
Cut: 400 CY± Fill: 290 CY±

Note: exact shrinkage, consolidation, and subsidence factors and losses due to clearing operations are not included. Estimated earthwork quantities are based upon the difference between existing ground surface and proposed finish grades, or sub grades as shown on the plan, and should vary according to these factors. The contractor shall be responsible for site inspection and quantify take off, and shall bid accordingly.
5. Soils engineer to determine the soil is suitable to support the intended structure. Such report including progress and/or compaction reports shall be submitted to the field inspector prior to final inspection when a soils report is obtained. The County policy regarding pad certification shall be followed. When applicable the engineer shall observe the grading operation(s) and provide the field inspector with required compaction reports and a report stating that the grading performed has been observed and is in conformance with the UBC and County ordinances.
6. No cut or fill slopes will be constructed steeper than two horizontal to one vertical (2:1).
7. Dust control is to be maintained at all times during construction.
8. Areas of fill shall be scarified, benched and recompacted prior to replacing fill and observed by a soil or civil engineer.
9. Fill material will be recompacted to 90% of maximum density.
10. Remove any deleterious material encountered before placing fill.
11. All disturbed areas shall be hydro seeded or planted with approved erosion control vegetation as soon as practical after construction is complete.
12. Minimum setback to creeks and bluffs shall be maintained. Minimum setback of two feet from all property lines will be maintained for all grading.
13. Minimum slope away from buildings shall be 5% for the first ten feet around perimeter.
14. The contractor shall be responsible for the protection of all existing survey markers during construction. All such monuments or markers disturbed shall be reset at the contractor's expense.
15. All contractors and subcontractors working within the right of way shall have an appropriate contractor's license, a local business license, and shall obtain an encroachment permit.
16. Engineering reports for cut or fill slope steeper than 2:1 shall be submitted to the field inspector.

UNDERGROUND UTILITY NOTES

1. An effort has been made to define the location of underground facilities within the job site. However, all existing utility and other underground structures may not be shown on this plan and their location where shown is approximate. The construction contractor agrees that he shall assume sole and complete responsibility for locating or having located all underground utilities and other facilities and for protecting them during construction.
2. All utility companies must be notified prior to the start of construction. The construction contractor shall contact underground service alert (USA) at 811 two to ten days prior to the start of excavation and shall verify the location of any known utilities and whether or not a representative of each company will be present during excavation.



MANDATORY SITE DESIGN MEASURES (SELECT AT LEAST ONE)	SELECTED	REASON, IF NOT SELECTING	HANDBOOK SECTION
a. Roof runoff directed into cisterns or rain barrels for reuse?	optional	At owner's discretion	5.2.1
b. Roof runoff directed into vegetated areas (safely away from building foundations and footings)?	yes		5.2.2
c. Runoff from sidewalks, walkways, and/or patios directed onto vegetated areas (safely away from the building foundations and footings)?	yes		5.2.3
d. Runoff from driveways and/or uncovered parking lots onto vegetated areas (safely away from the building foundations and footings)?	yes		5.2.4
e. Construct bike lanes, driveways, uncovered parking lots, sidewalks, walkways, and patios with permeable surfaces?	N/A		5.2.5



Roberts Engineering

Timothy P. Roberts
Civil Engineer - RCE 35366

2015 Vista de la Vina
Templeton, CA 93465
Phone (805) 239-0664
Fax (805) 238-6148
Email robertseng@charter.net

Record Drawings

Timothy P. Roberts, RCE 35366 exp 09/30/15	Date
Revisions This Sheet:	
1	
2	
3	
4	
5	
6	

Roberts Engineering, Inc.

Juengermann - Sunburst Road

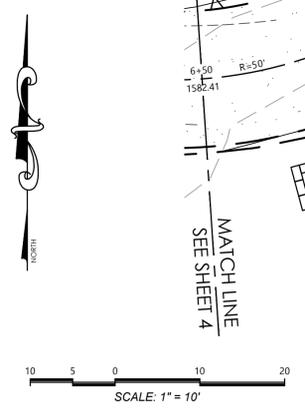
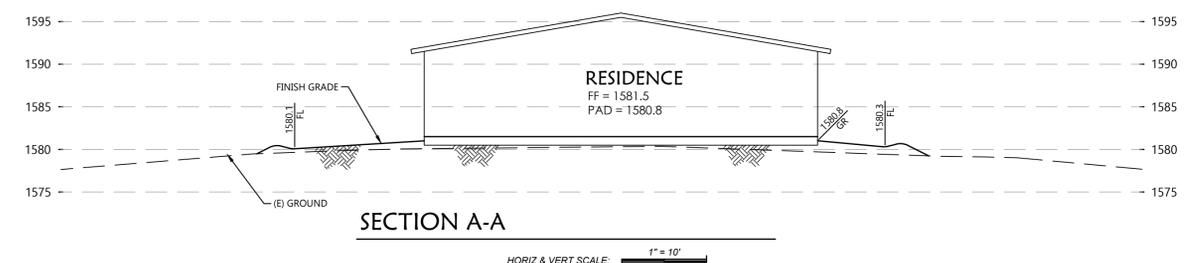
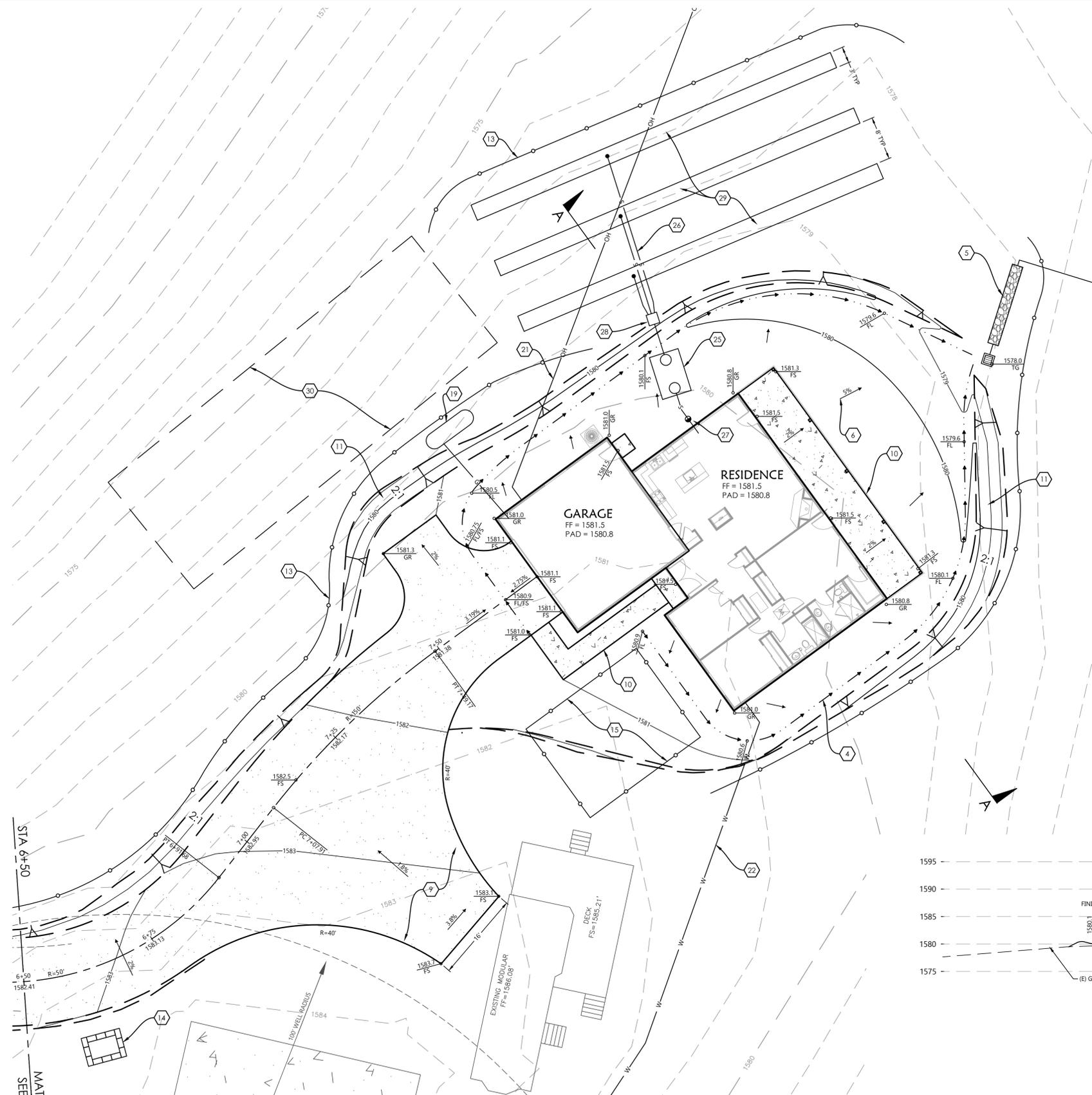
Title Sheet, Notes & Details

Design/Drawn TR / JTM	County Plan Checker	Approved for County Requirements
Job # 15-036	County W.O. No.	Development Services Engineer <i>Timothy P. Roberts</i> Date 8/18/2015
California Coordinates (CCS83, Zone 5)	County Road #	1
N 2402980 E 5829770		of 4

CONSTRUCTION NOTES

The footprint of the residence shown hereon is based upon a graphic exhibit provided by the owner. While assumed accurate for purposes of this plan, it is not intended for precise building layout.

- 1 Construct 1 1/2" AC pavement driveway per typical section detail Sheet 4.
- 2 Construct 1 1/2" all weather Class II aggregate base driveway per typical section detail Sheet 4.
- 3 Construct County Std B-1c drive approach.
- 4 Construct earth swale at S = 1% typical (36" wide by 6" deep)
- 5 Construct level spreader per detail sheet 2, typical.
- 6 Grade to drain away from proposed structure at S = 5% for 10 feet min. typical
- 7 Construct brow ditch at top of slope, typical
- 8 Existing all weather base way.
- 9 Construct all weather Class II aggregate base CalFire turnaround.
- 10 Install 4" PCC concrete flatwork, S=2% typical. See architect's plans for details.
- 11 Track straw into, or hydro seed all newly graded slopes with County approved native erosion control seed mix.
- 12 Construct temporary construction entrance per CASQA detail sheet 2.
- 13 Install biodegradable fiber rolls at toe of slope and as indicated. See CASQA detail sheet 2.
- 14 Construct concrete washout structure per CASQA detail sheet 2.
- 15 Construct temporary material storage area per CASQA detail sheet 2.
- 16 Install rock filled fabric erosion control bags in "chevron" formation at 100 foot intervals, typical.
- 17 Install 1 CY rock rip rap slope protection over erosion control fabric, typical
- 18 Install temporary straw bale barrier per detail sheet 2.
- 19 Install LPG tank. Extend LPG service to new residence.
- 20 Limits of disturbance, typ.
- 21 Approximate location of PG&E and telephone. Extend overhead to serve new residence.
- 22 Extend water service to serve new residence.
- 23 Install 6" Type A asphalt berm per County Std C-3.
- 24 Construct asphalt outside drain per Caltrans Std D87D.
- 25 Install 1,200-gallon septic tank.
- 26 Install 4" PVC sewer pipe at S=2% min.
- 27 Install sanitary sewer clean out.
- 28 Install distribution box.
- 29 Install leach trenches. Alt 1 - Standard trench - 3 @ 71.5 LF. Alt 2 - "Infiltrator" leach trenches, 3 @ 100 LF, (75) - 4' chambers. (Standard trench shown). See design report for details and specifications.
- 30 Provide adequate area for 100% expansion.



STA 6+50
MATCH LINE
SEE SHEET 4

Roberts Engineering, Inc.		
Juengermann - Sunburst Road		
Grading, Drainage & Erosion Control Plan		
Design/Drawn TR / JTM	County Plan Checker	Approved for County Requirements
Job # 15-036	County W.O. No.	Development Services Engineer <i>Timothy P. Roberts</i> Date 6/12/2015
California Coordinates (CCS83, Zone 5)	County Road #	3
N 2402980 E 5829770		of 4

Roberts Engineering
Timothy P. Roberts
Civil Engineer - RCE 35366
2015 Vista de la Vina
Tempton, CA 93465
Phone (805) 239-0664
Fax (805) 238-6148
Email robertseng@charter.net

Record Drawings

Timothy P. Roberts, RCE 35366 exp 09/30/15 Date

Revisions This Sheet:

1	
2	
3	
4	
5	
6	

