

TELEPHONE RECORD

Date/Time: November 9, 2012

Name: David Campbell / Rachelle Kellogg

Client: City of Sonora

Project: Dragoon Gulch Master Plan Number: 12220

Regarding: Response from resident focused community meeting 11/8

Conversation:

Rachelle reported on last night's informal meeting with residents near the trail. Approximately 20 people attended. Responses were generally:

Concern from Sonora Estates residents:

- Increased traffic
- People hanging out
- Kids/others partying
- Response time from emergency services
- Proximity
- Views into private property
- No parking lot off Leland would discourage non-local access
- Homeless people on private property

Support from Alpine Lane residents:

- Love the trail
- Enjoy walking, hiking.

We also discussed advertisement for the upcoming public meeting:

- Add going in paper Monday night
- Radio announcement / PSA
- Flyer posted in Kiosk
- Website
- Stakeholders list Rachelle will send the notice to them.

5.2 COMMUNITY MEETING #1 NOTES



To: Rachelle Kellogg / City of Sonora

From: David Campbell / Siegfried

cc: file

Date: November 26, 2012

Re: Dragoon Gulch Master Plan

Community Meeting #1 Input

Comments Recorded During Discussion

- Simplify the Directional Signage. Current signs can be confusing.
- If cross country trail, determine width req.
 - o Safety concerns with student travel from HS to trail
 - o 8 schools @ xc races
 - o 5K & 2 mi Courses need
 - Varsity & Fr. Soph.
 - o Large meets or other events should be seen as a revenue stream
- Woods Creek Park can be an event / track meet starting point- ample bus parking
- Int. signage outdoor education
- Like multiple options Shortcuts that make sense
 - o trail services multiple uses bike, walk, run
- Be sensitive to the land prevent scaring
 - General agreement that the trail should not scar the land and large areas of dirt should be avoided
 - Avoid places where people can create shortcuts
- Vary the width wider for greater use. Single track (narrow) for less use
- Connect to surrounding neighborhoods
- Trail from Shaw's Flat to Racetrack? Would be good for future consideration.
- Mark the property on Racetrack for reference
- 10 mi loop for runners roads are dangerous!
- Provide good parking options, clearly marked
- Accessible paths make some areas asphalt or smooth
- Occasional motor bike on trail not often
- Views into rear yards a concern
- Mix sun/shade over trail for users
- Better interior signage along trail @ urban interface

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- o Discuss stewardship
- With regard to bikes pay attention to compatible users w/ hikers
 - Safety between biking/running/walking
 - o Awareness & inclusion instead of exclusion. Don't segregate uses.

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- Possible technical sections for bikers?
- Fire concerns? Smoking restrictions?
 - Sometimes, the existing parking is used for hanging out and smoking fire hazard.
- Parking expansion
 - Need to have parking so people don't block houses
 - Signs to prevent parking where people shouldn't?
- More dog waste stations & signs
 - Discussion about dog waste: agreement that signage is needed to make people aware of expectations.
 - In some places, dog bag dispensers have been stocked by people bringing plastic grocery bags
 - One comment was that people should pick up after themselves without any dispensers.
- Pump track? Trestle?
- Look at existing parking resources. There may already be plenty of parking.
 - Need to match parking to the use not too much or too little
- Places to sit highlight natural features (like the existing view benches)
- Will bus stops suffice for safe routes?
- Water would like to have access to drinking water especially if the trail is expanded.
 - Agreement that it's only needed at trailhead(s)

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Write-in comments (from Activity Survey sheets)

- Dog Park? Closer to entrances or parking!
- Nature interpretation & signage for interesting things there.
- Interpretative signage (a picture was drawn with it).
- Restrooms.
- Place outhouse on the trail.
- Keep it pristine.
- Mountain biking i.e. single track but without added features (ramps + jumps).
- Geocaching Hiking with GPS units to cool places.
- Linking to as many access points as possible allows users to maximize potential loops using neighborhood roads. Also really hope city and county are working to improve bike lanes to encourage more, safe walking and running.
- I like events but I'm thinking more 5k walks because I think that matches the community better.
- Quiet places to sit, not just benches, but perhaps places that incorporate natural features like a rock 'nook' bench.
- Interpretative signs for vegetation & culture. Attention to bike trail (erosion) and pedestrian
 interface. Volunteer trail crew development. I am interested, 4 years trail crew experience.
 juliarivans@yahoo.com
- Need "No Motorcycle" signs or posts. Better locking of gates at night. No expansion on trails
 without new parking lot, no expansion on alpine lot. Some noisy partying during the day, partying
 at dusk.
- Learn about local history, then good trailside interpretation. Make map of trail and diagram in hiking sign. Leave cultural resources in place and do interpretation with appropriate signage.
- No camping, privacy to adjacent property.
- No attracting outsiders (no events, no other sports)
- Connectivity!

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Activity Survey Results

	.		Ranked	Ranked	Ranked
<u>Activity</u>	<u>Circled</u>	<u>%</u>	<u>#1</u>	<u>#2</u>	<u>#3</u>
Hiking	28	78%	3	9	2
Walking	24	67%	7		
Casual biking	18	50%		1	3
Jogging/ Fitness	17	47%	2	2	
Experiencing Nature	16	44%	1	2	4
Bird Watching	13	36%		1	1
Meditation	12	33%		1	1
Cross Country	11	31%			2
Downhill Biking	10	28%	1		
Events	8	22%			
Skills Park	8	22%			1
Transportation/Connectivity	7	19%	2		
Picnicking	7	19%			1
Fit Course	5	14%			
Dirt Jumps	5	14%			
Free Play	4	11%			
Bicycle Competitions	4	11%		1	
Other Sports	2	6%			
Large group gathering area	2	6%		1	
_Mountain biking	2	6%	1		1
Play equipment	1	3%			
_Out-house along trail	1	3%			
_Restroom	1	3%			
_Interpretive signage	1	3%			
_Dog park	1	3%			
Total respondents:	36				

_ = write-in activity

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To: Rachelle Kellogg / City of Sonora

From: David Campbell / Siegfried

cc: William Roach / Siegfried

Randy Martin / Trailscape

Date: December 17, 2012

Re: Dragoon Gulch Master Plan

Community Meeting #2 Input

Comments during general descriptions of alternatives

- What's the distance of the school trail vs. the walk on Racetrack?
- Number of Parking spaces? How was it determined?
- Considered wildlife?
- How many phases will this take?
- Distance from woods creek parking to proposed parking?
- Is a playground needed? There are other playgrounds nearby, and maybe something else could go here.
- How will it be phased? Trails built as whole or in pieces? (A: Phasing has not been defined, but will be funding driven based on the refined plan and current funding opportunities.)
- Consider building the parking in phases/plan for expansion.
- Has thought been given to wildfire? Consider a fire break at Leland Drive residences. This would be in addition to any buffer.
- (comment by Rachelle what we did on phase one was to clear a buffer to either side of the trail of ladder fuels while clearing for the actual trail. This was done in a very sensitive and natural way; many people didn't even realize it had been done. This helps mitigate fire potential from trail use.)
- The vegetative buffer needs to be adjusted to actually encompass enough vegetation for privacy. Trees are not always consistent within 80'; look at enough of a buffer to avoid direct visual access.
- Keeping an adequate buffer is in the best interest of neighbors & users.

Comments during trail discussion

- Too dense isn't good
- Density of A & D feels good

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- A & B well designed with regard to use & density
- If someone wants mileage they'll go to the track (wee section) or do the route twice

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- Switch backs are boring
- Encourage the city to develop small parking
- B 5.1 mile people will run it twice for 10
- Resident with 90' to current trail (and downslope) sees nothing, but can occasionally hear people
- Likes a gentle section likes variation, less dense
- Lower density (Option B) allows for greater buffer like it
- Leland property needs to be resolved for access
- 80' between trails feels right
- "Wee" trail like it
- Stairs would be great
- Will the trail be smooth graded? A variety of terrain is nice, would be good to get some variation from the current (smooth) trail surface for bikers
- Post signage for safety at xings, ground rules etc.
- Like the current trails with combined uses.
- Trail is an asset to the quality of life
- Good for tourism Hotels can post
- Can all peaks be summitted in Opt A?
- Suggest low level lighting at trail ends it is hard to see people coming out of the trail area otherwise.
- Suggest some type of paved surface for portions of the trail to enable access for people of all abilities
- Suggestion to use rubberized asphalt good for high-impact activity (sprints)
- Will Leland residents be able to see/ experience the trail flagging?
- What is the process for completing the MP?
- Next steps (per Tim Miller) Fire, police review, city review, Master Plan completion, environmental review, and funding (sources have not been identified)

Comments recorded during discussion after the public meeting

- I like the variation off different trail experiences, and the whoo-hoo trail sounds fun!
- Please buffer the our (large) residential property to the South as well (Mary-Anne)

5.4	SONORA HIGH SCHOOL LEADERSHIP CLASS PRESENTATION OUTLINE

Dragoon Gulch Presentation to Student Leadership Class

Introductions: Julian Divine- Student, Senior Project

Tyler Summersett, Trails Program Coordinator

Rachelle Kellogg, City of Sonora

Project Overview:

What is Dragoon Gulch? (Use DG overview Map)

- 1. City owned property, 102 acres
- 2. 2.5 mile trail network, open to walking and biking
- 3. Open Space near the downtown corridor/High School
- 4. Surrounded by residential developments
- 5. Trails as an economic engine

What is the Dragoon Gulch Master Plan? (Use DG Opportunities Map)

- 1. Plan for the entire 102 acres of property
- 2. Currently only 35 acres being used
- 3. 67 additional acres
- 4. Looking at expansion of Trail network, access to trails, parking, other uses,
- 5. Community outreach to see what the residents want
- ** Administer DG activity survey
 - 6. Safe Route to School component
 - a. Does anyone currently walk or ride to school
 - b. Who lives in the project area?
- ** Administer DG current use survey
 - 7. Senior Project Discussion

Where are we at in the Planning Process?

- 1. Selection of preferred development scenario
- 2. Flagging of trail, formalize intended uses
- 3. Adopt Plan
- 4. Complete environmental review
- 5. Build project
- **Administer Trails survey

Thank class for participation!



To: Tyler Summersett / TCTC

From: David Campbell / Siegfried

cc: Rachelle Kellogg / City of Sonora

Date: April 26, 2013

Re: Sonora High School Leadership Class

Survey Results

Following are tabulated results of the in-class survey (66 total respondents, though not all students responded to all questions). Responses are recorded in red text. An underscore "_" indicates a write-in response.

1. How often to you visit the current Dragoon Gulch? (select one)

- Never 11 (17%)
- A few times a year or more 43 (66%)
- Once a month or more 11 (17%)
- Once a week or more 0
- Daily 0

2. What activities do you enjoy while there? (select all that apply)

- Walking 40 62%
- Jogging / Running 28 (43%)
- Bike riding 2 (3%)
- Observing nature 14 (22%)
- Other: ______

_Dont Go	2	3%
_Hiking	2	3%
_Bird Watching	1	2%

3. How long do you typically spend during a visit? (select one)

- 15 minutes or less 6 (9%)
- 30 minutes or less 20 (31%)
- 1 hour or less 30 (46%)
- 2 hours or more 2 (3%)

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4. What is your primary purpose for visiting? (select one)

- Exercise / health 26 (40%)
- To enjoy a natural setting 12 (18%)
- Get away from stress/pressures 6 (9%)
- Walk to other destinations 2 (3%)
- PE Class 33 (51%)

5. Do you currently walk or bike to school?

- Yes, I walk to school 1 (2%)
- Yes, I bike to school 0
- Yes, I can walk to school but don't 8 (12%)
- No, I live too far away 51 (78%)
- No, no safe route (no sidewalk, cars driving too fast, other 9 (14%)

6. In general, do you walk, bike, jog, dog-walk, spend time with your family, or otherwise recreate on Trails?

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YES	36	55%
SOMETIMES	10	15%
NO	12	18%
_walk	22	34%
_jog	6	9%
_hike	5	8%
_bike	4	6%
_dog	9	14%
_spend time	7	11%
_trails for PE	2	3%
_timed running	1	2%
_cross country	1	2%

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7. Please list any trails or trail networks that you regularly access in Tuolumne County.

A LOT	2	3%
NONE	32	49%
_Dragoon Gulch	18	28%
_Mt Elizabeth	1	2%
_Natural Bridges	1	2%
_Table Top Mt	4	6%
_TUD Ditch _Sugar Pine	6	9%
Railroad	1	2%
_Lyons Dam	1	2%
_Little Lakes	2	3%
_Flume Trails	1	2%
_Melones Trails _Imagrant	1	2%
Wilderness	2	3%
_Pinecrest	1	2%
_Rotary	1	2%

8. Do you recreate on any part of TUD Ditch/Flume Trails? If yes, which sections?

YES	14	22%
NO	51	78%
_Twain Harte	2	3%
_TUD Ditch	2	3%
_South Fork	2	3%
_Lyons Bald Mtn	1	2%
_Flume Trails	1	2%
_Columbia	1	2%
_Cedar Ridge	1	2%
Jamestown	1	2%

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9. In your opinion, are there barriers to accessing trails in Tuolumne County? If yes, what are they?

YES	14	22%
NO	34	52%
I DON'T KNOW	16	25%
_Trail to road access		
limits usage	1	2%
_Few access points	1	2%
_Distance away	1	2%
_Dirtbike Barriers	1	2%
_Trees/Bushes/Stickers	1	2%
_No Transportation	4	6%
_Too Busy/Time	1	2%

10. Have you ever visited www.tuolumnecountytrails.com for information about or maps of local trails?

YES	1	2%			
NO	64	98%			

11. Other thoughts or ideas on Trails in Tuolumne County?

_Need Flatter Trails	1	2%
_Keep trails in better		
condition	1	2%
_Big Grass Area	1	2%
_Make it happen	1	2%
_Focus on many rivers/mountains	1	2%
_Make it a great family place where the		
community can gather	1	2%
_More access	1	2%
_Cleaner trails	1	2%
_Keep Dragoon Gulch		
alive	1	2%
_Need bird watching		
and nature observing areas	1	2%
_Place for kids	1	2%

Corporate Office

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5.6 INCOME PROJECTIONS





DRAGOON GULCH TRAIL MASTER PLAN

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REVENUE PROJECTIONS

04/26/

			Y	'ear 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7			Year 8		Year 9		Year 10		Totals
Increase in Real Estate Tax Revenue																			
	Value /	Avg Home																	
(Tax will only increase as homes turn over)	Increase	Home Count Value		10%	20%	30%	40%	50%	60%		70%		80%		90%		100%		
		\$ 189,500	\$	195,185	\$ 201,041	\$ 207,072	\$ 213,284	\$ 219,682	\$ 226,273	\$	233,061	\$	240,053	\$	247,255	\$	254,672		
Real Estate Value Increase Within 1/4 Mile	49	6 160 \$ -	\$	124,918	\$ 257,332	\$ 397,578	\$ 546,007	\$ 702,984	\$ 868,888	\$	1,044,114	\$	1,229,071	\$	1,424,186	\$	1,629,902		
Real Estate Value Increase Within 1/2 Mile	29	632 \$ -	\$	246,714	\$ 508,231	\$ 785,216	\$ 1,078,363	\$ 1,388,393	\$ 1,716,054	\$	2,062,125	\$	2,427,415	\$	2,812,767	\$	3,219,056		
Real Estate Value Increase Within 1 Mile	19	6 2512 \$ -	\$	490,305	\$ 508,231	\$ 785,216	\$ 1,078,363	\$ 1,388,393	\$ 1,716,054	\$	2,062,125	\$	2,427,415	\$	2,812,767	\$	3,219,056		
Taxable Value Increase from Trail		0	\$	861,937	\$ 1,273,793	\$ 1,968,010	\$ 2,702,734	\$ 3,479,770	\$ 4,300,995	\$	5,168,363	\$	6,083,901	\$	7,049,721	\$	8,068,014	\$ 4	0,957,238
Increase in Real Estate Tax Revenue (est)	1.10%	6	\$	9,481	\$ 14,012	\$ 21,648	\$ 29,730	\$ 38,277	\$ 47,311	\$	56,852	\$	66,923	\$	77,547	\$	88,748	\$	450,530
Increase in Hotel Rooms Rentals																			
		Increase In																	
2012 Room Rentals	1424			3%	4%	5%	5%	5%	5%		5%		5%		5%		5%		
Average Cost per room (estimate)	\$70		\$	29,910	\$ 39,880	\$ 49,851	\$ 49,851	\$ 49,851	\$ 49,851	\$	49,851	\$	49,851	\$	49,851	\$	49,851	\$	468,595
Transient Occupancy Tax Increase	89	6	\$	2,393	\$ 3,190	\$ 3,988	\$ 3,988	\$ 3,988	\$ 3,988	\$	3,988	\$	3,988	\$	3,988	\$	3,988	\$	37,488
Increase in Ancillary Economic Activity																			
Ancillary Economic Activity per occupant	\$100		\$	42,729	\$ 56,972	\$ 71,215	\$ 71,215	\$ 71,215	\$ 71,215	\$	71,215	\$	71,215	\$	71,215	\$	71,215	\$	669,421
Tax Revenue (estimated)	1.10%	6	\$	470	\$ 627	\$ 783	\$ 783	\$ 783	\$ 783	\$	783	\$	783	\$	783	\$	783	\$	7,364
TOTAL ESTIMATED REVENUE			\$	12,344	\$ 17,829	\$ 26,420	\$ 34,501	\$ 43,049	\$ 52,082	\$	61,623	\$	71,694	\$	82,318	\$	93,520	\$	495,381

Assumptions/Data Referenced

Census data of 800 dwelling units/mi. for Sonora, assume 1 du = 1 average home

Baseline: Jan-Mar median home price of \$189,500

3% annual real estate appreciation

Estimated real estate turnover of 10% annually

Room Rentals per Tuolumne County Visitor's Bureau Report

TOT per Sonora Municipal Code Section 3.20.030

 $Ancillary\ Economic\ Revenue\ estimated\ per\ Tuolomne\ County\ Visitor's\ Bureau,\ range\ of\ \$85-\$105\ in\ 2009$

Sales and Use Tax .87% in 2001 Per Sonora Municipal Code Section 3.16.020

5.7 PEDESTRIAN COUNT

Snell St. Pedestrian Count April 17, 2013 2:51PM-3:40PM Sonora, CA											
Sn	ell St. (Nort	:h)	W. Bo	nanza Rd. (West)		Conditions:				
Walking	Byc.	Other	Walking	Byc.	Other		Traffic: Light				
5	0	1	10	0	0		Weather: Sunny				



To: Rachelle Kellogg / City of Sonora

From: David Campbell / Siegfried

cc:

Date: May 21, 2013

Re: Dragoon Gulch Master Plan

Educational Program Outline

Part I – Capitalize on Healthy Transportation Alternatives

Requirements of the Community Transformation Implementation Plan (CTIP) include an educational program designed to "encourage students to utilize healthy transportation alternatives."

Related to Dragoon Gulch, this educational program provides an opportunity to address not only transportation, but larger issues related to lifestyle, community, and overall health. The project presents an attractive, exciting opportunity for active recreation in extremely close proximity to over 1,500 high school students.

A key objective of the Dragoon Gulch Master Plan is to provide a venue for outdoor physical activities, including walking, jogging, biking, and downhill bicycling. Promoting these activities indirectly encourages alternative transportation options, and given the interests of students, is likely to be more successful than a direct approach. Students who are already in relatively close proximity and engaged in these activities are likely to continue to walk, jog, or bicycle between destinations, rather than use a vehicle.

With this proximity and emphasis, an education program designed to promote healthy transportation options can do so by promoting healthy outdoor activities. Safety must be considered a part of health and should be emphasized. We suggest re-focusing the topic of the educational program from "healthy transportation alternatives" to the more holistic topic of "*Healthy Activities for Life*" with an emphasis on outdoor recreation, mobility, and safety:

Healthy Activities for Life - low cost, great fun!

- Running
 - a. Fitness benefits
 - b. Competitive Events types, and training
 - c. Running for life form, stretching

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- d. Personal Safety
 - i. Situational Awareness
 - ii. Visibility
- 2. Walking
 - a. Fitness benefits (stress reduction, aerobic and cardiovascular health)
 - b. Personal Safety
- 3. Biking
 - a. Major types: downhill, cross country, road
 - b. Equipment: care and maintenance (this may include a demonstration or workshop with a local bicycle shop. Other schools have been successful in creating student-run clinics for bicycle maintenance, including tools, rental or loaner bicycles, and volunteer staff)
 - c. Safety: gear (helmets, gloves, reflectors), sharing the road (hand signals, where to ride), on the trail (situational awareness, awareness of difficulty and personal abilities)
- 4. Getting There from Here
 - a. Why Bike or Walk?
 - i. Health benefits
 - ii. Reduce Carbon emissions
 - iii. Experience Community
 - b. Estimating distances and travel time
 - i. Average pace for walking, biking
 - ii. Allow for unforeseen events
 - c. Preparing for the trip repair supplies, directions, contact information

Part II - Integrate With California Core Curriculum goals:

Dragoon Gulch is well suited as a learning destination that provides context and sensory experience related to state curriculum goals. Dragoon Gulch's proximity to Sonora Elementary School and Curtis Creek Elementary School would facilitate field trips with a variety of educational goals.

The outline below lists topics that can be observed and taught by using existing natural resources in the Dragoon Gulch area. We recommend expanding on this outline by coordinating future development of the area (including interpretive programing and design) with local faculty.

Activities related to Common Core State Standards for grades K-6¹:

- 1. Kindergarten:
 - a. Earth Sciences: View landforms, hills, ravines compare and contrast different formations seen from vista points.
 - b. Life Sciences: Study plants and animals, and learn their factual characteristics (reality) vs. anthropomorphism (fantasy). Observe plants and animals in their natural habitat.
- 2. First Grade:

1 http://www.cde.ca.gov/ci/cr/cf/grlevelcurriculum.asp

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- Geography of Community: locate Dragoon Gulch (along with other notable places) on a map, draw a map of the community including natural features
- b. Life Sciences: learn about favorable habitats, differences between environments, and the food chain.

3. Second Grade:

- Geography and Mapping Skills: Have students follow a route using a map and/or trail markers
- b. Earth Sciences (focus on the earth's crust): explore and identify types of rock visible in the area.

4. Third Grade:

- a. Geography of the Local Region: study and identify natural landforms
- b. History: note historical patterns of use and change over time (from habitation to mining to recreation)

5. Fourth Grade:

- a. History of California: learn the local history of mining and settlement, including Miwok Indians, European Settlement, and the Gold Rush. Explore archeological artifacts.
- 6. Fifth Grade: Fifth Grade studies are predominately focused on the early history and origins of the United States, and macro-level earth sciences, offering no strong correlation to the Dragoon Gulch area.

7. Sixth Grade:

- a. Shaping Earth's Surface: review the hydrologic cycle and explore local water sheds, drainage patterns, and causes of erosion. Understand and use contour lines and topographic maps to show the path of water. Learn about the dynamic nature of waterways and change over time.
- Ecology: explore how individual organisms form a community, and explore the concept of ecotype. Understand the concept of ecotypes and identify local ecotypes (ie, Oak Woodlands, Chaparral) and the species that constitute them.

The <u>Education and the Environment Initiative</u> (EEI) promotes an understanding of the linkages between students and the environment. Virtually all EEI curriculum units are applicable to resources and opportunities in the Dragoon Gulch area. For more information, see www.calepa.ca.gov/Education/EEI.

5.9	ROUGH ORDER	OF MAGNITUDE	COST ESTIMATE



SONORA, CALIFORNIA

12220 2013.06.06

ROUGH ORDER OF MAGNITUDE ESTIMATE

VERALL SUMMARY

ITEM NO.	ITEM DESCRIPTION	ITEM DESCRIPTION UNIT ESTIMA QUANT		PHASE 1	PHASE 2	PHASE 3	PHASE 4
CONSTRUCTION	COSTS						
1	SITE PREPARATION AND GRADING	LS	LUMP SUM	0	0	0	44,800
2	SITE UTILITIES	LS	LUMP SUM	0	0	0	22,374
3	SITE CONSTRUCTION	LS	LUMP SUM	25,800	96,000	28,600	526,275
SUBTOTAL				25,800	96,000	28,600	593,449
4	CONTINGENCY (15%)	LS	LUMP SUM	2,580	14,400	4,300	89,100
TOTAL				28,380	110,400	32,900	682,549
DESIGN AND ADI	MINISTRATIVE COSTS						
5	DESIGN FEES (SMALL PROJECT @ 8%)	LS	LUMP SUM	2,580	9,600	2,900	59,400
6	BUILDING PERMIT FEE (1%)	LS	LUMP SUM	258	960	286	5,934
7	PUBLIC WORKS PLAN CHECK FEE (1%)	LS	LUMP SUM	258	960	286	5,934
8	CITY PROJECT MANAGEMENT FEE (2%)	LS	LUMP SUM	516	1,920	572	11,869
9	INSPECTION AND TESTING FEE (1%)	LS	LUMP SUM	258	960	286	5,934
TOTAL				3,870	14,400	4,330	89,072



SONORA, CALIFORNIA

12220 2013.06.06

ROUGH ORDER OF MAGNITUDE ESTIMATE

DVERALL SUMMARY

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	PHASE 1	PHASE 2	PHASE 3	PHASE 4
OTHER COSTS			-				
10	SWPPP NOI FEE (1%)	LS	LUMP SUM	0	0	0	59,345
11	MISC. (CITY PRINTING, ETC.)	LS	LUMP SUM	300	300	300	600
TOTAL				300	300	300	59,945
GRAND TOTAL	(CONSTRUCTION)			\$32,000	\$121,000	\$37,000	\$802,000
MAINTENANCE	(30 YEAR PERIOD)						
12	TRAIL MONITORING/BRUSH TRIMMING/MINOR MAINTENANCE (MONTHLY)	LS	LUMP SUM	142,560	492,480	142,560	155,520
13	TRAIL REGRADING/COMPACTING (EVERY 10 YEARS)	LS	LUMP SUM	20,909	72,230	20,909	22,810
14	INDICENTAL REPAIR: SIGNAGE/TRAIL (\$150/MI/YR.)	LS	LUMP SUM	6,600	22,800	6,600	7,200
15	INDICENTAL REPAIR: AMENITIES (\$2,000/YR.)	LS	LUMP SUM	0	0	0	60,000
16	PUMPING SERVICE (\$4000/YR. X 30 YEARS)	LS	LUMP SUM	0	0	0	120,000
17	RESTOCKING AND JANITORIAL SERVICES (\$300/MO. X 30 YEARS)	LS	LUMP SUM	0	0	0	108,000
18	ASPHALT CRACK REPAIR (EVERY 2 YEARS)	SF	38,476	0	0	0	259,713
19	ASPHALT OVERLAY (EVERY 10 YEARS)	SF	38,476	0	0	0	178,913
SUBTOTAL (MA	INTENANCE OVER 30 YEARS)			170,069	587,510	170,069	912,156
TOTAL (MAINTE	ENANCE, ANNUALLY)			\$15,000	\$49,000	\$15,000	\$77,000

ASSUMPTIONS

¹ SEPTIC TANK PUMP OUT COST BASED ON 4X/YR. FREQUENCY. ACTUAL PUMP OUT MAY BE LESS.

² ALL WORK IS SELF-PERFORMED OR CONTRACTED.



SONORA, CALIFORNIA

ROUGH ORDER OF MAGNITUDE ESTIMATE

					SE 1	PHA	ASE 2 PH		SE 3	PHASE 4	
ITEM NO.	ITEM DESCRIPTION	UNIT	UNIT PRICE (\$)	ESTIMATED QUANTITY	SUBTOTAL (\$)						
1	MOBILIZATION	LS	2,000.00		0	0	0		0	LUMP SUM	2,000
2	TEMPORARY FENCE (TYPE CL-6)	LF	3.00		0		0		0	200	600
3	CONSTRUCTION STAKING	LS	4,000.00		0		0		0	LUMP SUM	4,000
4	CONSTRUCTION AREA SIGNS	LS	200.00		0		0		0	LUMP SUM	200
5	TREE REMOVAL	ALLOW	6,000.00		0		0		0	1	6,000
6	CLEARING AND GRUBBING	LS	800.00		0		0		0	LUMP SUM	800
7	DEMO PAVING	ALLOW	0.00		0		0		0	1	1,200
8	DEMO EXISTING STRUCTURE AND FOUNDATIONS TO -2'	ALLOW	8,000.00		0		0		0	1	8,000
9	DEMO MISC. (INC. GRAVEL, HEADERBOARD, ETC.)	ALLOW	2,000.00		0		0		0	1	2,000
10	GRADING	LS	20,000.00		0		0		0	LUMP SUM	20,000
SUBTOTAL		,	0		0		0		44,800		



SONORA, CALIFORNIA

ROUGH ORDER OF MAGNITUDE ESTIMATE

				PHA	SE 1	PHA	SE 2	PHA	SE 3	PHA	SE 4
ITEM NO.	ITEM DESCRIPTION	UNIT	UNIT PRICE (\$)	ESTIMATED QUANTITY	SUBTOTAL (\$)						
1	DRINKING FOUNTAIN SUMP	EA	400.00		0		0		0	1	400
2	PRECAST TANK	LS	4,000.00		0		0		0	1	4,000
3	LEECH FIELD	LS	6,000.00		0		0		0	1	6,000
4	WATER: 1" POTABLE	LS	24.00		0		0		0	256	6,144
5	WATER: 1" SUB-METER	EA	600.00		0		0		0	1	600
6	STORM DRAINAGE: 10" CMP CULVERT	EA	2,000.00		0		0		0	2	4,000
7	SANITARY SEWERAGE: 4" LINE	LF	30.00		0		0		0	41	1,230
8	SANITARY SEWERAGE CLEANOUT	EA	400.00		0		0		0	1	400
9	SANITARY SEWERAGE JUNCTION BOX	EA	800.00		0		0		0	1	800
10	ELECTRICAL: CONNECTION, SUB-PANEL	LS	10,000.00		0		0		0	1	10,000
11	ELECTRICAL: CONDUIT AND TRENCHING	LF	30.00		0		0		0	256	7,680
SUBTOTAL			0		0		0		22,374		

ASSUMPTIONS

1 ELECTRICAL AND POTABLE WATER SERVICE MAY BE EXTENDED FROM EXISTING RESIDENCE (CITY OWNED) AND SUB-METERED. NO NEW CONNECTION.



DRAGOON GULCH
SONORA, CALIFORNIA
ROUGH ORDER OF MAGNITUDE ESTIMATE
SITE CONSTRUCTION

				PHA	SE 1	PHA	SE 2	PHA	SE 3	PHA	SE 4
ITEM NO.	ITEM DESCRIPTION	UNIT	UNIT PRICE (\$)	ESTIMATED QUANTITY	SUBTOTAL (\$)						
1	CONSTRUCT NATURAL SURFACE TRAIL (FINISHED)	MILE	15,000.00	1.1	16,500	3.8	57,000	1.1	16,500	1.2	18,000
2	CONSTRUCT NATURAL SURFACE SWITCHBACK TURN	EA	600.00	5	3,000	22	13,200	9	5,400	16	9,600
3	CONSTRUCT NATURAL SURFACE TRAIL (BRUSH MASTICATION/REMOVAL)	MILE	5,000.00	1.1	5,500	3.8	19,000	1.1	5,500	1.2	6,000
4	SIGN: WAYFINDING (CARVED GRANITE/ROCK)	EA	400.00	2	800	5	2,000	0	0	4	1,600
5	SIGN: INTERPRETIVE (STEEL FRAME, FULL COLOR)	EA	1,200.00	0	0	4	4,800	1	1,200	4	4,800
6	SIGN: STANDARD POST (SIGNAGE VARIES)	EA	250.00		0		0		0	8	2,000
7	SIGN: PROJECT (MATCH EXISITING)	EA	800.00		0		0		0	2	1,600
8	PAVING: ASPHALT VEHICULAR SECTION	SF	8.50		0		0		0	21666	184,161
9	PAVING: ASPHALT OVERLAY	SF	2.00		0		0		0	16810	33,620
10	PAVING: CONCRETE BUS PAD	SF	10.00		0		0		0	1067	10,670
11	PAVING: CONCRETE PEDESTRIAN	SF	6.00		0		0		0	264	1,584
12	6" CONCRETE CURB	LF	12.00		0		0		0	20	240
13	PAVING: DECOMPOSED GRANITE	SF	4.50		0		0		0	4485	20,183
14	RETAINING WALL (GABION)	LS	12,000.00		0		0		0	LUMP SUM	12,000
15	RETAINING WALL (ROCKERY)	LF	90.00		0		0		0	44	3,960
16	TRUNCATED DOMES AND PAD	SF	12.00		0		0		0	206	2,472
17	STRIPING: 2" PAINTED	SF	1.00		0		0		0	2565	2,565
18	STRIPING: 12" THERMOPLASTIC	SF	2.00		0		0		0	57	114
19	STRIPING: H/C SYMBOLS, DIRECTIONAL ARROWS, AND LETTERING	ALLOW	4,000.00		0		0		0	1	4,000
20	PRE-FABRICATED RESTROOM W/ DRINKING FOUNTAIN	LS	80,000.00		0		0		0	1	80,000



SONORA, CALIFORNIA

ROUGH ORDER OF MAGNITUDE ESTIMATE

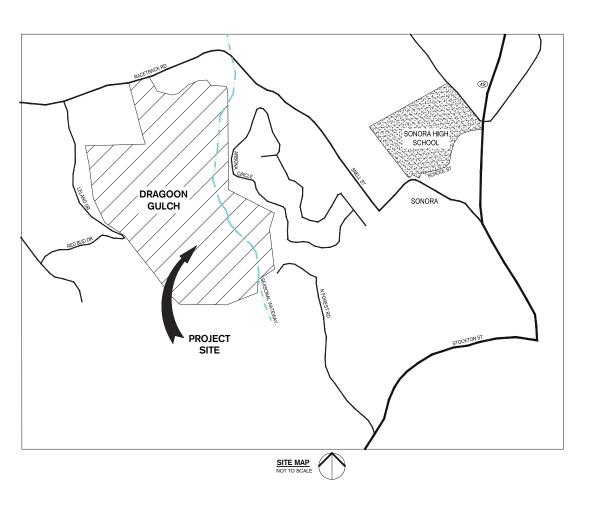
SITE CONSTRUCTION

					PHA	SE 1	PHASE 2		PHASE 3		PHASE 4	
ITEM N	Ю.	ITEM DESCRIPTION	UNIT	UNIT PRICE (\$)	ESTIMATED QUANTITY	SUBTOTAL (\$)						
21		BUS SHELTER	ALLOW	8,000.00		0		0		0	1	8,000
22		PRE-FABRICATED SHADE STUCTURE	ALLOW	24,000.00		0		0		0	1	24,000
23		PICNIC TABLES (INCLUDING ACCESSIBLE)	EA	900.00		0		0		0	6	5,400
24		WOOD FENCING (INC. GATES)	LF	18.00		0		0		0	3717	66,906
25		ACCESS GATE (PIPE)	EA	800.00		0		0		0	2	1,600
26		WHEEL STOPS	EA	60.00		0		0		0	20	1,200
27		RESTORATION/DEMONSTRATION PLANTING/IRRIGATION	ALLOW	20,000.00		0		0		0	1	20,000
SUBTOTAL				25,800		96,000		28,600		526,275		

5.10 30% IMPROVEMENT PLANS

DRAGOON GULCH TRAIL 30% IMPROVEMENT PLANS

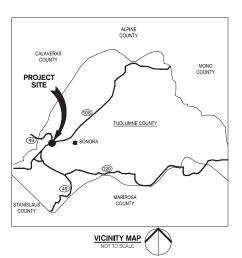
SONORA, CALIFORNIA



BASIS OF DESIGN:

1. THESE PLANS HAVE BEEN PREPARED TO PROVIDE ROUGH ORDER OF MAGNITUDE COSTING ONLY, A FILL SITE SURVEY TO ESTABLISH PROPERTY BOUNDARIES, EXISTING GRADES, AND EXISTING CONDITIONS IS REQUIRED.

- PROPOSED IMPROVEMENTS REPRESENTED HEREIN MARE BASED ON CITY-PROVIDED AERMAL TOPOGRAPHIC INFORMATION ON STATE PLANE COORDINATES INCLUDING ROADS, CONTOURS (10' INTERVAL), FENCES, AND TREE CAMOPY. THE ACQUIRGY OF THIS INFORMATION HAS NOT BEEN ESTABLISHED AND IS LIKELY TO VARY FROM ACTUAL SITE CONDITIONS
- 3. A SUPPLEMENTAL TOPOGRAPHIC SURVEY WAS PERFORMED TO IDENTIFY EXISTING ROADS AND STRUCTURES PROOF TO RECEIPT OF THIS INFORMATION AND SHOULD BE RECTIFIED WITH THE AERIAL OR PUTURE BOUNDARY SURVEY. THIS ECTIFICATION MAY CONFIRM OR RESCUE VENOTED DISCREPANCIES INCLUDING THE APPARENT OVERLAP OF THE APPROXIMATE PROPERTY BOUNDARY AND EXISTING DRIVEWAY.
- TRAIL ALIGNMENTS REPRESENTED HEREIN HAVE BEEN FIELD-VERIFIED AS TO GENERAL FIT AND ARE ACCURATE +130' (DUE TO GPS EQUIPMENT USED). ACTUAL TRAIL ALIGNMENTS HAVE BEEN FLAGGED IN-FIELD.



PROJECT CONTACTS

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CIVIL ENGINEER

INDEX OF SHEETS:

C1.0	COVER SHEET
C2.0	GENERAL NOTES & ABBREVIATIONS
C3.0	PAVING PLAN
C4.0	GRADING & UTILITY PLAN PLAN
C5.0	TRAJL ALIGNMENT PLAN NO. 1
C5.1	TRAÍL ALÍGNMENT PLAN NO. 2
C5.2	TRAIL ALIGNMENT PLAN NO. 3
C6.0	RESTROOM DETAILS
C7.0	DETAILS



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- CIVIL ENGINEERING
- LAND SURVEYING

REVISIONS No. Date Description

PROJECT

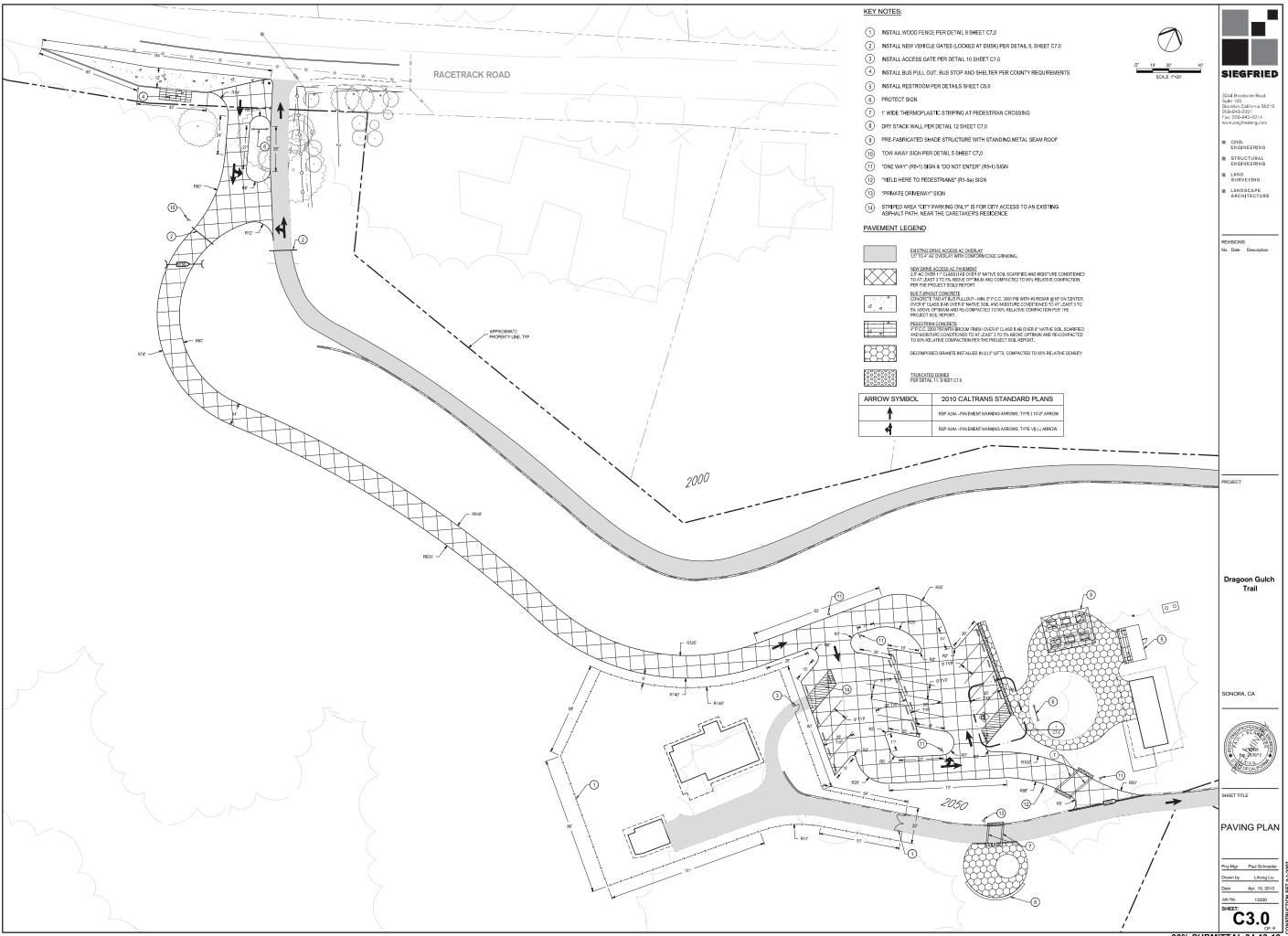
Dragoon Gulch Trail

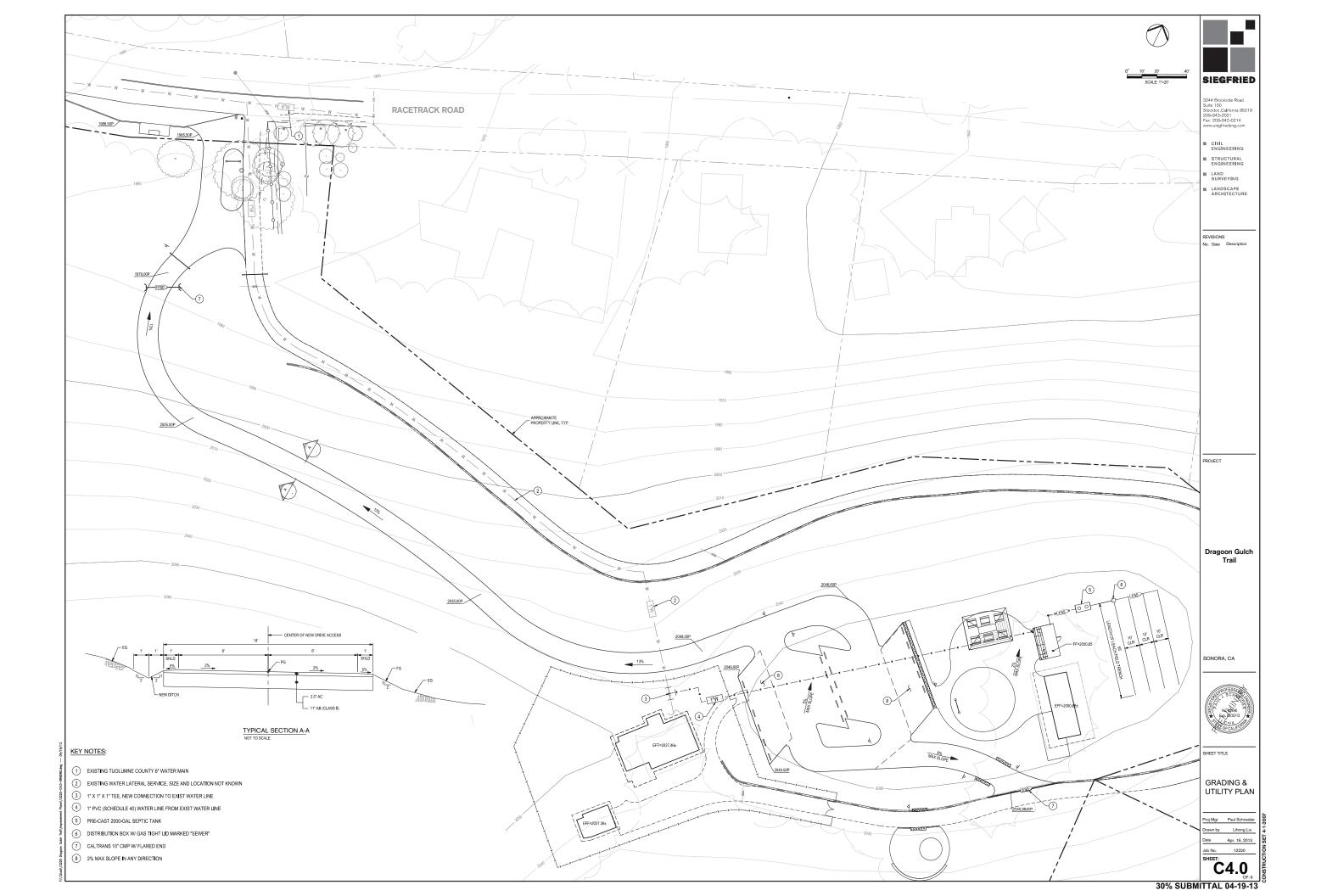
SONORA, CA



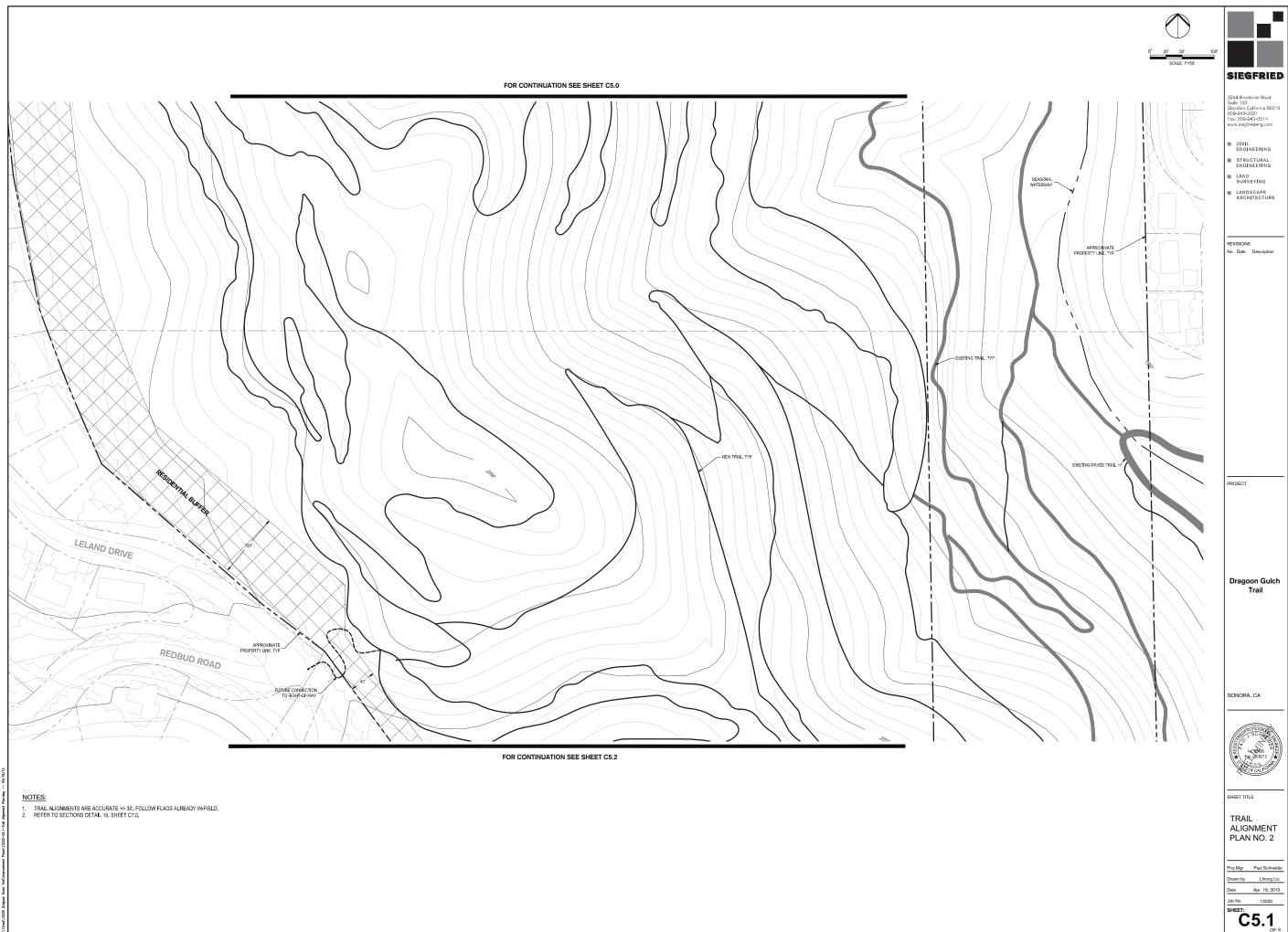
COVER SHEET

Proj Mgr Paul Schneider Drawn by Lihong Liu Date Apr. 19, 2013 Job No. 12220 SHEET: C1.0

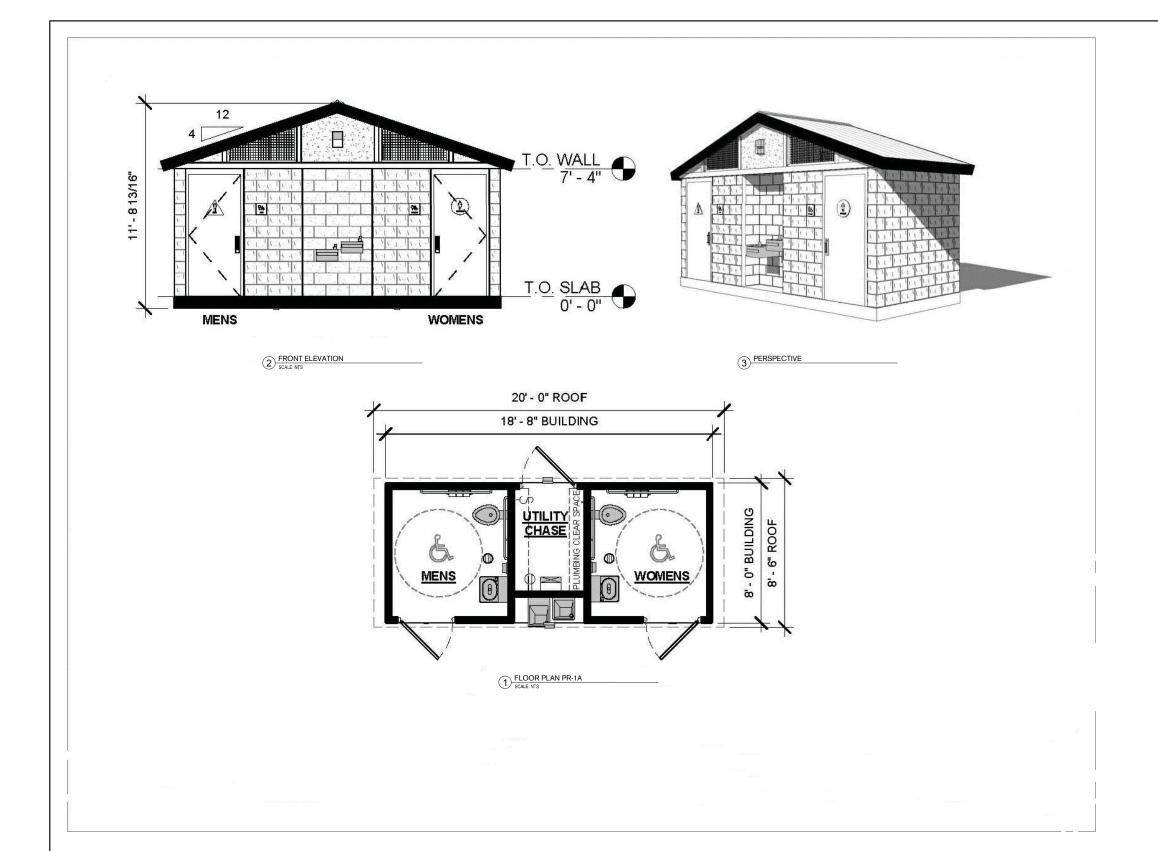














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- CIVIL ENGINEERING
- STRUCTURAL ENGINEERING
- LAND SURVEYING
- LANDSCAPE ARCHITECTURE

REVISIONS

No. Date Description

PROJECT

Dragoon Gulch Trail

SONORA, CA



SHEET TITLE

RESTROOM DETAILS

Drawn by Lihong Liu

Job No. 12220 SHEET: C6.0

