CLEANUP AND ABATEMENT ORDER NO. R5-2015-0701

ASSESSOR PARCEL 041-300-035-000

SHASTA COUNTY

Attachment B – 19 November 2014 Baker Ridge Inspection Report

CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD

INSPECTION REPORT

20 February 2015

PROPERTY OWNERSHIP:	Shasta County APN: 041-300-035-000 Christopher Cordes, 101 South F Street, Pensacola, FL 32502
PHYSICAL PROPERTY ADDRESS:	Baker Ridge Road, Igo, CA 96047
CONTACT(S):	Will Bond (Consultant to Eddie Axner Construction, Inc.) 530-221-5424 or 530-515-9658 wbond@shn-engr.com
RESIDENTS PRESENT:	No residents present during the inspection
INSPECTION DATE & TIME:	19 November 2014 at 0845.
INSPECTED BY:	Roy Sherrell, ES, Central Valley Regional Water Quality Control Board Kevin Pfeiffer, EG, Central Valley Regional Water Quality Control Board Patricia Vellines, EG, Central Valley Regional Water Quality Control Board Ashley Hampton, ES, Central Valley Regional Water Quality Control Board
CONSENT/WARRANT:	This inspection was conducted with consent from the Property Owner
ACCOMPANIED BY:	Clint Snyder, Assistant Executive Officer, Central Valley Regional Water Quality Control Board Will Bond, Senior Civil Engineer, SHN Consulting Engineers & Geologists Inc. Eddie Axner, Owner, Eddie Axner Construction
EQUIPMENT USED:	Garmin Rino 655t GPS & Two-way Radio Nikon Coolpix AW120 GPS Camera

ATTACHMENTS:

Appendix A – Figure 1
Appendix B – Photographs #1 - #6
Appendix C – SHN Erosion Control Plans

SITE DESCRIPTION

On 19 November 2014 Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff conducted a follow-up inspection of Shasta County APN: 041-300-035-000 (hereafter referred to as the "Site").

The Site, located off of Baker Ridge Road, east of Rainbow Lake in Ono, Shasta County lies adjacent to a seasonal stream and several seasonal drainages that exist as unnamed tributaries to the North Fork Cottonwood Creek. The North Fork Cottonwood Creek is a major tributary of Cottonwood Creek. The existing beneficial uses of Cottonwood Creek are listed in the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (Basin Plan) as: Municipal & Domestic Supply; Agricultural Supply; Water Contact & Non-contact Recreation; Warm & Cold Freshwater Habitat; Migration of Cold Freshwater Aquatic Organisms; Spawning, Reproduction, and/or early Development; and Wildlife Habitat. The potential beneficial uses of Cottonwood Creek as listed in the Basin Plan include: Industrial Process Supply, Industrial Service Supply, and Industrial Power.

A summary of the inspection and water quality concerns associated with the Site are included below. Appendix A includes an overview figure summarizing the site including labels, tracks, and waypoints for roads, water crossings, and graded areas. Corresponding inspection photographs documenting Site details and water quality concerns are included as Appendix B. Plans for erosion control measures to be implemented at the Site as provided by SHN Consulting Engineers & Geologists are included as Appendix C. A copy of the 28 October 2014 Baker Ridge Inspection Report is included with and is referenced in this report.

BACKGROUND

On 28 October 2014 Central Valley Water Board, California Department of Fish & Wildlife (CDFW), and Shasta County Department of Resource Management staffs conducted an inspection of the Site. During this inspection Central Valley Water Board staff inspected areas surrounding the two main terraces and the access road that connects the terraces to Baker Ridge Road (see 28 October 2014 Baker Ridge Inspection Report). During the 28 October 2014 inspection, Staff discovered a previously unknown and recently constructed section of road that started from the north side of the upper terrace and traveled west, accessing more of the Site (hereafter "New Road"). Due to time constraints Staff was unable to fully inspect the New Road during that inspection.

On 7 November 2014, CDFW staff returned to the Site and conducted another inspection which included a full inspection of the New Road. Following that inspection CDFW staff informed Central Valley Water Board staff that some erosion control measures had been installed at the Site and that there were several areas on the New Road that had discharged sediment laden stormwater to unnamed tributaries of North Fork Cottonwood Creek including two watercourse crossings, one of which was observed during the October inspection. After being notified of the

issues Staff contacted Mr. Will Bond, who had created an Erosion Control Plan for the Site, to ask for a meeting at the Site to view and evaluate the recently installed erosion control measures and to inspect the New Road. Permission to enter the property was obtained by Mr. Bond from the property owner for Central Valley Water Board staff to access the property and conduct an inspection. Confirmation with Shasta County verified that no permits of any kind had been issued for the New Road construction at the Site.

OBSERVATIONS AND COMMENTS

On 19 November 2014 at 0845 hours the above identified Central Valley Water Board staff, Mr. Will Bond from SHN Consulting Engineers & Geologists Inc., and Mr. Eddie Axner of Eddie Axner Construction met at the Site on the lower terrace.

Per Eddie Axner, Eddie Axner Construction constructed the upper and lower terraces as well as additional development of the existing main access road between Baker Ridge Road and the terraces. Since the 28 October 2014 inspection, Eddie Axner Construction has also installed erosion control measures which Staff met on Site to inspect. Mr. Bond was present to discuss the recently developed Site erosion control plans.

The weather for the duration of the inspection was cloudy with rain, and there was evidence that it had rained overnight and in the morning just before the inspection.

Staff's focus was directed towards several water quality concerns present at the Site and described in further detail below, including:

- Main Access Road
- Graded Upper and Lower Terraces
- New Road – Including two water crossings

Staff also interviewed both Mr. Axner and Mr. Bond in order to acquire further information regarding Site development and its conditions, and information regarding the land owner, Mr. Cordes.

Main Access Road

The Site is accessed via Baker Ridge Road by a main access road. The main access road leading up to the lower terrace, which was further developed by Mr. Axner from an existing access road and described in detail in the inspection report from the 28 October 2014 inspection, consists of a watercourse crossing and an in-sloped road with an inboard ditch that drains directly to the creek on the upstream side of the watercourse crossing. The crossing itself is composed of a 24 inch metal culvert with tires and native soil used as fill. Since the previous inspection by Central Valley Water Board staff, this main access road was mulched and seeded with straw and rye grass seed. In addition, 4 to 6 inch angular rock had been placed in the inboard storm water drainage ditch to dissipate energy and protect fill material from further erosion and discharge to the Unnamed Class III Tributary of North Fork Cottonwood Creek. Erosion control efforts implemented at this location appeared to be effective at the time of inspection and were successful at abating further discharge to the watercourse, however ongoing maintenance will need to be employed to ensure continuing function.

Upper and Lower Terraces

Staff evaluated erosion control measures implemented on the upper and lower terraces and discussed them with Mr. Bond and Mr. Axner. Erosion control blankets had been installed on the east fill/side slope of the lower terrace where Staff had observed heavy equipment operating during the 28 October 2014 inspection. Erosion control blankets were also installed along the cut banks of the access road between the upper and lower terrace. Straw was used to mulch all other areas of the upper and lower terrace surfaces and fill/side slopes. Angular rock, sized between 4 and 6 inches, had been placed in several areas where stormwater drains from the roads along the terraces in approximate 100 foot spaced check dams as visually estimated (and as specified in Erosion Control Plans included in Appendix C) to act as energy dissipaters and to protect fill material from further erosion. Straw mulch and rye seed had been applied to all of the areas exposed by grading and the rye had just begun to sprout at the time of this inspection.

It was evident due to rain and runoff before and during this inspection that the seed and straw mulch, while effective on the flatter areas of the terraces and the road, was insufficient to fully protect and prevent erosion on the steep (greater than 50% grade as measured during 28 October 2014 inspection) south and west fill/side slopes of the lower terrace. On these steep fill/side slopes the seeds and straw mulch had been mobilized downslope and into rills by wind and rain, leaving the majority of the erodible fill/side slope surfaces exposed and vulnerable to further erosion (Photograph #1). Mr. Axner stated that he would like to "pull back" those fill/side slopes to make them less steep then install erosion control blankets to protect the slopes.

New Road

After inspecting the erosion control measures implemented on the upper and lower terraces, Staff, Mr. Axner, and Mr. Bond walked the New Road. This unpermitted section of road begins on the north side of the upper terrace and travels west. Approximately 300 yards due west of the upper terrace the road splits to form a loop with two dead end spur road sections which extend to the south and southwest (see Figure 1). Mr. Axner stated that Mr. Cordes "rented a dozer, probably a D6, and had one of his guys conduct the [new] road work". Mr. Axner also stated that Mr. Cordes told him that he created the New Road as a "dirt bike track". Staff found several areas where the fill/side slopes of this road had sloughed off or eroded away discharging fill and road material to watercourses below (Photograph #2 and Photograph #4). All areas disturbed by the road construction had been mulched and seeded by Eddie Axner Construction since the 28 October 2014 inspection; however the straw mulch and seed was not effective at preventing erosion on the steep fill/side slopes.

Watercourse Crossings, Way Points 1 & 2

Staff identified two watercourse crossings (Refer to Figure 1) on the New Road. Both were constructed by pushing/grading native soil material into a watercourse and riparian zones, to form a surface over which vehicles could pass.

Crossing 1, Photograph #3

At Way Point 1, Eddie Axner Construction had placed riprap in a deep erosional scar that was created by flow from the watercourse passing over the crossing then exiting the road surface to the downstream side. This riprap could prevent the current erosional scar from growing, but will not prevent flow of the watercourse from continuing to erode this un-armored watercourse

crossing and discharging fill/road material to the watercourse. Mr. Axner agreed that a significant amount of fill and road material had already discharged to the watercourse, and that additional measures were needed to stabilize this watercourse crossing and prevent it from discharging more fill/road material to the watercourse. The crossing was conservatively measured during the 28 October 2014 inspection as being approximately 32 feet long, over 20 feet wide, with an average thickness of over 12 feet on the downstream side, 0 feet on the upstream side, and was constructed by placing more than 3,840 cubic feet (as calculated from measurements) of native rock and soil in the watercourse and adjacent riparian areas at this location. No permits were obtained for the construction of this watercourse crossing.

Crossing 2, Photograph #5

At Way Point 2, staff estimated more than 75 feet of stream channel had been filled using more than 4,680 cubic feet (as calculated from measurements) of native earthen materials to construct the watercourse crossing. The crossing was conservatively measured by CDFW staff during their 7 November 2014 inspection as being approximately 78 feet long, over 12 feet wide, with an average thickness of over 10 feet on the downstream side, 0 feet on the upstream side. There is no culvert or armoring at this crossing, meaning that flow from the watercourse passes over the road surface composed of native soil that is highly erosive and largely un-compacted decomposed granite fill and then down the fill/side slope to the channel below. Mr. Axner and Mr. Bond agreed that a significant amount of fill and road material had already discharged to the watercourse from this crossing, and that significant erosion control measures were needed to stabilize this watercourse crossing and prevent it from discharging more fill/road material. It is the consensus of Staff that, due to the topography and the erodibility of soils at this location, a watercourse crossing should never have been constructed at this location. Again, no permits were obtained nor plans submitted for the construction at this crossing.

Additional Comments

While conducting the inspection Staff learned several things about the history of the Site from Mr. Axner. According to Mr. Axner, the site was originally a "dump site" where locals disposed of old cars and appliances among other things. He claimed that a realtor had purchased the property, removed some of the junk, and then flipped the property selling it to Mr. Cordes. Mr. Axner stated that his company, Eddie Axner Construction, was hired to construct the upper and lower terraces and to improve the access road from Baker Ridge Road to the terraces. Mr. Axner stated that Mr. Cordes wanted the upper and lower terraces for a home site and to grow "his 99 medical marijuana plants". Mr. Axner stated that his company was hired on a per-hour basis and that they never had, and did not currently have, a contract with Mr. Cordes. When asked about plans for the terrace structures, Mr. Axner stated that they never surveyed or planned the excavation/grading of the terraces and that they just followed Mr. Cordes' orders. When questioned about a grading stake that was found at the Site during the 28 October inspection (Photograph #6), Mr. Axner admitted that it was, in fact, one of his teams' grading stakes; however it was not from surveying and planning of the construction. Mr. Axner also stated that, "Chris [Cordes] dumped the potting soil" over the side of the terraces.

It should be noted that Mr. Axner is, and has been for many years, a licensed contractor and licensed timber operator. This means that he was knowledgeable and aware of the fact that a Grading Permit from Shasta County and a Stormwater Construction Permit from the Central Valley Water Board was needed to conduct the grading/construction of the terraces. It also means that he was knowledgeable and aware that significant stabilization and erosion control

measures where required following a grading/construction project of this size on soils such as those present at the Site.

In addition, erosion control plans drawn by SHN Consulting Engineers & Geologists, Inc. (Appendix C) and provided by Mr. Bond include labels diagraming the existing seasonal drainages along the new road. The identification of these drainages (corresponding with Crossing #1 and Crossing #2) confirms knowledge of their existence and need for adequate measures to be taken to prevent further erosion. The currently implemented erosion control measures along these water crossings do not follow those indicated in the plan and are insufficient for the prevention of gross erosion along the road on these highly erosive soils.

ENFORCEMENT DISCRETION

The observations in this report will be assessed for violations of the California Water Code. The Central Valley Water Board reserves its rights to take any enforcement action authorized by law.

Inspectors Signatures

Ashley Hampton,
Environmental Scientist

Kevin Pfeiffer, G.I.T
Engineering Geologist

Roy Sherrell, MFR
Environmental Scientist

Patricia Vellines, P.G.
Engineering Geologist

Reviewer Signature

Clint Snyder, P.G.
Assistant Executive Officer

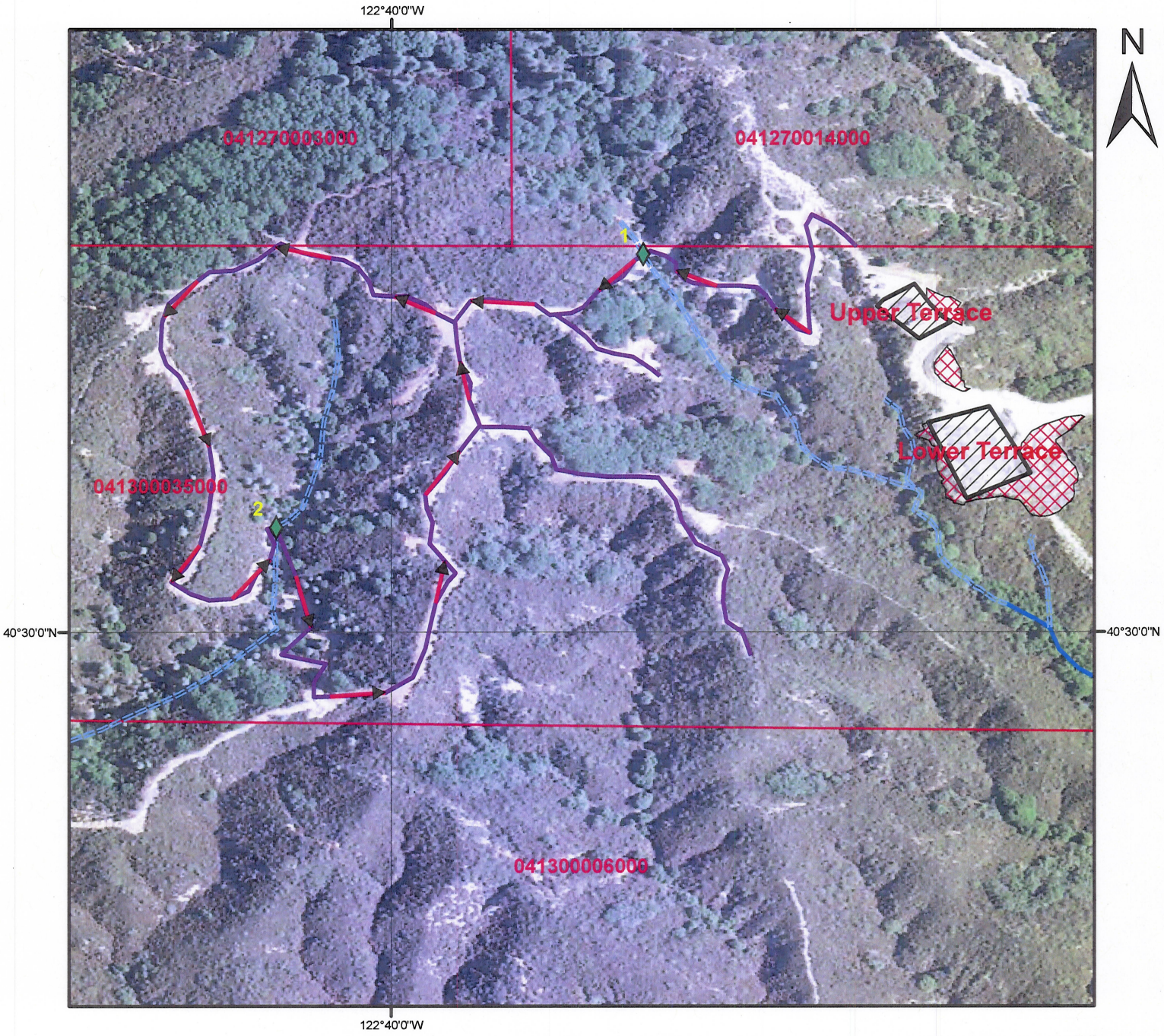
19 NOVEMBER 2014 BAKER RIDGE INSPECTION REPORT

ASSESSOR PARCEL 041-300-035-000

SHASTA COUNTY

Appendix A – Figure 1

Baker Ridge Rd. Grow: 11-19-14 Inspection on NAIP 2014 Imagery



0 0.05 0.1 0.2 Miles

1:5,000

Description of Lines and Units

- Waypoints Identifying Significant Water Crossings
- New Road/ Unpermitted Construction by Cordes
- Class III Waterway
- Class II Waterway
- Route taken by Water Board Staff
- Area Graded by Eddie Axner
- Side Castings and DG Fill Material/ Eddie Axner
- Parcel Boundaries

Map Created By: Kevin Pfeiffer G.I.T
Engineering Geologist
Watershed Enforcement Team
Central Valley Regional Water Quality Control Board

Date: 1/13/2015

STATE OF CALIFORNIA
CENTRAL VALLEY REGION
REGIONAL WATER QUALITY CONTROL BOARD

19 NOVEMBER 2014 BAKER RIDGE INSPECTION REPORT

ASSESSOR PARCEL 041-300-035-000

SHASTA COUNTY

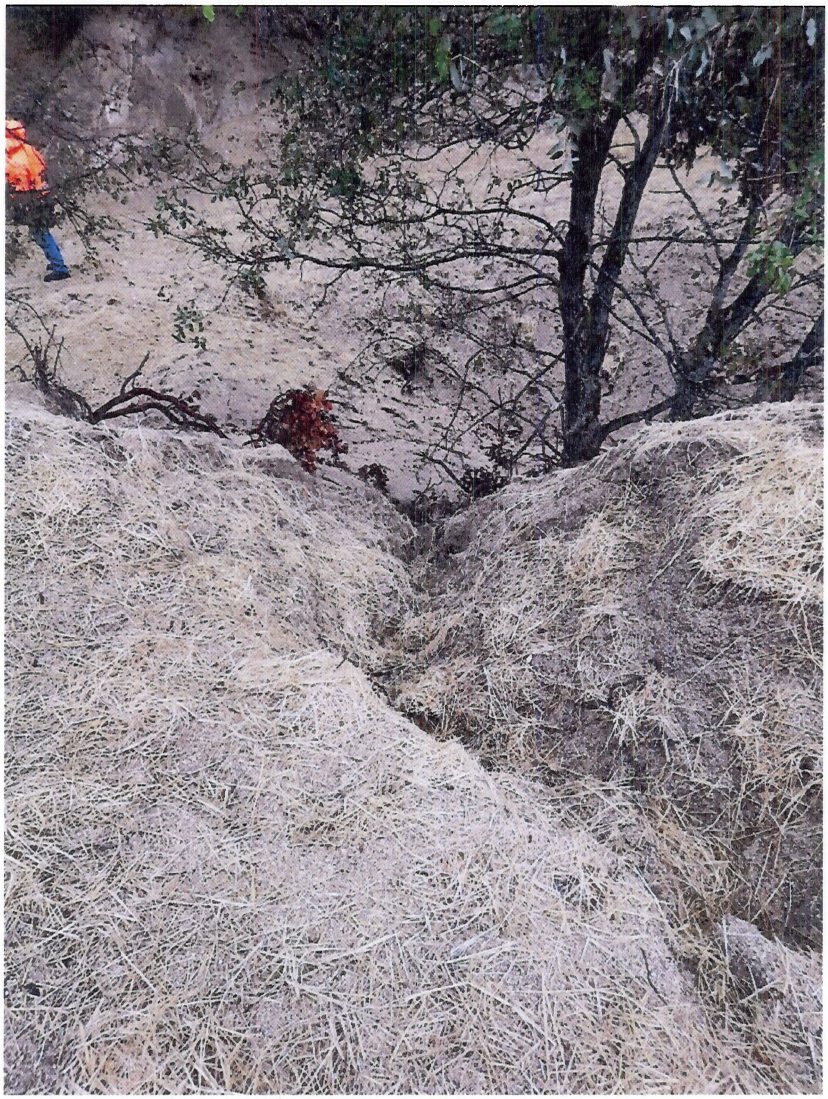
Appendix B – Photographs #1 - #6

Photograph #1. West fill/side slope of lower terrace with straw mulch ineffectively protecting fill material from erosion.

Photograph #2. Area where road and fill material from the New Road has discharged to an un-named tributary of North Fork Cottonwood Creek.

Photograph #3. Way Point 1 - Riprap in deep erosional scar on downstream side of watercourse crossing.

Photograph #4. Stormwater discharge location on New Road approximately 100 yards south of Way Point 2.



Photograph #5. Way Point 2 – Fill and road material from New Road/watercourse crossing within watercourse on downstream side of watercourse crossing.

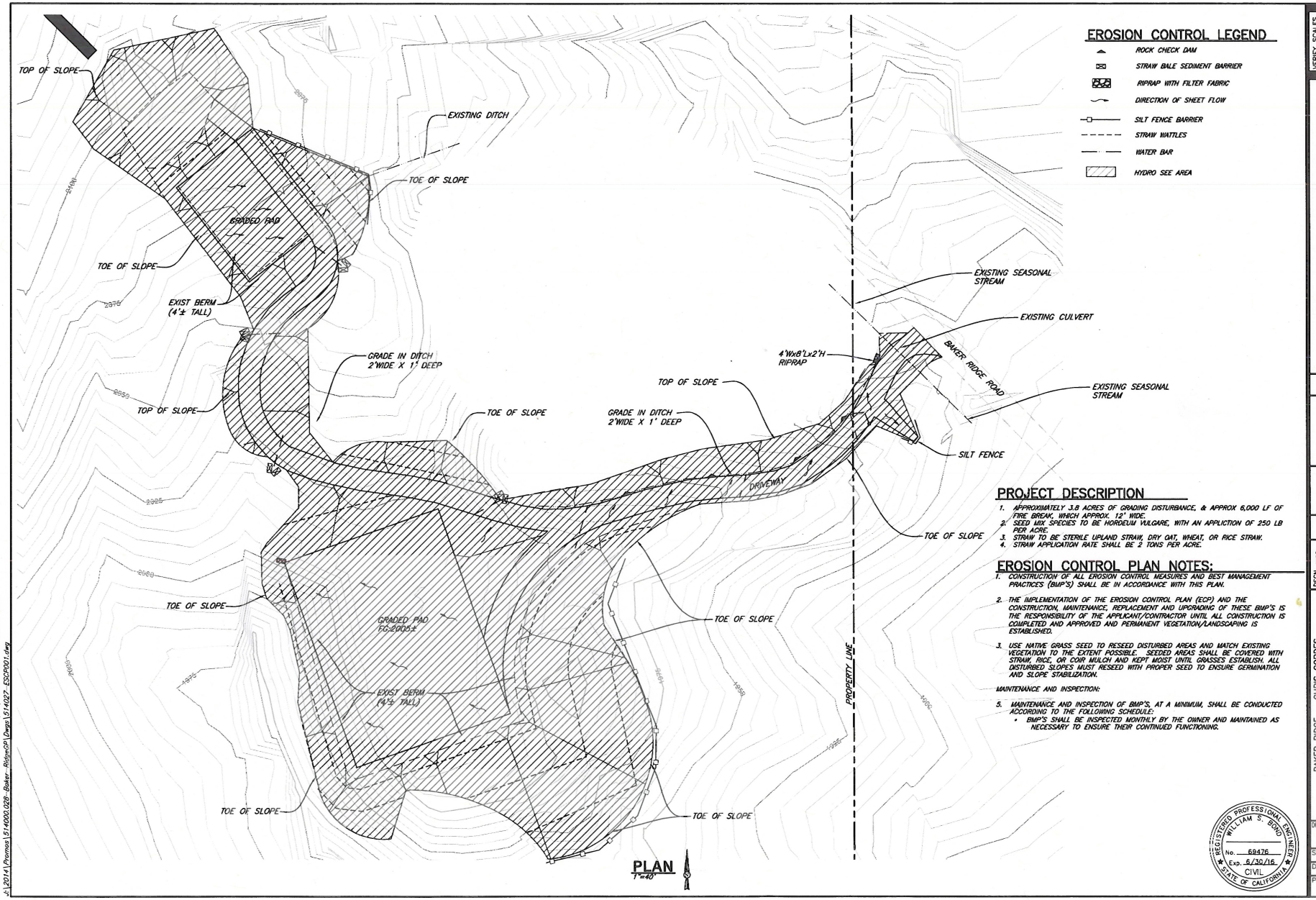
Photograph #6. Eddie Axner Construction grading stake documented during the 28 October 2014 inspection.

19 NOVEMBER 2014 BAKER RIDGE INSPECTION REPORT

ASSESSOR PARCEL 041-300-035-000

SHASTA COUNTY

Appendix C – SHN Erosion Control Plans



PLAN
1"=40'

EROSION CONTROL LEGEND

- ROCK CHECK DAM
- STRAW BALE SEDIMENT BARRIER
- RIPRAP WITH FILTER FABRIC
- DIRECTION OF SHEET FLOW
- SILT FENCE BARRIER
- STRAW WATTLES
- WATER BAR
- HYDRO SEE AREA

PROJECT DESCRIPTION

1. APPROXIMATELY 3.8 ACRES OF GRADING DISTURBANCE, & APPROX 6,000 LF OF FIRE BREAK, WHICH APPROX. 12' WIDE.
2. SEED MIX SPECIES TO BE HORDEUM VULGARE, WITH AN APPLICTION OF 250 LB PER ACRE.
3. STRAW TO BE STERILE UPLAND STRAW, DRY OAT, WHEAT, OR RICE STRAW.
4. STRAW APPLICATION RATE SHALL BE 2 TONS PER ACRE.

EROSION CONTROL PLAN NOTES:

1. CONSTRUCTION OF ALL EROSION CONTROL MEASURES AND BEST MANAGEMENT PRACTICES (BMP'S) SHALL BE IN ACCORDANCE WITH THIS PLAN.
2. THE IMPLEMENTATION OF THE EROSION CONTROL PLAN (ECP) AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT AND UPGRADING OF THESE BMP'S IS THE RESPONSIBILITY OF THE APPLICANT/CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND PERMANENT VEGETATION/LANDSCAPING IS ESTABLISHED.
3. USE NATIVE GRASS SEED TO RESEED DISTURBED AREAS AND MATCH EXISTING VEGETATION TO THE EXTENT POSSIBLE. SEEDED AREAS SHALL BE COVERED WITH STRAW, RICE, OR COIR MULCH AND KEPT MOIST UNTIL GRASSES ESTABLISH. ALL DISTURBED SLOPES MUST RESEED WITH PROPER SEED TO ENSURE GERMINATION AND SLOPE STABILIZATION.

MAINTENANCE AND INSPECTION:

5. MAINTENANCE AND INSPECTION OF BMP'S, AT A MINIMUM, SHALL BE CONDUCTED ACCORDING TO THE FOLLOWING SCHEDULE:
   - BMP'S SHALL BE INSPECTED MONTHLY BY THE OWNER AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.

REGISTERED PROFESSIONAL ENGINEER
WILLIAM S. BOND
No. 69476
Exp. 6/30/16
CIVIL
STATE OF CALIFORNIA

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING 1"
IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY

CONSULTING ENGINEERS & GEOLOGISTS, INC.
350 Hartnell Avenue
Redding, CA 96002
(530)221-5424
FAX (530)221-0135

NO.	DATE	REVISION	BY

DSGN WSB
DR WSB
CHK WSB
APVD

BAKER RIDGE - CHRIS CORDES
APN:0041-300-035
ONO,SHASTA COUNTY, CALIFORNIA

EROSION CONTROL PLAN

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SHEET 3
DATE 10/20/14
PROJ. NO. 514027

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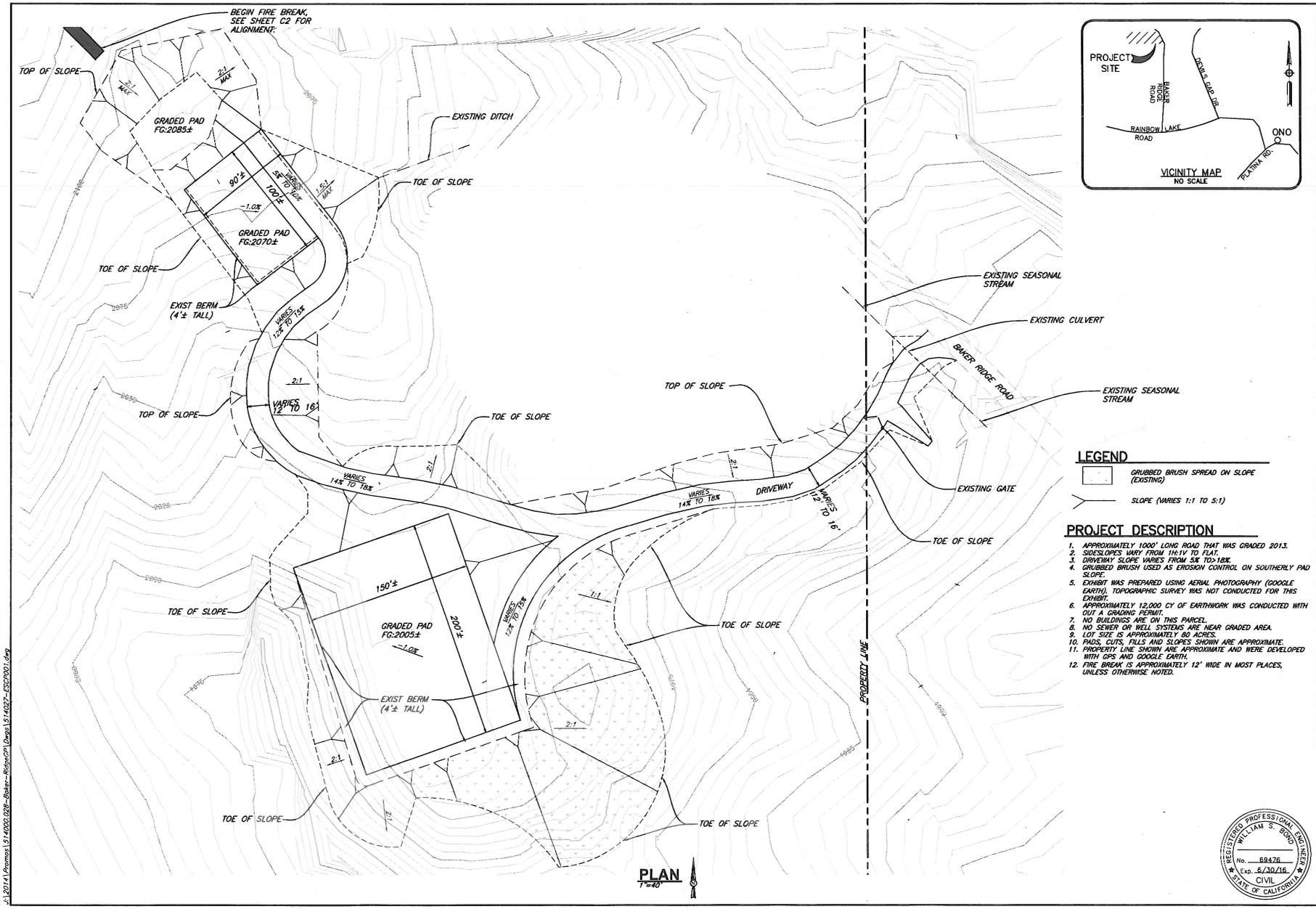

PLAN
1"=40'

VICINITY MAP
NO SCALE

LEGEND

GRUBBED BRUSH SPREAD ON SLOPE (EXISTING)

SLOPE (VARIES 1:1 TO 5:1)

PROJECT DESCRIPTION

1. APPROXIMATELY 1000' LONG ROAD THAT WAS GRADED 2013.
2. SIDESLOPES VARY FROM 1H:1V TO FLAT.
3. DRIVEWAY SLOPE VARIES FROM 5% TO >18%.
4. GRUBBED BRUSH USED AS EROSION CONTROL ON SOUTHERLY PAD SLOPE.
5. EXHIBIT WAS PREPARED USING AERIAL PHOTOGRAPHY (GOOGLE EARTH). TOPOGRAPHIC SURVEY WAS NOT CONDUCTED FOR THIS EXHIBIT.
6. APPROXIMATELY 12,000 CY OF EARTHWORK WAS CONDUCTED WITH CUT A GRADING PERMIT.
7. NO BUILDINGS ARE ON THIS PARCEL.
8. NO SEWER OR WELL SYSTEMS ARE NEAR GRADED AREA.
9. LOT SIZE IS APPROXIMATELY 80 ACRES.
10. PADS, CUTS, FILLS AND SLOPES SHOWN ARE APPROXIMATE.
11. PROPERTY LINE SHOWN ARE APPROXIMATE AND WERE DEVELOPED WITH GPS AND GOOGLE EARTH.
12. FIRE BREAK IS APPROXIMATELY 12' WIDE IN MOST PLACES, UNLESS OTHERWISE NOTED.

REGISTERED PROFESSIONAL ENGINEER
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No. 69476
Exp. 6/30/16
CIVIL
STATE OF CALIFORNIA

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SHN
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NO.	DATE	REVISION	BY

DSGN WSB
DR WSB
CHK WSB
APVD

BAKER RIDGE - CHRIS CORDES
APN:0041-300-035
ONO,SHASTA COUNTY, CALIFORNIA

EXISTING CONDITIONS SITE PLAN

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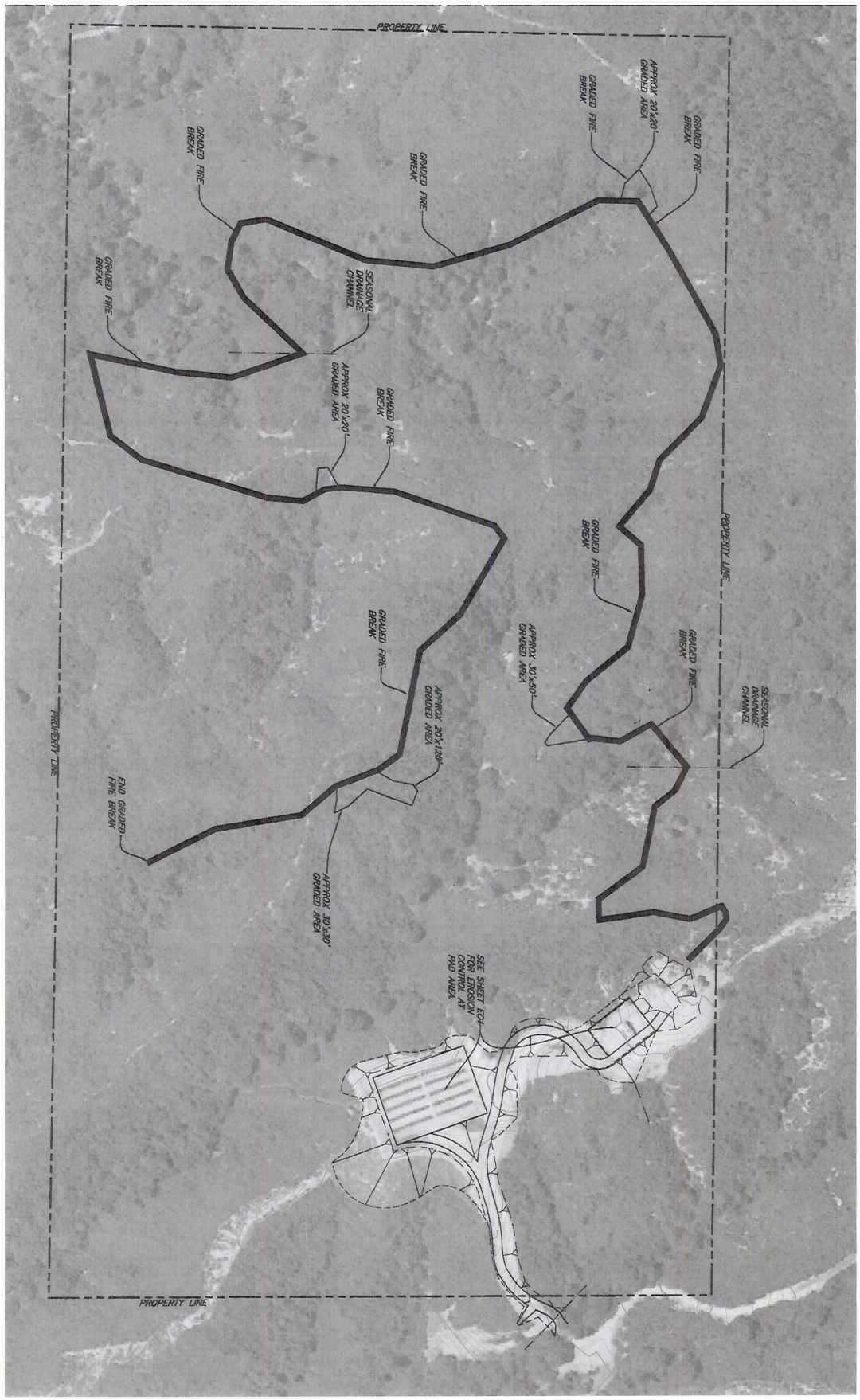

PLAN
1"=100'

REGISTERED PROFESSIONAL ENGINEER
WILLIAM S. BOND
No. 69476
Exp. 6/30/16
CIVIL
STATE OF CALIFORNIA

PROJ. NO.: 514027	DATE: 10/20/14	SHEET: 2	DRAWING: C2	BAKER RIDGE – CHRIS CORDES APN:0041-300-035 ONO,SHASTA COUNTY, CALIFORNIA EXISTING CONDITIONS SITE PLAN	DSGN WSB DR WSB CHK WSB APVD	NO.	DATE	REVISION / BY

SHN CONSULTING ENGINEERS & GEOLOGISTS, INC.
350 Hartnell Avenue Redding, CA 96002
(530)221-5424 FAX (530)221-0135

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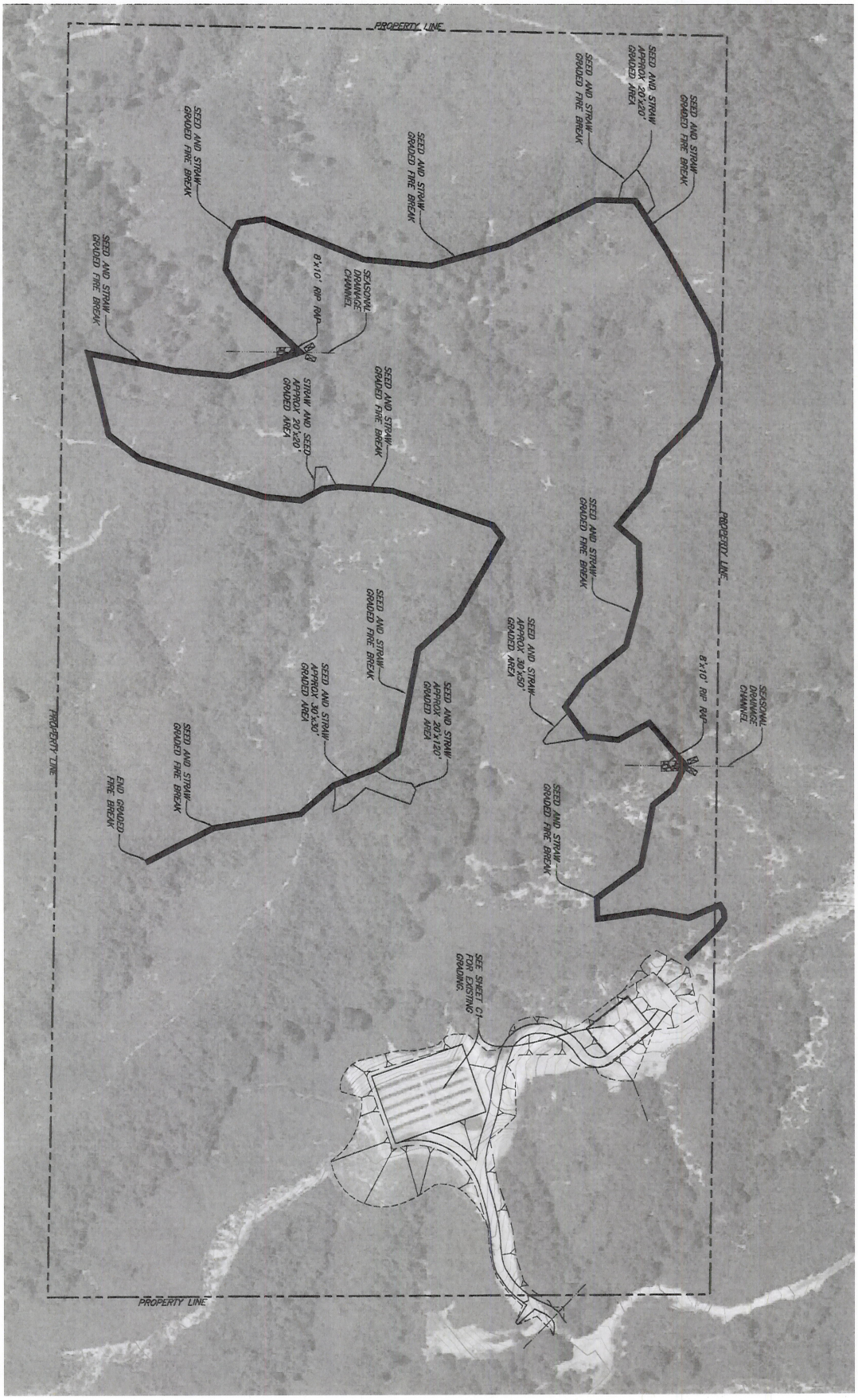
EROSION CONTROL PLAN NOTES:

1. USE STRAW AND NATIVE GRASS SEED TO RESEED FIRE BREAKS AND OTHER GRADED AREAS THAT MAY OR MAY NOT BE SHOWN ON PLAN. MATCH EXISTING VEGETATION TYPE. DISTURBED AREAS SHALL BE COVERED WITH STRAW, RICE, OR CURL MULCH AND KEPT MOIST UNTIL GRASSES ESTABLISH. ALL DISTURBED SLOPES MUST SEEDED WITH PROPER SEED TO ENSURE GERMINATION AND SLOPE STABILIZATION.
2. WATER BAR, ROCK CHECK DAMS, SILT FENCE, STRAW WATTLE LOCATIONS, UNLESS OTHERWISE NOTED TO BE MARKED IN FIELD BY QSP.

PLAN
1"=100'



REGISTERED PROFESSIONAL ENGINEER
WILLIAM S. BOND
No. 68476
Exp. 6/30/16
CIVIL
STATE OF CALIFORNIA

BAKER RIDGE – CHRIS CORDES
APN:0041-300-035
ONO,SHASTA COUNTY, CALIFORNIA

EROSION CONTROL PLAN

DRAWING: EC2
SHEET: 4
DATE: 10/20/14
PROJ. NO.: 514027

DSGN	WSB
DR	WSB
CHK	WSB
APVD	

NO.	DATE	REVISION	BY

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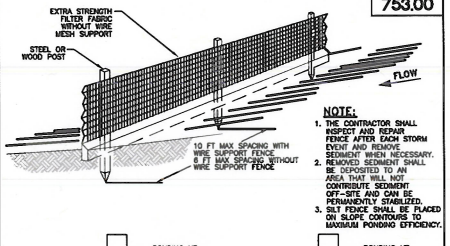
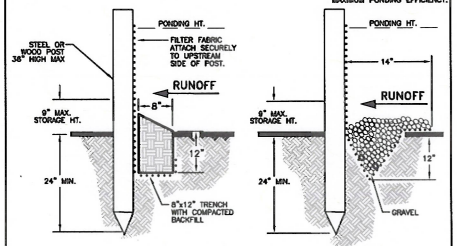


NOTE:
1. THE CONTRACTOR SHALL INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
3. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMUM PONDING EFFICIENCY.

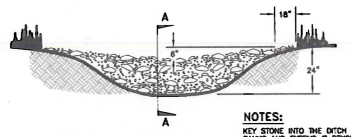


STD. DETAIL
TRENCH WITH NATIVE BACKFILL

ALT. DETAIL
TRENCH WITH GRAVEL

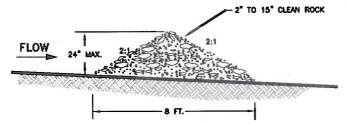
SUB DATE 9-03	CHAIR MTG	CITY OF REDDING - TRANSPORTATION & ENGINEERING DEPARTMENT	
		APPROVED BY	SILT FENCE
MARK	DATE	REVISION	

PAGE 754.00

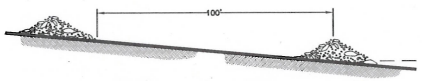


VIEW LOOKING UPSTREAM

NOTES:
KEY STONE INTO THE DITCH BANKS AND EXTEND IT BEYOND THE ABUTMENTS A MINIMUM OF 18" TO PREVENT OVERFLOW AROUND DAM.

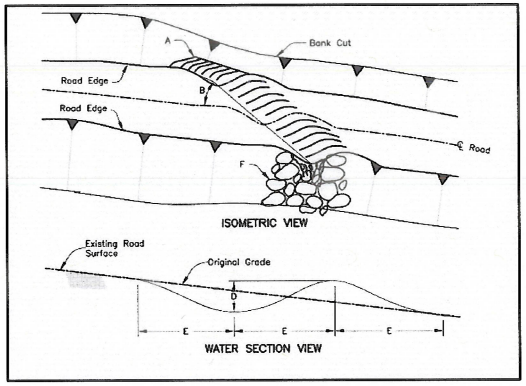


SECTION A-A



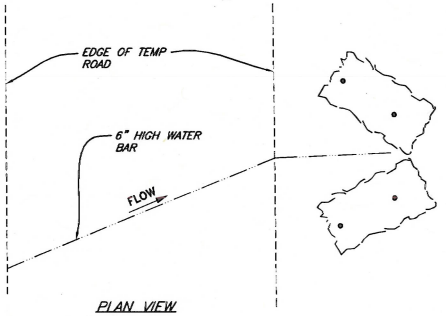
SPACING BETWEEN CHECK DAMS

SUB DATE 9-03	CHAIR MTG	CITY OF REDDING - TRANSPORTATION & ENGINEERING DEPARTMENT	
		APPROVED BY	ROCK CHECK DAM
MARK	DATE	REVISION	



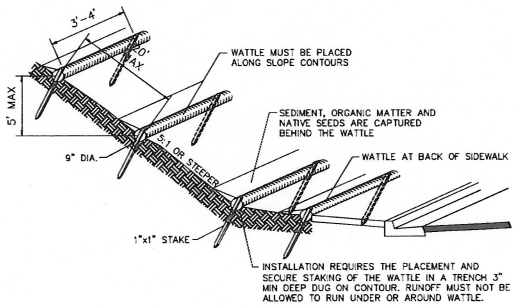
WATER BAR

NOTES
A. WATER BAR EXTENDS INTO CUT BANK SLOPE.
B. ANGLE DRAIN 30° FROM CL OF ROAD.
C. SPACE WATER BARS AT APPROX. 150'.
D. DEPTH = 1'
E. 3' TO 4'
F. USE 3"+ RIPRAP OR STRAW BALES.



PLAN VIEW

WATER BAR



STRAW WATTLE BARRIER

REGISTERED PROFESSIONAL ENGINEER
WILLIAM S. BOND
No. 69476
Exp. 6/30/16
CIVIL
STATE OF CALIFORNIA

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

SHN
CONSULTING ENGINEERS & GEOLOGISTS, INC.
350 Hartnell Avenue Redding, CA 96002
(530)221-5424 FAX (530)221-0135

NO.	DATE	REVISION	BY

DSGN WSB
DR WSB
CHK WSB
APVD

BAKER RIDGE - CHRIS CORDES
APN:0041-300-035
ONO,SHASTA COUNTY, CALIFORNIA
EROSION CONTOL CONSTRUCTION DETAILS

DRAWING EC3
SHEET 5
DATE 10/20/14
PROJ. NO. 514027

SAVED: 10/20/2014 10:54 AM WBOND, PLOTTED: 10/20/2014 10:59 AM WILLIAM BOND
J:\2014\Promos\514000.028-Baker-Rnnch\DWGS\514027-ESCP001.dwg