

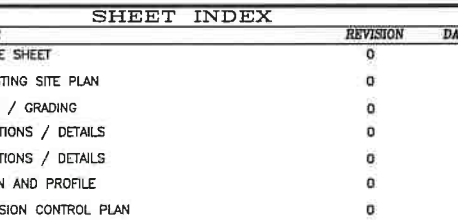
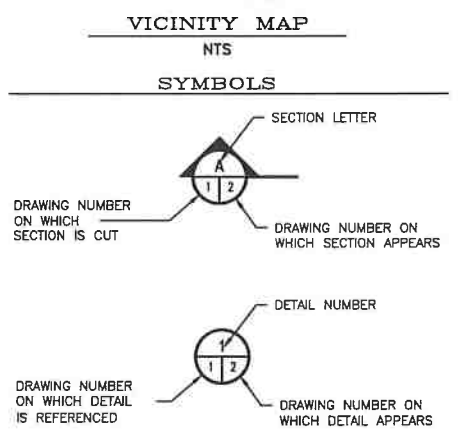
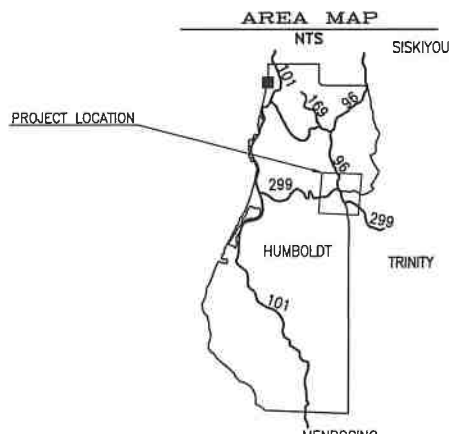
Nathan Harveston
Grading Plan
APN: 522-221-051
BRANNON MOUNTAIN ROAD, WILLOW CREEK, CA

PROPOSED	LEGEND	EXISTING
	CABLE TV OVERHEAD	
	POWER OVERHEAD	
	TELEPHONE OVERHEAD	
	TELEPHONE UG	
	POWER (UNDERGROUND) UG	
	GAS LINE	
	ANCHOR/GUY WIRE	
	SEWER MANHOLE	
	SEWER LINE	
	FLUSHING BRANCH/CLEANOUT	
	SEWER SERVICE	
	STORM DRAIN MANHOLE	
	STORM DRAIN PIPE	
	STORM DRAIN INLET	
	WATER LINE	
	WATER VALVE	
	REDUCER	
	BLOW OFF ASSEMBLY	
	AIR RELIEF VALVE	
	FIRE HYDRANT ASSEMBLY	
	R.P. BACKFLOW PREVENTER	
	DRIVE WAY	
	SIDEWALK RAMP	
	BARRICADE	
	SURVEY MONUMENT	
	CENTERLINE	
	RIGHT OF WAY LINE	
	PROPERTY LINE	
	EASEMENT LINE	
	EDGE OF PAVEMENT	
	RIDGE LINE	
	FENCE LINE	
	CONTOUR LINE	
	SIDEWALK	
	STREET LIGHT	
	STREET NAME SIGN	
	SIGN	

ABBREVIATIONS	
AC	= ASPHALTIC CONCRETE
AB	= AGGREGATE BASE
A.D.	= ALGEBRAIC DIFFERENCE
BC, PC	= BEGIN CURVE
CO	= CLEAN OUT
CL	= CENTER LINE
CMP	= CORRUGATED METAL PIPE
CPCT.	= COMPACT
D	= DELTA
DET	= DETAIL
DRN	= DRAIN
<E>	= EXISTING
EC	= END CURVE
EG	= EXISTING GROUND
EP	= EDGE OF PAVEMENT
FF	= FINISH FLOOR
FG	= FINISH GRADE
FH	= FIRE HYDRENT
FL	= FLOW LINE
GA	= GUY ANCHOR
GV	= GATE VALVE
HC	= HANDICAPPED
HDPE	= HIGH DENSITY POLYETHYLENE PIPE
INV	= INVERT
(INT-X)	= INTERSECTION
K	= SIGHT DISTANCE
LAT	= LATERAL
LD	= LOCAL DEPRESSION
LF	= LINEAR FEET
LF	= SEWER LEACH FIELD
LT	= LEFT
MAS.	= MASONRY
MI	= MILES
MSE	= MECHANICALLY STABILIZED EARTH
(N)	= NEW
NTS	= NOT TO SCALE
O.C.	= ON CENTER
PG&E	= PACIFIC GAS & ELECTRIC
(P)	= PROPOSED
PP	= POWER POLE
PRC	= POINT OF REVERSE CURVE
PT	= POINT
PVI	= POINT OF VERTICAL INTERSECTION
PVT	= PRIVATE
RT	= RIGHT
RTN	= RETURN
SB	= SET BACK
SDMH	= STORM DRAIN MAN HOLE
SHT	= SHEET
SD	= STORM DRAIN
STA	= STATION
STD.	= STANDARD
TC	= TOP OF CURB
TBC	= TOP BACK OF CURB
TFC	= TOP FACE OF CURB
TOB	= TOP OF BANK
TEL	= TELEPHONE
TP	= TOP OF PAVEMENT
TVCE	= TRINITY VALLEY CONSULTING ENGINEERS
TW	= TOP OF WALL
(TYP)	= TYPICAL
UG	= UNDERGROUND
W	= WATER
WV	= WATER VALVE



PROJECT LOCATION
APN: 522-221-051



SHEET INDEX			
DRAWING #	TITLE	REVISION	DATE
T01	TITLE SHEET	0	
C01	EXISTING SITE PLAN	0	
C02	SITE / GRADING	0	
C03	SECTIONS / DETAILS	0	
C04	SECTIONS / DETAILS	0	
C05	PLAN AND PROFILE	0	
C06	EROSION CONTROL PLAN	0	

CONTRACTOR ALERT!

CONTRACTOR MUST CONTACT USA DIG AT 800-227-2600 AT LEAST 72 HOURS BEFORE ANY EARTHWORK OR ACTIVITIES THAT MAY IMPACT EXISTING UNDERGROUND UTILITIES.

EXISTING UTILITY ALIGNMENTS BOTH HORIZONTALLY AND VERTICALLY MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION ACTIVITIES.

67 WILLOW WAY
WILLOW CREEK, CA 95573
PHONE (530) 629-3000
FAX (530) 629-3011

DESIGNED BY	UTM
CHECKED BY	J. McKNIGHT
APPROVED BY	UTM

DATE OF ISSUE: June 2016

SCALE: AS SHOWN

PROJECT NO: 928

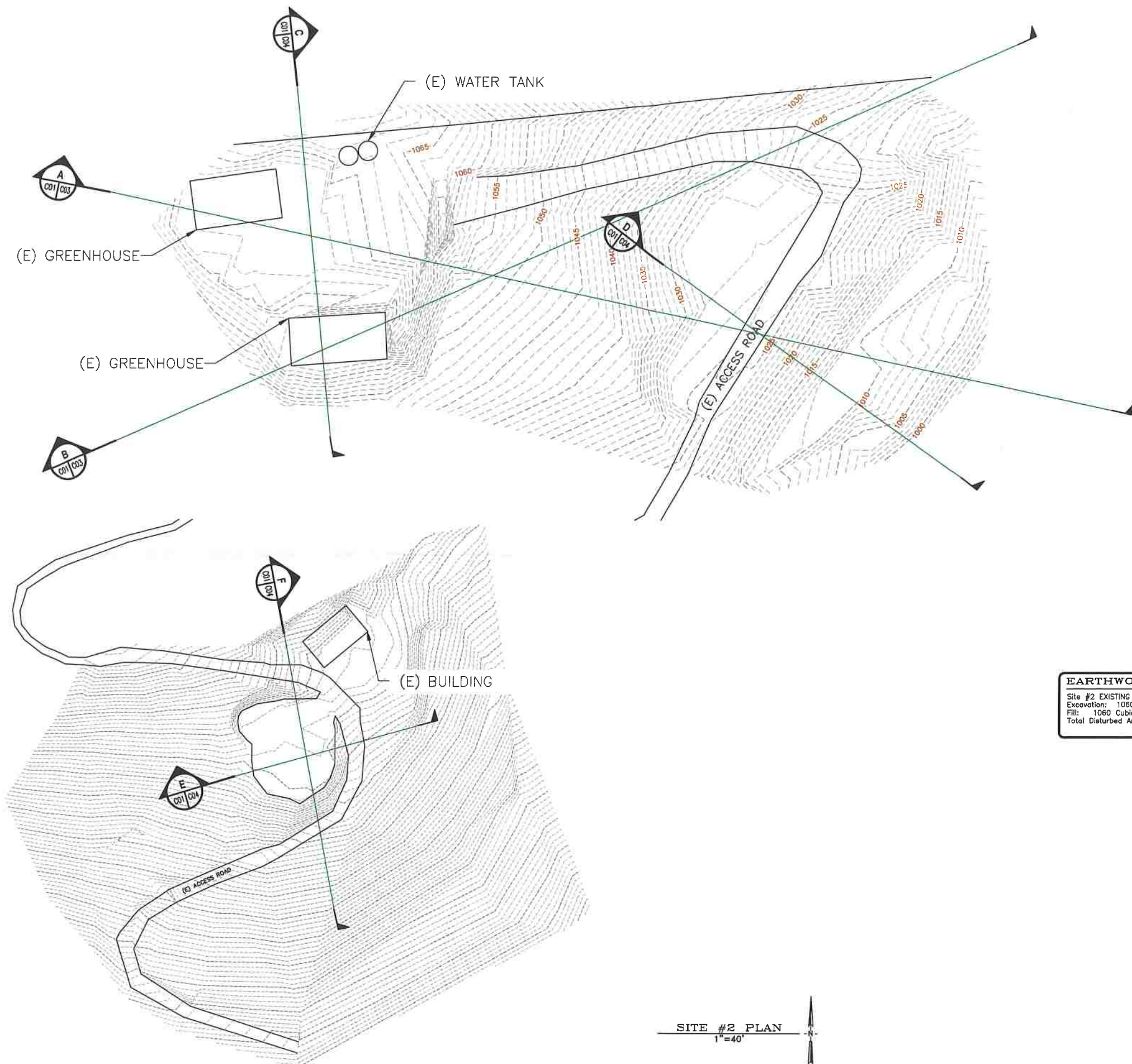
DRAWING NO: T01

TITLE SHEET

Nathan Harveston
APN 522-221-051

Brannon Mountain Road, County of Humboldt, California

1" = 1/2" 0" 1"



SITE #1 PLAN
1"=20'

EARTHWORK QUANTITIES:
Site #2 EXISTING
Excavation: 1060 Cubic Yard
Fill: 1060 Cubic Yard
Total Disturbed Area: 0.41 Acres



TVCE
67 WALNUT WAY
PO BOX 1057
HUMBOLDT, CA 95573
PHONE (530) 625-3000
FAX (530) 625-3011

REV	DATE	DESCRIPTION	APP BY	CHK BY	DES BY	EXP	JTM	JTM	JTM
A									

Nathan Harverson
APN 522-221-051

EXISTING SITE 1 & 2 PLAN
Brannon Mountain Road, County of Humboldt, California

DRAWN BY: E. KEYES	DESIGNED BY: JTM	CHECKED BY: J. MCKNIGHT	APPROVED BY: JTM
DATE OF ISSUE: June 2016			
SCALE: AS SHOWN			
PROJECT NO: 928			
DRAWING NO: C01			



DATE	BY	CHK BY	APP BY
JUN	JTM		
JUN	JTM		
JUN	JTM		
EX			

REV	DATE	DESCRIPTION
A		

Drawn by: E. Keyes	Designed by: JTM	Checked by: J. McKnight	Approved by: JTM
DATE OF ISSUE: June 2016			
SCALE: AS SHOWN			
PROJECT NO: 928			
DRAWING NO: C02			

Nathan Harveston
APN 522-221-051
GRADING SITE 2 PLAN
Bramon Mountain Road, County of Humboldt, California

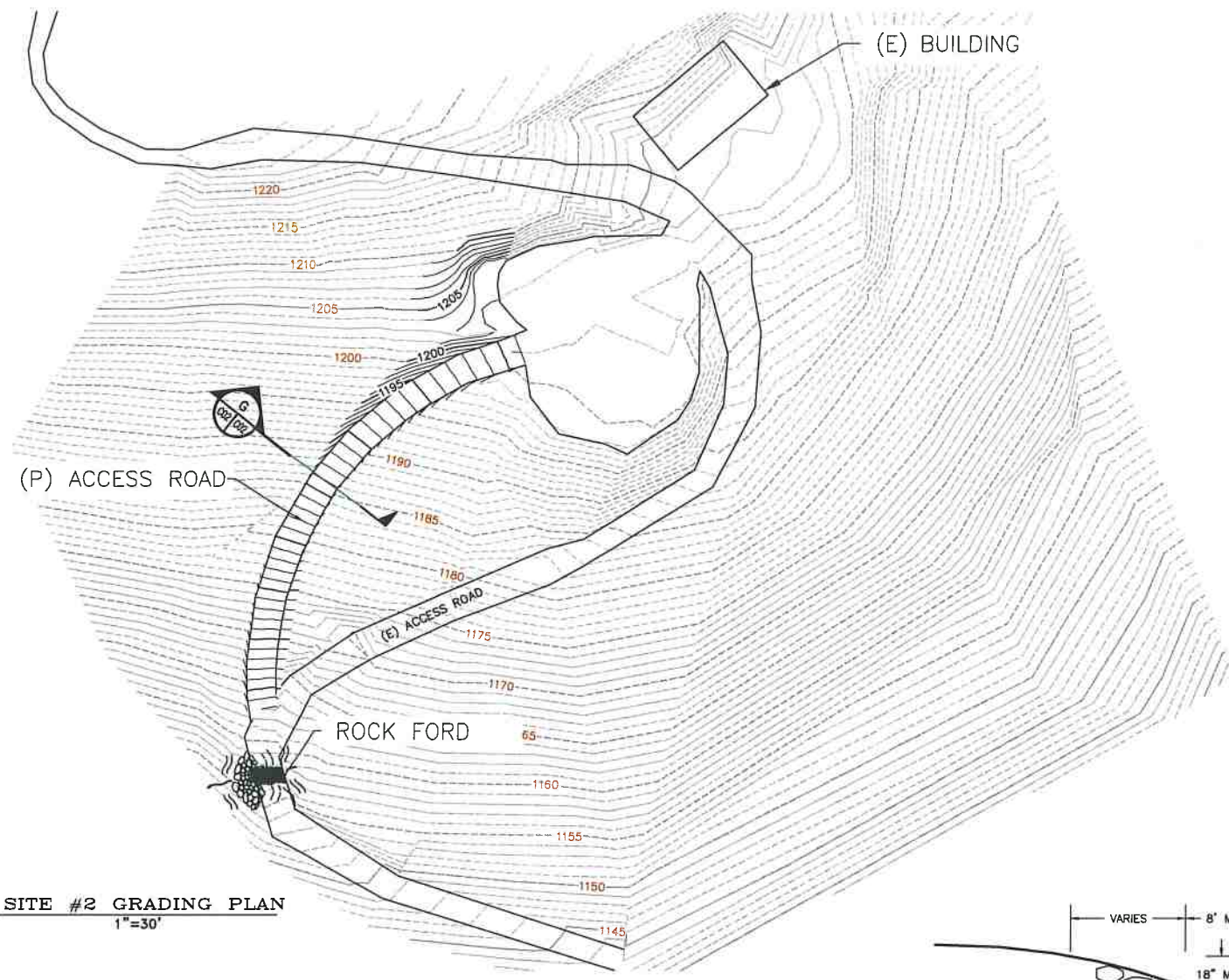


- GRADING NOTES:**
- ALL EARTHWORK, INCLUDING BUT NOT LIMITED TO, SITE CLEARING, GRUBBING, STRIPPING, AND GRADING WILL BE CONDUCTED DURING DRY WEATHER CONDITIONS. (TYPICALLY APRIL 15 TO OCTOBER 15)
 - STRIP AND REMOVE ALL TOPSOIL AND VEGETATION FROM THE PROJECT AREA, AND FOR A MINIMUM OF THREE FEET TO THE OUTSIDE OF THE WORKING AREA.
 - ANY UNDOCUMENTED FILL SOILS, FINE-GRAINED RESIDUAL SOILS, AND ANY OTHER DEBRIS ENCOUNTERED AT OR BELOW THE EXISTING GROUND SURFACE SHALL BE REMOVED AT THE LOCATIONS RECEIVING ANY POTENTIAL FILLS.
 - THE SITE SHOULD BE GRADED TO PROVIDE ADEQUATE DRAINAGE SUCH THAT NO WATER IS ALLOWED TO POND ANYWHERE ON THE SITE OR MIGRATE BENEATH FUTURE DEVELOPMENTS.
 - ALL FILL MATERIAL SHALL BE PLACED IN HORIZONTAL LIFTS NOT TO EXCEED EIGHT INCHES (8") IN DEPTH AND SHALL BE COMPACTED MECHANICALLY.
 - ALL FILL MATERIAL SHALL BE FREE OF ORGANICS, ROCKS LARGER THAN 3", WOODY DEBRIS, ROOTS, AND INORGANIC MATERIAL.
 - ALL FILL MATERIAL SHALL HAVE A UNIFORM MOISTURE CONTENT AT OR NEAR OPTIMUM MOISTURE CONTENT AS DETERMINED BY TESTING AND APPROVED BY THE ENGINEER.
 - NON-STRUCTURAL FILL SHALL BE COMPACTED MECHANICALLY TO A FIRM UNYIELDING SURFACE AS APPROVED BY THE ENGINEER.
 - COMPACTION TESTING WILL BE DETERMINED AT THE ENGINEER'S DISCRETION.
 - IT IS RECOMMENDED THAT ANY MATERIAL PROPOSED FOR STRUCTURAL FILL MATERIAL TO SUPPORT ANY FOUNDATIONS OR STRUCTURAL BUILDING ELEMENT AND ASSOCIATED UTILITIES BE COMPACTED AS OUTLINED IN THE SOILS REPORT.
 - ALL FILL SLOPES SHALL BE TO A SMOOTH AND EVEN GRADE, SHALL BE SURFACE TRACKWALKED, AND FINAL GRADES NOT TO EXCEED 1.5:1 (h:v).
 - SUFFICIENT TESTING AND INSPECTION SHOULD BE PERFORMED TO MONITOR THE SUITABILITY OF FILL MATERIALS AND ASSURE COMPLIANCE WITH THE RECOMMENDED COMPACTION STANDARDS.
 - ENGINEER TO PROVIDE CERTIFICATION OF EXISTING FILL, BOTH STRUCTURAL AND NON-STRUCTURAL FILL, THAT IT MEETS THE REQUIRED COMPACTION STANDARDS.

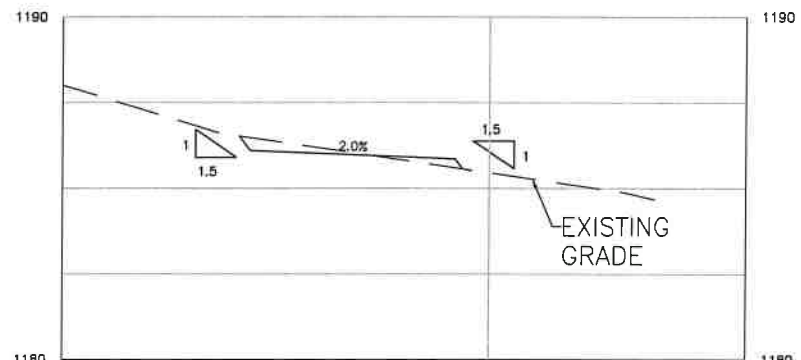
- CLEARING, GRUBBING, & DEMOLITION NOTES:**
- TREES SCHEDULED TO BE REMOVED SHALL BE REMOVED COMPLETELY INCLUDING STUMPS, ROOTS, BRANCHES, WOODY DEBRIS, BARK, AND FLESH. TREES SHALL BE REMOVED FROM THE SITE AND DEPOSITED IN LOCATIONS DESIGNATED BY THE OWNER.
 - VEGETATION AND WOODY DEBRIS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A MANNER CONSISTENT WITH APPLICABLE LAWS AND REGULATIONS.
 - ALL GENERATED AND ACCUMULATED CONSTRUCTION DEBRIS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A MANNER CONSISTENT WITH APPLICABLE LAWS AND REGULATIONS.
 - ALL AREAS WITH GENERATED VOIDS FROM DEMOLITION ACTIVITIES SHALL BE BACKFILLED WITH NATIVE SOIL TO FINISH GRADE IN 1' MAXIMUM VERTICAL LIFTS SUFFICIENTLY COMPACTED TO ELIMINATE SUBSIDENCE.
 - DUST CONTROL SHALL BE MAINTAINED DURING DEMOLITION PRACTICES.
 - TRACKING OF MATERIAL FROM THE SITE ONTO EXISTING ROADWAYS WILL NOT BE TOLERATED. TEMPORARY CONSTRUCTION SITE ENTRANCES SHOULD BE BUILT AT POINTS OF INTERSECTION TO EXISTING ROADWAYS AND PRACTICES SHOULD BE IMPLEMENTED TO REMOVE CONSTRUCTION MATTER FROM VEHICLES AND EQUIPMENT PRIOR TO LEAVING THE CONSTRUCTION SITE.
 - EROSION CONTROL MEASURES SHALL BE IMPLEMENTED FOR THE SITE AS SOON AS PRACTICAL AND SHALL BE IN PLACE PRIOR TO EXECUTION OF MAJOR DEMOLITION OPERATIONS.

EARTHWORK QUANTITIES:
Site #2 PROPOSED
Excavation: 350 Cubic Yard
Fill: 350 Cubic Yard
Total Disturbed Area: 0.12 Acres

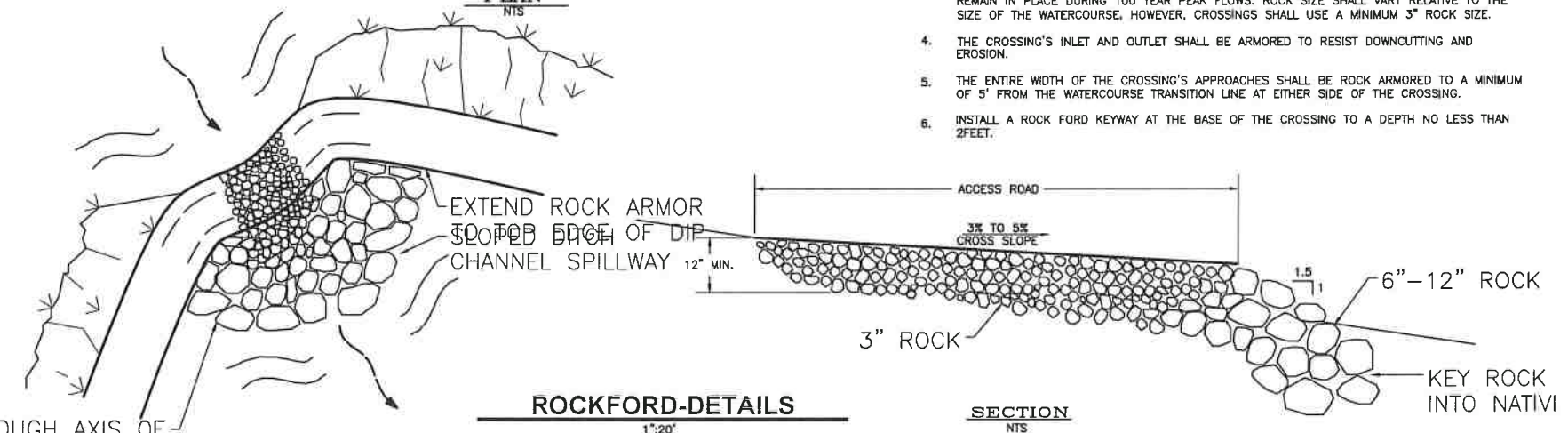
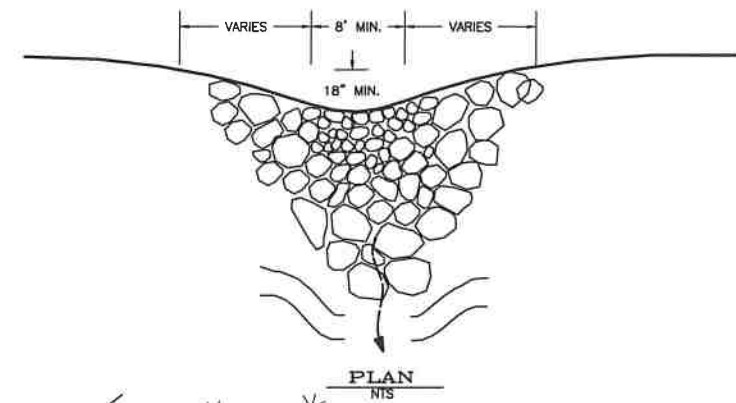
- ROCKED FORD NOTES:**
- ROCKED FORDS ARE DRAINAGE STRUCTURES DESIGNED TO CARRY WATER ACROSS ROADS.
 - THE ROAD SHALL DIP INTO AND OUT OF THE ROCKED FORD TO MINIMIZE DIVERSION POTENTIAL.
 - THE CROSSING SHALL BE CONSTRUCTED WITH CLEAN, NATIVE ROCK THAT IS LARGE ENOUGH TO REMAIN IN PLACE DURING 100 YEAR PEAK FLOWS. ROCK SIZE SHALL VARY RELATIVE TO THE SIZE OF THE WATERCOURSE, HOWEVER, CROSSINGS SHALL USE A MINIMUM 3" ROCK SIZE.
 - THE CROSSING'S INLET AND OUTLET SHALL BE ARMORED TO RESIST DOWNCUTTING AND EROSION.
 - THE ENTIRE WIDTH OF THE CROSSING'S APPROACHES SHALL BE ROCK ARMORED TO A MINIMUM OF 5' FROM THE WATERCOURSE TRANSITION LINE AT EITHER SIDE OF THE CROSSING.
 - INSTALL A ROCK FORD KEYWAY AT THE BASE OF THE CROSSING TO A DEPTH NO LESS THAN 2 FEET.



SITE #2 GRADING PLAN
1"=30'



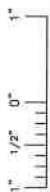
ROADWAY-TYPICAL-SECTION
1"=5'

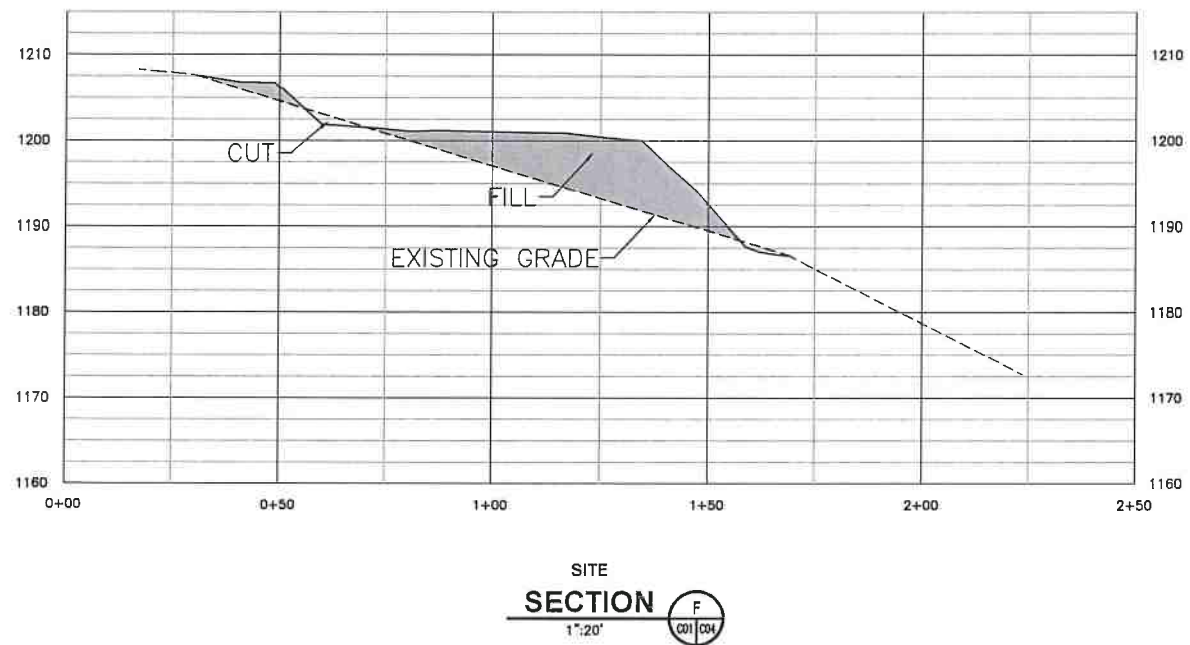
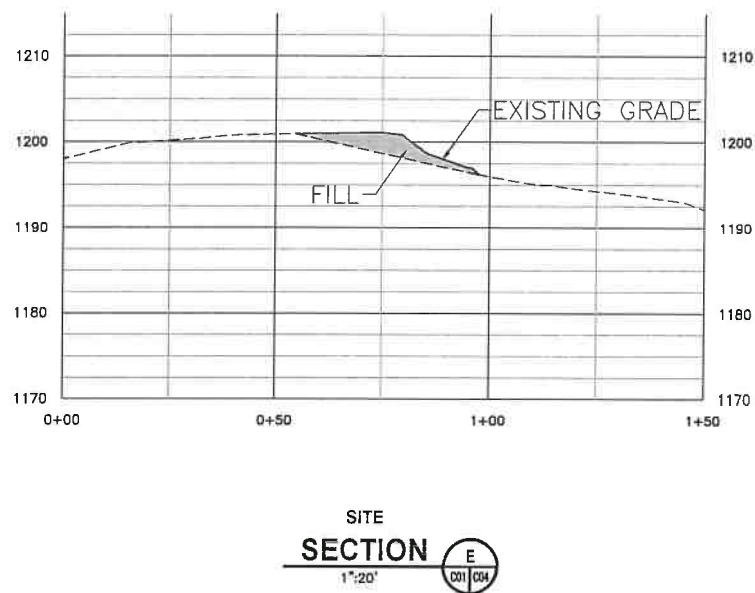
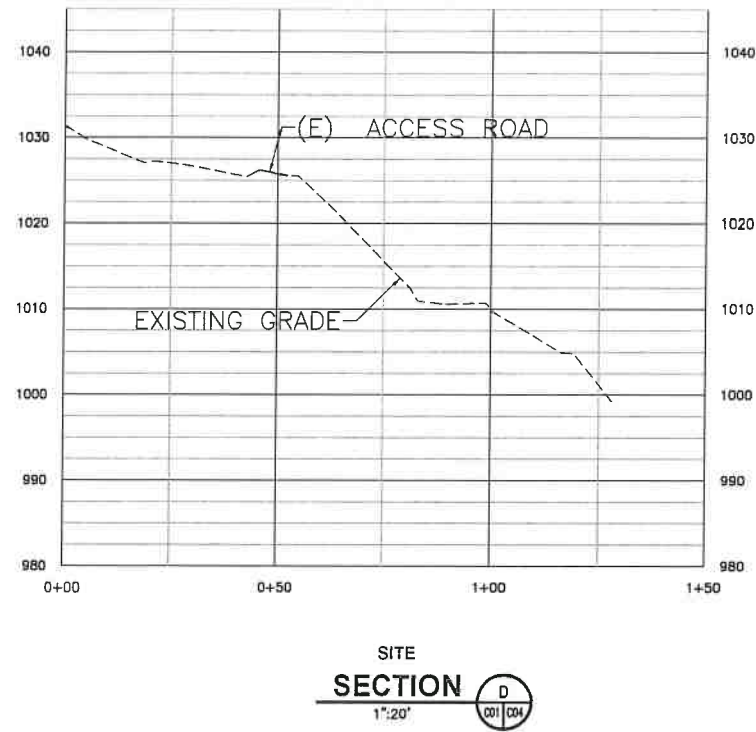
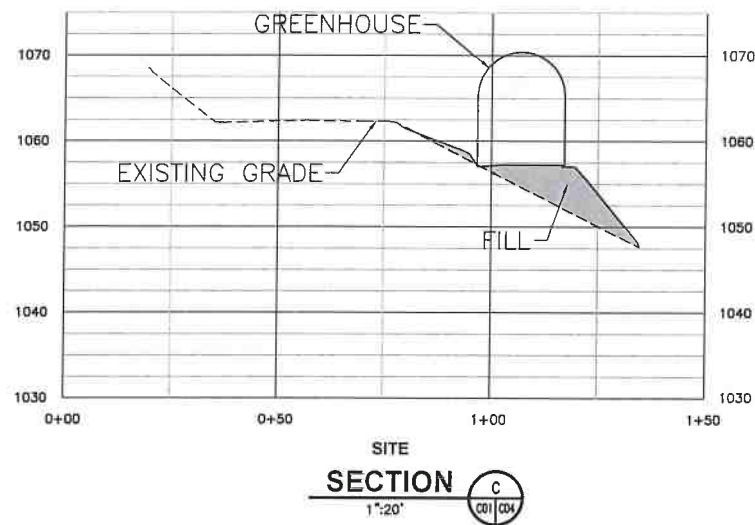


ROCKFORD-DETAILS
1"=20'

SECTION
NTS

D THROUGH AXIS OF CHANNEL AS SPECIFIED





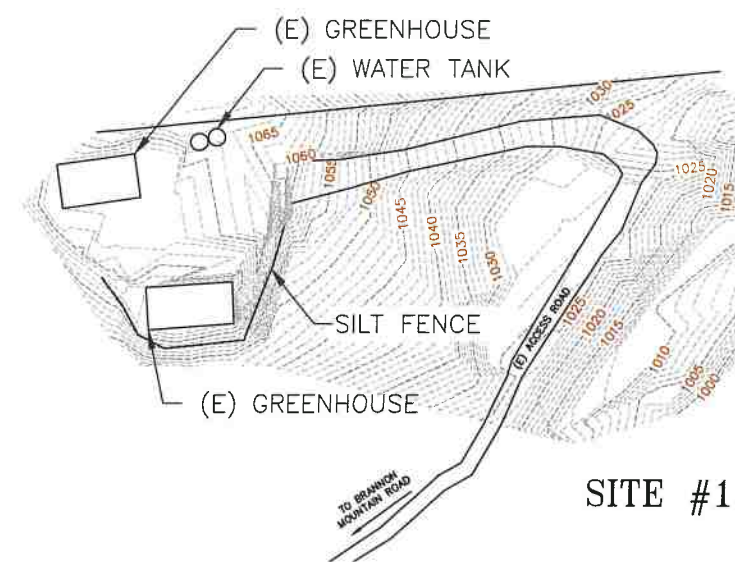
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DATE	DATE	DATE
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DESCRIPTION	DESCRIPTION	DESCRIPTION

SECTIONS / DETAILS

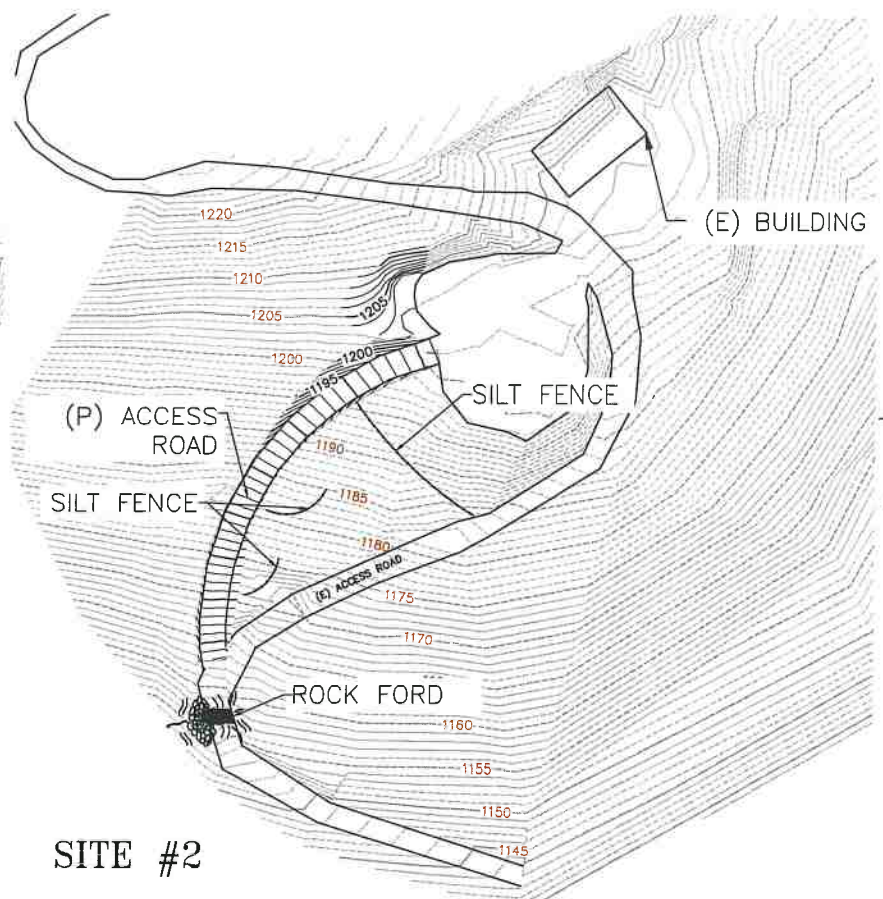
Nathan Harverson
APN 522-221-051

Brannon Mountain Road, County of Humboldt, California

DRAWN BY	DATE OF ISSUE
E. KEYES	June 2016
DESIGNED BY	SCALE:
JTM	AS SHOWN
CHECKED BY	PROJECT NO.
J. McKNIGHT	928
APPROVED BY	DRAWING NO.
JTM	C04



SITE #1

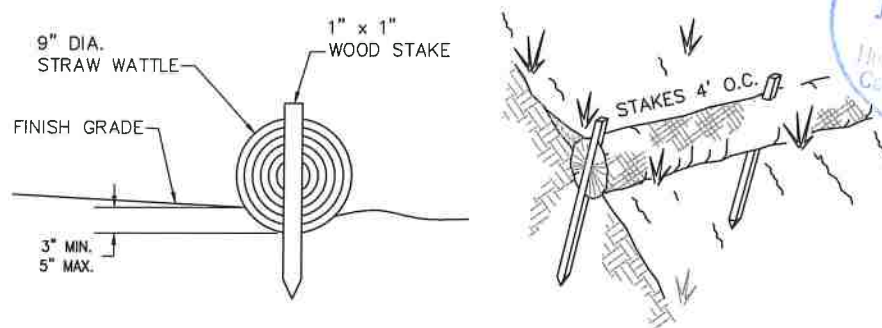


SITE #2

EROSION CONTROL PLAN
1"=40'

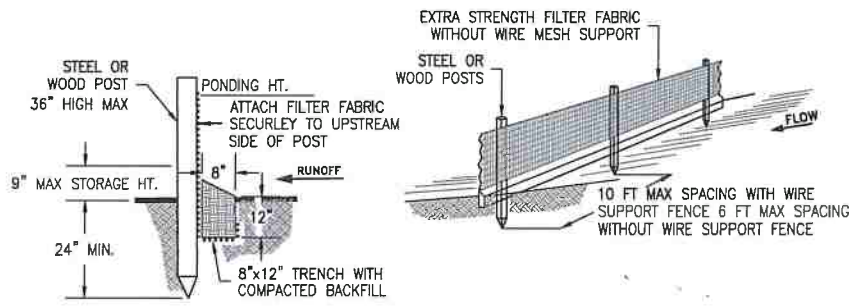
PHASE OF CONSTRUCTION	BMP INSTALLATION SCHEDULE									
	EROSION AND SEDIMENT CONTROL MEASURES									
	(WET SEASON)	(WET SEASON)	(WET SEASON)	(WET SEASON)	(WET SEASON)	(WET SEASON)	(WET SEASON)	(WET SEASON)	(WET SEASON)	(WET SEASON)
PRE-GRADING	HYDROSEEDING MULCHING	PRESERVATION OF EXISTING VEGETATION	STRAW FIBER ROLLS	STORM DRAIN INLET PROTECTION	TEMP. SEDIMENT TRAP	STABILIZED CONSTRUCTION ENTRANCE	CONTRACTOR EQUIPMENT CONTROLS	MATERIAL & WASTE DISPOSAL LOCATION	DUST CONTROL	DEWATERING OPERATIONS
CUT AND FILL ACTIVITIES										
UNDERGROUND WORK										
STORM DRAIN IMPROVEMENTS										
OFFSITE IMPROVEMENTS										
COMPLETION OF PAVING										
POST-GRADING										

- STRAW MULCH NOTES:**
- STRAW SHALL BE DERIVED FROM WHEAT, RICE, OR BARLEY. WHERE REQUIRED BY THE PLANS, SPECIFICATIONS, PERMITS, OR ENVIRONMENTAL DOCUMENTS, NATIVE GRASS STRAW SHALL BE USED.
 - A TACKIFIER IS THE PREFERRED METHOD FOR ANCHORING STRAW MULCH TO THE SOIL ON SLOPES.
 - CRIMPING, PUNCH ROLLER-TYPE ROLLERS, OR TRACK WALKING MAY ALSO BE USED TO INCORPORATE STRAW MULCH INTO THE SOIL ON SLOPES. TRACK WALKING SHALL ONLY BE USED WHERE OTHER METHODS ARE IMPRACTICAL.
 - AVOID PLACING STRAW ONTO ROADS, SIDEWALKS, DRAINAGE CHANNELS, SOUND WALLS, EXISTING VEGETATION, ETC.
 - STRAW MULCH WITH TACKIFIER SHALL NOT BE APPLIED DURING OR IMMEDIATELY BEFORE RAINFALL.
 - APPLY STRAW AT A MINIMUM RATE OF 4,000 LB/ACRE, EITHER BY MACHINE OR BY HAND DISTRIBUTION.
 - ROUGHEN EMBANKMENTS AND FILL RILLS BEFORE PLACING THE STRAW MULCH BY ROLLING WITH A CRIMPING OR PUNCHING TYPE ROLLER OR BY TRACK WALKING.
 - EVENLY DISTRIBUTE STRAW MULCH ON THE SOIL SURFACE.
 - ON SMALL AREAS, A SPADE OR SHOVEL CAN BE USED TO PUNCH IN STRAW MULCH.
 - ON SLOPES WITH SOILS THAT ARE STABLE ENOUGH AND OF SUFFICIENT GRADIENT TO SAFELY SUPPORT CONSTRUCTION EQUIPMENT WITHOUT CONTRIBUTING TO COMPACTION AND INSTABILITY PROBLEMS, STRAW CAN BE "PUNCHED" INTO THE GROUND USING A KNIFE BLADE ROLLER OR A STRAIGHT BLADED COULTER, KNOWN COMMERCIALY AS A "CRIMPER".
 - ON SMALL AREAS AND/OR STEEP SLOPES, STRAW CAN ALSO BE HELD IN PLACE USING PLASTIC NETTING OR JUTE. THE NETTING SHALL BE HELD IN PLACE USING 11 GAUGE WIRE STAPLES, GEOTEXTILE PINS OR WOODEN STAKES AS DESCRIBED IN EC-7, GEOTEXTILES AND MATS.
 - TACKIFIER ACTS TO GLUE THE STRAW FIBERS TOGETHER AND TO THE SOIL SURFACE. THE TACKIFIER SHALL BE SELECTED BASED ON LONGEVITY AND ABILITY TO HOLD THE FIBERS IN PLACE. A TACKIFIER IS TYPICALLY APPLIED AT A RATE OF 125 LB/ACRE. IN WINDY CONDITIONS, THE RATES ARE TYPICALLY 180LB/ACRE.
 - ALL CUT AND FILL SLOPES SHALL BE TRACKWALKED AND COMPACTED IN PLACE.



- STRAW WATTLE NOTES:**
- STRAW WATTLES SHALL BE INSTALLED WITH 18 OR 24 INCH WOOD STAKES AT FOUR FEET ON CENTER. THE ENDS OF ADJACENT STRAW WATTLES SHALL BE ABUTTED TO EACH OTHER SNUGLY OR OVERLAPPED BY SIX INCHES.
 - STRAW ROLL INSTALLTION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3"-5" DEEP. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND THE ROLL.

STRAW WATTLE INSTALLATION DETAIL
NTS



- SILT FENCE NOTES:**
- THE CONTRACTOR SHALL INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT.
 - CONTRACTOR SHALL REMOVE SEDIMENT AS NECESSARY. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND IN AN AREA THAT CAN BE PERMANENTLY STABILIZED.
 - SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.

SILT FENCE DETAILS
NTS

- CONTRACTOR NOTE:**
- CONTRACTOR MAY SUBSTITUTE TEMPORARY SILT FENCES FOR STRAW FIBER ROLLS AND VICE VERSA.
- BMP MAINTENANCE NOTES:**
- ALL OF THE IMPLEMENTED BMPS SHALL BE INSPECTED AND CORRECTED AS NEEDED PRIOR TO, DURING, AND DIRECTLY FOLLOWING ANY STORM EVENT, OR WHENEVER PRACTICAL.
- EROSION AND SEDIMENT CONTROL NOTES:**
- EROSION CONTROL BEST MANAGEMENT PRACTICES (BMP'S) SHALL BE INSTALLED AND MAINTAINED DURING THE WET SEASON (OCTOBER 1 THROUGH APRIL 30). SEDIMENT CONTROL BMP'S SHALL BE INSTALLED AND MAINTAINED ALL YEAR.
 - ALL DRAINAGE INLETS IMMEDIATELY DOWNSTREAM OF THE WORK AREA AND WITHIN THE WORK AREA SHALL BE PROTECTED WITH SEDIMENT CONTROL AND INLET FILTER BAGS, YEAR ROUND.
 - ALL STABILIZED CONSTRUCTION ACCESS LOCATIONS SHALL BE CONSTRUCTED PER STANDARD DRAWING TC-1 WHERE CONSTRUCTION TRAFFIC ENTERS OR LEAVES PAVED AREAS. THE STABILIZED ACCESS SHALL BE MAINTAINED ON A YEAR-ROUND BASIS UNTIL THE COMPLETION OF CONSTRUCTION.
 - ALL AREAS DISTURBED DURING CONSTRUCTION, BY GRADING, TRENCHING, OR OTHER ACTIVITIES, SHALL BE PROTECTED FROM EROSION DURING THE WET SEASON (OCTOBER 1 THROUGH APRIL 30). HYDROSEED, IF UTILIZED, MUST BE PLACED BY SEPTEMBER 15. HYDROSEED PLACED DURING THE WET SEASON SHALL USE A SECONDARY EROSION PROTECTION METHOD.
 - SENSITIVE AREAS AND AREAS WHERE EXISTING VEGETATION IS BEING PRESERVED SHALL BE PROTECTED WITH CONSTRUCTION FENCING. SEDIMENT CONTROL BMP'S SHALL BE INSTALLED WHERE ACTIVE CONSTRUCTION AREAS DRAIN INTO SENSITIVE OR PRESERVED VEGETATION AREAS.
 - SEDIMENT CONTROL BMP'S SHALL BE PLACED ALONG THE PROJECT PERIMETER WHERE DRAINAGE LEAVES THE PROJECT. SEDIMENT CONTROL BMP'S SHALL BE MAINTAINED YEAR-ROUND UNTIL THE CONSTRUCTION IS COMPLETE OR THE DRAINAGE PATTERN HAS BEEN CHANGED AND NO LONGER LEAVES THE SITE.
 - ALL SLOPES GREATER THAN 1:1 SHALL RECEIVE SEED AND STRAW OR OTHER EROSION CONTROL.
 - ALL FENCING AND EROSION CONTROL METHODS SHALL BE MAINTAINED THROUGHOUT ALL ON-SITE CONSTRUCTION ACTIVITIES.
 - ALL BMPS SHALL BE INSTALLED AND FUNCTIONING PRIOR TO ANY ANTICIPATED STORM EVENT.



REV	DATE	DESCRIPTION	DES BY	CHK BY	APP BY
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Nathan Horvath
APN 522-221-051

DATE OF ISSUE:	June 2016
SCALE:	AS SHOWN
PROJECT NO.:	928
DRAWING NO.:	C06

EROSION CONTROL PLAN
Brannon Mountain Road, County of Humboldt, California