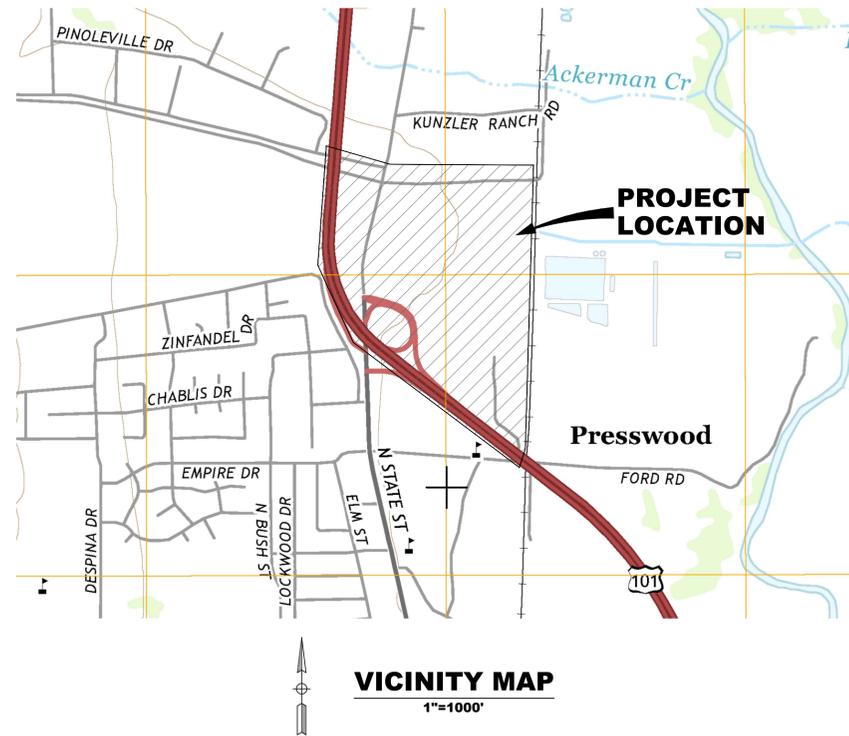
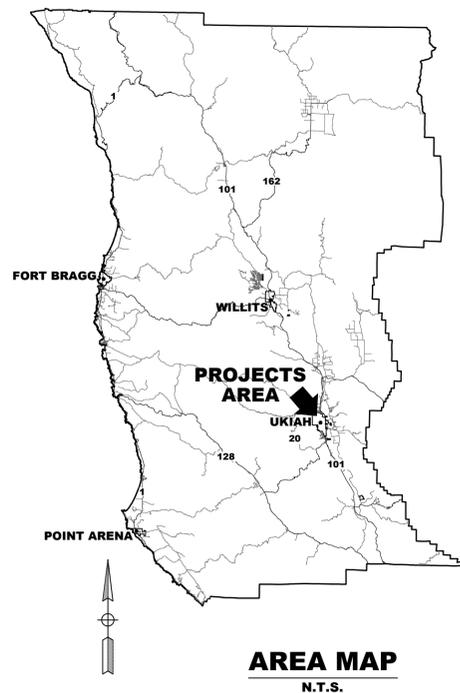


# LIBERTY: PRELIMINARY ROADWAY DESIGN

## MASONITE ROAD, UKIAH, CALIFORNIA

### PRELIMINARY DESIGN SUBMITTAL

FEBRUARY 8, 2018



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LIBERTY: PRELIMINARY ROADWAY DESIGN  
PRELIMINARY DESIGN SUBMITTAL  
COVER SHEET  
FRIENDS OF LIBERTY, LLC  
1307 MASONITE ROAD, UKIAH, CA 95482

DRAWN	BD
CHECK	RLW
APPROVED	RLW
DATE	4/20/2018
JOB NUMBER	7583.14
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**GENERAL NOTES**

- ALL MATERIAL WORKMANSHIP AND CONSTRUCTION SHALL CONFORM TO THE COUNTY OF MENDOCINO STANDARD SPECIFICATIONS AND STANDARD PLANS AND THE STATE OF CALIFORNIA STANDARD PLANS AND SPECIFICATIONS, LATEST EDITION.
- FOR WORK IN OR AFFECTING THE COUNTY ROAD RIGHT-OF-WAY, THE CONTRACTOR SHALL OBTAIN AN ENCROACHMENT PERMIT FROM THE COUNTY OF MENDOCINO (340 LAKE MENDOCINO DRIVE, UKIAH, CA 95482) BEFORE START OF WORK. CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE PERMIT FOR WORK IN OR AFFECTING THE STATE HIGHWAY RIGHT-OF-WAY, A CALTRANS ENCROACHMENT PERMIT IS REQUIRED.
- CONTRACTOR SHALL OBTAIN REQUIRED PERMITS FROM ALL AGENCIES AND PAY ALL AGENCY FEES PRIOR TO COMMENCEMENT OF ANY WORK. CONTRACTOR SHALL CONFORM WITH ZONING CODE, BUILDING CODE, AND ALL OTHER REQUIREMENTS ADMINISTERED BY THE COUNTY OF MENDOCINO PLANNING AND BUILDING SERVICES DEPARTMENT.
- CONTRACTOR SHALL GIVE THE COUNTY OF MENDOCINO DEPARTMENT OF TRANSPORTATION 48 HOURS NOTICE BEFORE STARTING WORK. CONTRACTOR SHALL ARRANGE A PRE-CONSTRUCTION MEETING. CALL (707) 463-4363 OR CONTACT AT 340 LAKE MENDOCINO DRIVE, UKIAH, CA 95482.
- WORK HOURS ARE LIMITED TO MONDAY THROUGH FRIDAY, 7:00 A.M. TO 5:00 P.M. WHEN LANE CLOSURES ARE MADE FOR A WORK DAY ONLY, AT THE END OF EACH WORK DAY, ALL COMPONENTS OF THE TRAFFIC CONTROL SYSTEM, EXCEPT PORTABLE DELINEATORS PLACED ALONG OPEN TRENCHES OR EXCAVATION ADJACENT TO THE TRAVELED WAY, SHALL BE REMOVED FROM THE TRAVELED WAY AND SHOULDER. IF THE CONTRACTOR SO ELECTS, SAID COMPONENTS MAY BE STORED AT SELECTED CENTRAL LOCATIONS AS APPROVED BY THE DOT DIRECTOR. WITHIN THE LIMITS OF THE COUNTY RIGHT OF WAY, INSPECTION WILL BE AVAILABLE MONDAY THROUGH FRIDAY FROM 8:00 A.M. TO 4:30P.M. CONTRACTORS SHALL SCHEDULE INSPECTIONS 48 HOURS IN ADVANCE BY CALLING (707) 463-4363.
- ANY DISCREPANCY DISCOVERED BY CONTRACTOR IN THESE PLANS OR ANY FIELD CONDITIONS DISCOVERED BY CONTRACTOR THAT MAY DELAY OR OBSTRUCT THE PROPER COMPLETION OF THE WORK FOR THESE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE COUNTY DOT AND OWNER IMMEDIATELY UPON DISCOVERY. SAID NOTIFICATION SHALL BE IN WRITING.
- GRADE BREAKS ON CURBS AND SIDEWALKS SHALL BE ROUNDED OFF IN FORMS AND SURFACE FINISHING.
- ITEMS SPECIFIED ON THE STANDARD PLANS ARE APPROVED FOR USE BY THE COUNTY OF MENDOCINO. ALL SUBSTITUTES OR ALTERATIONS SHALL BE SUBMITTED TO THE COUNTY OF MENDOCINO FOR APPROVAL.
- THE CONTRACTOR SHALL MAINTAIN A NEAT APPEARANCE TO THE WORK. IN ANY AREA VISIBLE TO THE PUBLIC, THE FOLLOWING SHALL APPLY:  
  
WHEN PRACTICABLE, BROKEN CONCRETE AND DEBRIS DEVELOPED DURING CLEARING AND GRUBBING SHALL BE DISPOSED OF CONCURRENTLY WITH ITS REMOVAL. IF STOCKPILING IS NECESSARY, THE MATERIAL SHALL BE REMOVED OR DISPOSED OF WEEKLY.  
  
THE CONTRACTOR SHALL FURNISH TRASH BINS FOR ALL DEBRIS FROM STRUCTURE CONSTRUCTION. ALL DEBRIS SHALL BE PLACED IN TRASH BINS DAILY. FORMS OR FALSEWORK THAT ARE TO BE REUSED SHALL BE STACKED NEATLY CONCURRENTLY WITH THEIR REMOVAL. FORMS AND FALSEWORK THAT ARE NOT TO BE REUSED SHALL BE DISPOSED OF CONCURRENTLY WITH THEIR REMOVAL.
- CONTRACTOR SHALL COMPLY WITH ANY AND ALL MITIGATION MEASURES ADOPTED BY THE COUNTY OF MENDOCINO FOR THE PROJECT.
- CONTRACTOR SHALL COMPLY WITH THE COUNTY OF MENDOCINO CODE 22.12 REGARDING THE DISCOVERY OF ARCHAEOLOGICAL SITES DURING THE PERFORMANCE OF WORK.
- OWNER OR CONTRACTOR SHALL PROVIDE COMPACTION, GRADATION, SAND EQUIVALENT AND ALL OTHER TESTS AS REQUIRED BY THE COUNTY MENDOCINO.

**NOTIFICATION FOR INSPECTIONS**

APPROVAL OF ALL WORK SHALL BE NECESSARY AT THE COMPLETION OF EACH OF THE FOLLOWING STAGES OF WORK AND SUCH APPROVAL MUST BE OBTAINED BEFORE SUBSEQUENT STAGES OF WORK MAY BE COMMENCED. ADDITIONALLY, THE INSPECTOR SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF ANY OF THE FOLLOWING STAGES OF WORK.

ANY CONSTRUCTION OR EXCAVATION REQUIRING INSPECTION THAT IS UNDERTAKEN WITHOUT INSPECTION IS SUBJECT TO RECONSTRUCTION AND REEXCAVATION AT THE CONTRACTOR'S EXPENSE.

INSPECTION MUST BE SCHEDULED FOR THE FOLLOWING WORK:

- COMPACTION AND PREPARATION OF EMBANKMENTS, EXCAVATIONS, AND SUBGRADE.
- CONSTRUCTION OF FORMS FOR ALL CONCRETE STRUCTURES, INCLUDING CURBS, GUTTERS, AND SIDEWALKS.
- EXCAVATION FOR STORM DRAINS AND CULVERTS.
- PLACING OF CONCRETE IN STRUCTURES, INCLUDING CURBS, GUTTERS AND SIDEWALKS.
- PLACING OF STORM DRAINS AND CULVERT PIPES.
- EXCAVATION AND BACKFILL FOR STRUCTURES AND PIPES AND PUBLIC UTILITIES. WATER AND SEWER FACILITIES MUST BE INSPECTED BY THE COMPANY/AGENCY WITH JURISDICTION.
- CONSTRUCTION OF ROADSIDE DITCHES AND OTHER DRAINAGE WAYS.
- PLACING AND COMPACTING OF BASE MATERIAL. IF MORE THAN ONE COURSE OR TYPE OF BASE OR SUBBASE IS TO BE USED, APPROVAL SHALL BE NECESSARY FOR EACH COURSE AND/OR TYPE.
- PLACING OF PAVEMENT OR SURFACING. WITHIN 48 HOURS OF PAVING, ALL WATER VALVE BOXES, CLEANOUTS AND MANHOLE FRAMES AND COVERS SHALL BE BROUGHT TO GRADE AND INSPECTED.
- STRIPING AND SIGNING LAYOUT AND PLACEMENT.
- FINAL CLEAN-UP.

**GRADING STANDARD NOTES**

- AN ENCROACHMENT PERMIT MUST BE OBTAINED FROM THE COUNTY OF MENDOCINO DEPARTMENT OF TRANSPORTATION PRIOR TO ANY GRADING SHOWN ON THESE PLANS. CONTRACTOR SHALL ALSO COMPLY WITH ANY AND ALL GRADING PERMIT REQUIREMENTS ADMINISTERED BY THE COUNTY OF MENDOCINO PLANNING AND BUILDING SERVICES DEPARTMENT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK WITH THE SOILS ENGINEER. ALL GRADING SHALL BE PERFORMED TO THE SATISFACTION OF THE SOILS ENGINEER AND SHALL BE IN CONFORMANCE WITH THE PROJECT SOILS REPORT.
- ROAD SUBGRADE SHALL BE COMPACTED PER THE COUNTY STANDARD ROAD SPECIFICATIONS.
- AS A MINIMUM, ALL GRADED AREAS AND EXPOSED SOIL WITHIN THIS PROJECT SHALL BE SEEDED FOR EROSION CONTROL BY THE CONTRACTOR. SEED AND MULCH WILL BE APPLIED BY OCTOBER 15TH TO ALL CUT AND FILL SLOPES WITHIN OR ADJACENT TO PROJECT ROADS. SEED AND FERTILIZER WILL BE APPLIED HYDRAULICALLY OR BY HAND AT THE RATES SPECIFIED BELOW. ON SLOPES, STRAW WILL BE APPLIED BY BLOWER OR BY HAND AND ANCHORED IN PLACE BY PUNCHING. ALL CRITICAL EARTHWORK OPERATIONS SHALL BE PERFORMED DURING THE DRY WEATHER SEASON, FROM APRIL 15TH TO OCTOBER 15TH OR AS OTHERWISE APPROVED BY THE DEPARTMENT OF TRANSPORTATION. THE CLEARING OF EXISTING VEGETATION SHALL BE CONFINED WITHIN THE LIMITS OF ACTUAL EARTHWORK. STAGING OF THE WORK SHALL BE REQUIRED TO ENSURE THAT THE AMOUNT OF LAND CLEARED AT ANY TIME IS LIMITED TO THE AREA THAT CAN BE DEVELOPED DURING THE CONSTRUCTION PERIOD. STORM WATER SHALL NOT BE ALLOWED TO FLOW DIRECTLY DOWN UNPROTECTED SLOPES. ENERGY DISSIPATING STRUCTURES AND EROSION CONTROL DEVICES SHALL BE PLACED AT ALL DRAINAGE OUTLETS WHICH DISCHARGE TO NATURAL CHANNELS AS SHOWN ON THESE PLANS. ALL SEDIMENT TRAPS SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL SUCH TIME THAT THE COUNTY ACCEPTS MAINTENANCE RESPONSIBILITY.

ITEM	POUNDS PER ACRE
"BLANDO BROME"	30
ANNUAL RYE GRASS	20
FERTILIZER (4-20-0 & 15% SULPHUR)	500
STRAW MULCH	4000 OR 3500 LBS OF WOOD CELLULOSE

- THE ABANDONMENT OR ALTERATION OF ANY AND ALL SEPTIC SYSTEMS AND WELLS SHALL COMPLY WITH THE COUNTY OF MENDOCINO HEALTH DEPARTMENT PERMIT REQUIREMENTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE DUST CONTROL MEASURES FOR THE ENTIRE CONSTRUCTION PERIOD OF THIS PROJECT TO THE SATISFACTION OF THE COUNTY AND AIR QUALITY MANAGEMENT DISTRICT AS APPLICABLE.
- PROJECTS GREATER THAN OR EQUAL TO ONE (1) ACRE IN SIZE WILL REQUIRE A CONSTRUCTION GENERAL PERMIT AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP) THROUGH THE APPROPRIATE REGIONAL WATER QUALITY CONTROL BOARD.
- THE CONTRACTOR SHALL NOTIFY THE MENDOCINO COUNTY ENVIRONMENTAL HEALTH DEPARTMENT AT 234-6825 IMMEDIATELY IF HAZARDOUS WASTE OR MATERIAL IS ENCOUNTERED DURING EXCAVATION OF GRADING OPERATIONS.

**UNDERGROUND CONSTRUCTION STANDARD NOTES**

- NO GUARANTEE IS INTENDED THAT UNDERGROUND OBSTRUCTIONS, NOT SHOWN ON THESE PLANS, MAY BE ENCOUNTERED. THOSE SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE AND THE CONTRACTOR IS CAUTIONED THAT THE OWNER, THE ENGINEER, AND THE COUNTY OF MENDOCINO ASSUME NO RESPONSIBILITY FOR ANY OBSTRUCTIONS EITHER SHOWN OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY COMPANIES WORKING WITHIN THE LIMITS OF THIS PROJECT.
- CONTRACTOR SHALL NOT BEGIN EXCAVATION UNTIL ALL EXISTING UTILITIES HAVE BEEN MARKED IN THE FIELD BY THE APPLICABLE ENTITY RESPONSIBLE FOR THAT PARTICULAR UTILITY. THE CONTRACTOR SHALL NOTIFY EACH APPLICABLE ENTITY AT LEAST 24 HOURS BEFORE STARTING WORK.
- UNDERGROUND SERVICE ALERT: CALL TOLL FREE (800) 227-2600 OR 811 AT LEAST 48 HOURS PRIOR TO EXCAVATION.
- CONTRACTOR SHALL UNCOVER EXISTING BURIED UTILITIES WITH UTILITY OWNER TO VERIFY LOCATIONS AND ELEVATIONS OF UTILITIES. BURIED UTILITIES INCLUDE BUT ARE NOT LIMITED TO WATER MAINS AND LATERALS, SEWER MAINS, STORM DRAINS, GAS MAINS AND LATERALS, ELECTRICAL DISTRIBUTION LINES AND TELEPHONE LINES. ALL UTILITIES CONFLICTING WITH THE PROPOSED CONSTRUCTION SHALL BE RELOCATED PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL VERIFY EXISTING INVERTS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION. THE CIVIL ENGINEER IN RESPONSIBLE CHARGE OF THE WORK MAY ADJUST THE GRADE OF NEW STORM DRAIN CONSTRUCTION ACCORDINGLY WITH CONCURRENCE FROM THE COUNTY DEPARTMENT OF TRANSPORTATION.
- DISTANCES AND INVERTS ARE TO AND AT THE CENTER OF THE MANHOLES, CLEANOUTS, DROP INLETS, CATCH BASINS, AND YARD DRAINS OR AS MARKED ON THE DRAWINGS.
- ALL UNDERGROUND IMPROVEMENTS SHALL BE INSTALLED AND APPROVED PRIOR TO PAVING.
- THE CONTRACTOR SHALL STAMP THE LETTER "S" ON THE FACE OF CURB DIRECTLY ABOVE THE SEWER LATERAL, AND THE LETTER "W" ON THE FACE OF CURB DIRECTLY ABOVE WATER SERVICES, AND "B" ON FACE OF CURB DIRECTLY ABOVE A BLOW OFF OR AIR RELIEF VALVE. AT A DRIVEWAY THE STAMP SHALL BE PLACED AT THE BACK OF RAMP. THE LETTERS SHALL BE 4" HIGH AND COMPLETELY LEGIBLE.
- SURFACE MOUNTED TRANSFORMERS SHALL NOT BE USED UNLESS LOCATION OF SUCH UTILITIES ARE SHOWN ON THE PLANS AND APPROVED BY THE COUNTY.

**DRAINAGE STANDARD NOTES**

- STORM DRAIN CONDUITS SHALL CONFORM TO CALTRANS SPECIFICATIONS AND SHALL BE R.C.P. PIPE, CORRUGATED METAL PIPE OR HDPE PLASTIC PIPE WITH SMOOTH INTERIOR WALL. CORRUGATED METAL PIPE SHALL NOT BE USED IN THE ROAD RIGHT-OF-WAY, EXCEPT FOR DRIVEWAY CULVERTS, CROSS CULVERTS, AND CREEK OUTLETS. MINIMUM COVER OVER PIPE TO BE 30", EXCEPT WHERE SLURRY CEMENT BACKFILL IS PROVIDED PER MENDOT STD. A60C. THE MAXIMUM ALLOWABLE COVER SHALL BE LIMITED TO 11 FEET FOR ALL SIZES.
- ALL STORM DRAIN MANHOLES SHALL BE A MINIMUM OF 48" IN DIAMETER. UNLESS OTHERWISE NOTED, MANHOLE FRAME AND COVER SHALL HAVE 24" CLEAR OPENING, AND BE HEAVY DUTY NON-ROCKING. RAISED LETTERS ON TOP OF THE COVER SHALL READ "STORM DRAIN". PIPES SHALL NOT PROTRUDE INSIDE THE MANHOLE. PIPE ENDS SHALL BE ROUNDED.
- REINFORCED CONCRETE PIPE AND CAST-IN-PLACE STORM DRAIN PIPE SHALL BE PLACED AND BACKFILLED IN ACCORDANCE WITH STANDARD DRAWINGS A60A, A60B, AND A60C. STORM DRAIN WITHIN COUNTY MAINTAINED ROADS SHALL BE MINIMUM 18 INCH DIAMETER, WITH FOLLOWING EXCEPTIONS:  
A. LATERALS SERVING INDIVIDUAL PROPERTIES MAY BE 12 INCH DIAMETER  
B. DRIVEWAY CULVERTS MAY BE A MINIMUM OF 12 INCH DIAMETER.

**SIGNING, STRIPING AND PAVEMENT MARKINGS STANDARD NOTES**

- CONTRACTOR SHALL NOTIFY THE COUNTY DEPARTMENT OF TRANSPORTATION (DOT) OF CONTRACTOR'S INTENT TO PLACE ANY PAVEMENT MARKER, TRAFFIC STRIPE, PAVEMENT MARKING, AND PAVEMENT LEGEND LAYOUT LINES 10 WORKING DAYS BEFORE THE MARKER AND STRIPES WORK IS TO BE PERFORMED. ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE PROVIDED BY THE CONTRACTOR.
- ALL LAYOUT WORK IS TO BE PERFORMED BY THE CONTRACTOR AND SHALL BE FIELD APPROVED BY A COUNTY INSPECTOR BEFORE THE ACTUAL WORK BEGINS.
- PAVEMENT MARKERS AND TRAFFIC STRIPE DETAIL REFERENCE NUMBERS ARE SHOWN ON CALTRANS STANDARD PLANS A20-A, A20-B, A20-C AND A20-D.
- ROADSIDE SIGNS: ROADSIDE SIGNS SHALL BE AS SHOWN ON THE PLANS, IN ACCORDANCE WITH THE PROVISIONS OF SECTION 56, "SIGNS", OF THE STANDARD SPECIFICATIONS, AND AS DIRECTED BY THE COUNTY DEPARTMENT OF TRANSPORTATION.
- SIGN PANELS SHALL CONFORM TO THE CURRENT CALTRANS SIGN PANEL SPECIFICATIONS. MINIMUM GRADE OF SIGN SHEETING MATERIAL SHALL BE TYPE 2, SUPER ENGINEERING GRADE, PER MOST CURRENT ASTM SPECIFICATION, OR HIGHER GRADE AS REQUIRED BY THE DOT DIRECTOR. SIGNS USED FOR SCHOOL AREA TRAFFIC CONTROL SHALL BE RETROREFLECTIVE OR ILLUMINATED, AS SHOWN ON PLANS.
- LOCATIONS OF ALL SIGNS SHALL BE AS SHOWN ON THE PLANS AND AS DIRECTED BY THE COUNTY.
- SIGN PANELS SHALL BE MOUNTED ON METAL OR WOOD POSTS AS SHOWN ON THE PLANS. POST MATERIALS AND INSTALLATION SHALL BE PER THE CALTRANS STANDARD PLANS AND SPECIFICATIONS. METAL POSTS SHALL BE WIDE-FLANGE METAL POSTS PER CALTRANS STANDARD SPECIFICATIONS. ALL FASTENERS AND ATTACHMENT HARDWARE SHALL BE GALVANIZED.
- MARKERS AND DELINEATORS: MARKERS AND DELINEATORS SHALL BE AS SHOWN ON THE PLANS AND IN ACCORDANCE WITH THE PROVISIONS OF SECTION 82, "MARKERS AND DELINEATORS" OF THE STANDARD SPECIFICATIONS AND THESE SPECIAL PROVISIONS, AND AS DIRECTED BY THE COUNTY DEPARTMENT OF TRANSPORTATION DIRECTOR.
- LOCATION OF ALL MARKERS AND DELINEATORS SHALL BE AS SHOWN ON THE PLANS AND AS DIRECTED BY THE COUNTY DEPARTMENT OF TRANSPORTATION DIRECTOR.
- TRAFFIC STRIPES AND PAVEMENT MARKINGS: TRAFFIC STRIPES AND PAVEMENT MARKINGS SHALL BE AS SHOWN ON THE PLANS, IN ACCORDANCE WITH THE PROVISIONS OF SECTION 84, "TRAFFIC STRIPES AND PAVEMENT MARKINGS" OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE COUNTY DEPARTMENT OF TRANSPORTATION DIRECTOR.

**SIGNING, STRIPING AND PAVEMENT MARKINGS STANDARD NOTES (CONTINUED)**

- ALL STRIPING PAVEMENT MARKINGS, INCLUDING STOPLINES, AND ALL CHANNELIZING LINES SHALL BE THERMOPLASTIC UNLESS OTHERWISE SHOWN OR NOTED ON THE PLANS.
- THERMOPLASTIC TRAFFIC STRIPES AND PAVEMENT MARKINGS: THERMOPLASTIC TRAFFIC STRIPES AND PAVEMENT MARKINGS SHALL CONFORM TO THE PROVISIONS OF SECTION 84-2, "THERMOPLASTIC TRAFFIC STRIPES AND PAVEMENT MARKINGS" OF THE STANDARD SPECIFICATIONS.
- THERMOPLASTIC MATERIAL SHALL BE APPLIED AT A MINIMUM THICKNESS OF 0.125 INCH.
- PAVEMENT MARKERS: PAVEMENT MARKERS SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF SECTION 85, "PAVEMENT MARKERS" OF THE STANDARD SPECIFICATIONS.
- PAINTED/THERMOPLASTIC STRIPES AND PAVEMENT MARKINGS: EXISTING PAINTED/THERMOPLASTIC TRAFFIC STRIPES AND PAVEMENT MARKINGS WHICH CONFLICT WITH THE NEW TRAFFIC STRIPING AND PAVEMENT MARKING PLANS SHALL BE REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH SECTION 15-2, REMOVAL METHODS, OF THE CALTRANS STANDARD SPECIFICATIONS.
- RAISED PAVEMENT MARKER REMOVAL: EXISTING RAISED PAVEMENT MARKERS WHICH CONFLICT WITH THE NEW TRAFFIC STRIPING AND PAVEMENT MARKING PLAN SHALL BE REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH SECTION 15-2, REMOVAL METHODS, OF THE CALTRANS STANDARD SPECIFICATIONS.

**LIGHTING NOTES:**

- ALL WIRING METHODS AND EQUIPMENT CONSTRUCTION SHALL CONFORM TO THE CURRENT NATIONAL ELECTRICAL CODE.
- ALL WIRING SHALL BE IN APPROVED CONDUIT. ALL CONDUIT SHALL BE A MINIMUM OF 2" DIAMETER, SCHEDULE 40 P.V.C. (POLYVINYL CHLORIDE), EXCEPT FROM EACH STREET LIGHT TO THE ADJACENT PULL BOX WHICH MAY BE 1" DIAMETER PVC OR METAL, AND SHALL HAVE THE FOLLOWING COVER FROM TOP OF CONDUIT.  
A. WITHIN SIDEWALK OR PARKWAY AREAS: 18" MIN.  
B. WITHIN ROADWAY AREAS: 30" MIN.
- ALL METAL CONDUIT AND OTHER METAL PARTS SHALL BE CONTINUOUSLY BONDED AND GROUNDED.
- ALL BENDS AND/OR OFFSETS SHALL BE MADE WITH FACTORY SECTIONS.
- UNLESS OTHERWISE APPROVED BY THE DOT DIRECTOR, A NO. 5 PULL BOX (STATE STD. ES-8) SHALL BE USED AT ALL STREET LIGHT STANDARDS.
- ALL PULL BOXES SHALL BE PER CALTRANS STD. No. ES-8.
- WHEN PULL BOXES ARE SUBJECT TO VEHICULAR TRAFFIC, THEY SHALL BE SET ON CONCRETE FOOTINGS AND CAST IRON TRAFFIC COVERS SHALL BE INSTALLED.
- ALL SPLICES SHALL BE MADE WITH APPROVED SOLDERLESS WATERPROOF CONNECTORS OF THE PROPER SIZE PER NEC 300-15. (EXAMPLE: WIRENUT OR SPLIT BOLT PLUS TAPE PLUS COATING.) ALL SPLICES SHALL BE LOCATED IN AN APPROVED BOX.
- ALL EMPTY CONDUITS SHALL HAVE A 1/4" NYLON PULL ROPE PROVIDED INSIDE.
- ALL CONDUITS SHALL BE SEALED WITH AN APPROVED DUCT SEAL. CONDUITS STUBBED FOR FUTURE EXTENSION SHALL BE CAPPED.
- ALL STREET LIGHTING PROJECTS ARE SUBJECT TO APPROVAL BY THE DOT DIRECTOR.
- ALL PULL BOX COVERS SHALL BE SECURED WITH BRASS HOLD DOWN BOLTS AND INSCRIBED, "STREET LIGHTING".
- ALL STREET LIGHTS EQUIPPED WITH A PHOTOCCELL CONTROL SHALL HAVE THE PHOTOCCELL ORIENTED TO THE NORTH.
- ALL WIRE SHALL BE THHN A.W.G. THE MINIMUM SIZE SHALL BE #8.

**PRESERVATION OF SURVEY MONUMENTS:**

- CONTRACTOR IS RESPONSIBLE FOR PRESERVATION AND/OR PERPETUATION OF ALL EXISTING MONUMENTS WHICH CONTROL SUBDIVISIONS, TRACTS, BOUNDARIES, STREETS, HIGHWAYS, OR OTHER RIGHTS-OF-WAY, EASEMENTS, OR PROVIDE SURVEY CONTROL WHICH WILL BE DISTURBED OR REMOVED DUE TO CONTRACTOR'S WORK. CONTRACTOR SHALL PROVIDE A MINIMUM OF 10 WORKING DAYS NOTICE TO CIVIL ENGINEER OR SURVEYOR IN RESPONSIBLE CHARGE OF THE WORK PRIOR TO DISTURBANCE OR REMOVAL OF EXISTING MONUMENTS. CIVIL ENGINEER OR SURVEYOR IN RESPONSIBLE CHARGE OF THE WORK SHALL COORDINATE WITH CONTRACTOR TO RESET MONUMENTS OR PROVIDE PERMANENT WITNESS MONUMENTS AND FILE THE REQUIRED DOCUMENTATION WITH THE COUNTY SURVEYOR PURSUANT TO THE BUSINESS AND PROFESSIONS CODE SECTION 8771.
- CONTRACTOR IS RESPONSIBLE FOR ALL COSTS TO RESET ANY RECORD SURVEY MONUMENTS DAMAGED BY CONTRACTOR'S FORCES - PERSONNEL OR SUB-CONTRACTORS.

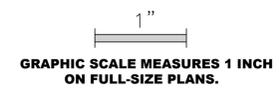
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### ABBREVIATIONS

<b>A</b>	<b>G</b>	<b>R</b>
AB - AGGREGATE BASE	G - GAS	R - RADIUS
ABON - ABANDONED	GALV - GALVANIZED	RC - RELATIVE COMPACTION
AC - ASPHALT CONCRETE	GIP - GALVANIZED IRON PIPE	RCP - REINFORCED CONCRETE PIPE
ACP - ASBESTOS CEMENT PIPE	GPM - GALLONS PER MINUTE	RD - ROAD
ACI - AMERICAN CONCRETE INSTITUTE	GRD - GRADE	RDCR - REDUCER
AG - AGGREGATE	GSP - GALVANIZED STEEL PIPE	RDWD - REDWOOD
APPROX - APPROXIMATELY	GV - GATE VALVE	REQD - REQUIRED
ASTM - AMERICAN SOCIETY FOR TESTING & MATERIALS		RM - ROOM
⊙ - AT	<b>H</b>	RSP - ROCK SLOPE PROTECTION
<b>B</b>	HB - HOSE BIBB	RT - RIGHT
BC - BEGIN CURVE	HDR - HEADER	R/W - RIGHT-OF-WAY
BCR - BEGIN CURB RETURN	HP - HORSEPOWER	
BF - BLIND FLANGE	HORIZ - HORIZONTAL	<b>S</b>
BFV - BUTTERFLY VALVE	HT - HEIGHT	SL - SLOPE
BLDG - BUILDING	HW - HOT WATER	SCHED - SCHEDULE
BM - BENCH MARK		SD - STORM DRAIN
BOT - BOTTOM	<b>I</b>	SDMH - STORM DRAIN MAN HOLE
BRG - BEARING	ID - INSIDE DIAMETER	SECT - SECTION
BTWN - BETWEEN	IN - INCH	SHT - SHEET
BVC - BEGINNING OF VERTICAL CURVE	INT - INTERIOR	SIM - SIMILAR
BW - BOTTOM OF WALL	INV - INVERT	SPEC - SPECIFICATIONS
<b>C</b>	<b>J</b>	SQ - SQUARE
CATV - CABLE TELEVISION	JT - JOINT	SQ FT - SQUARE FOOT
CB - CATCH BASIN	JP - JOINT POLE	SQ IN - SQUARE INCH
CEIL - CEILING	<b>K</b>	SS - SANITARY SEWER
CFM - CUBIC FEET PER MINUTE	KIP - THOUSAND POUNDS	SSMH - SEWER SYSTEM MAN HOLE
CI - CAST IRON	KW - KILOWATT	STA - STATION
CIP - CAST IRON PIPE		STD - STANDARD
C.I.P. - CAST-IN-PLACE	<b>L</b>	STL - STEEL
CJ - CONSTRUCTION JOINT	∠ - ANGLE (DEGREES)	SW - SIDEWALK
CL - CENTERLINE	LB - POUND	SYMM - SYMMETRICAL
CLR - CLEAR	LF - LINEAR FEET	<b>T</b>
CMP - CORRUGATED METAL PIPE	LG - LONG	T - TELEPHONE
CMU - CONCRETE MASONRY UNIT	LT - LEFT	TAN - TANGENT
CO - CLEANOUT	<b>M</b>	T&B - TOP AND BOTTOM
CONC - CONCRETE	MATL - MATERIAL	T&G - TONGUE AND GROOVE
CONT - CONTINUOUS	MAX - MAXIMUM	TBM - TEMPORARY BENCH MARK
COORD - COORDINATE	MECH - MECHANICAL	TC - TOP OF CURB
CPLG - COUPLING	MFR - MANUFACTURER	TELEM - TELEMETRY
CTR - CENTER	MH - MANHOLE	TEMP - TEMPERATURE OR TEMPORARY
CU FT - CUBIC FEET	MIN - MINIMUM	THD - THREAD
CV - CHECK VALVE	MISC - MISCELLANEOUS	TOC - TOP OF CONCRETE
CW - COLD WATER	MJ - MECHANICAL JOINT	TOG - TOP OF GRATE
CY - CUBIC YARD	MTL - METAL	TOF - TOP OF FOOTING
	<b>N</b>	TOW - TOP OF WALL
	<N> - NEW	TP - TOP OF PAVEMENT OR TELEPHONE POLE
	NC - NORMALLY CLOSED	<TYP> - TYPICAL
	NIC - NOT IN CONTRACT	<b>U</b>
	NO. - NUMBER	UBC - UNIFORM BUILDING CODE
	NO - NORMALLY OPEN	UOS - UNLESS OTHERWISE SPECIFIED
	NPT - NATIONAL PIPE THREAD	UG - UNDERGROUND
	NTS - NOT TO SCALE	UTIL - UTILITY
	# - NUMBER	UP - UTILITY POLE
<b>E</b>	<b>O</b>	<b>V</b>
<E> - EXISTING	OC - ON CENTER	V - VOLT
EA - EACH	OD - OUTSIDE DIAMETER	VC - VERTICAL CURVE
EC - END CURVE	OG - ORIGINAL GROUND	VCP - VITRIFIED CLAY PIPE
ECR - END CURB RETURN	OHE - OVERHEAD ELECTRIC	VERT - VERTICAL
EF - EACH FACE	OZ - OUNCE	VPI - VERTICAL POINT OF INTERSECTION
EL - ELBOW	OVHD - OVERHEAD	<b>W</b>
ELEC - ELECTRIC OR ELECTRICAL	<b>P</b>	WM - WATER METER
ELEV - ELEVATION	PB - PULL BOX	WV - WATER VALVE
ENGR - ENGINEER	PCC - POINT OF COMPOUND CURVATURE	<b>X</b>
EP - EDGE OF PAVEMENT	PCF - POUNDS PER CUBIC FOOT	XFMR - TRANSFORMER
EQ - EQUAL	PE - PLAIN END	<b>Y</b>
EQUIP - EQUIPMENT	PERF - PERFORATED	YD - YARD
EVC - END OF VERTICAL CURVE	PEP - POLYETHYLENE PIPE	YD <sup>2</sup> - SQUARE YARD
EW - EACH WAY	PL - PROPERTY LINE	YD <sup>3</sup> - CUBIC YARD
EXC - EXCAVATE	PLYWD - PLYWOOD	
EXP JT - EXPANSION JOINT	POC - POINT ON CURVE	
EXT - EXTERIOR	PP - POWER POLE	
	PRC - POINT OF REVERSE CURVATURE	
<b>F</b>	PREFAB - PREFABRICATED	
FC - FACE OF CURB	PSF - POUNDS PER SQUARE FOOT	
FF - FINISHED FLOOR	PSI - POUNDS PER SQUARE INCH	
FG - FINISHED GRADE	PSIG - POUNDS PER SQUARE INCH GAUGE	
FH - FIRE HYDRANT	PV - PLUG VALVE	
FIN - FINISH	PVC - POLYVINYL CHLORIDE PLASTIC	
FL - FLOW LINE	PVI - POINT OF VERTICAL INTERSECTION	
FLG - FLANGE	PVMT - PAVEMENT	
FLR - FLOOR	PVT - PRIVATE	
FS - FINISHED SURFACE	Q	
FT - FOOT	QTY - QUANTITY	
FT <sup>2</sup> - SQUARE FEET		
FT <sup>3</sup> - CUBIC FEET		
FTG - FOOTING		

### NOTES:

- CONTACT THE ENGINEER FOR SYMBOLS NOT LISTED.
- THIS IS A STANDARD SHEET, THEREFORE SOME SYMBOLS OR ABBREVIATIONS MAY APPEAR ON THIS SHEET WHICH DO NOT APPEAR ON THE PLANS.
- SITE AND UTILITY SYMBOLS SHOWN ON THIS SHEET ARE NOT INTENDED TO REPRESENT THE PHYSICAL SCALE OR SHAPE OF ANY ITEMS. WHERE LARGE-SCALE PLANS ARE PRESENTED, THE SYMBOLS SHOWN HEREON MAY BE REPLACED BY DETAILS MORE SUITED TO THE DRAWING SCALE.

### UTILITIES LEGEND

PROPOSED	EXISTING	DESCRIPTION
		GATE VALVE
		PLUG VALVE
		BALL VALVE
		BUTTERFLY VALVE
		AUTOMATICALLY OPERATED VALVE (P= PNEUMATIC, E= ELECTRIC, S= SOLENOID, H=HYDRAULIC, D= DIAPHRAGM ACTUATOR)
		3-WAY VALVE
		GLOBE VALVE
		ANGLE VALVE
		PRESSURE REGULATING VALVE
		PRESSURE RELIEF VALVE
		CHECK VALVE
		AIR OR VACUUM RELEASE VALVE
		AIR AND VACUUM VALVE
		COMBINATION AIR VALVE
		FLOW METER
		HOSE BIBB (NF=NON-FREEZE)
		REDUCER
		FIRE HYDRANT
		DROP INLET
		MANHOLE
		CLEANOUT
		UNDERGROUND ELECTRICAL
		OVERHEAD ELECTRICAL
		CABLE TELEVISION
		JOINT UTILITIES
		UNDERGROUND TELEMETRY LINE
		OVERHEAD TELEMETRY LINE
		UNDERGROUND TELEPHONE LINE
		OVERHEAD TELEPHONE LINE
		WATER LINE
		SANITARY SEWER LINE
		STORM DRAIN LINE
		GAS LINE
		FORCE MAIN AND DIRECTION OF FLOW
		CULVERT
		POLE MOUNTED STREETLIGHT
		ITEM TO BE REMOVED
		ITEM TO BE ABANDONED IN PLACE
		WATER METER
		PULL BOX AND DESIGNATION
		SIGN AND DESIGNATION
		MAIL BOX

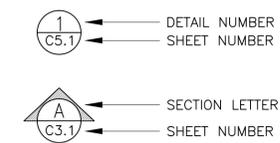
### CURVE DATA

R (RADIUS)  
L (LENGTH)  
Δ (DELTA)  
T (TANGENT)

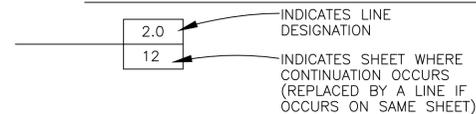
### TOPOGRAPHIC LEGEND

PROPOSED	EXISTING	DESCRIPTION
		P.V.I. (POINT OF VERTICAL INTERSECTION)
		TEMPORARY BENCH MARK
		BENCH MARK
		FINISH GRADE ELEVATION
		ELEVATION OF ORIGINAL GROUND
		RADIUS POINT
		FLOW LINE AND DIRECTION
		TOP OF CUT
		TOP OF FILL
		TOP OF SLOPE
		TOE OF SLOPE
		CONTOUR LINE
		CONCRETE
		PAVEMENT
		ROCKS
		STUMPS
		TREES
		ROADS
		UTILITY POLE (PP=POWER POLE, TP= TEL POLE, JP=JOINT POLE, LP=LIGHT POLE)
		GUY WIRE
		FENCE
		BOUNDARY LIMITS, W/DESIGNATION
		EASEMENT LINE
		CENTERLINE
		MARSH
		LAWN
		SPRING
		TEST PIT AND DESIGNATION
		EXPLORATION BORE HOLE
		PROPERTY CORNER
		SURVEY MONUMENT
		CONTROL POINT
		DRIVEWAY

### DETAIL AND SECTION DESIGNATION



### LINE DESIGNATION



1" GRAPHIC SCALE MEASURES 1 INCH ON FULL-SIZE PLANS.

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NO.	DATE	BY	CHK.	HISTORY / REVISION

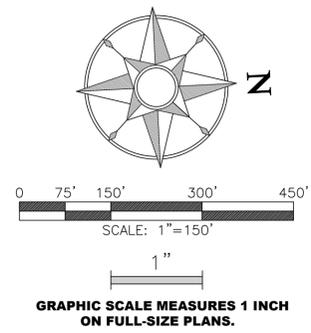
LIBERTY: PRELIMINARY ROADWAY DESIGN  
PRELIMINARY DESIGN SUBMITTAL  
ABBREVIATIONS & LEGEND  
FRIENDS OF LIBERTY, LLC  
1307 MASONITE ROAD, UKIAH, CA 95482

DRAWN	BD
CHECK	RLW
APPROVED	RLW
DATE	4/20/2018
JOB NUMBER	7583.14
SHEET	DRAWING
3	G0.2

POINT TABLE				
POINT #	DESCRIPTION	ELEVATION	NORTHING	EASTING
1	MAG NAIL	615.2	2190713.32	6219638.42
2	IPRCE21533	613.0	2189743.11	6219608.36
3	ngs	610.3	2189263.68	6219957.12
4	IPRCE21533	613.9	2190079.10	6219625.16
5	set mn	610.7	2189238.06	6219869.82
6	MAG NAIL	638.4	2191160.73	6218780.35
7	MAG NAIL	618.7	2192331.16	6219859.74
8	MAG NAIL	621.3	2192298.99	6219248.96
9	set mn	613.3	2191431.17	6220006.97
10	mc dot 4	620.9	2192307.71	6219456.75
11	set mn	615.2	2191310.03	6219638.16
12	set mn	616.0	2191807.35	6219688.71
13	set mn	617.5	2191237.36	6219243.34
14	set 60d	650.7	2191436.11	6218595.27
15	set 60d	639.8	2192365.20	6219003.72
16	set 60d	637.9	2192334.32	6219012.12
17	set mn	619.3	2192290.10	6219559.47
18	set 60d	611.0	2189431.72	6219953.77
19	set mn	611.4	2189641.72	6219783.85
20	set mn	613.5	2190045.89	6219608.94
21	mn	649.5	2192462.41	6218500.76



- LEGEND:**
- |     |                        |     |       |     |                                 |
|-----|------------------------|-----|-------|-----|---------------------------------|
| --- | PROPERTY LINE BOUNDARY | --- | NG    | --- | GAS                             |
| --- | ADJACENT BOUNDARY      | --- | OHE   | --- | OVERHEAD ELECTRIC               |
| --- | INTERIOR BOUNDARY      | --- | OHE&T | --- | OVERHEAD ELECTRIC AND TELEPHONE |
| --- | FENCE                  | --- | SD    | --- | STORM DRAIN                     |
| --- | EASEMENT               | --- | SS    | --- | SANITARY SEWER                  |
| --- | EASEMENT               | --- | PH    | --- | TELEPHONE                       |
| □   | DRAIN INLET            | --- | W     | --- | WATER                           |
| ✱   | FIRE HYDRANT           |     |       |     |                                 |
| □   | ELECTRICAL BOX         |     |       |     |                                 |



Apr 20 2018 10:40:10pm  
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NO.	HISTORY / REVISION	BY / CHK.	DATE

LIBERTY: PRELIMINARY ROADWAY DESIGN  
PRELIMINARY DESIGN SUBMITTAL  
EXISTING CONDITIONS & SURVEY CONTROL

FRIENDS OF LIBERTY, LLC  
1307 MASONITE ROAD, UKIAH, CA 95482

DRAWN	BD
CHECK	RLW
APPROVED	RLW
DATE	4/20/2018
JOB NUMBER	7583.14
SHEET	DRAWING
4	C0.0



DRAFT

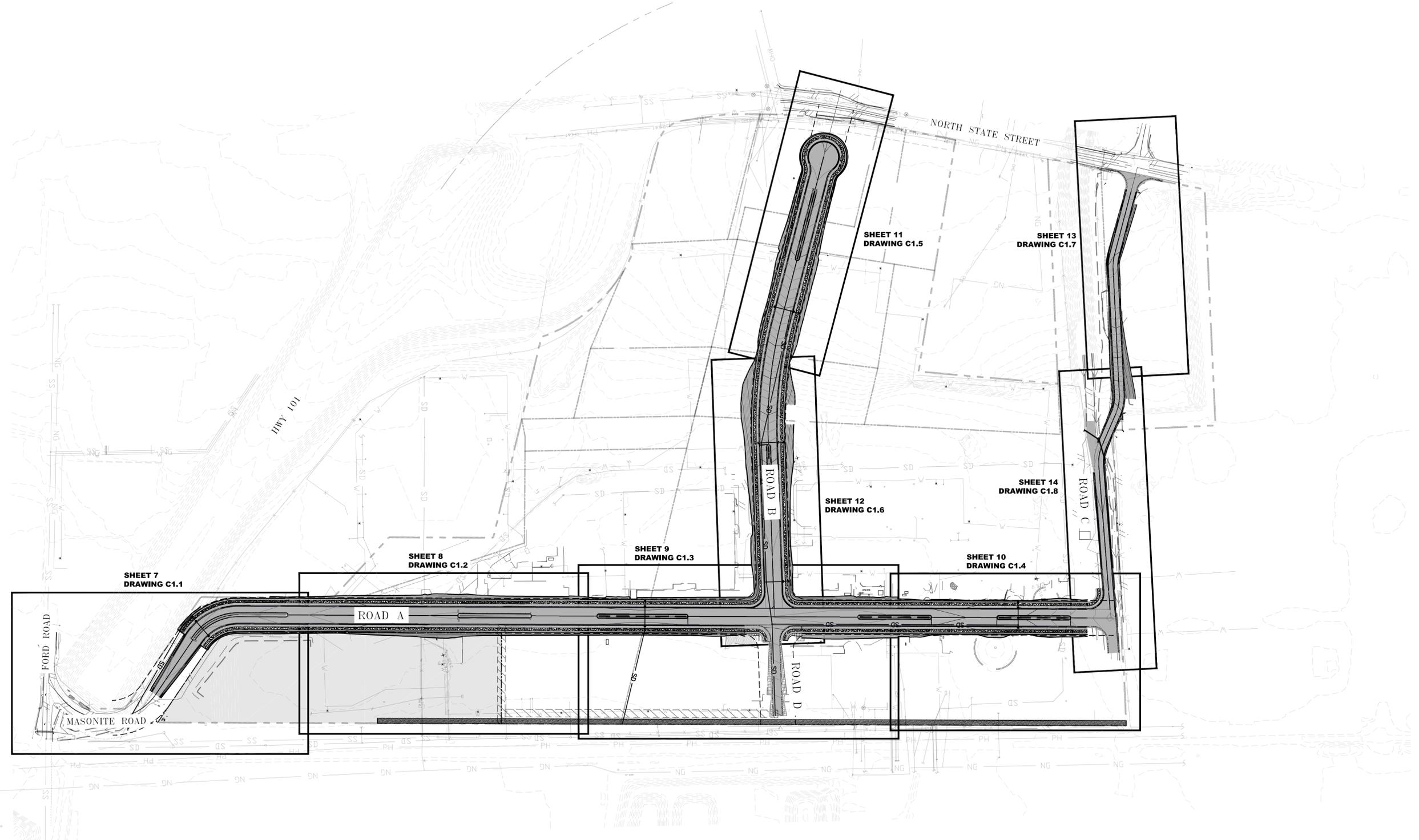
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 1-800-515-5054 www.lacoassociates.com

NO.	HISTORY / REVISION	BY / CHK.	DATE

LIBERTY: PRELIMINARY ROADWAY DESIGN  
 PRELIMINARY DESIGN SUBMITTAL  
 SITE PLAN & SHEET KEY

FRIENDS OF LIBERTY, LLC  
 1307 MASONITE ROAD, UKIAH, CA 95482

DRAWN	BD
CHECK	RLW
APPROVED	RLW
DATE	4/20/2018
JOB NUMBER	7583.14
SHEET	DRAWING
6	C1.0



PRE vs POST CONSTRUCTION		
	PRE CONSTRUCTION	POST CONSTRUCTION
IMPERVIOUS AREA	10.34 ACRES	9.46 ACRES
PERVIOUS AREA	1.77 ACRES	2.65 ACRES

MATERIAL QUANTITIES (CUBIC YARDS)				
ROAD	SURFACING	BASE	SUBBASE	CONCRETE
ROAD A	2223	3701	5034	859
ROAD B	956	1589	2185	427
ROAD C	607	1012	1473	129
TOTAL	3788	6304	8693	1415

EARTHWORK QUANTITIES (CUBIC YARDS)			
ROAD	CUT	FILL	NET
ROAD A	5291	8816	-3525 <FILL>
ROAD B	8812	10228	-1415 <FILL>
ROAD C	5594	197	5397 <CUT>
TOTAL	19699	19243	456 <CUT>

