

GENERAL NOTES

- THE CONTRACTOR SHALL HAVE A RESPONSIBLE PARTY, WHO SHALL HAVE THE AUTHORITY TO REPRESENT AND ACT FOR THE CONTRACTOR, ON THE JOB SITE DURING ALL WORKING HOURS.
- ALL WORK SHALL BE ACCOMPLISHED TO THE SATISFACTION OF THE WASHOE COUNTY AUTHORIZED REPRESENTATIVE.

DEFINITIONS:

- (ESC) - EROSION AND SEDIMENT CONTROL
 (NDES) - NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
 (CWA) - CLEAN WATER ACT
 (SWPPP) - STORM WATER POLLUTION PREVENTION PLAN
 (BMP) - BEST MANAGEMENT PRACTICES

THE CONTRACTOR SHALL:

MAKE HIM/HERSELF AWARE OF THE REQUIREMENTS OF SAID GENERAL PERMIT AND THE PROVISIONS OF THE GRADING & EROSION CONTROL PLANS.

IMPLEMENT THE ESC FEATURES AND BEST MANAGEMENT PRACTICES (BMP'S) CONTAINED IN THE IMPROVEMENT PLANS, AND OTHERWISE DILIGENTLY PURSUE COMPLIANCE WITH THE LOCAL REQUIREMENTS.

ASSIST THE OWNER, ENGINEER, AND PUBLIC WORKS DEPARTMENT STAFF IN THE ASSESSMENT OF THE FUNCTIONALITY OF AND MODIFICATIONS TO THE FEATURES AND PRACTICES IMPLEMENTED AND PROPOSED.

MEET WITH THE OWNER AND THE PUBLIC WORKS DEPARTMENT STAFF TO DETERMINE AND DISCUSS THE STATUS OF THE PROJECT, CONSTRUCTION SCHEDULE, AND ANY MODIFICATIONS AND/OR ADDITIONS TO THE ESC FEATURES IN ORDER TO DILIGENTLY PURSUE COMPLIANCE.

DOCUMENT ANY MAINTENANCE, REPLACEMENT, INSPECTION, MODIFICATIONS OR ADDITIONS TO THE PROJECT ESC FEATURES, AND NOTIFY THE ENGINEER, OWNER AND PUBLIC WORKS DEPARTMENT STAFF OF ANY SUBSTANTIAL MODIFICATIONS OR ADDITIONS TO THE ESC FEATURES AND FEATURES. ALL DISTURBED AREAS SHALL BE PROTECTED WITH APPROVED MATERIALS WITHIN 15 DAYS OF COMPLETION OF THE FINISHED GRADES.

MAINTAIN AN INVENTORY OF ESC MATERIALS (STRAW BALETS, 1.5" - 3" CLEAN CRUSHED ROCK, FIBER ROLLS, SILT FENCE, ROCK BAGS, ETC.) ON SITE FOR EMERGENCY USE AS DIRECTED BY THE ENGINEER, OWNER, OR THE PUBLIC WORKS DEPARTMENT STAFF.

OTHER RESPONSIBILITIES OF APPLICANT:

- PROTECTION OF UTILITIES: THE APPLICANT SHALL BE RESPONSIBLE FOR THE PREVENTION OF DAMAGE TO ANY PUBLIC UTILITIES OR SERVICES.
- PROTECTION OF ADJACENT PROPERTY: THE APPLICANT SHALL BE RESPONSIBLE.
- FOR THE PREVENTION OF DAMAGE TO ADJACENT PROPERTY, NO PERSON(S) SHALL EXCAVATE OR LAND THAT IS ADJACENT TO THE PROPERTY LINE AS TO ENHANCE ANY ADJACENT PUBLIC STREET, SIDEWALK, ALLEY, STRUCTURE OR OTHER PUBLIC OR PRIVATE PROPERTY OR EASEMENT, WITHOUT SUPPORTING AND PROTECTING SUCH PROPERTY FROM ANY DAMAGE WHICH MIGHT OTHERWISE RESULT.
- ADVANCE NOTICE: THE APPLICANT SHALL NOTIFY THE COUNTY AT LEAST FORTY-EIGHT HOURS PRIOR TO THE START OF WORK.
- EROSION AND SEDIMENT CONTROL: IT SHALL BE THE SOLE RESPONSIBILITY OF THE APPLICANT TO PREVENT DISCHARGE OF SEDIMENT FROM THE SITE, IN QUANTITIES GREATER THAN BEFORE THE GRADING OCCURRED, TO ANY WATERCOURSE, DRAINAGE SYSTEM, OR ADJACENT PROPERTY.
- COMPLIANCE WITH STORMWATER RUNOFF POLLUTION CONTROL CODE: AT ALL TIMES DURING THE PRE-CONSTRUCTION AND CONSTRUCTION OF ANY PROJECT FOR WHICH GRADING APPROVAL IS ISSUED UNLESS ALL FINAL IMPROVEMENTS AND PERMANENT STRUCTURES ARE COMPLETE, THE APPLICANT SHALL FULLY COMPLY WITH ALL APPLICABLE REQUIREMENTS OF THE STORMWATER RUNOFF POLLUTION CONTROL CODE.

EROSION CONTROL NOTES

- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE COUNTY IMPROVEMENT STANDARDS, CURRENT EDITION, AND THE COUNTY EROSION AND SEDIMENT CONTROL GUIDELINES.
- EROSION CONTROL BEST MANAGEMENT PRACTICES (BMP'S) SHALL BE INSTALLED AND MAINTAINED DURING THE WET SEASON (OCTOBER THROUGH APRIL 30). SEDIMENT CONTROL BMP'S SHALL BE INSTALLED AND MAINTAINED ALL YEAR.
- ALL DRAINAGE INLETS IMMEDIATELY DOWNSTREAM OF THE WORK AREAS AND WITHIN THE WORK AREAS SHALL BE PROTECTED WITH SEDIMENT CONTROL AND INLET FILTER BAGS. YEAR ROUND, INLET FILTER BAGS SHALL BE REMOVED FROM THE DRAINAGE INLETS UPON ACCEPTANCE OF THE PUBLIC IMPROVEMENTS BY THE COUNTY.
- 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). HYDROSEEDING, IF UTILIZED, MUST BE PLACED BY SEPTEMBER 15. HYDROSEEDING 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.
- THE FOLLOWING AREAS ARE TO RECEIVE HYDROSEEDING OR OTHER EROSION CONTROL: ALL SLOPES GREATER THAN 10:1.
- FOR DEMATERING OPERATIONS, SEDIMENT-LOADED STORM WATER SHALL BE EITHER PUMPED (NOTE 10) OR DIVERTED (TEMPORARY DIVERSION SWALES) TO SEDIMENT TRAPS) TO ALLOW SEDIMENT TO SETTLE OUT BEFORE DISCHARGE OFF-SITE. ONCE SEDIMENT HAS SETTLED OUT, WATER WILL BE DISCHARGED THROUGH SHALE LINED WITH IMPERVIOUS PLASTIC LINER.
- USE OF FIBER ROLLS SHALL BE AUGMENTED DURING WET SEASON WITH DEMATERING BMP'S IN THE EVENT THAT FIBER ROLLS DO NOT EFFECTIVELY RETAIN STORM WATER ON SITE. DEMATERING MAY INCLUDE PUMPS OR BELMS TO MOVE WATER TO THE SEDIMENT TRAP. IF PUMPS ARE USED, THEN FILTER BAGS SHALL BE USED AT DISCHARGE HOWE EVER. DEMATERING MATERIAL SHALL NOT BE DISCHARGED DIRECTLY TO THE STORM DRAIN SYSTEM.

BMP INSTALLATION SCHEDULE

BEST MANAGEMENT PRACTICE	LOCATION	IMPLEMENTATION SCHEDULE	MAINTENANCE SCHEDULE
A. PREEXISTING EXISTING VEGETATION	AROUND PERIMETER OF PROJECT SITE	CONTINUOUS UNTIL CONSTRUCTION IS COMPLETED	ENSURE EMPLOYEES AND SUBCONTRACTORS MAINTAIN AWARENESS OF MAINTAINING EXISTING VEGETATION TO PREVENT EROSION AND FIBER AND SEDIMENT AS RUNOFF FROM DISTURBED AREAS ON THE CONSTRUCTION SITE. INSPECT SITE PERIMETER MONTHLY TO VERIFY THE EXISTING VEGETATION IS NOT DISTURBED.
B. PROTECT EXPOSED AREAS AND SLOPES FROM WASHOUT & EROSION	THROUGHOUT PROJECT SITE	DURING WET SEASON	INSPECT EXPOSED AREAS AND SLOPES ON AT LEAST A MONTHLY BASIS TO CHECK FOR EROSION. REMOVE EXISTING VEGETATION FROM EXPOSED AREAS AS NECESSARY TO PREVENT EROSION.
C. DRAINAGE FILTER	AROUND FLOW LINES OF DRAINAGE FACILITIES WITHIN PROJECT SITE	IN PLACE BEFORE WET SEASON UNTIL ROADWAYS ARE PAVED	INSPECT DAILY AND AFTER EACH STORM REMOVE ONSET SEDIMENT DEPOSITED BEHIND SEDIMENT BARRIER TO MAINTAIN EFFECTIVENESS.
D. INLET FILTER BAG	INLETS TO THE STORM DRAINAGE SYSTEM	CONTINUOUS UNTIL LANDSCAPING IS IN PLACE	INSPECT WEEKLY AND AFTER EACH STORM REMOVE BAGS AND REPLACE WITH NEW BAGS AS NECESSARY TO MAINTAIN EFFECTIVENESS.
E. FIBER ROLL	SEE PLAN SHEET C-4	CONTINUOUS	INSPECT WEEKLY AND AFTER EACH STORM REMOVE SEDIMENT DEPOSITED BEHIND FIBER ROLL WHENEVER NECESSARY TO MAINTAIN EFFECTIVENESS.
F. HYDROSEEDING	SILT SLOPES	IN PLACE DURING BY SEPT. 15	INSPECT SLOPES ON AT LEAST A MONTHLY BASIS TO CHECK FOR EROSION. IF EROSION IS NOTICED, REPAIR STORM WASHOUT OVER AFFECTED AREAS.
G. STABILIZED CONSTRUCTION ENTRANCE	ENTRANCES TO SITE FROM PUBLIC ENTRANCES AND DRIVEWAYS	CONTINUOUS UNTIL CONSTRUCTION IS COMPLETED	INSPECT ON A MONTHLY BASIS AND AFTER EACH RAINFALL AND AFTER EACH WET WEATHER WHENEVER NECESSARY TO PREVENT SEDIMENT FROM BEING TRACKED INTO PUBLIC STREET.
H. WIND EROSION CONTROL PRACTICES	WHENEVER CONSTRUCTION IS THROUGHOUT PROJECT SITE	CONTINUOUS UNTIL GRADING IS COMPLETED AND SOILS ARE STABILIZED	INSPECT SITE DURING WET WEATHER TO VERIFY THAT WIND EROSION CONTROL PRACTICES ARE BEING MAINTAINED.
I. SOIL HOLDING MATERIALS	THROUGHOUT PROJECT SITE	CONTINUOUS UNTIL CONSTRUCTION IS COMPLETED	INSPECT SITE ON AT LEAST A MONTHLY BASIS TO VERIFY THAT SOIL HOLDING PRACTICES ARE BEING MAINTAINED.
J. FIBER CONSTRUCTION MATERIAL STORAGE	DESIGNATED AREA	CONTINUOUS UNTIL CONSTRUCTION IS COMPLETED	INSPECT SITE ON AT LEAST A WEEKLY BASIS TO VERIFY THAT CONSTRUCTION MATERIALS ARE STORED IN A MANNER WHICH WOULD NOT CAUSE STORM WATER POLLUTION.
K. FIBER VERIFICATION MATERIAL STORAGE AND DISPOSAL INCLUDING: 1) FIBER FABRIC SUPPLIES 2) WASTE FIBER CLEANING 3) WASTE FIBER CLEANING	DESIGNATED COLLECTION AREA AND CONTAINERS	CONTINUOUS UNTIL CONSTRUCTION IS COMPLETED	INSPECT SITE ON AT LEAST A WEEKLY BASIS TO VERIFY THAT WASTE FIBER IS PROPERLY STORED AND DISPOSED OF AT A LEGAL, DESIGNATED SITE.
L. STREET AND STORM DRAINAGE FACILITY MAINTENANCE DEFINITIONS	DESIGNATED AREA WITH SECONDARY CONTAINMENT	CONTINUOUS	KEEP AMPLE SUPPLIES OF SILT CLEANUP MATERIALS ON SITE & INSPECT ON REGULAR SCHEDULES.
M. STREET AND STORM DRAINAGE FACILITY MAINTENANCE DEFINITIONS	STREETS AND STORM DRAINAGE FACILITIES	CONTINUOUS UNTIL CONSTRUCTION IS COMPLETED	MAINTAIN STORM DRAINAGE FACILITIES AND PAVED STREETS CLEAR OF SEDIMENT AND DEBRIS.

- WET SEASON: ENTIRE PERIOD BETWEEN OCTOBER 1 THROUGH APRIL 30. CONSTRUCTION SHALL ALSO IMPLEMENT WET SEASON MEASURES IF WET WEATHER IS EXPECTED DURING THE DRY SEASON.
- PHASES OF GRADING:
 - INITIAL STAGE 1) WHEN CLEARING AND GRUBBING ACTIVITIES OCCUR.
 - ROUGH STAGE 2) WHEN CUT AND FILL ACTIVITIES OCCUR AND THE SITE IMPROVEMENTS ARE CONSTRUCTED, INCLUDING UNDERGROUND PIPING, STREETS, SIDEWALKS, AND OTHER IMPROVEMENTS.
 - FINAL (STAGE 3) WHEN FINAL ELEVATIONS ARE SET, AND SITE IMPROVEMENTS ARE COMPLETED AND READY FOR COUNTY ACCEPTANCE.

REQUIRED BMP'S

- THE FOLLOWING BMP'S SHALL BE REQUIRED ON ALL PROJECTS:
- ACCESS POINTS TO THE CONSTRUCTION SITE SHALL HAVE A STABILIZED CONSTRUCTION ACCESS.
 - THE PRESERVATION OF EXISTING VEGETATION SHALL BE DONE IN ACCORDANCE WITH PRESERVATION OF EXISTING VEGETATION, AND SILT FENCE.
 - PERIMETER PROTECTION ALONG PROPERTY LINES SHALL HAVE PRESERVATION OF EXISTING VEGETATION, AND SILT FENCE.
 - SLOPES GREATER THAN 3 PERCENT SHALL BE TEMPORARILY SEEDED AND SLOPES GREATER 3:1 (H:V) SHALL HAVE HYDROSEEDING AND/OR GEOTEXTILES, PLASTIC COVERS, AND/OR EROSION CONTROL BLANKETS INSTALLED.
 - THE TOE OF ALL SLOPES SHALL HAVE SILT FENCE AND/OR FIBER ROLL.
 - DISTURBED SOIL AREAS BEHIND THE CURB OR BACK OF WALK (OR CURB) SHALL HAVE STRAW MULCH, SOIL BARRIERS OR GEOTEXTILES, PLASTIC COVERS, AND EROSION CONTROL BLANKETS/MATS IN CONJUNCTION WITH HYDROSEEDING. SURFACE TREATMENTS SHALL EXTEND TO THE GREATER OF 6 METERS (20 FEET) OR TO THE TOP OF SLOPE.
 - ROADWAY SUBGRADES SHALL HAVE FIBER ROLL, SILT FENCE, OR SEDIMENT TRAP.
 - DEAD END STREETS, TO BE EXTENDED IN THE FUTURE, SHALL HAVE PRESERVATION OF EXISTING VEGETATION, HYDROSEEDING, SEDIMENT TRAP OR OTHER APPLICABLE BMP TO MINIMIZE THE TRANSPORT OF SEDIMENT ONTO OR FROM THE IMPROVED SURFACE.
 - PROJECTS THAT INCLUDE DETENTION BASINS SHALL HAVE A SEDIMENT BASIN.
 - PLACE DRAINAGE INLET SEDIMENT BMP'S AT ALL STORM DRAIN INLETS. BMP'S SHALL INCLUDE INLET SEDIMENT CONTROL BARRIER, INLET FILTER BAG AND CONCRETE STAMPS OR EXPLODED PLAGIARAS.
 - EACH CONSTRUCTION SITE SHALL PROVIDE DESIGNATED, PAINT AND WASTE DISPOSAL LOCATIONS AS NECESSARY.
 - A BMP INSTALLATION SCHEDULE SHALL BE INCLUDED ON THE IMPROVEMENT PLANS. THE SCHEDULE SHALL INCLUDE THE BMP'S FOR BOTH THE WET SEASON AND THE DRY SEASON.

PORTABLE CONCRETE WASHOUT CONTAINER
NO SCALE

INSPECTION & MAINTENANCE OF FIBER ROLLS:

- REMOVE OR REPLACE SPLIT, TORN, UNRAVELING OR SWAMPING FIBER.
- INSPECT FIBER ROLLS WHEN RAIN IS FORECAST. FOLLOWING RAIN EVENTS, AT LEAST DAILY DURING PROLONGED RAINFALL AND AT TWO-WEEK INTERVALS DURING THE NON-RAIN SEASON.
- SEDIMENT SHOULD BE REMOVED WHEN SEDIMENT ACCUMULATION REACHES ONE-HALF THE DESIGNATED STORAGE DEPTH. USUALLY THIS WILL BE THE DISTANCE BETWEEN THE TOE OF THE FIBER ROLL AND THE ADJACENT GROUND SURFACE. SEDIMENT REMOVED DURING MAINTENANCE MAY BE INCORPORATED INTO THE LANTERNWORK ON THE SITE OR DISPOSED AT AN APPROPRIATE LOCATION.

NOTES:

- FIBER BARRIER SHALL BE CONSTRUCTED LONG ENOUGH TO EXTEND ACROSS THE DISTURBED TYPICAL FORM AND AS APPROVED BY THE ENGINEER'S INSPECTION.
- INLET FILTER BAGS (12" DIAMETERS) SHALL BE PLACED INTO THE KEY TRENCH AND STAKES ON BOTH SIDES OF THE ROLL WITHIN 3 FEET OF EACH END AND WITHIN 30" OF THE 1.2 M (4 FT.) SPACING. STAKES SHOULD BE PLACED IN AN ALTERNATING PATTERN OF THE ROLL OR OTHERWISE AS APPROVED BY THE ENGINEER.
- CLEANING SHOULD BE PERFORMED ON ALL LOOK-OVER AND TO REMOVE LAUGH STONES OR OTHER THAT WILL PERMIT INTIMATE CONTACT OF THE FIBER ROLL WITH THE SUBSTRATE.
- PRIOR TO ROLL INSTALLATION, CONDUIT A CONDUIT TRENCH (2 TO 4 INCHES) DEEP ALONG THE PROPOSED INSTALLATION. FIBER ROLL SHALL BE INSTALLED ALONG THE SIDE OF WALK AND ALONG THE GUTTER RACING. THE BOTTOM EDGE OF THE FIBER ROLL SHALL EXTEND TO AND BEHIND THE BOTTOM OF THE TRENCH. THE FIBER ROLL SHALL BE SECURED TO THE BOTTOM OF THE TRENCH WITH WOOD STAKES.
- CONTRACTOR SHALL MAINTAIN DURING THE WET SEASON. MONTHLY DURING THE DRY SEASON AND MAXIMALLY AFTER EACH RAIN TO SETTING. FIBER ROLL SHOULD BE REMOVED BEFORE IT HAS REACHED ONE THIRD THE HEIGHT OF THE FILTER FABRIC.

TYPICAL FIBER ROLL INSTALLATION

FIBER ROLLS
NO SCALE

REVEGETATION STANDARDS

- PERMANENT REVEGETATION OR LANDSCAPING, IF REQUIRED, IS TO BE COMPLETED ON THE CONSTRUCTION SITE AS SOON AS PRACTICAL AND IN NO CASE EXCEEDING TWELVE MONTHS AFTER ACHIEVING FINAL GRADES AND UTILITY PLACEMENTS. WHENEVER PRACTICAL, LAND IS TO BE DEVELOPED IN INCREMENTS OF WORKABLE SIZE WHICH CAN BE COMPLETED DURING A SINGLE CONSTRUCTION SEASON. EROSION CONTROL MEASURES ARE TO BE COORDINATED WITH THE SEQUENCE OF GRADING OR IMPROVEMENTS.
- ALL SURFACES DISTURBED BY VEGETATION REMOVAL, GRADING, HALL, ROADS, OR OTHER ACTIVITY OF CONSTRUCTION WHICH ALTERS THE NATURAL VEGETATIVE COVER ARE TO BE PREPARED FOR EXPEDITIOUS REVEGETATION OR OTHERWISE MAINTAINED TO CONTROL EROSION UNLESS COVERED WITH IMPERVIOUS OR OTHER IMPROVED SURFACES PERSISTENT TO APPROVED PLANS WITHIN FOURTEEN DAYS FOLLOWING THE COMPLETION OF GRADING, OR REMOVAL OF VEGETATION IF NO GRADING WAS INVOLVED.
- TERRAIN REMOVED FROM THE SURFACE IN PREPARATION FOR GRADING SHALL BE RESTORED TO EXPOSE CUT AND FILL EMBANKMENTS OR BUILDING PAIRS SO AS TO PROVIDE A SUITABLE BASE FOR SEEDING AND PLANTING.
- ACCEPTABLE METHODS OF REVEGETATION INCLUDE STRAW-MULCHING, HYDRO-MULCHING OR PLANTING OF MIXTURE SPECIFIED IN THE IMPROVEMENT STANDARDS. OTHER METHODS OF REVEGETATION MAY BE APPROVED BY THE COUNTY ENGINEER WHERE EQUIVALENT PROTECTION IS PROVIDED.
- ALL REVEGETATION AND LANDSCAPING ARE TO BE CONDUCTED WITHIN SUITABLE GROWING PERIODS. NATIVE PLANT MATERIALS ARE SPECIFICALLY ENCOURAGED IN ORDER TO REDUCE IRRIGATION DEMANDS.
- TEMPORARY SEDIMENTATION CONTROL FACILITIES ARE TO BE INSTALLED IN CONJUNCTION WITH INITIAL GRADING OPERATIONS AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD TO REMOVE SEDIMENTS FROM RUNOFF WATERS DURING DEVELOPMENT.
- PERMANENT SEDIMENT CATCHMENT BASINS OR OTHER TYPES OF SEDIMENT RETENTION FACILITIES ARE REQUIRED WHERE NECESSARY TO PREVENT DISCHARGE OF SEDIMENT INTO WATERS OF THE STATE. SEDIMENT RETENTION FACILITIES SHALL BE INSPECTED AND CLEANED ACCORDING TO A REGULAR MAINTENANCE SCHEDULE.
- THE PLANTING OR SEEDING OF VEGETATIVE PROTECTION MUST BE EFFECTIVE IF THE CONSTRUCTION DOES NOT GROW AND OFFER PROPER PROTECTION, IT MUST BE REPLANTED OR RESEEDED.
- THE MAINTENANCE OF VEGETATIVE PROTECTION ON GRADED SLOPES SHALL BE THE RESPONSIBILITY OF THE PERMITTEE AND SHALL BE GUARANTEED UNTIL THE VEGETATION IS WELL ESTABLISHED OR IS DIFFICULTLY ASSURED BY ANOTHER PARTY.

DUST MITIGATION PLAN

- SECTION 1: FUGITIVE DUST PREVENTION AND CONTROL
- LAND CLEARING/EARTH MOVING:
- WATER SHALL BE APPLIED BY MEANS OF TRUCKS, HOSES AND/OR SPINKLERS PRIOR TO ANY LAND CLEARING OR EARTH MOVEMENT TO MINIMIZE DUST EMISSIONS. TRAIL VEHICLES TRANSPORTING SOIL INTO OR OUT OF THE PROPERTY SHALL BE COVERED.
- VISIBLELY DRY DISTURBED SOIL SURFACE AREAS:
- ALL VISIBLELY DRY DISTURBED UNPAVED DRIVEWAY SURFACE AREAS OF OPERATION SHALL BE WATERED TO MINIMIZE DUST EMISSIONS. DUST EMISSIONS FROM DRIVEWAYS MAY BE GRENDEL TO REDUCE DUST EMISSIONS.
- VEHICLES ENTERING / EXITING CONSTRUCTION AREA:
- VEHICLES ENTERING OR EXITING CONSTRUCTION AREA SHALL TRAVEL AT A SPEED WHICH MINIMIZES DUST EMISSIONS.
- EMPLOYEE VEHICLES:
- CONSTRUCTION WORKERS PARK IN DESIGNATED PARKING AREAS) TO HELP REDUCE DUST EMISSIONS.
- SOIL PILES:
- SOIL PILE SURFACES SHALL BE MOISTENED IF DUST IS BEING EXHAUSTED FROM THE PILE(S). ADEQUATELY SECURED TARPS, PLASTIC OR OTHER MATERIAL MAY BE REQUIRED TO FURTHER REDUCE DUST EMISSIONS.

PROPRIETARY INFORMATION

THE INFORMATION CONTAINED IN THIS SET OF DRAWINGS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO PECK SITE-COM IS STRICTLY PROHIBITED.

CLIENT:

2600 CANINO RAMON
SAN RAMON, CA 94583

PROJECT INFORMATION:

SOAPWEED
4010 STONE DR
PLACERVILLE, CA 95667

REV.	DATE	DESCRIPTION	BY
1	6-14-17	30X ZONING DOC'S	RB
2	6-3-17	REV 90X ZONING DOC'S	RB
3	8-21-17	100X ZONING DOC'S	RB

COORDINATING ENGINEER:

Peek Site-Com
12852 Earhart Ave. Suite 101
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SEAL:

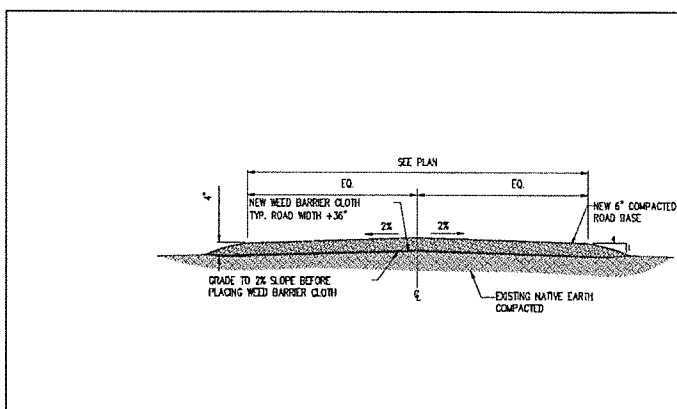
SITE # _____ DRAWN BY _____
 CIVIL 03411 _____ RB
 SHEET TITLE: _____
 SHEET NUMBER: _____ REVISION: _____

EROSION CONTROL NOTES

C-3 0

GRADING STANDARDS

1. GENERAL, UNLESS OTHERWISE RECOMMENDED IN THE APPROVED SOILS ENGINEERING OR ENGINEERING GEOLOGY REPORT, GRADING ACTIVITIES SHALL CONFORM TO THE PROVISIONS OF THIS SECTION.
 - A. CUT SLOPE. THE SLOPE OF CUT SURFACES SHALL BE NO STEEPER THAN IS SAFE FOR THE INTENDED USE AND SHALL BE NO STEEPER THAN 1 UNIT VERTICAL IN 2 UNITS HORIZONTAL (50% SLOPE) UNLESS THE PERMITTEE FURNISHES A SOILS ENGINEERING OR AN ENGINEERING GEOLOGY REPORT, OR BOTH, STATING THAT THE SITE HAS BEEN INVESTIGATED AND GIVING AN OPINION THAT A CUT AT A STEEPER SLOPE WILL BE STABLE AND NOT CREATE A HAZARD TO PROPERTY OR THE ENVIRONMENT.
 - B. FILL SLOPE AND PREPARATION
 - (1) PREPARATION OF GROUND. THE GROUND SURFACE SHALL BE PREPARED TO RECEIVE FILL BY REMOVING VEGETATION, NON-COMPLYING FILL, TOPSOIL AND OTHER UNSUITABLE MATERIALS SCOURING TO PROVIDE A BOND WITH THE NEW FILL.
 - (2) FILL MATERIAL. AMOUNT OF ORGANIC MATERIAL DETRIMENTAL TO STRUCTURAL INTEGRITY SHALL NOT BE PERMITTED IN FILLS EXCEPT AS PERMITTED BY THE BUILDING OFFICIAL. NO ROCK OR SIMILAR IRREDUCIBLE MATERIAL WITH A MAXIMUM DIMENSION GREATER THAN 12 INCHES (0.31 M) SHALL BE BURIED OR PLACED IN FILLS.
 - (3) EXCEPTION. THE BUILDING OFFICIAL MAY PERMIT PLACEMENT OF LARGER ROCK WHEN THE SOILS ENGINEER PROPERLY DEVISES A METHOD OF PLACEMENT, AND CONTINUOUSLY INSPECTS ITS PLACEMENT AND APPROVES THE FILL STABILITY. THE FOLLOWING CONDITIONS SHALL ALSO APPLY:
 - (a) PRIOR TO ISSUANCE OF THE GRADING PERMIT, POTENTIAL ROCK DISPOSAL AREAS SHALL BE SHOWN ON THE GRADING PLAN.
 - (b) ROCK SIZES GREATER THAN 12 INCHES (0.31 M) IN MAXIMUM DIMENSION SHALL BE 10 FEET (3.05 M) OR MORE BELOW GRADE, MEASURED VERTICALLY.
 - (c) ROCKS SHALL BE PLACED SO AS TO ASSURE FILLING OF ALL VOIDS WITH WELL-GRADED SOIL.
 - (4) COMPACTION. ALL FILLS SHALL BE COMPACTED TO A MINIMUM OF 90 PERCENT OF MAXIMUM DRY DENSITY WITH SUFFICIENT DOCUMENTATION OF COMPLIANCE WITH THIS STANDARD.
 - (5) SLOPE. THE SLOPE OF FILL SURFACES SHALL BE NO STEEPER THAN IS SAFE FOR THE INTENDED USE. FILL SLOPES SHALL BE NO STEEPER THAN 1 UNIT VERTICAL IN 2 UNITS HORIZONTAL (50% SLOPE).
 - C. SETBACKS
 - e. GENERAL. CUT AND FILL SLOPES SHALL BE SET BACK FROM SITE BOUNDARIES IN ACCORDANCE WITH THIS SECTION. SETBACK DIMENSIONS SHALL BE HORIZONTAL DISTANCES MEASURED PERPENDICULAR TO THE SITE BOUNDARY.
 - b. TOP OF CUT SLOPE. THE TOP OF CUT SLOPES SHALL NOT BE MADE NEARER TO A SITE BOUNDARY LINE THAN A MINIMUM OF 2 FEET. THE SETBACK MAY NEED TO BE INCREASED FOR ANY REQUIRED INTERCEPTOR DRAINS.
 - d. TOP OF FILL SLOPE. THE TOP OF FILL SLOPE SHALL BE MADE NOT NEARER TO THE SITE BOUNDARY LINE THAN A MINIMUM OF 2 FEET, WHERE A FILL SLOPE IS TO BE LOCATED NEAR THE SITE BOUNDARY AND THE ADJACENT OFFSITE PROPERTY IS DEVELOPED. SPECIAL PRECAUTIONS SHALL BE INCORPORATED IN THE WORK AS THE BUILDING OFFICIAL DEEMS NECESSARY TO PROTECT THE ADJACENT PROPERTY FROM DAMAGE AS A RESULT OF SUCH SLOPING. THESE PRECAUTIONS MAY INCLUDE, BUT ARE NOT LIMITED TO:
 - (1) ADDITIONAL SETBACKS.
 - (2) PROVISION FOR RETAINING, OR SLOUGH WALLS.
 - (3) MECHANICAL OR CHEMICAL TREATMENT OF THE FILL SLOPE SURFACE TO MINIMIZE EROSION.
 - (4) PROVISIONS FOR THE CONTROL OF SURFACE WATERS.
 - e. MODIFICATION OF SETBACKS. THE BUILDING OFFICIAL MAY APPROVE ALTERNATE SETBACKS. THE BUILDING OFFICIAL MAY REQUIRE AN INVESTIGATION AND RECOMMENDATION BY A QUALIFIED ENGINEER OR ENGINEERING GEOLOGIST TO DEMONSTRATE THAT THE INTENT OF THIS SECTION HAS BEEN SATISFIED.
 3. MAINTENANCE REQUIRED. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR ADEQUATELY MAINTAINING ALL DRAINAGE FACILITIES INSTALLED PURSUANT TO THIS SECTION.
 4. GRADING INSPECTION
 - A. GENERAL. GRADING OPERATIONS FOR WHICH A PERMIT IS REQUIRED SHALL BE SUBJECT TO INSPECTION BY THE BUILDING OFFICIAL.
 - B. PERMITTEE. THE PERMITTEE SHALL BE RESPONSIBLE FOR THE WORK TO BE PERFORMED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AND IN CONFORMANCE WITH THE PROVISIONS OF THIS CODE, AND THE PERMITTEE SHALL ENGAGE CONSULTANTS, IF REQUIRED, TO PROVIDE PROFESSIONAL INSPECTIONS ON A TIMELY BASIS. THE PERMITTEE SHALL ACT AS A COORDINATOR BETWEEN THE CONSULTANTS, THE CONTRACTOR AND THE BUILDING OFFICIAL. IN THE EVENT OF CHANGED CONDITIONS, THE PERMITTEE SHALL BE RESPONSIBLE FOR INFORMING THE BUILDING OFFICIAL OF SUCH CHANGE AND SHALL PROVIDE REVISED PLANS FOR APPROVAL.
 - C. BUILDING OFFICIAL. THE BUILDING OFFICIAL SHALL INSPECT THE PROJECT AT THE VARIOUS STAGES OF WORK REQUIRING APPROVAL TO DETERMINE THAT ADEQUATE CONTROL IS BEING EXERCISED BY THE PROFESSIONAL CONSULTANTS.
 - D. NOTIFICATION OF NONCOMPLIANCE. IF, IN THE COURSE OF FULFILLING THEIR RESPECTIVE DUTIES UNDER THIS CHAPTER, THE CIVIL ENGINEER, THE SOILS ENGINEER OR THE ENGINEERING GEOLOGIST FINDS THAT THE WORK IS NOT BEING DONE IN CONFORMANCE WITH THIS CHAPTER OR THE APPROVED GRADING PLANS, THE DISCREPANCIES SHALL BE REPORTED IMMEDIATELY IN WRITING TO THE PERMITTEE AND TO THE BUILDING OFFICIAL.
 - E. TRANSFER OF RESPONSIBILITY. IF THE CIVIL ENGINEER, THE SOILS ENGINEER OR THE ENGINEERING GEOLOGIST OF RECORD IS CHANGED DURING GRADING, THE WORK SHALL BE STOPPED UNTIL THE REPLACEMENT HAS AGREED IN WRITING TO ACCEPT THEIR RESPONSIBILITY WITHIN THE AREA OF TECHNICAL COMPETENCE FOR APPROVAL UPON COMPLETION OF THE WORK. IT SHALL BE THE DUTY OF THE PERMITTEE TO NOTIFY THE BUILDING OFFICIAL IN WRITING OF SUCH CHANGE PRIOR TO THE RE-COMMENCEMENT OF SUCH GRADING.
 5. EROSION AND SEDIMENTATION CONTROL
 - A. ADMINISTRATION
 - (1) THE EROSION AND SEDIMENT CONTROL PROVISIONS OF THIS SECTION SHALL BE APPLICABLE TO ALL FACILITIES AND ACTIVITIES UNDER THE SUPERVISION OF THE DIRECTOR OF THE DEPARTMENT OF PUBLIC WORKS.
 - (2) THE ADMINISTRATION OF THIS SECTION, AS IT AFFECTS COUNTY FACILITIES AND ACTIVITIES, IS THE RESPONSIBILITY OF THE DIRECTOR OF THE DEPARTMENT OF PUBLIC WORKS.
 - (3) THE ADMINISTRATION OF THIS SECTION AS IT AFFECTS OTHER BUILDING, GRADING, AND RELATED ACTIVITIES IS THE RESPONSIBILITY OF THE CHIEF BUILDING OFFICIAL.
 - (4) ANY SOILS OR GEOLOGIC REPORTS PREPARED FOR ANY PROJECT WHERE A GRADING PERMIT IS SUBMITTED AS A PART OF A TENTATIVE SUBDIVISION MAP APPLICATION, OR RELATED ENVIRONMENTAL DOCUMENT, SHALL BE PLACED IN THE RECORDS OF THE CHIEF BUILDING OFFICIAL.
 - B. EROSION AND SEDIMENTATION CONTROL. THESE MINIMUM EROSION AND SEDIMENTATION CONTROL STANDARDS SHALL APPLY TO ALL PROJECTS REQUIRING BUILDING, GRADING, AND DEVELOPMENT PERMITS, AND COUNTY OF MENDOCINO PUBLIC WORKS ACTIVITIES, TO PREVENT SEDIMENTATION OR DAMAGE TO ONSITE AND OFFSITE PROPERTY. THESE STANDARDS SHALL BE INCORPORATED INTO THE PROJECT DESIGN AND SHALL BE ADHERED TO DURING PROJECT CONSTRUCTION.
 - (1) GENERAL GUIDELINES
 - (a) MINIMIZE SOIL EXPOSURE DURING THE RAINY SEASON BY PROPER TIMING OF GRADING AND CONSTRUCTION.
 - (b) RETAIN TREES AND NATURAL VEGETATION TO STABILIZE HILLSIDES, RETAIN MOISTURE, REDUCE EROSION, MINIMIZE SILTATION AND NUTRIENT RUNOFF AND PRESERVE SCENIC QUALITIES.
 - (c) VEGETATE AND MULCH DENUDATED AREAS TO PROTECT THEM FROM WINTER RAINS.
 - (d) DIVERT RUNOFF AWAY FROM STEEP, DENUDATED SLOPES OR OTHER CRITICAL AREAS WITH BARRIERS, BERMS, DITCHES OR OTHER FACILITIES.
 - (e) LIMIT CONSTRUCTION, CLEARING OF VEGETATION AND DISTURBANCE OF THE SOIL TO AREAS OF PROVEN STABILITY, MITIGATE GEOLOGIC HAZARDS AND ADVERSE SOIL CONDITIONS WHEN THEY ARE ENCOUNTERED.
 - (f) REDUCE SEDIMENT TRANSPORT OFF THE SITE TO THE MAXIMUM EXTENT FEASIBLE THROUGH THE USE OF BEST MANAGEMENT PRACTICES (BMPs).
 - (2) PROPOSE A NEW OR MODIFIED EROSION AND SEDIMENT CONTROL TECHNIQUE IF THE TECHNIQUE IS PREFERRED AND MEETS THE INTENT OF THESE REGULATIONS. OBTAIN APPROVAL FROM THE COUNTY PRIOR TO IMPLEMENTATION.
 - (3) CONDUCT FREQUENT SITE INSPECTIONS TO ENSURE THAT CONTROL MEASURES ARE WORKING PROPERLY AND TO CORRECT PROBLEMS AS NEEDED.
 - (4) EMPLOY OTHER MEANS OF EROSION AND SEDIMENT CONTROL AS REQUIRED BY THE CHIEF BUILDING OFFICIAL OR DIRECTOR OF THE DEPARTMENT OF PUBLIC WORKS AS APPLICABLE.
 - (2) SEDIMENT CONTROL
 - (a) USE SEDIMENT BASINS, SILT TRAPS, OR SIMILAR MEASURE TO RETAIN SEDIMENT TRANSPORTED BY RUNOFF WATER COURSE.
 - (b) COLLECT AND DIRECT SURFACE RUNOFF AT NON-EROSIVE VELOCITIES TO THE COMMON NATURAL WATERCOURSE OF THE DRAINAGE AREA.
 - (c) AVOID CONCENTRATING SURFACE WATER ANYWHERE EXCEPT SWALES OR WATERCOURSES.
 - (d) PREVENT MUD FROM BEING TRACKED ONTO THE PUBLIC ROADWAY BY TRAVELING OVER A TEMPORARY GRAVEL CONSTRUCTION ENTRANCE OR WASHING OFF VEHICLE TIRES BEFORE ENTERING A PUBLIC OR PRIVATE DRIVEWAY.
 - (3) SLOPE CONSTRUCTION
 - (a) MINIMIZE LENGTH AND STEEPNESS OF SLOPES BY BENCHING, TERRACING OR CONSTRUCTING DIVERSION STRUCTURES.
 - (b) PRESERVE, MATCH, OR BLEND CUTS AND FILLS WITH THE NATURAL CONTOURS AND UNDUATIONS OF THE LAND.
 - (c) ROUND SHARP ANGLES AT THE TOP AND SIDES OF CUT AND FILL SLOPES.
 - (d) MAINTAIN CUT AND FILL SLOPES AT LESS THAN TWO-TO-ONE (2:1, RUN-RISE) SLOPE UNLESS A GEOLOGICAL AND ENGINEERING ANALYSIS INDICATES THAT STEEPER SLOPES ARE SAFE AND EROSION AND SEDIMENT CONTROL MEASURES CAN SUCCESSFULLY PREVENT EROSION.
 - (4) PROTECTION OF WATERCOURSES AND DRAINAGE INLETS
 - (a) PREPARE DRAINAGEWAYS TO HANDLE CONCENTRATED OR INCREASED RUNOFF FROM DISTURBED AREAS BY USING APPROPRIATE LINING MATERIALS OR ENERGY ABSORBING DEVICES TO REDUCE THE VELOCITY OF RUNOFF WATER.
 - (b) TRAP SEDIMENT-LADEN RUNOFF IN BASINS TO ALLOW SOIL PARTICLES TO SETTLE OUT BEFORE FLOWS ARE RELEASED TO RECEIVING WATERS, STORM DRAINS, STREETS OR ADJACENT PROPERTY. THIS STANDARD IS NOT MANDATORY FOR GRADING THE SITE IS FULLY WINTERIZED AND STABILIZED PRIOR TO AND WHEN CONDUCTED BETWEEN APRIL 15 AND OCTOBER 15. REMOVE TRAPPED SEDIMENT TO A SUITABLE LOCATION ON-SITE OR AT A DISPOSAL SITE APPROVED BY THE COUNTY.
 - (c) DO NOT GRADE OR DRIVE EQUIPMENT IN A STREAMSIDE MANAGEMENT OR OTHER NET AREA EXCEPT AS ALLOWED THROUGH THE COUNTY STREAMSIDE MANAGEMENT AREA ORDINANCE.
 - (d) DEPOSIT OR STORE EXCAVATED MATERIALS AWAY FROM WATERCOURSES.
 - (e) PROTECT ALL EXISTING OR NEWLY INSTALLED STORM DRAINAGE STRUCTURES FROM SEDIMENT CLOGGING.
 - (f) USE STRAW BALES, FILTER FABRIC WRAPS AND DRAINAGE INLET PROTECTORS IN A MANNER THAT DOES NOT CAUSE ADDITIONAL EROSION OR FLOODING OF A ROADWAY.
 - (5) DISPOSAL OF EXCAVATED MATERIALS
 - (a) STOCKPILE TOPSOIL ON THE SITE FOR USE ON AREAS TO BE REVEGETATED.
 - (b) PLACE STOCKPILED SOIL IN LOCATIONS, SO THAT IF EROSION OCCURS, IT WILL NOT CONTRIBUTE TO OFFSITE SEDIMENT DISCHARGE.
 - (c) PROTECT STOCKPILED SOIL PROMPTLY THROUGH THE USE OF APPROPRIATE BUPS TO REDUCE THE RISK OF EROSION AND SEDIMENT TRANSPORT. APPLY MULCH OR OTHER PROTECTIVE COVERINGS ON STOCKPILED MATERIAL THAT WILL BE EXPOSED THROUGH THE WINTER SEASON.
 - (d) DISPOSE OF EXCAVATED MATERIAL NOT USED AT THE SITE AT A LOCATION APPROVED BY THE COUNTY.
 - (6) DUST CONTROL
 - (a) ALL CONSTRUCTION AREAS, INCLUDING DISPOSAL SITES, SHALL BE TREATED AND MAINTAINED AS NECESSARY TO MINIMIZE THE EMISSION OF DUST. MAINTENANCE SHALL BE CONDUCTED AS NECESSARY TO PREVENT A NUISANCE TO OFFSITE PROPERTIES.
 - (b) ALL CONSTRUCTION SITES, INCLUDING DRIVEWAYS, SHALL BE MAINTAINED AS NECESSARY TO MINIMIZE THE EMISSION OF DUST AND PREVENT THE CREATION OF A NUISANCE TO ADJACENT PROPERTIES.
 - (7) REVEGETATION
 - (a) APPLY TEMPORARY SEEDING AND MULCHING TO DENUDATED AREAS PRIOR TO OCTOBER 15 UNLESS THE PROJECT IS CONDITIONED OTHERWISE.
 - (b) ESTABLISH A PERMANENT VEGETATIVE COVER ON DENUDATED AREAS NOT OTHERWISE STABILIZED. PERMANENT VEGETATION GROUND COVER MUST CONTROL SOIL EROSION SATISFACTORILY AND SURVIVE SEVERE WEATHER CONDITIONS.
 - (c) RETAIN A VEGETATIVE BARRIER WHENEVER POSSIBLE AROUND PROPERTY BOUNDARIES.
 - (d) USE SELF-SUSTAINING, NON-INVASIVE PLANTS THAT REQUIRE LITTLE OR NO MAINTENANCE AND DO NOT CREATE AN EXTREME FIRE HAZARD.
 - (e) USE NATIVE PLANT SPECIES WHENEVER FEASIBLE.



TYP. A/C ROAD SECTION SCALE: N.T.S. 1

PROPRIETARY INFORMATION
THE INFORMATION CONTAINED IN THIS SET OF DRAWINGS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO PEAK SITE-COM IS STRICTLY PROHIBITED



PROJECT INFORMATION
SOAPWEED
4270 SIERRA DR
PLACERVILLE, CA 95667

REV.	DATE	DESCRIPTION	BY
1	6-14-17	90% ZONING DOC'S	RB
2	8-3-17	REV 90% ZONING DOC'S	RB
3	8-21-17	100% ZONING DOC'S	RB

COORDINATING ENGINEER
Peek Site-Com
12852 Earhart Ave. Suite 101
Auburn, California 95602
Phone (530) 885-6160
E-Mail info@peaksitecom.com



SITE # CIV.03411
CHK: RB
DRAWN BY: RB

SHEET TITLE: **GRADING NOTES & DETAILS**

SHEET NUMBER: **C-4** REVISION: **0**



CLD0411 Soapweed
4070 Stope Drive, Placerville, CA
Photosynth Produced on 7-21-2017



Exhibit G
Site 4 Soapweed

PLANNING COMMISSION
Board of Supervisors
September 11, 2018
BY: *Roger Tarrant*
EXECUTIVE SECRETARY

Shot Point Map

Existing



Proposed



Proposed AT&T tower location

view from property looking north at site

AdvanceSim
Photo Simulations Software
Contact (925) 202-8507

 **AT&T Wireless**

CVL03411 Sogwood
4070 Sogwood Drive, Placerville, CA
Photosim Produced on 7-25-2017

Existing



Proposed



view from Awesome View looking north at site

Existing



Proposed



view from Stage Drive looking northeast at site

Existing



Proposed




Proposed 4507
Installation Near Utility

view from Pine Needle Lane looking northeast at site

AdvanceSim
PHOTO SIMULATIONS SOLUTIONS

Contact (925) 202-6507

 **AT&T Wireless**

CVL02411 Sugarwood
4070 Sycamore Drive, Placerville, CA
Photosim Produced on 7-25-2017

CVL03411 Zoning Propagation Map

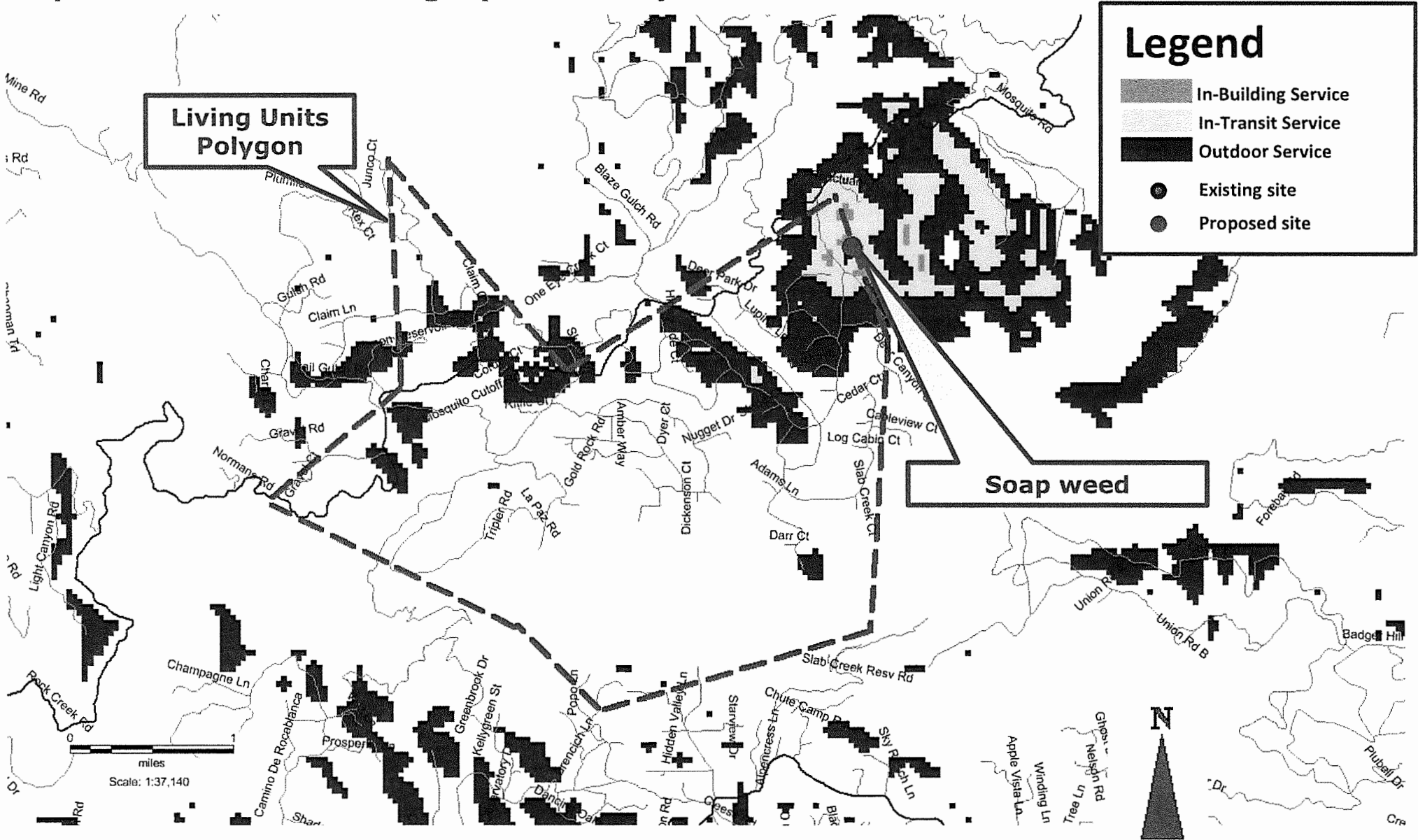
June 24, 2017

APPROVED
EL DORADO COUNTY
PLANNING COMMISSION
Board of Supervisors
September 11, 2015
Dr. Roger Tam/lat
EXECUTIVE SECRETARY

Exhibit H

Site 4 Soapweed

Proposed LTE 700 Coverage (RC = 130')



June 24, 2017



WATERFORD
COMPLIANCE...FROM START TO SIGNAL

APPROVED
EL DORADO COUNTY
~~PLANNING COMMISSION~~
Board of Supervisors
DATE September 11, 2018
BY Roger Trout
EXECUTIVE SECRETARY

Radio Frequency Emissions Compliance Report For AT&T Mobility

Site Name: Soapweed	Site Structure Type: Monopine
Address: 4070 Stope Drive	Latitude: 38.80793
Placerville, CA	Longitude: -120.697897
Report Date: July 14, 2017	Project: New Build

General Summary

AT&T Mobility has contracted Waterford Consultants, LLC to conduct a Radio Frequency Electromagnetic Compliance assessment of the proposed Soapweed site located at 4070 Stope Drive, Placerville, CA. This report contains information about the radio telecommunications equipment to be installed at this site and the surrounding environment with regard to RF Hazard compliance. This assessment is based on installation designs and operational parameters provided by AT&T Mobility.

The compliance framework is derived from the Federal Communications Commission (FCC) Rules and Regulations for preventing human exposure in excess of the applicable Maximum Permissible Exposure ("MPE") limits. At any location at this site, the power density resulting from each transmitter may be expressed as a percentage of the frequency-specific limits and added to determine if 100% of the exposure limit has been exceeded. The FCC Rules define two tiers of permissible exposure differentiated by the situation in which the exposure takes place and/or the status of the individuals who are subject to exposure. General Population / Uncontrolled exposure limits apply to those situations in which persons may not be aware of the presence of electromagnetic energy, where exposure is not employment-related, or where persons cannot exercise control over their exposure. Occupational / Controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment, have been made fully aware of the potential for exposure, and can exercise control over their exposure.

Frequency (MHz)	Limits for General Population/ Uncontrolled Exposure		Limits for Occupational/ Controlled Exposure	
	Power Density (mW/cm ²)	Averaging Time (minutes)	Power Density (mW/cm ²)	Averaging Time (minutes)
30-300	0.2	30	1	6
300-1500	f/1500	30	f/300	6
1500-100,000	1.0	30	5.0	6

f=Frequency (MHz)

In situations where the predicted MPE exceeds the General Population threshold in an accessible area as a result of emissions from multiple transmitters, FCC licensees that contribute greater than 5% of the aggregate MPE share responsibility for mitigation.

Based on the computational guidelines set forth in FCC OET Bulletin 65, Waterford Consultants, LLC has developed software to predict the overall Maximum Permissible Exposure possible at any particular location given the spatial orientation and operating parameters of multiple RF sources. These theoretical results represent worst-case predictions as emitters are assumed to be operating at 100% duty cycle.

Exhibit I Site 4 Soapweed

For any area in excess of 100% General Population MPE, access controls with appropriate RF alerting signage must be put in place and maintained to restrict access to authorized personnel. Signage must be posted to be visible upon approach from any direction to provide notification of potential conditions within these areas. Subject to other site security requirements, occupational personnel should be trained in RF safety and equipped with personal protective equipment (e.g. RF personal monitor) designed for safe work in the vicinity of RF emitters. Controls such as physical barriers to entry imposed by locked doors, hatches and ladders or other access control mechanisms may be supplemented by alarms that alert the individual and notify site management of a breach in access control. Waterford Consultants, LLC recommends that any work activity in these designated areas or in front of any transmitting antennas be coordinated with all wireless tenants.

Analysis

AT&T Mobility proposes the following installation at this location:

- Install twelve (12) new panel antennas
- Install six (6) new RRUS-11, three (3) RRUS-12, twelve (12) new RRUS-32

The antennas will be mounted on a 140-foot Monopine with centerlines at 130 and 122 feet above ground level. The antennas will be oriented toward 90, 330 and 210 degrees. The Effective Radiated Power (ERP) in any direction from all AT&T Mobility operations will not exceed 25,831 Watts. Other appurtenances such as RRUs and hybrid cable are not sources of RF emissions. From this site, AT&T Mobility will enhance voice and data services to surrounding areas in licensed 700, 850, 1900, 2100 and 2300 MHz bands. No other antennas are known to be operating in the vicinity of this site.

Power density decreases significantly with distance from any antenna. The panel-type antennas to be employed at this site are highly directional by design and the orientation in azimuth and mounting elevation, as documented, serve to reduce the potential to exceed MPE limits at any location other than directly in front of the antennas. For accessible areas at ground level, the maximum predicted power density level resulting from all AT&T Mobility operations is 0.5455% of the FCC General Population limits (0.1091% of the FCC Occupational limits). Incident at adjacent buildings depicted in Figure 1, the maximum predicted power density level resulting from all AT&T Mobility operations is 0.121% of the FCC General Population limits (0.0242% of the FCC Occupational limits). The proposed operation will not expose members of the General Public to hazardous levels of RF energy and will not contribute to existing cumulative MPE levels on walkable surfaces at ground or at adjacent buildings by 5% of the General Population limits.

Waterford Consultants, LLC recommends posting contact information signage at the gate that informs personnel entering the site of basic precautions to be followed when working around antennas. RF alerting signage (Caution) should be posted at the base of the proposed Monopine to inform authorized climbers of potential conditions near the antennas. These recommendations are depicted in Figure 2.

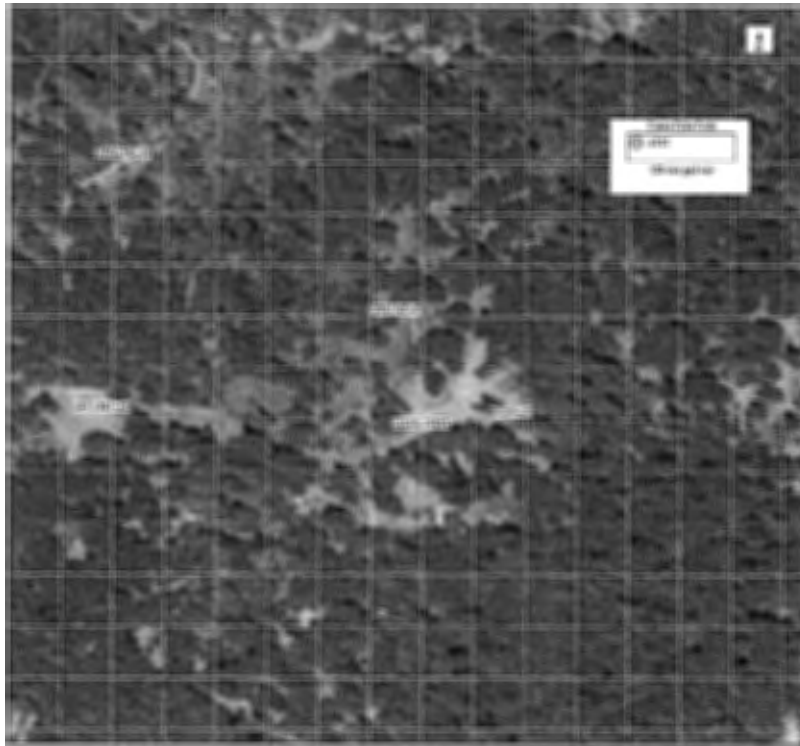


Figure 1: Antenna Locations

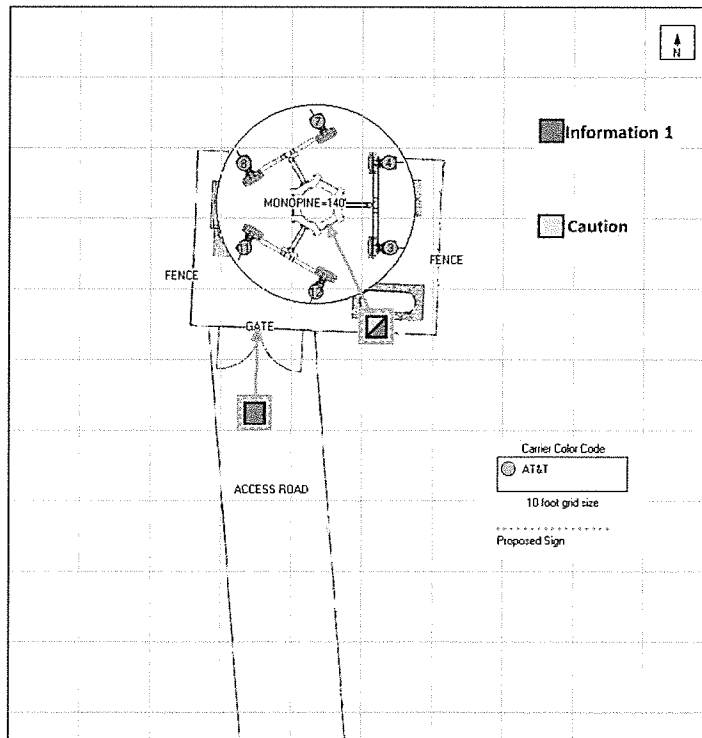


Figure 2: Mitigation Recommendations

Compliance Statement

Based on information provided by AT&T Mobility and predictive modeling, the installation proposed by AT&T Mobility at 4070 Stope Drive, Placerville, CA will be compliant with Radiofrequency Radiation Exposure Limits of 47 C.F.R. § 1.1307(b)(3) and 1.1310. RF alerting signage and restricting access to the Monopine to authorized climbers that have completed RF safety training is required for Occupational environment compliance.

Certification

I, David H. Kiser, am the reviewer and approver of this report and am fully aware of and familiar with the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation, specifically in accordance with FCC's OET Bulletin 65. I have reviewed this Radio Frequency Exposure Assessment report and believe it to be both true and accurate to the best of my knowledge.

