TOWN OF PORTOLA VALLEY
ARCHITECTURAL AND SITE CONTROL COMMISSION (ASCC)
Monday, December 9, 2013
Special Field Meetings (time and place as listed herein)
7:30 PM – Regular ASCC Meeting
Historic Schoolhouse
765 Portola Road, Portola Valley, CA 94028

SPECIAL JOINT ASCC/PLANNING COMMISSION FIELD MEETING*

2:00 p.m. 4115 Alpine Road Field meeting for preliminary consideration of plans for modification to existing wireless communication facilities, CUP X7D-161 (ASCC review to continue at Regular Meeting)

SPECIAL ASCC FIELD MEETING*

3:00 p.m. 302 Portola Road Field meeting for consideration of track and field improvements and preliminary consideration of conceptual plans for additions and improvements to Benedictine and Church Squares for conformity with conditional use permit X7D-30
(ASCC review to continue at Regular Meeting)

7:30 PM - REGULAR AGENDA*

1. Call to Order:

2. Roll Call: Breen, Clark, Hughes, Koch, Ross

3. Oral Communications:

   Persons wishing to address the Commission on any subject, not on the agenda, may do so now. Please note, however, the Commission is not able to undertake extended discussion or action tonight on items not on the agenda.

4. Old Business:

   a. Follow-up Review for Compliance with Conditions of Approval, Review of Building Permit Plans for Faux Pine Colocation "Tree Antenna," Priory School, 302 Portola Road, Conditional Use Permits X7D-132 (Verizon) and X7D-138 (AT&T)

   b. Follow-up Architectural and Site Development Permit Review for Conformity with CUP X7D-30, Detailed Plans for Track and Field Improvements, 302 Portola Road, The Priory

   c. Preliminary Consideration of Architectural Plan Concepts for Improvements to Benedictine and Church Squares, Review for Conformity with the Master Plan Provisions of CUP X7D-30, 302 Portola Road, The Priory

5. New Business:

   a. Architectural Review of Plans for Proposed Replacement of Secondary Driveway Entry Gate and Fencing, 330 Golden Hills Drive, Tri-State Capital, LLC

b. Preliminary Review of Proposed Amendment to CUP X7D-161, Modifications to Existing Wireless Communication Facilities Adjacent to 4115 Alpine Road, AT&T Mobility

6. Commission and Staff Reports:

7. Approval of Minutes: November 25, 2013

8. Adjournment:

*****For more information on the projects to be considered by the ASCC at the Special Field and Regular meetings, as well as the scope of reviews and actions tentatively anticipated, please contact Carol Borck in the Planning Department at Portola Valley Town Hall, 650-851-1700 ex. 211. Further, the start times for other than the first Special Field meeting are tentative and dependent on the actual time needed for the preceding Special Field meeting.

PROPERTY OWNER ATTENDANCE. The ASCC strongly encourages a property owner whose application is being heard by the ASCC to attend the ASCC meeting. Often issues arise that only property owners can responsibly address. In such cases, if the property owner is not present it may be necessary to delay action until the property owner can meet with the ASCC.

WRITTEN MATERIALS. Any writing or documents provided to a majority of the Town Council or Commissions regarding any item on this agenda will be made available for public inspection at Town Hall located 765 Portola Road, Portola Valley, CA during normal business hours.

ASSISTANCE FOR PERSONS WITH DISABILITIES

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Assistant Planner at 650-851-1700, extension 211. Notification 48 hours prior to the meeting will enable the Town to make reasonable arrangements to ensure accessibility to this meeting.

PUBLIC HEARINGS

Public Hearings provide the general public and interested parties an opportunity to provide testimony on these items. If you challenge a proposed action(s) in court, you may be limited to raising only those issues you or someone else raised at the Public Hearing(s) described later in this agenda, or in written correspondence delivered to the Planning Commission at, or prior to, the Public Hearing(s).

This Notice is Posted in Compliance with the Government Code of the State of California.

Date: December 6, 2013

CheyAnne Brown
Planning Technician

MEMORANDUM

TOWN OF PORTOLA VALLEY

TO: ASCC

FROM: Tom Vlasic, Town Planner

DATE: December 5, 2013

RE: Agenda for December 9, 2013 ASCC Meeting

NOTICE: A special ASCC field meeting has been scheduled for Monday, December 9, 2013. The meeting will consider three requests, two associated with plans for Conditional Use Permit (CUP) implementation for The Priory School.

The meeting will begin at 2:00 p.m. at the Alpine Road right of way adjacent to 4115 Alpine Road. This site session is for preliminary consideration of proposed AT&T plans for modifications to its existing wireless communication facilities as regulated under the provisions of CUP X7D-161. An initial review of this request for CUP amendment is presented below under ***agenda item 5b***. Since the planning commission will be involved with the CUP amendment request, the site meeting has been noticed as a joint session of the ASCC and planning commission. *(Due to limited space along Alpine Road, meeting attendees may want to consider parking along Creek Park Drive or other side streets off of Alpine Road or arranging to carpool from the town center.)*

After the AT&T site review, the special ASCC field meeting will continue at approximately 3:00 p.m. at The Priory School, 302 Portola Road. The meeting will convene in the main parking lot of the school adjacent to the Portola Road frontage athletic facilities. This field meeting is for consideration of two items relative to conformity with the provisions of approved Priory CUP X7D-30. The first matter is review of detailed plans for the track and field improvements authorized by the CUP amendment granted to the Priory earlier this year. ASCC review of this request is discussed under ***agenda item 4b***. The second request is for preliminary consideration and reaction to concept plans for additions and improvements to the Benedictine and Church Squares authorized by the Priory's current CUP master plan. This request is discussed under ***agenda item 4c***.

The following comments are offered on the items listed on the December 9, 2013 ASCC agenda.

4a. BUILDING PERMIT REVIEW OF "MONOPINE" COLLOCATION ANTENNA PLANS FOR CONFORMITY WITH CONDITIONS OF CUP X7D-132 (VERIZON WIRELESS) AND CUP X7D-138 (AT&T MOBILITY), THE PRIORY SCHOOL, 302 PORTOLA ROAD

This matter is before the ASCC for final building permit review and approval. The ASCC last considered the proposed design for the subject "monopine" collocation tree antenna at its July 23, 2013 meeting. At that time, the ASCC reached conclusions and provided directions for development of final building permit plans for the "monopine." The staff report and related materials relative to the July 23, 2013 meeting are attached, as are the meeting minutes, which include the four building permit conditions set by the ASCC at that time.

Based on the requirements of the subject CUPs and the July 23, 2013 ASCC action, Verizon Wireless with the concurrence of AT&T Mobility has provided the attached building permit submittal materials:

- Proposed Equipment Installation Plans (7 sheets), Verizon Wireless, 302 Portola Road, revised though November 11, 2012 and received by the town December 2, 2013.
- Structural Calculations, 60-Foot Pine Tree Monopole (11 Pages), Cell Trees Inc., November 18, 2013
- Cell Trees Branch Specifications statement regarding branch characteristics and longevity.

In addition to these plans and materials, Jay Gruendle, Verizon Wireless representative who is taking the lead for the project, has advised that branch and bark samples for the faux tree will be available for presentation and review at the December 9th ASCC meeting.

The comments that follow address how the revised plans respond to the directions provided at the July 23, 2013 ASCC meeting. There is considerable background on this matter that is not possible to present with the current report, but staff can provide additional comments as may be needed at Monday's ASCC meeting. In particular, it has been extremely complicated to resolve all of the needed agreements and actions to allow the building permit plans to move forward and timelines have been difficult to meet. This has been extremely frustrating and at this point, staff is hopeful that with an ASCC action on December 9th, the project can finally moved ahead to completion.

Conditions 1 & 2. "Tree details." The key "aesthetic" details including branch samples will, as noted above, be available for ASCC consideration at Monday's meeting. We understand that photos of example trees with similar branch density as called for on plan sheets MP-1 and MP-2 will be available for review at the ASCC meeting. This will be important in judging the adequacy of the density and length and placement of the branches. Additional data will also be provided on the branch and bark color and "colorfast condition" of all "tree" materials, but the Cell Tree letter does provide some data relative to the tree branch longevity.

Condition 3. The tree height is 60feet, consistent with the condition, and the branches now are to start very close to the top of the Monastery building (refer to Sheet A-2).

The plans considered in July of 2012 will be available for reference at Monday's ASCC meeting.

Condition 4. Screen landscaping as called for in this condition as clarified at the evening ASCC meeting is shown in the Partial Site Plan box on plan Sheet A-1. As noted in the ASCC 7/23 meeting minutes, the placement of the three, 24-inch box multi-stem live oaks will be field set, and agreement for their maintenance will be needed to the satisfaction of staff prior to actual release of the building permits.

Prior to completing action on this building permit review, ASCC members should consider the above comments and any new information presented at the December 9, 2013 ASCC meeting.

4b. FOLLOW-UP ARCHITECTURAL AND SITE DEVELOPMENT PERMIT REVIEW FOR CONFORMITY WITH CUP X7D-30, DETAILED PLANS FOR TRACK AND FIELD IMPROVEMENTS, *302 PORTOLA ROAD, THE PRIORY SCHOOL*

In May, the town council, after considering an appeal of the planning commission's approval of the Priory's CUP amendment request for track and field improvements with artificial turf, approved the CUP amendment with a prohibition on use of artificial turf. The approval requires that detailed improvement plans be presented to the ASCC for final review and approval for conformity with the amended CUP before any construction is formally authorized.

These detailed plans have now been presented to the town for review and approval so that the track and field project can begin after the current winter season. The enclosed December 5, 2013 staff report prepared by Deputy Town Planner Kristiansson evaluates the detailed plans against the provisions of the approved CUP and offers recommendations for ASCC consideration and action. As noted at the head of this report, a site meeting has been scheduled for 3:00 p.m. on December 9th to facilitate ASCC review and action on the detailed project plans. After the site meeting, i.e., at the regular evening December 9th meeting, the ASCC should, if possible, complete plan review and approval, with any conditions determined necessary.

4c. PRELIMINARY CONSIDERATION OF ARCHITECTURAL PLAN CONCEPTS FOR IMPROVEMENTS TO BENEDICTINE AND CHURCH SQUARES, REVIEW FOR CONFORMITY WITH THE MASTER PLAN PROVSIONS OF CUP X7D-30, 302 PORTOLA ROAD, THE PRIORY SCHOOL

The Priory School's master CUP as authorized in 2005 and amended earlier this year includes provisions for classroom and other building additions within and around both the Benedictine and Church Square areas of the campus. Staff has been in discussions with Priory staff and the school's architectural team as plans for the additions to these areas have evolved. One design approach was fairly well developed earlier this fall, and plans for it were submitted to the town to begin the formal ASCC review process for consistency with the approved master plan. This approach, however, has been reconsidered by the school and a modified approach is now being

pursued by a new architectural team under the direction of Jim Goring, who was also involved with the town's town center project.

The Priory has requested the opportunity to share the new approach concepts with the ASCC at the December 9th meeting. This is to include a visit to both Benedictine and Church Squares as part of the Priory 12/9 afternoon site meeting as noted at the head of this report. This will allow the project design team to share their concept plans with ASCC members and to obtain initial reactions that will aid them in developing final architectural plans for the project.

The enclosed December 5, 3013 staff report from Deputy Town Planner Kristiansson provides background and CUP context data to assist the ASCC in the 12/9 preliminary review. No action is called for at this time and, from a practical perspective, Monday's meeting will be an information sharing time where the Priory and its design team, the ASCC, staff and other interested parties can share perspectives on the school's evolving plans.

5a. ARCHITECTURAL REVIEW OF PLANS FOR PROPOSED REPLACEMENT OF SECONDARY DRIVEWAY ENTRY GATE AND FENCING, 330 GOLDEN HILLS DRIVE, *TRI-STATE CAPITAL, LLC-WICK*

This request is for ASCC approval of plans for replacing an existing secondary access driveway gate and adjacent fencing with a new gate and fencing to facilitate access to the main garage at the subject 4.7-acre Oak Hills subdivision property. The property location is shown on the attached vicinity map. This is a fairly straight-forward request that removes the last section of black iron picket gate and fencing associated with the parcel that has been undergoing modifications to be more in line with current town guidelines since the ASCC approved removal of perimeter redwoods trees in 2010.

The proposed replacement gate, with modified driveway access, and replacement fencing are described in the attached November 13, 2013 letter from project landscape architect Thomas Klope. The proposed new gate and fencing plan is attached. It was also prepared by Thomas Klope Associates and is dated November 13, 2013. As noted in the November 13th project description letter, the proposed plans have been reviewed and approved by the Oak Hills homeowners association.

The following additional comments are offered to assist the ASCC review and act on the project.

1. **Background and project description.** In 2010, the ASCC considered and approved plans for removal of over 280 redwood trees that then virtually surrounded most this Oak Hills subdivision property. As part of the 2010 action and plan approval, the applicant received permission to replace existing metal picket fencing along the property's Golden Hills street frontage with horse style post and rail fencing and also to install a driveway gate serving the main, formal entrance off of Golden Hills Drive. The new replacement fencing has been installed and extends along a portion of the southeastern parcel boundary that is common with a private access drive that serves the subject site and the four parcels immediately east of

the property. The new Golden Hills Drive entry gate has yet to be completed, but will be as additional ongoing site work is finished.

The current request, as explained in the November 13, 2013 letter from Mr. Klope, is related to the existing gated driveway access to the main house garage located off of the southeast side private, common driveway. The existing gate is of black vertical iron pickets and achieves a maximum height of roughly six feet. From the rock column gateposts to the easterly property line, there is an existing four-foot high black iron pricket fence that matches the gate pickets and the same style fence extends from the south side gatepost to the existing post and rail fence along the private driveway boundary.

The proposal would eliminate the existing AC paving from the private drive to the garage paver apron area and install 160 sf of new pavement to accommodate the new entry point. The reduction in existing paving is under some significant oaks.

The new gate would be set back 10 feet from the side property line and would be no higher than four feet. It would match the basic design approved for the main driveway gate, including the plaster support columns, wood frame and iron pickets in the wood frame. The wood frame would be stained the same dark brown finish approved for the main entry gate. Notlighting is proposed with the gate changes.

From the new gate columns to the easterly property line and southwest to the existing post and rail fence, the existing metal picket fencing would be replaced with the same post and rail, "horse fence," design used for the front yard fencing. The fencing has been aligned to avoid utility features and trees.

Visually, this project would complete and be fully consistent with the changes initiated with the project started with ASCC approval in 2010. Further, the scope of paving under the oaks would be reduced and there would be more off street paved area for vehicles entering the site than is currently the case. In addition, the automatic gate would open into the site ensuring that waiting vehicles would not have to stay mostly in the private street. Also, with the gate and fence alignment, there is sufficient room for placement of a gate keypad on the property, but the location for the pad and the design should be specified with building permit plans to the satisfaction of planning staff.

2. **Conformance with zoning ordinance provisions**. The proposed gate and fencing conform to the height, opacity and basic design standards of the town's fence and entry feature ordinance. The ordinance requires that entry gates be set back at least one half the distance of the front setback and assumes all driveway gates would be along a parcel frontage. In this case, the preexisting driveway and gate to service the house garage are off of the side property line and well beyond the front yard setback area. Nonetheless, the proposed gate has been moved to a 10-foot setback, which is one-half of the required 20-foot side yard setback. Thus, we believe the intent of the ordinance is fully achieved with the proposed modified driveway access and new gate design and fencing.

Prior to acting on this request ASCC members should inspect the project site and consider the above comments as well as any new information that may be presented at the December 9, 2013 ASCC meeting. Assuming the ASCC finds it can conclude

action on this request as proposed, the only condition recommended at this time is for the gate keypad details to be defined to the satisfaction of staff with the building permit submittal for the project.

5b. PRELIMINARY REVIEW OF PROPOSED AMENDMENT TO CUP X7D-161, MODIFICATIONS TO EXISTING WIRELESS COMMUNICATION FACILITIES ADJACENT TO 4115 ALPINE ROAD, *AT&T MOBILITY*

This is a preliminary review of AT&T Mobility's request to amend its existing subject CUP to allow for modifications and additions to its existing subject Alpine Road facility to support upgraded wireless services in the town. (See attached vicinity map for site location). As noted at the head of this memorandum, the preliminary review will start with a site meeting at 2:00 p.m. on Monday, December 9th. Since the planning commission will be the approving authority relative to the CUP amendment, the site meeting has been noticed as a joint session of the ASCC and planning commission. Following the site meeting, the ASCC will continue its preliminary review at the regular evening ASCC meeting. Continued planning commission review is tentatively scheduled to take place at the December 18, 2013 regular commission meeting. Eventually the planning commission will conduct a formal public hearing on the amendment request and, prior to the hearing, the ASCC should forward specific aesthetic recommendations to the planning commission on the project.

The proposed amendments are explained and described in the materials listed below which are attached, unless otherwise noted. Some preliminary comments on the proposed plans and materials are provided with the following list.

- **June 27, 2013 letter from AT&T representative David Haddock, Wireless Acquisition Resources, Inc**. The letter describes the project and responds to a number of application requirements set forth in the town's wireless communications ordinance and questions raised by staff.
- **Project Plan Set (enclosed), revised through October 1, 2013**. This 17-sheet, "full size" plan set details the proposed ground mounted equipment changes including the equipment pad and fenced area, and plans for the new antenna on the existing joint utility pole. Two new antennas would be added to the two existing and all four antennas would be mounted on an "H-Frame" extension on the Alpine Road side of the pole.
- **Photo simulations for ground mounted equipment changes, 4/9/13**. These do not specifically show the proposed new antennas on the existing power pole. However, the attached simulations received August 31, 2011 provided with a previous preliminary design, give a fairly good indication of the view changes with the added antennas extending toward Alpine Road. The existing west side antennas shown in the 8/31/11 simulation would, however, be removed with the current proposal.
- **Permanent Site Propagation Map-CCL05918, June 18, 2013**. This six page document shows the existing and proposed service areas with the objective being enhanced LTE service coverage. As discussed and explained in the June 27th application letter, the project objective is not to fill gaps in existing service, but to

increase capacity and provide enhanced performance. *A black and white copy of the coverage data is attached and a more usable color version is enclosed.*

- **Executed Tower/Structure/Equipment removal bond.** This bond, dated 2/6/13, was provided as called for in existing CUP conditions.
- **ATT RF EME Compliance Report, EBI Consulting, October 8, 2013**. This report provides the required analysis of RF exposure relative to Federal standards. The report concludes no public issues with the RF conditions and only notes that under worst case conditions, workers above ground level and within 11 feet of the antenna could face exposure to power densities above FCC occupational limits. The report also advises of the safety signage that would be needed for the site.

  It should be noted that during communications with other AT&T representatives relative to the site, and as required by current CUP conditions, staff did receive earlier reports from the project consultants verifying continuing compliance with Federal RF standards. It is also noted that the report is typical of the type we have received in the past and evaluated through a peer review process. There has never been an issue with the review process or compliance with the FCC RF standards and the town does not have any ability to require more restrictive RF standards.
- **Environmental Noise Assessment Report, EBI Consulting, October 17, 2013**. The report evaluates the projected noise from the proposed equipment cabinets against town noise standards and ambient conditions. It concludes that the changes in noise will be less than 3dBA and have "no appreciable impact" on existing noise levels and would also be in compliance with town noise ordinance standards. While we don't take issues with this conclusion, given the proximity to Alpine Road traffic, we would appreciate a more complete understanding of the factors contributing to the current ambient conditions and, particularly, how the existing facility equipment influences the ambient noise.

In addition to the above comments, the following are offered to assist in the preliminary application review process.

1. **Existing CUP, background and recent "emergency" repairs**. The existing CUP provisions are attached. The permit was originally granted in 2005 and amended on September 15, 2010 to allow for antenna and equipment upgrades. The amended permit has a life of five years from its effective date, i.e., until October 16, 2015. (More comments are offered relative to permit life in a later section of this report.)

   The existing facility is an important part of the AT&T wireless service to the town, which includes the subject site, a utility pole site adjacent to 945 Portola Road (CUP X7D-161), and a facility at The Priory (CUP X7D-138). The Priory antenna facility is being modified with those of Verizon Wireless (CUP X7D-132) to be a collocation "monopine" antenna as required by the AT&T and Verizon CUPs for their Priory facilities.

   Over the past two to three years, staff has had a number of discussions with various AT&T representatives relative to all three of its facilities in the town. In particular, we have had a number of discussions with different representatives for the changes

desired at the subject site. As noted in the application letter, Mr. Haddock is now the responsible person for the site and all upgrade plans and processing of them through the town. This, hopefully, will ensure that we can get through the process with minimum confusion, but it is recognized that it is difficult for AT&T's consultants, let alone the town, to keep pace with the changes in the wireless industry, particularly given the nature of the competition in the industry.

Within the past month, some emergency work was necessary at the subject facility as explained in the attached letter from Mr. Haddock dated November 19, 2013. With this letter, Mr. Haddock explained the necessary emergency repairs that were completed and additional necessary repairs. At the time of the letter, AT&T had intended to wait to complete the remaining work until this permit was processed. This, however, was not possible and in order to keep the facility active, the remaining emergency work finished under town review and approval.

2. **Project description**. The proposal includes the addition of two new pole mounted antennas for a total of four on the existing pole. The antenna would be mounted as shown on the plans and all antennas and equipment would be painted in the dark brown color used on the existing facilities. The antennas would add some visual "clutter" to the top of the pole, but would not be significantly different from existing conditions. Further, the antennas would be on the east side of the pole and, to a degree, screened by the pole to views from the uphill residence to the west. The view impacts would also need to be considered with the other existing utility facilities in the area, including power and communication wires and equipment boxes. At one point, it was assumed that some of these elements would be undergrounded sooner than later and this is no longer the case as discussed below.

   The major visual change would likely be the enlarged ground based equipment area with surrounding six-foot high chain link fencing. Currently, the ground equipment is relatively limited with a footprint of roughly 3 by 6 feet. It is not enclosed with fencing and screen shrubs have been installed as required by the CUP conditions and these do provide some screening to the existing equipment.

   The proposed fenced equipment area is 8 by 17 feet. Some grading would be needed for a concrete pad, but the other equipment would be frame mounted and likely can be installed with minimum ground disturbance. The "aesthetic solution" for the ground equipment is to paint it all dark brown, and this includes the proposed six-foot high chain link fence. The landscape plan Sheet L-1 proposes use of Dr. Hurd Manzanita and coyote brush for screening. The ASCC will need to consider the proposed equipment design, painting and planting to determine if the screening is adequate for this location in the Alpine Road scenic corridor. Options for cabinet location might be considered, and the applicant should advise if some of the equipment could be buried in a vault to minimize the size of above ground conditions, particularly the need for the relatively large fenced area. At the same time, due to the slope conditions, the amount of grading that might be acceptable is limited. If this fencing is absolutely necessary, and the enclosure can't be significantly decreased in size, then larger size and/or more screen plant materials should be considered.

The landscape plan suggests that existing screen planting will not be disturbed by the project. We wonder if this is possible and how it will be accomplished. This matter should be addressed by the applicant during the site meeting.

Proposed warning signs are shown on plan Sheet A-1.1. The size and colors should be defined for ASCC review and consideration and should be no larger than required to meet FCC standards.

It is noted that the antenna plan view on the landscape plans is not consistent with the views shown on the technical plan sheets. This inconsistency should be explained and corrected as appropriate.

3. **CUP life**. Under state regulations, the town must grant a wireless facility a minimum permit life of 10 years unless there are special aesthetic conditions that impact the antenna site. When the subject permit was amended in 2010, the site was part of the town's formal Alpine Road utility undergrounding district and the permit was granted only a five-year life with the assumption that some undergrounding would move ahead in the district that could include the antenna site. This year, however, the undergrounding district was modified to cover only a small area between Nathhorst Avenue and Hillbrook Drive. Thus, the subject site is no longer in the undergrounding district and that leverage relative to a shorter permit timeframe no longer exists. As a result, any action to grant the amendment would be likely need to be for a minimum 10-year life.

   Also, since undergrounding is now not a possibility in the 10-year life, the existing overhead wires will remain. Thus, the overhead visual changes would not be as great as would be the case with the elimination of the overhead wires. And now the pole will remain, and alternatives for the pole for mounting of the antennas would not need to be considered.

4. **Key issues beyond aesthetics**. A number of the provisions of the town's wireless ordinance call for exploration of optional sites and peer review of technical data. Given the scope and objectives of the current amendment request, and the experience with the 2010 amendment, at this point we believe the key issues are associated with the potential aesthetic impacts of the added ground equipment and not filling of service gaps or installation of a major *new* service facility. Thus, unless data from the preliminary review process leads to other conclusions, we would likely not push for the full scope of review that, for example, was required with the expired proposal for the T-Mobile application for the Peak Lane site.

ASCC members should conduct the December 9th preliminary review and offer comments and reactions for consideration by the project team. Review should then be continued to the January 13th regular ASCC meeting to allow time for response to ASCC and planning commission comments as may be offered at the site meeting or at the regular December 18th planning commission meeting.

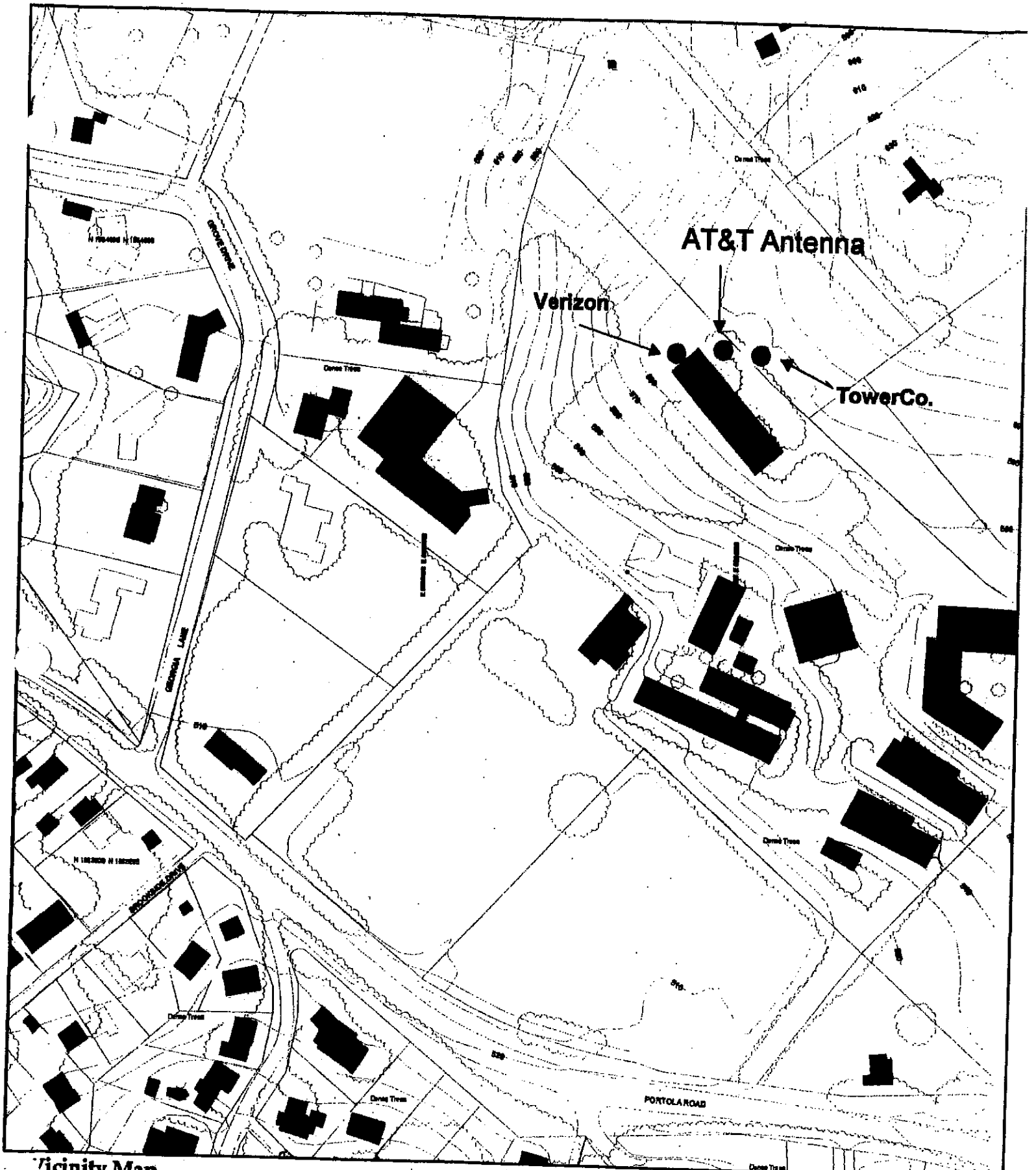
6. COMMISSION AND STAFF REPORTS

Staff will report on agenda items anticipated for the January 2014 ASCC meetings. As a reminder, the regular December 23rd ASCC meeting has been cancelled due to the Winter Holiday town hall closure.

TCV

encl.
attach.
cc. Planning Commission Liaison
Town Council Liaison
Town Manager
Mayor
Deputy Town Planner Kristiansson
Assistant Planner Borck
Applicants

BUILDING PERMIT REVIEW
"MONOPINE" COLLOCATION ANTENNA
CUPS X7D-132 & 138
302 PORTOLA ROAD,
(VERIZON WIRELESS AND AT&T MOBILITY)



Vicinity Map

Scale: 1" = 200 feet

Conditional Use Permit X7D-1312 Verizon Wireless

302 Portoa Road (Priory), Town of Portola Valley

August 2010

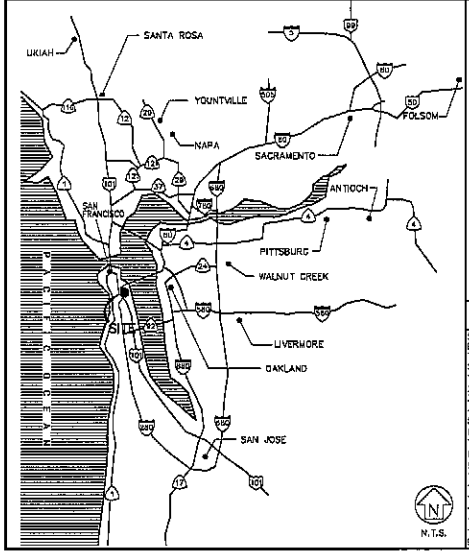
verizonwireless

PORTOLA VALLEY

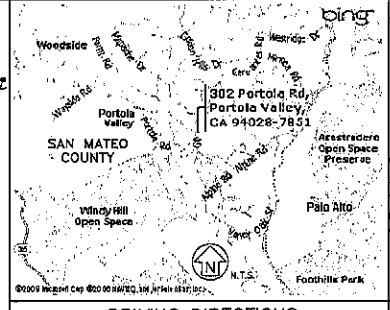
302 PORTOLA ROAD
PORTOLA VALLEY, CA 94028 PS SITE No. 123584

L.D. STROBEL CO. INC.
DESIGN / CONSTRUCTION
WIRELESS COMMUNICATIONS
1022 SHARY CIRCLE, SUITE 9, CONCORD, CA 94518
PHONE: 925-686-3241 FAX: 925-686-3350

LOCATION MAP



VICINITY MAP



CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN COMPLIANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

1. CALIFORNIA ADMINISTRATIVE CODE (INCLUDING TITLES 24 & 25)
2. 2010 CALIFORNIA BUILDING CODE
3. 2010 CALIFORNIA MECHANICAL CODE
4. 2010 CALIFORNIA PLUMBING CODE
5. 2010 CALIFORNIA ELECTRIC CODE
6. 2010 COUNTY ORDINANCES

ACCESSIBILITY REQUIREMENTS:
FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH THE 2010 CALIFORNIA BUILDING CODE, TITLE 24, PART 2, VOLUME 1, CHAPTER 11, SECTION 1103.1.1, EXCEPTION 1.

CALL BEFORE YOU DIG
Underground Service Alert of Central/Northern California
CALL TOLL FREE 1-800-227-2600
TWO WORKING DAYS BEFORE YOU DIG

PROJECT DATA

APPLICANT:
VERIZON WIRELESS
WALNUT CREEK EXECUTIVE PARK
2785 MITCHELL DRIVE SUITE 9
WALNUT CREEK, CA 94598
CONTACT: JAY INOUYE
(925) 278-6333

AGENT:
ON AIR, LLC
465 FIRST ST. WEST, SUITE 101
SONOMA, CA 94576
CONTACT: JAY GRUENDLE (707) 933-9630

OWNER:
BENEDICTINE FATHERS OF THE PRIORY
302 PORTOLA RD.
PORTOLA VALLEY, CA 94025
CONTACT: JOSE CASTANEDA
(650) 851-6130

CIVIL ENGINEER:
L.D. STROBEL CO. INC.
1022 SHARY CIR. SUITE 9
CONCORD, CA 94518

CONSTRUCTION MANAGER:
ON AIR, LLC
465 FIRST ST. WEST, SUITE 101
SONOMA, CA 94576
CONTACT: OLIVIER FONTANA
(925) 250-5945

AT&T REPRESENTATIVE:
1826 WEBSTER STREET
SAN FRANCISCO, CA 94115
CONTACT: MATTHEW YERGOVICH
(415) 596-3474

DRIVING DIRECTIONS

Start: 2785 Mitchell Dr, Walnut Creek
End: 302 Portola Rd, Portola Valley
Total Distance: 23.5 Miles
Start: Depart 2785 Mitchell Dr, Walnut Creek
1: Turn LEFT (South-East) onto N Wiget Ln 0.3
2: Turn RIGHT (West) onto Ygnacio Valley Rd 3.0
3: Road name changes to Hillside Ave 0.1
4: Take Ramp (RIGHT) onto SR-24 towards CA-24 / Oakland 13.5
5: Turn RIGHT onto Ramp towards I-580 / San Francisco / Hayward 0.4
6: Keep RIGHT to stay on Ramp towards I-580 / San Francisco 0.3
7: Take Ramp (LEFT) onto I-580 towards I-580 / San Francisco 0.8
8: Take Ramp (LEFT) onto I-80 towards I-80 / San Francisco 0.8
9: Take Ramp (RIGHT) onto I-80 7.7
10: Merge onto US-101 [James Lick Fwy] 9.3
11: At exit 423B, take Ramp (RIGHT) onto I-380/I-280/San Bruno 1.8
12: Take Ramp onto I-280 [Junipero Serra Fwy] I-280 / San Jose 21.6
13: Turn RIGHT onto Ramp towards Alpine Road / Portola Valley 0.2
14: Take Ramp (RIGHT) onto Alpine Rd towards Portola Valley 3.0
15: Turn RIGHT (North-West) onto Portola Rd 0.4
End: Arrive 302 Portola Rd, Portola Valley, CA 94028-7851

BUILDING/SITE DATA LEGEND

A.P.N.: 079-053-040
SITE NUMBER: CA-123584
ANTENNA TYPE:
AREA OF CONSTRUCTION: 386 SQ. FT.

PROJECT DESCRIPTION

REMOVE EXISTING VERIZON WIRELESS & AT&T MONOPOLES AND REPLACE WITH A NEW 60' MONOPINE STRUCTURE.

SHEET INDEX

REVISIONS

NO.	DATE	DESCRIPTION
1	5/29/09	90% ZD/CD
2	09/02/09	90% ZD/CD Rev A
3	05/12/10	90% ZD/CD Rev B
4	08/18/10	95% ZD/CD
5	06/28/12	95% ZD/CD Rev A
6	7/11/12	100% ZD/CD
7	11/13/12	100% ZD/CD Rev A

SITE ADDRESS:
302 PORTOLA ROAD
PORTOLA VALLEY, CA 94028
SAN MATEO COUNTY

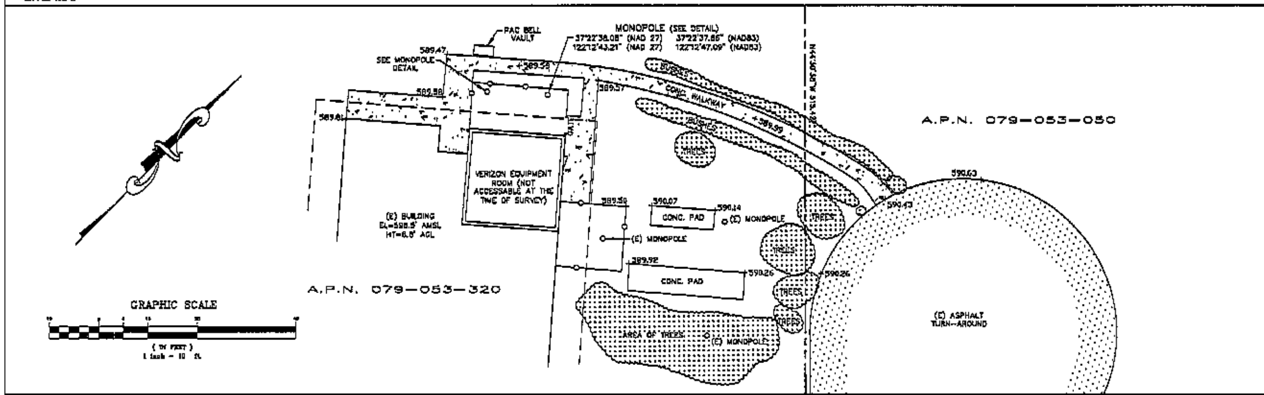
VERIZON WIRELESS
2785 MITCHELL DRIVE SUITE 9
WALNUT CREEK, CA 94598

PROPOSED EQUIPMENT INSTALLATION
PORTOLA VALLEY
PS SITE No. CA-123584

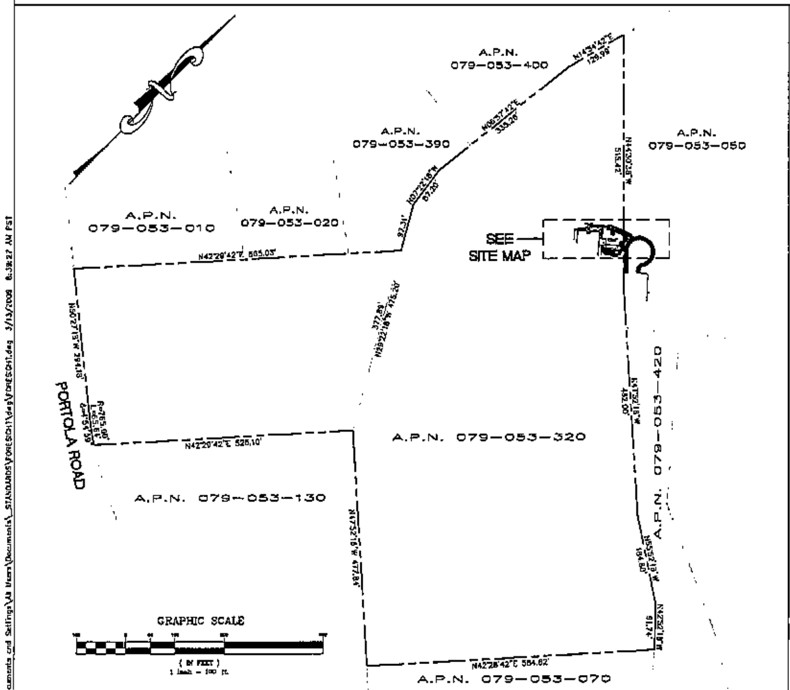
verizonwireless

DRAWN: MRB DATE: 11/14/12
FILE: 4072-T1
SHEET NO.
T-1

SITE MAP



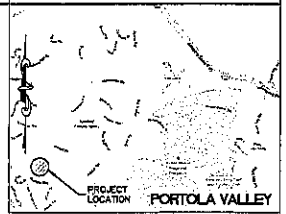
OVERALL SITE MAP



BOUNDARY SHOWN IS BASED ON RECORD INFORMATION AND FOUND MONUMENTATION.
THIS IS NOT A BOUNDARY SURVEY. PROPERTY LINES SHOWN ARE APPROXIMATE.

VICINITY MAP

NOT TO SCALE



GENERAL NOTES

PROPERTY INFORMATION

OWNER: BENEDICTINE FATHERS OF THE PRIORY, INC.
ADDRESS: 302 PORTOLA ROAD
PORTOLA VALLEY, CA

SITE: PORTOLA VALLEY
302 PORTOLA ROAD
PORTOLA VALLEY, CA

ASSESSOR'S PARCEL NUMBER: 079-053-320
EXISTING GROUND ELEVATION: ELEV=590'±AMSL

LESSOR'S LEGAL DESCRIPTION

LEGAL DESCRIPTION IS FOUND IN NORTH AMERICAN TITLE COMPANY TITLE REPORT FILE NUMBER 56901-994734-10, DATED MARCH 3, 2010.

THE LAND REFERRED TO IN SAID REPORT IS SITUATED IN THE CITY OF PORTOLA VALLEY, COUNTY OF SAN MATEO, STATE OF CALIFORNIA.

TITLE REPORT

TITLE REPORT WAS AVAILABLE AT THE TIME OF FIELD SURVEY. TITLE REPORT PROVIDED BY NORTH AMERICAN TITLE COMPANY, PRELIMINARY TITLE REPORT FILE NUMBER 56901-994734-10, DATED MARCH 3, 2010.

BASIS OF BEARING

BEARINGS SHOWED HEREON ARE BASED UPON U.S. STATE PLANE NAD83 COORDINATE SYSTEM STATE PLANE COORDINATE ZONE 3, DETERMINED BY GPS OBSERVATIONS.

BENCHMARK

ELEVATION ESTABLISHED FROM GPS DERIVED ORTHOMETRIC HEIGHTS. (NAVD88)

SURVEY DATE

04/21/2010

SURVEYOR'S NOTES

ALL EASEMENTS CONTAINED WITHIN SAID TITLE REPORT AFFECTING THE IMMEDIATE AREA SURROUNDING THE LEASE HAVE BEEN PLOTTED. SURVEYOR HAS NOT PERFORMED A SEARCH OF PUBLIC RECORDS TO DETERMINE ANY DEFECT IN TITLE ISSUED. THE BOUNDARY SHOWN HEREON IS PLOTTED FROM RECORD INFORMATION AND DOES NOT CONSTITUTE A BOUNDARY SURVEY OF THE PROPERTY.

UTILITY NOTES

SURVEYOR DOES NOT GUARANTEE THAT ALL UTILITIES ARE SHOWN OR THEIR LOCATIONS ARE ACCURATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND DEVELOPER TO CONTACT U.S.A. AND ANY OTHER INVOLVED AGENCIES TO LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION. REMOVAL, RELOCATION AND/ OR REPLACEMENT IS THE RESPONSIBILITY OF THE CONTRACTOR.

Foresight
Land Surveying & Civil Engineering
Jim Schuricht
ph 925-389-8180
email: foresight@comcast.net

REVISIONS

NO.	DATE	DESCRIPTION
1	05/09/10	ISSUE FOR REVIEW
2	06/13/10	ADDED LAT/LONG

verizon wireless

VERIZON WIRELESS
2785 MITCHELL DRIVE, BLDG 9
WALNUT CREEK, CA. 94598

PSL#123584
PORTOLA VALLEY
302 PORTOLA ROAD
PORTOLA VALLEY, CA

DRAWN:	DATE: 06/13/10
JOB NO.	1006 PORT
SHEET NO.	C-1

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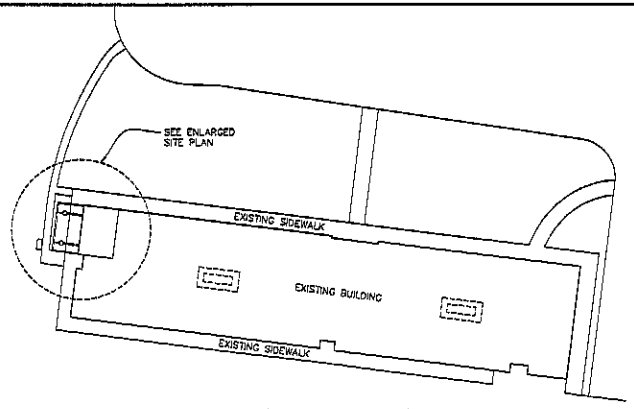
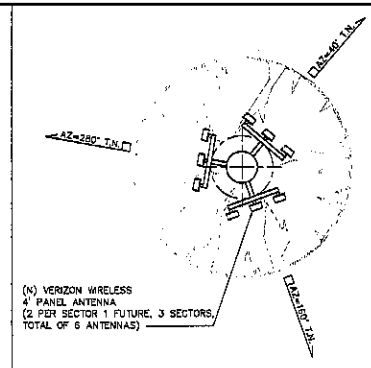


OVERALL SITE PLAN (EXISTING CONDITIONS)
SCALE: 1"=20'-0"



ANTENNA PLAN
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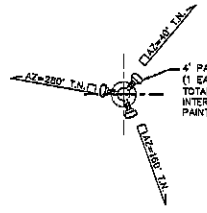

ANTENNA PLAN—INTERIM CONFIG
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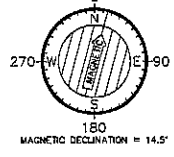
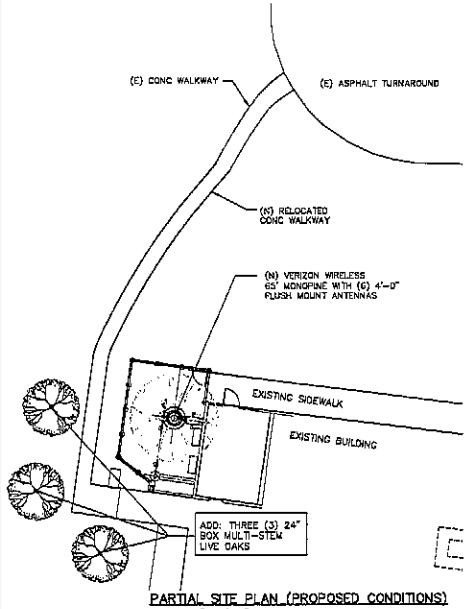


MAGNETIC DECLINATION = 14.5°

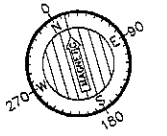
0 1' 4' 8' 12'
SCALE: 1/4"=1'-0"

L.D. STROBEL CO. INC.
DESIGN / CONSTRUCTION
WIRELESS COMMUNICATIONS
3022 SHARY CIRCLE, SUITE 9, CONCORD, CA. 94518
PHONE: 925-825-3241 FAX: 925-825-3350

REVISIONS		
NO.	DATE	DESCRIPTION
1	5/29/09	90% ZD/CD
2	09/02/09	90% ZD/CD Rev A
3	05/12/10	90% ZD/CD Rev B
4	08/18/10	95% ZD/CD
5	06/29/12	95% ZD/CD Rev A
6	7/11/12	100% ZD/CD
7	11/15/12	100% ZD/CD Rev A

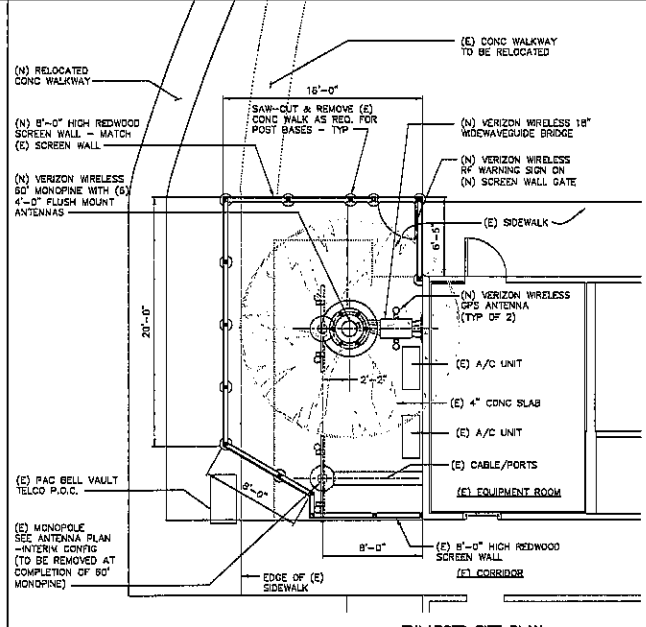


PARTIAL SITE PLAN (PROPOSED CONDITIONS)
SCALE: 1"=10'-0"

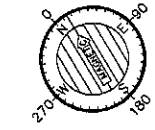


MAGNETIC DECLINATION = 14.5°

0 5' 10' 20' 40' 80'
SCALE: 1"=20'-0"



ENLARGED SITE PLAN
SCALE: 1/4"=1'-0"



MAGNETIC DECLINATION = 14.5°

0 1' 4' 8' 12'
SCALE: 1/4"=1'-0"

SITE ADDRESS:
3000 ALPINE ROAD
PORTOLA VALLEY, CA 94025
SAN MATEO COUNTY

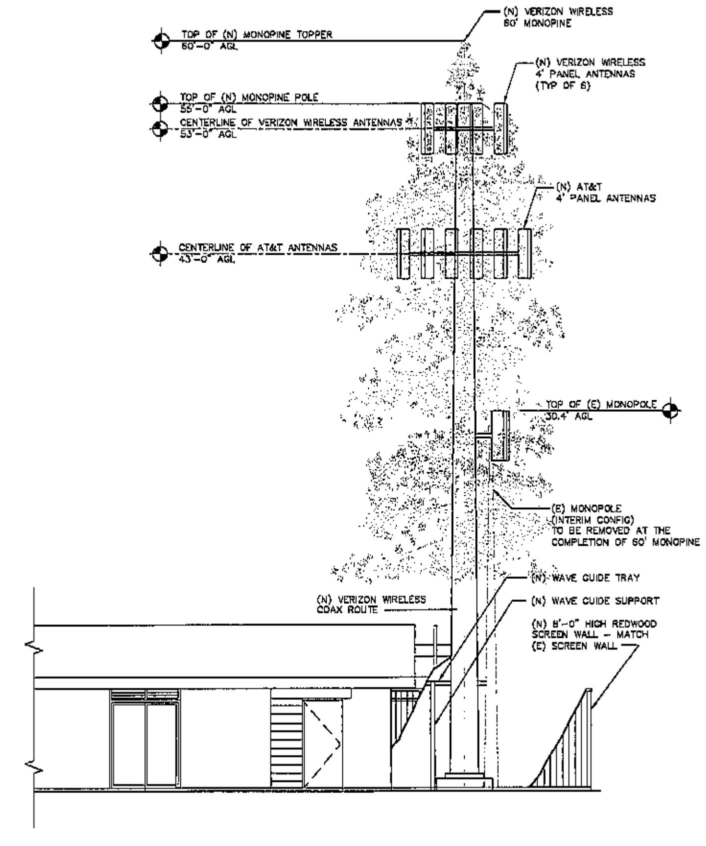
VERIZON WIRELESS
2785 MITCHELL DRIVE, SUITE 9
WALNUT CREEK, CA 94598

PROPOSED EQUIPMENT INSTALLATION
PORTOLA VALLEY
PS SITE No. CA-123584

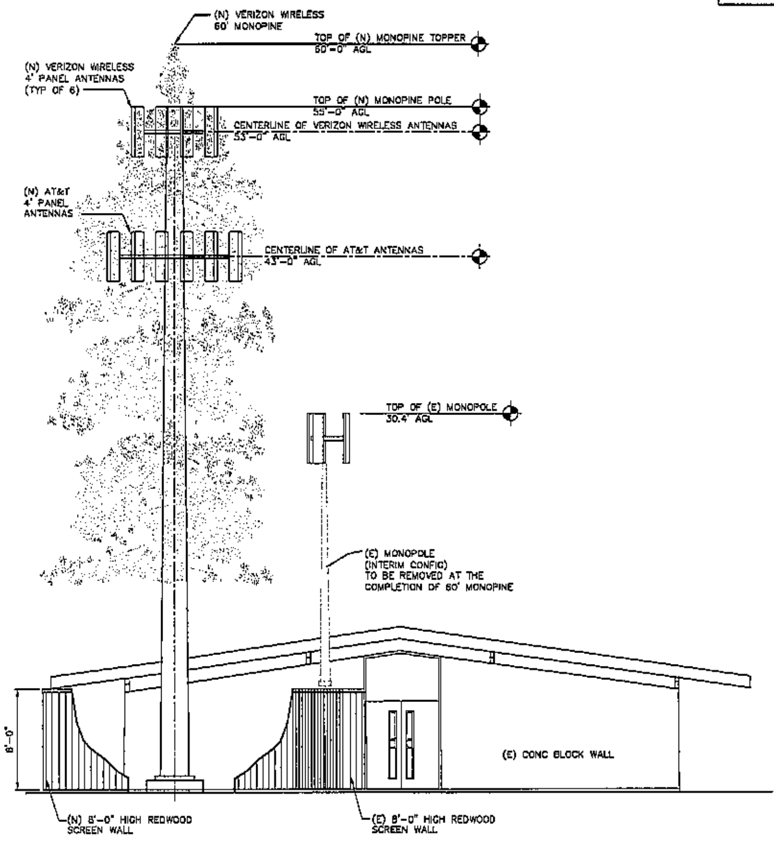
verizonwireless

DRAWN: MRB | DATE: 11/14/12
FILE: 4072-A1
SHEET NO.

A-1



SOUTH ELEVATION
SCALE: 1/4"=1'-0"



EAST ELEVATION
SCALE: 1/4"=1'-0"

SCALE: 1/4"=1'-0"

L.D. STROBEL CO. INC.
DESIGN / CONSTRUCTION
WIRELESS COMMUNICATIONS
1022 SHARY CIRCLE, SUITE 9, CONCORD, CA. 94518
PHONE: 925-686-3241 FAX: 925-686-3350

REVISIONS

NO.	DATE	DESCRIPTION
1	5/29/09	90% ZD/CD
2	09/02/09	90% ZD/CD Rev A
3	05/12/10	90% ZD/CD Rev B
4	08/18/10	95% ZD/CD
5	06/29/12	95% ZD/CD Rev A
6	7/11/12	100% ZD/CD
7	11/15/12	100% ZD/CD Rev A

SITE ADDRESS:
302 PORTOLA ROAD
PORTOLA VALLEY, CA 94028
SAN MATEO COUNTY

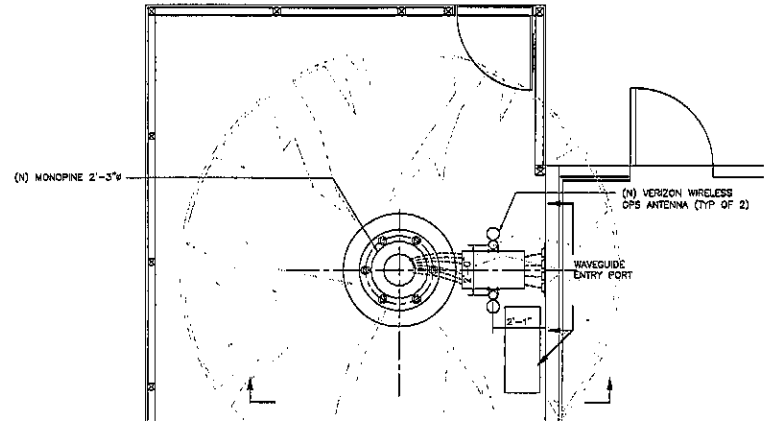
VERIZON WIRELESS
2785 MITCHELL DRIVE SUITE 9
WALNUT CREEK, CA 94598

PROPOSED EQUIPMENT INSTALLATION
PORTOLA VALLEY
PS SITE No. CA-123584

verizonwireless

DRAWN: MRB DATE: 11/14/12
FILE: 4072-A2
SHEET NO.

A-2



PLAN DETAIL–WAVEGUIDE BRIDGE
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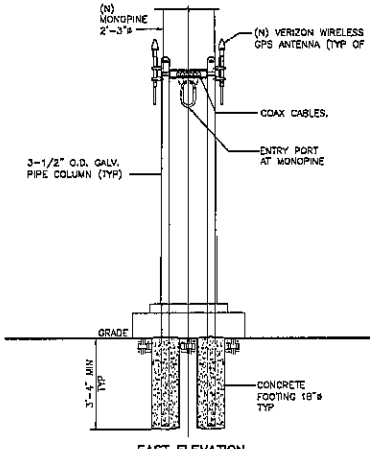
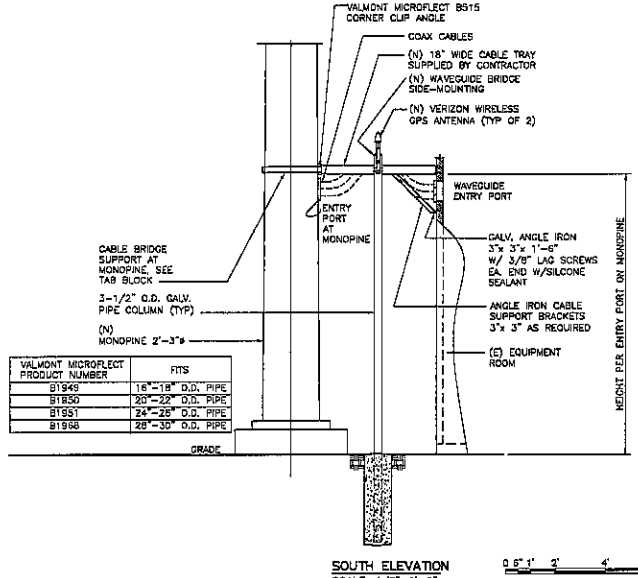


EAST ELEVATION
SCALE: 1/2"=1'-0"



VALMONT MICROFLECT PRODUCT NUMBER	FITS
B1949	16"-18" O.D. PIPE
B1950	20"-22" O.D. PIPE
B1951	24"-26" O.D. PIPE
B1968	28"-30" O.D. PIPE

SOUTH ELEVATION
SCALE: 1/2"=1'-0"

0 6" 1' 2' 4' 6'
SCALE: 1/2"=1'-0"

L.D. STROBEL CO. INC.
DESIGN / CONSTRUCTION
DIRECTED COMMUNICATIONS
1022 SHARY CIRCLE, SUITE 9, CONCORD, CA 94518
PHONE: 925-686-3241 FAX: 925-685-3350

REVISIONS

NO.	DATE	DESCRIPTION
1	5/29/09	90% ZD/CD
2	09/02/09	90% ZD/CD Rev A
3	05/12/10	90% ZD/CD Rev B
4	06/18/10	95% ZD/CD
5	08/29/12	95% ZD/CD Rev A
6	7/11/12	100% ZD/CD
7	11/15/12	100% ZD/CD Rev A

SITE ADDRESS:
302 PORTOLA ROAD
PORTOLA VALLEY, CA 94028
SAN MATEO COUNTY

VERIZON WIRELESS
2785 MITCHELL DRIVE SUITE 9
WALNUT CREEK, CA 94598

PROPOSED EQUIPMENT INSTALLATION
PORTOLA VALLEY
PS SITE No. CA-123584

verizonwireless

DRAWN: MRB | DATE: 03/31/10
FILE: 4072-A3
SHEET NO.

A-3

GENERAL NOTES:

1. ALL STEEL SHALL MEET THE REQUIREMENTS OF THE "STANDARD SPECIFICATIONS FOR STRUCTURAL STEEL" ASTM A36, UNLESS OTHERWISE NOTED ON THE STRUCTURAL PLANS OR BELOW.

2. ALL ROUND STEEL PIPE SHALL MEET THE REQUIREMENTS OF ASTM A53 TYPE E OR S GRADE B (35 KSI YIELD POINT MATERIAL) OR ASTM A501 (36 KSI YIELD POINT MATERIAL).

3. ALL TUBE STEEL (SQUARE OR RECTANGULAR) SHALL MEET THE REQUIREMENTS OF ASTM A500 GRADE B (46 KSI YIELD POINT MATERIAL).

4. ALL POLYGON FORMED STEEL SHAFTS SHALL MEET THE REQUIREMENTS OF ASTM A572 GR. 65 (Fy= 65 ksi).

5. ALL WELDED CONNECTIONS SHALL CONFORM TO THE LATEST VERSION OF THE AMERICAN WELDING SOCIETY AWS D1.1 CODE. ALL WELD ELECTRODES OR WIRE SHALL AT A MINIMUM CONFORM TO AWS E81T1-NI1CJ H8 ELECTRODES (80 KSI YIELD).

6. ALL EXPOSED STEEL SHAPES AND PLATES SHALL BE HOT-DIPPED GALVANIZED ACCORDING TO ASTM A123. ALL EXPOSED STEEL NUTS AND BOLTS AND ASSOCIATED HARDWARE SHALL BE HOT-DIPPED ACCORDING TO ASTM A153.

7. WIND TESTING OF ARTIFICIAL TREE BRANCHES HAS BEEN COMPLETED BY THE SUPPLIER OF THE BRANCHES, CELL TREES, INC.. CELL TREES, INC. HAS VERIFIED THE STRENGTH OF THE BRANCHES THROUGH FULL SCALE WIND TESTING. THE WIND AREA USED IN THE CALCULATIONS IS BASED ON THE WIND TEST DATA. THE CALCULATIONS ACCOUNT FOR BRANCHES ATTACHED TO THE MONOPOLE SHAFT AS SHOWN ON THESE DRAWINGS. DAVINCI ENGINEERING, INC. HAS REVIEWED AND APPROVED THE WIND TEST METHODS.

8. THE MAIN MONOPOLE STRUCTURE SHALL BE FABRICATED BY TRANSAMERICAN POWER PRODUCTS. TAPP IS A CERTIFIED FABRICATOR OF CONVENTIONAL STEEL STRUCTURES. ADDITIONAL FABRICATOR LICENSE INCLUDE: CITY OF LOS ANGELES # TYPE.

9. SPECIAL INSPECTION SHALL BE PERFORMED ACCORDING TO SECTION 1704 OF THE CBC 2010. REFER TO TABLE 'SUMMARY OF SPECIAL INSPECTION' ON SHEET MP-2.

10. IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO NOTIFY THE SPECIAL INSPECTOR OR INSPECTION AGENCY (OR THE INSPECTING GEOTECHNICAL ENGINEER) AT LEAST ONE WORKING DAY PRIOR TO PERFORMING ANY WORK THAT REQUIRES SPECIAL INSPECTION PER THE CBC 2010. ANY WORK THAT REQUIRES SPECIAL INSPECTION THAT IS INSTALLED OR COVERED WITHOUT THE APPROVAL OF THE SPECIAL INSPECTOR IS SUBJECT TO REMOVAL.

11. THE LIST OF SPECIAL INSPECTIONS IS IN ADDITION TO INSPECTIONS REQUIRED BY SECTION 108.4.4 OF THE CBC 2010. SPECIAL INSPECTION IS NOT A SUBSTITUTION FOR INSPECTION BY A CITY INSPECTOR.

12. THE SPECIAL INSPECTOR SHALL BE APPROVED BY THE LOCAL JURISDICTION TO PERFORM THE TYPES OF INSPECTION REQUIRED.

13. CONTINUOUS INSPECTION IS ALWAYS REQUIRED DURING THE PERFORMANCE OF THE WORK UNLESS OTHERWISE SPECIFIED.

14. ANY SUPPORT SERVICE PERFORMED BY THE ENGINEER OF RECORD DURING CONSTRUCTION SHALL BE DISTINGUISHED FROM CONTINUOUS AND DETAILED INSPECTION SERVICES, WHICH ARE FURNISHED BY OTHERS. THESE SUPPORT SERVICES PERFORMED BY THE ENGINEER OF RECORD ARE ONLY FOR THE PURPOSE OF ASSISTING IN THE QUALITY CONTROL AND IN ACHIEVING CONFORMANCE WITH THE CONTRACT DOCUMENTS. THIS SUPPORT DOES NOT GUARANTEE THE CONTRACTOR'S PERFORMANCE AND SHALL NOT BE CONSTRUED AS SUPERVISION OF CONSTRUCTION.

ERECTION NOTES:

1. ALL ANTENNA COAXIAL CABLES SHALL BE RUN INSIDE THE MONOPOLE SHAFT.

2. THE CONTRACTOR SHALL INSTALL THE ANTENNA AND MOUNT AS REQUIRED BY THE OWNER.

3. ALL ANCHOR BOLT NUTS SHALL BE TIGHTENED TO AISC SNUG TIGHT REQUIREMENTS. THE SNUG TIGHT CONDITION IS DEFINED AS THE TIGHTNESS THAT EXIST WHEN ALL PLIES IN A JOINT ARE IN FIRM CONTACT. THIS MAY BE ATTAINED BY A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF A MAN USING AN ORDINARY SPUD WRENCH.

4. ALL GALVANIZED SURFACES THAT ARE DAMAGED BY ABRASIONS, CUTS, DRILLING OR FIELD WELDING DURING SHIPPING OR ERECTION SHALL BE TOUCHED UP WITH TWO COATS OF A COLD GALVANIZING COMPOUND MEETING THE REQUIREMENTS OF ASTM A780.

5. THE ANCHOR BOLT TEMPLATES AND BASE PLATE WILL TYPICALLY HAVE AN AZIMUTH WELDED OR A NOTCH INDICATING THE CORRECT ORIENTATION OF THE ANCHOR BOLTS. THIS IS NECESSARY TO PROPERLY ORIENT THE MONOPOLE EXIT PORTS

6. ALL SLIP SPLICES SHALL BE JACKED TO WITHIN THE SLIP SPLICE DESIGN CRITERIA AS SHOWN ON THESE DRAWINGS. IF THE DESIGN SPLICE CANNOT BE ATTAINED DAVINCI ENGINEERING SHALL BE CONTACTED TO ADVISE.

FOUNDATION NOTES:

1. THE GEOTECHNICAL ENGINEER (OR THE APPROPRIATE INSPECTOR) SHALL INSPECT THE EXCAVATION PRIOR TO PLACING REINFORCING STEEL OR FORMS. THE GEOTECHNICAL ENGINEER (OR INSPECTOR) SHALL PROVIDE A NOTICE OF INSPECTION FOR THE BUILDING INSPECTOR FOR REVIEW AND RECORDS PURPOSE.

2. THE CONTRACTOR SHALL DETERMINE THE MEANS AND METHODS TO SUPPORT THE EXCAVATION DURING CONSTRUCTION. REFER TO THE GEOTECHNICAL REPORT FOR RECOMMENDATIONS.

3. THE CONTRACTOR SHALL READ THE GEOTECHNICAL REPORT AND SHALL CONSULT THE GEOTECHNICAL ENGINEER AS NECESSARY PRIOR TO CONSTRUCTION.

4. FOUNDATION DESIGN IS BASED ON SITE SPECIFIC GEOTECHNICAL REPORT AS PROVIDED BY: BROWN & MILLS, INC.; REPORT # 13-091; DATED SEPTEMBER 4, 2013.

5. ALL FOUNDATION CONCRETE SHALL USE TYPE II CEMENT AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI WITHIN 28 DAYS OF PLACEMENT. PROPORTIONING OF THE CONCRETE MIX SHALL BE DESIGNED BY AN APPROVED LABORATORY. COPIES OF EACH MIX SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND COMMENTS PRIOR TO PLACING ANY CONCRETE. CONCRETE SHALL HAVE A MAXIMUM WATER/CEMENT RATIO OF 0.48 AND SHALL BE AIR ENTRAINED 4.5% (±1.5%). ALL CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 318, "THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", LATEST EDITION. CEMENT SHALL BE LOW ALKALI, CONFORMING TO ASTM C-150. ALL AGGREGATE USED IN THE CONCRETE SHALL CONFORM TO ASTM C-33. USE ONLY AGGREGATES KNOWN NOT TO CAUSE EXCESSIVE SHRINKAGE. MAXIMUM AGGREGATE SIZE TO BE 1 1/2 INCH."

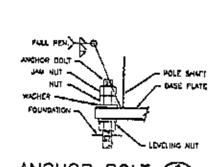
6. CAISSON FOUNDATION INSTALLATION SHALL BE IN ACCORDANCE WITH ACI 336, "STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF DRILLED PIERS", LATEST EDITION. CONCRETE CYLINDERS SHALL BE MADE AND TESTED. A MINIMUM OF ONE (1) SET SHALL BE TAKEN FROM CONCRETE IN FOUNDATION. EACH SET SHALL CONSIST OF THREE (3) CYLINDERS. ONE SHALL BE TESTED AT SEVEN (7) DAYS, THE SECOND SHALL BE TESTED AT TWENTY EIGHT (28) DAYS AND THE LAST CYLINDER SHALL BE A HOLD. ALL CYLINDERS SHALL BE TAKEN, PREPARED AND TESTED BY A TESTING LAB IN ACCORDANCE WITH ASTM STANDARDS C172, C31 AND C39.

7. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615. PRIMARY REINFORCING BARS SHALL BE GRADE 60, AND TIES OR STIRRUPS SHALL BE A MINIMUM OF GRADE 40. THE PLACEMENT OF ALL REINFORCEMENT SHALL CONFORM TO ACI 315, "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", LATEST EDITION, UNLESS OTHERWISE DETAILED ON THIS SHEET.

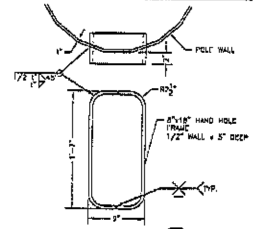
8. ESTIMATED CONCRETE VOLUME = 15 CUBIC YARDS.

9. THE FOUNDATION HAS BEEN DESIGNED TO RESIST THE FOLLOWING FACTORED LOADS: MOMENT: 815 FT-KIPS; SHEAR: 23 KIPS; AXIAL: 18 KIPS

Additional Notes:

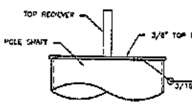


ANCHOR BOLT (1/MP-1)

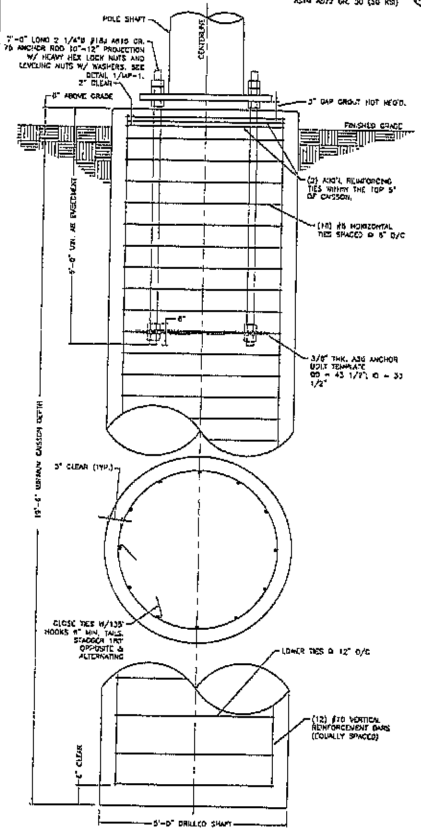


HAND HOLE (6/MP-1)

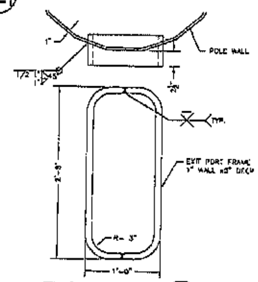
ASTM A572 GR. 50 (50 KSI)



TOP PLATE (5/MP-1)



CAISSON FOUNDATION (B/MP-1)



EXIT PORT (3/MP-1)

ASTM A572 GR. 65 (65 KSI)

COAX PORT HOLE SCHEDULE				
ELEVATION (AGL)	PORT SIZE	QTY	AZIMUTH (DEG.)	REFERENCE DETAIL
51'-0"	6"x18"	3	40,160,280	6\MP-1
41'-0"	6"x18"	3	0,120,240	6\MP-1
2'-0"	12"x30"	2	90,270	3\MP-1

DESIGN SPECIFICATIONS			
DESIGNED ACCORDING TO: ANSI/TIA-222-G-2			
COMPLIES WITH: 2010 CALIFORNIA BUILDING CODE			
EARTHQUAKE DESIGN DATA			
(PER THE EQUIVALENT LATERAL FORCE PROCEDURE; SECTION 1613)			
IMPORTANCE FACTOR (I): 1		OCCUPANCY CATEGORY: Group I	
Ss: 1.549	S1: 1.272	Sa: 2.519	S1: 1.272
SEISMIC DESIGN CATEGORY: D; SITE CLASS D			
DESIGN BASE SHEAR = 25K (WIND)			
SEISMIC RESPONSE COEFFICIENT (Cs): 1.03			
RESPONSE MODIFICATION FACTOR (R): 1.50			
Wind Speed Load Cases: (According to the ANSI/TIA-222-G-2)			
STRUCTURE CLASS	EXPOSURE CATEGORY	TOPOGRAPHIC CATEGORY	CREST HEIGHT
I	C	1	0m
LOAD CASE 1: 90 MPH DESIGN WIND SPEED			
LOAD CASE 2: 60 MPH OPERATIONAL WIND SPEED			
POLE STEEL SPECIFICATIONS			
POLE SHAFT SHAPE: 18-SIDED TAPERED POLYGON			
POLE SHAFT TAPER: 0.18804 inches/ft.			
POLE SHAFT STEEL: ASTM A572 GR. 65 (Fy= 65 ksi)			
BASE PLATE STEEL: ASTM A572 GR. 60 (Fy= 60 ksi)			
ANCHOR RODS: 2 1/4"Ø #18J A615 GR. 75 x 7 FT LONG			

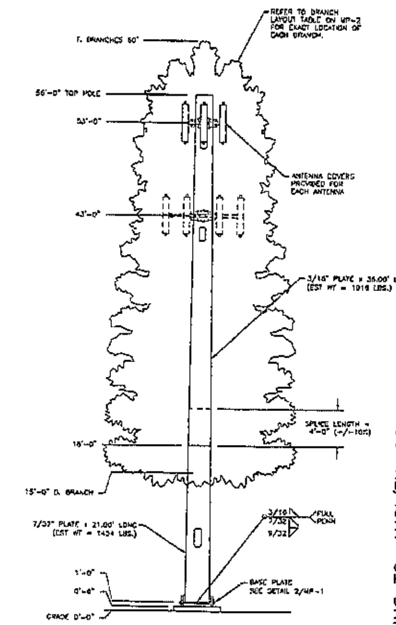
MONOPOLE BASE REACTIONS: (Minimum Factored Reactions)		
MOMENT:	811	ft-kips
SHEAR:	21.4	kips
AXIAL:	13.5	kips

POLE SHAFT SECTION DIMENSIONS					
	SECTION LENGTH (ft)	WALL THK. (inches)	SPLICE LENGTH (ft)	TOP DIA. (inches)	BOT. DIA. (inches)
Top	39.00	0.1875	4.00	21.500	28.800
	21.00	0.2188	0.00	27.539	31.300

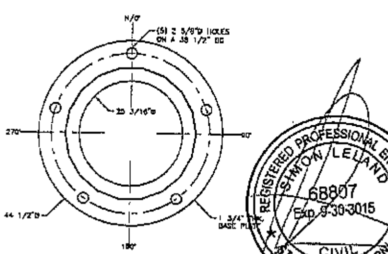
MONOPOLE TWIST & SWAY CRITERIA				
	90 MPH WIND SPEED		60 MPH WIND SPEED	
ELEVATION	DEFLECTION	ROTATION	DEFLECTION	ROTATION
50 ft	18.0"	7.47°	4.7"	0.00°

APPURTENANCE LIST	
Elev. (ft)	Equipment Description
TOP	LIGHTNING ROD (OPTIONAL)
53.0	(9) DDXXHH-6565A-VTM PANEL ANTENNA
53.0	STD. 4-FT T-ARM MOUNT
43.0	(12) 72"x12"x7" PANEL W/ (6) RRUs (FUTURE)
43.0	STD. 4-FT T-ARM MOUNT (FUTURE)

NOTES: ARTIFICIAL TREE BARK ON POLE SHAFT TO 20-FT AGL
ANTENNA COAX CABLES ROUTED INSIDE POLE SHAFT



POLE ELEVATION (A/MP-1)



BASE PLATE (2/MP-1)

DESIGNED ACCORDING TO: ANSI/TIA-222-G-2
MEETS THE REQUIREMENTS OF: CBC 2010

REGISTERED PROFESSIONAL ENGINEER
SIMON LELAND
68807
Exp. 9-30-3015
CIVIL
STATE OF CALIFORNIA
11/8/13

Project Description: 60-FT PINE TREE MONOPOLE	Site Name: PORTOLA VALLEY 37° 22' 37.86", -122° 12' 47.09"
Project Number: 1513225-269	Site Location: PORTOLA VALLEY, CA 302 PORTOLA ROAD
CELL TREES, INC. 13-158	Designed By: BRW; Drawn By: BRW
Owner: VERIZON WIRELESS	Date: 10/30/2013
	Scale: NTS/_AS_NOTED

Revision: | Description:

APPROVED FOR FABRICATION

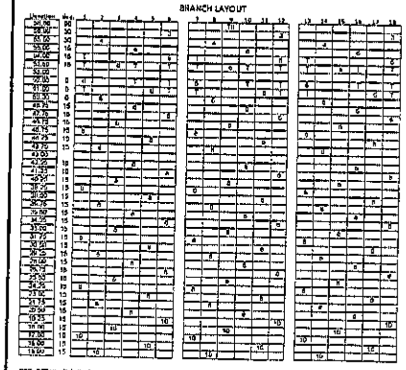
By: ______ Date: ______

Cell Trees
5401 S. CANADA PLACE
TUCSON, AZ 85706
(520) 669-1330

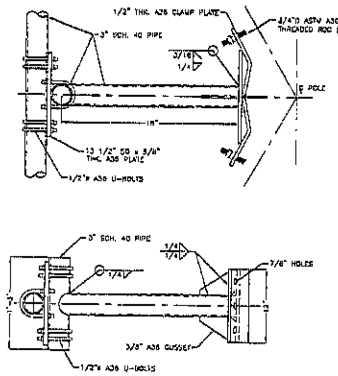
DaVinci Engineering, Inc.
P.O. BOX 1966
SANTA MARIA, CA 93456
(805) 922-3221

Sheet No.
MP-1

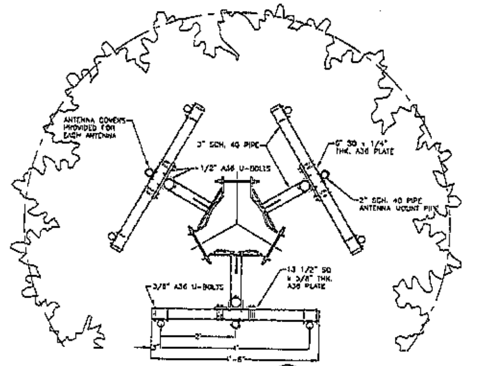
BRANCH LAYOUT



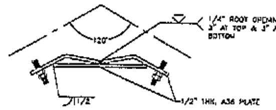
SEE DETAIL 7/MP-2 FOR FLAT NUMBERING
TOTAL BRANCH COUNT =115 & 24 TIPS
AVG. 2.8 BRANCHES/FT
ANTENNA SOCK PROVIDED FOR EACH ANTENNA
TB = TOP BRANCH
T=ANTENNA TIPS
3=3 FT BRANCH
4=4 FT BRANCH
6=6 FT BRANCH
8=8 FT BRANCH
10=10 FT BRANCH

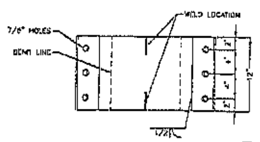


T-ARM ASSEMBLY DETAIL (1/MP-2)

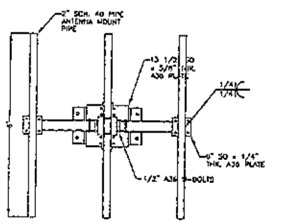


PLAN VIEW (A/MP-2)
4'-0" CLAMP-ON T-ARMS

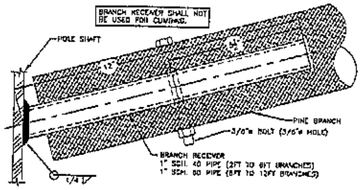




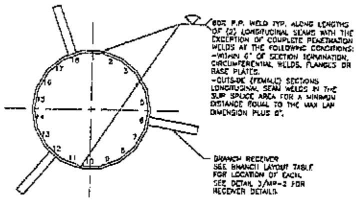
CLAMP PLATE DETAIL (2/MP-2)



ELEVATION VIEW (B/MP-2)
4'-0" CLAMP-ON T-ARMS



BRANCH RECEIVER (3/MP-2)



FLAT NUMBERING (7/MP-2)

Additional Notes:

SUMMARY OF SPECIAL INSPECTION		
NO.	DESCRIPTION OF TYPE OF INSPECTION REQ'D, LOCATION, REMARKS, ECT.	DESIGN STRENGTH
1.	FOUNDATION CONSTRUCTION:	
A.	GEOTECHNICAL ENGINEER OF RECORD MAY SERVE AS THE SPECIAL INSPECTOR FOR THE FOUNDATION CONSTRUCTION.	PER CBC 2010
B.	SHALL VERIFY THE DIAMETER, DEPTH, AND QUALITY OF THE EXCAVATION PRIOR TO THE CONCRETE PLACEMENT	INSPECT AND REPORT
C.	SHALL VERIFY THAT THE ON SITE SOILS ARE AS DETERMINED IN THE SOIL REPORT.	INSPECT AND REPORT
2.	CAST IN PLACE CONCRETE (FOUNDATION):	
A.	REINFORCING CAGE SHALL BE INSPECTED TO ENSURE THAT THE PROPER GEOMETRY, SIZE, LENGTH, QUANTITY AND GRADE MATERIAL ARE USED.	60 KSI (40 KSI TIES)
B.	ALL CONCRETE SHALL BE AS SPECIFIED BY ACI-318, LATEST EDITION, TO ENSURE THE COMPRESSIVE STRENGTH IS ATTAINED AS DESCRIBED IN THE FOUNDATION NOTES.	4000 PSI @ 28 DAYS
C.	CONTINUOUS INSPECTION IS REQ'D DURING THE CONCRETE PLACEMENT	INSPECT AND REPORT
3.	ANCHOR BOLTS INSTALLED IN CONCRETE:	
A.	PLACEMENT SHALL BE ORIENTED ON PROPER BOLT CIRCLE AS SHOWN ON THE STRUCTURAL PLANS, WITH TOP AND BOT. TEMPLATES INSTALLED.	INSPECT AND REPORT
B.	SHALL BE PLUMB	INSPECT AND REPORT
C.	SHALL HAVE A MINIMUM EMBEDMENT OF 8-FT INTO FOUNDATION (12-14 MAXIMUM PROJECTION)	INSPECT AND REPORT
D.	SHALL BE TIGHTENED TO A SNUG TIGHT CONDITION PER AISC STEEL MANUAL OF STEEL CONSTRUCTION.	INSPECT AND REPORT
4.	HIGH STRENGTH BOLTING:	
A.	ALL A325 BOLTS SHALL BE TIGHTENED ACCORDING TO THE TURN OF THE NUT METHOD AS PER ASTM A325 AND AISC TABLE 8.2.	ONLY A325 BOLTS (NOT USED THIS DESIGN)
5.	FIELD WELDING:	
A.	NO FIELD WELDING SHALL BE PERMITTED.	NOT PERMITTED
6.	SHOP WELDING:	
A.	ALL SHOP WELDING OF STRUCTURAL STEEL SHALL BE PERFORMED BY AN APPROVED FABRICATOR'S SHOP PER CBC 2010 SECTION 1704	PROVIDE CERTS.
B.	ALL WELDED CONNECTIONS SHALL CONFORM TO THE LATEST VERSION OF THE AMERICAN WELDING SOCIETY A.W.S. D1.1	INSPECT AND REPORT
C.	WELD ELECTRODES SHALL CONFORM TO E70 ELECTRODES OR WIRE.	E-70XX
D.	CONTINUOUS INSPECTION OF SHOP WELDING IS NOT REQUIRED. VISUAL INSPECTION SHALL BE PERFORMED BEFORE AND AFTER GALVANIZING.	VISUAL INSPECTION PER EOR
E.	IF A WELD IS IN QUESTION PER THE VISUAL INSPECTION THEN IT SHALL BE TESTED USING AN APPROPRIATE TEST, EX. DIE PENETRATION, OR MAGNETIC PARTICLE, U.T. ECT	INSPECT AND REPORT

MOUNT NOTES:
1. ALL STEEL SHALL MEET THE REQUIREMENTS OF THE "STANDARD SPECIFICATIONS FOR STRUCTURAL STEEL" ASTM A36, UNLESS OTHERWISE NOTED ON THE STRUCTURAL PLANS OR BELOW.
2. ALL ROUND STEEL PIPE SHALL MEET THE REQUIREMENTS OF ASTM A53 TYPE E OR S GRADE B (35 KSI YIELD POINT MATERIAL) OR ASTM A501 (36 KSI YIELD POINT MATERIAL).
3. ALL TUBE STEEL (SQUARE OR RECTANGULAR) SHALL MEET THE REQUIREMENTS OF ASTM A500 GRADE B (46 KSI YIELD POINT MATERIAL).
4. ALL WELDED CONNECTIONS SHALL CONFORM TO THE LATEST VERSION OF THE AMERICAN WELDING SOCIETY AWS D1.1 CODE. ALL WELD ELECTRODES OR WIRE SHALL AT A MINIMUM CONFORM TO AWS E60 ELECTRODES (60 KSI YIELD).
5. ALL STEEL SHAPES AND PLATES SHALL BE HOT-DIPPED GALVANIZED ACCORDING TO ASTM A123. ALL STEEL NUTS AND BOLTS AND ASSOCIATED HARDWARE SHALL BE HOT-DIPPED ACCORDING TO ASTM A153.
6. THE ANTENNA MOUNT SHALL BE FABRICATED BY CELL TREES, INC. OR AN APPROVED FABRICATOR OF CONVENTIONAL STEEL STRUCTURES
7. THIS ANTENNA MOUNT HAS BEEN DESIGNED FOR (1) ANTENNA PER MOUNT PIPE WITH A MAXIMUM LOAD OF 450 (PER SECTON) LBS AND A WEIGHT OF 60 LBS PER ANTENNA
8. EST. WEIGHT OF STD. 4-FT MOUNT (3 SECTORS) WITH STANDARD 8-FT MOUNT PIPES IS APPROXIMATELY 600 LBS

ERECTION NOTES:
1. THE CONTRACTOR SHALL INSTALL THE ANTENNA AND MOUNT AS REQUIRED BY THE OWNER
2. ALL A36 THREADED ROD AND U-BOLTS SHALL BE TIGHTENED TO AISC SNUG TIGHT REQUIREMENTS. THE SNUG TIGHT CONDITION IS DEFINED AS THE TIGHTNESS THAT EXISTS WHEN ALL PLIES IN A JOINT ARE IN FIRM CONTACT. THIS MAY BE ATTAINED BY A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF A MAN USING AN ORDINARY SPUD WRENCH. A36 NUTS AND BOLTS TIGHTENING DO NOT REQUIRE SPECIAL INSPECTION.
3. ANY GALVANIZED SURFACES THAT ARE DAMAGED BY ABRASIONS, CUTS, DRILLING, OR FIELD WELDING DURING SHIPPING OR ERECTION SHALL BE TOUCHED UP WITH TWO COATS OF A COLD GALVANIZING COMPOUND MEETING THE REQUIREMENTS OF ASTM A780.
4. ANTENNA MOUNT SHALL NOT BE USED AS A CLIMBING DEVICE. WORKERS SHALL ALWAYS TIE OFF TO A SPECIFIED CLIMBING POINT.

REGISTERED PROFESSIONAL ENGINEER
SIMON LELAND
68807
Exp. 9-30-3015
CIVIL
STATE OF CALIFORNIA
11/18/13

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Cell Trees
5401 S. CANADA PLACE
TUCSON, AZ 85706
(520) 663-1330

Revision: | Description:
APPROVED FOR FABRICATION
By: | Date:

Site Name: PORTOLA VALLEY
37° 22' 37.85", -122° 12' 47.09"
Site Location: PORTOLA VALLEY, CA
302 PORTOLA ROAD
Designed By: BJW | Drawn By: SAW
Date: 10/30/2013
Scale: NTS/_AS_NOTED

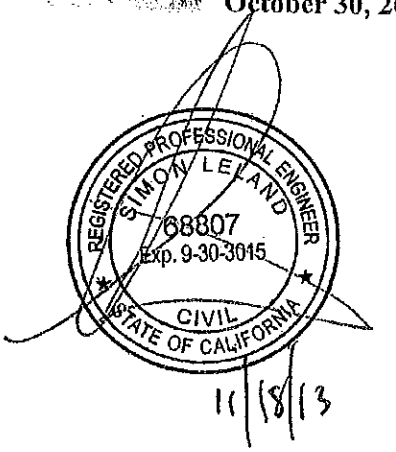
Project Description: 60-FT PINE TREE MONOPOLE
Project Number: 1513225-269
CELL TREES, INC. 13-158
Owner: VERIZON WIRELESS

Sheet No.
MP-2

Structural Calculations
60-Ft. Pine Tree Monopole

For Verizon Wireless
Site Location: 302 Portola Road Portola Valley, CA
Site Name: Portola Valley: 37° 22' 37.86", -122° 12' 47.09"
Designed According to: ANSI/TIA-222-G-2
Meets the Requirements of: 2010 California Building Code

Calculations Prepared by:
DaVinci Engineering, Inc.
Job # 1513225-269
October 30, 2013



Cell Trees Inc.

Cell Trees, Inc. Job# 13-158

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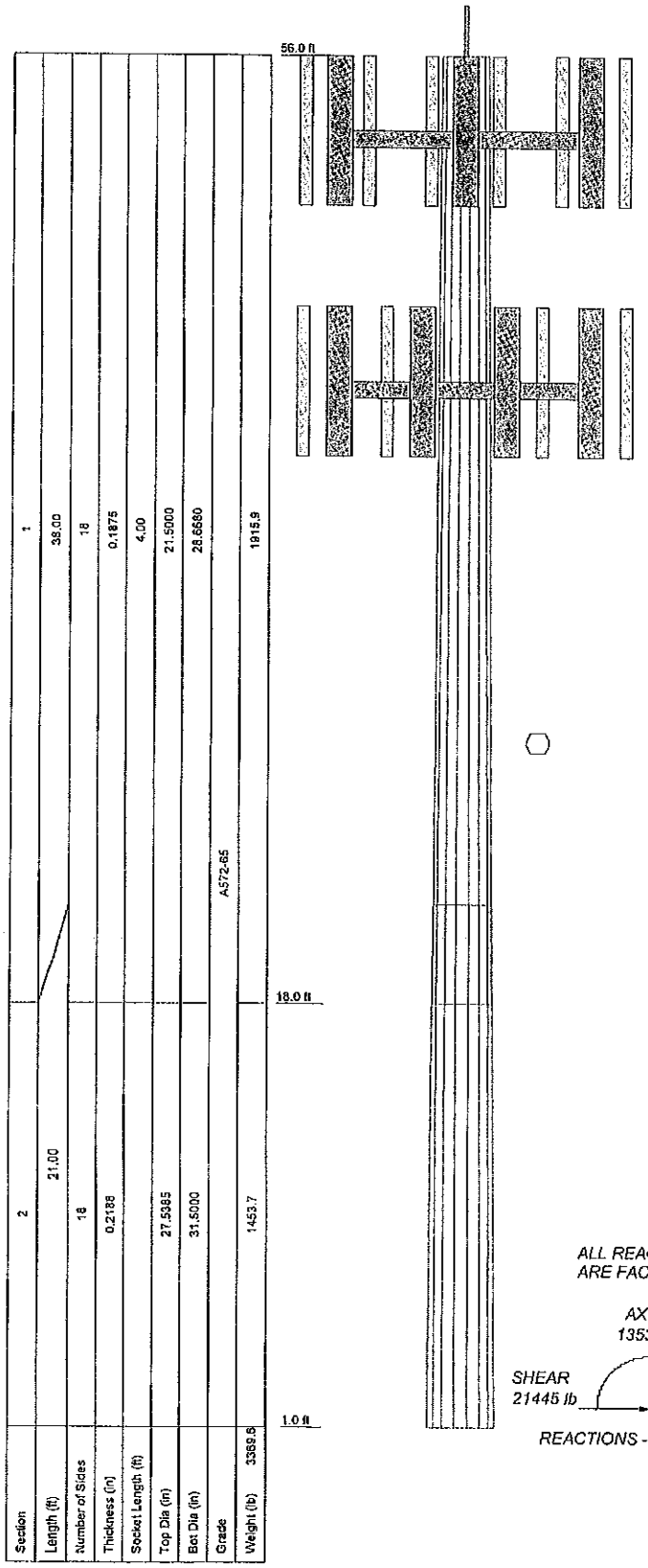

Section	1	2
Length (ft)	38.00	21.00
Number of Sides	18	18
Thickness (in)	0.1875	0.2188
Socket Length (ft)	4.00	
Top Dia (in)	21.5000	27.5385
Bot Dia (in)	28.6680	31.5000
Grade	A572-65	
Weight (lb) 3359.6	1915.9	1453.7

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Generic Lightning Rod 4' copper	56	6-ft Branches	46.79
3-ft Branches	56	(2) RRUS-12 RRU UNIT	43
4-ft Branches	55.75	(2) RRUS-12 RRU UNIT	43
(3) DBXNH-8565A-VTM Panel Antenna	53	Std. 8-ft T-Arm Mount	43
		(4) 72" x 12" x 7" Panel	43
Std. 4-ft T-Arm Mount	53	(4) 72" x 12" x 7" Panel	43
Antenna Tips	53	(4) 72" x 12" x 7" Panel	43
(3) DBXNH-8565A-VTM Panel Antenna	53	(2) RRUS-12 RRU UNIT	43
		8-ft Branches	31.75
(3) DBXNH-8565A-VTM Panel Antenna	53	10-ft Branches	17.05

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

TOWER DESIGN NOTES

1. Tower is located in San Mateo County, California.
2. Tower designed for Exposure C to the TIA-222-G Standard.
3. Tower designed for a 90 mph basic wind in accordance with the TIA-222-G Standard.
4. Deflections are based upon a 60 mph wind.
5. Tower Structure Class II.
6. Topographic Category 1 with Crest Height of 0.00 ft
7. Tower members are "hot dipped" galvanized in accordance with ASTM A123 and ASTM A153 Standards.
8. Welds are fabricated with ER-70S-6 electrodes.
9. TOWER RATING: 89%

ALL REACTIONS ARE FACTORED

AXIAL 13538 lb

SHEAR 21445 lb

MOMENT 811 kip-ft

REACTIONS - 90 mph WIND

DaVinci Engineering, Inc.
PO Box 1966
Santa Maria, CA 93456
Phone: (805) 922-5221
FAX: (805) 880-0402

Job: *1513225-269*			
Project: *60-ft Pine Tree Monopole*			
Client: Verizon Wireless: Portola Valley	Drawn by: Brett Wilhite, E.I.T.	App'd:	
Code: TIA-222-G	Date: 10/30/13	Scale: NTS	
Path:		Dwg No. E-1	

tnxTower	Job	Page
	1513225-269	1 of 10
DaVinci Engineering, Inc. PO Box 1966 Santa Maria, CA 93456 Phone: (805) 922-5221 FAX: (805) 880-0402	Project 60-ft Pine Tree Monopole	Date 13:57:34 10/30/13
	Client Verizon Wireless: Portola Valley	Designed by Brett Wilhite, E.I.T.

Tower Input Data

This tower is designed using the TIA-222-G standard.
The following design criteria apply:

Tower is located in San Mateo County, California.
Basic wind speed of 90 mph.
Structure Class II.
Exposure Category C.
Topographic Category 1.
Crest Height 0.00 ft.
Deflections calculated using a wind speed of 60 mph.
Tower members are "hot dipped" galvanized in accordance with ASTM A123 and ASTM A153 Standards..
Welds are fabricated with ER-70S-6 electrodes..
A non-linear (P-delta) analysis was used.
Pressures are calculated at each section.
Stress ratio used in pole design is 1.
Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Tapered Pole Section Geometry

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L1	56.00-18.00	38.00	4.00	18	21.5000	28.6680	0.1875	0.7500	A572-65 (65 ksi)
L2	18.00-1.00	21.00		18	27.5385	31.5000	0.2188	0.8750	A572-65 (65 ksi)

Tapered Pole Properties

Section	Tip Dia. in	Area in^2	I in^4	r in	C in	I/C in^3	J in^4	It/Q in^2	w in	w/t
L1	21.8317	12.6836	727.8616	7.5659	10.9220	66.6418	1456.6810	6.3430	3.4540	18.421
	29.1103	16.9495	1736.9546	10.1106	14.5633	119.2689	3476.1948	8.4763	4.7156	25.15
L2	28.7295	18.9684	1788.6334	9.6985	13.9895	127.8550	3579.6204	9.4860	4.4618	20.397
	31.9859	21.7190	2685.0027	11.1048	16.0020	167.7917	5373.5385	10.8615	5.1590	23.584

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Component Type	Placement ft	Total Number		C_AA_A ft^2/ft	Weight plf
7/8"	C	No	Inside Pole	53.00 - 2.00	18	No Ice	0.00	0.33
7/8"	C	No	Inside Pole	43.00 - 2.00	36	No Ice	0.00	0.33
1 1/4"	C	No	Inside Pole	43.00 - 2.00	3	No Ice	0.00	0.66

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft²	C_AA_A Side ft²	Weight lb
Generic Lightning Rod 4' copper ***	C	None		0.0000	56.00	No Ice	0.25	0.50	75.00
(3) DBXNH-6565A-VTM Panel Antenna	A	From Face	2.50	0.0000	53.00	No Ice	8.59	7.02	59.75
(3) DBXNH-6565A-VTM Panel Antenna	B	From Face	2.50	0.0000	53.00	No Ice	8.59	7.02	59.75
(3) DBXNH-6565A-VTM Panel Antenna	C	From Face	2.50	0.0000	53.00	No Ice	8.59	7.02	59.75
Std. 4-ft T-Arm Mount ***	C	None		0.0000	53.00	No Ice	6.47	6.47	415.00
(4) 72" x 12" x 7" Panel	A	From Face	3.50	0.0000	43.00	No Ice	8.40	5.28	21.00
(4) 72" x 12" x 7" Panel	B	From Face	3.50	0.0000	43.00	No Ice	8.40	5.28	21.00
(4) 72" x 12" x 7" Panel	C	From Face	3.50	0.0000	43.00	No Ice	8.40	5.28	21.00
(2) RRUS-12 RRU UNIT	A	From Face	3.00	0.0000	43.00	No Ice	3.28	1.30	57.20
(2) RRUS-12 RRU UNIT	B	From Face	3.00	0.0000	43.00	No Ice	3.28	1.30	57.20
(2) RRUS-12 RRU UNIT	C	From Face	3.00	0.0000	43.00	No Ice	3.28	1.30	57.20
Std. 8-ft T-Arm Mount ***	C	None		0.0000	43.00	No Ice	8.37	8.37	825.00
Antenna Tips	C	None		0.0000	53.00	No Ice	16.02	0.00	96.00
3-ft Branches	C	None		0.0000	56.00	No Ice	7.43	0.00	90.00
4-ft Branches	C	None		0.0000	55.75	No Ice	9.90	0.00	120.00
6-ft Branches	C	None		0.0000	46.79	No Ice	111.51	0.00	1470.00
8-ft Branches	C	None		0.0000	31.75	No Ice	175.95	0.00	2142.00
10-ft Branches	C	None		0.0000	17.05	No Ice	59.74	0.00	675.00

Tower Pressures - No Ice

$G_H = 1.100$

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg % %	C_AA_A In Face ft²	C_AA_A Out Face ft²
L1 56.00-18.00	36.62	1.024	20	80.658	A	0.000	80.658	80.658	100.00	0.000	0.000
					B	0.000	80.658		100.00	0.000	0.000
					C	0.000	80.658		100.00	0.000	0.000
L2 18.00-1.00	9.35	0.85	17	43.007	A	0.000	43.007	43.007	100.00	0.000	0.000
					B	0.000	43.007		100.00	0.000	0.000
					C	0.000	43.007		100.00	0.000	0.000

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.6 Wind 0 deg - No Ice
3	0.9 Dead+1.6 Wind 0 deg - No Ice
4	1.2 Dead+1.6 Wind 90 deg - No Ice
5	0.9 Dead+1.6 Wind 90 deg - No Ice
6	1.2 Dead+1.6 Wind 180 deg - No Ice
7	0.9 Dead+1.6 Wind 180 deg - No Ice
8	Dead+Wind 0 deg - Service
9	Dead+Wind 90 deg - Service
10	Dead+Wind 180 deg - Service

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial lb	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L1	56 - 18	Pole	Max Tension	6	0.00	0.00	0.00
			Max. Compression	4	-9766.39	-377.12	0.00
			Max. Mx	4	-9766.39	-377.12	0.00
			Max. My	2	-9766.39	0.00	377.12
			Max. Vy	4	18874.03	-377.12	0.00
			Max. Vx	2	-18874.03	0.00	377.12
L2	18 - 1	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	4	-13522.00	-811.16	0.00
			Max. Mx	4	-13522.00	-811.16	0.00
			Max. My	6	-13522.00	0.00	-811.16
			Max. Vy	4	21455.02	-811.16	0.00
			Max. Vx	6	21455.02	0.00	-811.16

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical lb	Horizontal, X lb	Horizontal, Z lb
Pole	Max. Vert	2	13538.09	0.00	21444.87
	Max. H_x	10	11281.75	0.00	-5329.88
	Max. H_z	3	10153.57	0.00	21444.98
	Max. M_x	2	811.16	0.00	21444.87
	Max. M_z	4	811.16	-21444.87	0.00
	Max. Torsion	4	0.00	-21444.87	0.00
	Min. Vert	5	10153.57	-21444.98	0.00
	Min. H_x	5	10153.57	-21444.98	0.00
	Min. H_z	7	10153.57	0.00	-21444.98
	Min. M_x	6	-811.16	0.00	-21444.87
	Min. M_z	1	0.00	0.00	0.00
	Min. Torsion	1	0.00	0.00	0.00

Tower Mast Reaction Summary

Load Combination	Vertical	$Shear_x$	$Shear_z$	Overturning Moment, M_x	Overturning Moment, M_z	Torque
	lb	lb	lb	kip-ft	kip-ft	kip-ft
Dead Only	11281.75	0.00	0.00	0.00	0.00	0.00
1.2 Dead+1.6 Wind 0 deg - No Ice	13538.09	0.00	-21444.87	-811.16	0.00	0.00
0.9 Dead+1.6 Wind 0 deg - No Ice	10153.57	0.00	-21444.98	-808.52	0.00	0.00
1.2 Dead+1.6 Wind 90 deg - No Ice	13538.09	21444.87	0.00	0.00	-811.16	0.00
0.9 Dead+1.6 Wind 90 deg - No Ice	10153.57	21444.98	0.00	0.00	-808.52	0.00
1.2 Dead+1.6 Wind 180 deg - No Ice	13538.09	0.00	21444.87	811.16	0.00	0.00
0.9 Dead+1.6 Wind 180 deg - No Ice	10153.57	0.00	21444.98	808.52	0.00	0.00
Dead+Wind 0 deg - Service	11281.75	0.00	-5329.88	-201.23	0.00	0.00
Dead+Wind 90 deg - Service	11281.75	5329.88	0.00	0.00	-201.23	0.00
Dead+Wind 180 deg - Service	11281.75	0.00	5329.88	201.23	0.00	0.00

Solution Summary

	Sum of Applied Forces			Sum of Reactions			
Load Comb.	PX lb	PY lb	PZ lb	PX lb	PY lb	PZ lb	% Error
1	0.00	-11281.75	0.00	0.00	11281.75	0.00	0.000%
2	0.00	-13538.10	-21445.27	0.00	13538.09	21444.87	0.002%
3	0.00	-10153.58	-21445.27	0.00	10153.57	21444.98	0.001%
4	21445.27	-13538.10	0.00	-21444.87	13538.09	0.00	0.002%
5	21445.27	-10153.58	0.00	-21444.98	10153.57	0.00	0.001%
6	0.00	-13538.10	21445.27	0.00	13538.09	-21444.87	0.002%
7	0.00	-10153.58	21445.27	0.00	10153.57	-21444.98	0.001%
8	0.00	-11281.75	-5329.97	0.00	11281.75	5329.88	0.001%
9	5329.97	-11281.75	0.00	-5329.88	11281.75	0.00	0.001%
10	0.00	-11281.75	5329.97	0.00	11281.75	-5329.88	0.001%

Maximum Tower Deflections - Service Wind

Section No.	Elevation	Horz. Deflection	Gov. Load Comb.	Tilt	Twist
	ft	in		°	°
L1	56 - 18	4.676	10	0.6001	0.0000
L2	22 - 1	0.894	10	0.3598	0.0000

Maximum Tower Deflections - Design Wind

Section No.	Elevation	Horz. Deflection	Gov. Load Comb.	Tilt	Twist
	ft	in		°	°
L1	56 - 18	18.853	6	2.4204	0.0000
L2	22 - 1	3.605	6	1.4507	0.0000

Pole Design Data

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in^2	lb	lb	
L1	56 - 18 (1)	TP28.668x21.5x0.1875	38.00	55.00	67.1	16.5004	-9766.39	669155.00	0.015
L2	18 - 1 (2)	TP31.5x27.5385x0.2188	21.00	55.00	59.4	21.7190	-13522.00	984180.00	0.014

Pole Bending Design Data

Section No.	Elevation	Size	M_{ux}	ϕM_{nx}	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy}	ϕM_{ny}	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
	ft		kip-ft	kip-ft		kip-ft	kip-ft	
L1	56 - 18 (1)	TP28.668x21.5x0.1875	377.12	615.81	0.612	0.00	615.81	0.000
L2	18 - 1 (2)	TP31.5x27.5385x0.2188	811.15	926.98	0.875	0.00	926.98	0.000

Pole Shear Design Data

Section No.	Elevation	Size	Actual V_u	ϕV_n	Ratio $\frac{V_u}{\phi V_n}$	Actual T_u	ϕT_n	Ratio $\frac{T_u}{\phi T_n}$
	ft		lb	lb		kip-ft	kip-ft	
L1	56 - 18 (1)	TP28.668x21.5x0.1875	18874.00	539464.00	0.035	0.00	1233.12	0.000
L2	18 - 1 (2)	TP31.5x27.5385x0.2188	21455.00	719936.00	0.030	0.00	1856.24	0.000

Pole Interaction Design Data

Section No.	Elevation	Ratio $\frac{P_u}{\phi P_n}$	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	Ratio $\frac{M_{uy}}{\phi M_{ny}}$	Ratio $\frac{V_u}{\phi V_n}$	Ratio $\frac{T_u}{\phi T_n}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
	ft								
L1	56 - 18 (1)	0.015	0.612	0.000	0.035	0.000	0.628 ✓	1.000	4.8.2 ✓
L2	18 - 1 (2)	0.014	0.875	0.000	0.030	0.000	0.890 ✓	1.000	4.8.2 ✓

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
L1	56 - 18	Pole	TP28.668x21.5x0.1875	1	-9766.39	669155.00	62.8	Pass
L2	18 - 1	Pole	TP31.5x27.5385x0.2188	2	-13522.00	984180.00	89.0	Pass
							Summary	
						Pole (L2)	89.0	Pass
						RATING =	89.0	Pass

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Project: 60-Ft. Pine Tree Monopole		Date: 10/30/2013
Client: Verizon Wireless: Portola Valley		Designed by: Brett W. Wilhite, E.I.T.

Monopole Anchor Rod and Base Plate Calculation

ANSI/ TIA-222-G-2

Factored Base Reactions:		Pole Shape:	Anchor Rods:	Base Plate:
Moment:	915 ft-kips	18-Sided Tapered Polygon	(5) 2.25 in. #18J A615 GR. 75	1.75 in. x 44.5 in. Dia.
Shear:	23 kips	Pole Dia. (D_f):	Anchor Rods Evenly Spaced	f_y = 60 ksi
Axial:	16 kips	31.50 in	On a 38.5 in Bolt Circle	ID = 25.2 in

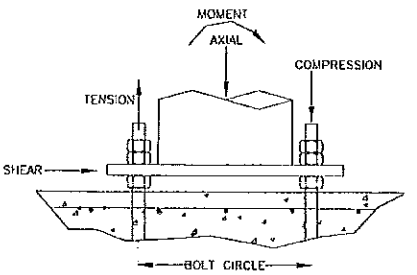
Anchor Rod Calculation Accordng to TIA-222-G section 4.9.9

ϕ = 0.80 TIA 4.9.9
I_{bolts} = 926 in^2 Moment of inertia
P_u = 228 kips Tension Force
V_u = 4.6 kips Shear Force
R_{nt} = 325 kips Nominal Tensile Strength
η = 0.50 for detail type (d)

The following Interaction Equation Shall Be Satisfied:

$$\left(\frac{P_u + \frac{V_u}{\eta}}{\phi R_{nt}}\right) \leq 1.0$$

$$0.9 \leq 1$$



Base Plate Calculation According to TIA-222-G

ϕ = 0.90 TIA 4.7
M_{PL} = 809.7 in-kip Plate Moment
L = 19.79 in Section Length
Z = 15.15 Plastic Section Modulus
M_p = 909.2 in-kip Plastic Moment
ϕM_n = 818.3 in-kip Factored Resistance

Calculated Moment vs Factored Resistance

810 in-kip $\leq$ 818 in-kip

Base Weld Calculation According to AISC (J.8.2)

ϕ = 0.75
ϕR_n = 18.66 kips/ in
R_w = 14.09 kips/ in

$$Rn := \sqrt{\left(\frac{\text{Moment}}{\frac{\pi \cdot \text{Pole\_Diameter}^2}{4}}\right)^2 + \left(\frac{\text{Shear}}{\pi \cdot \text{Pole\_Diameter}}\right)^2}$$

Anchor Rods Are Adequate	91.4%
Base Plate is Adequate	99.0%
Base Weld is Adequate	75.5%

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Caisson Foundation Calculations

ANSI/TIA-222-G-2

1. FOUNDATION OVERTURNING RESISTANCE CALCULATED WITH "PLS Caisson" (VERSION 9.00), BASED ON BROM'S METHOD FOR RIGID PILES. THE SOIL LAYERS ARE MODELED AFTER RECOMMENDATIONS FROM THE GEOTECHNICAL REPORT.

2. COHESION STRENGTH IN PLS Caisson ASSUMES FULL COHESION AT THE GROUND LEVEL, THEREFORE THE COHESION VALUES IN THE CALCULATIONS HAVE BEEN REDUCED BY 50% TO A DEPTH OF 3X THE CAISSON DIAMETER.

3. IN LIEU OF A SOIL RESISTANCE FACTOR $\phi_s = 0.75$ (TIA-9.4.1) AN ADDITIONAL SAFETY FACTOR AGAINST SOIL FAILURE OF 1.33 HAS BEEN APPLIED.

4. WITH RESPECT TO APPLIED LOADS AND ULTIMATE SOIL RESISTANCE, THE FOUNDATION IS DESIGNED WITH A MINIMUM SAFETY FACTOR RESISTING OVERTURNING OF 2.0

5. FOUNDATION LOADS HAVE BEEN FACTORED PER ANSI/TIA-222-G-2

6. GEOTECHNICAL REPORT INDICATES GROUNDWATER WAS NOT ENCOUNTERED WITHIN THE DEPTH OF THE CAISSON.

*** PIER PROPERTIES CONCRETE STRENGTH (ksi) = 4.00 STEEL STRENGTH (ksi) = 60.00

DIAMETER (ft) = 5.000 DISTANCE FROM TOP OF PIER TO GROUND LEVEL (ft) = 0.50

*** SOIL PROPERTIES

LAYER	TYPE	THICKNESS (ft)	DEPTH AT TOP OF LAYER (ft)	DENSITY (pcf)	CU (psf)	KP	PHI (degrees)
1	C	4.00	0.00	0.0	0.0		
2	S	27.50	4.00	110.0		3.000	30.00

*** DESIGN (FACTORED) LOADS AT TOP OF PIER MOMENT (ft-k) = 915.0 VERTICAL (k) = 16.0 SHEAR (k) = 23.0
ADDITIONAL SAFETY FACTOR AGAINST SOIL FAILURE = 1.33

*** CALCULATED PIER LENGTH (ft) = 20.000

*** CHECK OF SOILS PROPERTIES AND ULTIMATE RESISTING FORCES ALONG PIER

TYPE	TOP OF LAYER BELOW TOP OF PIER (ft)	THICKNESS (ft)	DENSITY (pcf)	CU (psf)	KP	FORCE (k)	ARM (ft)
C	0.50	4.00	0.0	0.0		0.00	2.50
S	4.50	11.24	110.0		3.000	312.81	11.99
S	15.74	4.26	110.0		3.000	-281.81	17.98

*** SHEAR AND MOMENTS ALONG PIER

DISTANCE BELOW TOP OF PIER (ft)	WITH THE ADDITIONAL SAFETY FACTOR SHEAR (k)	WITH THE ADDITIONAL SAFETY FACTOR MOMENT (ft-k)	WITHOUT ADDITIONAL SAFETY FACTOR SHEAR (k)	WITHOUT ADDITIONAL SAFETY FACTOR MOMENT (ft-k)
0.00	31.0	1316.1	23.3	989.5
2.00	31.0	1378.1	23.3	1036.1
4.00	31.0	1440.0	23.3	1082.7
6.00	25.4	1499.3	19.1	1127.3
8.00	0.7	1528.7	0.5	1149.4
10.00	-43.9	1488.8	-33.0	1119.4
12.00	-108.2	1340.0	-81.4	1007.5
14.00	-192.4	1042.7	-144.6	784.0
16.00	-267.3	561.0	-201.0	421.8
18.00	-143.5	146.9	-107.9	110.4
20.00	0.0	0.0	0.0	0.0

*** TOTAL REINFORCEMENT PCT = 0.38 REINFORCEMENT AREA (in^2) = 10.74
*** USABLE AXIAL CAP. (k) = 16.0 USABLE MOMENT CAP. (ft-k) = 1209.2

*** WEIGHT OF CAISSON (kips) = 58.905
*** PRESSURE UNDER CAISSON DUE TO INPUT DESIGN AXIAL LOAD (psf) = 814.9

CAISSON DESIGN SUMMARY:
5-ft DIAMETER CAISSON x 20-ft LONG (19.5-ft BELOW GRADE & 6-in ABOVE GRADE) W/(12) #10 REINFORCING BARS EQUALLY SPACED AND (#5)CIRCULAR TIES @ 6"O/C FOR THE UPPER 8-ft AND @ 12"O/C FOR THE REMAINING LENGTH. CONCRETE STRENGTH =4000 PSI @ 28 DAYS WITH TYPE II CEMENT AND A MAX. W/C RATIO OF 0.46. VOLUME OF CONCRETE = 15 CUBIC YARDS.

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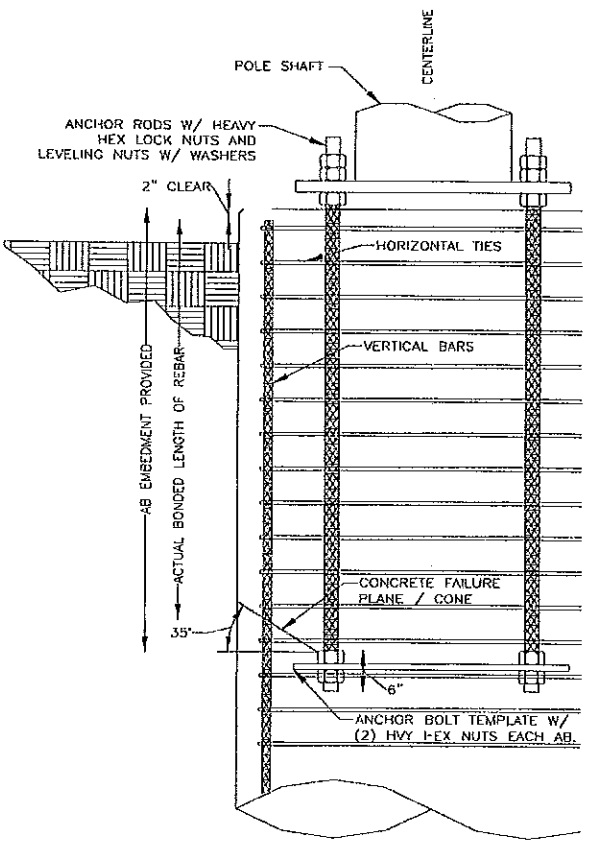
Anchor Bolt Development Length in Concrete

Calculation per ACI 318-08

The anchor bolts are mechanically anchored with nuts and template at the bottom of the bolts. The cone of failure is assumed to start at the top of the top nut and taken at a 35 deg. cone (per ACI). The cones from the individual anchor bolts will overlap and also come out of the sides of the caisson. Therefore, we conservatively assume that the concrete cracks and there is no strength provided from the concrete and that the vertical reinforcement has to be developed to ensure that the anchor bolts stay attached to the rest of the caisson. Below is the calculations showing the minimum anchor bolts embedment length required to fully transfer the load into vertical bars of the caisson.



#10 Rebar **Min. Development Length**
(Per. ACI 318-08 12.2.3; Eq. 12-1)

$$l_d := \left[\frac{f_y}{\sqrt{(f_c)}} \cdot \frac{\frac{3}{40}\psi_t \cdot \psi_e \cdot \lambda}{(2.5)}\right] \cdot d_b \qquad \ell_d = \quad 36.14"$$

Anchor Bolt Length = 7-ft Concrete Strength 4000 psi

Minimum Required Anchor Bolt Embedment Depth

ℓ_{min} = ld +2"+6"+[(Caisson Dia. - 2*Clear Cover)-BC]/2

ℓ_{min} = 49.57" (min. Depth Req'd.)

Anchor Bolt Embedment Provided = **66.00"**
(from top of nut)

Strength Comparison of Anchor Bolts to Caisson Reinforcement

AB Moment of Inertia = 926 in^2

AB Fy = 75 ksi Equivalent Strength = 69480 kips

Rebar Moment of Inertia = 4374 in^2

Rebar Fy = 60 ksi Equivalent Strength = 262440 kips

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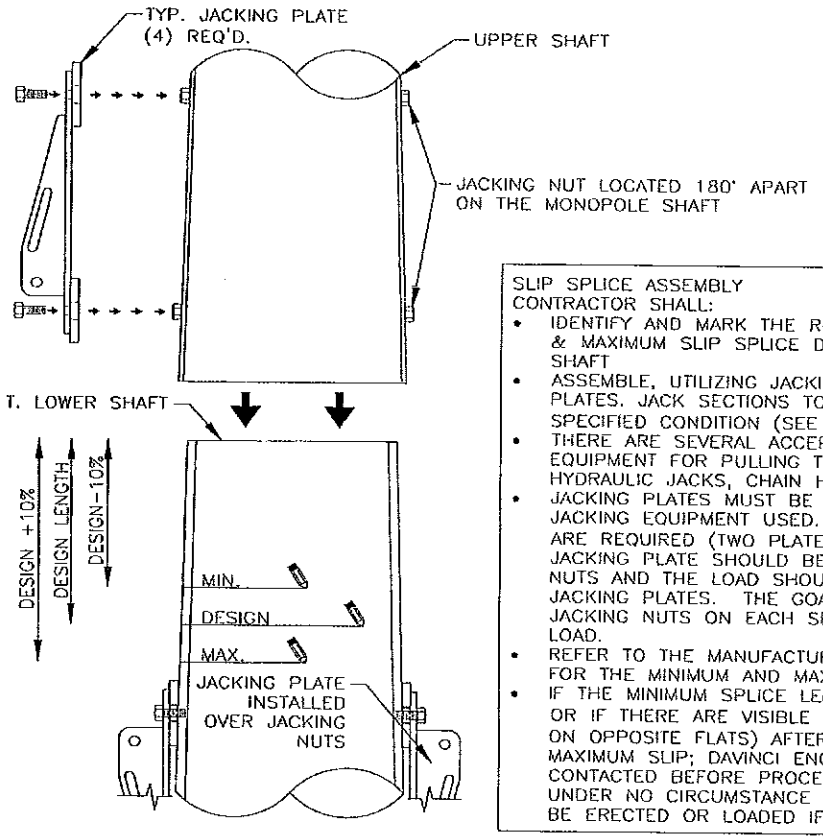
Monopole Slip Splice Information:

In Accordance with: Section 4.9.7.1 & 13.3.5 of the ANSI/ TIA-222-G-2

The monopole sections are tapered and have a male/female slip splice that is held together with gravity loads and friction from mechanical jacking forces. The splice connection has been designed in accordance with section 4.9.7.1 & 13.3.5 of the TIA/EIA-222-G Structural Specifications for Antenna Supporting Structures and Antennas. There is no welding or bolting required at this connection. This splice connection is the industry standard for both the telecommunication and transmission tower industries.



SLIP SPLICE ASSEMBLY
CONTRACTOR SHALL:

- IDENTIFY AND MARK THE REQUIRED MINIMUM, DESIGN & MAXIMUM SLIP SPLICE DISTANCE ON THE POLE SHAFT
- ASSEMBLE, UTILIZING JACKING NUTS AND JACKING PLATES. JACK SECTIONS TOGETHER TO MANUFACTURER SPECIFIED CONDITION (SEE ERECTION DRAWINGS)
- THERE ARE SEVERAL ACCEPTABLE TYPES OF EQUIPMENT FOR PULLING THE SECTIONS TOGETHER: HYDRAULIC JACKS, CHAIN HOIST OR TURNBUCKLES.
- JACKING PLATES MUST BE USED REGARDLESS OF THE JACKING EQUIPMENT USED. FOUR JACKING PLATES ARE REQUIRED (TWO PLATE PER SECTION). THE JACKING PLATE SHOULD BE BOLTED TO BOTH JACKING NUTS AND THE LOAD SHOULD BE APPLIED TO THE JACKING PLATES. THE GOAL IS TO INSURE THAT BOTH JACKING NUTS ON EACH SECTION CARRY THE JACKING LOAD.
- REFER TO THE MANUFACTURERS ERECTION DRAWINGS FOR THE MINIMUM AND MAXIMUM JACKING FORCES.
- IF THE MINIMUM SPLICE LENGTH CANNOT BE ACHIEVED, OR IF THERE ARE VISIBLE GAPS (IN EXCESS OF 1/4" ON OPPOSITE FLATS) AFTER THE SECTIONS PASS MAXIMUM SLIP; DAVINCI ENGINEERING SHALL BE CONTACTED BEFORE PROCEEDING WITH THE ERECTION. UNDER NO CIRCUMSTANCE SHOULD THE STRUCTURE BE ERECTED OR LOADED IF THESE CONDITIONS EXIST.

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Seismic Analysis per:

2010 California Building Code

Occupancy Category — Reference: CBC 2010 Table 1604.5

I

Importance Factor — ASCE 7-05 Table 11.5-1

I = 1

Site Classification — CBC 2010 Table 1613.5.2 & Table 1613.5.6(1)

Seismic Design Category D

Site Class D

Site Coefficients — CBC 2010 Section 1613.5.3

S_S 2.319 Mapped Spectral Accelerations for short periods

S_1 1.272 Mapped Spectral Accelerations for a 1 sec period

Design Spectral Response Acceleration Parameters — CBC 2010 Section 1613.5.4

S_{DS} 1.546 5% damped Spectral Accl. for short periods — CBC 2010 Eq: 16-38

S_{D1} 1.272 5% damped Spectral Accl for a 1 sec. period — CBC 2010 Eq: 16-39

Equivalent Lateral Force Procedure — ASCE 7-05 Section 12.8

C_t = 0.02 Period Parameters — ASCE 7-05 Table 12.8-2

X= 0.75 Period Parameters — ASCE 7-05 Table 12.8-2

h_n = 56-ft Height of Structure

$T = C_t h_n^X$ = 0.409 Fundamental Period — ASCE 7-05 Eq: 12.8-7

R = 1.5 Response Modification Factor — ASCE 7-05 Tabel 12.2-1

$C_s = S_{DS}/[R/I]$ = 1.03 Seismic Response Coefficient — ASCE 7-05 Eq: 12.8-2/ 12.8-3

W 13.5 kips Total Axial Weight of Pole

$V = C_S W$ = 13.9 kips Max. Equivalent Seismic Base Shear — ASCE 7-05 Eq: 12.8-1

13.9 kips < 23 kips

Seismic < Wind Load from Design

Design Vertical Acceleration — ASCE 7-05 Eq: 12.14-6

Ev = 4.17 kips (maximum vertical seismic force at base is less than dead load of strcuture)

The maximum creditable seismic shear is less than the calculated wind shear

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Cell Trees Inc. Branch Specifications

- PVC Sch. 80 Armature
- UV pigmented Fiberglass wrap
- Hand-wrapped 1/8" spiral wrap with 50% overlay
- UV resistant PVC Foliage

Cell Trees Inc. has been manufacturing this style of Branch for almost 14 years. We manufacture over 20,000 Artificial Branches per year.

Cell Trees has a two year warranty on all of its products. The warranty is based on the engineered drawings and calculations for the pole. If the pole has been designed for 90 MPH wind then the branch warranty is based on that wind speed.

The branches have been wind tunnel tested at Texas A&M up to 130 MPH with no branch breakage. (Test documentation attached)

Environment is a big factor in the wear and degradation of the foliage and branches. We have Had our product in mild climates for over 8 years with little wear and degradation. We have had our product in Harsh environments that show substantial wear after 3 years. The foliage is the main part of the branch affected. Branch breakage is not something that will happen due to weather unless there is large storm like a hurricane, heavy snow or ice.

A mild environment would be an area that does not have temperatures over triple digits more than a few weeks a year. The area does not have temperatures below freezing more than a few weeks a year. The area does not have winds over 70MPH more than a few weeks a year.

The biggest factor in the longevity of the branches is proper handling and installation at the time the initial Monotree is installed and then equipment upgrades and installs after our product has been installed.

Architectural and Site Control Commission **July 23, 2012**

Special Site Meeting Regarding Conditional Use Permits (CUP) X7D-132 (Verizon Wireless) and X7D-138 (AT&T Mobility), Priory School, 302 Portola Road, and Regular Evening Meeting, 765 Portola Road, Portola Valley, California

Chair Hughes called the special site meeting to order at 4:00 p.m. at the northwestern end of the Monastery building on the Priory School campus, i.e., the area where the Verizon and AT&T wireless facilities are located.

Roll Call:

ASCC: Hughes, Breen, Clark
Absent: Koch, Warr
Town Council Liaison: Aalfs
Town Staff: Town Planner Vlasic, Planning Technician Brown

Others* present relative to the Verizon and AT&T Mobility CUPs:

Jay Gruendle, agent for Verizon Wireless
Misako Hill, Agent for Crown Castle/Sprint (CUP application X7D-174)

Consideration of "Monopine" Collocation Antenna plans for compliance with conditions of approval, Conditional Use Permits (CUP) X7D-132 (Verizon Wireless) and X7D-138 (AT&T Mobility), Priory School, 302 Portola Road

Vlasic presented the July 19, 2012 staff report on the subject conditional use permits. He discussed the background on the status of the CUPs and the plans for the required collocation faux monopine tree antenna. He clarified that at this point, given the background set forth in the staff report, the ASCC is to provide final design directions for completion of the collocation monopine and that the "tree" should, hopefully, be installed by the end of October.

ASCC members considered the staff report and the following proposed faux tree plans submitted by Verizon Wireless and, unless otherwise noted, prepared by L.D. Strobel Co., Inc.:

Sheet T-1, (project data), 7/10/12
Sheet C-1, (survey data and site plan data), Foresight, 6/13/10
Sheet A-1, (site plan details and interim conditions)
Sheet A-2, (faux tree plans)
Sheet A-3, (faux tree details)

Also considered were a letter dated July 10, 2012, provided by AT&T confirming its agreement with the plans prepared on behalf of Verizon Wireless.

Vlasic commented that during the course of planning commission review earlier this year, it was noted that the final faux tree design should be no higher than necessary to accommodate the needs of Verizon and AT&T and advised that he had informed the Verizon representative that he should comment on the height matter at the site meeting.

Vlasic also noted that Sprint was seeking a new CUP for its existing pole facility at the Priory and that the intent of past discussions at the ASCC was that any upgrading of the Sprint, or adjacent T-Mobile facility, should also be with a monopine. Ms. Hill confirmed that she was aware of the past discussions and was present to better understand the design

recommendations of the ASCC so that she could advise Sprint and Crown Castle. She clarified that Crown Castle would be the builder and owner of the new antenna pole for Sprint.

Jay Gruendle discussed the plans and reviewed current site conditions. He explained that the details for the faux tree in terms of colors, trunk design, antenna "sock" covers, branch density, etc., would be submitted with the tree building permit plans and after the final tree contractor is selected. He presented a photo image of an existing faux pine tree constructed by Larson Camouflage in Kenwood, California that was similar to the design being considered by Verizon/AT&T for the Priory site. With respect to height, it was confirmed that Verizon could meet its needs with a monopine no taller than 60 feet, with the Verizon antenna centered at approximately 53 feet. He added that the AT&T antenna would then be centered at approximately 43 feet and that there would not be additional space on the pole for a third carrier. He also noted that he had not received final confirmation from AT&T that the 43-foot center height would meet its needs.

In response to a question, Mr. Gruendle advised that the distance between the top of the Monastery building and the start of the monopine tree branches likely could be reduced if the "tree" only had to accommodate two carriers with a maximum height of approximately 60 feet. He also commented that since implementation of the collocation tree would require modifications to the lease arrangements with the Priory he was not certain that construction could be completed by the end of October, but that was still the intent of the process.

ASCC members viewed the photo example, considered site conditions, the staff report, project plans and the clarifications offered by Mr. Gruendle. Members then offered the following comments relative to factors that should be addressed with the final plans for the monopine faux tree:

1. The details for the tree need to be fully defined. Samples of the branches need to be provided and hopefully would be large enough for viewing at a distance. Further, if possible, a local example of the tree proposed should be identified for ASCC inspection.

2. Tree details need to include bark and branch materials and colors with the needles as dark as possible or at least dark enough to blend with the "green" tree backdrop at the site. Data should also be provided on the colorfast conditions of the tree materials and any efforts that would be necessary to ensure against fading of colors.

3. The tree should be no higher than 60 feet to accommodate just Verizon and AT&T. Further, the tree branches should start as close to the top of the existing Monastery building as possible.

4. There should be some landscaping around the base of the tree, just to the southwest of the antenna site to help screen views from below and off site.

ASCC members also acknowledged that the Priory as part of its use permit reviews and/or amendment applications should address concerns over the loss of the existing pine trees and the need for new planting where needed to replace key screening of views provided by the existing pines.

With respect to the concerns over fading of tree colors, it was noted that the TowerCo-Sprint/Nextel monopole that was painted a dark brown to comply with a condition of CUP amendment (X7D-152) had faded significantly and needed to be repainted.

ASCC members also noted that the existing TowerCo pole, painted a dark brown to satisfy a CUP condition, had faded to a relatively light tan/gray color in a very short period of time. Vlasic advised that staff would contact the TowerCo representative and hopefully have the pole repainted, this time a much darker green color to blend better with site conditions.

After discussion, ASCC members present agreed they would offer additional comments at the evening ASCC meeting. Chair Hughes then thanked Mr. Gruendle and Ms. Hill for their participation at the site meeting.

Adjournment

The special site meeting was adjourned at 4:35 p.m.

Architectural and Site Control Commission **July 23, 2012**
Regular Evening Meeting, 765 Portola Road, Portola Valley, California

Vice Chair Hughes called the meeting to order at 7:33 p.m. in the Town Center historic School House meeting room.

Roll Call:

ASCC: Hughes, Breen, Clark
Absent: Koch, Warr
Planning Commission liaison: Zaffaroni
Town Council Liaison: Aalfs
Town Staff: Town Planner Vlasic, Planning Technician Brown

Consideration of "Monopine" Collocation Antenna plans for compliance with conditions of approval, Conditional Use Permits (CUP) X7D-132 (Verizon Wireless) and X7D-138 (AT&T Mobility), Priory School, 302 Portola Road

Vlasic presented the July 19, 2012 staff report on this matter and discussed the events of the afternoon site meeting on the monopine project. (Refer to above site meeting minutes, which include a listing of the proposed plans and materials.) He noted that at the conclusion of the site meeting, the ASCC provided specific directions and sought construction details for the monopine and also concluded that some screen planting should be included with the project. Vlasic noted that specifically the monopine should be no higher than 60 feet and should only accommodate Verizon and AT&T.

Jay Gruendle, Verizon Wireless, acknowledged the ASCC input at the site meeting. He noted that he would confirm the acceptability of the lower height with AT&T and also would provide the design details requested at the site meeting with the building permit submittal. He also requested more specific direction relative to the requests for screen planting. In response to a question from Chair Hughes, Gruendle confirmed that the monopine would be custom constructed for the site.

Public comments were requested. **Leah Zaffaroni, 175 Georgia Lane**, spoke in favor of a lower height and noted that it would be harder to mitigate the visual presence of a 70-foot tall monopine. She also commented that this would be a good demonstration project and suggested that any faux tree might better blend into the background on the site with a more mottled than uniform needle color scheme.

Following discussion, Clark moved, seconded by Breen and passed 3-0, to confirm the following requirements for completion of the collocation monopine project:

1. The four specific comments offered at the site meeting shall be addressed with the final building permit plans. Further, the final building permit plans shall be subject to review and approval of the full ASCC.

2. The final plans shall provide for the screen planting of three 24-inch box size, multi-stem live oaks at the southwest corner of the lawn area at the northwesterly end of the Monastery building. These trees shall be field located under the direction of a designated ASCC member after construction of the monopine, and maintenance of the trees shall be provided for in the final documents signing off on the building permit for the monopine. (*Note: This requirement clarifies comment 4 made at the site meeting relative to screen landscaping.)*

MEMORANDUM

TOWN OF PORTOLA VALLEY

TO: ASCC

FROM: Tom Vlasic, Town Planner

DATE: July 19, 2012

RE: Agenda for July 23, 2012 ASCC Meeting

NOTE: The July 23rd meeting will include a special afternoon field session that will start at 4:00 p.m. at the Priory School, 302 Portola Road. The meeting will start at the wireless antenna facilities at the top of the school, i.e., at the north end of the monastery building. This meeting is for design review of the plans for the collocation "monopine" that is required for AT&T and Verizon wireless under the terms of each company's approved use permit for their Priory wireless facilities. The proposed antenna design is discussed below under ***agenda item 4c. AT&T Mobility/Verizon Wireless.*** Discussion of the proposal is scheduled to continue at the regular evening ASCC meeting.

The following comments are offered on the items listed on the ASCC agenda.

4c. CONSIDERATION OF "MONOPINE" COLLOCATION ANTENNA PLANS FOR COMPLIANCE WITH CONDITIONS OF APPROVAL, CONDITIONAL USE PERMITS (CUP) X7D-132 (VERIZON WIRELESS) AND X7D-138 (AT&T MOBILITY), PRIORY SCHOOL, 302 PORTOLA ROAD

The ASCC last considered this matter at a March 12, 2012 site meeting at which time the applicants were asking the ASCC and town to consider options for a collocation antenna to the "monopine" called for in the subject approved use permits. The ASCC concluded that the "faux" tree approach was still the correct one and, at its Mach 21st meeting, the planning commission concurred with the March 12th recommendations of the ASCC. As noted at the head of this memorandum, on July 23rd, the ASCC will conduct an afternoon site meeting to consider the specific designs for the collocation faux tree.

The following enclosed proposed faux tree plans have been submitted by Verizon Wireless and, unless otherwise noted, have been prepared by L.D. Strobel Co., Inc.:

Sheet T-1, (project data), 7/10/12

Sheet C-1, (survey data and site plan data), Foresight, 6/13/10
Sheet A-1, (site plan details and interim conditions)
Sheet A-2, (faux tree plans)
Sheet A-3, (faux tree details)

By attached letter dated July 10, 2012, AT&T has confirmed its agreement with these plans prepared on behalf of Verizon Wireless. In addition to these plans, the applicants will have more details on the proposed faux tree at the site meeting including photo images of similar trees and branch/color samples. They will also define branch density and provide other details on the plans.

Background to this review is provided in the following attached materials:

- March 8, 2012 staff report prepared for March 12th ASCC meeting.
- March 14, 2012 staff report prepared for March 21st planning commission meeting. This report also includes the specific recommendations of the ASCC developed at the March 8th meeting.
- Minutes of the March 21, 2012 planning commission meeting.

While the applicants have not met all of the timelines identified at the March 21st commission meeting, it has taken time to work out the agreements between the carriers to allow the design process to proceed. The ASCC should consider the subject plans and data provided at the 7/23 site meeting and reach conclusions on the acceptability of the plans with any conditions ASCC members find are needed. We should also seek a specific timeline for construction of the faux tree and any associated landscaping that the ASCC deems necessary, with the expectation that the construction can be done to meet the October deadline identified with the March 21st planning commission acceptance of ASCC's recommendation for the faux tree approach for collocation.

During the course of planning commission review, it was noted that the final faux tree design should be no higher than necessary to accommodate the needs of Verizon and AT&T. This height matter should be discussed further with the applicants at the site meeting and, if any further clarifications or adjustments are found to be needed relative to height, these should be provided to the satisfaction of the ASCC.

In any case, before completing action on the design for the faux tree, the ASCC should conduct the site meeting, continue deliberations at the regular evening meeting and consider the above comments and any additional information presented at the July 23rd meetings.

MEMORANDUM

TOWN OF PORTOLA VALLEY

TO: ASCC

FROM: Tom Vlasic, Town Planner

DATE: March 8, 2012

RE: Agenda for March 12, 2012 ASCC Meeting

NOTE: The March 12th agenda includes a special site meeting. The site meeting is for follow-up review relative to a condition of CUP approval that pertains to both ***Verizon Wireless (CUP X7D-132) and AT&T Mobility (X7D-138).*** Both are for facilities in the wireless antenna area adjacent to the Monastery at the Woodside Priory, 302 Portola Road. The site meeting at the Priory antenna area will take place at 4:00 p.m. and this matter is discussed under ***agenda item 4a***.

The following comments are offered on the items listed on the ASCC agenda.

4a. CONSIDERATION OF OPTIONS FOR COMPLIANCE WITH CONDITION OF APPROVAL, CONDITIONAL USE PERMITS (CUP) X7D-132 (VERIZON WIRELESS) AND X7D-138 (AT&T MOBILITY), PRIORY SCHOOL, 302 PORTOLA ROAD

On September 15, 2010, the planning commission approved amendments to the subject conditional use permits to allow for improvements to the existing AT&T and Verizon wireless antenna facilities at the Priory. (Refer to the attached vicinity map for antenna and related equipment locations at the Priory.) The permit amendments were effective on October 16, 2011. Condition #2 of each amended permit provides for interim antenna improvements on existing poles for enhanced service while a plan is being developed for collocation of the AT&T and Verizon antennas on one "monopine" pole. The permits also include alternatives for landscape solutions if it is eventually concluded that a "monopine" is not the best aesthetic solution.

At this point, the permit holders and staff are seeking ASCC recommendations on possible options to the "monopine" collocation plan as noted in the *enclosed* March 2, 2012 letter from Jay Gruendle, Verizon representative. The 4:00 p.m. site meeting described at the head of this memorandum has been scheduled to facilitate ASCC consideration of the options and development of specific recommendations. These recommendations would be shared in a report to the planning commission and the commission would then need to decide how the permit holders would proceed to satisfy

the use permit condition(s) in question. To facilitate the site meeting and ASCC consideration of the options, the following comments are offered. It is emphasized that no formal ASCC action is required at this time and that the ASCC would only be offering input to the planning commission on the possible options.

1. **Condition wording and background.** The specific condition wording for each CUP follows:

   Verizon CUP X7D-132:

   2. Pursuant to the use permit application as revised with the September 1, 2010, submittal documents, for an interim period of one year, three new antennas may be installed on one of the two existing Verizon Wireless poles, i.e., as shown on Plan Sheet A-2, while a plan is developed with AT&T and other carriers at the Priory site for collocation of antenna on a monopine or similar faux tree. Any such tree design shall be subject to design review and approval by the ASCC and shall address the recommendations of the ASCC as stated in the record of the August 9, 2010 ASCC meeting when the Verizon Wireless monopine plans were before the ASCC for conceptual consideration. Within nine months of the effective date of this permit amendment, the applicant shall inform the planning commission of the progress being made for implementation of the collocation "tree" plan. The commission may allow for additional time for the plan to be developed and implemented if it is satisfied that acceptable progress is being made on the plan.

      For the interim period, it is understood that installation of the three new antennas would include removal of one of the two existing poles and the existing white whip extensions and that the new antennas would be a dark brown color.

   AT&T CUP X7D-138:

   2. Pursuant to the use permit application as revised on August 19, 2010, for an interim period of one year, the new antennas may be installed on the existing AT&T poles while a plan is developed with Verizon Wireless and other carriers at the Priory site for collocation of antenna on a monopine or similar faux tree. Any such tree design shall be subject to design review and approval by the ASCC and shall address the recommendations of the ASCC as stated in the record of the August 9, 2010 ASCC meeting. Within nine months of the effective date of this permit amendment, the applicant shall inform the planning commission of the progress being made for implementation of the collocation "tree" plan. The commission may allow for additional time for the plan to be developed and implemented if it is satisfied that acceptable progress is being made on the plan.

      For the interim period, it is understood that installation of the new antennas would include removal of the existing white whip extensions and that the antennas would be a dark brown color.

   Within the nine month period from the effective date of the amendments, both Verizon and AT&T advised staff of the status of the collocation process and provided letters discussing the progress being made and requesting the allowed for time extension. As explained in letters, while progress was being made with the "monopine" collocation effort, both companies sought additional time to complete the design effort and work associated with the agreements that would be necessary for the plan, including changes in the lease arrangements with the Priory.

On September 7, 2011, the planning commission conditionally granted the requested time extension, but asked for an updated status report within three months, i.e., by the mid January 2012. Within that three month period, Jay Gruendle informed town staff that while efforts continued for collocation, it was hoped that the town might consider options short of a "monopine" as explained in his March 2, 2012 letter. It is also noted that both AT&T and Verizon have completed installation of their interim facilities. At this point, the permit holders have until April 16th of this year to complete the collocation planning effort called for in the permit conditions.

Again, at this point, staff is asking that the ASCC conduct the site meeting on Monday and provide its recommendation(s) for the most appropriate aesthetic solution.

2. **Review of options and some visual impact perspectives**. The possible options to a "monopine" collocation antenna "pole" are discussed in the March 2nd letter. Specifically, the "monopine," as described in the letter and visual simulation attachments to it, would be a faux tree 70 feet high to accommodate Verizon, AT&T and a third carrier. Based on our field checks, an option that perhaps would call less visual attention to the site could be to paint the existing 30-35 foot tall antenna facilities a very dark green color, to blend with the background tree cover (at least in terms of views from the south and southwest along the Portola Road corridor), and add landscaping to enhance screening, particularly if/when some of the existing pines on the southwest side of the facility die over time. Planting of new trees closer to the northwestern end of the Monastery building, i.e., where the Verizon and AT&T "interim" facilities are located, would soften views and help to ensure that screening continues even if the pines do not survive. This is basically letter Option #2 and would, if pursued, require development and implementation of a screen planting plan to the satisfaction of the ASCC.

   We have considered views from the intersection of Portola Road and Georgia Lane, along Georgia Lane and from higher elevations in Brookside Park, i.e., from the northern section of the Crescent Drive loop. We have also considered views from the north side, i.e., the nearby vacant parcels in the Priory subdivision at the end of Antonio Court. The most sensitive visual relationships appear relative to views from the south and southwest. The ASCC may want to consider these more distant views to the existing facilities as part of Monday's field session.

Based on the field analysis on Monday and any input at the afternoon and evening meetings, the ASCC should offer reactions and any recommendations it may find appropriate on the options outlined in the letter from the Verizon permit holder. The planning commission would likely consider the options and ASCC input at its March 21, 2012 meeting. After that, Verizon and AT&T would need to proceed to develop final plans, to the satisfaction of the ASCC, for conformity with the "collocation" condition(s).

MEMORANDUM

TOWN OF PORTOLA VALLEY

TO: Planning Commission

FROM: Tom Vlasic, Town Planner

DATE: March 14, 2012

RE: ***Status of Planning for Antenna Collocation***, Verizon (CUP X7D-132) and AT&T (CUP X7D-138), Existing Facilities at 302 Portola Road, (Woodside Priory)

Background and Status Report of Carrier Collocation Planning, ASCC Review

On September 15, 2010 the planning commission approved amendments to the subject conditional use permits to allow for improvements to the existing AT&T and Verizon wireless antenna facilities at the Priory. The permit amendments were effective on October 16, 2010. Condition #2 of each amended permit provides for interim antenna improvements on existing poles for enhanced service while a plan is being developed for collocation of the AT&T and Verizon antennas on one "monopine" pole. The conditions set some time frames for the collocation "monopine" planning and implementation process.

Pursuant to the permit conditions, the applicants requested and received planning commission approval in September of 2011 for an extension to the collocation planning process. With the extension, the planning process is now to be completed by mid-April of 2012, i.e., with ASCC approval of the collocation plan, with the plan then to be implemented after ASCC approval. In granting the extension, the commission asked for an interim report to be provided within three months, or by the end of January. The applicants did advise the town at that time that the collaborative planning process was continuing, but also requested that the town consider options to a faux tree for the reasons cited in the attached March 2, 2012 letter from Mr. Jay Gruendle, Verizon Wireless agent.

Staff referred the options to the ASCC for aesthetic review and reaction so that any ASCC input could be reported to the planning commission. The options were considered by the ASCC at its March 12, 2012 meeting and this included an afternoon site inspection of the interim Verizon and AT&T facilities as well as other conditions in the wireless antenna area adjacent to the Monastery building at the Priory (refer to attached vicinity map). ASCC members collectively considered on-site conditions and, after the site meeting, individually viewed the existing antennas from various off-site locations. ASCC summary comments and recommendations were offered at the evening 3/12 meeting. The staff report prepared

for the 3/12 ASCC meeting is attached for reference and provides additional perspective on the options suggested in the 3/2 communication from the Verizon agent.

ASCC members Hughes, Breen and Koch were able to attend the afternoon meeting, and member Clark participated in the evening discussion, noting that he had viewed the antenna conditions on his own as he could not attend the afternoon field meeting. ASCC member Warr did not participate in the discussion as his firm continues to provide architectural services to the Priory School. Also attending the ASCC 3/12 afternoon site meeting, as a Georgia Lane neighbor, was Leah Zaffaroni.

After considering the CUP condition(s) in question, site circumstances and views from off site, ASCC members concluded that the faux tree option should be pursued and implemented. The comments offered in support of this position are stated below and repeat a number of conclusions reached when the faux tree matter was first considered by the ASCC in August of 2010.

1. While, typically, the ASCC would not encourage a faux tree, in this case due to the distance from the tree to any public viewing locations, a tree, even at the anticipated 70-foot height appears appropriate (i.e., see attached preliminary tree plan for three carriers considered at the site meeting and previously shared with the town). It would blend well with the backdrop and help screen views to the existing 50–foot tall Sprint/Nextel and TowerCo antennas located north of the Verizon and AT&T facilities. A key issue will be to ensure that the faux tree color is as permanent as possible and does not fade so as to stand out from the evergreen backdrop. It was noted that the TowerCo antenna that was painted a very dark brown to satisfy a CUP condition shortly after the CUP renewal for the facility was granted in 2010, has now faded to a fairly light tan-gray color. Such fading should be avoided with the materials and finishes selected for the faux tree. (*Staff will also follow-up with TowerCo regarding repainting their antenna. Based on ASCC review comments during the 3/12 site session, we will seek a darker green color for the repainting.*)

2. The faux tree should be pursued with the intention that when the other site carriers seek amendments to the CUPs for their facilities, the precedent will be in place for the collocation tree. A second tree to accommodate the nearby poles of T-Mobile and Sprint/Nextel, as well as possible a third carrier, should be required and this would result in two faux "monopines" replacing at least four individual poles that now exist at the site around the northwest end of the Monastery building. These two faux trees would also screen views to the existing TowerCo pole further uphill and, with repainting of that pole a dark green, the view to the "antenna farm" condition would be mitigated. It was noted that it is likely that other carriers may seek permits at the Priory and the faux tree would have space for additional future collocation.

3. Some additional landscaping should be provided around the base of the Verizon/AT&T faux tree to soften potential views, as the start of the tree branches would need to be somewhat high to avoid conflict with the Monastery building. In addition, a few Monterey pines, perhaps three, should be planted on the hillside below and to the southwest of the faux tree site to enhance screening, and to be in place when some of the exiting pines die. It was noted that the ASCC typically does not support planting of Monterey pines, but in this case given the extensive pines on the site, some additional planting appears appropriate to ensure long-term screening of the antenna facilities. (*Chair Hughes commented that perhaps the matter of planting of pines or other screen trees in*

anticipation of the loss of existing pines should be a Priory school requirement under its use permit. It is noted that the Priory will likely be seeking some CUP amendment in the near future for additional improvements in the central plaza area of the campus and also to add the Gambetta house property into the CUP area for the school. Adding this property would also likely allow for consideration of some enhancement to the existing athletic fields.)

Verizon agent Jay Gruendle was present at the March 12th ASCC meeting and advised that Verizon is prepared to move ahead with the collocation tree generally as discussed at the site meeting. In follow-up to the 3/12 meeting, we also had contact with AT&T agent Kit Tarn. Mr. Tarn has advised that he has been in contact with Mr. Gruendle and that AT&T is also prepared to move ahead with Verizon on the monopine design. We understand that both agents will be present at the March 21, 2012 planning commission meeting.

Recommendation

Based on staff review and the ASCC comments, it is recommended that the planning commission concur with the ASCC and that the applicants be directed to develop the monopine tree design to the satisfaction of the ASCC, and that the design effort be completed by the end of May. We also recommend that the commission direct that the monopine design and the screen landscaping requested by the ASCC be installed no later than the end of October of this year. We believe that this schedule should provide adequate time for Verizon and AT&T to complete their efforts. In the meantime, we will keep the planning commission informed of the process and, if necessary, place the matter on a future commission agenda if there are any concerns over the process or timeframe for plan implementation.

TCV

cc. Leslie Lambert, Planning Manager
Carol Borck, Planning Technician
Maryann, Mayor
Ann Wengert, Town Council Liaison
Sandy Sloan, Town Attorney
Applicants

July 10, 2012

Town of Portola Valley
Attn: Tom Vlasic
765 Portola Road
Portola Valley, CA 94028

RE: AT&T Co-location on Verizon Proposed 70' Monopine
Site Address: 302 Portola Road, Portola Valley, CA 94028

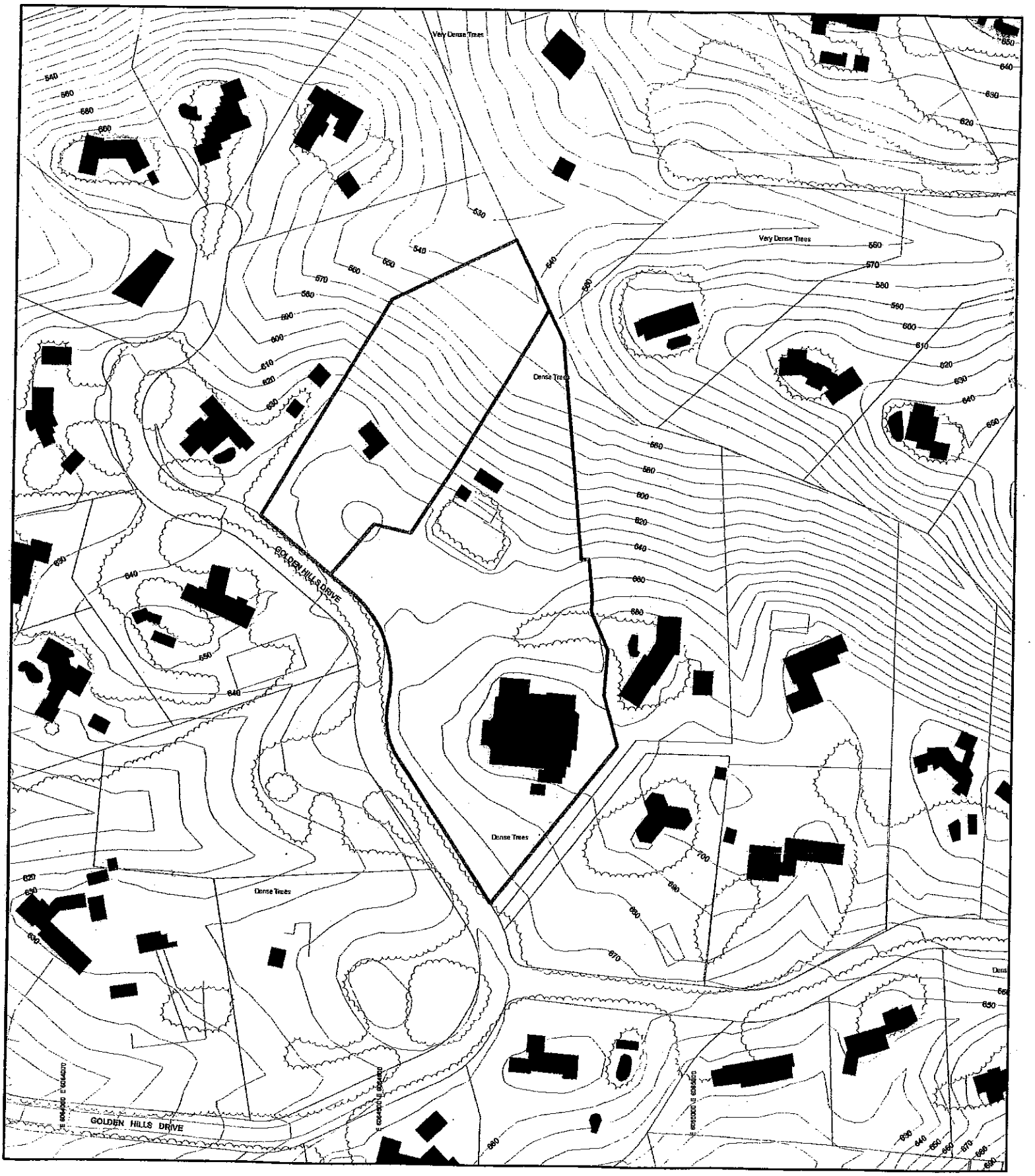
Dear Tom,

AT&T is in agreement to work with Verizon on a proposed new 70' Monopine for co-location. AT&T RF engineers have determined that the available 53' RAD (Centerline of Antennas) will work to achieve their future coverage objective in the area and have accepted the available 53' RAD for their future antennas.

Thank you,

Kit Tran
Project Management North America
Ericsson Inc. www.ericsson.com
On Behalf of AT&T Mobility
Services North America
6140 Stoneridge Mall Road #350
Pleasanton, CA 94588
Office: 925-737-5842
Mobile: 510-385-5432
Email: kit.tran@ericsson.com

ARCHITECTURAL REVIEW
REPLACEMENT GATE AND FENCING
330 GOLDEN HILLS DRIVE, WICK



Vicinity Map

Scale: 1" = 200 feet

Redwood Tree Removal, Klope

330 & 340 Golden Hills Drive, Town of Portola Valley

March 2010

THOMAS
KLOPE
ASSOCIATES, INC.
LANDSCAPE ARCHITECTS

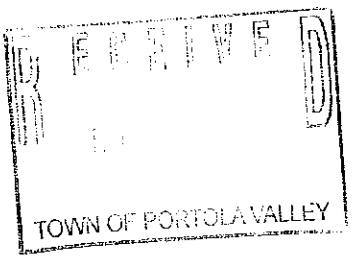
November 13, 2013

Ms. Carol Bork
Town of Portola Valley
Planning Department
765 Portola Road
Portola Valley, California 94028

RECEIVED

NOV 15 2013

SPANGLE ASSOC.



Subject: Secondary Vehicle Gate and Fence ASCC Application
330 Golden Hills Drive; Portola Valley, California

Dear Carol:

On behalf of our clients, Tri-State Capital, LLC, we are submitting the attached application for ASCC approval of a secondary vehicle gate and fencing to be located along a shared access road off of Golden Hills Drive on the eastern side of the 330 Golden Hills Drive property. This submittal is the last phase of fencing and gates for the property.

Our proposal requests the review and approval of one sixteen-feet (16) wide, four-feet (4) tall, 50% open automatic driveway access vehicular gate and of the continuance of a three rail four-feet (4) high split rail fence design already existing and previously approved for the property. The proposed vehicular gate replaces an existing gate located north of the proposed gate location.

The intent of the gate design and relocation is to create a more direct access to the garages of the residence and to allow for the removal of approximately 750 square feet of existing asphalt driveway underneath existing oak trees. A new asphalt apron of approximately 160 square feet will connect the driveway to the road at the new gate location.

Due to the limitations of the driveway area, the gate is set back ten (10) feet from the property line. Two - sixteen (16) inch wide by three (3) feet and eight and one half (8.5) inches high plaster gate columns will hold the automatic gates and are consistent with but smaller in design than the previously approved main gate design for 330 Golden Hills Drive.

The previously approved split rail wood fence installed along the Golden Hills Drive frontage is proposed to complete the eastern property boundary replacing the original six-feet (6) high black, metal picket fencing. The new gate location shifts the driveway access thirty-nine (39) feet farther away from the neighbor to the north.

This application does not propose any exterior landscape lighting fixtures.

The Oak Hills Subdivision Home Owner's Association has approved the design and locations of the gate and fencing conveyed in this submittal.

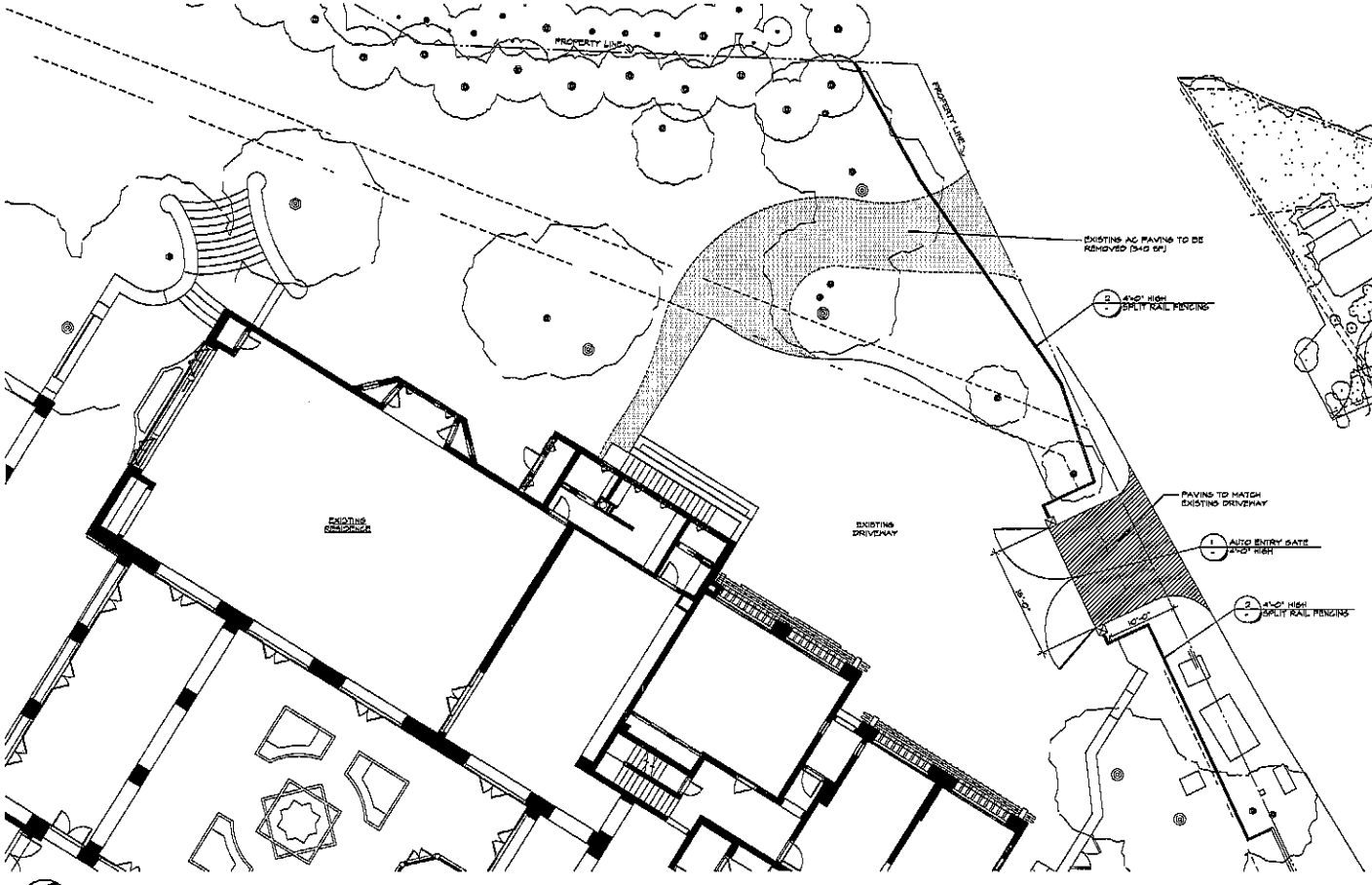
Thank you for this opportunity to submit for ASCC consideration. If you require any further information, please do not hesitate to contact me.

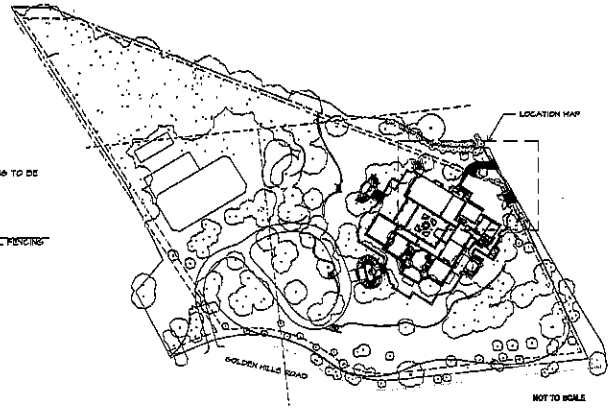
Sincerely,

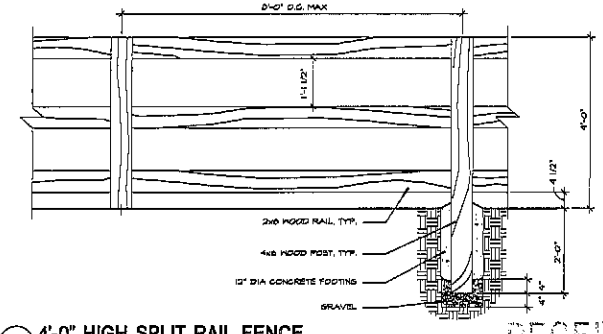
Thomas Klope, ASLA

TK/spk

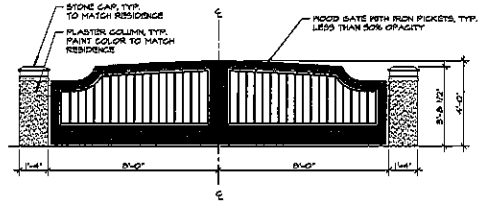
cc: Paul and Karin Wick - Tri-State Capital, LLC
Dave McLoughlin - R.J.Dailey Construction







2 4'-0" HIGH SPLIT RAIL FENCE
SCALE: 3/4" = 1'-0"



1 AUTO ENTRY GATE- 4'-0" HIGH
SCALE: 3/8" = 1'-0"

THOMAS KLOPE ASSOCIATES, INC.
LANDSCAPE ARCHITECTS
3120 EL CAMINO REAL
BUILDING B SUITE 20
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www.tkla.com
CALIFORNIA REG # 2137

TRI STATE CAP, LLC.
330 GOLDEN HILLS DR.
PORTOLA VALLEY,
CALIFORNIA

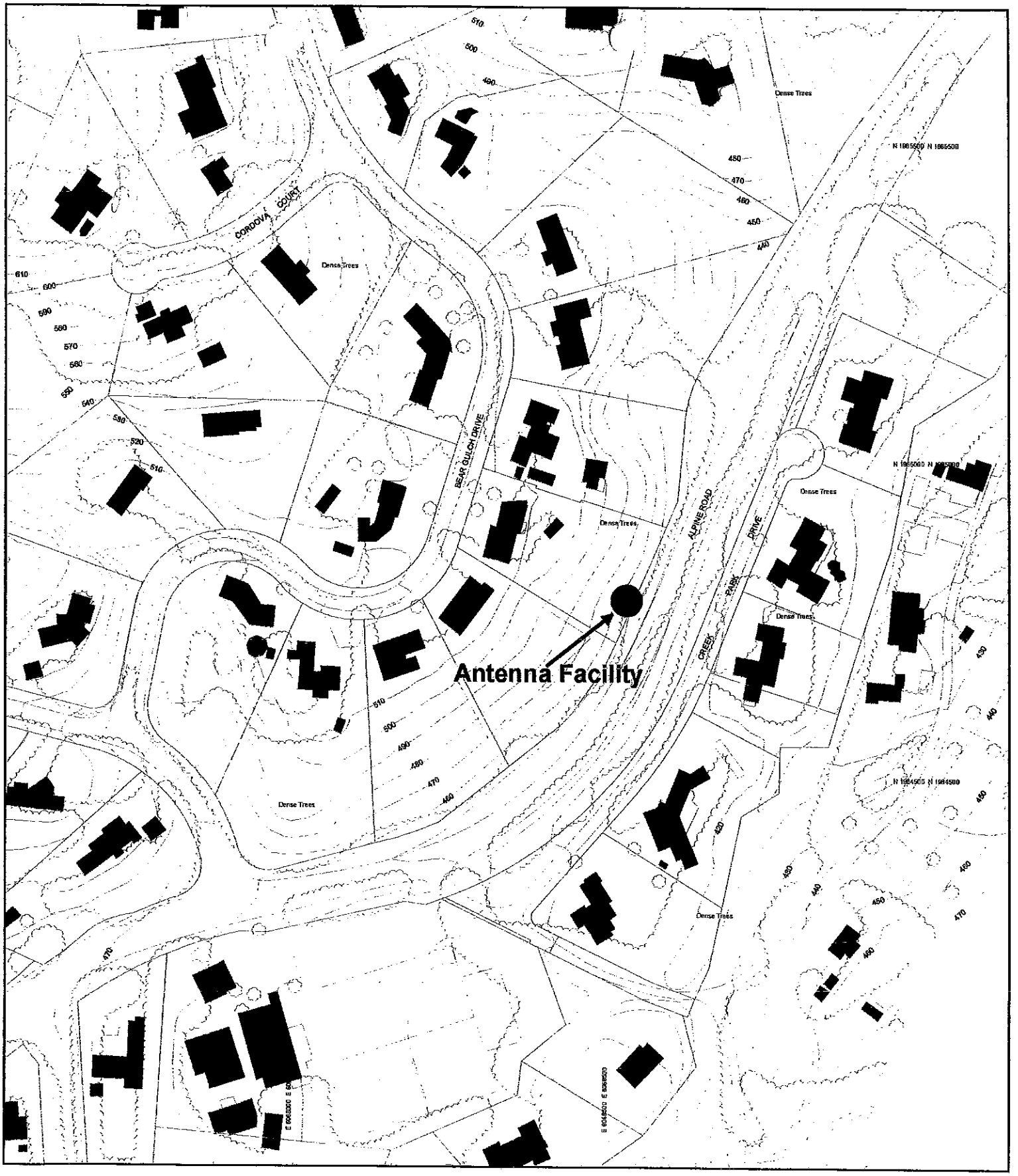
DATE: REVISION:

SECONDARY GARAGE ACCESS GATE PLAN

DATE: 11/13/13
DRAWN: PM KM
CHECKED: TK
SCALE: AS SHOWN

EG-1

PRELIMINARY REVIEW
AMENDMENT TO CUP X7D-161
WIRELESS FACILITIES ADJACENT TO
4115 ALPINE ROAD, AT&T MOBILITY



Vicinity Map

Scale: 1" = 200 feet

Conditional Use Permit X7D-161, AT&T Mobility

Adjacent to 4115 Alpine Road, Town of Portola Valley

August 2010

MEMORANDUM

TOWN OF PORTOLA VALLEY

TO: Leslie Lambert, Planning Manager

FROM: Tom Vlasic, Town Planner

DATE: September 27, 2010

RE: Approval Conditions, Conditional Use Permit X7D-161
AT&T Wireless Antenna Facilities, 4115 Alpine Road

Provided below are the conditions for the subject use permit as approved by the planning commission on September 15, 2010. The action was completed based on evaluations in the September 9, 2010 staff report on the request. The planning commission action is effective on October 16, 2010 and any conditions setting compliance time frames would be from the effective date of the permit. For example, this permit is valid for a period of five years and the expiration date, unless actions are otherwise taken, is October 16, 2015.

Conditions of Approval
AT&T Wireless Facilities, 4115 Alpine Road
Conditional Use Permit X7D-161
September 15, 2010

1. This amended conditional use permit is issued to AT&T for modification to the existing AT&T facilities at the subject property in accordance with the following plans received by the town on August 18, 2010 and the other conditions set forth herein:

   Photo Simulations, two sheets, Artistic Engineering
   Technical Plans and Specifications, 10 Sheets, prepared by Jeffrey Rome & Associates

   The permit shall run with the site and be binding on any future owner of the wireless facilities. The permit shall be valid for a period of 5 years, but shall be reviewed, unless otherwise noted, every two years by the planning commission for conformity with the conditions of the permit. AT&T or any future owner of the facilities shall be responsible for any town costs associated with the periodic review of the permit or any other town reviews required by permit conditions.

2. Prior to installation of the new facilities, the applicant shall apply for and receive an encroachment permit from the town's public works director. In addition, prior to issuance of the encroachment permit or installation of the facilities, the final access plan and landscaping plans, as recommended by the ASCC in its August 30, 2010 project review, shall have been developed and approved by the town.

3. AT&T or a future owner may request an extension of the 5-year life of this permit if the request is made at least six months before the expiration date. The planning commission shall consider the request at a duly noticed public hearing and shall consider changes in technology that would permit alternative means of providing comparable wireless services with less aesthetic impacts. The commission reserves the right to require replacement of the facilities if less intrusive service alternatives are available as a condition of extending the life of the use permit. In addition, the commission will take into account the underground district and my elect not to grant any permit extension if it would conflict with implementation of the plans for undergrounding utilities along Alpine Road.

4. If the wireless facilities are transferred to another owner, the town shall be notified as soon as the transfer has been recorded. No additional carrier to AT&T shall be permitted on the existing utility pole. The planning commission may, however, permit AT&T to be replaced by a different carrier if it determines that the new carrier provides similar services and coverage to AT&T, or provides other or additional wireless services serving the needs of the town. Any replacement carrier shall be subject to the conditions of this permit and shall so acknowledge in a written statement or agreement to the satisfaction of the town attorney.

5. Within three months of the effective date of this use permit, AT&T and shall enter into an agreement with the town guaranteeing maintenance of the site and facilities and removal of the wireless facilities if they are no longer used. This agreement shall be to the satisfaction of the town attorney and shall be binding on all future owners of the property and wireless facilities. Further, the agreement shall provide for removal of the facilities at the end of the 5-year use permit life unless the permit has been extended by the planning commission as provided for in condition 3. Bonds or other sureties shall be provided to cover the guarantees called for in this condition to the satisfaction of town staff.

6. On an annual basis, the permittee shall furnish data to the satisfaction of town staff verifying compliance with town noise ordinance standards and all FCC requirements including radio frequency emission standards. If standards are exceeded, the permittee shall advise of the steps to be taken to bring the facilities into compliance, and the town shall then be advised when compliance has been achieved. Unless compliance is achieved within 60 days, the town may take steps to revoke or modify the conditions of this permit. In addition to the foregoing, within 30 days after the new equipment is in operation, noise measurements shall be taken at the site verifying the calculations provided in the September 8, 2010 noise evaluation by Hammett & Edison, Inc.

7. The permittee shall defend, indemnify and hold harmless the town, its agents and officers and employees from any claim, action, or proceeding related to the town's approval of this use permit.

8. As new technology becomes available, the permit holder shall upgrade the facility as feasible to minimize impacts upon the community, including aesthetic impacts. If the facility is not upgraded, as feasible, within a reasonable amount of time, the town may take steps to revoke or modify the conditional use permit. The provisions of this condition shall be considered by the planning commission at the time of each required two-year review. Specifically, the applicant shall provide a report to the commission on the state-of-the-art as to wireless service and less intrusive technology that is available. If the information demonstrates that less intrusive technology is readily available or becoming available, and feasible to employ at the site, the report shall set forth a time frame for site conversion. The framework for determining feasibility of conversion shall be as set forth by the town attorney and shall also be considered in light of the progress being made relative to utility undergrounding in the Alpine Road undergrounding district.

9. If AT&T or any future holder of this permit desires to make physical changes to the approved facilities, such changes shall be submitted to the town planner for review. If the town planner finds the changes to be of a minor nature and consistent with the general provisions of this permit, he may approve them. If he considers the changes to be more significant, but not of a magnitude to require conditional use permit amendment, he may refer them to the planning commission for review. If the commission determines the changes are consistent with the general provisions of the permit, it may approve the changes.

TCV

cc. Sandy Sloan, Town Attorney
Mike Mangiantini, AT&T

ireless cquisition esources, Inc.

November 19, 2013

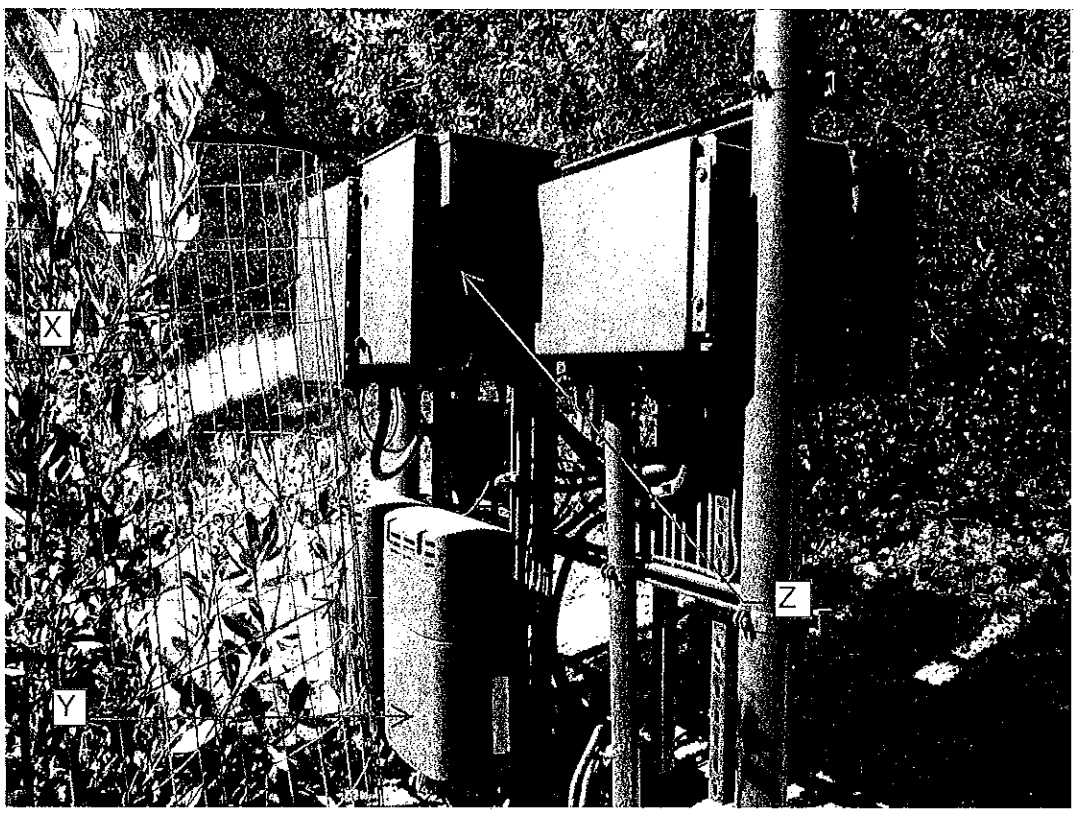
Tom Vlasic
Town Planner
Town of Portola Valley
765 Portola Road
Portola Valley, CA 94028

Re: AT&T Modifications of Existing Wireless Telecom Facility
Near 4115 Alpine Road, Portola Valley
AT&T#: CNU5918
Previously Approved Permit #X7D-161

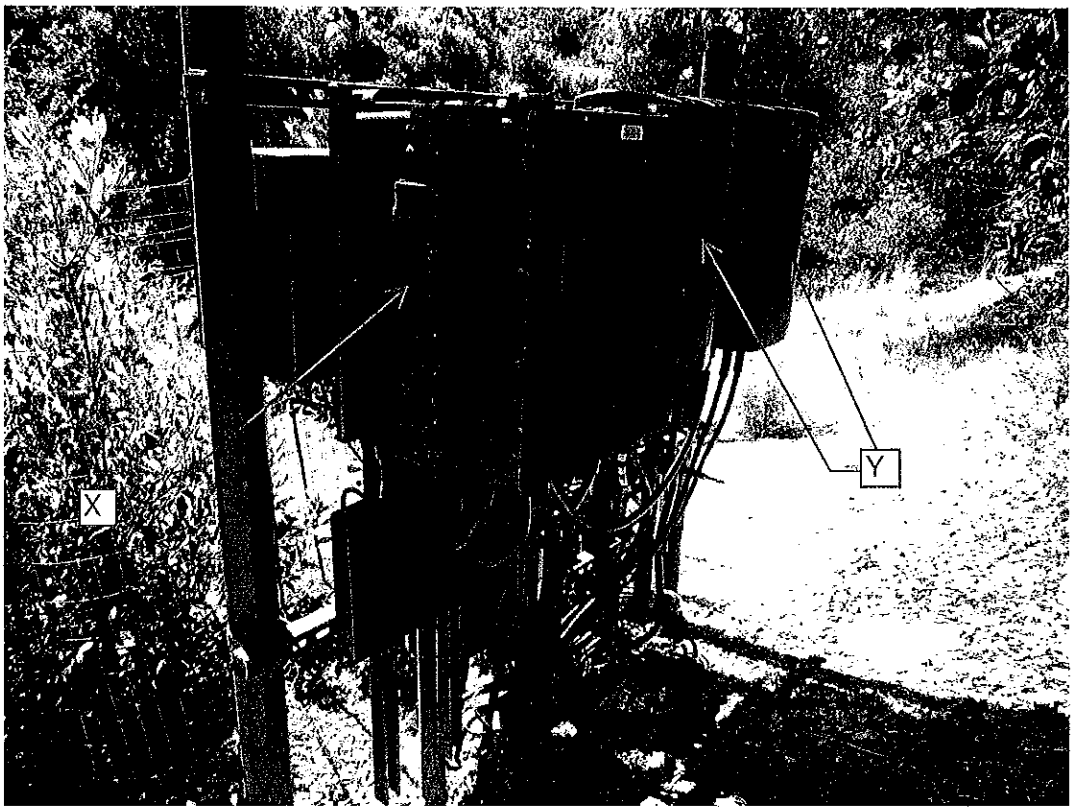
Dear Mr. Vlasic,

You had previously asked about the work AT&T was doing during the first week of November at its wireless telecom facility located near 4115 Alpine Road. This letter is an effort to explain what was being done, and the current condition of the site.

Ground equipment at the site is currently mounted on an H-frame. Before recent work, the H-frame looked like this, from the front:



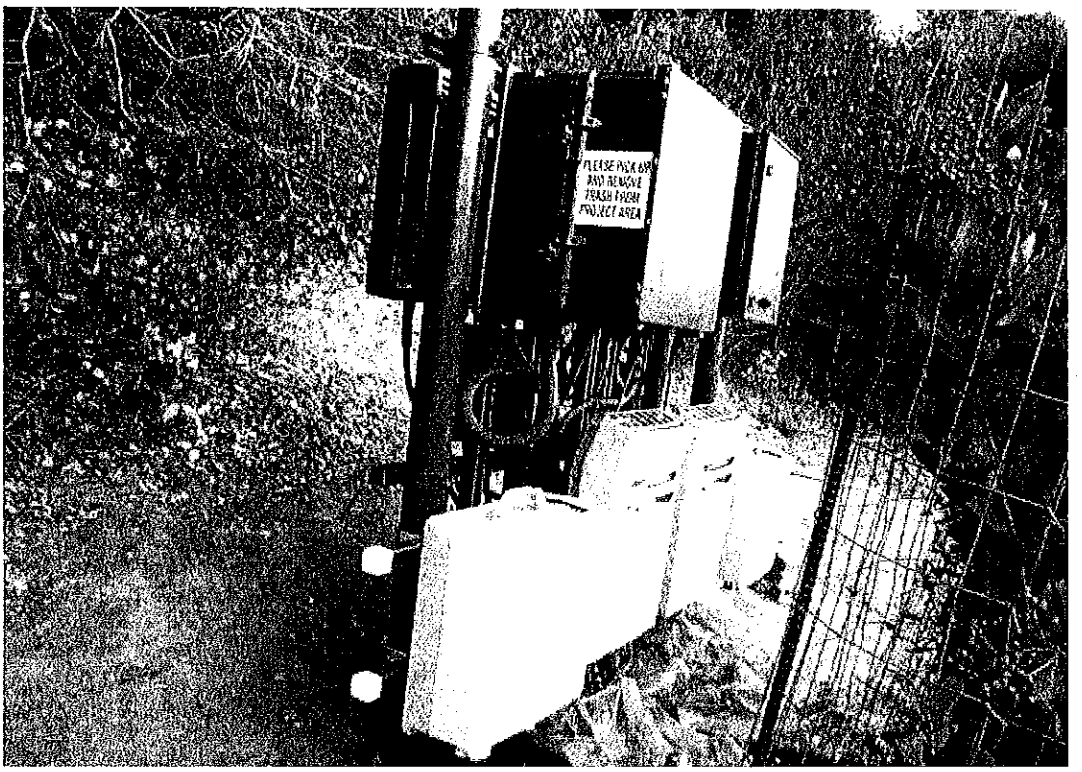
From the back, the H-frame looked like this:



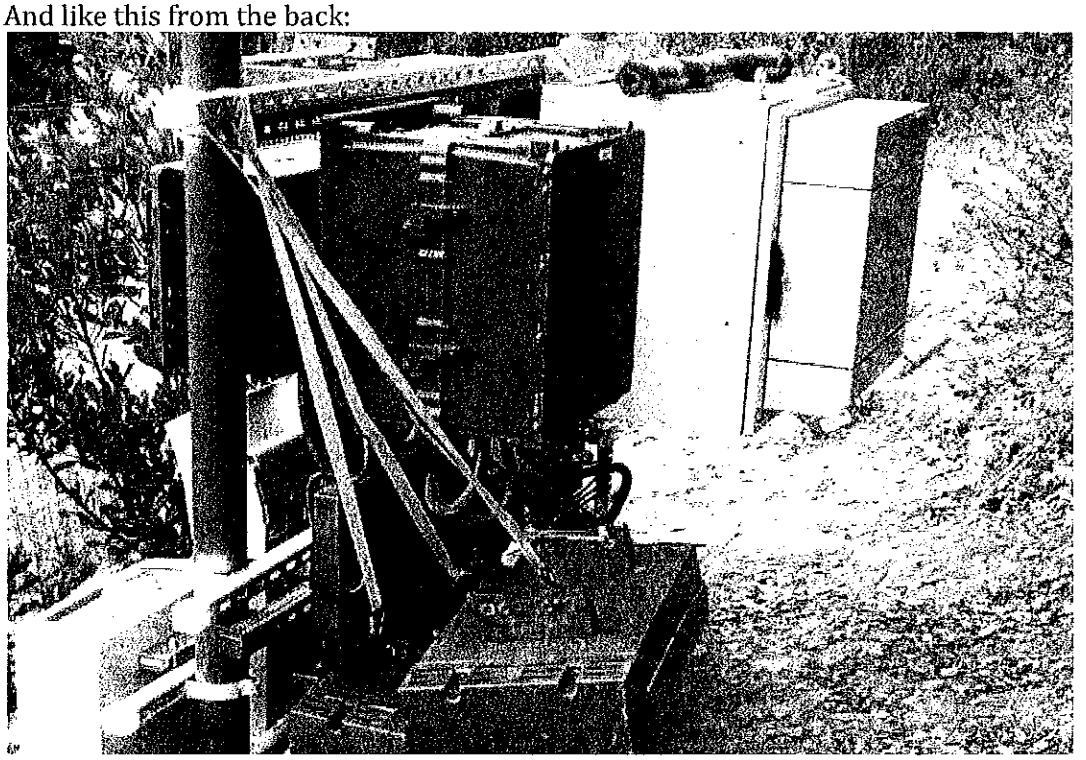
The large boxes on the ends, marked with an "X," are "PBC-02" units that provide power to the other equipment. The four boxes with rounded edges, two on each side of the H-frame, marked with "Y," are RRU-22 "remote radio units." The large box in the middle of the side facing the road, marked with a "Z," is an RBS 3818 cabinet. This is a radio base station. The particular RRUs and the RBS installed here are designed to work as a team to process, send and receive data from the antennas that are installed on the adjacent pole.

AT&T remotely monitors the performance of its equipment. Early in November, AT&T noticed that this site was not performing properly. Technicians that were dispatched to the site discovered that the existing RRUs were malfunctioning. The site had not entirely failed, but performing at less than full capacity. Technicians determined that in order to restore functionality the existing RRUs needed to be replaced with newer models. As the RRUs are designed to work as a team with the RBS, this also meant that AT&T needed to install a new RBS that is designed to work with the new RRUs.

Following this work, the site looked like this from the front:



And like this from the back:

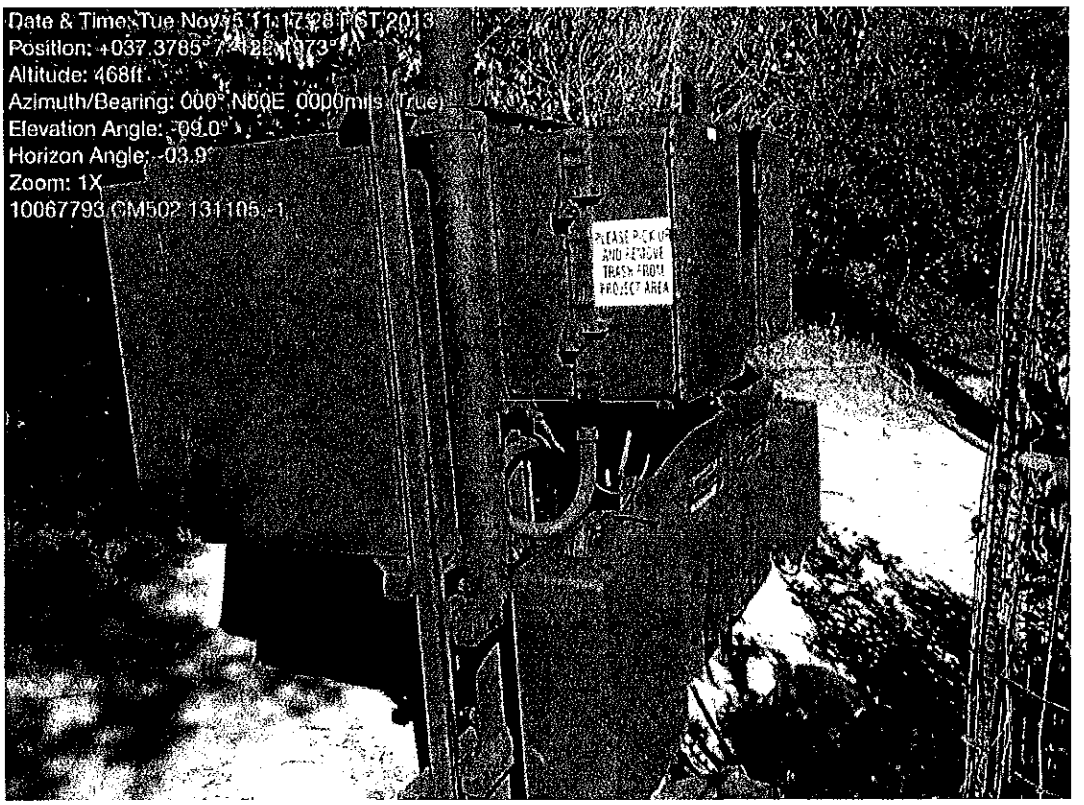


The front view shows four new RRU's (two each of two different models). These four RRUs take the place of the two old RRUs that were mounted on the front of the H-frame.

The back view shows a Purcell cabinet that is mounted in the space previously occupied by two of the old RRUs. This cabinet houses a new 6601 RBS. This radio base station is designed to work with the new RRUs. Both are necessary for proper operation of the site.

The back view also shows old RRUs that are temporarily suspended from the H-frame. The front view also shows that the RBS 3818 has not yet been removed. Both the old RRUs and the old RBS 3818 would have been removed once the installation of the new equipment had been completed, and the technicians had verified that the new equipment was operating properly.

The new equipment was painted brown to match the older equipment after these photos were taken:



The net result of this emergency maintenance work would have been the replacement of four old RRUs with four new RRUs of similar size and function. In addition, AT&T would have replaced one old RBS with a new RBS of similar size and function.

As I mentioned in my prior e-mail, as the technicians were attempting to bring the new equipment online they discovered that it was not working properly. Troubleshooting suggested that there was a problem with one or more of the lines that connect the equipment shown here with the antennas mounted on the adjacent pole. Locating the bad line would require technicians to access the pole, which would require a lift, and would likely require two days of active work at the site, including closure of one lane of Alpine Road.

Because of the discovery of bad lines at the site, the cut-over to new equipment could not be completed. Consequently, the old equipment is still mounted temporarily on the H-frame, and is necessary for the site to operate. AT&T intends to go to the site in the next few days to turn the old equipment upright so that it is not damaged by rain.

AT&T's original intention had been to make the necessary repairs as quickly as possible in order to restore the site to full operation. However, given that we are already seeking permits to move the site slightly closer to the road, and to rebuild it from scratch, AT&T determined that it would be wasteful to also seek a second permit to complete these short term repairs. Our preference is to limp along with the site partially operational until permits are received to complete all the work at once. Our hope is that these permits can be received in a matter of weeks, rather than months.

Leaving the site as-is while the permitting process is underway will likely reduce high speed internet access, and limit the use of some modern services. But we believe that basic voice calling and text messaging will not be significantly interrupted, and health and safety impacts will not be substantial. However, if additional system failures occur at the site, a "dead zone" may develop such that cell phone service will not be available on this portion of Alpine Road.

Sincerely,

David Haddock
Wireless Acquisition Resources, Inc.
An Authorized Representative of AT&T Mobility
324 Riverside Avenue
Roseville, CA 95678
916-420-5802
dh@sacq.net

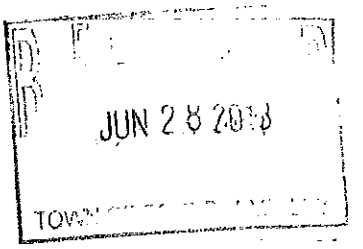
Wireless Acquisition Resources, Inc.

June 27, 2013

RECEIVED

JUL 16 2013

SPANGLE ASSOC.



Steve Padovan
Interim Planning Manager
Town of Portola Valley
765 Portola Road
Portola Valley, CA 94028

Re: Revisions to Application to Modify Existing AT&T Wireless Telecom Facility
Near 4115 Alpine Road, Portola Valley
AT&T#: CNU5918
Previously Approved Permit #X7D-161

Dear Mr. Padovan,

Please accept these revisions to the planning application, previously submitted, which proposes modifications to an existing AT&T wireless telecommunications facility near 4115 Alpine Road, in Portola Valley. The wireless facility is currently operating under the amended conditional use permit # X7D-161, which was effective on October 16, 2010.

In recent months, AT&T has been working on two separate projects at this location. One of them involves the UMTS upgrades mentioned below. The other involves work and equipment that would interconnect this wireless facility with the AT&T telecommunications network using fiber optic cables. Currently, there is a third project to add two (2) additional antennae the existing pole. These separate projects have now been combined into this single proposal. Please change the name of the applicant on the prior application to AT&T Mobility and myself David Haddock as agent for AT&T Mobility, and correct the contact info so that it matches the info included at the bottom of this letter.

This project proposes to replace some existing wireless telecommunications equipment, and to add additional wireless equipment, in the equipment space on the ground, near the JPA utility pole where the antennas are mounted. This proposal also includes the addition of two (2) antennae. This proposal is part of an AT&T project to provide UMTS services in and near Portola Valley, and throughout its wireless network. Details describing the work proposed are included with the drawings submitted with this application.

UMTS (Universal Mobile Telecommunications System is a third generation mobile cellular system for networks based on the GSM standard. UMTS offers significant advancements over prior networks in terms of data rates, network latency, and mobile reliability. These advancements will allow users to stream their favorite movies with less buffering, download documents and presentations in seconds, load websites quickly, etc.

The Planning department requested several particular pieces of information. Requests and responses are included below.

1. *Provide a map depicting coverage at maximum power and design capacity identifying any significant gaps in coverage.*

A coverage map, showing all AT&T wireless facilities near the Town of Portola Valley, is included with this application. However, please bear in mind that the purpose of this proposed project is not to fill gaps in coverage. AT&T is proposing to make upgrades to an existing facility that has been operating for many years. At this time, AT&T is reasonably satisfied with the coverage provided by the facility in its current location. Accordingly, this proposal is not designed to fill gaps in coverage, but is rather designed to provide upgraded performance and services. For this reason, the coverage maps that are included with this proposal do not show any significant changes in coverage.

2. *Description of the proposed approach for screening the existing and new equipment from public view including plans for installation and maintenance of landscaping, and sample exterior materials and colors.*

AT&T is proposing to modify an existing wireless communications facility that has been operating for many years. The site is currently screened through the use of landscaping. AT&T proposes to maintain similar landscaping in future years as the primary approach for screening the equipment. The project proposes a chainlink fence, painted to blend with the environment, in order to secure the equipment. AT&T is willing to install a more opaque fence, such as one made from redwood, or to add slats to the proposed chainlink fence, if the Town prefers that the equipment be more completely screened.

3. *A narrative description of the service providers existing coverage area and of the proposed coverage area of the specific site that is the subject of the application.*

AT&T proposes to modify an existing wireless communications facility that has been operating near 4115 Alpine Road for many years. AT&T is not proposing to move the facility from its current location. The modifications are not proposed for the purpose of accomplishing any new coverage objectives; the wireless facility already provides adequate coverage for the areas it is designed to serve. Rather, the modifications are proposed in order to increase capacity, and provide enhanced performance and services to AT&T's customers. This proposal will offer substantial benefits to the residents of Portola Valley.

Because of dramatic changes in technology over recent decades, the "capacity" of a telecommunications facility is no longer measured by how many copper wires are attached to a telephone switch, or even by how many simultaneous telephone calls may be processed. Modern telecommunications networks treat all traffic simply as "bits" – small pieces of data that may be part of a telephone call, a text message, an Internet web page, a video, or any number of other things. All traffic is simply data. There are of course limits to the amount of data that a single facility like this one can handle. Wireless delivery of a video, which typically uses a large amount of data, has a much greater impact on the capacity of a wireless facility than does the wireless delivery of a text message. Because of this, the number of telephone calls that can be handled at any given moment depends upon what other users are doing – how many e-mails are being retrieved, how many web pages are being delivered, how many videos are being watched, etc. Thus, it is impossible to describe "capacity" in terms of total calls, etc.

What we can say is that the proposed work will essentially double the amount of traffic that can be handled by the facility at any given moment. To analogize, AT&T is proposing to increase the size of this information highway from two lanes to four lanes. This should lead to a substantial increase in the facility's ability to provide modern telecommunications services. Because the "capacity" of the site at any given moment depends upon the mix of services being provided, it is safe to say that all services will benefit.

In addition to increasing the number of lanes on the information highway, the proposed upgrade will also increase the speed limit for traffic using those lanes. The proposed upgrades to the wireless facility will allow maximum data transfer speeds of approximately 10 times the rate possible with the facility in its current state. This means web pages will load much more quickly, e-mail will arrive faster, internet videos will load more quickly and play more reliably. The faster a given e-mail, or internet video, can be delivered, over time, the sooner the wireless facility will be free to carry other data, which benefits all users.

In short, AT&T proposes to make substantial improvements to its wireless facility, by essentially doubling capacity for the site, by increasing data speeds by approximately 10 times, and by improving coverage. These are substantial benefits. On the other hand, AT&T is not proposing any increase in the height of the antennas, and is proposing only a modest increase in the overall size of the facility compared to what had been previously permitted. This is a considerable amount of benefit, with little cost to the Town of Portola Valley or its residents.

4. *A visual analysis to assess the effects on views and aesthetics from public areas and from private residences and to address cumulative impacts of the proposed facility and other existing and foreseeable wireless communications facilities, including foreseeable co-location facilities.*

Photographs showing the wireless facility in its current state, and photosimulations showing the likely appearance of the facility after the proposed work is completed, are included with this application. AT&T proposes to continue to screen the facility from public view mainly through the use of plants and shrubs. However, AT&T would provide an opaque fence (or would perhaps install slats in the proposed chainlink fence) to more completely screen the facility from view, if requested by the Town.

5. *A report by an approved radio frequency expert estimating the cumulative radio frequency emissions and compliance with FCC OET Bulletin 65 that would result if the proposed facility is approved.*

Radiofrequency emissions analysis is included with this application. The report includes cumulative analysis, and indicates that the facility will meet FCC emissions standards.

6. *An alternative site analysis, submitted by the applicant and subject to independent expert review by the Town.*

Alternative site analysis is typically required when wireless carriers are proposing to build a new wireless facility, and must explain the reasons why a particular location was chosen. For this proposal, AT&T is not proposing to locate a new wireless facility in Portola Valley, but rather to modify a facility that has been operating in Portola Valley for many years (alternative site analysis was likely provided before the site was constructed, years ago). Because a new facility is not being proposed, the Planning Department agreed via e-mail to waive the alternative site analysis. At this time, AT&T is satisfied that the location of this facility adequately meets its coverage objectives, and with the modifications proposed, will achieve AT&T's objective of increasing capacity and providing enhanced services to its customers in the vicinity of the facility. Because this facility works in concert with other AT&T wireless facilities to cover a large geographical area, moving this facility to a significantly different location would make achieving coverage objectives difficult. It would also likely create new aesthetic issues in any new location.

7. *Provide a written narrative showing how the applicant has complied with all previous Use Permit conditions on the site.*

The prior use permit conditions required AT&T to apply for and obtain an encroachment permit prior to installing new facilities. AT&T applied for and received encroachment permit number 1868 in July, 2011. The prior permit also required AT&T to enter into an agreement to maintain the wireless facility, to remove equipment that is no longer used, and to post a bond to guarantee this obligation. Although AT&T has not complied with these requirements previously, a bond guaranteeing AT&T's obligation to maintain or remove the wireless facility is included with this application. The prior permit requested data verifying

compliance with the Town noise ordinance, and with FCC radio frequency emission standards. Appropriate reports covering each of these subjects are included with this application. The prior permit required AT&T to upgrade the facility as new technology becomes available. AT&T is complying with this obligation via the present application. The prior application required AT&T to submit proposed physical changes to the facility to the town planner for review. AT&T is also complying with this obligation via the present application.

AT&T will provide such other documents and information as may be requested by the town to make the necessary determinations.

Thank you for your consideration of this matter.

Sincerely,

David Haddock
Wireless Acquisition Resources, Inc.
An Authorized Representative of AT&T Mobility
324 Riverside Avenue
Roseville, CA 95678
916-420-5802
dh@sacq.net

at&t

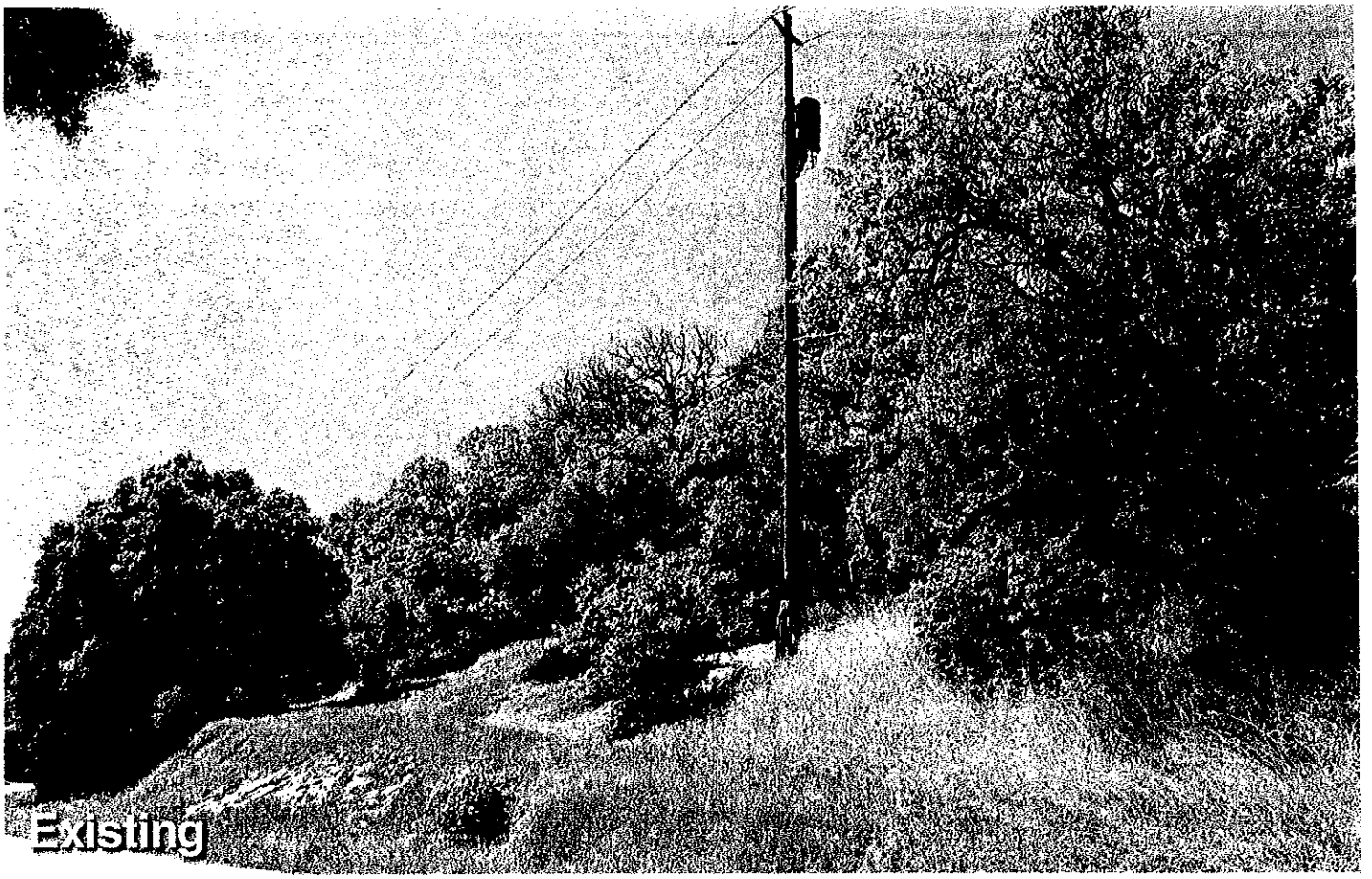
Alpine Road JPA **Site # CNU5918** **Looking North from Alpine Road**

4115 Alpine Road
Portola Valley, CA 94028

View #1

4/9/13

Applied Imagination 510 914-0500



at&t

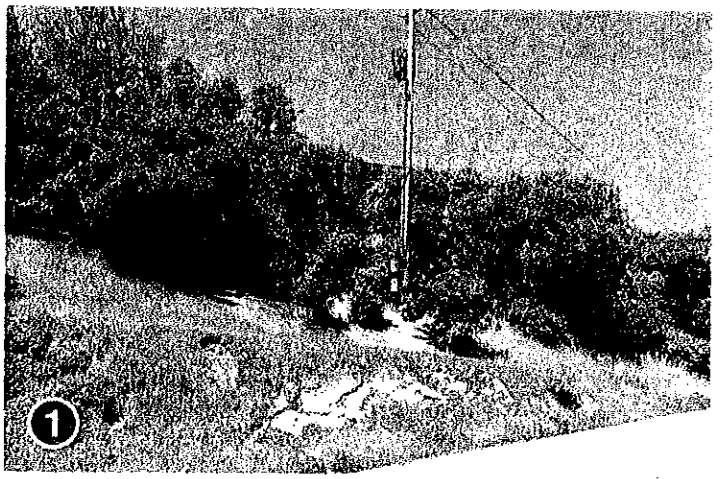
Alpine Road JPA **Site # CNU5918** **Looking North from Alpine Road**

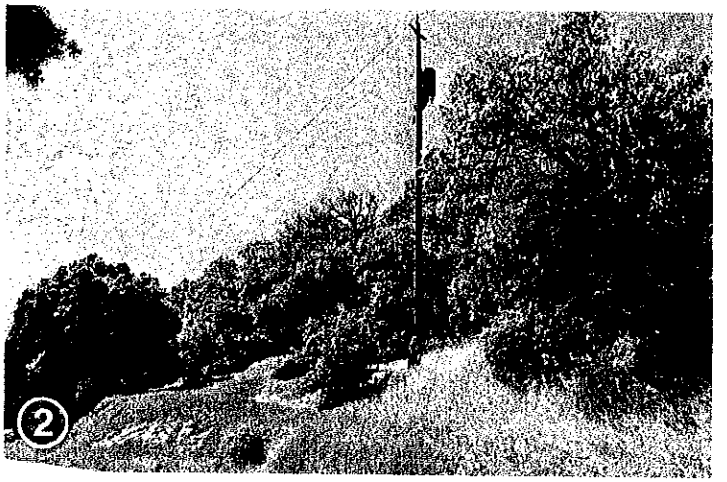
4115 Alpine Road
Portola Valley, CA 94028

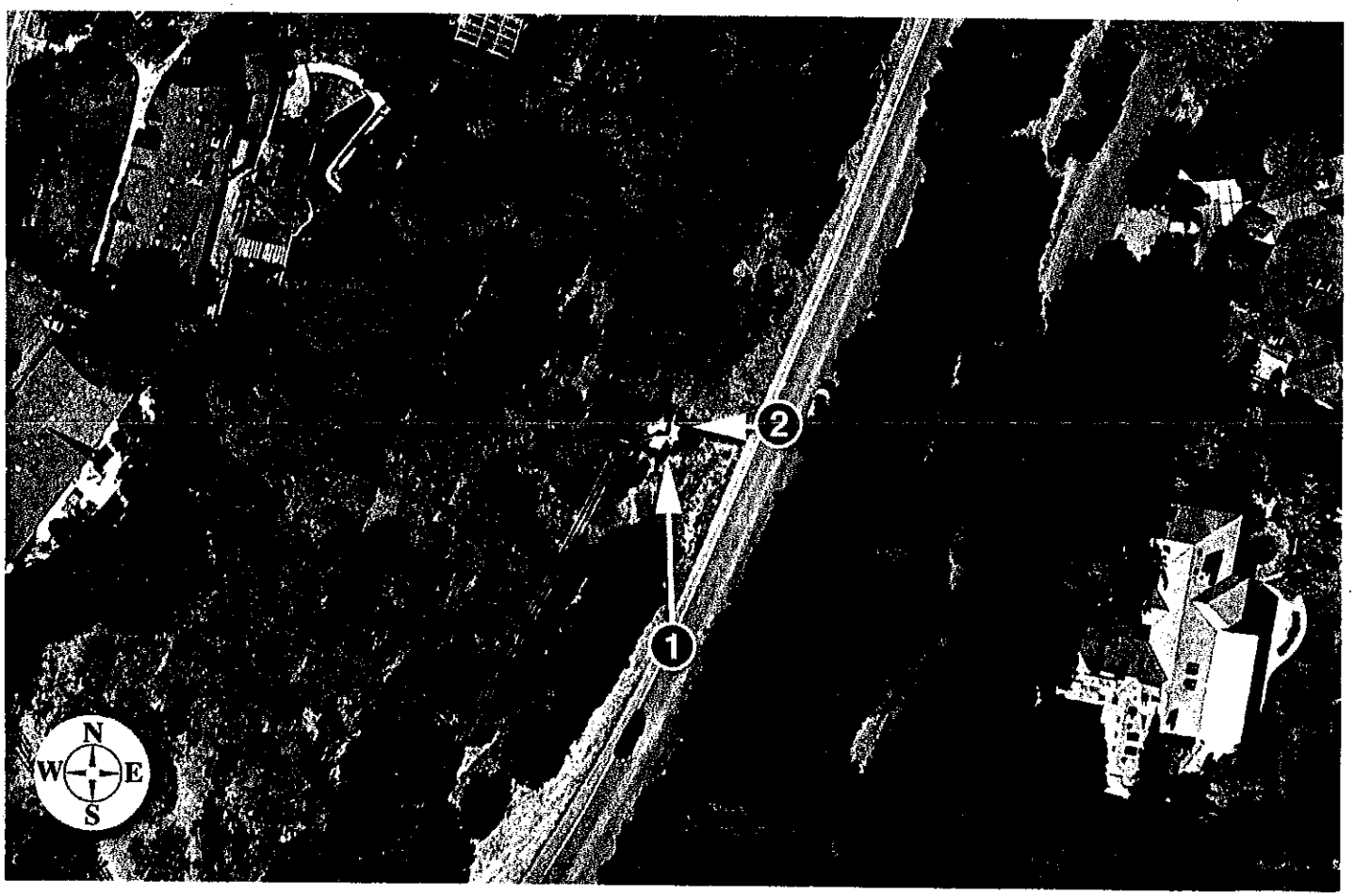
View #2

4/9/13

Applied Imagination 510 914-0500







at&t

Alpine Road JPA **Site # CNU5918**

Aerial Map

4115 Alpine Road
Portola Valley, CA 94028

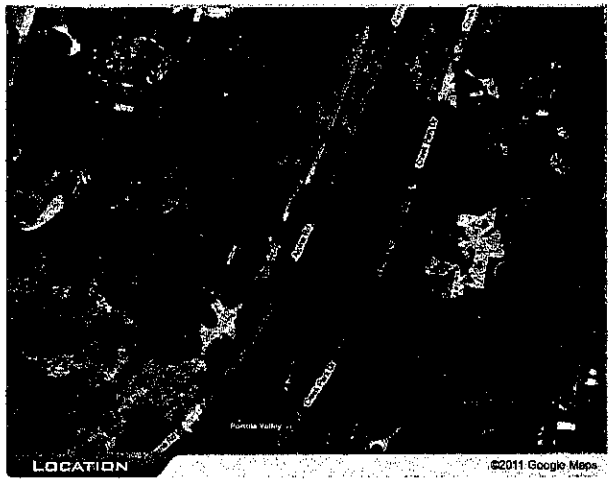
4/9/13

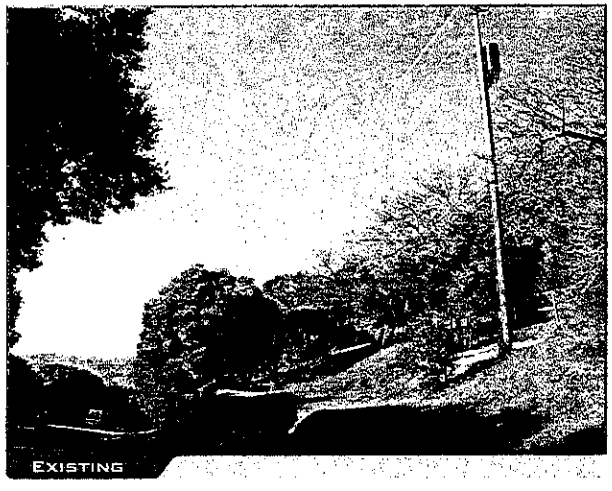
Applied Imagination 510 914-0500

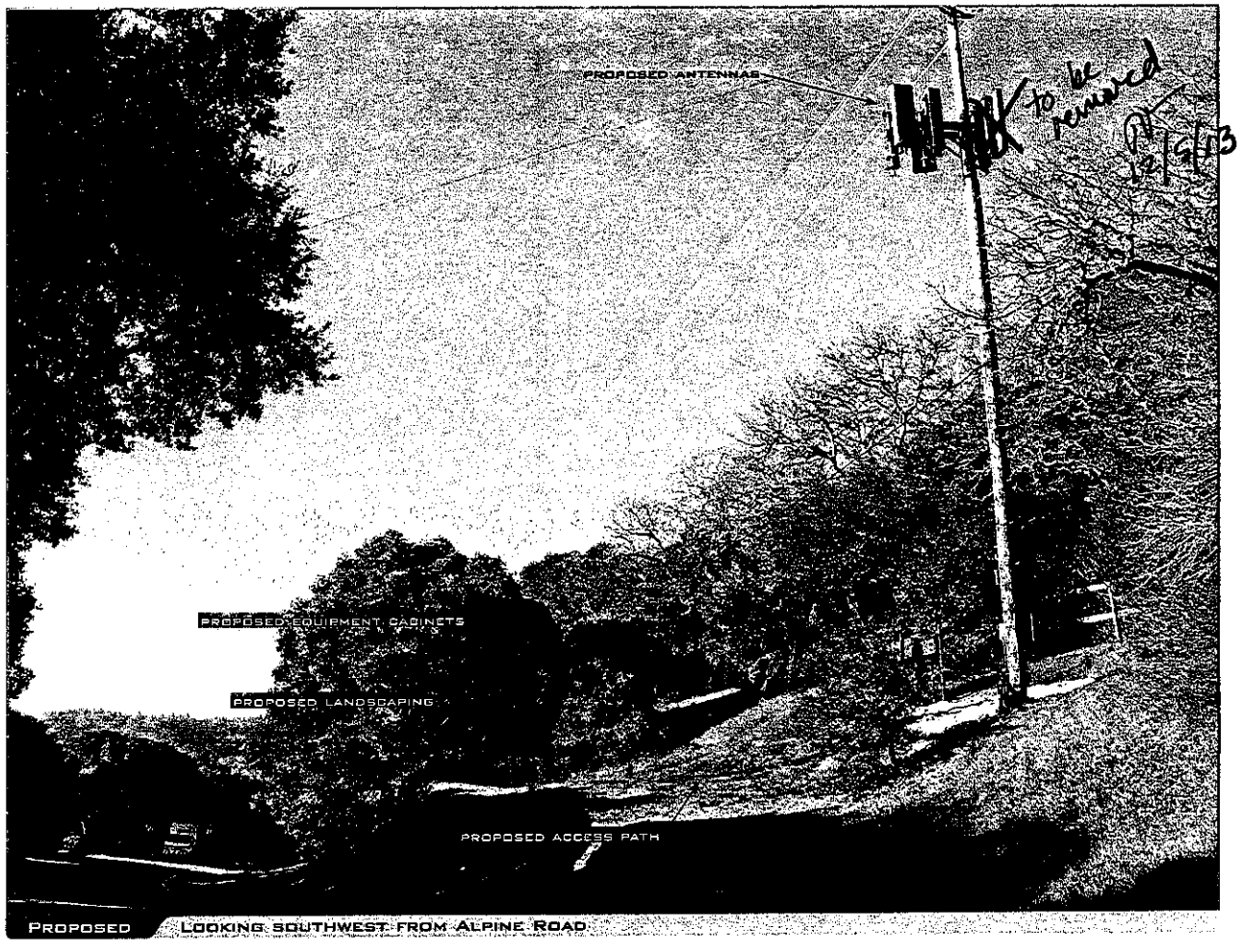
at&t

CN5918
ALPINE

ALPINE ROAD PORTOLA VALLEY CA 94028







ACCURACY OF PHOTO SIMULATION BASED UPON INFORMATION PROVIDED BY PROJECT APPLICANT.

SPANGLE ASSOC.

SEP - 1 2011

CN5918

ALPINE

ALPINE ROAD PORTOLA VALLEY CA 94028

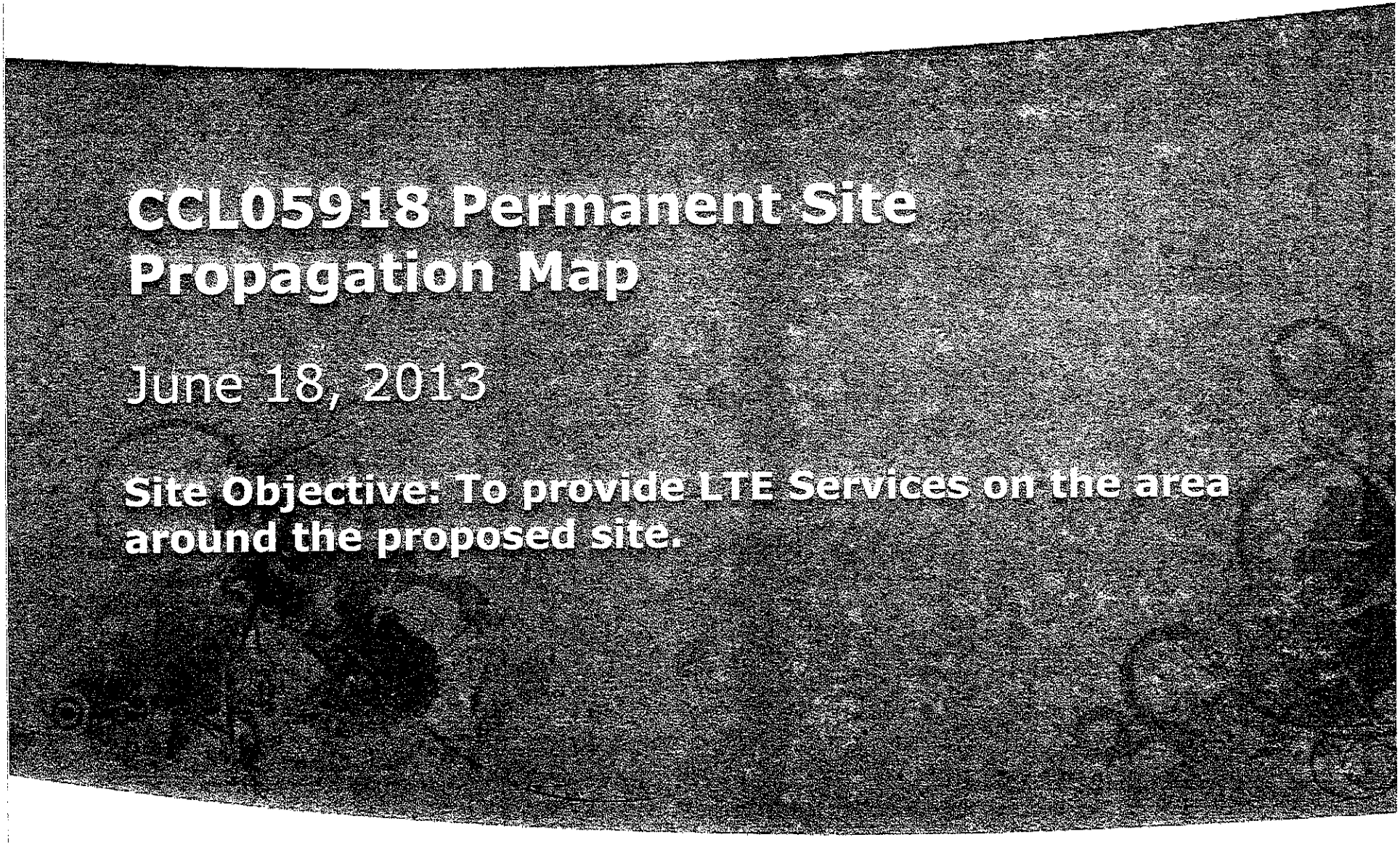
VIEW 2

LOCATION

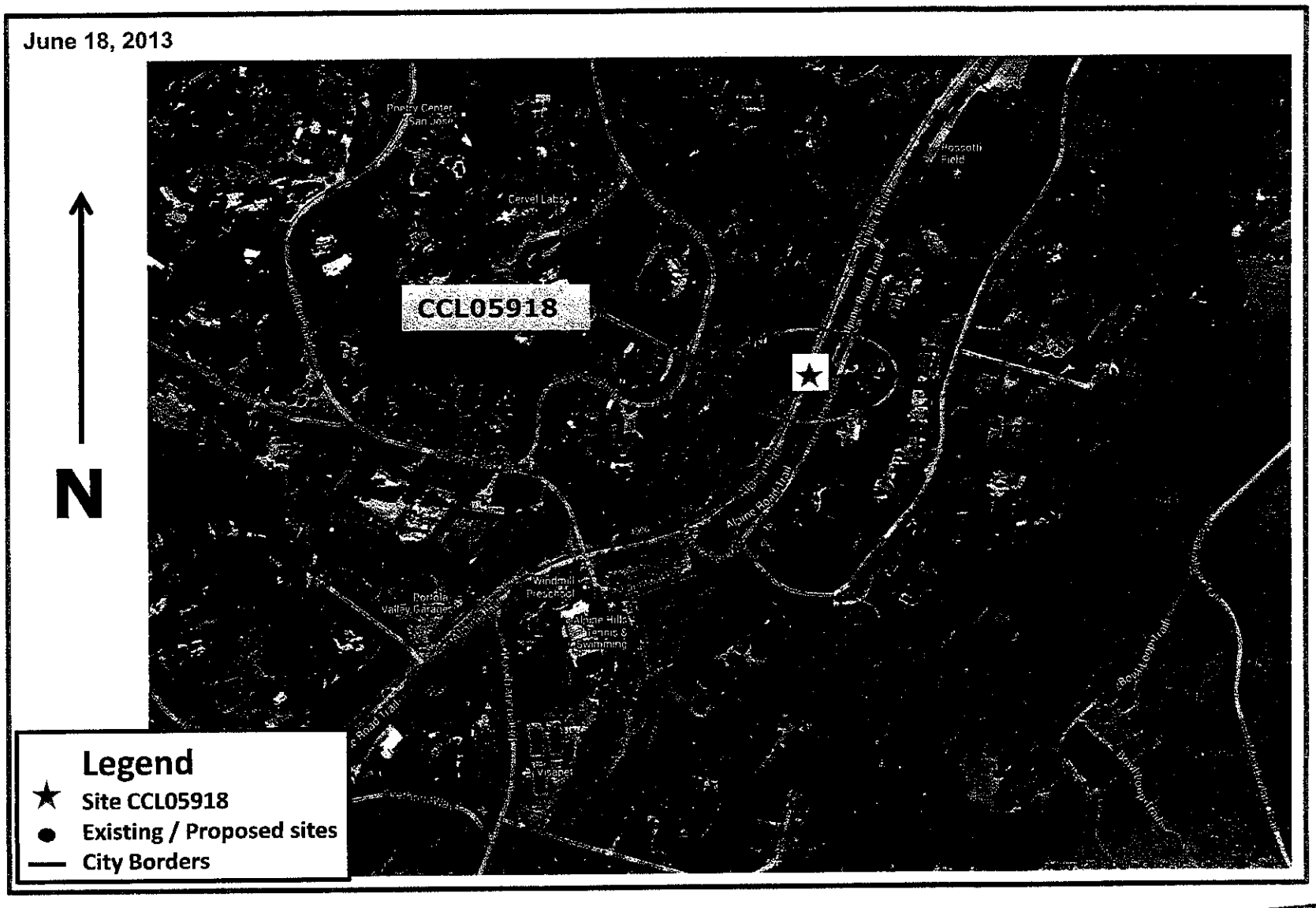
EXISTING

PROPOSED LOOKING NORTH FROM ALPINE ROAD

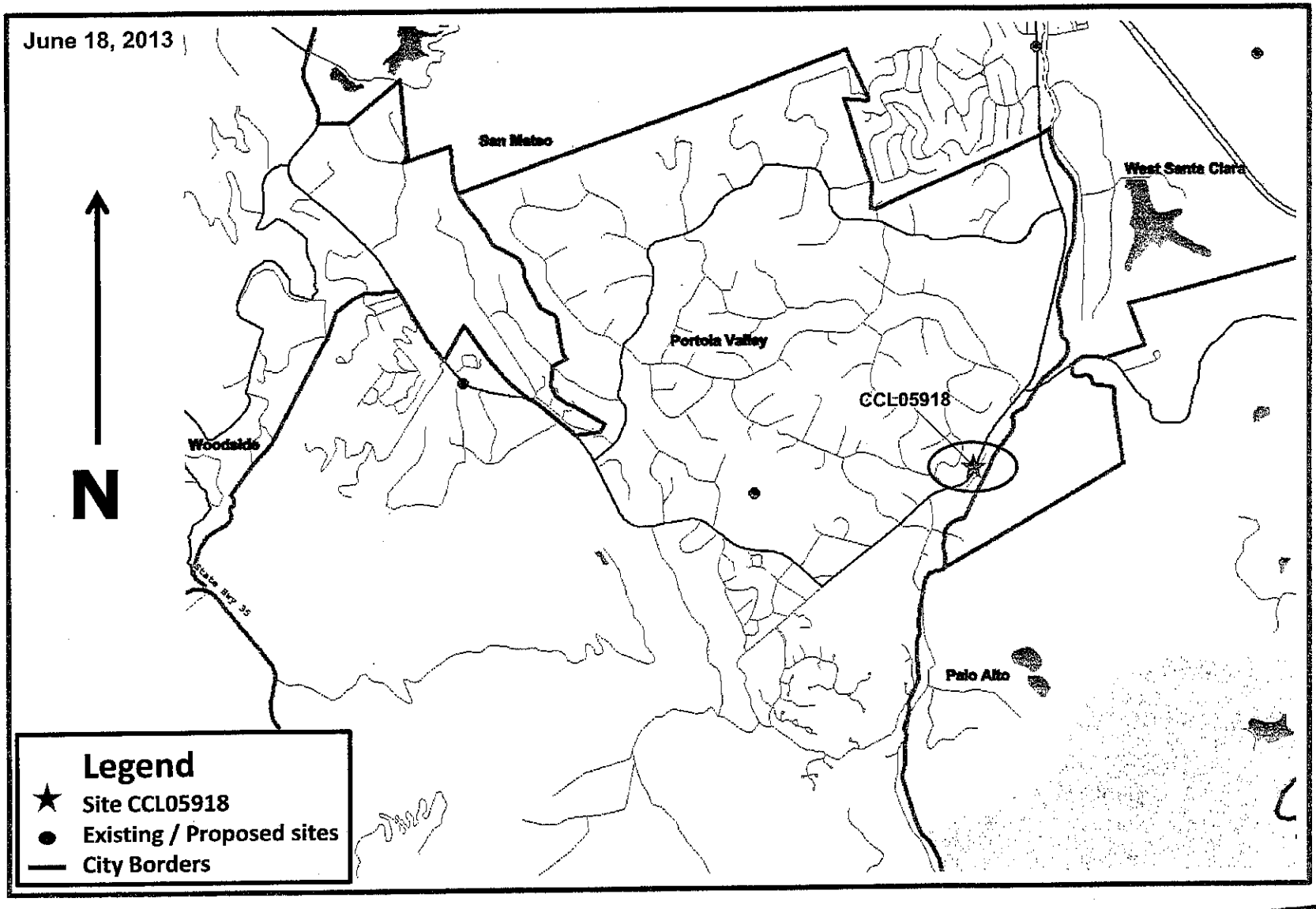
ACCURACY OF PHOTO SIMULATION BASED UPON INFORMATION PROVIDED BY PROJECT APPLICANT.


CCL05918 Permanent Site Propagation Map
June 18, 2013
Site Objective: To provide LTE Services on the area around the proposed site.

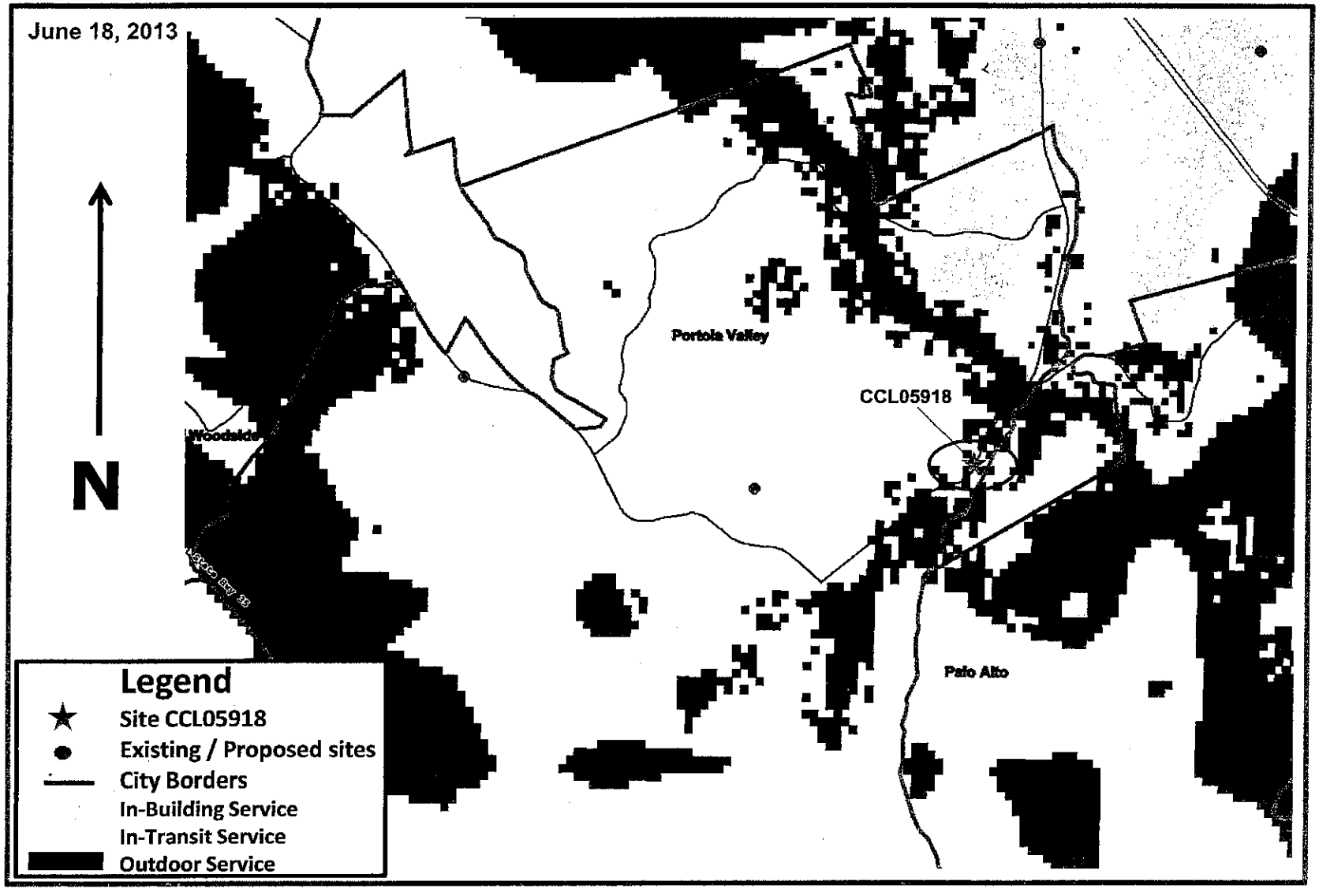
Satellite view around Proposed Site – CCL05918



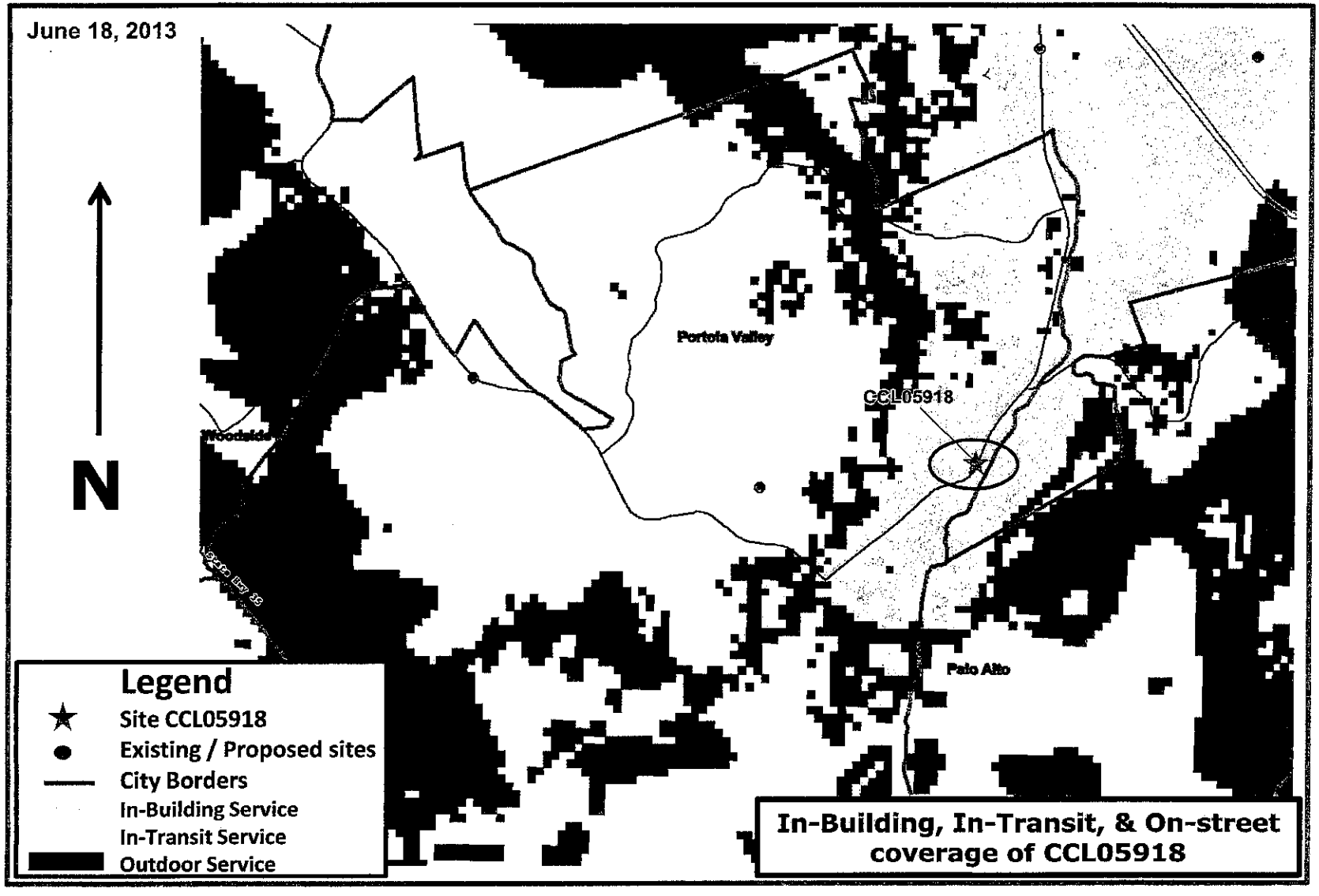
Area Detail around Proposed Site – CCL05918



LTE Coverage BEFORE the Proposed Site – CCL05918



LTE Coverage AFTER the Proposed Site – CCL05918



Coverage Legend

In-Building Service: **In general, the areas shown in dark green should have the strongest signal strength and be sufficient for most in-building coverage. However, in-building coverage can and will be adversely affected by the thickness/construction type of walls, or your location in the building (i.e., in the basement, in the middle of the building with multiple walls, etc.)**

In-Transit Service**: The areas shown in the yellow should be sufficient for on-street or in-the-open coverage, most in-vehicle coverage and possibly some in-building coverage.**

Outdoor Service: **The areas shown in the Blue should have sufficient signal strength for on-street or in-the-open coverage, but may not have it for in-vehicle coverage or in-building coverage.**

TOWER / STRUCTURE / EQUIPMENT REMOVAL BOND

Location of tower/structure/equipment:
4115 Alpine Road, Portola Valley, CA

Site: CNU5918 Alpine Road
FA #10067793

Bond Number: 39S205670

KNOW ALL MEN BY THESE PRESENTS:

THAT **New Cingular Wireless PCS, LLC 4430 Rosewood Drive, Pleasanton, CA 94588,** as Principal, and **Liberty Mutual Insurance Company**, a corporation duly organized under the laws of the State of **Massachusetts** as Surety, are held and firmly bound unto **the Town of Portola Valley, 765 Portola Road, Portola Valley, CA 94025** as Obligee, the penal sum of **Fifteen Thousand and NO/100 Dollars ($15,000.00)** for the payment of which, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents, the liability of the surety being limited to the penal sum of this bond regardless of the number of years the bond is in effect.

WHEREAS, the Principal has entered into a written agreement with the property owner for the placement of a tower, structure or equipment furnishing telephone, television or other electronic media service, which agreement sets forth the terms and conditions which govern the use of such towers, structures or equipment and which agreement is hereby specifically referred to and made part hereof, and

WHEREAS, the **Town of Portola Valley** ordinance and/or the property owner, requires the submission of a bond guaranteeing the maintenance, replacement, removal or relocation of said tower,

NOW THEREFORE, the condition of this obligation is such, that if the above bounden Principal shall perform in accordance with the aforesaid ordinance and/or agreement, and indemnify the Obligee against all loss caused by Principal's breach of any ordinance or agreement relating to the maintenance, replacement, removal or relocation of a tower, structure or equipment, then this obligation shall be void, otherwise to remain in full force and effect unless cancelled as set forth below.

THIS BOND may be cancelled by Surety by giving thirty (30) days written notice to the Obligee by certified mail. Such cancellation shall not affect any liability the surety has incurred under this bond prior to the effective date of the termination.

PROVIDED that no action, suit or proceeding shall be maintained against the Surety on this bond unless the action is brought within twelve (12) months of the cancellation date of this bond.

SIGNED this **6th** day of **February, 2013**.

CORPORATE SEAL

Principal: New Cingular Wireless PCS, LLC
By AT&T Mobility Corporation its manager

By: _____ **Art Kirchoffer**
Assistant Treasurer

Surety: Liberty Mutual Insurance Company

By: _____
Heidi A. Nothelsen, Attorney-in-Fact

ATT RF EME Compliance Report

USID# 51055
Site No. CNU5918
Alpine Road - 3701438614 - CN5918
4115 Alpine Road
Portola Valley, California 94028
San Mateo County
37.378569; -122.197239 NAD83
utility pole

EBI Project No. 69131170
October 8, 2013

Prepared for:

AT&T Mobility, LLC
c/o Black & Veatch Corporation
Bishop Ranch 8, 5000 Executive Parkway, Suite 430
San Ramon, CA 94583

Prepared by:

EBI Consulting
environmental | engineering | due diligence

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APPENDICES

EXECUTIVE SUMMARY

Purpose of Report

EnviroBusiness Inc. (dba EBI Consulting) has been contracted by AT&T Mobility, LLC to conduct radio frequency electromagnetic (RF-EME) modeling for AT&T Site CNU5918 located at 4115 Alpine Road in Portola Valley, California to determine RF-EME exposure levels from proposed AT&T wireless communications equipment at this site. As described in greater detail in Section 2.0 of this report, the Federal Communications Commission (FCC) has developed Maximum Permissible Exposure (MPE) Limits for general public exposures and occupational exposures. This report summarizes the results of RF-EME modeling in relation to relevant FCC RF-EME compliance standards for limiting human exposure to RF-EME fields.

This report contains a detailed summary of the RF EME analysis for the site, including the following:

- Antenna Inventory
- Site Plan with antenna locations
- Antenna inventory with relevant parameters for theoretical modeling
- Graphical representation of theoretical MPE fields based on modeling
- Graphical representation of recommended signage and/or barriers

This document addresses the compliance of AT&T's transmitting facilities independently and in relation to all collocated facilities at the site.

Statement of Compliance

A site is considered out of compliance with FCC regulations if there are areas that exceed the FCC exposure limits and there are no RF hazard mitigation measures in place. Any carrier which has an installation that contributes more than 5% of the applicable MPE must participate in mitigating these RF hazards.

As presented in the sections below, based on worst-case predictive modeling, there are no modeled areas on any accessible ground-level walking/working surface related to the proposed antennas that exceed the FCC's occupational or general public exposure limits at this site. Additionally, there are areas where workers elevated above the ground may be exposed to power densities greater than the occupational limits. The worst-case emitted power density may exceed the FCC's occupational limit within approximately 11 feet of AT&T's proposed antennas at the antenna face level. Workers and the general public should be informed about the presence and locations of antennas and their associated fields.

AT&T Recommended Signage/Compliance Plan

AT&T's RF Exposure: Responsibilities, Procedures & Guidelines document, dated September 21, 2012, requires that:

1. All sites must be analyzed for RF exposure compliance;
2. All sites must have that analysis documented; and
3. All sites must have any necessary signage and barriers installed.

Site compliance recommendations have been developed based upon protocols presented in AT&T's RF Exposure guidance document, dated September 21, 2012, additional guidance provided by AT&T, EBI's

understanding of FCC and OSHA requirements, and common industry practice. Barrier locations have been identified (when required) based on guidance presented in AT&T's RF Exposure Policy guidance document, dated September 21, 2012. The following signage is recommended at this site:

- Green INFO 2 sign posted on the base of the utility pole.
- Blue NOTICE - sign posted at the base of the utility pole.
- Yellow CAUTION - TOWER sign posted on or near the antennas. (The size of the sign should be proportionate to the size of the pole)

The signage proposed for installation at this site complies with AT&T's RF Exposure: Responsibilities, Procedures & Guidelines document and therefore complies with FCC and OSHA requirements. Barriers are not recommended on this site. More detailed information concerning site compliance recommendations is presented in Section 5.0 and Appendix E of this report.

1.0 SITE DESCRIPTION

This project involves the proposed addition of two (2) LTE antennas to the existing two (2) wireless telecommunication antennas on a utility pole in Portola Valley, California. There are two Sectors (A and B) proposed at the site, with one (1) existing antenna and one (1) proposed LTE antenna per sector. For modeling purposes, it is assumed that there will be one (1) GSM/UMTS antenna in each sector transmitting in one band of the 850 (GSM), two bands of the 850 (UMTS) and two bands of the 1900 MHz frequency ranges, and one (1) LTE antenna in each sector transmitting in the 700 and 1900 MHz frequency ranges. The Sector A antennas will be oriented 35° from true north. The Sector B antennas will be oriented 243° (GSM and UMTS) and 225° (LTE) from true north. The bottoms of the LTE antennas will be 40 feet above ground level. The bottoms of the GSM/UMTS antennas will be 40.8 feet above ground level. Appendix B presents an antenna inventory for the site.

Access to this site is accomplished via approaching the utility pole from ground level. Workers must be elevated to antenna level to access them, so these antennas are not accessible to the general public.

2.0 FEDERAL COMMUNICATIONS COMMISSION (FCC) REQUIREMENTS

The FCC has established Maximum Permissible Exposure (MPE) limits for human exposure to Radiofrequency Electromagnetic (RF-EME) energy fields, based on exposure limits recommended by the National Council on Radiation Protection and Measurements (NCRP) and, over a wide range of frequencies, the exposure limits developed by the Institute of Electrical and Electronics Engineers, Inc. (IEEE) and adopted by the American National Standards Institute (ANSI) to replace the 1982 ANSI guidelines. Limits for localized absorption are based on recommendations of both ANSI/IEEE and NCRP.

The FCC guidelines incorporate two separate tiers of exposure limits that are based upon occupational/controlled exposure limits (for workers) and general public/uncontrolled exposure limits for members of the general public.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/ controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general public/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

General public/uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment-related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Table 1 and Figure 1 (below), which are included within the FCC's OET Bulletin 65, summarize the MPE limits for RF emissions. These limits are designed to provide a substantial margin of safety. They vary by frequency to take into account the different types of equipment that may be in operation at a particular facility and are "time-averaged" limits to reflect different durations resulting from controlled and uncontrolled exposures.

The FCC's MPEs are measured in terms of power (mW) over a unit surface area (cm^2). Known as the power density, the FCC has established an occupational MPE of 5 milliwatts per square centimeter (mW/cm^2) and an uncontrolled MPE of 1 mW/cm2 for equipment operating in the 1900 MHz frequency range. For the AT&T equipment operating at 850 MHz, the FCC's occupational MPE is 2.83 mW/cm^2 and an uncontrolled MPE of 0.57 mW/cm^2. For the AT&T equipment operating at 700 MHz, the FCC's occupational MPE is 2.33 mW/cm^2 and an uncontrolled MPE of 0.47 mW/cm^2. These limits are considered protective of these populations.

Table 1: Limits for Maximum Permissible Exposure (MPE)

(A) Limits for Occupational/Controlled Exposure

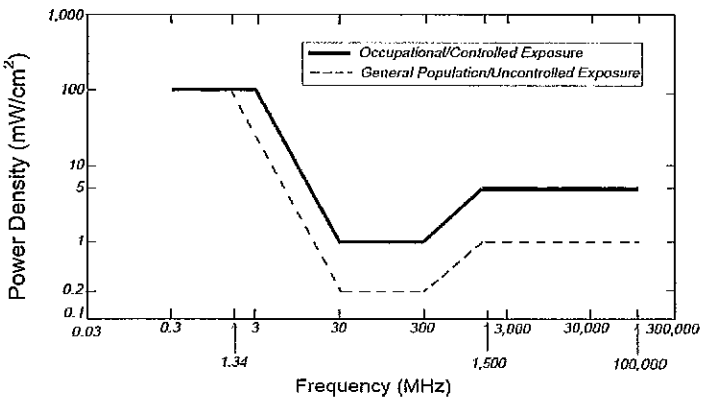
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $[E]^2$, $[H]^2$, or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	($900/f^2$)*	6
30-300	61.4	0.163	1.0	6
300-1,500	--	--	f/300	6
1,500-100,000	--	--	5	6

(B) Limits for General Public/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $[E]^2$, $[H]^2$, or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	($180/f^2$)*	30
30-300	27.5	0.073	0.2	30
300-1,500	--	--	f/1,500	30
1,500-100,000	--	--	1.0	30

f = Frequency in (MHz)
* Plane-wave equivalent power density

Figure 1. FCC Limits for Maximum Permissible Exposure (MPE)
Plane-wave Equivalent Power Density



Based on the above, the most restrictive thresholds for exposures of unlimited duration to RF energy for several personal wireless services are summarized below:

Personal Wireless Service	Approximate Frequency	Occupational MPE	Public MPE
Personal Communication (PCS)	1,950 MHz	5.00 mW/cm^2	1.00 mW/cm^2
Cellular Telephone	870 MHz	2.90 mW/cm^2	0.58 mW/cm^2
Specialized Mobile Radio	855 MHz	2.85 mW/cm^2	0.57 mW/cm^2
Most Restrictive Freq. Range	30-300 MHz	1.00 mW/cm^2	0.20 mW/cm^2

MPE limits are designed to provide a substantial margin of safety. These limits apply for continuous exposures and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

Personal Communication (PCS) facilities used by AT&T in this area operate within a frequency range of 700-1900 MHz. Facilities typically consist of: 1) electronic transceivers (the radios or cabinets) connected to wired telephone lines; and 2) antennas that send the wireless signals created by the transceivers to be received by individual subscriber units (PCS telephones). Transceivers are typically connected to antennas by coaxial cables.

Because of the short wavelength of PCS services, the antennas require line-of-site paths for good propagation, and are typically installed above ground level. Antennas are constructed to concentrate energy towards the horizon, with as little energy as possible scattered towards the ground or the sky. This design, combined with the low power of PCS facilities, generally results in no possibility for exposure to approach Maximum Permissible Exposure (MPE) levels, with the exception of areas directly in front of the antennas.

3.0 AT&T RF Exposure Policy Requirements

AT&T's RF Exposure: Responsibilities, Procedures & Guidelines document, dated September 21, 2012, requires that:

1. All sites must be analyzed for RF exposure compliance;
2. All sites must have that analysis documented; and
3. All sites must have any necessary signage and barriers installed.

Pursuant to this guidance, worst-case predictive modeling was performed for the site. This modeling is described below in Section 4.0. Lastly, based on the modeling and survey data, EBI has produced a Compliance Plan for this site that outlines the recommended signage and barriers. The recommended Compliance Plan for this site is described in Section 5.0.

4.0 Worst-Case Predictive Modeling

In accordance with AT&T's RF Exposure policy, EBI performed theoretical modeling using RoofView® software to estimate the worst-case power density at the site ground-level resulting from operation of the antennas. RoofView® is a widely-used predictive modeling program that has been developed by Richard Tell Associates to predict both near field and far field RF power density values for roof-top and tower telecommunications sites produced by vertical collinear antennas that are typically used in the cellular, PCS, paging and other communications services. The models utilize several operational specifications for different types of antennas to produce a plot of spatially-averaged power densities that can be expressed as a percentage of the applicable exposure limit.

For this report, EBI utilized antenna and power data provided by AT&T, and compared the resultant worst-case MPE levels to the FCC's occupational/controlled exposure limits outlined in OET Bulletin 65.

The assumptions used in the modeling are based upon information provided by AT&T, and information gathered from other sources. There are no other wireless carriers with equipment installed at this site.

Based on worst-case predictive modeling, there are no modeled areas on any accessible ground-level walking/working surface related to the proposed AT&T antennas that exceed the FCC's occupational or general public exposure limits at this site. Additionally, there are areas where workers elevated above the ground may be exposed to power densities greater than the occupational limits. The worst-case emitted power density may exceed the FCC's occupational limit within approximately 11 feet of AT&T's proposed antennas at the antenna face level. Workers and the general public should be informed about the presence and locations of antennas and their associated fields. At the nearest walking/working surfaces to the AT&T antennas, the maximum power density generated by the AT&T antennas is approximately 7.60 percent of the FCC's general public limit (1.52 percent of the FCC's occupational limit).

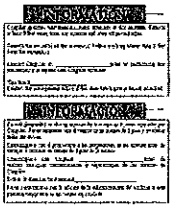
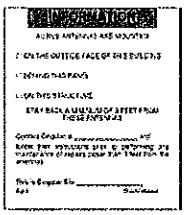
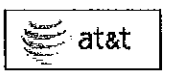
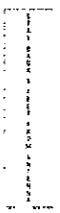
The inputs used in the modeling are summarized in the RoofView® export file presented in Appendix C. A graphical representation of the RoofView® modeling results is presented in Appendix D. It should be noted that RoofView® is not suitable for modeling microwave dish antennas; however, these units are designed for point-to-point operations at the elevations of the installed equipment rather than ground-level coverage. Based on AT&T's RF Exposure: Responsibilities, Procedures & Guidelines document, dated September 21, 2012, microwave antennas are considered compliant if they are higher than 20 feet above any accessible walking/working surface. There are no microwaves installed at this site.

5.0 RECOMMENDED SIGNAGE/COMPLIANCE PLAN

Signs are the primary means for control of access to areas where RF exposure levels may potentially exceed the MPE. As presented in the AT&T guidance document, the signs must:

- Be posted at a conspicuous point;
- Be posted at the appropriate locations;
- Be readily visible; and
- Make the reader aware of the potential risks prior to entering the affected area.

The table below presents the signs that may be used for AT&T installations.

Informational Signs		Alerting Signs	
	INFO 1		NOTICE
	INFO 2		CAUTION - ROOFTOP
	INFO 3		CAUTION - TOWER
	INFO 4		WARNING

Based upon protocols presented in AT&T's RF Exposure: Responsibilities, Procedures & Guidelines document, dated September 21, 2012, and additional guidance provided by AT&T, the following signage is recommended on the site:

Recommended Signage:

- Green INFO 2 sign posted on the base of the utility pole.
- Blue NOTICE - sign posted at the base of the utility pole.
- Yellow CAUTION - TOWER sign posted on or near the antennas. (The size of the sign should be proportionate to the size of the pole)

No barriers are required for this site. Barriers may consist of rope, chain, or fencing. Painted stripes should only be used as a last resort. If painted stripes are selected as barriers, it is recommended that the stripes and signage be illuminated. The signage and any barriers are graphically represented in the Signage Plan presented in Appendix E.

6.0 SUMMARY AND CONCLUSIONS

EBI has prepared this Radiofrequency Emissions Compliance Report for the proposed AT&T telecommunications equipment at the site located at 4115 Alpine Road in Portola Valley, California.

EBI has conducted theoretical modeling to estimate the worst-case power density from AT&T antennas to document potential MPE levels at this location and ensure that site control measures are adequate to meet FCC and OSHA requirements, as well as AT&T's corporate RF safety policies. As presented in the preceding sections, based on worst-case predictive modeling, there are no modeled exposures on any accessible ground-level walking/working surface related to proposed equipment in the area that exceed the FCC's occupational and general public exposure limits at this site. As such, the proposed AT&T project is in compliance with FCC rules and regulations. Additionally, there are areas where workers elevated above the ground may be exposed to power densities greater than the occupational limits. The worst-case emitted power density may exceed the FCC's occupational limit within approximately 11 feet of AT&T's proposed antennas at the antenna face level. Workers and the general public should be informed about the presence and locations of antennas and their associated fields.

Signage is recommended at the site as presented in Section 5.0 and Appendix E. Posting of the signage brings the site into compliance with FCC rules and regulations and AT&T's corporate RF safety policies.

7.0 LIMITATIONS

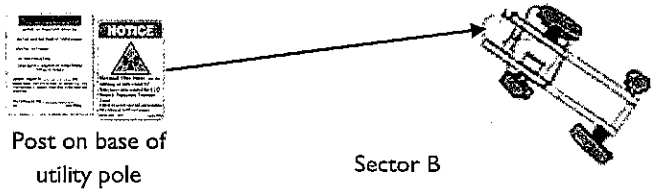
This report was prepared for the use of AT&T Mobility, LLC. It was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same locale under like circumstances. The conclusions provided by EBI are based solely on the information provided by the client. The observations in this report are valid on the date of the investigation. Any additional information that becomes available concerning the site should be provided to EBI so that our conclusions may be revised and modified, if necessary. This report has been prepared in accordance with Standard Conditions for Engagement and authorized proposal, both of which are integral parts of this report. No other warranty, expressed or implied, is made.

Appendix E

Compliance/Signage Plan

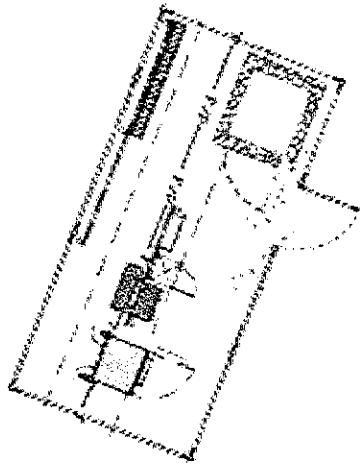
AT&T Antennas

Sector A



Post on base of utility pole

Sector B



*Post on or near antennas. The size of the sign should be proportionate to the size of the pole

Sign Identification Legend	
	Denotes AT&T Informational Sign 1
	Denotes AT&T Informational Sign 2
	Denotes AT&T Informational Sign 3
	Denotes AT&T Informational Sign 4
	Denotes AT& T NOTICE Sign
	Denotes AT&T CAUTION Sign
	Denotes AT&T WARNING Sign

0' 2' 4' 8'

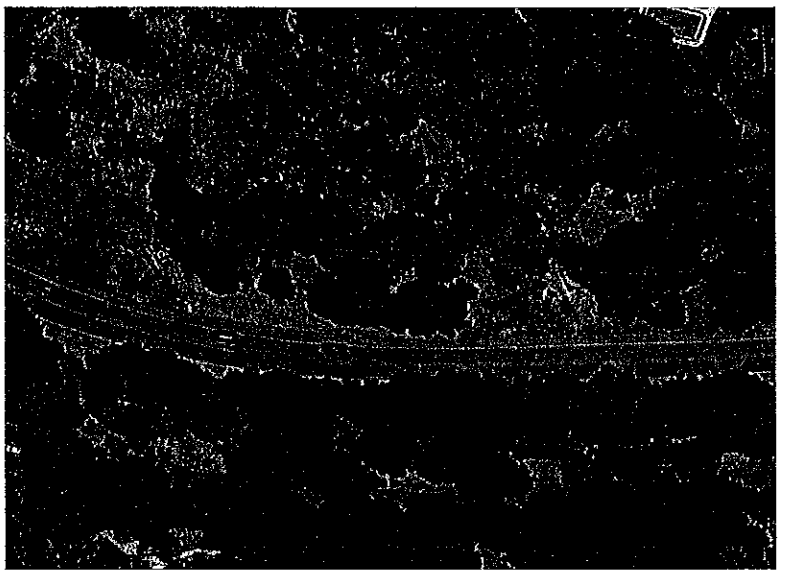
Compliance/Signage Plan
Facility Operator: AT&T Mobility
Site Name: Alpine Road - 3701438614 - CN5918
AT&T Site Number: CNU5918
USID Number: 51055
Report Date: 10-08-13

EBI Consulting
environmental | engineering | due diligence

Environmental Noise Assessment Report

Site No. CNU5918
Alpine
4115 Alpine Road
Portola Valley, CA

EBI Project No. 24130014
October 17, 2013



Prepared for:

at&t

c/o AT&T Mobility, LLC
c/o Black and Veatch Corp
2999 Oak Road
Suite 910
Walnut Creek, CA

Prepared by:

EBI Consulting
environmental | engineering | due diligence

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APPENDICES

1.0 EXECUTIVE SUMMARY

AT&T, currently operates an unstaffed wireless telecommunications facility at site number CNU5918 (site nameAlpine). This site is located in the wooded area adjacent to the road at 4115 Alpine Road, Portola Valley, CA, and is herein referred to as Alpine.

A study of the noise effects from the existing climate controlled equipment on nearby areas was performed by EBI Consulting. Existing sound levels were measured on July 9, 2013 at the nearest residence and adjacent to the equipment. Acoustic modeling was done to assess the potential change in existing sound levels and predict post construction daytime and nighttime sound levels. This report evaluates the compliance for the 4115 Alpine Road site in relation to the Town of Portolla Valley Noise guidelines.

Based on the results of this study, EBI concludes that the CNU5918 project will be in compliance with the Town of Portolla Valley Municipal Code Ordinance No. 2009-380 concerning the sound level limits at all project property lines.

2.0 BACKGROUND

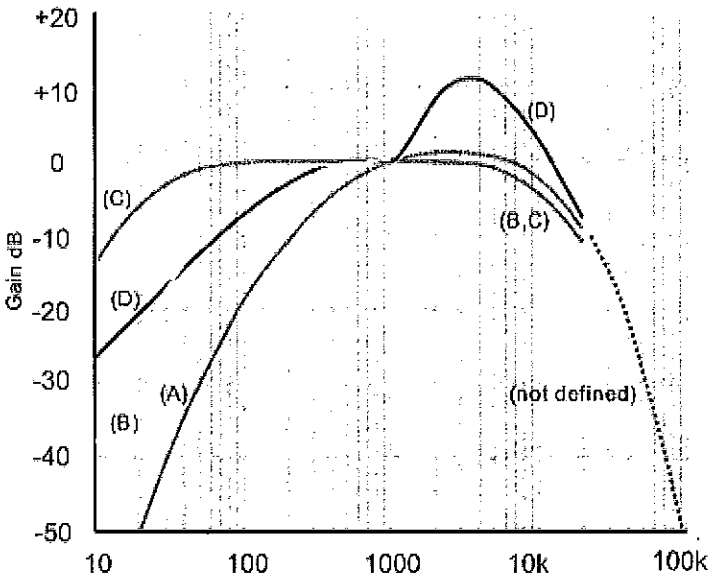
All sounds originate from a source. The sound energy, produced by a source, creates variations in air pressure which travel in all directions much like a wave ripples across the water. The "loudness" or intensity of a sound is a function of the sound pressure level, defined as the ratio of two pressures: the measured sound pressure from the source divided by a reference pressure (i.e. threshold of human hearing). Sould level measurements are most commonly expressed using the decibel (dB) scale. The decibel scale is logarithmic to accommodate the wide range of sound intensities the human ear is capable of responding to. On this scale, the threshold of human hearing is equal to 0 dB, while levels above 140 dB can cause immediate hearing damage.

One property of the decibel scale is that the combined sound pressure level of separate sound sources is not simply the sum of the contributing sources. For example, if the sound of one source of 70 dB is added to another source of 70 dB, the total is only 73 dB, not a doubling to 140 dB. In terms of human perception of sound, a 3 dB difference is the minimum perceptible change for broadband sounds (i.e. sounds that include all frequencies). A difference of 10 dB represents a perceived halving or doubling of loudness.

Environmental sound is commonly expressed in terms of the A-weighted sound level (dBA). The A-weighting is a standard filter to make measured sound levels more nearly approximate the frequency response of the human ear. Table 1 shows the adjustments made at each octave band frequency to contour un-weighted sound levels (dB) to A-weighted sound levels (dBA).

TABLE 1 - A-WEIGHTED OCTAVE BAND ADJUSTMENT (±dB)

Octave Band Center Frequency (Hz)	32	64	125	250	500	1000	2000	4000	8000	16000
A-weighting Adjustment (±dB)	-39.4	-26.2	-16.1	-8.6	-3.6	0.0	+1.2	+1.0	-1.1	-6.6



A-weighting (blue), B (yellow), C (red), and D-weighting (blk)

Environmental sound varies depending on environmental conditions. Some sounds are sharp impulses lasting for short periods of time, while others rise and fall over longer periods of time. There are various measures (metrics) of sound pressure designed for different purposes. The Leq, or equivalent sound level, is the steady-state sound level over a period of time that has the same acoustic energy as the fluctuating sound that was measured over the same period. The Leq is commonly referred to as the average sound level and is calculated automatically by the sound level meter using methods defined in ANSI S1.4-1983[1].

[1] American National Standards Institute, ANSI S1-4-1983, American National Standard Specification for Sound Level Meters, 1983

3.0 REGULATORY REQUIREMENTS

Town of Portola Valley Ordinance No. 2009-380

The town of Portola Valley Ordinance No. 2009-380 describes the Community Noise standards and noise level limits. These limits are applicable at the boundaries of the property where sound is produced. The table of sound level limits for each land use category has been extracted from the Ordinance and is shown in Table 2 below. Section 9.10.030 of the Ordinance specifies Exterior Noise Level Limits not to be exceeded in any hour in each zoning district. Note that the limit corresponding to the zoning district of the receiver (not the noise source) is applied.

TABLE 2 – PORTOLA VALLEY
TABLE OF APPLICABLE NON-TRANSPORTATION GENERATED NOISE STANDARDS

Land Use Receiving the Noise	Hourly Noise-Level Descriptor	Exterior Noise-Level Standard In Any Hour (dBA)		Interior Noise-Level Standard In Any Hour (dbA)	
		Daytime (7am-10pm)	Nighttime (10pm-7am)	Daytime (7am-10pm)	Nighttime (10 pm-7 am)
Residential	Leq Lmax	50 65	40 55	40 55	30 45
Medical Convalescent	Leq Lmax	55 70	45 60	45 55	35 45
Theater, auditorium	Leq Lmax			35 50	35 50
Religious facility, meeting hall	Leq Lmax	55		40 55	40 55
Office Building	Leq			45	
School, library, museum	Leq Lmax	55		40 55	
Playground, park	Leq	55			

In addition, the Ordinance prohibits creation of any noise which causes the sound level when measured on any other property to exceed:

a. The Residential standards apply to all residentially zoned properties.

b. Each of the noise levels specified above shall be lowered by 5 dBA for tonal noises characterized by a whine, screech, or hum, noises consisting primarily of speech or music, or recurring impulsive noises.

c.The exterior noise standards are measured at any point on the property on which sound is generated, or on a separate receiving property.

d. The thresholds for speech interference indoors are about 45 dBA if the noise is steady and above 55 dBA if the noise is fluctuating. Outdoors, the thresholds are about 15 dBA higher. Steady noise of sufficient intensity, above 35 dBA, and fluctuating noise levels above about 45 dBA have been shown to affect sleep.

4.0 SITE DESCRIPTION

The site CNU5918 is located adjacent to Alpine Road in the woods area near the southeastern property lines of the residential properties at 40 and 50 Bear Gulch Drive Portola Valley, CA. The residential area surrounding the site is zoned as residential according to the Town of Portola Valley zoning[2], and therefore noise generated by the installed equipment is subject to the limitations in the residential category of Table 2. Antennas are proposed for installation on the exisiting utility pole. The equipment cabinets are to be located near the southeastern property line of the adjacent residences. Figure 1 presents the proposed equipment cabinet location, monitoring location, property line and nearest residential property. According to aerial photographs, the nearest private residential structure is 40 Bear Gulch Drive, approximately 165 feet from the equipment cabinet.

[2] Town of Portola Valley Municipal Code Chapter 18.08, "Zoning Map", Municipal Code 1983. Online:http://library.municode.com/index.aspx?clientId=13781&stateId=5&stateName=California

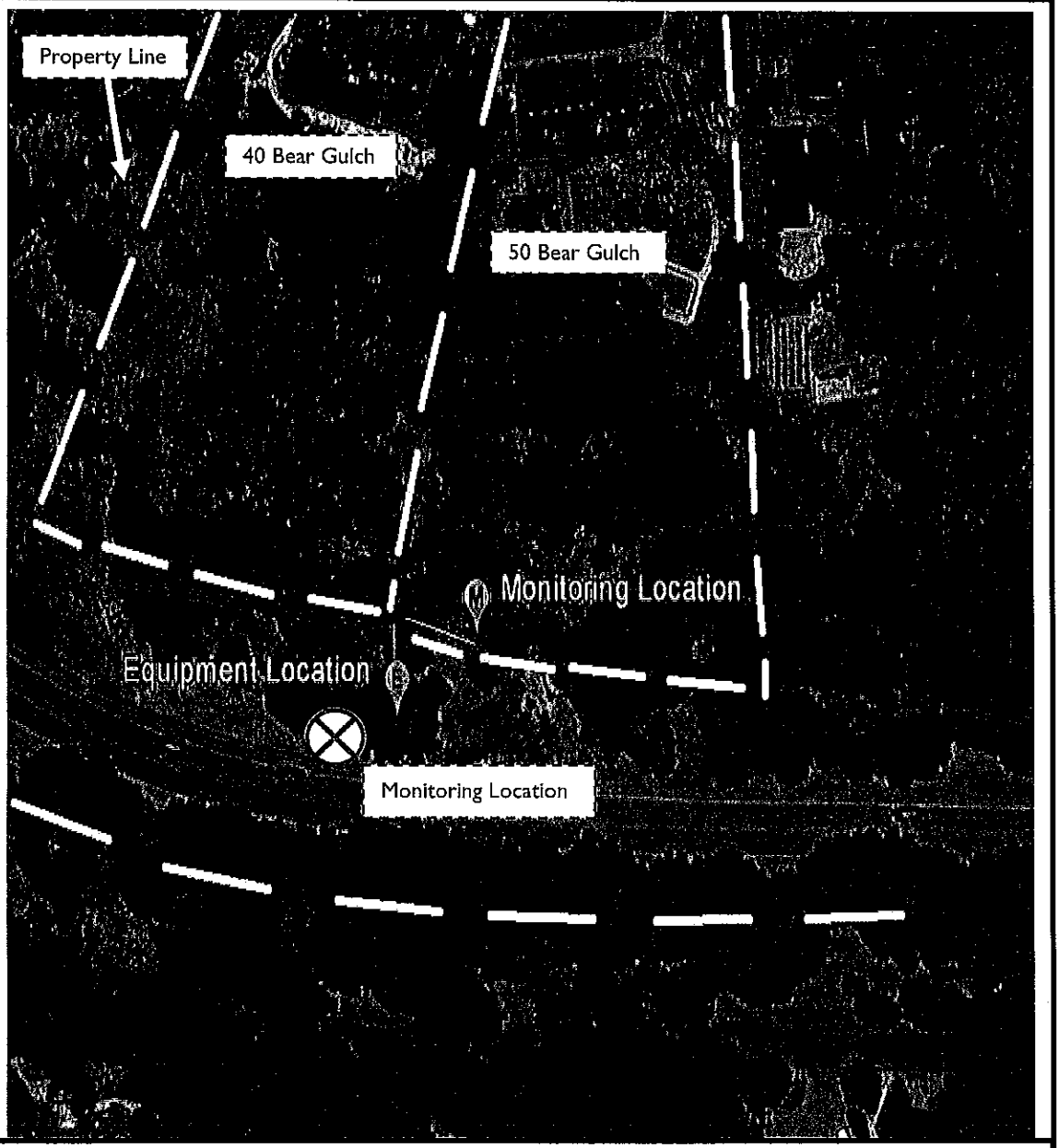


FIGURE 1 – SITE SCHEMATIC AND MONITORING LOCATIONS

Alpine
CNU5918
4115 Alpine Road, Portola Valley, CA
Site Visit Date: July 9, 2013

5.0 AMBIENT SOUND LEVEL MEASUREMENTS

Short-term (20 minute) sound monitoring, day and night, was performed in the area surrounding the proposed location on July 9, 2013. See Figure 1.

All sound level measurements were taken with a Casella CEL-633 real-time octave-band sound level analyzer, which was equipped with a precision condenser microphone having an operating range of 5 dB to 140 dB, and an overall frequency range of 3.5 to 20,000 Hz. The meter meets or exceeds all requirements set forth in the American National Standards Institute (ANSI) Standards for Type 1 for quality and accuracy. Prior to and immediately following both measurement sessions, the sound analyzer was calibrated (no level adjustment was required) with an ANSI Type 1 calibrator, which has an accuracy traceable to the National Institute of Standards and Technology (NIST). All instrumentation was laboratory calibrated per ANSI recommendations. For all measurement sessions the microphone was fitted with an environmental windscreen to negate the effect of air movement and tri-pod mounted at a height of 1.3 meters above grade, and measurements were made away from any vertical reflecting surfaces in compliance with ANSI Standards S12.9[3]. All data were downloaded to a computer following the measurement session. The sound data are shown in Appendix A and are summarized in Table 3.

TABLE 3 – AMBIENT SOUNT LEVEL MONITORING RESULTS
JULY 9, 2013

Location	Description	Time	L_{eq} (dBA)
Loc-1	Equipment Location	1:56 – 2:16 p.m.	61.8
		11:10 – 11:31 p.m	57.7
Loc-2	Adjacent to Alpine Road	2:24 – 2:45 p.m.	71.1
		11:39 – 12:00 a.m.	59.3

[3] Acoustical Society of America, ANSI Standard S12.9-1992, "Quantities and Procedures for Description and Measurement of Environmental Sound"

6.0 MODELED POST CONSTRUCTION NOISE LEVELS

Post construction sound level effects from the proposed equipment at the equipment location and the nearest residence were calculated with the EBI Consulting – Environmental Noise Model (EBI-ENM). EBI-ENM is a sophisticated spreadsheet model for sound propagation and attenuation based on International Standard ISO 9613[4] and other industry accepted calculation standards. Atmospheric absorption, the process by which sound energy is absorbed by the air, is calculated using the Volpe Method[5] which is consistent with ANSI S1.26-1995[6]. The absorption of sound assumes standard dry conditions and is significant at great distances. The EBI-ENM model uses the Modified Kurze-Anderson Formula[7] to predict the insertion loss of any barriers intersecting the line-of-sight between the receiver and the sound source. Complete modeling output sheets from the EBI-ENM are contained in Appendix B. Table 5 summarizes the results of the acoustic modeling.

Predictive post-construction noise levels were calculated for site CNU5918 using measured existing noise levels and acoustical specifications for one (1) RBA72 Cabinet and two (2) Purcell LTE Cabinets. Noise specifications for proposed equipment are summarized in Table 4.

[4] International Standard, ISO 9613-2, Acoustics – Attenuation of Sound During Propagation Outdoors, -- Part 2 General Calculation Method.
[5] Rickley, E., Fleming, G., & Roof, C. *Simplified Procedure for Computing Absorption of Sound by the Atmosphere*, Noise Control Engineering, US, 2007
[6] American National Standards Institute, ANSI S1-26-1995, American National Standard Method for the Calculation of the Absorption of Sound by the Atmosphere, 1995
[7] Menounou, P. *A Correction to Maekawa's Curve for the Insertion Loss Behind Barriers.* Journal of Acoustical Society of America, Vol. 101, Issue 4, 2001

TABLE 4 – ACOUSTIC MODELING RESULTS

Source Name	Description	Equipment Noise Impact (dBA)		
		Source	Loc-1	Loc-2
RBA72 Cabinet	Battery Cabinet	59.0	43.0	41.1
Purcell Cabinet	Equipment Cabinet Climate Control Unit	65.0	48.6	48.0
Purcell Cabinet	Equipment Cabinet Climate Control Unit	65.0	48.6	48.0

TABLE 5 – POST CONSTRUCTION SOUND LEVEL RESULTS

Location	Existing Condition (dBA)		Future Condition (dBA) and Increase (±dB) w/ Proposed Equipment	
	Daytime	Nighttime	Daytime	Nighttime
Loc-1 Equipment Location	61.8	57.7	62.2 (+0.4)	58.8 (+1.1)
Loc-2 Adjacent to Apline Road	71.1	59.3	71.2 (+0.1)	60.0 (+0.7)

7.0 RESULTS AND CONCLUSIONS

The equipment cabinet installation at 4115 Alpine Road will be in compliance with the Town of Portola Valley Municipal Code. The Town of Portola Valley Noise Ordinance. The Town of Portola Valley stipulates that for a property located adjacent to a residential zone (R) shall not exceed 65 dBA from the hours of 7:00 a.m. to 10:00 p.m., and 55 dBA from the hours of 10:00 p.m. to 7:00 a.m. Measured pre-construction ambient sound levels exceed the Town's daytime limit a location 2, and nighttime noise limits at both monitoring locations. Worst-case predictive modeling indicates that the proposed wireless equipment cabinets will have no appreciable impact (>+3 dBA) on the existing noise levels at the nearest property lines and will comply with the Town of Portola Valley Municipal Code.

8.0 LIMITATIONS

This report was prepared for the use of AT&T and Black and Veatch. The conclusions provided by EBI are based solely on the information provided by the client. The observations in this report are valid on the date and time of the investigation. Reported noise levels contained herein are a factor of meteorological and environmental conditions present at the time of the site survey, and represent "typical" site noise levels. Measurement and calculations contained in this report should be considered accurate to within one decibel. Any additional information that becomes available concerning the site should be provided to EBI so that our conclusions may be revised and modified, if necessary. This report has been prepared in accordance with Standard Conditions for Engagement and authorized proposal, both of which are integral parts of this report and has been designed to address the Town of Portola Valley Noise Ordinance No. 2009-380 requirements only.

9.0 REVIEWER CERTIFICATION

I, Sean Pinette, state that:

- I am an employee of Envirobusiness Inc. (d/b/a EBI Consulting), which provides acoustic survey and compliance services to the wireless communications industry. I have reviewed the data collected during the site survey which is incorporated into this Site Compliance Report such that the information contained in this report is true and accurate to the best of my knowledge.

Sincerely,
By EBI Consulting

Sean Pinette
Staff Engineer

MEMORANDUM

TOWN OF PORTOLA VALLEY

TO: ASCC

FROM: Karen Kristiansson, Deputy Town Planner

DATE: December 5, 2013

RE: Follow-up review for conformity with CUP X7D-30: Priory track and field

The Town Council approved an amendment to The Woodside Priory School's use permit (X7D-30) for a new track and replacement field with natural grass on May 8, 2013. The resolution approving the project and the associated conditions of approval are attached. Those conditions require a number of follow-up approvals from the ASCC, including the following which the Priory is applying for at this time:

2. Detailed grading and drainage plans shall be submitted for ASCC review and approval prior to issuance of a site development permit. These detailed plans shall be consistent with the Priory's master drainage plan, and verification of consistency shall be to the satisfaction of the town public works director.
3. The final design of the shed, including its size, shall be subject to review and approval by the ASCC prior to issuance of a building permit. The shed shall not be larger than 2,000 square feet in area.
4. The final color of the track shall be subject to the review and approval of the ASCC prior to installation of the track.
5. Prior to issuance of a site development permit for the project, a final landscaping plan for removal of non-native plantings and species and addition of selected natural screening of the field along the Portola Road corridor shall be submitted to the ASCC for review and approval. The final landscaping plan shall show all existing and proposed vegetation along the Portola Road frontage and in the berm area, as well as all proposed fencing in those areas.

On December 12, the ASCC will be reviewing these items as required by the conditions of approval. There will be a field meeting at 3:00 pm to see the story poles for the revised shed design and to review the landscaping plan in particular. A vicinity map showing the location of the project site is attached. The field meeting will begin in the parking lot next to the proposed track and field site. Review of the project will be continued at the evening meeting. The ASCC last reviewed this project at its January 14, 2013 meeting; the staff report and minutes from that meeting are attached.

The project is presented on the following attached plans dated 10/15/13 and prepared by CJW Architecture unless noted otherwise:

Sheet T-0.1, Cover Sheet
Sheet A-1.1, Project Site Plan
Sheet C-1.0, Grading Plan, BKF, 10/14/13
Sheet C-2.0, Drainage Plan, BKF, 10/14/13
Sheet C-3.0, 36" Storm Line, BKF, 10/14/13
Sheet C-4.0, Civil Details, BKF, 8/23/13
Sheet C-5.0, Grading Sections, BKF, 10/14/13
Sheet C-6.0, Erosion Control Plan, BKF, 10/14/13
Sheet C-6.1, Erosion Control Notes & Details, BKF, 8/23/13
Sheet C-6.2, STOPPP, BKF, 8/23/13
Sheet TF-1.0, Track & Field Notes and Legends, Callander Associates, 10/15/13
Sheet TF-3.0, Track and Field Site Construction, Callander Associates, 10/15/13
Sheet TF-4.0, Track and Field Irrigation Plan, Callander Associates, 10/15/13
Sheet TF-6.0, Track and Field Details, Callander Associates, 10/15/13
Sheet TF-7.0, Track and Field Details, Callander Associates, 10/15/13
Sheet TF-8.0, Track and Field Details, Callander Associates, 10/15/13
Sheet LP-1, Site Preparation Plan, Cleaver Design Associates, 10/15/13
Sheet LP-2, Landscape Plan, Cleaver Design Associates, 10/15/13
Sheet LP-3, Irrigation Plan, Cleaver Design Associates, 10/15/13
Sheet LP-4, Landscape Details, Cleaver Design Associates, 10/15/13
Sheet A-2.1, Storage Shed Plans & Schedules
Sheet A-2.2, Storage Shed Elevations
Sheet A-7.1, Storage Shed Details
Sheet S1, Standard Details, BC|A Structural Engineering, 10/8/2013
Sheet S2, Foundation Plan, BC|A Structural Engineering, 10/8/2013
Sheet S3, Roof Framing Plan, BC|A Structural Engineering, 10/8/2013
Sheet S4, Standard Details, BC|A Structural Engineering, 10/8/2013
Sheet S5, Structural Details, BC|A Structural Engineering, 10/8/2013

A cut sheet for the proposed lights on the shed was also provided and is attached.

The following comments are offered to assist the ASCC in considering and acting on this proposal.

1. **Conformity with the Conditional Use Permit, including the approved Priory Master Plan and the amendments approved on May 8, 2013.** The approved master plan shows this part of the campus for athletic fields, and the proposed track and field are consistent with that designation. The master plan also establishes floor area and impervious surface limits for the campus as a whole. The proposed plans would increase the floor area and impervious surface on the campus as shown in the table below.

	Total Allowed	Currently Existing	This Proposal	Remaining Allowed
Floor Area for Athletic B'ldings	27,190	20,190	1,974	5,026
Impervious Surface	315,693	234,693	57,970	23,003

The plans show a number of minor differences from those submitted for the use permit review last year, but appear to be consistent with the overall approved concepts. There are two changes which the ASCC will want to look at more carefully: the shed design and associated lighting, and the color of the infill area at the western end of the track. Both of these are discussed below.

ASCC members will also note that the track and field plans now include facilities for shotput, discus, long jump, and high jump. Staff has confirmed with the Priory that these facilities are for practice only. The school is not planning to host meets at the new track and field facility, and the facility is too small for meets because the track has six lanes instead of eight. In addition, there are no cages proposed for any of the facilities, and the only fencing will be the post and rail fence along the Portola Road frontage.

2. **Grading and Drainage.** The grading and drainage for the project were reviewed by the Town Geologist, who provided comments in a letter dated November 25, 2013 (attached). These comments raise some questions about the drainage which will need to be answered before a site development permit would be issued. Compliance with the conditions set forth in this letter should be required.

   The plans were also sent to the Town's engineering consultant, NV5, for review and assessment of conformity with the Priory's master drainage plan, but comments have not yet been received from them. However, compliance with the master drainage plan and approval by the engineering consultant should be required for this project.

3. **Shed Design and Associated Lighting.** The plans now show two smaller sheds attached with a breezeway, with a total of 1,974 sf of floor area in the sheds, which is within the 2,000 sf anticipated for the building with the CUP amendment plans. The sheds are located in approximately the same location as was shown on the previous plans, although slightly to the west, and are about the same distance from the trail and Portola Road. Both the shed design and location were revised to respond to the location of the 36" stormwater main, which is being replaced as part of this project. The breezeway will be located above the stormwater main. The original story poles are still located at the site and provide a good sense of the size of the proposed shed, as is shown in the attached drawings. In addition, staff has requested that the applicant stake the corners of the proposed shed for the ASCC to review in the field.

   The height of the building has been lowered by 6" in response to the ASCC's request, from a ridge height of 13'-4" to 12'-10". The plate height of 8'-0" is the same as was originally proposed. Like the original version of the shed, the proposed buildings would be painted a dark brown to match the existing small shed behind the parking lot and would have a composition shingle roof. In addition, the sheds now include windows along the south wall, towards Portola Road, as well as on the side walls.

   There has also been an increase in lighting on the shed. Originally, there was a single light proposed at the door to the shed on the north wall facing away from Portola Road. With the revised design, the shed includes five exterior lights, all located at doorways. Two of these are in the breezeway and one of these in particular could be visible from the Portola Road corridor. The three other lights are

located on the north wall away from Portola Road. All five lights would use the same fixture, which is shown on the attached cut sheet.

Although the shed will likely be used primarily during daylight hours, especially since the track and field themselves are not illuminated, the visibility of the lighting from Portola Road is still an issue. Staff has asked the applicant to consider eliminating the doorway closest to Portola Road, or if that is not possible, to lower or otherwise change the lighting for that doorway so that it would not wash the wall under the fixture. Placing these lights on a timer could also help to reduce potential impacts.

4. **Track color.** The track is proposed to be a standard dark red cinder color, as was discussed previously. The applicant will bring a sample of the track material and color to the December 9 ASCC meeting.

   In addition to the running track, the plans now show an area inside the western end of the track which has the same type of surface as the track. The area is to be used for high jump and other track and field practice and staging activities. Because of the size of the area, staff has asked the applicant whether it, and possibly the long jump area on the north side of the track, could be colored green to match the grass rather than red to match the running track. The ASCC can consider whether using a green color, or other color, in these areas would help to reduce the potential visual impact of the facility from the Portola Road corridor. The project architect will bring a color chart to the meeting for the ASCC's consideration.

5. **Landscaping.** The landscaping shown on the plans (Sheet LP-2) uses the same plant palette and is similar to what was shown on the landscape concept plans approved in May, with some adjustments to the planting area boundaries and number of plants.

   The Conservation Committee reviewed the plans at their meeting on November 26, and their comments are attached, along with their original comments from September 2012. In their review, they note the two main differences from the approved plan. First is the addition of two valley oaks and one coast live oak at the east end of the track, two near the shed and one by the parking lot. These trees would be replacing seven live oaks which are being removed in the area. Second is a reduction in the amount of planting proposed at the northeast side of the track behind the Fromhertz House, so that the planting would be limited to the area being graded.

   The Conservation Committee suggests opening "pocket views" across the field so that there is not just a solid wall of redwoods visible from Portola Road. This was discussed during an earlier field meeting. At its December 4 field meeting, the ASCC should consider whether, and if so, where views should be opened. To help with this, staff has requested that the applicant flag all trees that are currently proposed for removal, except for those along the berm.

   A portion of the existing post and rail fence near the berm would be removed as part of the project, and during the original approval process there was discussion of both replacing that fence and extending it down to the Fromhertz House to create a unified front. The applicant's architect has said that this will be added to the landscape plans. In addition, the plans will be corrected to account for the bleacher

pad and team benches shown on Sheet TF-3.0. Access to the bleachers and team benches will be along the mulch strip outside the track shown on Sheet LP-2.

In terms of the field itself, the approved plans required natural grass, with the understanding that the grass would be as drought-tolerant as possible and similar to what is used on the Town fields. The project proposes to use Celebration Bermuda grass from Delta Bluegrass, overseeded with breakout turf annual rye grass. Celebration Bermuda grass is described as "highly tolerant of heat, shade, and drought conditions" on the Delta Bluegrass website. The Town has used various mixes of bluegrass, rye grass, bentgrass on its fields, and the Town's Recreational Facilities Coordinator said that the best blend will depend on soil conditions and the proposed grass mix is a good one.

Finally, condition of approval #6 stipulates that the ASCC shall review the landscaping approximately 18-24 months after the new landscaping is complete. At that time, the ASCC may require additional plantings or other landscaping adjustments. For that reason, the ASCC may want to keep the current landscape plan at a minimal level, with the understanding that more can be required if that appears necessary once the track and field have been installed and the landscaping has had a chance to start becoming established.

Conclusion

Based on discussion and review at the field meeting and evening meeting, the ASCC should act on the proposed plans. The following conditions are recommended if the ASCC acts to approve the project:

1. The applicant shall comply with the conditions set forth in the November 25, 2013 letter from the Town Geologist.
2. The project shall be approved by the Town's engineering consultant prior to issuance of a site development permit, and any changes necessary to bring the project into conformity with the approved master drainage plan shall be made to the project to the satisfaction of the Public Works Director.
3. The landscape plans shall be revised to show the replacement and extension of the post and rail fence to the Rutherford House and the treatment around the bleacher pad and team benches, to the satisfaction of staff.

In addition, the ASCC should consider whether any additional conditions are needed based on the discussion and review at the December 9 meeting.

Attachments: Resolution and conditions of approval
Vicinity map
Staff report and minutes from January 14, 2013 ASCC meeting
Shed light cut sheet
Letter from Cotton, Shires dated November 25, 2013
Shed Footprint and Existing Story Poles
Shed Elevation and Existing Story Poles
Conservation Committee comments, 2013 and 2012
Project plans

RESOLUTION NO. 2592 -2013

RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF PORTOLA VALLEY APPROVING AN AMENDMENT TO CONDITIONAL USE PERMIT X7D-30 FOR A FIELD REPLACEMENT PROJECT AT THE WOODSIDE PRIORY SCHOOL, SUBJECT TO THE PROVISIONS CONTAINED IN THE "CONDITIONS EXHIBIT," INCLUDING PROHIBITION OF ARTIFICIAL TURF

WHEREAS, the Woodside Priory School proposed to amend its Conditional Use Permit X7D-30 (CUP) to replace an existing athletic field at the school with a 400 m track and field, including artificial turf and other related field modifications ("Project"); and

WHEREAS, the planning commission adopted the Initial Study, Notice of Preparation and Mitigated Negative Declaration ("CEQA Documents") for the Project, including a Mitigation Monitoring and Reporting Program ("MMRP") and the Project at its meeting on March 20, 2013 with Resolutions 2013-1 and 2013-2; and

WHEREAS, the Town Council of the Town of Portola Valley reviewed the record of the planning commission's decisions at its meetings on April 10 and April 24, 2013, and set the project for public hearing before the council on May 8, 2013 specifically to focus on the question of whether the artificial turf component of the project is "in harmony with the general purpose and intent" of the town's zoning ordinance and general plan, as is required by Finding #6 for granting of a CUP amendment; and

WHEREAS, the May 8, 2013 public hearing was duly noticed and conducted, and the town council considered all comments and information presented at the meeting, in addition to the information in the planning commission record and the information in the staff report prepared for the May 8th meeting; and

WHEREAS, at its May 8, 2013 meeting, the town council affirmed the planning commission adoption of the CEQA Documents as set forth in Resolution 2013-1; and

WHEREAS, Section 18.72.130 of the Portola Valley Municipal Code sets forth the required findings for granting or amending a Conditional Use Permit, as follows:

1. The proposed use or facility is properly located in relation to the community as a whole and to land uses and transportation and services facilities in the vicinity.
2. The site for the proposed use is adequate in size and shape to accommodate the proposed use and all yards, open spaces, walls and fences, parking, loading, landscaping and such other features as may be required by this title or in the opinion of the commission be needed to assure that the proposed use will be reasonably compatible with land uses normally permitted in the surrounding area and will insure the privacy and rural outlook of neighboring residences.

3. The site for the proposed use will be served by streets and highways of adequate width and pavement type to carry the quantity and kind of traffic generated by the proposed use.
4. The proposed use will not adversely affect the abutting property or the permitted use thereof.
5. The site for the proposed use is demonstrated to be reasonably safe from or can be made reasonably safe from hazards of storm water runoff, soil erosion, earth movement, earthquake and other geologic hazards.
6. The proposed use will be in harmony with the general purpose and intent of this title and the general plan.
7. When this title or the town general plan specifies that a proposed use shall serve primarily the town and its spheres of influence, the approving authority must find that it is reasonable to conclude, based on the evidence before it, that the proposed use will meet a need in the town and that a majority of the clientele of the proposed use will come from the town and its spheres of influence within the near future, normally no more than two years. In general, in making such finding, the approving authority shall, in addition to other information, explicitly take into consideration all similar uses in the town and its spheres of influence; and

WHEREAS, the town council reviewed these findings and determined that Finding #6 could not be made for the Project as proposed with artificial turf and therefore modified the conditions of planning commission approval to require the use of living grass instead of artificial turf; and

WHEREAS, the town council has determined that based on the record and with the revised conditions of approval that are attached in the "Conditions Exhibit" to this resolution, all of the findings set forth in 18.72.130 of the Portola Valley Municipal Code can be made;

NOW, THEREFORE, be it resolved that the Town Council of the Town of Portola Valley approves the amendment to Conditional Use Permit X7D-30 for the field replacement project at the Woodside Priory School subject to the provisions contained in the "Conditions Exhibit."

PASSED AND ADOPTED at the regular meeting of the Town Council of the Town of Portola Valley on May 8, 2013.

By: _____
Mayor

Attest: _____
Town Clerk

Conditions Exhibit
Amendment to CUP X7D-30, Woodside Priory
May 8, 2013
(Conditions of Approval for the Project Eliminating use of Artificial Turf)

(Note: These conditions would be for this requested amendment and would be in addition to the master plan conditions required with the 2005 CUP amendment.)

1. Synthetic or artificial turf shall not be used as part of this project.
2. Detailed grading and drainage plans shall be submitted for ASCC review and approval prior to issuance of a site development permit. These detailed plans shall be consistent with the Priory's master drainage plan, and verification of consistency shall be to the satisfaction of the town public works director.
3. The final design of the shed, including its size, shall be subject to review and approval by the ASCC prior to issuance of a building permit. The shed shall not be larger than 2,000 square feet in area.
4. The final color of the track shall be subject to the review and approval of the ASCC priory to installation of the track.
5. Prior to issuance of a site development permit for the project, a final landscaping plan for removal of non-native plantings and species and addition of selected natural screening of the field along the Portola Road corridor shall be submitted to the ASCC for review and approval. The final landscaping plan shall show all existing and proposed vegetation along the Portola Road frontage and in the berm area, as well as all proposed fencing in those areas.
6. Approximately 18-24 months after the new landscaping is complete, there shall be a follow-up meeting to review the landscaping with the ASCC. Additional plantings or other landscaping adjustments may be required by the ASCC as a result of the follow-up meeting.
7. Equipment used for field maintenance shall be energy-efficient and should be electric if possible.
8. Within four months of the effective date of the CUP amendment, the Priory shall complete an analysis of the structural condition of the Fromhertz House and provide recommendations for protecting it from failure due to deferred maintenance or structural failure. The analysis and recommendations shall be provided to the town and reviewed by the Town Planner and the Building Official, who shall work with the Priory to develop an appropriate schedule for carrying out the recommendations.
9. Fencing around the track and/or field shall be prohibited.
10. Any signs that are erected in the project area must be reviewed and approved by the ASCC.
11. The project shall comply with the mitigation measures set forth in the Initial Study/Mitigated Negative Declaration for the project except where they specifically refer to mitigations associated with artificial turf (MM 3.3-2a, 3.3-2b, 3.3-2c, and 3.17-2).

Vicinity Map

Review for Conformity with CUP X&D-30, Priory School

0 75 150 300 450 600 Feet

N

302 Portola Road
December 2013

MEMORANDUM

TOWN OF PORTOLA VALLEY

TO: ASCC

FROM: Tom Vlasic, Town Planner

DATE: January 10, 2013

RE: Agenda for January 14, 2013 ASCC Meeting

The following comments are offered on the items listed on the January 14, 2013 ASCC agenda.

4a. CONTINUED CONSIDERATION – REQUEST FOR AMENDMENT TO CONDITIONAL USE PERMIT (CUP) X7D-302 PORTOLA ROAD, *THE PRIORY SCHOOL*

At its January 14, 2013 meeting, the ASCC will consider the Priory School's application for an amendment to their use permit for a parcel merger and to allow installation of a new track with artificial turf infill. The ASCC will not act on the project but will provide recommendations to the planning commission, which is responsible for acting on the proposed use permit applications and amendments. ASCC consideration and recommendations should focus on the aesthetics and design of the proposed project. The planning commission is scheduled to continue its public hearing on the requested amendments at its February 6, 2013 regular meeting.

Both the planning commission and the ASCC have considered this project at a number of previous meetings, including:

- a joint planning commission and ASCC field meeting at the Priory on February 1, 2011 to consider the original proposed project;
- discussion of the original project at the February 15, 2011 ASCC meeting;
- discussion of the original project at the February 16, 2011 planning commission meeting;
- informal consideration on June 6, 2012 by the Planning Commission of a revised project with a larger track and less artificial turf;
- a joint planning commission and ASCC field meeting at the Priory on September 10, 2012 to consider site issues related to the revised project;
- discussion of site issues at the regular ASCC meeting of September 10, 2012;

- discussion of site issues at the regular planning commission meeting on September 19, 2012;
- a joint field meeting with the planning commission and ASCC on September 24, 2012 at Woodside Elementary School to view the school's natural and artificial turf fields; and
- Start of the formal public hearing on the application and the draft Initial Study/Mitigated Negative Declaration at the regular planning commission meeting of December 5, 2012.

The staff reports and minutes from all of those meetings are available online. In addition, the Conservation Committee reviewed plans for the project in September, as did Trails Committee members. Their comments are attached to this staff report and discussed below as appropriate.

As was explained in previous staff reports and application materials, the proposed project would merge the 1.3-acre former Rutherford/Gambetta ("Rutherford") parcel, now owned by the Priory, with the existing Priory land, remove the tree-covered constructed berm between the Rutherford parcel and the softball field, relocate the sewer line that is currently within that berm, underground the overhead utility lines that run along that berm, and install a regulation-sized track facility with 2.39 acres of artificial turf on the track interior. With the parcel merger, the total Priory land covered by the CUP would be 50.4 acres.

Cut from the removal of the berm would be placed on the field area and used to raise the track and field by approximately 10 inches. None of the cut from the berm will be removed from the site. An additional 8 inches of specialized fill will be needed under the track and artificial turf infill for drainage and proper support of the track and turf, so the track and turf will have an elevation approximately 18 inches higher than the existing field.

The project is shown on the following enclosed plans:

Sheet A-1.2, Area Expansion/Lot Merger & Athletic Fields Improvements, 10/2/2012, prepared by CJW Architecture

Sheet A-1.3, Enlarged Plan of Merger Area, 11/5/2012, prepared by CJW Architecture

Sheet A-1.3A, Merger Detail, 9/4/2012, prepared by CJW Architecture

Sheet A-1.4, Merger Detail, 10/8/12, prepared by CJW Architecture

Sheet A-1.5, Grading Plan at Trail, 11/7/12, prepared by CJW Architecture

Sheet 1, Sewer Relocation - Context Plan, 8/12, prepared by BKF

Sheet 2, Sewer Relocation, 8/12, prepared by BKF

Sheet F-1, Drainage Map, Existing Conditions, 5/12, prepared by BKF

Sheet F-2, Drainage Map, Proposed Condition, 5/12, prepared by BKF

Sheet 3, Site Plan, 11/12, prepared by BKF

These plans include revisions and clarifications that respond to comments made at previous planning commission and ASCC meetings. These include shifting the track slightly so that it is further away from Portola Road and also moving the softball field

and backstop towards the hill and away from the track. In addition, the plans now include undergrounding the utility line that runs along the berm. A drainage report, prepared by BKF, confirms that with the proposed drainage provisions, the project would be consistent with the Priory's town-approved Master Drainage Plan. The draft Initial Study/Mitigated Negative Declaration for the project is available on the town's website for reference (http://www.portolavalley.net/index.aspx?recordid=544&page=27).

If the conditional use permit amendment were approved, a site development permit would eventually need to be processed for consideration of the specific details for the grading and tree removal associated with berm removal and field changes. Engineered grading and drainage plans would be submitted as part of that process and would also include provisions for undergrounding the overhead utility lines.

The following information is offered to assist the ASCC with developing comments and recommendations that would be forwarded to the planning commission with respect to the aesthetics and design of the proposed project.

1. **Scope of ASCC review and focus of review.** The ASCC will not be taking formal action on this project but instead will be providing recommendations to the planning commission that should focus on aesthetic and design issues related to the project, particularly in relation to the town's design guidelines and general plan. ASCC members with particular concerns about other aspects of the project are welcome to provide comments to the planning commission as individuals.

2. **Grading, tree removal and drainage.** The project will involve significant amounts of grading. The berm between the existing soccer field and the Rutherford House will be removed, with the cut material being placed over the area to be used for the proposed track and field. That material will raise the elevation of the existing field by about 10 inches, and the specialized subsurface for the track and field will raise the elevation an additional 8 inches. The softball field adjacent to the soccer field will be graded to gradually slope up to meet the new elevation of the soccer field. There will also be grading down from the Rutherford property to the proposed track and field, and the grades of the trail along Portola Road will change near the location of the existing berm as shown on Sheet A-1.5. If the use permit amendment is approved, more detailed grading plans will be prepared for a site development permit for the project.

   The site development permit will also cover tree removal. A total of 52 trees along the berm would need to be removed as part of the project, of which 38 (oaks and redwoods) would be considered significant trees under the site development ordinance. The applicant is also proposing to remove some non-native vegetation along the Portola Road frontage. The Conservation Committee commented that they see the proposed tree removals as acceptable and suggest removing additional eucalyptus and olive trees (unless they are sterile). As is discussed below, new trees and native vegetation are proposed to be planted as part of the project.

   Drainage for the proposed project has been reviewed by BKF Engineers. Their drainage report, dated November 14, 2012, finds that the amount of runoff will be reduced from existing conditions because of the proposed drainage improvements

that are part of the project. The drainage report states "runoff volume will be reduced by 80 percent compared to pre project conditions." (p. 5)

3. **Aesthetics of the proposed artificial turf and track.** One issue that has been raised is the aesthetics of the proposed artificial turf, especially in light of the project's location in the Portola Road scenic corridor. This was discussed in detail at the site visit to Woodside Elementary School, which has both a natural turf field and an artificial turf field. The artificial turf at Woodside School had some glare associated with the material, wear and lack of maintenance and looked more artificial from certain angles. FieldTurf, the manufacturer of both the turf used at Woodside Elementary and the turf proposed for use at the Priory, has stated that the technology has improved in the five years since installation of the field at Woodside Elementary. The newer turf is described as appearing more natural and having less glare. The newer turf has been installed at a number of area high schools, including Cupertino High School, Homestead High School, Lynbrook High School, Monte Vista High School, and Burlingame High School, although those schools may not all have the same type of infill that is proposed for the Priory. The applicant will have a sample of the proposed artificial turf at the January 14 meeting.

   In response to comments from ASCC and planning commissioners at earlier meetings, the applicant has shifted the location of the track slightly so that it is further away from the trail and from Portola Road. At its closest point, the plans now show that the artificial turf would be 42 feet from the trail and 65 feet from Portola Road. In terms of elevation, the trail and the road are about 10-14 feet higher than the proposed track and field at the points with the greatest elevation differences.

   The track would be 400 meters in length, with a width of approximately 17 feet (the total track area is 0.61 acres). The proposed track surface is artificial and would have a dark reddish-brown color. We have asked the applicant to bring a sample of the track surface to the meeting so that the ASCC can see the actual color.

   As is shown on the proposed plans and discussed further below, the landscaping along Portola Road would be changed as part of the project, with non-native vegetation being removed and new native vegetation being planted. This landscaping will frame and filter views of the proposed track and turf from Portola Road in particular and is discussed in more detail below.

4. **Location, design, materials and finishes for the proposed shed.** The proposed 2,000 sf athletic shed is located approximately 82 feet from Portola Road and 36 feet from the trail at the closest points. At previous meetings, there has been discussion of the size and location of the proposed shed. Because of the existing redwoods between the trail and the proposed shed location, as well as the higher elevations of the trail and road, the shed may be less visible in its proposed location than it would be if placed further within the site. Representatives of the Priory have, however, said that they would be willing to consider alternative locations, but the only practical alternative location to serve the front athletic fields and facilities would be on the north side at the base of the slope near the existing shed.

   A note on the plans states that the shed would "match the design, materials and finishes approved for the existing storage shed with the 2005 amendments."

Pictures of the existing shed are attached. As is shown in the pictures, the proposed shed would have similar brown color wood side and composition shingles roofing. The proposed shed would have a plate height of 8'-0" and a ridge height of 13'-4" above the finished floor.

5. **Landscaping**. A landscape concept plan is shown on Sheet A-1.3 A of the plans, with an enlargement provided for the area between the track and the Rutherford House on Sheet A-1.4. The landscaping plan provides for removing vegetation along the Portola Road frontage, including cedars, acacia, plums, privet and pyracantha, as well as the materials on the berm. A variety of new native shrubs are proposed, with one group to be planted in the wet conditions along the roadside open channel and another to be planted in dry conditions further south along the road.

   Some landscaping changes are also proposed around the Rutherford House. The existing small orchard north of the house would be removed and five live oaks would be planted between the house and the track, as well as red fescue, California poppy and blue-eyed grass. Additional red fescue would be planted behind the house.

   At the September 10 field meeting at the Priory School, comments were made that the shaped hedges along Portola Road near the school entrance should be removed and that the oaks should remain but perhaps should be thinned. The Conservation Committee commented that the proposed plantings should be adjusted to leave more open views across the open space, and that preserving views of the hilltops behind the Priory is important. This is consistent with the Portola Road Taskforce's recommendation that plantings along the road should not form vegetative "walls" but should occur in more natural groupings, with occasional open areas allowing for more distant views between the groupings.

6. **Lighting, trail and fencing**. The only lighting proposed as part of this project is one light at the door to the athletic shed, on the north wall of the shed facing away from Portola Road. The proposed fixture is shown on the attached cut sheet and is a bronze sconce-type fixture that is 8" wide and 15" tall, and would extend 6" out from the wall of the shed. The light will likely have a motion serisor in order to minimize lighting impacts. No other lights are proposed as part of the project.

   Trails Committee members would like the trail to accommodate equestrians and to be kept clear of encroaching vegetation. According to the Town Engineer, the trail standard for a multi-use trail that should accommodate equestrians and other users is 6' wide with a rock base. The plans show the trail as 6' – 7' wide.

   On Sheet A-1.5, a note indicates that the existing post and rail fence along the Priory side of the trail will be extended basically up to the Rutherford house, along the road frontage. No other permanent fencing is shown on the proposed plans. There was mention of a possible fence between the softball field and the track at the December 5 planning commission meeting, but that would be a temporary fence that could be erected for softball games only.

Prior to making recommendations to the planning commission, the ASCC should visit the project site and consider the above comments and any new information presented at the January 14, 2013 ASCC meeting.

The ASCC's recommendations could include statements about the aesthetic impacts of the project, including the shed, the landscaping and the artificial turf. The ASCC can also recommend specific conditions to the planning commission, which could then be applied if the commission were to eventually approve the project. These conditions could relate to the landscaping concept, landscaping maintenance, the shed design, lighting, and other aesthetic and design aspects of the project.

4b. CONTINUED CONSIDERATION -- ARCHITECTURAL REVIEW FOR NEW RESIDENCE WITH DETACHED GUEST HOUSE, TENNIS COURT AND RELATED SITE IMPROVEMENTS, AND SITE DEVELOPMENT PERMIT X9H-646, 187 BOLIVAR LANE, *GOLDBAND*

On December 10, 2012 the ASCC conducted a preliminary review of this proposal for construction of a new, single-story, 3,178 sf contemporary design flat roof residence with attached garage on the subject 3.1-acre Westridge subdivision parcel (see enclosed vicinity map for parcel location). While the ASCC was generally supportive of the request, several preliminary review comments were offered, including those from Westridge Architectural Supervising Committee (WASC) representatives, and the project architect also advised that some project changes were in process. These were to include reconsideration of grading and impervious surface areas and also the addition of some floor area to the proposed main and guest house structures.

The staff report prepared for the December 10, 2012 meeting is attached and the meeting minutes are enclosed. In response to the review comments, the applicant and project design team members have provided the following enclosed plans and materials:

- 1/7/13 Letter from project architect with 1/7/13 letter from property owners and 1/7/13 letter from project architect. The letters specifically address each of the 8 points noted in the 12/10 meeting minutes.
- The project revisions discussed in the 1/7/13 letters are presented on the following enclosed plans, unless otherwise noted, dated 1/7/13, prepared by Field Architecture:

  Sheet A000, Cover Sheet

  Sheet L-1, Landscape Plan and Lighting Plan, Skyline Design Studio
  Sheet L-2, Landscape Water Use Plan, Skyline Design Studio

  Sheet A050, Site Plan
  Sheet A100, Floor Plan
  Sheet A101, Construction Staging Plan
  Sheet A200, Building Elevations
  Sheet A201, Building Elevations
  Sheet A202, Guest Elevations

Chair Hughes called the meeting to order at 7:32 p.m. in the Town Center historic School House meeting room.

Roll Call:

ASCC: Hughes, Breen, Clark, Koch, Ross
Absent: None
Planning Commission liaison: McKitterick
Town Council Liaison: Aalfs
Town Staff: Town Planner Vlasic, Principal Planner Kristiansson, Interim Planning Manager Padovan, Acting Planning Assistant Borck

Oral Communications

Public comments were requested, but none were offered.

Continued Consideration – Request for Amendment to Conditional Use Permit (CUP) X7D-302 Portola Road, The Priory School

Kristiansson presented the January 10, 2013 staff report on the ASCC's continued consideration of the subject proposal for CUP amendment for a parcel merger and to allow installation of a new track with artificial turf infill. She clarified that the ASCC does not need to formally act on the project but should provide recommendations to the planning commission, which is responsible for acting on the proposed use permit applications and amendments. She also clarified that ASCC consideration and recommendations should focus on the aesthetics and design of the proposed project.

Vlasic advised that the planning commission is scheduled to continue its public hearing on the requested amendments on February 6, 2013, but that it is unlikely that meeting date could be met. He noted that the response to comments process will take longer and that it is most likely the commission hearing would be continued to at least the February 20th planning commission meeting.

Kristiansson discussed the history of project review to date and that while most of the design aspects of the proposals have not been the subjects of any significant debate, the primary concerns have focused on the plans for use of artificial turf. She then discussed the following revised plans and how they were modified to address input received at the previous planning commission and ASCC meetings identified in the staff report:

Sheet A-1.2, Area Expansion/Lot Merger & Athletic Fields Improvements, 10/2/2012, prepared by CJW Architecture
Sheet A-1.3, Enlarged Plan of Merger Area, 11/5/2012, prepared by CJW Architecture
Sheet A-1.3A, Merger Detail, 9/4/2012, prepared by CJW Architecture
Sheet A-1.4, Merger Detail, 10/8/12, prepared by CJW Architecture
Sheet A-1.5, Grading Plan at Trail, 11/7/12, prepared by CJW Architecture
Sheet 1, Sewer Relocation - Context Plan, 8/12, prepared by BKF
Sheet 2, Sewer Relocation, 8/12, prepared by BKF
Sheet F-1, Drainage Map, Existing Conditions, 5/12, prepared by BKF
Sheet F-2, Drainage Map, Proposed Condition, 5/12, prepared by BKF

Sheet 3, Site Plan, 11/12, prepared by BKF

Tim Molak, Head of School, and project architects Carter Warr and Kevin Schwarckopf presented the revised plans to the ASCC. They offered the following comments:

- The basics of the project have been before the town and ASCC for some time. The key design issues associated with the berm removal, track layout, softball field, shed, trail modifications and landscaping have been addressed as noted in the staff report. Further, there appear to be no issues with the proposed parcel merger.

- The drainage issues have been clarified by the project consultants to the satisfaction of the town public works director, including recent communications from project engineering consultants at BKF.

- Concur with the staff suggestion that details associated with the landscaping, final frontage fencing and also final grading details can be addressed though conditions to any action on the request CUP amendment. The ASCC would then be fully involved in working out the details of such plans.

- It now appears that the key issues are those associated with the proposed artificial turf.

- In response to a question, it was noted that the softball field area would be surfaced in dirt and real grass (grass) and not artificial turf (turf). It was also clarified that the turf infield of the track area would be used for soccer and football activities already on-going at the school. It was noted that it could also be used for Lacrosse if that sport was reintroduced at the school.

- In response to a question, it was noted that the tree removal count is for the berm and no significant tree removal along the Portola Road frontage is planned at this time.

- In response to a question regarding the 2,000 sf size of the proposed storage building, it was noted that the structure was to house existing equipment and materials used in association with the fields that are now housed in at least three locations around the campus. It was explained that it could be smaller, but that this would not solve the scope of the current storage problem. It was further noted that the final design could be improved and that structure could be lower, and that the Priory is prepared to work with the town on a final design that addressed any concerns. It was also clarified that the current design has a plate height of eight feet.

Project FieldTurf representative David Brown provided samples of the previous generation of his company's product (i.e., as used at Woodside School) and what was identified as the most current generation (as used at the other schools identified in the staff report materials). He emphasized that the older generation had grass blade elements that were more reflective then the current generation and that the "visual improvements" was a result in changes to blade form and color. He also noted that the color of the current generation of infill material was improved over the previous generation and the current turf is much cooler that the version used at Woodside school.

During questioning of Mr. Brown about the turf materials there was some confusion over the sample products being displayed. It was determined that the "current" generation sample had the correct grass blades and included an infill material of the right color, but that was made from recycled tires. The applicant and staff advised that the recycled tire material was

not proposed for the project and/or what has been analyzed in the proposed environmental documents. It was eventually determined that a true sample of the material should be presented to the ASCC and that the correct sample should be available for consideration at the continued planning commission public hearing.

Public comments were requested and the following offered:

Andy Brown, Portola Valley resident, stated opposition to the use of turf and stated it was against all the values in town planning documents calling of protecting the natural character of the planning area. He worried about what was done with the old turf materials when they had to be replaced and concluded that this was making the "earth conform to us" rather than living with and protecting the earth.

Bev Lipman, Westridge resident, expressed confusion as to what turf was proposed and asked that this be clarified.

Sally Anne Reiss, Golden Oak Drive, spoke in favor of the Priory request and stressed that local use of water would be reduced and that she understood that 90-95% of the turf materials were recyclable and that it was a green product. She noted that the town now mandates use of manufactured materials for roofing due to fire safety objectives and that you make adjustments when materials are better suited for the specific location and purpose of use. She noted that her "artificial" roofing, while not the real wood she originally desired, did not detract from the aesthetics of her house or how it fit in the residential environment of the town. She also noted that there is already artificial turf at t locations in the town including a small amount in the children's play area at the town center.

Larry Cagan, Alamos Road, noted he was an active soccer player and that he supported the Priory plans for use of turf because it will allow the school to play the games and practice at home as intended with the school's fields. He acknowledged that a perfectly maintained grass field is best for play but this is not practical for anything but the most unusual situations, i.e., like Stanford stadium where there are only 30 games a year. He stressed that for any high use field, grass is difficult to maintain to a proper use standard.

Jon Silver, Portola Road, opposed the use of turf and found it to be fully inconsistent with the general plan provisions calling for preserving the natural beauty of the town and its planning area. He stated that the protection of the natural environment should come first even if it is not convenient needs. He took issue with the sample materials provided by the applicant and worried over the true ability to recycle turf when the surface needs to be replaced. He stressed that the samples look fake and that the turf at Woodside school was not only fake looking due to maintenance issues but also due to the design and general character. He concluded that "fake" grass was unacceptable in Portola Valley.

David Patzer, 350 Cervantes Road, commented that he supported the use of turf and that this should be a practical decision. He stressed that this was a good solution for the school use and that lawns on residential properties in town were also not consistent with preserving the natural condition of the planning area.

ASCC members considered the staff report, applicant input and public comments. Members then shared the following reactions on matters other than the use of turf:

- **Grading and tree removal**. Members found the proposals generally acceptable. Members concurred that consideration should be given to removal of the large

eucalyptus tree on the Rutherford property, but retention of the olive trees was acceptable. Members also noted that a CUP condition should call for a detailed plan for vegetation thinning along Portola Road consistent with the concepts shown on the landscape plan. It was recognized, however, that all existing materials along the frontage of the Rutherford property are not fully defined on the current plans. Members also were reminded that, eventually, detailed grading and drainage plans would need to be submitted for town approval with a formal site development permit and that this permit process would be recognized in conditions attendant to any planning commission action on the proposed CUP amendments.

- **Shed**. The proposed location and general size and design approach were found acceptable. It was agreed, however, that the building should be lowered with a change in roof pitch and it should be no larger than absolutely necessary to meet the needs associated with the field use. Further, members concurred that the final design details, including clarification of space needs, should be subject to ASCC review and approval to ensure the best possible design to blend with conditions at the proposed location and minimum visual intrusion relative to views from the public trail. Again, it was agreed that such final plan review should be a condition of and action to approve the CUP.

- **Track location and design**. The facility, location and general approach to design were found acceptable. Members discussed possible optional colors for the track surface, but concurred that either the currently proposed cinder color (a specific sample was available for review) or perhaps a tan or medium gray color would be acceptable. It was agreed, however, that final color should be based on consideration of all site conditions and that this also should be subject to ASCC review and approval at an appropriate time in the project implementation process, likely when the berm removal has been completed and the final landscaping plan is under consideration.

- **Landscape plan**. The plan concepts were found generally acceptable, but it was agreed that as a condition of CUP approval, a final, detailed landscape plan, including parcel frontage fencing, should be provided and subject to ASCC review and approval. A particular focus will be on the existing plantings on the Rutherford property and the scope of thinning and removal that would be appropriate. It was understood that this could include more removal of materials not appropriate for the Portola Road corridor frontage and additional planting of appropriate materials, e.g., more valley oaks, for necessary screening and softening of views. Members also concurred that after a period of time when the new plantings are in place, there should be a follow-up ASCC review to determine if additional plantings are needed or if other landscape adjustments should be made to ensure compatibility with the Portola Road Corridor. It was noted that the follow-up review might take place 18 to 24 months after the new plantings are installed.

In general, the ASCC was supportive of the portions of the proposals not associated with the turf matter discussed below, but with the understanding that final details for all project aspects needed to be considered together to ensure the plans achieved the intended site and scenic corridor integration.

Following the offering of the above comments, members offered the following individual inputs relative to the proposed turf material:

Clark:

- Has not reached a final position on the appropriateness of the turf. Perhaps the scope of turf use could be reduced if the infield semicircles at either end were in grass leaving the main play area in turf.
- The berm and associated tree removal will open views to the turf area and the landscaping will be important relative to proper visual integration into the road corridor.
- The misunderstandings created with the comments made by the FieldTurf representatives at the ASCC meeting need to be addressed and correct samples provided.

Breen:

- The Priory fields are located within the "heart" of the town's important scenic corridor and the visual sensitivity of this corridor as identified in the general plan encourages preservation of the natural conditions to the extent possible. Use of living grass seems consistent with the intent of the general plan provisions and artificial turf does not.
- The existing turf field examples, including Woodside school, raise serious concerns over the potential visual impacts of a turf surface. Wear, maintenance, light reflection, all are factors that seem to emphasize the artificial condition. In this case, there would be significant views down to the field from Portola Road and the aesthetic impacts on these views appear potentially significant and inconsistent with the natural character called for in the general plan. In addition, part of the aesthetic experience anticipated in Portola Valley is wildlife grazing on real grass fields and meadows. This experience would not be preserved with the artificial turf surface.
- The turf data raises issues over maintenance that seem to conflict with the town's setting. There would be animals, including deer and dogs, that would cross the turf and create maintenance problems that would appear to conflict with the product data for turf protection. Would fencing eventually be needed to control possible impacts and protect the turf warranty? Would normal use in the area result in the need to replace the turf surface more frequently? Worried over the true ability to recycle the materials.
- Remains concerned over the ability to control runoff of turf materials and impacts on soil and creek water quality.
- Worried that more usable surface would increase use and traffic.
- Based on all the issues, especially significant concern over visual impacts, can't support the use of turf at this location, particularly within the Portola Road scenic corridor.

Koch:

- Concurs with comments offered by Breen. Turf is unnatural and in conflict with the preservation of the town's natural setting as called for in the general plan. Lawns may not be natural either, but at least provide a living environment.
- Use of an artificial material for "grass" in the scenic corridor "feels" to be a conflict with the natural beauty for the town that the ASCC strives to protect.

Ross:

- Based on the data presented, the use of the turf material appears aesthetically acceptable. This is a school and the area in question is essentially for athletic field use consistent with the school's function. Getting the best use of the facilities in line with school's basic objectives seems appropriate.
- Once the turf is in place, it likely will not be highly identifiably as an artificial surface. Currently, those passing by the school likely take little notice of the field conditions and after the new landscaping is in place there will be a similar situation whether the surface is turf or grass.
- Maintained ornamental grass or "lawn" surfaces are not natural. Thus, the aesthetic differences between grass and turf fields seem minimal, and a maintained turf field

would appear to look very similar to a mowed grass field. In this case, improved functionality of the field for a school recognized on the general plan appears acceptable.
- Perhaps this provides an opportunity to test the use of a turf field in the town. It could be installed and then reconsidered after a specific period relative to the concerns and use objectives.

Hughes:
- Appreciates the various perspectives relative to the turf issue, both the comments in support and those opposed or with significant concerns.
- If turf were permitted, there should be no fencing to control passage of wildlife over the area.
- The first major goals of the general plan are to preserve and enhance the natural features of the planning area and to limit use so that the natural attributes can be sustained over time.
- Turf does not seem to stand the test called for in the basic goals of the general plan. Real grass, while not perfect, appears far more consistent with the objectives of the goals and would result in less impact on the lands than would artificial turf.
- Also remains concerned over the ability of the town to find that the manufacture, use and disposal of turf is consistent with town sustainability goals and objectives called for in the general plan.

Vlasic advised that the ASCC comments would be forwarded to the planning commission for consideration during the continued public hearing process on the proposed CUP amendments. He also advised that since the next ASCC meeting would take place prior to the continued commission public hearing the ASCC would have a chance to review the meeting minutes to ensure that they appropriately reflect the range of comments offered by ASCC members.

Continued Consideration -- Architectural Review for new residence with detached guest house, tennis court and related site improvements, and Site Development Permit X9H-646, 187 Bolivar Lane, Goldband

Vlasic presented the January 10, 2013 staff report on the continuing review of this proposal for construction of a new, single-story, contemporary design flat roof residence with attached garage on the subject 3.1-acre Westridge subdivision parcel. He summarized the events of the December 10, 2012 ASCC preliminary project review and then discussed how the revised plans and materials, listed below, address the preliminary review comments:

- 1/7/13 Letter from project architect with 1/7/13 letter from property owners. The letters specifically address each of the 8 points noted in the 12/10 meeting minutes.
- The project revisions discussed in the 1/7/13 letters are presented on the following enclosed plans, unless otherwise noted, dated 1/7/13, prepared by Field Architecture:

  Sheet A000, Cover Sheet

  Sheet L-1, Landscape Plan and Lighting Plan, Skyline Design Studio
  Sheet L-2, Landscape Water Use Plan, Skyline Design Studio

  Sheet A050, Site Plan
  Sheet A100, Floor Plan
  Sheet A101, Construction Staging Plan
  Sheet A200, Building Elevations
  Sheet A201, Building Elevations
  Sheet A202, Guest Elevations

Shaper
shaperlighting.com

DESCRIPTION

676-WP Floating Curved Shield Wall Sconce features bronze construction with a fully enclosed lamp compartment.

Catalog #		Type	
Project			
Comments		Date	
Prepared by			

SPECIFICATION FEATURES

Material
Solid bronze with open top, sides and bottom.

Finish
Natural bronze or two component polyurethane paint, 2.5 mil nominal thickness for superior protection against fade and wear.
Standard: Natural Bronze (NBZ) [Sustainable Design].
Note: Bronze will weather to a dark bronze patina.
Premium: Aluminum Paint (ALP), Black Paint (BK), Bronze Metallic Paint (BM), Dark Platinum Paint (DP), Gold Metallic Paint (GM), Graphite Metallic Paint (GRM), Grey Paint (GY), Verdigris (VG), White Paint (WH) or Custom Color (CC).

Optics
Refer to www.shaperlighting.com for complete photometrics.

Ballast
Integral electronic HPF, multi-volt 120/277V (347V Canada), thermally protected with end-of-life circuitry to accommodate the specified lamp wattage.

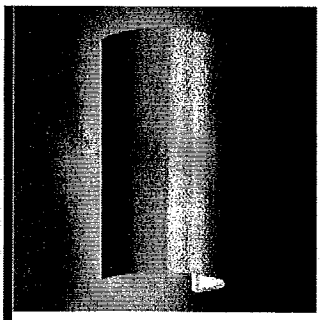
Lamp/Socket
One (1) 26W (G24q-3) quad CFL or 32W (GX24q-3) triple CFL lamp or one (1) 60W A-19 lamp.
CFL socket injection molded plastic. INC socket fired ceramic rated for 660W-250V. Lamps furnished by others.

Installation
Supplied with a universal circular strap for a standard 4" J-box or stucco ring.

Options
Accent Balls (ACB), Floating Cut-Out (FCT), Custom Logos - Contact factory.

Labels
U.L. and C.U.L. listed for wet location.

Modifications
Shaper's skilled craftspeople with their depth of experience offer the designer the flexibility to modify standard exterior wall luminaires for project specific solutions. Contact the factory regarding scale options, unique finishes, mounting, additional materials/colors, or decorative detailing.



676-WP SERIES

Exterior Wall Luminaire
Floating Curved Shield

ARRA

Shaper Lighting certifies that its products satisfy the requirements of Section 1605 of the American Recovery and Reinvestment Act (also known as the ARRA Buy American provision).

SUSTAINABLE DESIGN

Shaper has a long-standing history of offering environmentally-friendly fixtures. The copper and bronze alloys used in our exterior luminaires feature up to 98% recycled content, contribute less undesirable air emissions compared to painted aluminum and are easy to recycle.

ORDERING INFORMATION

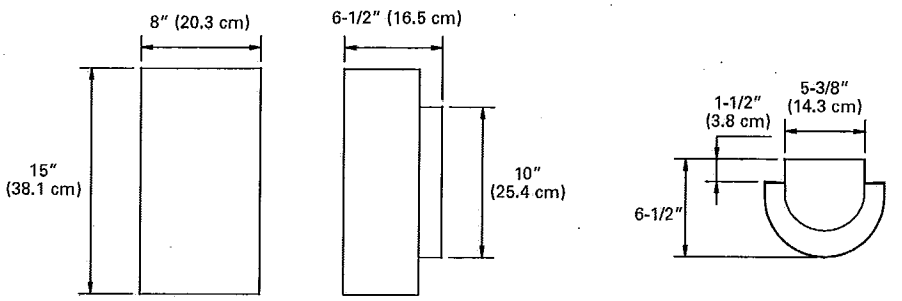
Sample Number: 676-WP-CFL/1/26-277V-BK

Series	Mounting Type	Lamp	Voltage	Finish [2, 3]	Options
676 = Floating Curved Shield	WP = Exterior Wall	CFL/1/26 CFL/1/32 INC/1/60	120V 277V [1] 347V [1]	Standard NBZ = Natural Bronze Premium ALP = Aluminum Paint BK = Black BM = Bronze Metallic Paint CC = Custom Color DP = Dark Platinum Paint GM = Gold Metallic Paint GRM = Graphite Metallic Paint GY = Grey VG = Verdigris WH = White	ACB = Accent Balls FCT = Floating Cut Out

Notes:

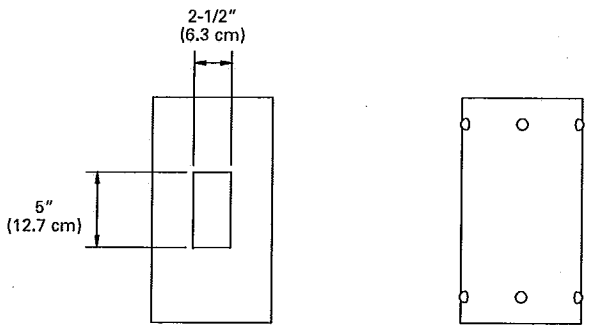
1. Available with CFL only.
2. Premium TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear.
3. Bronze will weather to a dark bronze patina.

MOUNTING TYPE



676-WP STANDARD

OPTIONS



FLOATING CUTOUT (FCT) **ACCENT BALLS (ACB)**

xc: CJW
MOlaIC

COTTON, SHIRES AND ASSOCIATES, INC.
CONSULTING ENGINEERS AND GEOLOGISTS

November 25, 2013
V5363

TO: Carol Borck
Assistant Planner
TOWN OF PORTOLA VALLEY
765 Portola Road
Portola Valley, California 94028

SUBJECT: **Geologic and Geotechnical Peer Review**
RE: Woodside Priory
New Track, Sports Field, and Storage Buildings
302 Portola Road, SDP# X9H-667

At your request, we have completed a geologic and geotechnical peer review of the Site Development Permit application for the proposed new track, sports field, and storage buildings:

- Geotechnical Investigation (Report), titled *Preliminary Geotechnical Investigation, New School Buildings, Sports Field, and Site Improvements, Woodside Priory School,* prepared by Romig Engineers, Inc., dated August 21, 2013;

- Civil Plans and Details (9 Sheets), titled *Woodside Priory Track and Field Project,* prepared by BKF Engineers, Inc., dated October 17, 2013;

- Track and Field Plans and Details (9 Sheets), titled *Woodside Priory Track and Field Project,* prepared by Callander Associates Landscape Architecture, Inc., dated October 15, 2013; and

- Structural Plans (4 Sheets), titled *Woodside Priory Track and Field Project,* prepared by BCA Structural Engineering, Inc., dated October 8, 2013.

In addition, we have reviewed pertinent technical documents from our office files and performed a recent site reconnaissance.

DISCUSSION

Based on our review of the referenced documents, we understand that the applicant proposes to construct a new 400 meter track covering 1.3 acres, a natural grass sports field within the interior portion of the track covering 1.93 acres, and two 987-square foot storage buildings separated by a 460-square foot breezeway. In addition, it

appears that the applicant plans to make drainage improvements including: replacing an existing concrete v-ditch; adding a new grass swale; adding 990 lineal feet of 12-inch diameter subdrain pipes; and replacing an existing 36-inch storm drain pipe. Estimated earthwork quantities include 5,950 cubic yards of excavation, and 5,950 cubic yards of fill placement. It appears that the project will include approximately 5 acres of ground disturbance in conjunction with construction activities.

SITE CONDITIONS

The site is characterized by relatively level valley floor topography bounded on the north by a cut and fill slope associated with the Woodside Priory School, and to the south by fill slopes supporting Portola Road. A northeast-southwest trending artificial fill berm, up to 14 feet in height, dissects the property near the eastern margin. A relatively undisturbed, gently inclined southwest-facing slope is east of the berm. Surface drainage is characterized by sheet flow toward the northwest off of the artificial fill berm; sheet flow to the north from the Portola Road fill slope where an earthen swale directs water to an existing 36-inch corrugated metal pipe (CMP); and sheet flow to the southwest from the northern cut and fill slope, controlled by an existing v-ditch that directs water to an existing 30-inch CMP squash pipe.

The property is underlain, at depth, by greenstone bedrock materials of the Franciscan Complex, and sedimentary bedrock materials of the Santa Clara Formation (i.e., poorly to moderately consolidated conglomerate, sandstone, and potentially expansive claystone). These materials are locally overlain by alluvial deposits (i.e., unconsolidated silt, sand, clay and gravel). The geotechnical exploration documented alluvium to be primarily sandy clay, at least 10 feet in thickness and up to 38 feet thick, with groundwater encountered at a depth of 23 feet below ground surface. According to the Town Ground Movement Potential Map, the proposed improvements are located within the boundaries of a "Sun" zone, which is defined as "*unconsolidated granular material (alluvium, slope wash and thick soil) on level ground and gentle slopes; subject to settlement and soil creep; liquefaction possible at valley floor sites during strong earthquakes.*" The closest active trace of the San Andreas fault is mapped approximately 2,550 feet southwest of the site.

CONCLUSIONS AND RECOMMENDED ACTION

The proposed site improvements are potentially constrained by expansive surficial soil materials, the potential for differential settlement of unconsolidated alluvium, the potential for shallow groundwater, and anticipated very strong to violent seismic ground shaking. The Project Geotechnical Consultant has performed a site investigation, including subsurface exploration and laboratory testing, and has provided

geotechnical design recommendations that are in general conformance with prevailing standards of geotechnical practice. We note that the plans include collector drains/dissipation trenches along the perimeter of the field that appear to be designed to collect surface water from the field and direct it to 3.25-foot wide by approximately 3.0-foot deep (effective depth) percolation trenches. It should be noted that the 12-inch diameter subdrain pipes have minimal slope gradients (i.e., 0.3% fall). The Project Engineer should provide clarification as to the design basis for the percolation trenches, whether percolation testing was performed to support system design, and under what conditions could the flow capacity of the low gradient subdrains be exceeded by surface runoff volumes into the trenches, and ramifications of such an event.

We recommend that Items 1 and 2 be performed prior to approval of grading and/or building permits:

1. **Civil Engineering Clarifications** – The Project Engineer should address the following items:

    - Clarification should be provided as to the design basis for the percolation/subdrain trenches, whether percolation testing was performed to support system design, and under what conditions could the flow capacity of the low gradient subdrains be exceeded by surface runoff volumes, and ramifications of such an event. The feasibility of constructing subdrains with 0.3% gradients should be discussed.

    - Grading for the project will result in greater than 1 acre of site disturbance, and thus, will require compliance with the California State Water Resources Control Board general permit for storm water discharges (including filing Notice of Intent and obtaining a Waste Discharge ID number if necessary). The Project Civil Engineer should provide the Town with appropriate documentation of compliance with State permit requirements.

2. **Geotechnical Plan Review** - The applicant's geotechnical consultant should review and approve all geotechnical aspects of the development plans (i.e., including site preparation and grading, site drainage improvements and design parameters for building foundations) to ensure that their recommendations have been properly incorporated.

    - The proposed subdrain/percolation trench design should specifically be reviewed by the Geotechnical Consultant.

The Civil Engineering Clarifications and Geotechnical Plan Review should be submitted to the Town for review by Town Staff prior to issuance of grading permits. The following should be performed prior to final project approval:

3. **Geotechnical Construction Inspections** - The geotechnical consultant should inspect, test (as needed), and approve all geotechnical aspects of the project construction. The inspections should include, but not necessarily be limited to: site preparation and grading, site surface and subsurface drainage improvements and excavations for foundations and retaining walls prior to the placement of steel and concrete. The consultant should inspect completed drainage improvements to verify conformance with geotechnical standards.

   The results of these inspections and the as-built conditions of the project should be described by the geotechnical consultant in a letter and submitted to the Town Engineer for review prior to final (as-built) project approval.

LIMITATIONS

This geotechnical peer review has been performed to provide technical advice to assist the Town in its discretionary permit decisions. Our services have been limited to review of the documents previously identified, and a visual review of the property. Our opinions and conclusions are made in accordance with generally accepted principles and practices of the geotechnical profession. This warranty is in lieu of all other warranties, either expressed or implied.

Respectfully submitted,

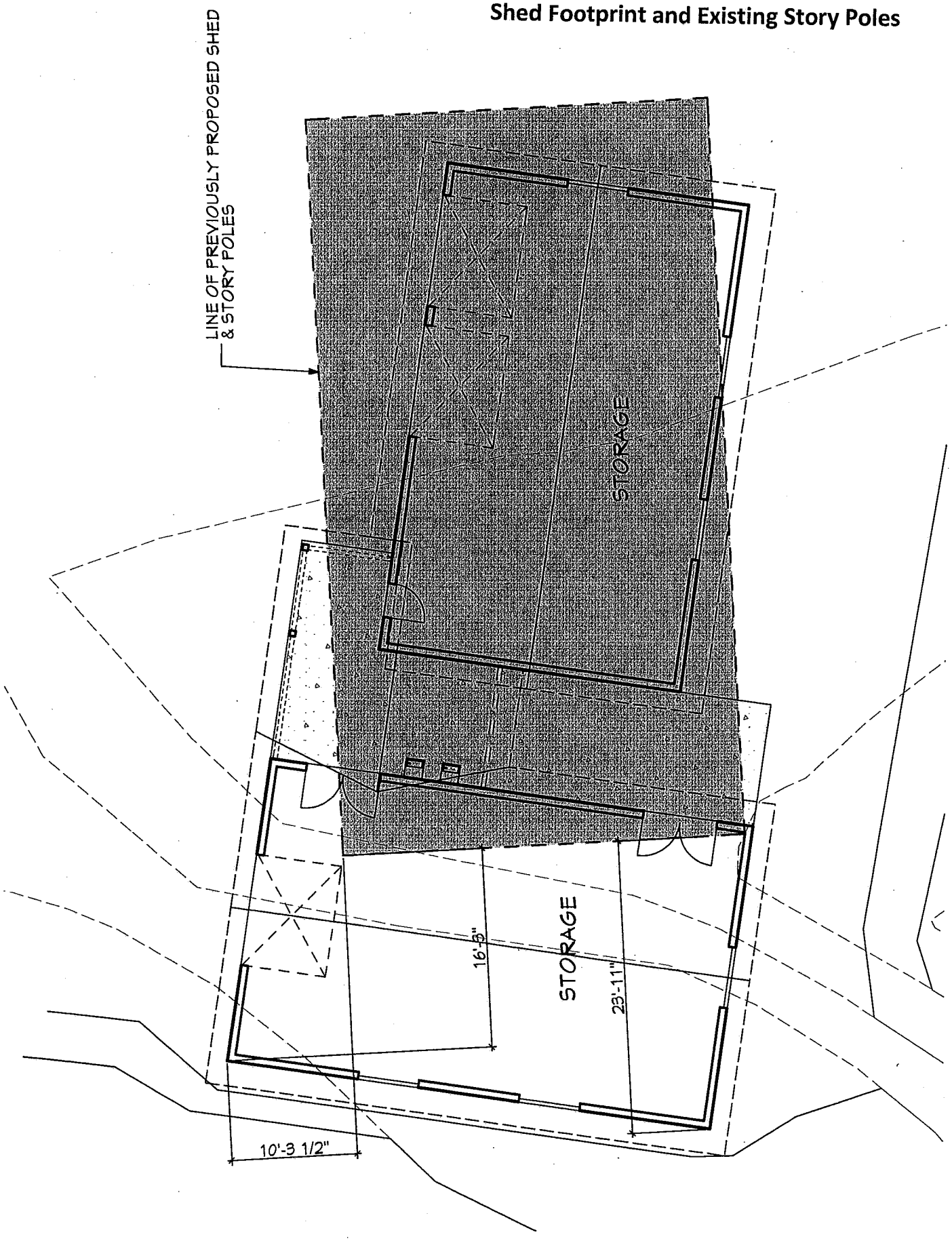
COTTON, SHIRES AND ASSOCIATES, INC.
TOWN GEOTECHNICAL CONSULTANT

John M. Wallace
Principal Engineering Geologist
CEG 1923

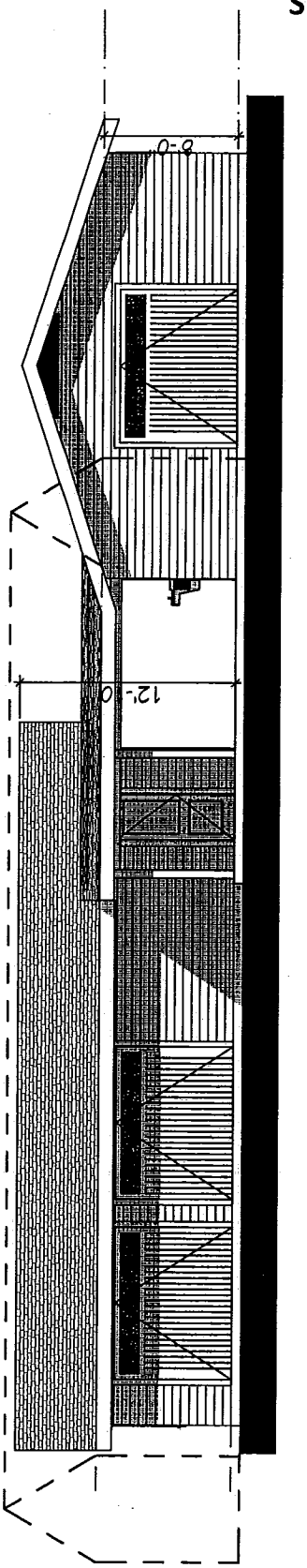
Timothy P. Sneddon
Supervising Geotechnical Engineer
GE 2809

JMW:TPS:AM

Shed Footprint and Existing Story Poles



Shed Elevation and Existing Story Poles



Conservation Committee Comments on Priory Track & Field Plans
December 3, 2014

In addition to the comments offered on this project last year, the Conservation Committee has the following comments:

- The Conservation Committee appreciates the addition of oak trees between the tracks.
- We continue to believe the equipment building should be on the other side of the fields, where it would blend in visually with existing buildings.
- Please mandate that amplified sound should be kept to a minimum and whenever used it must be aimed back across the fields towards the Priory campus instead of directed outward toward Portola Road where it is a nuisance in the neighborhood.
- Pocket views across the field - not into the parking areas - should be opened. We do not want to see a solid wall of redwoods.
- Current plan specifies limit of work to coincide with limit of grading. Previous plan showed expansive planting of Festuca rubra up the open NE grassland area. This should be retained in present plan.

PRELIMINARY 9/20/12 revised 9/25/12
Conservation Committee Comments on Priory Plans

1. Removal of trees in bermed area central to entire proposal and approved. All other notated removals OK.
   -Suggest additional removal of Eucalyptus and olives (unless these are sterile) while tree crews working.
2. Keynotes under Proposed Developments look good except D and F – consider leaving more open views across this attractive open space. Already there is too dense a screen planting along the road frontage.
   -Discourage the topping of frontage trees into unnatural hedge – especially the oaks. Allow trees to grow into natural high canopy. Remove some closely growing trees to allow room for natural canopy development.
   - leave groups of redwoods tightly clustered, remove others that are strung out as individuals, leaving open space between groupings.
   -remove as many deodar cedars as possible to allow growth of the existing stunted understory oaks.
3. We strongly recommend the storage shed be placed more appropriately at rear of field area where buildings already exist. No less convenient to fields, and much more visually pleasing. Perhaps on site of current softball field, which will lose its outfield when track goes in.
4. Clearing of non-natives from the channel much appreciated. Long living broom and other weed seeds are in this area - suggest scrape topsoil and replace at upper level. This area will require continued maintenance to protect from regrowth of invasives.
5. Retain the rustic fencing.
6. Underground as much wiring as economically feasible.
7. Meadow extension appreciated
8. Preserving views of hilltops behind Priory important.

9. Plant list appropriate except: - Variety of plants sold as Berkeley Sedge - specify Carex tumulicola and source from reliable grower of natives. Is specified Cornus equivalent to Cornus sericea?
10. Consider moving the track back as far as possible from the road.
11. Specify where bleachers will be placed.
12. Serious consideration needs to be given to the environmental and sustainability aspects of artificial turf.
13. We await arborists report
14. Artificial turf will be contentious. Should sustainability Committee weigh in from that point of view – resource conservation, ecological effects, etc.

Judith Murphy

Woodside Priory Track & Field Project

ABBREVIATIONS

SYMBOLS LEGEND

- SECTION NO. / DWG. NO.
- ELEVATION NO. / DWG. NO.
- DETAIL NO. / DWG. NO.
- DOOR TYPE / HARDWARE GROUP
- WINDOW TYPE
- DIMENSIONS TO FACE OF STUD OR WALL
- DIMENSION TO CENTERLINE
- REVISION
- ELEVATION — LEVEL LINE CONTROL POINT OR DATUM
- MATCH LINE
- KEYNOTES

MATERIALS LEGEND

- EARTH/ COMPACTED FILL
- ROCK FILL
- CONCRETE
- MASONRY
- STONE
- METAL
- ROUGH STRUCTURAL WOOD
- BLOCKING
- FINISH WOOD
- PLYWOOD
- GYPSUM WALL BOARD
- CERAMIC TILE

PROJECT TEAM

ARCHITECT:	CJW ARCHITECTURE 130 PORTOLA ROAD, SUITE A PORTOLA VALLEY, CA 94028 ATT.: KEVIN SCHWARCKOPF T: 650-851-9335 F: 650-851-9337 E-MAIL: kevin@cjwarchitecture.com
CIVIL ENGINEER:	BKF ENGINEERS 255 SHORELINE DRIVE, SUITE 200 REDWOOD CITY, CA 94065 ATT.: YOUSRA TILDEN, PE T: 650-482-6300 F: 650-482-6399 E-MAIL: ytilden@bkf.com
ATHLETIC FIELD CONSULTANT:	CALLANDER ASSOCIATES LANDSCAPE ARCHITECTURE, INC 311 SEVENTH AVENUE SAN MATEO, CA 94401 ATT.: MATT GRUBER T: 650-375-1313 F: 650-344-3290 E-MAIL: mgruber@callanderassociates.com
LANDSCAPE ARCHITECT:	CLEAVER DESIGN ASSOCIATES 1210 VACATION DRIVE LAFAYETTE, CA 94549 ATT.: BOB CLEAVER T: 925-934-6044 F: 925-934-6055 E-MAIL: bob @ cleaverdesign .com

DRAWING INDEX

ALL DISCIPLINES

T-0.1	COVER SHEET
A-1.1	PROJECT SITE PLAN
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C-2.0	DRAINAGE PLAN
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C-5.0	GRADING SECTIONS
C-6.0	EROSION CONTROL PLAN
C-6.1	EROSION CONTROL NOTES & DETAILS
C-6.2	STOPPP
TF1	TRACK & FIELD NOTES & LEGENDS
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TF3	TRACK & FIELD CONSTRUCTION PLAN
TF4	TRACK & FIELD IRRIGATION PLAN
TF5	TRACK & FIELD PLANTING PLAN
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TF7	TRACK & FIELD DETAILS
TF8	TRACK & FIELD DETAILS
TF9	TRACK & FIELD DETAILS
LP-1	SITE PREPARATION PLAN
LP-2	LANDSCAPE PLAN
LP-3	IRRIGATION PLAN
LP-4	LANDSCAPE DETAILS
SHED:	
A-2.1	STORAGE SHED PLANS, NOTES & SCHEDULES
A-2.2	STORAGE SHED ELEVATIONS
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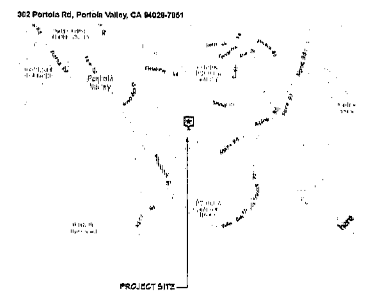
S1	STANDARD DETAILS
S2	FOUNDATION PLAN
S3	ROOF FRAMING PLAN
S4	STANDARD DETAILS
S5	STRUCTURAL DETAILS

SITE LOCATION MAP



VICINITY MAP
N.T.S.

PROJECT DATA

CJW Job No. 1999.4210
PROJECT ADDRESS: 302 Portola Road, Portola Valley, 940128
ASSESSOR'S PARCEL No. 079-053-050, 079-053-130, 079-053-320, 079-058-390, 079-053-400, 079-058-420, 079-071-100, 079-053-140, 079-220-040

PROJECT INFO & SCOPE OF WORK:

- NEW RUNNING TRACK, NATURAL GRASS TURF FIELD, AND OTHER ATHLETIC IMPROVEMENTS TO EXISTING ATHLETIC FIELD AREA AT THE SCHOOL

-REMOVAL OF EXISTING BERM TO ALLOW FOR 400 M TRACK

- RE-GRADING OF AREA TO USE EXISTING SOIL, & KEEP IT ON SITE

- NEW WOOD FRAMED SHED STRUCTURE TO SUPPORT THE ATHLETIC PROGRAM AT THE SCHOOL

NEW BUILDING INFORMATION:

PROPOSED BUILDING: NON-HABITABLE, STORAGE BUILDING, V b CONSTRUCTION; NON-INSULATED; NO FIRE SPRINKLERS

PROPOSED FLOOR AREA:

TWO BUILDINGS, 987 SF EACH: 1,974 SF

PROPOSED IMPERVIOUS SURFACE:

CONCRETE WALK - 460 SF

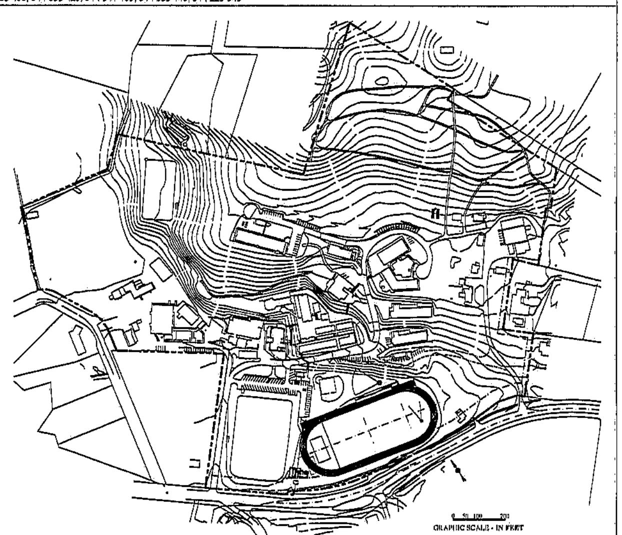
NEW SITE INFORMATION:

TRACK & RESILIENT SURFACE: 1.80 ACRES
NATURAL GRASS TURF, INSIDE TRACK: 1.93 ACRES
NATURAL GRASS TURF, OUTSIDE TRACK: 0.72 ACRES

PERMITS:

REQUEST DEFERRED SUBMITTAL ON DETAILED ELECTRICAL PLANS; TO BE DESIGN BUILD BY CONTRACTOR.

ELECTRICAL DESIGN DRAWINGS INCLUDED ARE FOR DESIGN ONLY.



1 Woodside Priory - School Plan 1" =200'

GENERAL NOTES

1. CODE COMPLIANCE:
1a. Contract and Construction Documents include: AIA Document A201 (2007), the General Conditions of the contract for Construction.

1b. All work is to be performed in accordance with all governing codes, ordinances, and regulations.

2. UTILITIES AND SITE WORK:
2a. General Contractor shall verify all underground utility locations prior to excavation, trenching, or grading of any kind. General Contractor shall coordinate with applicable utility companies when routing electrical, telephone, cable TV, gas, water, sanitary sewer services, or any other utility.

2b. Construction Documents include the Geotechnical Investigation Report By:

2c. Geotechnical Engineer and Civil Engineer shall coordinate drainage system and approved before backfilling. Drainage and positive flow of entire system shall be tested prior to backfill.

2d. General Contractor shall include Soils Engineer in the inspection of foundations, foundation waterproofing and drainage systems, and all related facets of the job. The Architect requires a signed letter stating that the work is in compliance with the Soils Engineer's recommendations.

3. DIMENSIONS:
3a. No dimensions shall be taken by scaling from the drawings. Contact architect for dimension clarifications or additional dimensions as required. Refer to the Cover Sheet for dimensioning standards. Details and the dimensions provided therein take precedence over general floor plans, elevations, and sections.

3b. Verify all dimensions on the job site prior to ordering or manufacturing.

3c. Dimensions noted "clear" must be accurately maintained, and shall not vary more than +/- 1/8" without written instruction from the Architect. Dimension marked +/- mean a tolerance not greater nor smaller than 2" from indicated dimension, u.o.n. verify field dimensions exceeding tolerance with the Architect, and secure Architect's approval.

4. DISCREPANCIES:
4a. In case of any discrepancy in the contract documents, consult the Architect before proceeding.

5. GENERAL CONTRACTOR RESPONSIBILITIES:
5a. General Contractor shall be responsible for coordination and execution of the work shown or implied in the construction documents. General Contractor is responsible for all construction means, methods, and procedures.

5b. General Contractor shall coordinate all facets of work and all trades involved to avoid conflict in the location, installation, and construction of all items of work as indicated on the construction documents. If any work is to be installed by the Owner directly, allowances for such work must be made. Coordinate with Architect.

5c. General Contractor shall review all Contract and Construction Documents; Architectural Drawings include reflected ceiling, finish, electrical, lighting, and mechanical plans; and all schedules prior to pouring concrete and prior to framing. Coordinate locations of studs, electrical wiring/conduit, HVAC ductwork, and light fixtures with locations of foundations and framing. It is imperative that locations of framing members do not conflict with locations of recessed light fixtures.

5d. General Contractor shall install all appliances specified and all equipment specified according to the respective manufacturers instructions. All instruction booklets, warranties, and other information regarding appliances and equipment shall be handed directly to the Owner in a manila envelope at the time of substantial completion. Contractor shall verify that every appliance and every piece of equipment is in perfect working order and that information about all warranties and guarantees is made known to the Owner.

5e. The installer of each major unit of work is required to inspect the substrate and conditions to receive work and shall report all unsatisfactory conditions to the General Contractor and shall not proceed until satisfactory conditions are attained.

5f. No work shall commence with unapproved materials. Any work done with un-approved materials and equipment is at the contractor's risk. See specifications for submittal and substitution requirements.

5g. Construction materials stored on the site shall be properly stacked and protected so as to prevent damage or deterioration until used. Failure in this regard may be cause for rejection of material and/or work.

5h. New/existing finishes and construction shall be protected by the contractor from potential damage caused by construction activity. Damage to finishes or construction caused in this manner shall be repaired or replaced (owner's decision) by the contractor with identical material and/or finishes. Contractor shall make and maintain a photographic record notebook with dated/indexed photographs.

5i. In addition to those shown on drawings, provide and locate access doors or panels in ceiling and wall construction as required by mechanical, plumbing, and electrical work.

5j. General Contractor shall leave the job site "broom clean" at the end of each working day. All materials shall be stored in a neat and safe place to avoid accidents.

6. EQUIPMENT BACKING:
6a. For mounting heights not clearly outlined in the plans or schedules, coordinate with the Architect. Architect shall confirm all electrical device and light fixture locations before contractor [illegible].

6b. Provide solid backing as necessary for wall mounted shelves, fixtures, and fittings, even when work is to be done by Owner directly. Coordinate work and locations with Owner and Architect.

6c. All fastening devices to be concealed, unless otherwise shown.

7. WEATHER PROOFING:
7a. Weather-strip all exterior doors and windows.

7b. Caulk or otherwise seal around all openings to limit infiltration; including but not limited to: Exterior joints around windows and door frames, between sole plates and floors, at exterior wall intersections and corners, and between exterior wall panels.

7c. General Contractor shall verify that all work on the exterior of the project is watertight. All joints exposed to the elements shall be tested for water tightness prior to substantial completion.

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

• PROJECT •

Woodside Priory Track & Field Project
Portola Road
Portola Valley, CA 94028

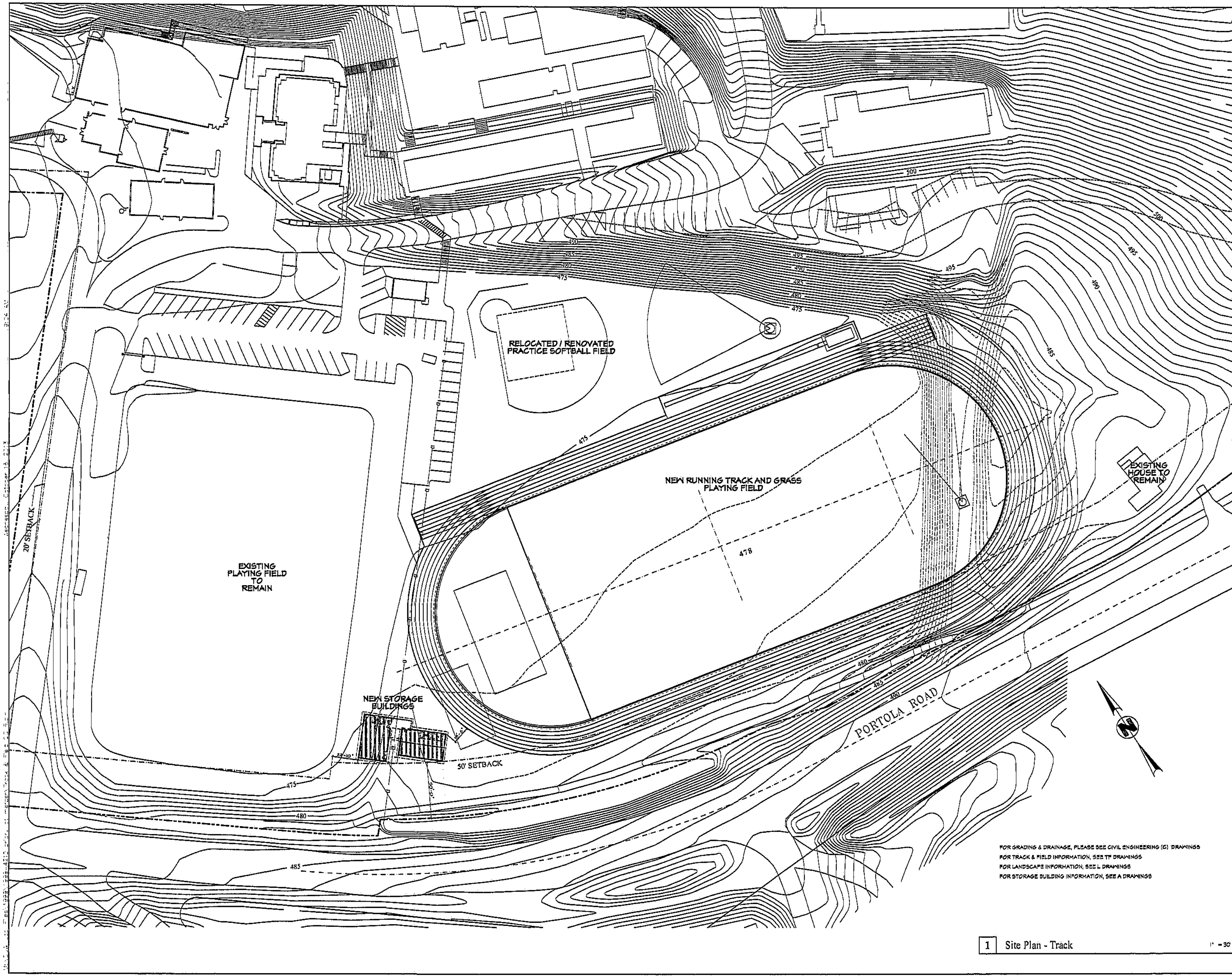
• SHEET TITLE •

Cover Sheet

• REVISIONS •

No.	Date	Notes

• JOB: 1999.4210
• DATE: 10/15/2013
• SHEET: T-0.1



1 Site Plan - Track 1" = 30'

CJ W ARCHITECTURE
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Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

• PROJECT •

Woodside Priory Track & Field Project
Portola Road
Portola Valley, CA 94028

• SHEET TITLE •

Project Site Plan

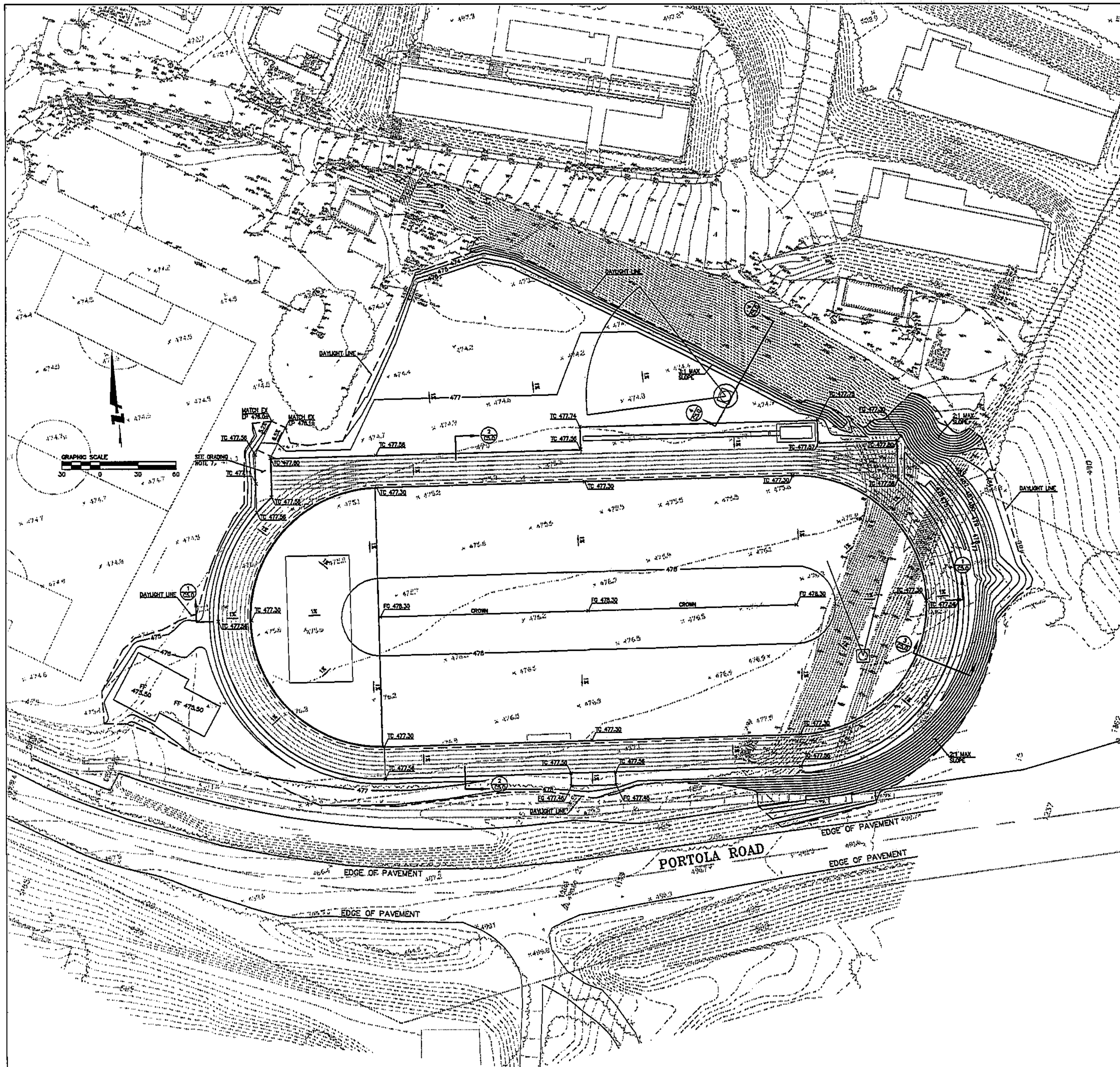
• REVISIONS •

No.	Date	Notes

• JOB: 1999.4210

• DATE: 10/15/2013

• SHEET: A-1.1



ABREVIATIONS

FG	FINISH GRADE ELEVATION
TC	TOP OF CURB ELEVATION
SG	SUB GRADE ELEVATION
EX	EXISTING
EP	EDGE OF PAVEMENT

GRADING NOTES

1. CONTRACTOR SHALL INFILL ALL LOW AREAS AND EVEN OUT ALL GRADES AS NECESSARY TO PROVIDE CONSISTENT SLOPES AND FINISH GRADES THROUGHOUT THE SITE WITHOUT ANY AREAS OF PUDDLING OR STANDING WATER.
2. CONTRACTOR SHALL PROVIDE SMOOTH AND CONSISTENT TRANSITION BETWEEN PROPOSED CURBS, EDGE OF PAVEMENT, ETC.
3. GRATE ELEVATIONS ARE 0.1' BELOW FINISH GRADE ELEVATION ON ALL SIDES.
4. TURF FINISHED GRADE WILL BE 0.1' BELOW TOP OF TRACK CURB ELEVATION.
5. TOP 3" OF SITE WILL BE STRIPPED. HAVE THE ORGANIC MATERIAL REMOVED AND USED AS ENGINEERED FILL.
6. FINISH GRADES SHOWN ARE FOR TOP OF ASPHALT PAVEMENT. RUBBERIZED SURFACING IS IN ADDITION TO THESE GRADES.
7. ROADWAY AC PAVING SHALL BE PER RECOMMENDATIONS PREPARED BY HENRY JUSTINIANO & ASSOCIATES (2.5" AC PAVING AND 9" CLASS 2 AGGREGRATE BASE).

EARTHWORK

CUT =	5,950 CY
FILL =	5,950 CY
NET CUT=	0 CY

THE EARTHWORK QUANTITIES SHOWN ABOVE ARE IN-PLACE QUANTITIES AND HAVE BEEN ESTIMATED BY THE ENGINEER WITH THE FOLLOWING ASSUMPTIONS:

1. THE ROADWAY IS A 2.5" AC/9" AB THICK SECTION.
2. THE TRACK IS A 1/2" MIN. RUBBER/3" ASPHALT/6" AB THICK SECTION. SEE 2/TF6
3. THE TURF IS A 12" SAND/ 6" AB THICK SECTION. SEE 1/TF6
4. EARTHWORK QUANTITIES DO NOT ACCOUNT FOR FILL SHRINKAGE FACTORS.
5. EARTHWORK QUANTITIES DO NOT ACCOUNT FOR SOIL STABILIZATION FACTORS AND LANDSCAPING PLANTING SOILS.
6. EARTHWORK QUANTITIES DO NOT ACCOUNT FOR BUILDING FOOTINGS AND BACKFILL.

ACTUAL QUANTITIES MAY VARY DUE TO FIELD CONDITIONS OR CONSTRUCTION TECHNIQUES. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES BASED UPON APPROVED PLANS AND INDEPENDENT CALCULATIONS.

SUB-GRADES:

TRACK SG = TRACK FG – 0.75'
TURF SG = TURF FG – 1.50'

C1.0 Grading Plan 1" = 30'

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650-482-6399 (FAX)

• PROJECT •

Woodside Priory Track & Field Project
Portola Road
Portola Valley, CA 94028

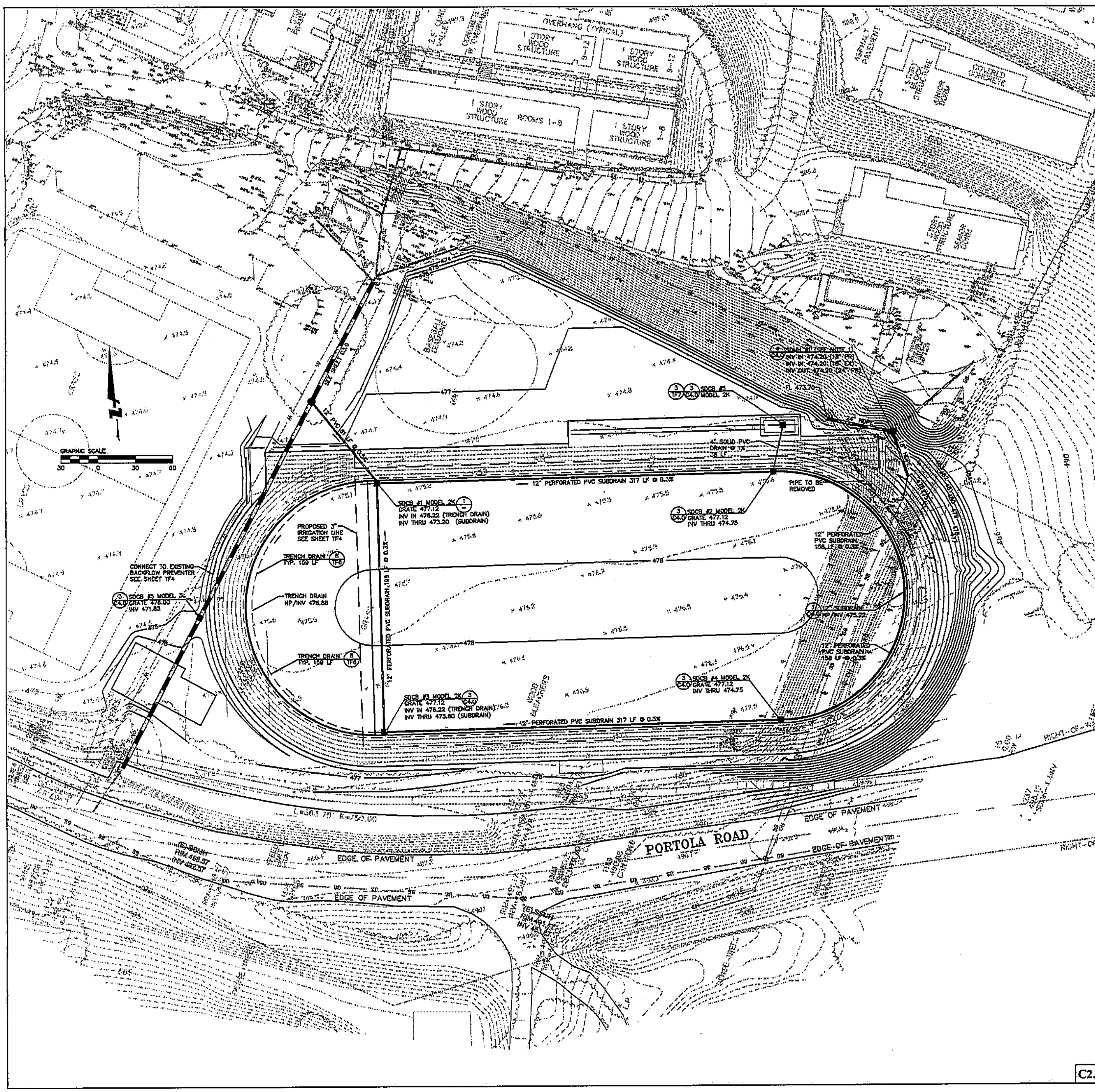
• SHEET TITLE •

Grading Plan

• REVISIONS •

No.	Date	Notes

• JOB: 1999.4210
• DATE: 10/17/2013
• SHEET: C1.0



DRAINAGE NOTES

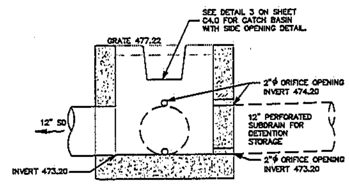
1. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES, STRUCTURES, AND SERVICES BEFORE COMMENCING WORK. THE LOCATION OF UTILITIES, STRUCTURES, AND SERVICES SHOWN THESE PLANS SHALL BE DEEMED TO BE APPROXIMATIONS ONLY. ALL DISCREPANCIES BETWEEN WHAT IS SHOWN AND THE ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE.
2. CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (USA) AT (800) 227-2600 PRIOR AT LEAST TWO (2) WORKING DAYS PRIOR TO ANY DEMOLITION OR EXCAVATION. UPON COMPLETION OF USA MARKINGS OPERATIONS, CONTRACTOR SHALL RECORD ALL UTILITY MARKINGS ON A SEPARATE SET OF DRAWINGS. THIS SET SHALL BE KEPT ON-SITE FOR REFERENCE FOR DURATION OF CONTRACT. NOTIFY THE OWNER'S REPRESENTATIVE IMMEDIATELY SHOULD CONFLICTS ARISE AND REDIRECT WORK TO AVOID DELAYS.
3. ALL EXISTING DRAINAGE STRUCTURES, BOXES, UTILITY VAULTS ETC. TO REMAIN SHALL BE BROUGHT TO FINISH GRADE PRIOR TO FINAL SURFACE TREATMENT AND FLUSHED TO ENSURE FUNCTIONALITY.
4. PERMITEE SHALL NOTIFY TOWN OF PORTOLA VALLEY AT LEAST TWO FULL WORKING DAYS IN ADVANCE OF THE START OF GRADING. 650-851-1700 EXT 216

DRAINAGE LEGEND

SYMBOL	DESIGNATION
(dotted line)	EXISTING STORM DRAIN LINE
(heavy line)	PROPOSED STORM DRAIN LINE
■	CATCH BASIN
●	MANHOLE
— —	PROPOSED IRRIGATION LINE

ABBREVIATIONS

EX EXISTING
PR PROPOSED
SDCB STORMDRAIN CATCH BASIN



1 SDCB #1 OPENINGS
NTS

C2.0 Drainage Plan 1" = 30'

CJ W ARCHITECTURE
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© BKF ENGINEERS

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• PROJECT •

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Portola Road
Portola Valley, CA 94028

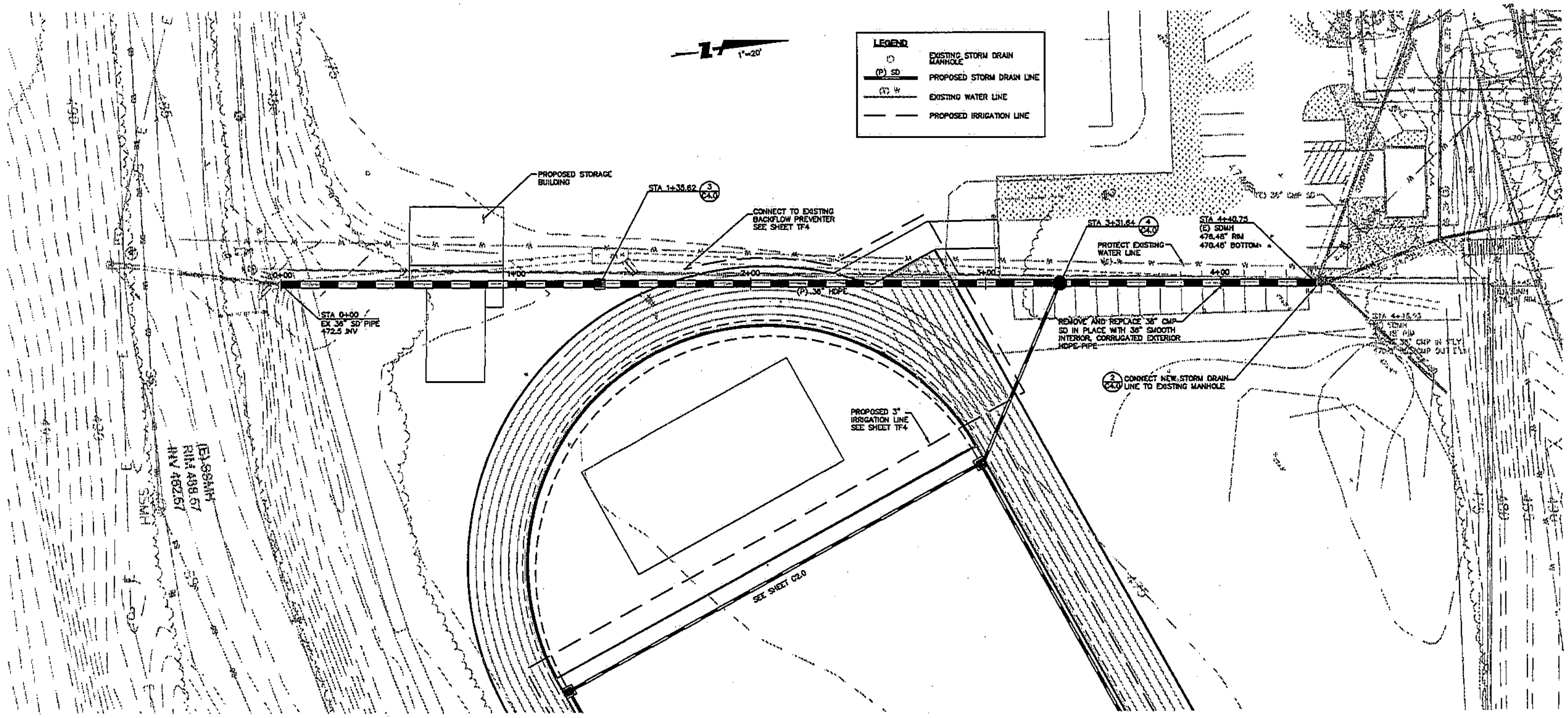
• SHEET TITLE •

Drainage Plan

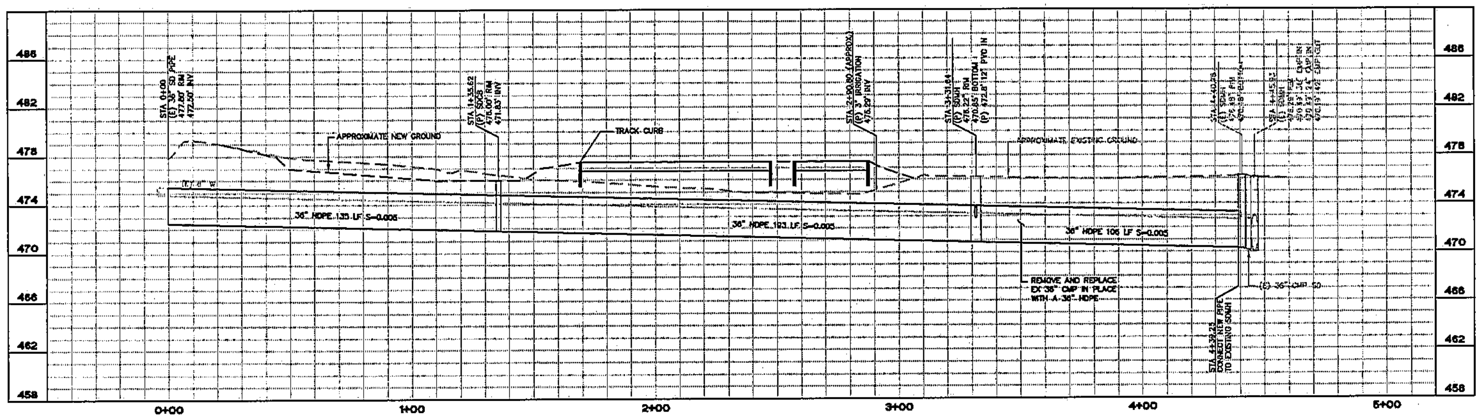
• REVISIONS •

No.	Date	Notes

• JOB: 1999.4210
• DATE: 10/17/2013
• SHEET: C2.0



PLAN
1" = 20'



PROFILE
SCALE : HORIZ 1" = 20'
VERT 1" = 4'

NOTE:
THESE DRAWINGS ARE BASED ON LIMITED FIELD REVIEW AND DO NOT SHOW ALL UTILITIES. BKF ENGINEERS AND THE TOWN OF PORTOLA VALLEY ASSUME NO LIABILITY FOR THE ACCURACY OF THE INFORMATION. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO VERIFY THE LOCATION OF THESE FACILITIES AND TO LOCATE ANY OTHER UNDERGROUND UTILITIES AND STRUCTURES THAT MAY NECESSITATE A CHANGE IN THE LOCATION, LINE, OR GRADE OF THE NEW WORK. SHOULD UNDERGROUND UTILITIES OR FACILITIES BECOME DAMAGED, THE CONTRACTOR WILL MAKE ALL NECESSARY REPAIRS AT THEIR OWN COST.

C3.0 36" Storm Line

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• PROJECT •
Woodside Priory Track & Field Project
Portola Road
Portola Valley, CA 94028

• SHEET TITLE •
36" Storm Line

• REVISIONS •

No.	Date	Notes

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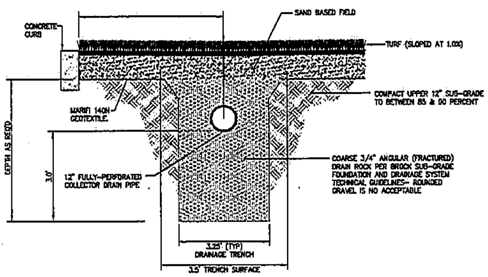
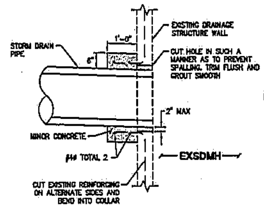


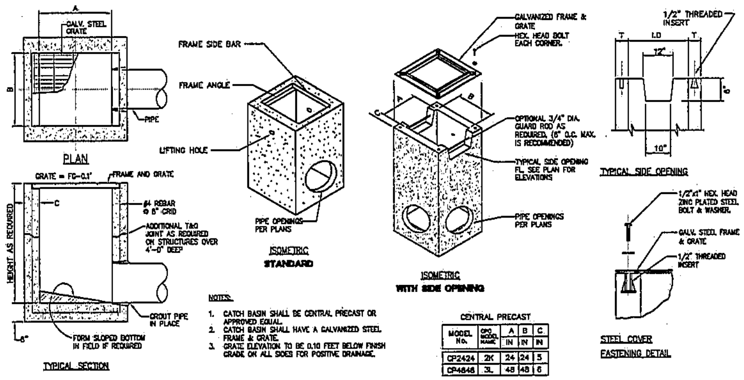
1 — TURF WITH COLLECTOR DRAIN
NTS



NOTES:

1. IF WALL OF EXISTING DRAINAGE STRUCTURE HAS NO REINFORCING, DRILL AND BOND DOWELS, 1" ON CENTER, 6" INTO WALL AND BEND INTO COLLAR.
2. SQUARE OR CIRCULAR COLLAR OPTIONALS

2 — CONNECT TO EXISTING MANHOLE
NTS



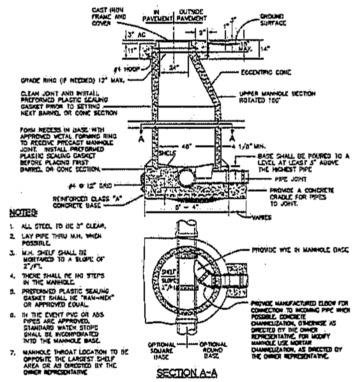
NOTES:

1. CATCH BASIN SHALL BE CENTRAL PRECAST OR APPROVED EQUAL.
2. CATCH BASIN SHALL HAVE A GALVANIZED STEEL FRAME & GRATE.
3. GRATE ELEVATION TO BE 0.10 FEET BELOW FINISH GRADE ON ALL SIDES FOR POSITIVE DRAINAGE.

CENTRAL PRECAST

MODEL No.	CPC MODEL NAME	A IN	B IN	C IN
CP2424	2K	24	24	5
CP4848	3L	48	48	6

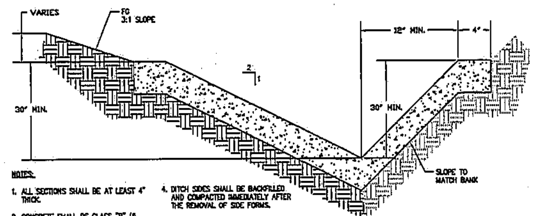
3 — STORM DRAIN CATCH BASIN
NTS



NOTES:

1. ALL STEEL TO BE 3" CLEAR.
2. LAY PIPE THRU M.H. WHEN POSSIBLE.
3. M.H. SHELF SHALL BE MORTARED TO A SLOPE OF 2"/FT.
4. THERE SHALL BE NO STEPS IN THE MANHOLE.
5. PREFORMED PLASTIC SEALING GASKET SHALL BE "RAM-NEK" OR APPROVED EQUAL.
6. IN THE EVENT PVC OR ABS PIPES ARE APPROVED, STANDARD WATER STOPS SHALL BE INCORPORATED INTO THE MANHOLE BASE.
7. MANHOLE THROAT LOCATION TO BE OPPOSITE THE LARGEST SHELF AREA OR AS DIRECTED BY THE OWNER REPRESENTATIVE

4 — STORM DRAIN MANHOLE
NTS



NOTES:

1. ALL SECTIONS SHALL BE AT LEAST 4" THICK.
2. CONCRETE SHALL BE CLASS "B" (5 SACK).
3. CONCRETE FINISH SHALL CONFORM TO ORDINARY SURFACE FINISH PER SECTION 51 OF THE STATE STANDARD SPECIFICATIONS.
4. DITCH SIDES SHALL BE BACKFILLED AND COMPACTED IMMEDIATELY AFTER THE REMOVAL OF SIDE FORMS.
5. NO EXPANSION JOINTS SHALL BE REQUIRED.

5 — CONCRETE LINED DITCHES
NTS

C4.0 Civil Details

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Woodside Priory Track & Field Project
Portola Road
Portola Valley, CA 94028

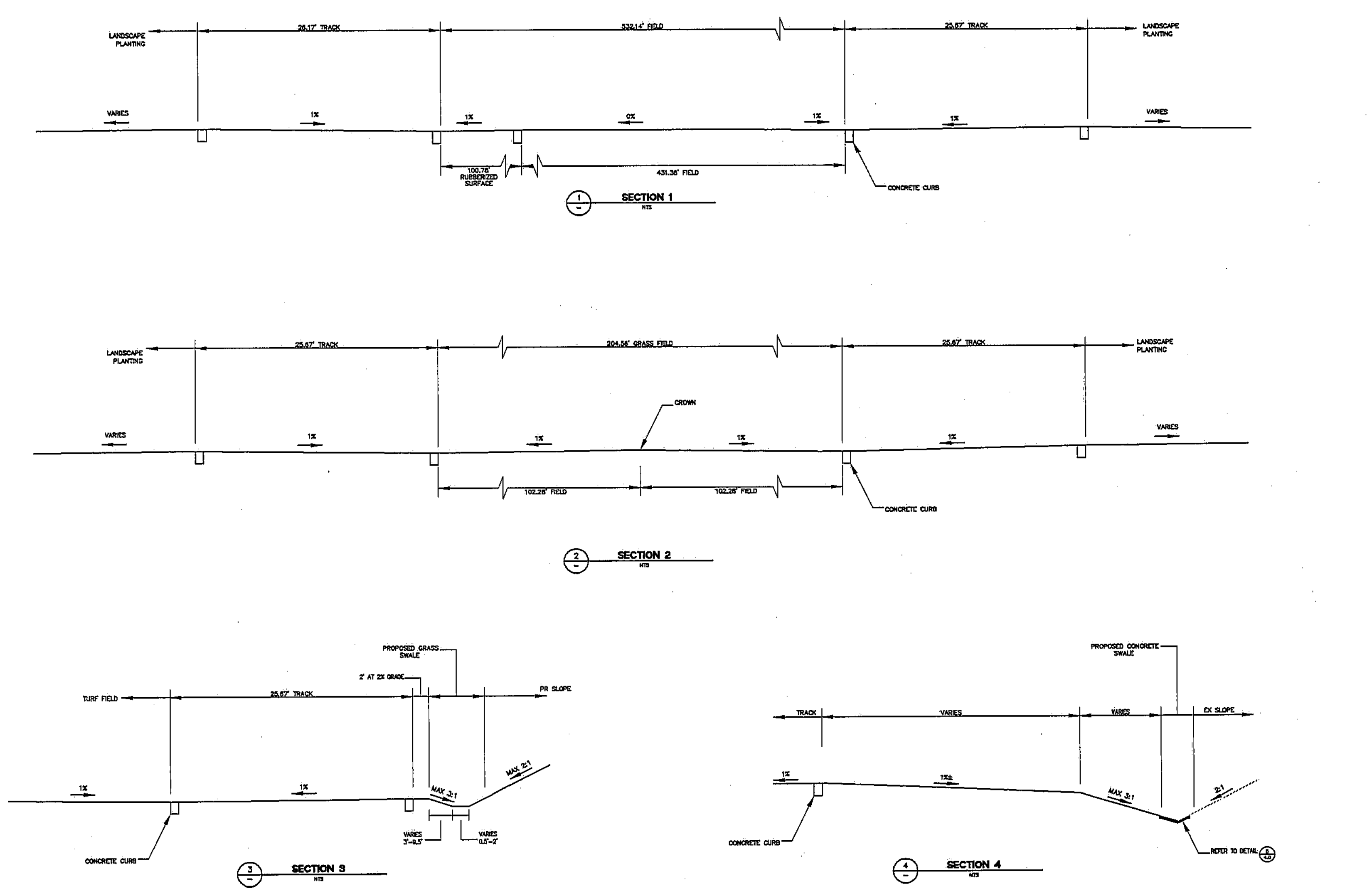
• SHEET TITLE •

Civil Details

• REVISIONS •

No.	Date	Notes

• JOB: 1999.4210
• DATE: 10/17/2013
• SHEET: C4.0



C5.0 Grading Sections - Track

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Grading Sections

• REVISIONS •

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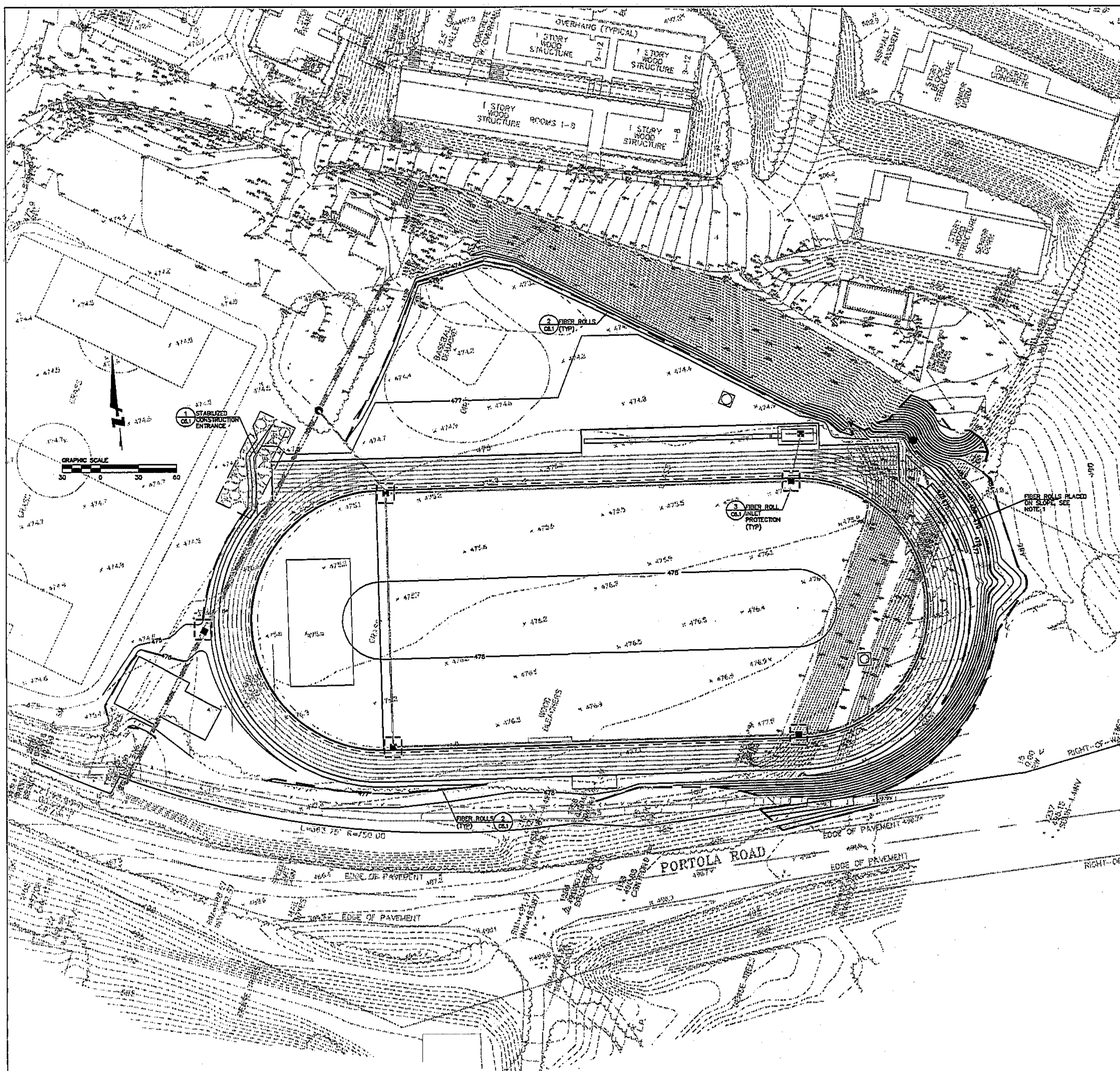
• DATE: 10/17/2013

• SHEET: C5.0



EROSION CONTROL LEGEND

- STABILIZED CONSTRUCTION ENTRANCE SEE DETAIL 1, SHEET C6.1
- FIBER ROLLS DETAIL 2, SHEET C6.1
- FIBER ROLLS INLET PROTECTION SEE DETAIL 3, SHEET C6.1

NOTES

1. FIBER ROLLS SHALL BE PLACED AT A MAXIMUM INTERVAL OF 10 FEET FOR SLOPES INCLINING 2:1 OR HIGHER. FOR SLOPE INCLINATION BETWEEN 2:1 AND 4:1, THE SPACING SHALL BE MAXIMUM 15 FEET.
2. FOR HYDROSEEDING SEE SHEET LP-2

C6.0 Erosion Control Plan

1" = 30'

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Erosion Control Plan

• REVISIONS •

No.	Date	Notes

• JOB: 1999.4210

• DATE: 10/17/2013

• SHEET: C6.0

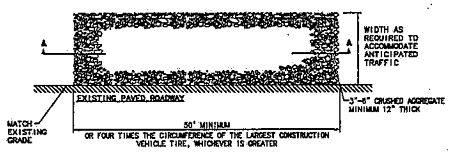
EROSION & SEDIMENT CONTROL NOTES

1. EROSION CONTROL PLAN AND SEDIEMNT CONTROL MEASURES TO MEET REGIONAL WATER QUALITY CONTROL BOARD'S EROSION AND SEDIEMTN CONTROL FIELD MANUAL AND THE SAN MATEO COUNTY STORM WATER POLLUTION PREVENTION PROGRAM REQURIEMENTS.
2. THIS SHEET IS INTENDED TO BE USED FOR EROSION AND SEDIMENT CONTROL ONLY.
3. THIS PLAN MAY NOT COVER ALL THE SITUATIONS THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. IN GENERAL, THE CONTRACTOR IS RESPONSIBLE FOR KEEPING SEDIMENT-LADEN STORM RUN OFF FROM LEAVING THE SITE. FIBER ROLLS, SAND BAGS, AND SILT FENCES SHALL BE USED BY THE CONTRACTOR ON AN AS NEEDED BASIS TO INHIBIT SILT FROM LEAVING THE SITE AND ENTERING THE STORM DRAIN SYSTEM. ALL EXISTING, TEMPORARY, OR PERMANENT CATCH BASINS SHALL USE ONE OF THE SEDIMENT BARRIERS SHOWN.
4. CATCH BASIN INSERTS SHALL BE PROVIDED AT ALL CATCH BASINS YEAR ROUND. INSERTS ARE NO LONGER NEEDED ONCE THE ADJACENT STREET IS PAVED AND UPSTREAM SOILS ARE STABILIZED.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGES TO PUBLIC AND/OR PRIVATELY OWNED AND MAINTAINED ROADS CAUSED BY THE CONTRACTOR'S GRADING ACTIVITIES, AND SHALL BE RESPONSIBLE FOR THE CLEANUP OF ANY MATERIAL SPILLED ON ANY PUBLIC ROAD ON THE HAUL ROUTE. ADJACENT PUBLIC ROADS SHALL BE CLEANED AT THE END OF EACH WORKING DAY.
6. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE OPERABLE YEAR ROUND OR UNTIL VEGETATION IS ESTABLISHED ON DISTURBED SURFACES.
7. BORROW AND TEMPORARY STOCKPILES SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTROL MEASURES (TARPS, STRAW WATTLES, SILT FENCES ETC.) TO ENSURE SILT DOES NOT LEAVE THE SITE OR ENTER THE STORM DRAIN SYSTEM.
8. ALL EROSION CONTROL FACILITIES MUST BE MONITORED AS REQUIRED IN THE MONITORING PROGRAM. ALL SLOPES SHALL BE REPAIRED AS SOON AS POSSIBLE WHEN DAMAGED.
9. ALL TRUCK TIRES SHALL BE CLEANED PRIOR TO EXITING THE PROPERTY.
10. DURING CONSTRUCTION, THE MAINTENANCE OF SUMMERTIME DRAINAGE THROUGH THE SITE IS THE RESPONSIBILITY OF THE CONTRACTOR.
11. OPEN SPACE AREAS ARE TO BE PLANTED BY SEPTEMBER 15. IF THIS CONDITION IS NOT MET, CONTRACTOR SHALL SUBMIT AN EROSION CONTROL PLAN TO THE CITY FOR REVIEW AND APPROVAL.
12. DURING PERIODS WHEN STORMS ARE FORECASTED–
    A. EXCAVATED SOILS SHOULD NOT BE PLACED IN STREETS OR ON PAVED AREAS.
    B. ANY EXCAVATED SOILS SHOULD BE REMOVED FROM THE SITE BY THE END OF THE DAY.
    C. WHERE STOCKPILING IS NECESSARY, USE A TARPAULIN OR SURROUND THE STOCKPILED MATERIAL WITH FIBER ROLLS OR OTHER RUNOFF CONTROL MEASURES.
    D. USE INLET SEDIMENT BARRIERS FOR STORM DRAINS ADJACENT TO THE STOCKPILED SOIL.
    E. THOROUGHLY SWEEP ALL PAVED AREAS EXPOSED TO SOIL EXCAVATION PLACEMENT.

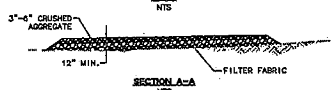
    DURING PERIODS WHEN STORMS ARE NOT FORECASTED–
    A. PREVENT STOCKPILED MATERIAL FROM ENTERING THE STORM DRAIN SYSTEM.
    B. THOROUGHLY REMOVE LOOSE SOIL VIA SWEEPING FOLLOWING REMOVAL OF DIRT.

    THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES. BMP'S REGARDING THE DISCHARGE OF NON-STORM WATER RUNOFF SHALL APPLY YEAR-ROUND.
13. THE NAME, ADDRESS AND 24-HOUR TELEPHONE NUMBER OF THE PERSON RESPONSIBLE FOR IMPLEMENTATION OF EROSION AND SEDIMENTATION CONTROL PLAN SHALL BE PROVIDED TO THE CONSTRUCTION MANAGER.

    NAME: ____________
    ADRESS: ____________
    TELEPHONE NO: ____________
    EMERGENCY TELEPHONE NO: ____________
14. STORMWATER SAMPLES SHALL BE TAKEN WHENEVER VISUAL MONITORING INDICATES THAT THERE HAS BEEN A BREACH, MALFUNCTION, LEAKAGE, OR ANY SPILL FROM A BMP WHICH COUULD RESULT IN THE DISCHARGE IN STORM WATER OF POLLUTANTS THAT WOULD NOT BE VISABLY DETECTABLE, OR IF STORM WATER COMES INTO CONTACT WITH SOIL AMENDMENTS OR OTHER EXPOSED MATERIALS OR CONTAMINATION AND IS ALLOWED TO BE DISCHARGED.
15. THE SAMPLES ARE TO BE TAKEN BY THE CONTRACTOR. ARRANGEMENTS SHALL BE MADE WITH A TESTING LAB PRIOR TO STARTING CONSTRUCTION. THE SAMPLE SHALL BE TAKEN, PRESERVED AND TRANSPORTED TO THE LAB IN ACCORDANCE WITH THE LAB PROCEDURES. SAMPLES SHALL BE TESTED FOR SETTLEABLE SOLIDS (ML/L) AND TOTAL SUSPENDED SOLIDS (MG/L). FAILURE TO FOLLOW LAB PROCEDURES COULD INVALIDATE TESTING RESULTS, RESUTLING IN A VIOLATION OF THE PERMIT. SAMPLING BOTTLES SHALL BE OBTAINED IN ADVANCE AND STORED AT THE JOB SITE. THEM SAMPLING PROCEDURE SHALL BE DOCUMENTED AND DESCRIBED ACCORDING TO LOCATION AND RATIONALE FOR OBTAINING THE UNCONTAMINATED SAMPLE OF STORM WATER.
16. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED. CHANGES TO THIS EROSION CONTROL PLAN SHALL BE MADE TO MEET FIELD CONDITIONS ONLY WITH THE APPROVAL OF OR AT THE DIRECTION OF THE TOWN.
17. MAINTENANCE, MONITORING, AND INSPECTION SHALL BE CONDUCTED ACCORDING TO BEST MANAGEMENT PRACTICES. TRAINING OF INSPECTION PERSONNEL WILL BE CONDUCTED PRIOR TO IMPLEMENTATION OF THE MONITORING PROGRAM. THE MONITORING PROGRAM SHALL INCLUDE REGULAR SITE INSPECTIONS AND REPORTS. MONITORING FORMS AND COMPLIANCE CERTIFICATION SHALL BE PROVIDED TO THE OWNER AND ENGINEER BY JULY 1 FOR THE PREVIOUS YEARS ACTIVITIES.
18. ALL EROSION CONTROL FACILITIES MUST BE MONITORED AS REQUIRED IN THE MONITORING PROGRAM. ALL SLOPES SHALL BE REPAIRED AS SOON AS POSSIBLE WHEN DAMAGED.
19. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSPECT AND REPAIR ALL EROSION CONTROL FACILITIES AT THE END OF EACH WORK DAY DURING THE RAINY SEASON AND AFTER EACH STORM EVENT.
20. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT TEMPORARY BORROW AREAS AND/OR STOCKPILES WITH THE APPROPRIATE EROSION CONTROL MEASURES SATISFACTORY TO THE TOWN.
21. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED DURING GRADING OPERATION, BEFORE OCTOBER 1 AND PRIOR TO INSTALLATION OF STORM DRAINAGE SYSTEM. SUCH ADDITIONAL MEASURES WILL BE CONTINGENT UPON THE STAGE OF GRADING OPERATION. CONTRACTOR SHALL IMPLEMENT ANY ADDITIONAL EROSION CONTROL MEASURES AS REQUIRED BY THE TOWN.



PLAN
NTS

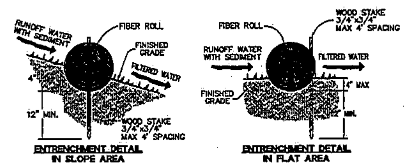


SECTION A-A
NTS

NOTES:

1. ALL CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USE TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAYS SHALL BE REMOVED IMMEDIATELY.
2. WHEELS SHALL BE CLEAN PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAYS. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE THROUGH USE OF INLET PROTECTION (E.G. SAND BAGS OR OTHER APPROVED METHODS).
3. THE MATERIAL FOR CONSTRUCTION OF THE PAD SHALL BE 3" TO 6" STONE.
4. THE THICKNESS OF THE PAD SHALL NOT BE LESS THAN 12".
5. THE WIDTH OF THE PAD SHALL NOT BE LESS THAN THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
6. THE LENGTH OF THE PAD SHALL NOT BE LESS THAN 50'.

1 STABILIZED CONSTRUCTION ENTRANCE
NTS



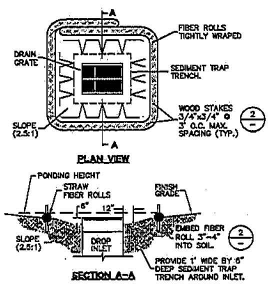
ENTRENCHMENT DETAIL IN SLOPE AREA

ENTRENCHMENT DETAIL IN FLAT AREA

NOTES:

1. FIBER ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3" TO 4" DEEP, DUG ON CONTOUR.
2. ADJACENT ROLLS SHALL TIGHTLY ABUT.
3. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND FIBER ROLL.

2 FIBER ROLL
NTS



NOTES:

1. PLACE FIBER ROLLS AROUND THE INLET CONSISTENT WITH BASIN SEDIMENT BARRIER DETAIL ON THIS SHEET. (FIBER ROLLS ARE TUBES MADE FROM STRAW BOUND W/ PLASTIC NETTING. THEY ARE APPROX. 8" DIA. AND 20 - 30 FT. LONG.)
2. FIBER ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE FIBER ROLL IN A TRENCH, 3" - 4" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND FIBER ROLL.
3. THE TOP OF THE STRUCTURE (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BY-PASSING THE INLET. EXCAVATION OF A BASIN ADJACENT TO THE DROP INLET OR A TEMPORARY DIKE ON THE DOWNSLOPE OF THE STRUCTURE MAY BE NECESSARY.

3 DROP INLET/AREA DRAIN FIBER ROLLS SEDIMENT BARRIER
NTS

C6.1 Erosion Control Notes & Details

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Erosion Control Notes & Details

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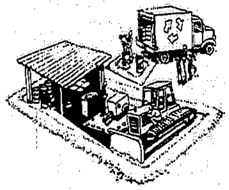
• SHEET: C6.1

Stormwater Pollution Prevention Program

Pollution Prevention — It's Part of the Plan

It is your responsibility to do the job right!

Runoff from streets and other paved areas is a major source of pollution in local creeks, San Francisco Bay and the Pacific Ocean. Construction activities can directly affect the health of our waters unless contractors and crews plan ahead to keep dirt, debris, and other construction waste away from storm drains and creeks. Following these guidelines will ensure your compliance with local stormwater ordinance requirements. Remember, ongoing monitoring and maintenance of installed controls is crucial to proper implementation.



General Construction & Site Supervision

Advance planning prevents pollution

- ✓ **Schedule excavation and grading activities for dry weather periods.** To reduce soil erosion, plant temporary vegetation or place other erosion controls before rain begins.
- ✓ **Locate and protect storm drains** in the vicinity of the site with berms or filters during wet weather periods.
- ✓ **Control the amount of runoff crossing your site** (especially during excavation) by using berms or temporary or permanent drainage ditches to divert water flow around the site. Reduce stormwater runoff velocities by constructing temporary check dams or berms where appropriate.
- ✓ **Train your employees and subcontractors.** Make these brochures available to everyone who works on the construction site. Inform subcontractors about the new stormwater requirements and their responsibilities.

Good housekeeping practices

- ✓ **Designate one completely contained area for auto parking, vehicle refueling, and routine equipment maintenance.** The designated area should be well away from streams or storm drain inlets, and bermed if necessary. Make major repairs off site.
- ✓ **Keep materials out of the rain — prevent runoff contamination at the source.** Cover exposed piles of soil or construction materials with plastic sheeting or temporary roofs.
- ✓ **Keep pollutants off exposed surfaces.** Place trash cans and recycling receptacles around the site to minimize litter.
- ✓ **Dry sweep paved surfaces** that drain to storm drains, creeks, or channels. If pavement flushing is necessary, use silt ponds or other techniques to trap sediment and other pollutants.
- ✓ **Clean up leaks, drips and other spills immediately** so they do not contaminate soil or groundwater or leave residue on paved surfaces. Use dry cleanup methods whenever possible. If you must use water, use just enough to keep the dust down.
- ✓ **Cover and maintain dumpsters.** Check frequently for leaks. Place dumpsters under roofs or cover with tarps or plastic sheeting secured around the outside of the dumpster. A plastic liner is recommended to prevent leakage of liquids. **Never clean out a dumpster by hosing it down on the construction site.**
- ✓ **Make sure portable toilets are maintained in good working order** by the leasing company and that wastes are disposed of properly. Check toilets frequently for leaks.

Materials/waste handling

- ✓ **Practice source reduction — minimize waste when you order materials.** Order only the amount you need to finish the job.
- ✓ **Use recyclable materials** whenever possible. Arrange for pick-up of recyclable materials such as concrete, asphalt, scrap metal, solvents, degreasers, cleared vegetation, paper, rock, and vehicle maintenance materials such as used oil, antifreeze, batteries, and tires.
- ✓ **Dispose of all wastes and demolition debris properly.** Many construction materials and wastes can be recycled, including solvents, water-based paints, vehicle fluids, broken asphalt and concrete, wood, and cleared vegetation. Materials and debris that cannot be recycled must be taken to an appropriate landfill or disposed of as hazardous waste. **Never bury waste materials or leave them in the street or near a creek or stream bed.**

Heavy Equipment Operation

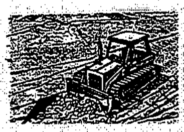
Site planning and preventive vehicle maintenance

- ✓ Designate a completely contained area of the construction site, well away from streams or storm drain inlets, for auto and equipment parking, refueling, and routine vehicle and equipment maintenance.
- ✓ Maintain all vehicles and heavy equipment. Inspect frequently for and repair leaks.
- ✓ Perform major maintenance, repair jobs, and vehicle and equipment washing off site.
- ✓ If you must drain and replace motor oil, radiator coolant, or other fluids on site, use drip pans or drop cloths to catch drips and spills. Collect all spent fluids, store in separate containers, and recycle whenever possible, or dispose of fluids as hazardous waste.
- ✓ Do not use diesel oil to lubricate or clean equipment or parts.
- ✓ Recycle used vehicle batteries.

Clean up spills immediately when they happen

- ✓ Never hose down "dirty" pavement or impermeable surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags) whenever possible. If you must use water, use just enough to keep the dust down.
- ✓ Sweep up spilled dry materials immediately. Never attempt to "wash them away" with water, or bury them. Use as little water as possible for dust control.
- ✓ Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- ✓ Report significant spills to the appropriate spill response agencies immediately. You are required by law to report all significant releases of hazardous materials, including oil. To report a spill, call the following agencies: 1) Dial 911 or your local emergency response number, 2) Call the Governor's Office of Emergency Services Warning Center, (800) 852-7550 (24 hours).

Earth-Moving Activities



During Construction

- ✓ Remove existing vegetation only when absolutely necessary.
- ✓ Seed or plant *temporary* vegetation for erosion control on slopes or where construction is not immediately planned.
- ✓ Protect downslope drainage courses, streams, and storm drains with hay bales, temporary drainage swales, silt fences, berms or storm drain inlet filters.
- ✓ Use check dams or ditches to divert runoff around excavations and graded areas.
- ✓ Cover stockpiles and excavated soil with secured tarps or plastic sheeting.
- ✓ Properly monitor and maintain all erosion and sediment controls.
- ✓ Properly report failures of erosion and sediment controls to the local stormwater authority.

General Business Practices

- ✓ Schedule excavation and grading work for dry weather.
- ✓ Perform major equipment repairs away from the job site.
- ✓ When refueling or when vehicle/equipment maintenance must be done on site, work within a completely bermed area away from storm drains.
- ✓ Do not use diesel oil to lubricate or clean equipment or parts.

Watch for soil and ponded groundwater that may be contaminated.

If any of these conditions are observed, test for contamination and contact the Regional Water Quality Control Board:

- Unusual soil conditions, discoloration, or odor
- Abandoned underground tanks
- Abandoned wells
- Buried barrels, debris, or trash.

Roadwork & Paving

- ✓ Develop and implement erosion/sediment control plans for roadway embankments.
- ✓ Schedule excavation and grading work for dry weather.
- ✓ Check all equipment for leaks and repair leaking equipment promptly.
- ✓ Perform major maintenance, repairs, and washing of equipment away from the construction site.
- ✓ When refueling or vehicle/equipment maintenance must be done on site, designate a completely contained area away from storm drains and creeks.
- ✓ Do not use diesel oil to lubricate or clean equipment or parts.
- ✓ Recycle used oil, batteries, concrete, broken asphalt, etc. whenever possible.
- ✓ Train employees in using these best management practices.

During Construction

- ✓ Avoid paving and seal coating in wet weather, or when rain is forecast before fresh pavement will have time to cure.
- ✓ Cover and seal catch basins and manholes when applying seal coat, slurry seal, fog seal, etc.
- ✓ Use check dams, ditches, or berms to divert runoff around excavations.
- ✓ Never wash excess material from exposed- aggregate concrete or similar treatments into a street or storm drain. Collect and recycle, or dispose to dirt area.
- ✓ Cover stockpiles and other construction materials with plastic tarps. Protect from rainfall and prevent runoff with temporary roofs or plastic sheets and berms.
- ✓ Catch drips from paver with drip pans or absorbent material (cloth, rags, etc.) placed under machine when not in use.
- ✓ Clean up all spills and leaks using "dry" methods (with absorbent materials/rags), or dig up and remove contaminated soil.
- ✓ Collect and recycle or appropriately dispose of excess abrasive gravel or sand.
- ✓ Avoid over-application by water trucks for dust control.

Asphalt/Concrete Removal

- ✓ Avoid creating excess dust when breaking asphalt or concrete.
- ✓ After breaking up old pavement, be sure to remove all chunks and pieces from the site.
- ✓ Make sure broken pavement does not come in contact with rainfall or runoff.
- ✓ Protect nearby storm drain inlets during saw-cutting. Shovel or vacuum saw-cut slurry deposits and remove from the site.
- ✓ Never hose down streets to clean up tracked dirt. Use dry sweep methods.

Fresh Concrete & Mortar Application

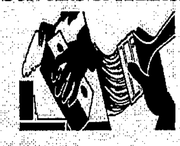
General Business Practices

- ✓ Both at your yard and the construction site, always store both dry and wet materials under cover, protected from rainfall and runoff. Protect dry materials from wind.
- ✓ Secure bags of cement after they are open. Be sure to keep wind-blown cement powder away from gutters, storm drains, rainfall, and runoff.
- ✓ Wash out concrete mixers only in designated wash-out areas in your yard, where the water will flow into containment ponds or onto dirt. Let concrete harden and dispose of as garbage. Whenever possible, recycle washout by pumping back into mixers for reuse. **Never dispose of washout into the street, storm drains, drainage ditches, or streams.**

During Construction

- ✓ Don't mix up more fresh concrete or cement than you will use in a day.
- ✓ Set up and operate small mixers on tarps or heavy plastic drop cloths.
- ✓ When cleaning up after driveway or sidewalk construction, wash fines onto dirt areas, not down the driveway or into the street or storm drain.
- ✓ Prevent aggregate wash from driveway/patio construction from entering storm drains. Hose aggregate wash onto dirt areas and spade into dirt.
- ✓ Place hay bales or other erosion controls downslope to capture runoff carrying mortar or cement before it reaches the storm drain.
- ✓ When breaking up paving, be sure to pick up all the pieces and dispose properly.
- ✓ Recycle large chunks of broken concrete at a landfill.
- ✓ Dispose of small amounts of excess dry concrete, grout, and mortar in the trash.
- ✓ Never bury solid or hazardous waste material.

Painting & Application of Solvents & Adhesives



Handling Paint Products

- ✓ **Keep all liquid paint products and wastes away from the gutter, street, and storm drains.** Liquid residues from paints, thinners, solvents, glues, and cleaning fluids are hazardous wastes and must be disposed of at a hazardous waste collection facility (contact your local stormwater program).

Painting cleanup

- ✓ **Never clean brushes or rinse paint containers into a street, gutter, storm drain, or stream.**
- ✓ **For water-based paints,** paint out brushes to the extent possible. Rinse to the sanitary sewer once you have gained permission from the local wastewater treatment authority. Never pour paint down a drain.
- ✓ **For oil-based paints,** paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids and residue as hazardous waste.

Paint removal

- ✓ **Paint chips and dust from non-hazardous dry stripping and sand blasting** may be swept up or collected in plastic drop cloths and disposed of as trash.
- ✓ **Chemical paint stripping residue** and chips and dust **from marine paints or paints containing lead or tributyl tin** must be disposed of as hazardous wastes.
- ✓ When stripping or cleaning building exteriors with high-pressure water, block storm drains. Wash water onto a dirt area and spade into soil. Or, check with the local wastewater treatment authority to find out if you can collect (mop or vacuum) building cleaning water and dispose to the sanitary sewer. Sampling of the water may be required to assist the wastewater treatment authority in making its decision.

Recycle/reuse leftover paints whenever possible.

- ✓ **Recycle or dispose of excess water-based paint** at a household hazardous waste collection facility, or use up. When they are thoroughly dry, empty paint cans, used brushes, rags, and drop cloths may be disposed of as garbage in a sanitary landfill.
- ✓ **Reuse leftover oil-based paint.** Dispose of excess liquid, including sludges, as hazardous waste.
- ✓ Small quantity generators should check with the San Mateo County Environmental Health Division regarding recycling or hazardous waste disposal.
- ✓ Unopened cans of paint may be able to be returned to the paint vendor. Check with the vendor regarding its "buy-back" policy.

Landscaping, Gardening, and Pool Maintenance

- ✓ Protect stockpiles and landscaping materials from wind and rain by storing them under tarps or secured plastic sheeting.
- ✓ Store pesticides, fertilizers, and other chemicals indoors or in a shed or storage cabinet.
- ✓ Schedule grading and excavation projects for dry weather.
- ✓ Use temporary check dams or ditches to divert runoff away from storm drains.
- ✓ Protect storm drain inlets with hay bales, berms, filter mats or other inlet protection measures.
- ✓ **Revegetation is an excellent form of erosion control for any site.**

Landscaping/Garden Maintenance

- ✓ Use up pesticides and follow label directions. Rinse containers, and use rinsewater as product. Dispose of rinsed containers in the trash.
- ✓ Dispose of unused pesticides as hazardous waste.
- ✓ Collect lawn and garden clippings, pruning waste, and tree trimmings. Chip if necessary, and compost.
- ✓ Do not place yard waste in gutters. In communities with curbside yard waste recycling, leave clippings and pruning waste for pickup in approved bags or containers. Or, take to a landfill that composts yard waste.
- ✓ **Do not blow or rake leaves, etc. into the street.**

Pool/Fountain/Spa Maintenance

- ✓ Never discharge chlorinated pool or spa water to a street or storm drain.
- ✓ When emptying a pool or spa, let chlorine dissipate for 5 to 7 days. Then recycle water by draining it gradually onto a landscaped area, or drain the dechlorinated water to a storm drain.
- ✓ Chlorinated water may be to discharged to the sanitary sewer (if allowed by the local sewage treatment authority) by running a hose to a utility sink or sewer pipe cleanout junction.
- ✓ **Do not use copper-based algaecides.** Control algae with chlorine or other alternatives to copper-based pool chemicals. **Copper is harmful to aquatic life and cannot be completely removed by the sewage treatment plant.**

Storm drain polluters may be liable for fines of up to $25,000 per day!

C6.2 STOPPP

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• PROJECT •

Woodside Priory Track & Field Project
Portola Road
Portola Valley, CA 94028

• SHEET TITLE •

STOPPP

• REVISIONS •

No.	Date	Notes

• JOB: 1999.4210

• DATE: 10/17/2013

• SHEET: C6.2

SITE CONSTRUCTION LEGEND

- CONCRETE PAVEMENT (5/TF-4.0)
- EXPANSION JOINT, TYP. (5/TF-4.0)
- SCORE JOINT, TYP.
- TRACK SURFACING (2/TF-4.0)
- TURF FROM SOD, CELEBRATION BERMUDA GRASS OVERSEEDED WITH BREAKOUT TURF ANNUAL RYE GRASS, AS AVAILABLE FROM DELTA BLUEGRASS COMPANY, OR APPROVED EQUAL. CONTACT DINAH ZUCKERMAN (926) 657-8875 (1/TF-4.0)
- O$_T$ TRASH RECEPTACLE
- PLAYER'S BENCH, PER SPECIFICATIONS
- SAND PIT CATCH BASIN (3/TF-4.0)
- S.A.D. SEE ARCHITECT'S DRAWING
- S.C.D. SEE CIVIL'S DRAWING

SITE CONSTRUCTION NOTES

1. **SITE LAYOUT.** FOR HORIZONTAL CONTROL OF TRACK AND FIELD IMPROVEMENTS S.C.D.
2. **EXPANSION JOINTS.** INSTALL EXPANSION JOINTS AS SHOWN ON DRAWINGS.
3. **SLEEVING.** REFER TO IRRIGATION PLAN FOR REQUIREMENTS OF SLEEVING UNDER PAVING.
4. **EXISTING PLANT MATERIAL.** PROTECT ALL EXISTING PLANT MATERIAL TO REMAIN. REPAIR ANY DAMAGES INCURRED AS A DIRECT RESULT OF THIS CONTRACT TO THE OWNER'S SATISFACTION AT NO ADDITIONAL COST.
5. **SOILS TESTING.** SEE SPECIFICATIONS FOR TESTING OF SAND AND AMENDMENTS.

IRRIGATION LEGEND

- ROTOR, HUNTER, I-25-04-SS-HS, NOZZLE #05, ARC AS REQUIRED (7/TF-4.0)
- ROTOR, HUNTER, I-40-04-SS, NOZZLE #15, ARC AS REQUIRED
- ROTOR, HUNTER, I-40-04SS-ON, NOZZLE #15, ARC AS REQUIRED
- REMOTE CONTROL VALVE, IRRITROL, 100 SERIES, SIZE PER PLAN (3/TF-4.0)
- [C] CONTROLLER, IRRITROL, #MC-24E, WALL MOUNT WITH R-100-KIT (1/TF-4.0)
- [V] MASTER VALVE, SUPERIOR 3100 SERIES, NORMALLY OPEN, 3" (2/TF-4.0)
- (W) WEATHER SENSOR, IRRITROL, CLIMATE LOGIC, CL-100-WIRELESS, INSTALL ON BUILDING PER MANUFACTURER'S RECOMMENDATION
- (F) FLOW SENSOR, IRRITROL, FS-B250 (4/TF-4.0)
- [BP] BOOSTER PUMP (8/TF-4.0)
- CONTROL WIRE, BURY 18" MIN. COVER
- LATERAL LINE, CLASS 200 PVC, SIZE PER PLAN (9/TF-4.0)
- MAINLINE, SIZE PER PLAN, CLASS AS REQUIRED PER SPECS.
- SLEEVE, SCH 40 PVC, SIZE AS REQUIRED
- QUICK COUPLING VALVE, TORO, 475-25 (5/TF-4.0)
- GATE VALVE, NIBCO 113, CLASS 125, LINE SIZE, INSTALL IN VALVE BOX (6/TF-4.0)
- VALVE # / APPROXIMATE GPM THROUGH VALVE / VALVE SIZE
- [B] BACKFLOW PREVENTER, EXISTING
- [C] CONTROLLER, EXISTING

IRRIGATION NOTES

1. **SPECIFICATIONS.** SEE IRRIGATION SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. **VERIFICATION.** SYSTEM DESIGN IS BASED ON 70 P.S.I. AND 65 G.P.M. AVAILABLE DOWNSTREAM OF BOOSTER PUMP. VERIFY SAME AND NOTIFY OWNER'S REPRESENTATIVE IF LOWER FIGURES ARE RECORDED DURING VERIFICATION. SUCH NOTICE SHALL BE MADE IN WRITING AND PRIOR TO COMMENCING ANY IRRIGATION WORK.
3. **UTILITIES.** VERIFY LOCATION OF ALL ON-SITE UTILITIES. RESTORATION OF DAMAGED UTILITIES SHALL BE MADE AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
4. **SCHEMATIC.** SYSTEM FEATURES ARE SHOWN SCHEMATICALLY FOR GRAPHIC CLARITY. INSTALL ALL PIPING AND VALVES IN COMMON TRENCHES WHERE FEASIBLE AND INSIDE PLANTING AREAS WHENEVER POSSIBLE. ALL VALVES SHALL BE LOCATED IN GROUNDCOVER OR SHRUB AREAS WHENEVER POSSIBLE.
5. **CODES.** IRRIGATION SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH ALL LOCAL CODES AND ORDINANCES. NOTIFY OWNER'S REPRESENTATIVE BY TELEPHONE AND IN WRITING OF ANY CONFLICTS PRIOR TO INSTALLATION.
6. **SLEEVING.** ADEQUATELY SIZE ALL SLEEVES SHOWN ON PLAN. SLEEVES SHALL BE INSTALLED AT THE NECESSARY DEPTHS PRIOR TO PAVEMENT CONSTRUCTION. SLEEVING SHALL EXTEND 1'-0" FROM EDGE OF PAVING INTO LAWN OR PLANTING AREA, AND SHALL HAVE ENDS CLEARLY MARKED ABOVE GRADE.
7. **QUICK COUPLING VALVES.** INSTALL ON TRIPLE SWING JOINT. LOCATE 12 INCHES AWAY FROM EDGE OF WALKS, WALLS, CURBS, AND HEADERBOARDS WITHIN PLANTING AREAS. PROVIDE OWNER WITH ONE OPERATING KEY, TWO SETS OF LOCKING COVER KEYS, AND ONE SWIVEL HOSE ELL.
8. **CONTROLLER.** INSTALL CONTROLLER 4'-0" ABOVE FLOOR OR FINISHED GRADE AND FASTEN SECURELY TO WALL. ALL ABOVE-GRADE CONDUIT EITHER 24V. OR 110V. SHALL BE RIGID STEEL AND SECURELY FASTENED TO STRUCTURE AND TO CONTROLLER.
9. **CHECK VALVES.** INSTALL PLASTIC CHECK VALVE AT BASE OF HEADS ON LOW ENDS OF SYSTEMS AS REQUIRED TO MINIMIZE LINE DRAINAGE. ALLOW IN BID PRICE AN AMOUNT SUFFICIENT TO PROVIDE AND INSTALL AN ADDITIONAL (2) CHECK VALVES TO ACCOMMODATE ANY NECESSARY FIELD CHANGES.
10. **MAINLINE BREAK.** SHOULD THE EXISTING MAINLINE BREAK OR BE SHUT OFF FOR ANY REASON DURING THE COURSE OF CONSTRUCTION THE CONTRACTOR SHALL HAND WATER ALL TREES, SHRUBS, TURF, AND GROUNDCOVER THAT THE EXISTING IRRIGATION SYSTEM WATERS. CONTINUE TO DO SO UNTIL THE IRRIGATION SYSTEM IS OPERABLE.
11. **PRE-PROJECT CONDITION OF EXISTING IRRIGATION.** THE CONTRACTOR SHALL CONDUCT A PRE-CONSTRUCTION TEST OF THE EXISTING IRRIGATION SYSTEM FOR THE PURPOSES OF DOCUMENTING IT'S CONDITION. THE TEST SHALL BE CONDUCTED IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE AND ALL EXISTING DEFICIENCIES SHALL BE CLEARLY DOCUMENTED. PERFORMANCE FAILURES OF THE EXISTING IRRIGATION SYSTEM THAT WERE NOT DOCUMENTED IN THE PRE-CONSTURCTION TEST SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REPAIRED AT NO ADDITIONAL EXPENSE TO THE OWNER.

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• PROJECT •

Woodside Priory Track & Field Project
Portola Road
Portola Valley, CA 94028

• SHEET TITLE •

Track and Field
Notes and Legends

• REVISIONS •

No.	Date	Notes

• JOB: 13043

• DATE: 10/15/2013

• SHEET: TF-1.0

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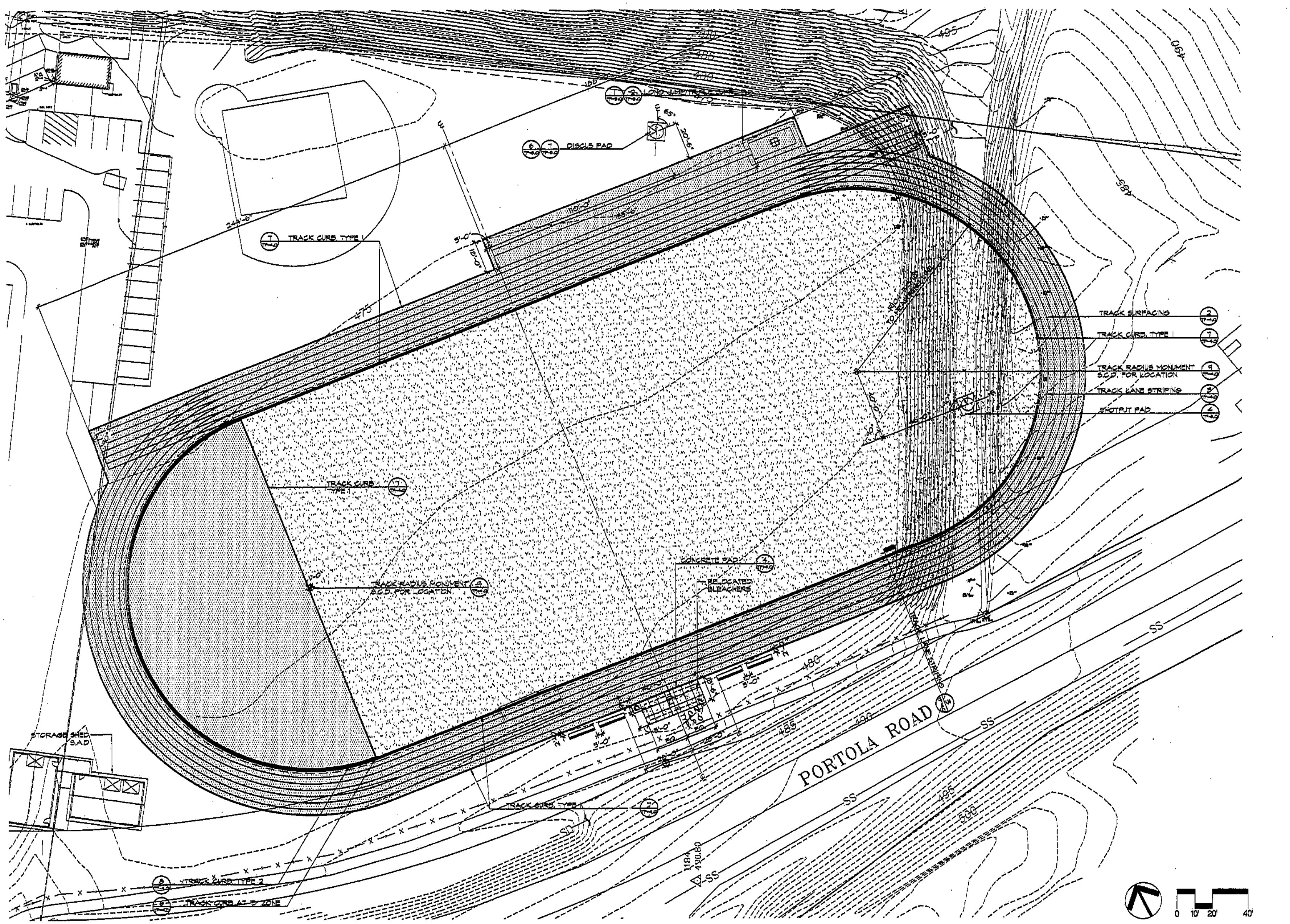

FOR NOTES AND LEGEND SEE SHEET TF-1.0

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Woodside Priory Track & Field Project
Portola Road
Portola Valley, CA 94028

• SHEET TITLE •

Track and Field
Site Construction

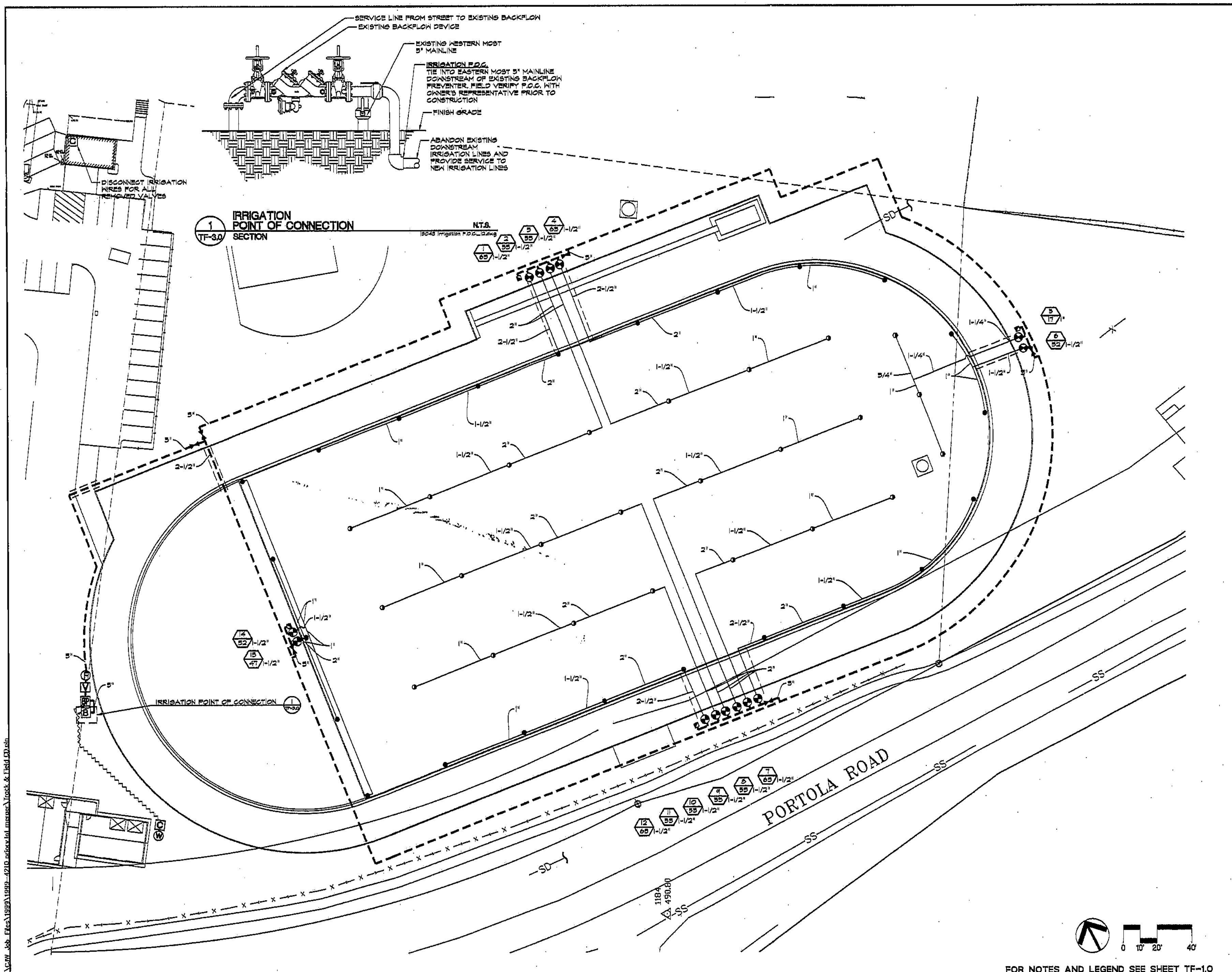
• REVISIONS •

No.	Date	Notes

• JOB: 13043

• DATE: 10/15/2013

• SHEET: TF-2.0



FOR NOTES AND LEGEND SEE SHEET TF-1.0

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Portola Road
Portola Valley, CA 94028

• SHEET TITLE •

Track and Field Irrigation Plan

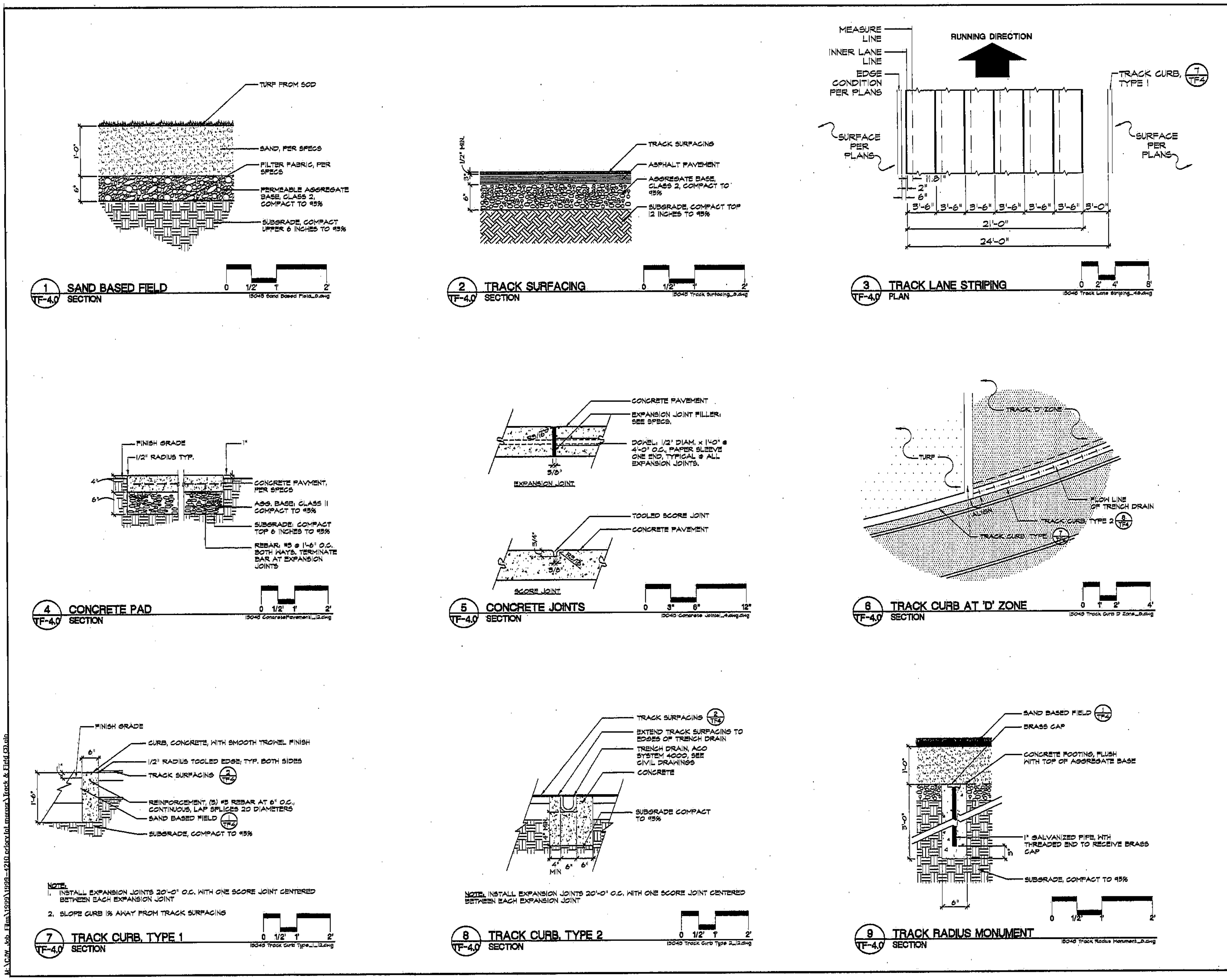
• REVISIONS •

No.	Date	Notes

• JOB: 13043

• DATE: 10/15/2013

• SHEET: TF-3.0


TURF FROM SOD
SAND, PER SPECS
FILTER FABRIC, PER SPECS
PERMEABLE AGGREGATE BASE, CLASS 2, COMPACT TO 95%
SUBGRADE, COMPACT UPPER 6 INCHES TO 95%
1'-0"
6"
1 SAND BASED FIELD
TF-4.0 SECTION
0 1/2' 1' 2'
TRACK SURFACING
ASPHALT PAVEMENT
AGGREGATE BASE, CLASS 2, COMPACT TO 95%
SUBGRADE, COMPACT TOP 12 INCHES TO 95%
1/2" MIN.
3"
6"
2 TRACK SURFACING
TF-4.0 SECTION
0 1/2' 1' 2'
MEASURE LINE
INNER LANE LINE
EDGE CONDITION PER PLANS
RUNNING DIRECTION
TRACK CURB, TYPE 1
SURFACE PER PLANS
SURFACE PER PLANS
11.81"
2"
6"
3'-6" 3'-6" 3'-6" 3'-6" 3'-6" 3'-6" 3'-0"
21'-0"
24'-0"
3 TRACK LANE STRIPING
TF-4.0 PLAN
0 2' 4' 8'
FINISH GRADE
1/2" RADIUS TYP.
1"
4"
6"
CONCRETE PAVMENT, PER SPECS
AGG. BASE: CLASS II COMPACT TO 95%
SUBGRADE: COMPACT TOP 6 INCHES TO 95%
REBAR: #5 @ 1'-6" O.C. BOTH WAYS. TERMINATE BAR AT EXPANSION JOINTS
4 CONCRETE PAD
TF-4.0 SECTION
0 1/2' 1' 2'
CONCRETE PAVEMENT
EXPANSION JOINT FILLER: SEE SPECS.
DOWEL: 1/2" DIAM. x 1'-0" @ 4'-0" O.C. PAPER SLEEVE ONE END, TYPICAL @ ALL EXPANSION JOINTS.
5/8"
EXPANSION JOINT
TOOLED SCORE JOINT
CONCRETE PAVEMENT
3/4"
3/8"
SCORE JOINT
5 CONCRETE JOINTS
TF-4.0 SECTION
0 3" 6" 12"
TRACK 'D' ZONE
TURF
FLOW LINE OF TRENCH DRAIN
ALIGN
TRACK CURB, TYPE 2
TRACK CURB, TYPE 1
6 TRACK CURB AT 'D' ZONE
TF-4.0 SECTION
0 1' 2' 4'
FINISH GRADE
CURB, CONCRETE, WITH SMOOTH TROWEL FINISH
1/2" RADIUS TOOLED EDGE; TYP. BOTH SIDES
TRACK SURFACING
REINFORCEMENT, (3) #5 REBAR AT 6" O.C., CONTINUOUS, LAP SPLICES 20 DIAMETERS
SAND BASED FIELD
SUBGRADE, COMPACT TO 95%
6"
1'-6"
NOTE:
1. INSTALL EXPANSION JOINTS 20'-0" O.C. WITH ONE SCORE JOINT CENTERED BETWEEN EACH EXPANSION JOINT
2. SLOPE CURB 1% AWAY FROM TRACK SURFACING
7 TRACK CURB, TYPE 1
TF-4.0 SECTION
0 1/2' 1' 2'
TRACK SURFACING
EXTEND TRACK SURFACING TO EDGES OF TRENCH DRAIN
TRENCH DRAIN, ACO SYSTEM 4000, SEE CIVIL DRAWINGS
CONCRETE
SUBGRADE COMPACT TO 95%
4" MIN 6" 6"
NOTE: INSTALL EXPANSION JOINTS 20'-0" O.C. WITH ONE SCORE JOINT CENTERED BETWEEN EACH EXPANSION JOINT
8 TRACK CURB, TYPE 2
TF-4.0 SECTION
0 1/2' 1' 2'
SAND BASED FIELD
BRASS CAP
CONCRETE FOOTING, FLUSH WITH TOP OF AGGREGATE BASE
1" GALVANIZED PIPE, WITH THREADED END TO RECEIVE BRASS CAP
SUBGRADE, COMPACT TO 95%
1'-0"
3'-0"
6"
9 TRACK RADIUS MONUMENT
TF-4.0 SECTION
0 1/2' 1' 2'

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• PROJECT •

Woodside Priory Track & Field Project
Portola Road
Portola Valley, CA 94028

• SHEET TITLE •

Track and Field Details

• REVISIONS •

No.	Date	Notes

• JOB: 13043

• DATE: 10/15/2013

• SHEET: TF-4.0

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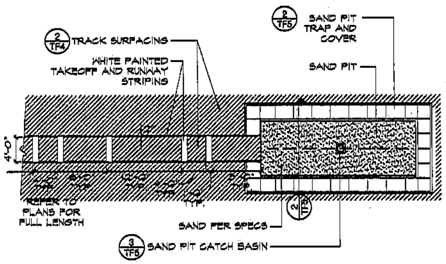
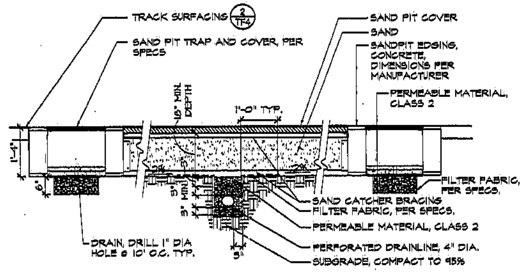


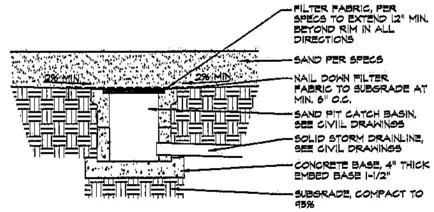
1 LONG JUMP/TRIPLE JUMP
TF-5.0 PLAN

0 4' 8' 16'



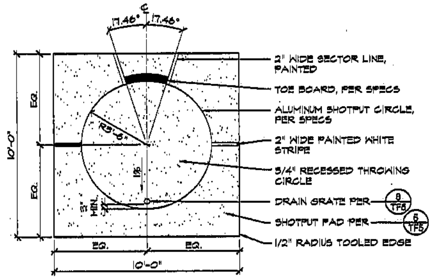
2 SAND PIT TRAP AND COVER
TF5.0 SECTION

0 1/2' 1' 2'



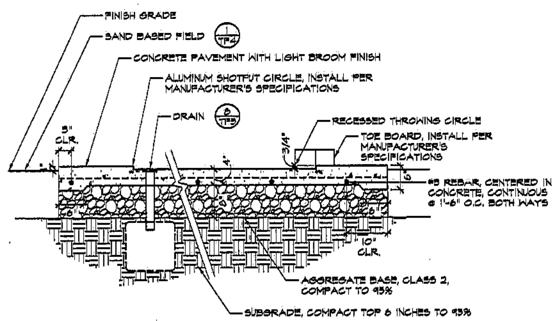
3 SAND PIT CATCH BASIN
TF5.0 SECTION

0 1' 2' 4'



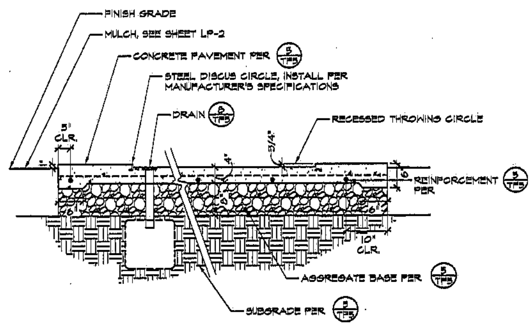
4 SHOTPUT PAD
TF5.0 PLAN

0 1' 2' 4'



5 SHOTPUT PAD
TF-5.0 SECTION

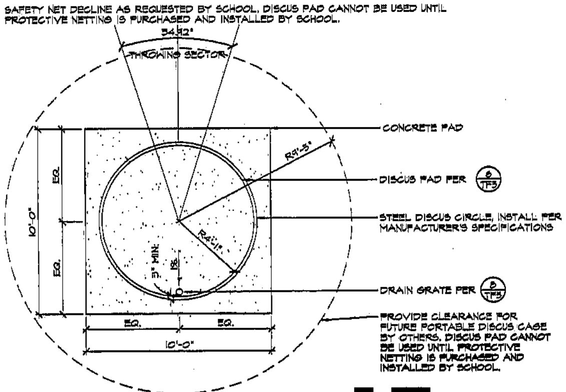
0 1/2' 1' 2'



6 DISCUS PAD
TF-5.0 PLAN

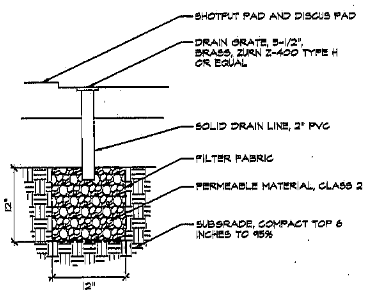
0 1/2' 1' 2'

NOTE:
1. LEFT AND RIGHT SIDE DIMENSIONS MIRROR EACH OTHER.
2. SAFETY NET DECLINE AS REQUESTED BY SCHOOL. DISCUS PAD CANNOT BE USED UNTIL PROTECTIVE NETTING IS PURCHASED AND INSTALLED BY SCHOOL.



7 DISCUS PAD
TF-5.0 PLAN

0 1' 2' 4'



8 DRAIN
TF-5.0 SECTION

0 1/2' 1' 2'

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• SHEET TITLE •

Track and Field Details

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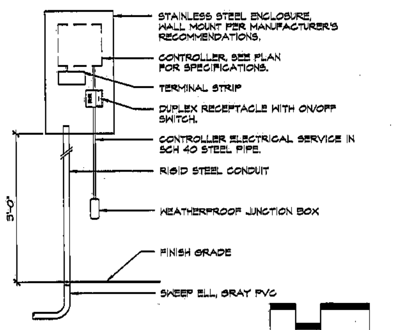
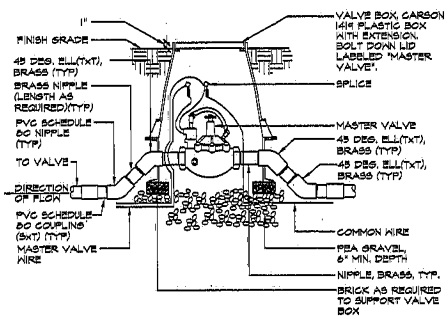
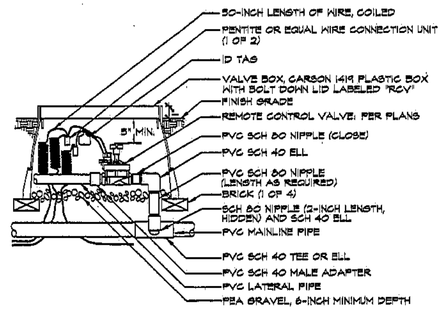


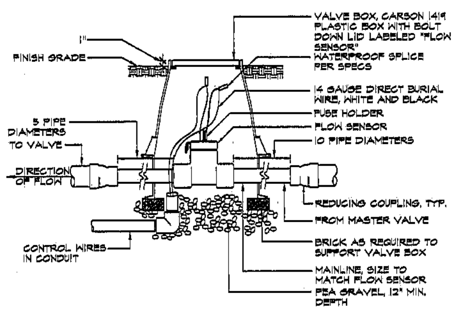
1 TF-6.0 CONTROLLER
SECTION
15040 Controller1_12.dwg



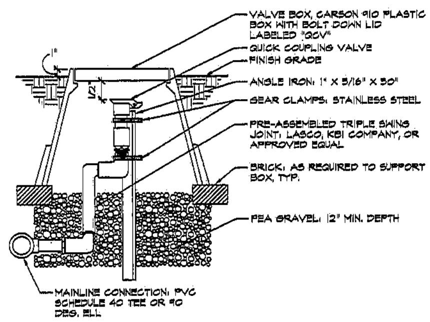
2 TF-6.0 MASTER VALVE N.T.S.
SECTION
15040 Mastervalve_40.dwg



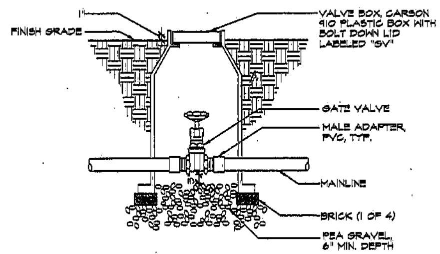
3 TF-6.0 REMOTE CONTROLE VALVE N.T.S.
SECTION
15040 RemoteControlValve1_4.dwg



4 TF-6.0 FLOW SENSOR N.T.S.
SECTION
15040 Flowsensor_40.dwg

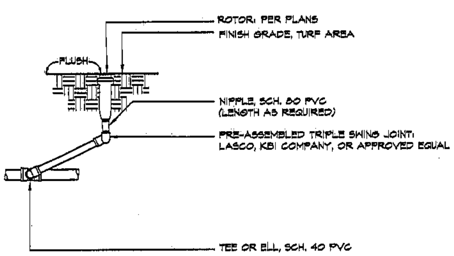


5 TF-6.0 QUICK COUPLING VALVE N.T.S.
SECTION
15040 QuickCouplingValve_4.dwg

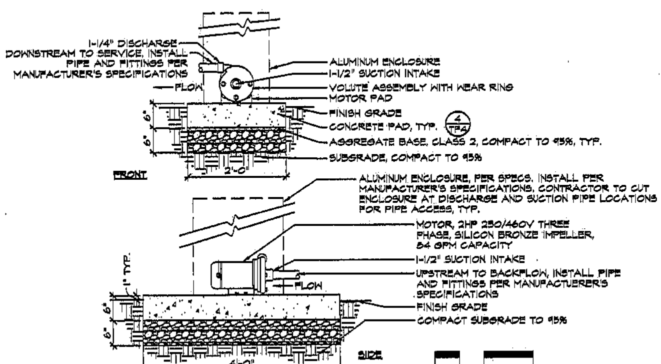


6 TF-6.0 GATE VALVE N.T.S.
SECTION
15040 GateValve_4.dwg

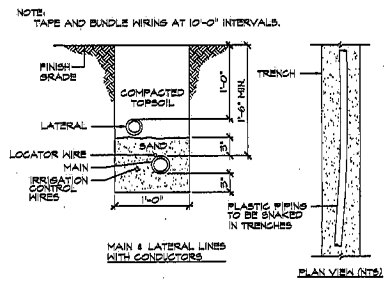
NOTE:
1. THREE PHASE ELECTRICAL SERVICE WITH 60-AMP BREAKER WITH GROUND AND CONTROL WIRE ARE REQUIRED. CONNECT ELECTRICAL WIRES PER MANUFACTURER'S SPECIFICATIONS.
2. ODELL'S PUMP SERVICE TO PROVIDE INSTALLATION AND TRAINING, CONTACT PERRY ODELL (916) 925-8808.
3. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS BEFORE INSTALLATION.



7 TF-6.0 ROTOR
SECTION
15040 Sprayhead_40.dwg



8 TF-6.0 BOOSTER PUMP
SECTION
15040 Booster Pump_D.dwg



9 TF-6.0 IRRIGATION TRENCHING
SECTION
02010Trenching_D.dwg

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Callander Associates
Landscape Architecture
Urban Design
Land Planning
Park and Recreation Planning
Environmental Planning

• PROJECT •
Woodside Priory Track & Field Project
Portola Road
Portola Valley, CA 94028

• SHEET TITLE •
Track and Field Details

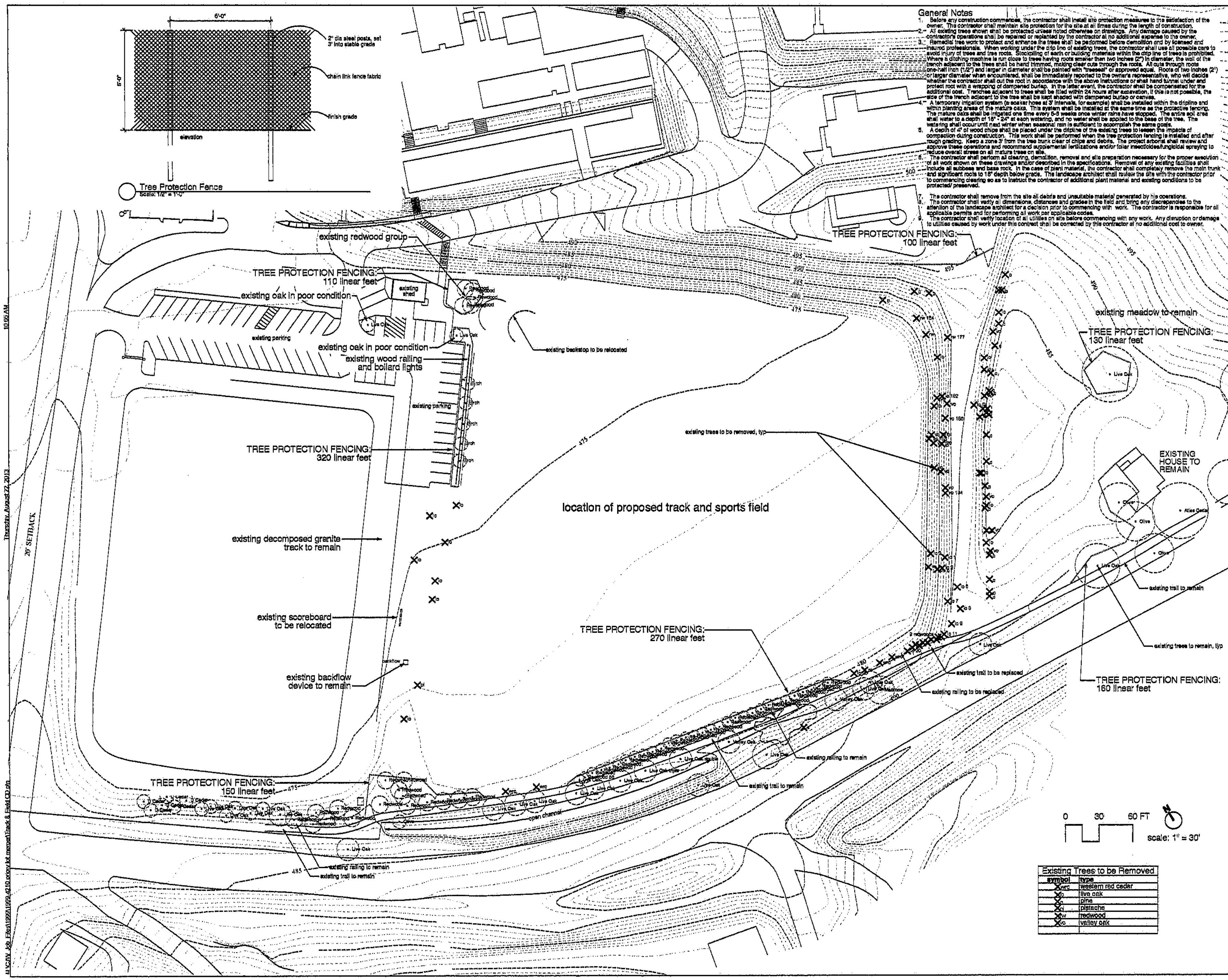
• REVISIONS •

No.	Date	Notes

• JOB: 13043
• DATE: 10/15/2013
• SHEET: TF-6.0

General Notes

1. Before any construction commences, the contractor shall install site protection measures to the satisfaction of the owner. The contractor shall maintain site protection for the site at all times during the length of construction.
2. All existing trees shown shall be protected unless noted otherwise on drawings. Any damage caused by the contractor's operations shall be repaired or replanted by the contractor at no additional expense to the owner.
3. Remedial tree work to protect and enhance the trees shall be performed before demolition and by licensed and insured professionals. When working under the drip line of existing trees, the contractor shall use all possible care to avoid injury of trees and tree roots. Stockpiling of earth or building materials within the drip line of trees is prohibited. Where a ditching machine is run close to trees having roots smaller than two inches (2") in diameter, the wall of the trench adjacent to the trees shall be hand trimmed, making clear cuts through the roots. All cuts through roots one-half inch (1/2") and larger in diameter shall be painted with "treeseal" or approved equal. Roots of two inches (2") or larger diameter when encountered, shall be immediately reported to the owner's representative, who will decide whether the contractor shall cut the root in accordance with the above instructions or shall hand tunnel under and protect root with a wrapping of dampened burlap. In the latter event, the contractor shall be compensated for the additional cost. Trenches adjacent to trees shall be filled within 24 hours after excavation, if this is not possible, the side of the trench adjacent to the tree shall be kept shaded with dampened burlap or canvas.
4. A temporary irrigation system (a soaker hose at 3' intervals, for example) shall be installed within the dripline and within planting areas of the mature oaks. This system shall be installed at the same time as the protective fencing. The mature oaks shall be irrigated one time every 6-8 weeks once winter rains have stopped. The entire soil area shall water to a depth of 18" - 24" at each watering, and no water shall be applied to the base of the tree. The watering shall occur until next winter when seasonal rain is sufficient to accomplish the same goals.
5. A depth of 4" of wood chips shall be placed under the dripline of the existing trees to lessen the impacts of compaction during construction. This work shall be performed when the tree protection fencing is installed and after rough grading. Keep a zone 3' from the tree trunk clear of chips and debris. The project arborist shall review and approve these operations and recommend supplemental fertilizations and/or foliar insecticides/fungicidal spraying to reduce overall stress on all mature trees on site.
6. The contractor shall perform all clearing, demolition, removal and site preparation necessary for the proper execution of all work shown on these drawings and/or described in the specifications. Removal of any existing facilities shall include all subbase and base rock. In the case of plant material, the contractor shall completely remove the main trunk and significant roots to 18" depth below grade. The landscape architect shall review the site with the contractor prior to commencing clearing so as to instruct the contractor of additional plant material and existing conditions to be protected/preserved.
7. The contractor shall remove from the site all debris and unsuitable material generated by his operations.
8. The contractor shall verify all dimensions, distances and grades in the field and bring any discrepancies to the attention of the landscape architect for a decision prior to commencing with work. The contractor is responsible for all applicable permits and for performing all work per applicable codes.
9. The contractor shall verify location of all utilities on site before commencing with any work. Any disruption or damage to utilities caused by work under this contract shall be corrected by this contractor at no additional cost to owner.



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CLEAVED DESIGN ASSOCIATES

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Woodside Priory Track & Field Project
Portola Road
Portola Valley, CA 94028

• SHEET TITLE •

Site Preparation Plan

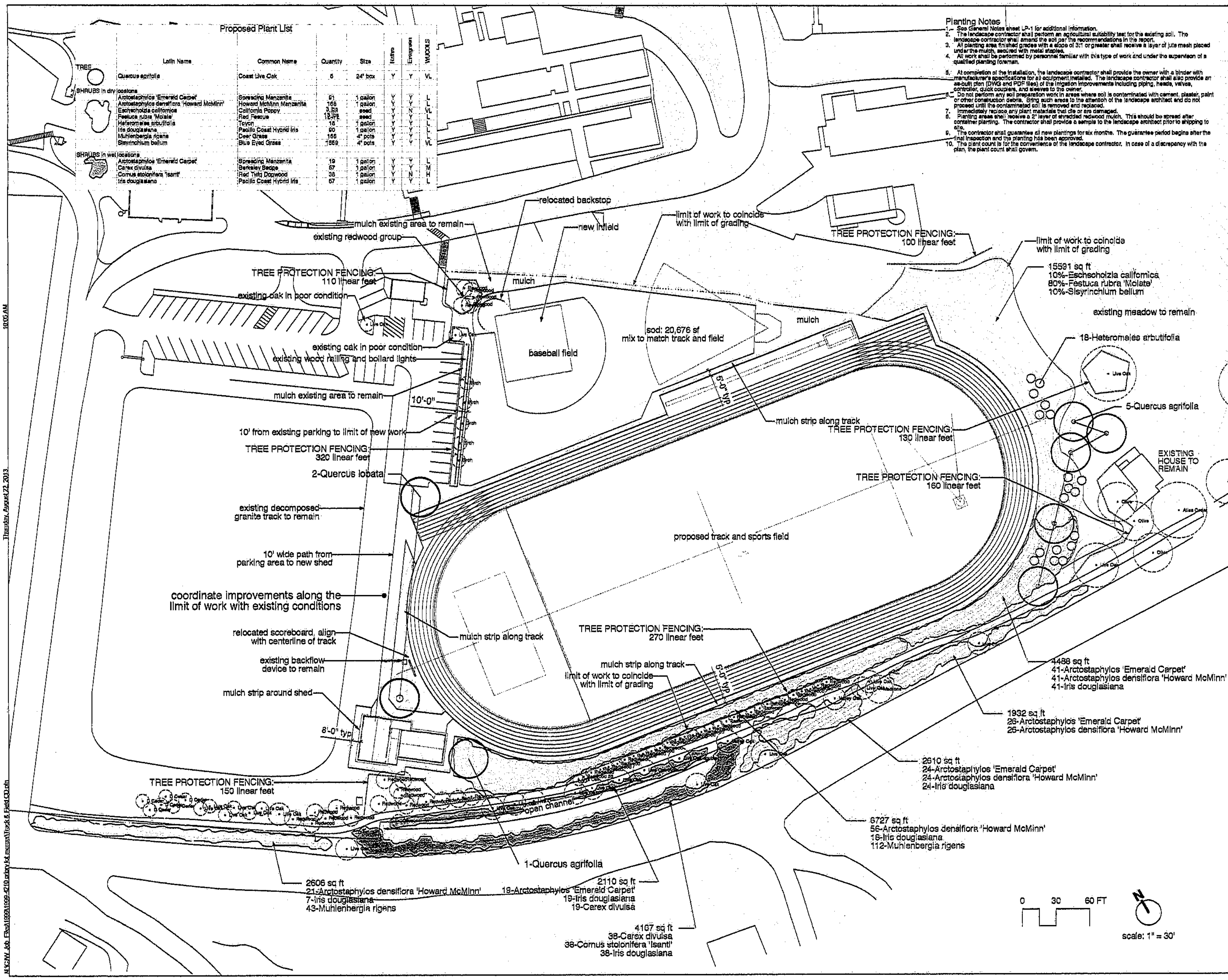
• REVISIONS •

No.	Date	Notes
		100% submittal

• JOB: 1999.4210

• DATE: 10/15/2013

• SHEET: LP-1



Proposed Plant List

	Latin Name	Common Name	Quantity	Size	Native	Evergreen	WUCOLS
TREE	Quercus agrifolia	Coast Live Oak	6	24" box	Y	Y	VL
SHRUBS in dry locations							
	Arctostaphylos 'Emerald Carpet'	Spreading Manzanita	91	1 gallon	Y	Y	L
	Arctostaphylos densiflora 'Howard McMinn'	Howard McMinn Manzanita	168	1 gallon	Y	Y	L
	Eschscholzia californica	California Poppy	3 lbs	seed	Y	N	VL
	Festuca rubra 'Molate'	Red Fescue	12 lbs	seed	Y	Y	L
	Heteromeles arbutifolia	Toyon	18	1 gallon	Y	Y	L
	Iris douglasiana	Pacific Coast Hybrid Iris	90	1 gallon	Y	Y	L
	Muhlenbergia rigens	Deer Grass	155	4" pots	Y	Y	L
	Sisyrinchium bellum	Blue Eyed Grass	1559	4" pots	Y	Y	VL
SHRUBS in wet locations							
	Arctostaphylos 'Emerald Carpet'	Spreading Manzanita	19	1 gallon	Y	Y	L
	Carex divulsa	Berkeley Sedge	57	1 gallon	Y	Y	M
	Cornus stolonifera 'Isanti'	Red Twig Dogwood	38	1 gallon	Y	N	H
	Iris douglasiana	Pacific Coast Hybrid Iris	57	1 gallon	Y	Y	L

Planting Notes

1. See General Notes sheet LP-1 for additional information.
2. The landscape contractor shall perform an agricultural suitability test for the existing soil. The landscape contractor shall amend the soil per the recommendations in the report.
3. All planting area finished grades with a slope of 3:1 or greater shall receive a layer of jute mesh placed under the mulch, secured with metal staples.
4. All work shall be performed by personnel familiar with this type of work and under the supervison of a qualified planting foreman.
5. At completion of the installation, the landscape contractor shall provide the owner with a binder with manufacturer's specifications for all equipment installed. The landscape contractor shall also provide an as-built plan (DWG and PDF files) of the irrigation improvements including piping, heads, valves, controller, quick couplers, and sleeves to the owner.
6. Do not perform any soil preparation work in areas where soil is contaminated with cement, plaster, paint or other construction debris. Bring such areas to the attention of the landscape architect and do not proceed until the contaminated soil is removed and replaced.
7. Immediately replace any plant materials that die or are damaged.
8. Planting areas shall receive a 2" layer of shredded redwood mulch. This should be spread after container planting. The contractor shall provide a sample to the landscape architect prior to shipping to site.
9. The contractor shall guarantee all new plantings for six months. The guarantee period begins after the final inspection and the planting has been approved.
10. The plant count is for the convenience of the landscape contractor. In case of a discrepancy with the plan, the plant count shall govern.

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Woodside Priory Track & Field Project
Portola Road
Portola Valley, CA 94028

• SHEET TITLE •

Landscape Plan

• REVISIONS •

No.	Date	Notes
		100% submittal

• JOB: 1999.4210

• DATE: 10/15/2013

• SHEET: LP-2

Irrigation Schedule

type	flow/gpm	coverage	PSI
MP1000		8' - 15' radius	40
quarter	0.2		
half	0.4		
full	0.8		

type	flow/gpm	coverage	PSI
MP3000		22' - 31' radius	40
quarter	0.9		
half	1.9		
full	3.7		

type	flow/gpm	coverage	PSI
I-20 Black		17' - 19' radius	50
quarter	0.5		
half	0.5		
full	0.5		

type	flow/gpm	coverage	PSI
I-20 Blue		29' - 32' radius	45
quarter	1.5		
half	1.5		
full	1.5		

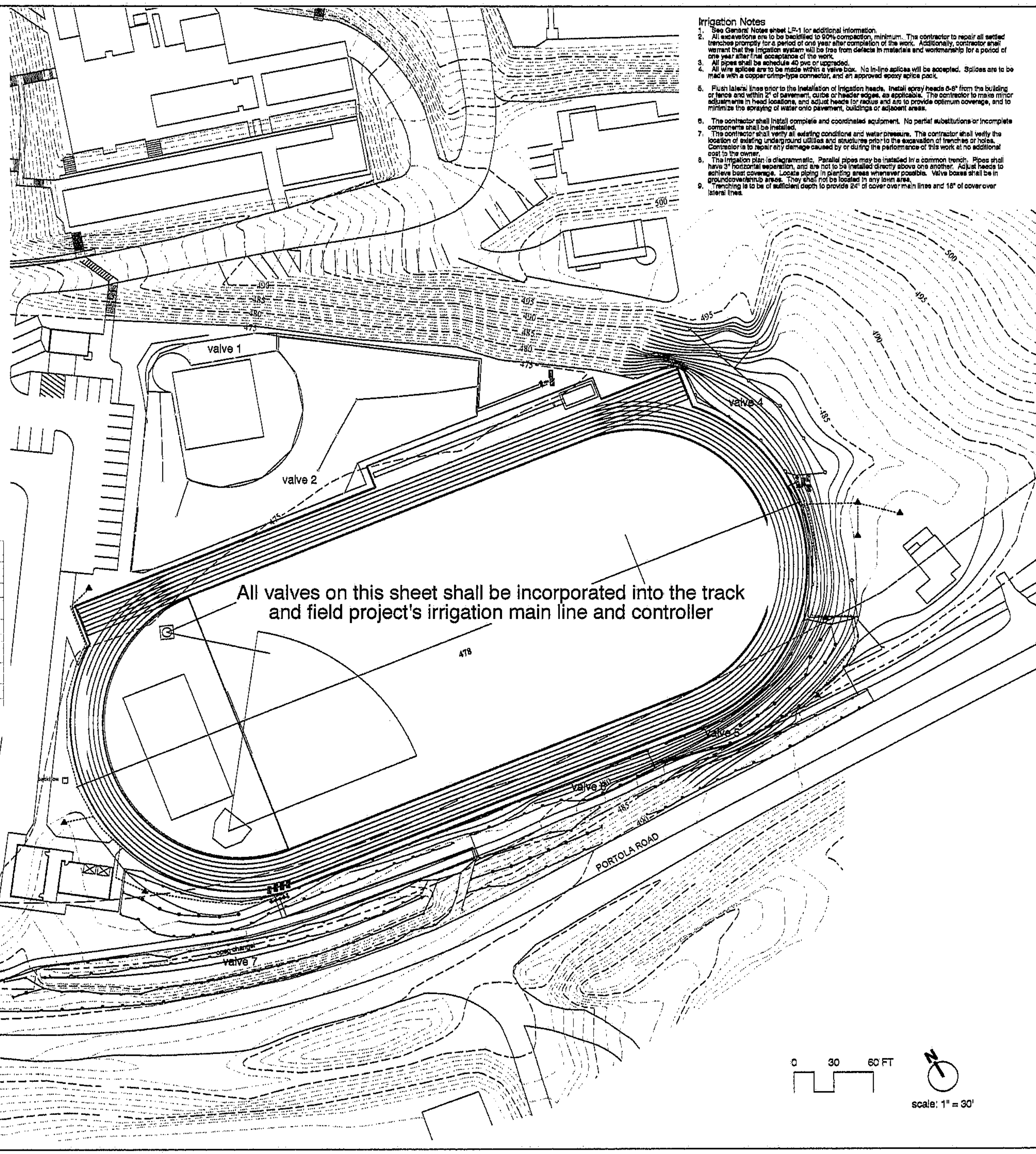
type	flow/gpm	coverage	PSI
PCB-50		bubbler	40
quarter			
half			
full	0.5		

valve #	heads	rate	extension	valve #	heads	rate	extension	valve #	heads	rate	extension
1 I-20 Black				4 MP3000				7 MP1000			
Q	4	0.5	2	Q	3	0.9	2.7	Q	7	0.2	1.4
H	15	0.5	7.5	H	11	1.9	20.9	H	83	0.4	33.2
F	3	0.5	1.5	F	8	3.7	29.6	F	1	0.8	0.8
total	22		11	total	22		53.2	total	91		35.4
2 I-20 Blue				5 MP1000				8 MP1000			
Q	7	1.5	10.5	Q	6	0.2	1.2	Q	3	0.2	0.6
H	20	1.5	30	H	47	0.4	18.8	H	34	0.4	13.6
F	6	1.5	9	F	9	0.8	7.2	F	0	0.8	0
total	33		49.5	total	62		27.2	total	37		14.2
3 PCB-50				6 MP1000				9 PCB-50			
Q	0	0	0	Q	6	0.2	1.2	Q	0	0	0
H	0	0	0	H	73	0.4	29.2	H	0	0	0
F	10	0.5	5	F	12	0.8	9.6	F	6	0.5	3
total	10		5	total	91		40	total	6		3

Irrigation Legend

symbol	description	remarks
	lateral line	sch 40 pvc, size varies, solvent weld by IPS glue and primer
	drip line	3/4" dia, sch 40 pvc, solvent weld by IPS glue and primer
	access sleeve	4" dia sch 40 pvc, 18" cover, extend 24" beyond paving and mark with stakes above grade
	remote control valve	Irritrol 100 series to match sports field valves *include Irritrol - OmniReg modular pressure regulator (valves 4,5,6,7,8) 5 total
	shut off valve	Gate valve, Nibco 113, class 125 line size install in valve box, to match sports field system
	drip head	Hunter PCB bubbler nozzles, .5 gpm (2 per tree) u.o.n. Install 3" above grade 36" from plant center, see plan for shrub bubbler quantities
full half quarter	spray head	Hunter MP1000
		Hunter MP3000
		Hunter I-20 Black, short radius rotor
		Hunter I-20 Blue, standard radius rotor

Coordinate location of valve boxes with sports field irrigation mainline - confirm location in field



Irrigation Notes

1. See General Notes sheet LP-1 for additional information.
2. All excavations are to be backfilled to 90% compaction, minimum. The contractor to repair all settled trenches promptly for a period of one year after completion of the work. Additionally, contractor shall warrant that the irrigation system will be free from defects in materials and workmanship for a period of one year after final acceptance of the work.
3. All pipes shall be schedule 40 pvc or upgraded.
4. All wire splices are to be made within a valve box. No in-line splices will be accepted. Splices are to be made with a copper crimp-type connector, and an approved epoxy splice pack.
5. Flush lateral lines prior to the installation of irrigation heads. Install spray heads 6-8" from the building or fence and within 2" of pavement, curbs or header edges, as applicable. The contractor to make minor adjustments in head locations, and adjust heads for radius and arc to provide optimum coverage, and to minimize the spraying of water onto pavement, buildings or adjacent areas.
6. The contractor shall install complete and coordinated equipment. No partial substitutions or incomplete components shall be installed.
7. The contractor shall verify all existing conditions and water pressure. The contractor shall verify the location of existing underground utilities and structures prior to the excavation of trenches or holes. Contractor is to repair any damage caused by or during the performance of this work at no additional cost to the owner.
8. The irrigation plan is diagrammatic. Parallel pipes may be installed in a common trench. Pipes shall have 3" horizontal separation, and are not to be installed directly above one another. Adjust heads to achieve best coverage. Locate piping in planting areas whenever possible. Valve boxes shall be in groundcover/shrub areas. They shall not be located in any lawn area.
9. Trenching is to be of sufficient depth to provide 24" of cover over main lines and 18" of cover over lateral lines.

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Woodside Priory Track & Field Project
Portola Road
Portola Valley, CA 94028

• SHEET TITLE •

Irrigation Plan

• REVISIONS •

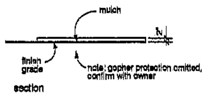
No.	Date	Notes
		100% submittal

• JOB: 1999.4210

• DATE: 10/15/2013

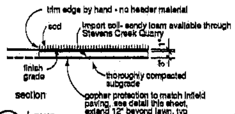
• SHEET: LP-3

notes:
1. Mulch shall be small fir bark available thru Lyngso Garden Materials, submit sample.



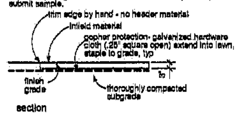
Mulch Paving
Scale: 1/2" = 1'-0"

notes:
1. Lawn shall be sod as selected by owner, submit sample.



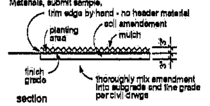
Lawn
Scale: 1/2" = 1'-0"

notes:
1. Infield paving material shall be as selected by owner, submit sample.



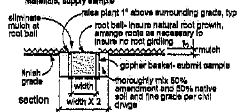
Infield Paving
Scale: 1/2" = 1'-0"

notes:
1. Amendment shall be CK mix by Clardelle's Garden Supply or equal, submit sample.
2. Mulch shall be mini mulch fir bark by Lyngso Garden Materials, submit sample.



Planting Area - option 1
Scale: 1/2" = 1'-0"

notes:
1. Amendment shall be CK mix by Clardelle's Garden Supply or equal, submit sample.
2. Mulch shall be mini mulch fir bark by Lyngso Garden Materials, supply sample



Planting Area - option 2
Scale: 1/2" = 1'-0"

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Landscape Details

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No.	Date	Notes
		100% submittal

• JOB: 1999.4210

• DATE: 10/15/2013

• SHEET: LP-4

DOOR AND FRAME SCHEDULE												
No.	Type	Size		Hdwr ...	Door Mat.	Frame Mat.	Detail			Fire Rtg.	Swing	Notes
		Width	Hgt				Head	Jamb	Thresh...			
101	A	6'	7'		Wood	Wood					L	
102	C	9'	7'		Wood	Wood					R	
103	A	6'	7'		Wood	Wood					R	
104	B	2'-8"	7'		Wood	Wood					L	
105	C	9'	7'		Wood	Wood					L	
106	C	9'	7'		Wood	Wood					R	

Door Type			
Type	A	B	C
Quantity	2	1	3

ALL GLAZING IN DOORS ARE TO BE TEMPERED GLASS

WINDOW SCHEDULE									
Type	Size		Material	Head	Jamb	Sill	Function	Head Ht	Notes
	Width	Hgt							
W1	5'	4'	Wood				Slider	7'	

WINDOW TYPES	
ID	W1
Function	Slider
Quantity	6
W x H Size	5'x4'

ALL WINDOW GLAZING IS TO BE TEMPERED GLASS

Notes

03.0 CONCRETE

3.05 EXTERIOR CONCRETE SLAB. SEE STRUCTURAL DETAILS; BROOM FINISH

05.0 METALS

5.02 METAL ATTIC LOUVER, 6'-0" WIDE. INSTALL BOTH ENDS OF THE GABLE TO PROVIDE CROSS VENTILATION; INSTALL INTERIOR THERMOSTATIC FAN TO EVACUATE HOT AIR AS NECESSARY

06.0 WOOD, PLASTICS, COMP

6.14 EXTENDED EAVES & PORCH CEILINGS TO BE ENCLOSED COMPLETLY WITH A FIRE RATED SOFFIT & VENTED WITH 1/8" SCREEN VENTING PER WUI 7A REQUIREMENTS

6.25 NEW 2X6 EXTERIOR WALL,EXTERIOR WALL COVERING OR WALL ASSEMBLY SHALL BE CONSTRUCTED OF EITHER NONCOMBUSTIBLE MATERIAL, IGNITION-RESISTANT MATERIAL, OR SHALL HAVE ONE LAYER OF 5/8" TYPE X GYPSUM SHEATHING APPLIED BEHIND THE EXTERIOR COVERING OR CLADDING ON THE EXTERIOR SIDE OF THE FRAMING. ALTERNATIVELY, WALL ASSEMBLIES THAT MEET THE PERFORMANCE CRITERIA AND ARE LISTED IN THE SFM STANDARD 12-7A-1 SECTION MAY BE USED PER CRC SEC. 327.7.3

6.29 THE EXPOSED UNDERSIDE OF EXTERIOR PORCH CEILINGS OR CANTILEVERED FLOOR PROJECTIONS SHALL BE PROTECTED WITH NONCOMBUSTIBLE OR IGNITION RESISTANT MATERIAL PER CRC SEC. R327.7.6 AND R327.7.7

07.0 THERMAL & MOISTURE PROTEC

7.01 NEW COMPOSITE SHINGLE ROOFING; CLASS A, BY ELK OR EQUAL. INSTALL OVER 2 LAYERS OF 15 LB ROOFING FELTS

7.07 HORIZONTAL WOOD SIDING, PAINTED

7.11 DOWN SPOUT LOCATION, RAINWATER TO LAND ON SPLASH BLOCK OR WALK, AND FLOW AWAY FROM BUILDING TO LANDSCAPE AREAS

7.15 EXTERIOR WALL BELOW

7.16 COLUMNS BELOW

7.18 PER CRC SEC. 327 REQUIREMENTS, ALL EXTERIOR GLAZING SHALL BE TEMPERED GLASS.

7.19 ASSUME SHINGLE OVERLAP PROPOSED IN VALLEYS OR IF METAL FLASHING WILL BE INCORPORATED IN VALLEYS, IT SHALL BE NOT LESS THAN 0.019 INCH (0.48 MM) (No 26 GALVANIZED SHEET GAGE) CORROSION-RESISTANT METAL INSTALLED OVER A MINIMUM 36 INCH WIDE UNDERLAYMENT CONSISTING OF ONE LAYER OF No. 72 ASTM CAP SHEET RUNNING THE FULL LENGTH OF THE VALLEY

08.0 OPENINGS

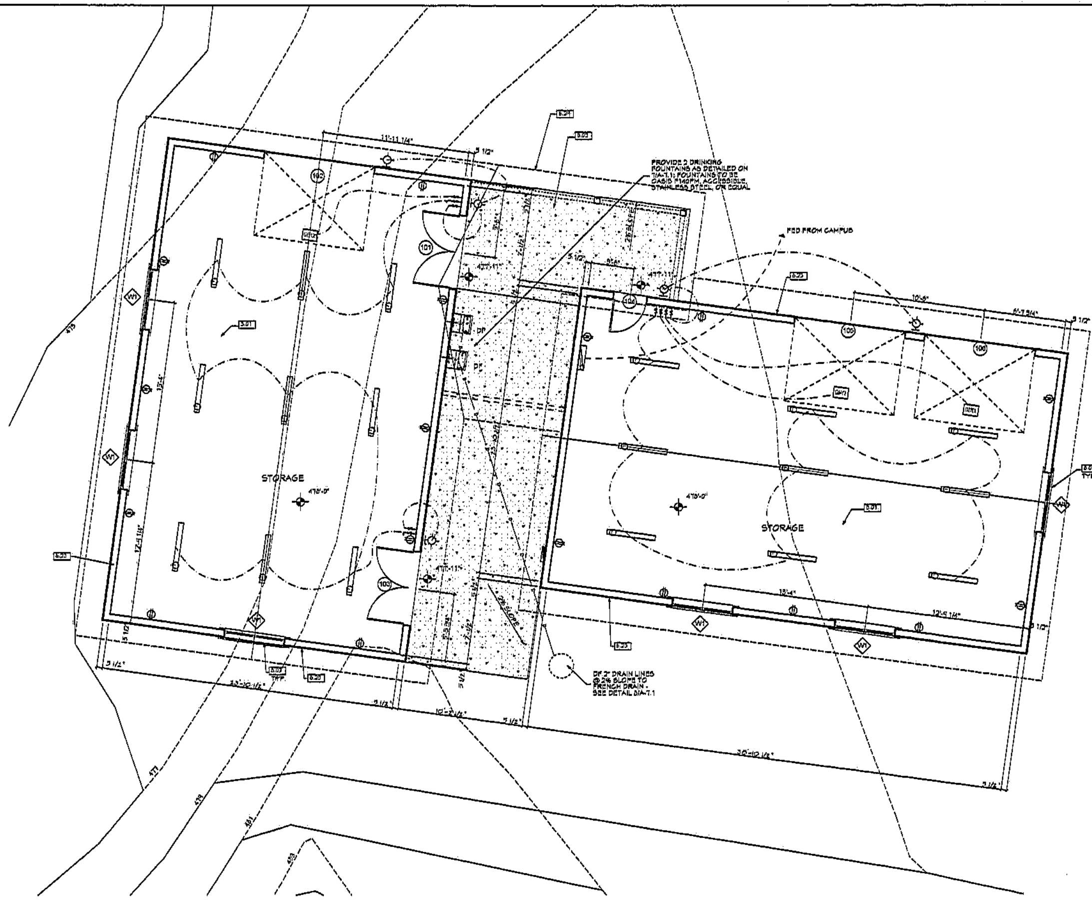
8.07 ALL EXTERIOR GLAZING SHALL BE TEMPERED GLASS

22.0 PLUMBING

22.03 ACCESSIBLE DRINKING FOUNTAIN, INSTALL PER DETAIL AND AS SPECIFIED HEREIN

ELECTRICAL NOTES

1.) ELECTRICAL & LIGHTING CIRCUITRY TO BE DESIGN-BUILD. THIS DRAWING PRESCRIBES DESIGN INTENT. ALL WORK MUST CONFORM TO TITLE 24 REQUIREMENTS.
2.) PROVIDE INSPECTION OFFICIALS WITH INSTALLATION INSTRUCTIONS UPON REQUEST.
3.) PROVIDE 4 PRONGED OUTLETS WITH INSULATED NEUTRAL AT DRYER AND OTHER LOCATIONS THAT MAY SERVE 240 V. PLUG-IN EQUIPMENT.
4.) PROVIDE ALL DOMESTIC WATER LINES WITH DEVICES TO ABSORB WATER HAMMER CAUSED BY QUICK CLOSING VALVES. INSTALL WATER HAMMERS AS CLOSE AS POSSIBLE TO VALVES, & PER SECT 609.10.
5.) ALL EXTERIOR OUTLETS ARE TO BE WEATHERPROOFED, GFI.
6.) ALL PIPING IN CONNECTION WITH A PLUMBING SYSTEM SHALL BE SO INSTALLED THAT PIPING OR CONNECTIONS WILL NOT BE SUBJECT TO UNDUE STRAINS OR STRESSES, AND PROVISIONS SHALL BE MADE FOR EXPANSION, CONTRACTION, AND STRUCTURAL SETTLEMENT. NO PIPING SHALL BE DIRECTLY EMBEDDED IN CONCRETE OR MASONRY. NO STRUCTURAL MEMBERS SHALL BE SERIOUSLY WEAKENED OR IMPAIRED BY CUTTING OR NOTCHING. PER UPC SECTION 313.2
7.) PLUMBING, MECHANICAL AND ELECTRICAL SYSTEMS ARE DESIGN-BUILD BY SUBCONTRACTOR. OBTAIN ALL NECESSRY PERMITS, COORDINATE DESIGN WITH OWNER REQUIREMENTS & ARCHITECTURAL INTENT. PROVIDE COMPLETE SYSTEMS, FULLY OPERATIONAL AS INTENDED AND OF VERY GOOD, DEPENDABLE QUALITY.
8.) GANG ALL SWITCHES WHERE THERE IS MORE THAN ONE SWITCH.



1 Main Floor Plan 1/4" = 1'-0"

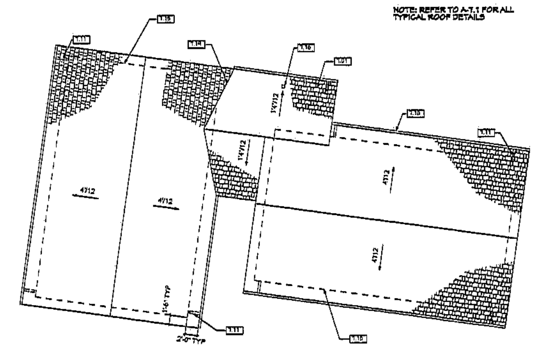
ELECTRICAL LEGEND

DUPLEX RECEPTACLE @ +15" U.O.N.
WALL MOUNTED LIGHT FIXTURE.
PENDANT MOUNTED FLUORESCENT LIGHT FIXTURE.
AUTOMATIC GARAGE DOOR OPENER
ELECTRICAL PANEL "A"
WATER SUPPLY

PANEL SCHEDULE

VOLTS: 120/240 THREE PHASE						PANEL A			FEED: EXTERIOR LB					
MAIN: 100 AMP MAIN BKR.						LOCATION: INTERIOR			MOUNTING: FLUSH					
LOAD	WATTS		BRK.		CIR	A	B	CIR	BRK.		WATTS		LOAD	
	A	B	AMP	P					P	AMP	B	A		
LIGHTS, FLUORESCENT	510		15	1	1			2	1	15		100	FAN	
LIGHTS, FLUORESCENT		510	15	1	3			4	1	15	100		FAN	
EXT. LIGHTS	100		15	1	5			6	3	40		400	IRRIGATION	
DUPLEX RECEPT.		720	15	1	7			8					SPACE	
DUPLEX RECEPT.	720		15	1	9									
OVRHD. DOOR		200	15	1	11									
OVRHD. DOOR	200		15	1	13									
SPACE					15									
PHASE WATTAGE	1590	1490			17						100	500	PHASE WATTAGE	
TOTAL WATTS A LEG: 2090					TOTAL WATTS A+B: 3680					TOTAL WATTS B LEG: 1590				
TOTAL WATTS: 3680	45 AMPS		120/240V		THREE PHASE					100 AMP BUS				
FEEDERS TO BE RUN UNDERGROUND TO EXISTING SERVICE ON CAMPUS														

NOTE: REFER TO A-7.1 FOR ALL TYPICAL ROOF DETAILS



2 Roof Plan 1/8" = 1'-0"

CJ W ARCHITECTURE

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LICENSED ARCHITECT · STATE OF CALIFORNIA

• PROJECT •

Woodside Priory Track & Field Project
Portola Road
Portola Valley, CA 94028

• SHEET TITLE •

Storage Shed Plans & Schedules

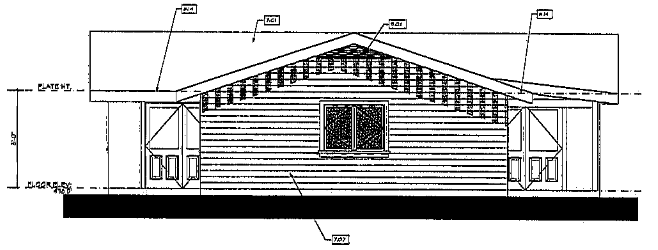
• REVISIONS •

No.	Date	Notes

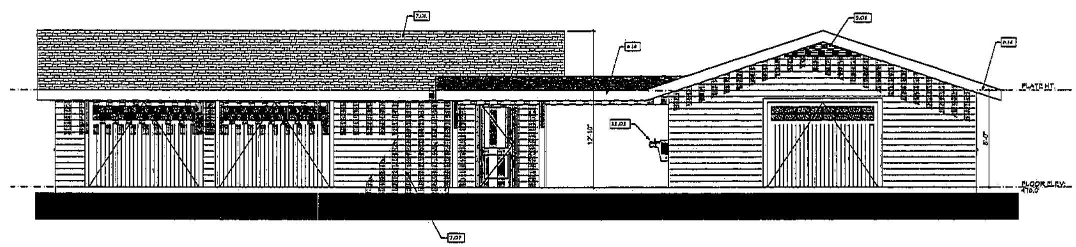
• JOB: 1999.4210

• DATE: 10/15/2013

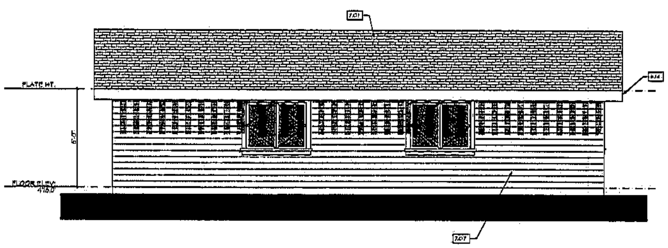
• SHEET: A-2.1



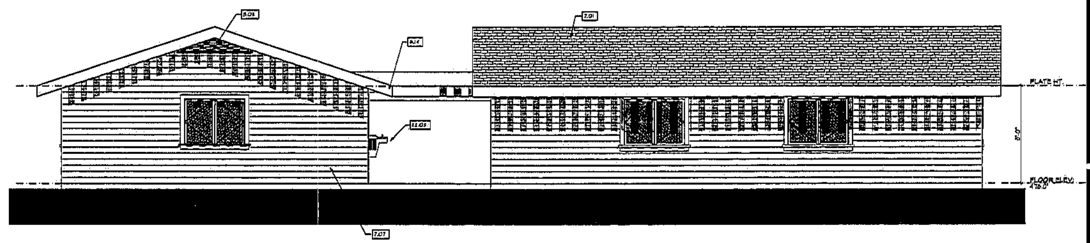
3 East Elevation 1/4" = 1'-0"



1 North Elevation 1/4" = 1'-0"



4 West Elevation 1/4" = 1'-0"



2 South Elevation 1/4" = 1'-0"

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• PROJECT •

Woodside Priory Track & Field Project
Portola Road
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• SHEET TITLE •

Storage Shed Elevations

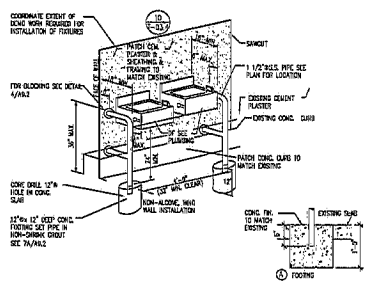
• REVISIONS •

No.	Date	Notes

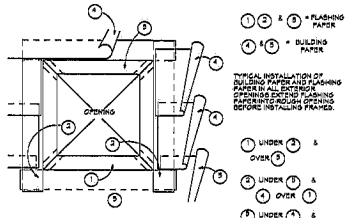
• JOB: 1999.4210

• DATE: 10/15/2013

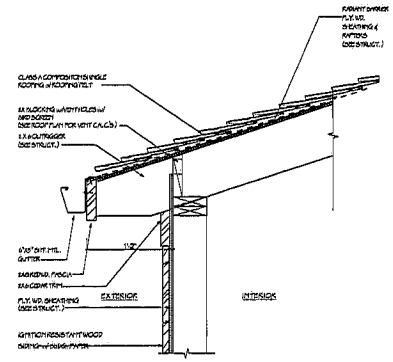
• SHEET: A-2.2



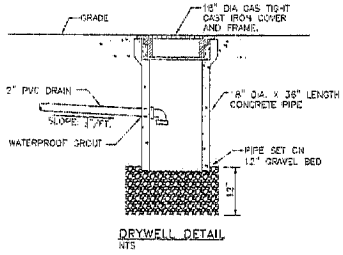
7 | DF detail 1" = 1'-0"



4 | Typ. Flashing Detail 1 1/2"= 1'-0"

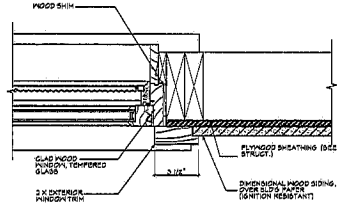


1 | Roof Eave Detail 1 1/2"= 1'-0"

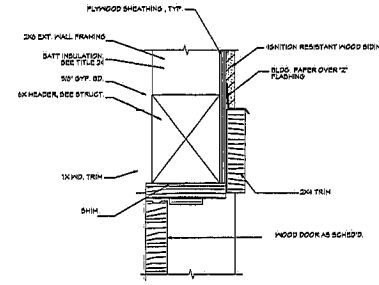


DRYWELL DETAIL
NTS

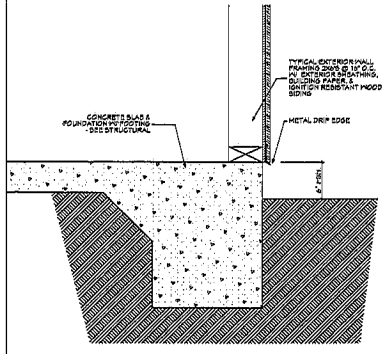
8 | Drywell Detail 1" = 1'-0"



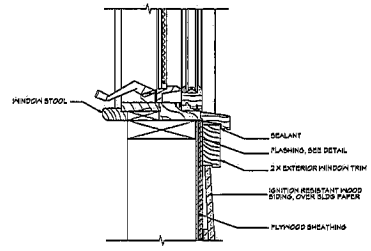
5 | Widow Jamb/Head Detail 3" = 1'-0"



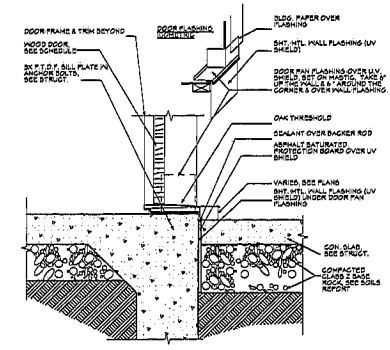
2 | Door Head Detail 3" = 1'-0"



9 | Wall Detail 1 1/2"= 1'-0"



6 | Window Sill 3" = 1'-0"



3 | Door Threshold Detail 1 1/2"= 1'-0"

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• PROJECT •

Woodside Priory Track & Field Project
Portola Road
Portola Valley, CA 94028

• SHEET TITLE •

Storage Shed Details

• REVISIONS •

No.	Date	Notes

• JOB: 1999.4210

• DATE: 10/15/2013

• SHEET: A-7.1

SHEAR WALL SCHEDULE

MARK	MATERIAL	EDGE NAIL (1)	FIELD NAIL	PLATE NAIL (2)	BLK'G NAIL (3)	ANCHOR BOLT* (4)	HOLDOWNS	REMARKS
A	1/2" STRUCT 1 CDX. PLY. OR OSB ONE SIDE	8d @ 6" O.C.	8d @ 12" O.C.	16d @ 6" O.C.	PLYWOOD OR A35 @ 16" O.C. AT RIM JOIST	5/8"ø x 12" @ 48" O.C.	HDU5	2x NOMINAL U.N.O.
B	1/2" STRUCT 1 CDX. PLY. OR OSB ONE SIDE	8d @ 4" O.C.	8d @ 12" O.C.	16d @ 4" O.C.	PLYWOOD OR A35 @ 8" O.C. AT RIM JOIST	5/8"ø x 12" @ 32" O.C.	HDU5	2x NOMINAL U.N.O.

* ADD ANCHOR BOLTS TO EXISTING CONCRETE SEE DETAIL 2/S1.1 (SEE DETAILS FOR IDENTIFICATION (#))

SHEAR WALL NOTES

1. ALL EDGES ARE BLOCKED.
2. REFER TO FOUNDATION AND FLOOR PLANS FOR HOLDOWN LOCATIONS.
3. REFER TO THIS SHEET FOR TYPICAL SHEARWALL DETAILS.
4. VERIFY ALL DIMENSIONAL AND EMBEDMENT REQUIREMENTS OF THE HOLD-DOWN WITH THE MANUFACTURER, "SIMPSON" OR EQUAL.
5. ALL EXTERIOR WALLS SHALL BE SHEATHED WITH 1/2" PLYWOOD WITH 8d AT 6" O.C. EDGES AND 12" O.C. THE FIELD UNLESS OTHERWISE NOTED IN THE SHEAR WALL SCHEDULE.
6. ANY WALL WITH 8d @ 3" o.c. OR TIGHTER NAILING SHALL HAVE 3x MEMBER WHERE A PLYWOOD EDGE ADJOINS.

DESIGN INFORMATION

4/12 ROOF LOAD
DL = 14 PSF
LL = 20 PSF

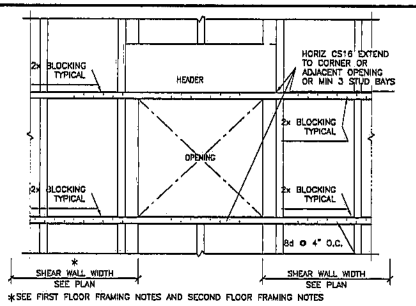
1.33/12 ROOF LOAD
DL = 13 PSF
LL = 20 PSF

FLOOR LOAD
DL = 13 PSF
LL = 40 PSF

SEISMIC DESIGN CATAGORY = E
I = 1.00 LESS THAN 250 OCCUPANTS
R = 6.5
Fa = 1 Fv = 1.5
Ss = 2.285 S1 = 1.280
Sms = 2.285 Sds = 1.523 Sd1 = 1.280
SITE CLASS = D
$V = \frac{SDS*W}{R/I}$ F = 0.234W
V = 0.167 W WORKING STRESS
WIND LOAD = 85 MPH, EXP B, λ=1 AND Iw=1

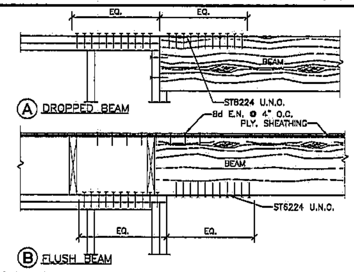
ANALYSIS PROCEDURE
SIMPLIFIED METHOD

SEISMIC FORCE RESISTING SYSTEM
WOOD SHEAR WALLS

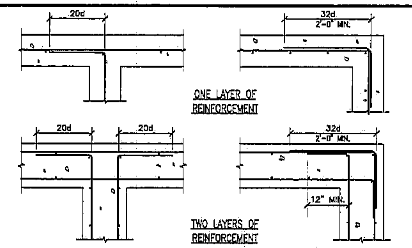


*SEE FIRST FLOOR FRAMING NOTES AND SECOND FLOOR FRAMING NOTES

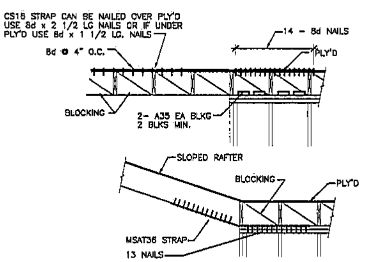
STRAP AT OPENINGS (9)
1"=1'-0"



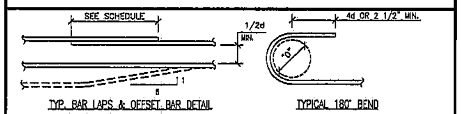
BEAM AT SHEAR WALL (5)
1"=1'-0"



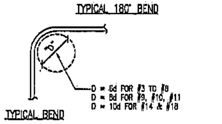
TYPICAL LAP SPLICES - CONC. (6)
N.T.S.



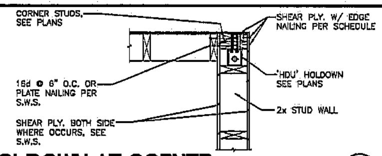
CS16 + MST36 STRAP (AT ROOF) (10)
1/2"=1'-0"



DEVELOP LENGTH & LAP SPLICES			
BAR SIZE	LAP CLASS	TOP BARS	OTHER BARS
#3	B	21"	16"
#4	B	30"	23"
#5	B	46"	36"
#6	B	65"	50"
#7	B	89"	69"
#8	B	117"	90"
#9	B	148"	114"
#10	B	188"	145"
#11	B	231"	178"



TYP. BAR LAPS AND OFFSETS (7)
1"=1'-0"



HOLDOWN AT CORNER (8)
1"=1'-0"

GENERAL NOTES

A. GENERAL

1. ALL WORK SHALL CONFORM TO CURRENT CALIFORNIA BUILDING CODES, FEDERAL, STATE AND LOCAL CODE REQUIREMENTS, LAWS AND ORDINANCES.

2. THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS AT THE JOB SITE AND SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND WHAT IS SHOWN ON THE DRAWINGS BEFORE PROCEEDING WITH THE WORK.

3. ANY OMISSIONS OR CONFLICTS BETWEEN THE ARCHITECTURAL, STRUCTURAL AND MECHANICAL DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BEFORE ANY RELATED WORK IS STARTED.

4. SHOP DRAWINGS REQUIRED BY THE SPECIFICATIONS SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO FABRICATION, AND ALLOW REASONABLE TIME FOR REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE BUILDING DURING THE CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ADEQUATE SHORING. BRACING AND GUYS IN ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL SAFETY ORDINANCES. ANY DEVIATIONS MUST BE APPROVED PRIOR TO ERECTION.

6. MECHANICAL EQUIPMENT MUST BE FIRMLY ATTACHED TO THE STRUCTURE. ALL MECHANICAL EQUIPMENT INTENDED TO BE SUPPORTED ON, OR FROM THE STRUCTURE, UNLESS INDICATED WITHIN STRUCTURAL DRAWINGS, SHALL BE SUBMITTED TO THE ARCHITECT FOR ENGINEER'S APPROVAL PRIOR TO INSTALLATION.

7. ALL CONDITIONS NOT CLEARLY SHOWN OR DETAILED SHALL BE OF THE SAME TYPE AND CHARACTER AS THOSE SHOWN FOR SIMILAR CONDITIONS.

B. FOUNDATION

1. FOUNDATION DESIGN IS BASED ON A REPORT BY ROMIG ENGINEERINGS, INC. WITH PROJECT No 3000-1, ISSUE DATE AUGUST 21, 2013 DESIGN CRITERIA CONVENTIONAL FOUNDATION SOIL BEARING CAPACITY 2500 PSF CONT. FTG STARTING 18" BELOW INTERIOR SLAB AND 24" BELOW EXTERIOR GRADE.

2. SLABS SHALL BE SUPPORTED ON UNIFORM SUBGRADE MATERIAL - MOISTURE CONDITIONED. PROVIDE 4" FREE DRAINING GRAVEL BENEATH SLABS.

3. FOUNDATION EXCAVATIONS SHALL BE EXAMINED AND CERTIFIED BY A GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF ANY REINFORCING STEEL OR CONCRETE.

C. CONCRETE

1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS

2. CONCRETE SHALL BE REGULAR WEIGHT HARD ROCK TYPE (150#/CF). AGGREGATE SHALL CONFORM TO ASTM C33, U.N.O..

3. CEMENT SHALL CONFORM TO ASTM C150, TYPE 1 OR 2.

4. PLACEMENT OF CONCRETE SHALL BE IN CONFORMANCE WITH ACI 318.

5. CONCRETE SHALL BE MACHINE MIXED AND DELIVERED IN ACCORDANCE WITH ASTM C-94. SUBMIT MIX DESIGN TO THE ARCHITECT FOR APPROVAL PRIOR TO PLACING CONCRETE.

6. PROVIDE MINIMUM CLEAR COVER OF CONCRETE OVER REINFORCING AS FOLLOWS:
A) AGAINST EARTH FORM - 3 INCHES
B) EXPOSED TO EARTH BUT POURED AGAINST FORM - 2 INCHES

D. REINFORCING STEEL

1. ALL REINFORCING STEEL SHALL CONFORM TO ASTM SPECIFICATION A615 GRADE 60 FOR # 5 AND LARGER BARS AND GRADE 40 FOR # 3 AND # 4.

2. ALL REINFORCING STEEL SHALL BE LAPPED AS NOTED BELOW. SEE 7/S1 UNLESS OTHERWISE NOTED IN PLANS. SPLICES SHALL BE LOCATED AS DETAILED IN THE PLANS. STAGGER ALL LAPS AND SPLICES.

3. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A82 AND A185.

4. ANCHOR BOLTS, DOWELS AND OTHER EMBEDDED ITEMS SHALL BE SECURELY TIED IN PLACE BEFORE CONCRETE IS PLACED, USE CUT THREAD ANCHOR BOLTS ONLY.

E. WOOD FRAME CONSTRUCTION

1. GENERAL WOOD FRAMING: WOOD FRAMING THROUGHOUT THE BUILDING SHALL BE CONSTRUCTED IN ACCORDANCE WITH CALIFORNIA BUILDING CODE (2010) AND THE STANDARD PRACTICES RECOMMENDED BY AMERICAN INSTITUTE OF TIMBER CONSTRUCTION AND WCLA GRADING. FOR NAILING SEE 2304.9.1. BOLTS IN WOOD FRAMING SHALL BE STANDARD MACHINE BOLTS WITH SQUARE 2x2x3/16 WASHERS.
EXCEPT SILL PLATES SHALL HAVE PLATE 1/4x3x3 WASHER.

2. JOIST HANGER AND MISCELLANEOUS CONNECTORS:
MEMBERS NOT RESTING ON, OR FRAMED OVER THEIR SUPPORT SHALL BE SUPPORTED BY MEANS OF "SIMPSON STRONG-TIE" JOIST HANGERS. HANGERS SHALL COMPLY WITH AND BE NAILED IN ACCORDANCE WITH MANUFACTURER'S ICC APPROVALS.

3. WOOD PLATES: BEARING DIRECTLY UPON CONCRETE SHALL BE PRESSURE TREATED D.F.

4. UNLESS OTHERWISE NOTES ON DRAWINGS OR IN SPECIFICATIONS FRAMING MEMBERS SHALL HAVE THE FOLLOWING GRADING:
A) ALL BEAMS, COLUMNS, POSTS AND CANTILEVER JOISTS AT BALCONIES: DOUGLAS FIR, GRADE MARK - NO. 1.
B) FRAMING: JOISTS, STUDS, PLATES, RAFTERS: DOUGLAS FIR, GRADE MARK - NO. 2.

5. PLYWOOD SHEATHING: SHALL BE DFPA CDX OR OSB OR EQUAL UNLESS OTHERWISE NOTED ON DRAWINGS; SOFTWOOD PLYWOOD USED STRUCTURALLY SHALL CONFORM TO PRODUCT STANDARDS PS 1-95 AND SHALL BEAR THE DFPA GRADE - TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION. ROOF SHEATHING SHALL BE 5/8 INCHES THICK (32/16), 5 PLY. FLOOR SHEATHING SHALL BE 3/4 INCHES THICK (48/24), TONGUE AND GROOVED AND SHALL BE GLUED AND NAILED. WALL SHEATHING SHALL BE A MIN. OF 1/2 INCHES THICK, U.N.O.

6. FRAMING CONTRACTOR SHALL PROTECT HIS WORK FROM ANY DAMAGES DUE TO WEATHER CONDITIONS AT TIME OF CONSTRUCTION.

F. NAIL SCHEDULE

1. WOOD MEMBERS SHALL BE CONNECTED WITH NAILING INDICATED IN TABLE 2306.3 (WALL), 2306.2.1(1) (ROOF) & 2304.9.1 FASTENING SCHEDULE UNLESS GREATER SIZES AND NUMBER OF NAILS ARE SHOWN OR NOTED ON DRAWINGS; NAILS EXPOSED TO WEATHER SHALL BE GALVANIZED; NAILS SHALL BE COMMON WIRE NAILS; HOLES FOR NAILS SHALL BE PROVIDED WHERE THE WOOD MEMBERS TEND TO SPLIT; WOOD MEMBERS SHALL BE REPLACED AND REMOVED FROM JOB PROMPTLY. SHORT PLYWOOD NAILS FOR EQUIVALENT SHEAR VALUE MAY BE USED. SEE PLANS FOR NAIL SPACING. ROOF SHEATHING 8d AT 6 INCHES O.C. AT SUPPORTED EDGES. 8d AT 12 INCHES O.C. INTERMEDIATE SUPPORTS. FLOOR SHEATHING 8d AT 6 INCHES O.C. AT BOUNDARIES AND PANEL EDGES AND 8d AT 10 INCHES O.C. AT INTERMEDIATE SUPPORTS. PLYWOOD WALL SHEATHING SHALL BE NAILED PER SHEAR WALL SCHEDULE AT SHEAR WALLS, AND AT A MINIMUM OF 8d AT 6 INCHES O.C. ALL OTHER EDGES.

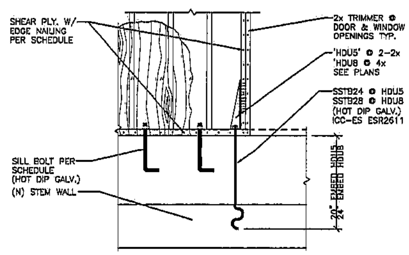
2. AT PRESSURE TREATED LUMBER USE HOT-DIPPED GALVANIZED, STAINLESS STEEL, SILICON BRONZE, OR COPPER. CBC 2304.9.5

ENGINEERS OBSERVATIONS

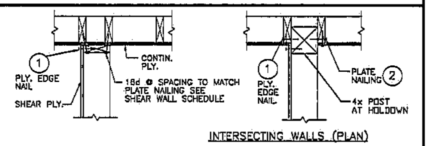
1. BCA STRUCTURAL ENGINEERING INC. SHALL PROVIDE PERIODIC FRAMING INSPECTIONS AND PROVIDE WRITTEN REPORTS TO THE BUILDING DEPARTMENT

SPECIAL INSPECTION

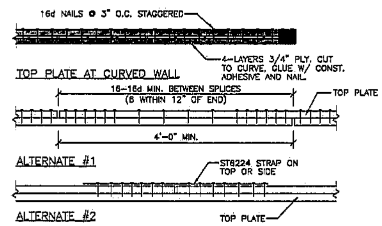
1. FIELD WELDING
2. EPOXY - SET ANCHOR BOLTS
3. MASONRY WHEN NOTED ON PLANS



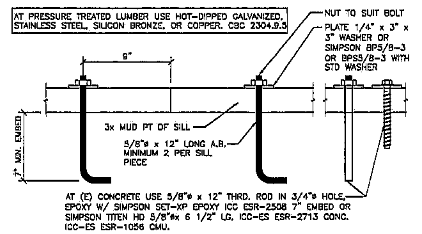
HOLDOWN AT FOUNDATION (3)
1"=1'-0"



SHEARWALL CORNER DETAIL (4)
1"=1'-0"



TOP PLATE SPLICE (1)
1"=1'-0"



SILL BOLT PLATE (2)
1"=1'-0"

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REGISTERED PROFESSIONAL ENGINEER GEOFFREY S. CLIFFORD S3682 Exp: 3/31/2015 STRUCTURAL STATE OF CALIFORNIA

BCA JOB No. 13384 10/25/201

• PROJECT •

WOODSIDE PRIORY TRACK & FEILD PROJECT
PORTOLA ROAD
PORTOLA VALLEY, CA 9402

• TITLE •

STANDARD DETAILS

SCALE: NOTED

• REVISIONS •

No.	Date	Notes

• JOB: -

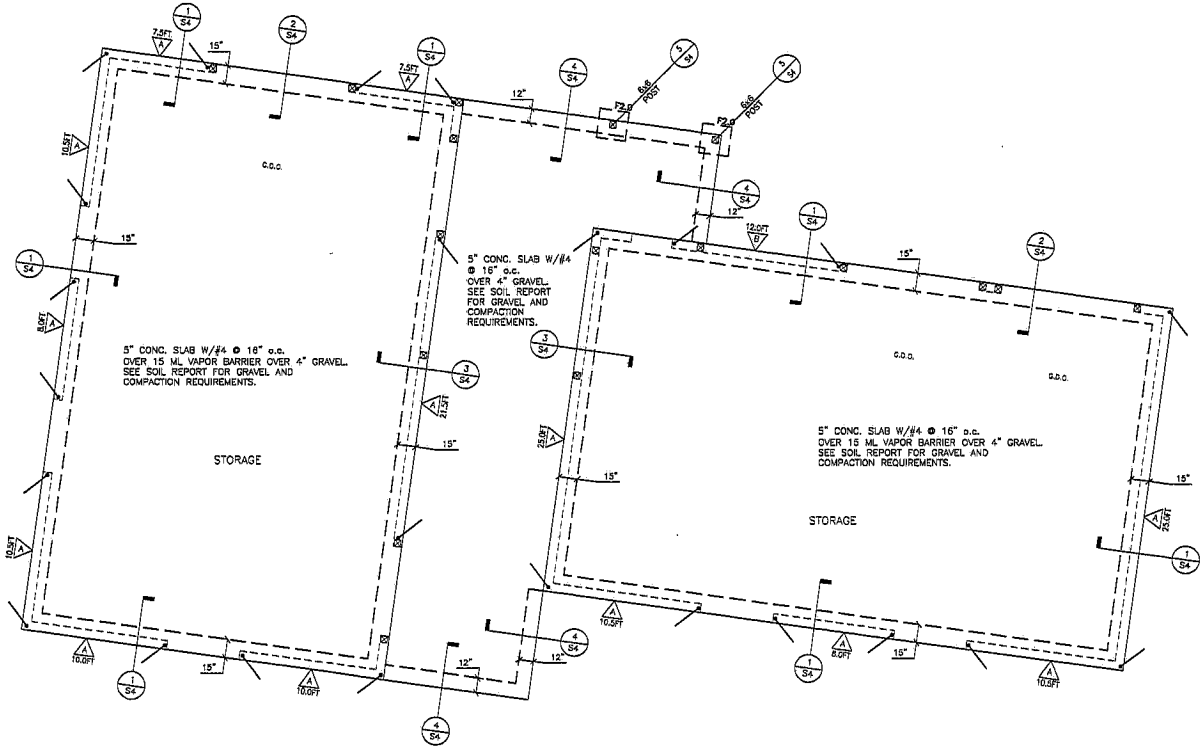
• DATE: 10/8/2013

• DWG#: S1

FOUNDATION NOTES

1. FOOTINGS SHALL BE SEATED AT 24" BELOW EXTERIOR GRADE OR 18" BELOW INTERIOR SLAB-ON-GRADE WHICHEVER IS DEEPER SOILS ENG. TO DETERMINED FINAL DEPTH OF FOOTING AT TIME OF EXCAVATION.
2. SOILS ENGINEER SHALL TEST AND APPROVE THE COMPACTION OF THE SUBGRADE BENEATH SLAB ON GRADE AND SHALL ALSO APPROVE THE GRAVEL TYPE USED.
3. ALL HOLDOWNS ANCHORS SHALL BE TIED IN PLACE PRIOR TO CALLING FOR A FOUNDATION INSPECTION.
4. PRIOR TO CONTRACTOR REQUESTING A BUILDING DEPARTMENT FOUNDATION INSPECTION, THE SOILS ENGINEER SHALL ADVISE THE BUILDING OFFICIAL IN WRITING THAT:
   A. THE BUILDING PAD WAS PREPARED AND COMPACTED IN ACCORDANCE WITH THE SOILS REPORT AND SPECIFICATIONS
   B. THE UTILITY TRENCHES HAVE BEEN PROPERLY BACKFILLED AND COMPACTED.
   C. THE FOUNDATION AND PIER EXCAVATION, DEPTH AND MATERIAL COMPLY WITH THE SOILS REPORT AND APPROVED PLANS.

PAD FOOTING SCHEDULE	
TYPE	SIZE
F2	2'-0" SQ. x 18" THICK W/ 2-#4 BARS EA WAY TOP & BOTTOM



A FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

SHEAR WALL LEGEND

△ INDICATES PLYD. SHEAR WALL SEE SHEAR WALL SCHEDULE AT SHT S1

3/S1 INDICATES HDU5 HOLDOWN LOCATION USE DOUBLE 2x TYP.

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REGISTERED PROFESSIONAL ENGINEER GEOFFREY S. BUTLAND S3682 Exp : 3/31/2015 STATE OF CALIFORNIA

BCA JOB No. 13384 10/25/201

• PROJECT •

WOODSIDE PRIORY TRACK & FEILD PROJECT
PORTOLA ROAD
PORTOLA VALLEY, CA 94028

• TITLE •

FOUNDATION PLAN

SCALE : 1/4"=1'-0"

• REVISIONS •

No.	Date	Notes

• JOB: -

• DATE: 10/8/2013

• DWG #: S2

NOTE TO TRUSS MANUFACTURER:

IF TRUSS LAYOUT VARIES FROM ON SHOWN ON THIS SHEET YOU MUST CONSULT "BCA" BEFORE PROCEEDING. OTHERWISE TRUSS LAYOUT WILL BE REJECTED REGARDLESS WHEN REVIEWED.

TRUSS FORMS CEILING. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TREATMENTS TO BE INCORPORATED INTO TRUSS PROFILE.

ROOF FRAMING NOTES

1. ROOF SHEATHING: 1/2" CDX PLYWOOD – W/RADIENT BARRIER
   NAILING: BOUNDARY = 8d @ 6" O.C.
   FIELD = 8d @ 12" O.C.
   PANEL INDEX: 24/0
2. ALL HEADERS SHALL BE 4x12 UNLESS OTHERWISE NOTED.
3. USE ST6236 STRAP AT ALL BEAMS TO TOP PLATE CONNECTION WHERE THE TOP PLATE IS DISCONTINUOUS.
4. ALL BEAMS RESTING ON THE TOP PLATE SHALL BE ATTACHED TO THE TOP PLATE WITH 1-A35 CLIP EA. SIDE.
5. TRUSSES SHALL BE SPACED @ 24" O.C. TRUSS CALCULATIONS, FRAMING PLANS, AND SHOP DRAWINGS SHALL BE PREPARED BY THE MANUFACTURER AND SUBMITTED TO THE ENGINEER AND THE BUILDING DEPARTMENT FOR REVIEW BEFORE FABRICATION.
6. EDGE NAIL PLYWOOD TO GIRDER & TIE TRUSSES.

PREMANUFACTURED TRUSS LOADS

TOP CHORD	
DL	10 PSF
LL	20 PSF
BOTTOM CHORD	
DL	5 PSF
*LL	10 PSF
DL(@ATTIC STORAGE)	10 PSF
*LL(@ATTIC STORAGE)	20 PSF
LATERAL LOAD AT TIE TRUSSES	
SL	4000 LBS

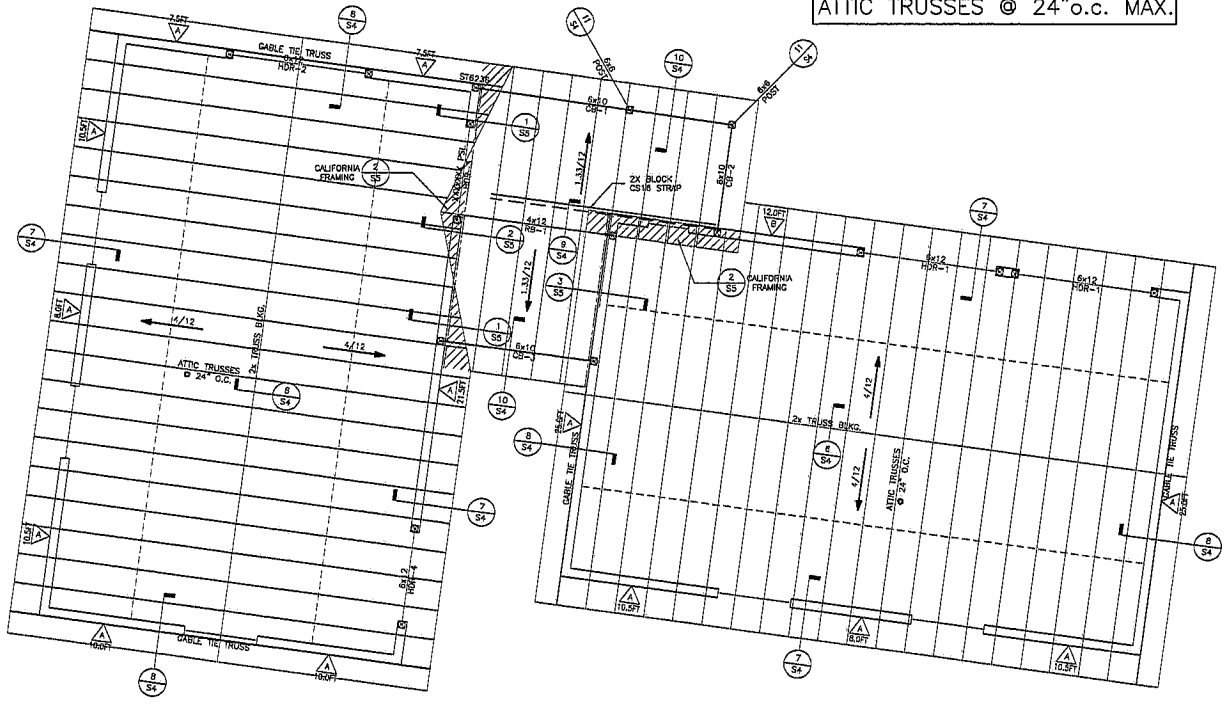
* NOT CONCURRENT W/ TOP CHORD LIVE LOAD

ROOF RAFTERS:
2x6 @ 24" O.C U.N.O.

ROOF FRAMING NOTES

1. ROOF SHEATHING: 1/2" CDX PLYWOOD – W/RADIENT BARRIER
   NAILING: BOUNDARY = 8d @ 6" O.C.
   FIELD = 8d @ 12" O.C.
   PANEL INDEX: 24/0
2. ALL HEADERS SHALL BE 4x12 UNLESS OTHERWISE NOTED.
3. USE ST6236 STRAP AT ALL BEAM TO TOP PLATE CONNECTION WHERE THE TOP PLATE IS DISCONTINUOUS.
4. USE A35 CLIPS ON RAFTER TO RIDGE CONNECTIONS FOR SPANS LESS THAN 10' FEET.
5. USE LS50 CLIPS ON RAFTER TO HIP CONNECTIONS FOR SPANS LESS THAN 10' FEET.
6. USE LSU TYPE HANGERS ON RAFTER TO RIDGE CONNECTIONS FOR SPANS GREATER THAN 10' FEET.
7. USE LS70 TYPE HANGERS ON RAFTER HIP CONNECTIONS FOR SPANS GREATER THAN 10' FEET.
8. ALL POSTS SUPPORTED BY BEAMS SHALL HAVE A "BC" TYPE BASE/CAP, AND ALL POSTS SUPPORTED BY GLU-LAM BEAMS SHALL HAVE AN INVERTED "CC" TYPE BASE/CAP.
9. ALL BEAMS RESTING ON THE TOP PLATE SHALL BE ATTACHED TO THE TOP PLATE WITH ONE A35 FRAMING CLIP EACH SIDE.
10. E.N. PLYWOOD TO BEAMS, TIE BEAMS, & TIE RAFTERS
11. ALL PSL & GLU-LAM BEAMS SHALL BE ATTACHED TO THE SUPPORTING POSTS W/ A "CC" STYLE POST CAP

ROOF FRAMING: ENGINEERED
ATTIC TRUSSES @ 24"o.c. MAX.



A ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0"

CALIFORNIA FRAMING

CALIFORNIA FRAMING RAFTER SPAN

RAFTER SIZE	SPAN AT 12" O.C.	SPAN AT 16" O.C.	SPAN AT 24" O.C.
2x4	9'-0"	8'-0"	6'-6"
2x6	14'-2"	12'-4"	10'-0"
2x8	18'-1"	15'-8"	12'-10"
2x10	22'-0"	19'-0"	15'-6"
2x12	25'-6"	22'-0"	18'-0"

FOR CALIFORNIA FRAMING AS REQUIRED BY TRUSS MANUFACTURER SEE DETAIL 2/S5

SHEAR WALL LEGEND

△ INDICATES PLYD. SHEAR WALL SEE SHEAR WALL SCHEDULE AT SHT S1

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REGISTERED PROFESSIONAL ENGINEER GEOFFREY S. CLIFFORD S3662 Exp: 3/31/2015 STRUCTURAL STATE OF CALIFORNIA

BCA JOB No. 13384 10/25/201

• PROJECT •

WOODSIDE PRIORY TRACK & FEILD PROJECT
PORTOLA ROAD
PORTOLA VALLEY, CA 9402

• TITLE •

ROOF FRAMING PLAN

SCALE: 1/4"=1'-0"

• REVISIONS •

No.	Date	Notes

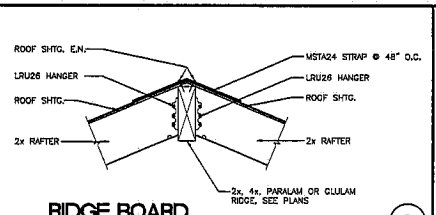
• JOB: -

• DATE: 10/8/2013

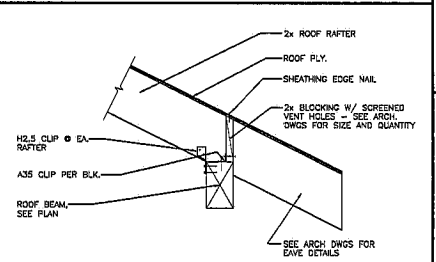
• DWG #: S3

TABLE 2304.9.1

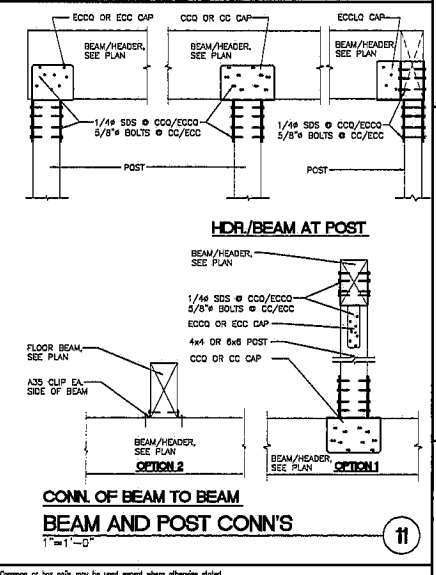
CONNECTION	FASTENING	LOCATION
1. JOIST TO SILL OR GIRDER	3-8d COMMON (2 1/2"x0.131") 3"x0.131" NAILS 3-3" 14 GA STAPLES	TOE NAIL
2. BRIDGING TO JOIST	2-8d COMMON (2 1/2"x0.131") 2-3"x0.131" NAILS 2-3" 14 GA STAPLES	TOE NAIL EACH END
3. 1"x6" SUBFLOOR OR LESS TO EACH JOIST	2-8d COMMON (2 1/2"x0.131")	FACE NAIL
4. WIDER THAN 1"x6" SUBFLOOR TO EACH JOIST	3-8d COMMON (2 1/2"x0.131")	FACE NAIL
5. 2" SUBFLOOR TO JOIST OR GIRDER	2-16d COMMON (3 1/2"x0.162")	BLIND AND FACE NAIL
6. SOLE PLATE TO JOIST OR BLOCKING	16d COMMON (3 1/2"x0.131") AT 16" O.C. 3"x0.131" NAILS AT 8" O.C. 3" 14 GA STAPLES AT 12" O.C.	TYPICAL FACE NAIL
SOLE PLATE TO JOIST OR BLOCKING AT BRACED WALL PANEL	3-16d COMMON (3 1/2"x0.131") AT 16" O.C. 4-3"x0.131" NAILS AT 8" O.C. 4-3" 14 GA STAPLES AT 12" O.C.	BRACED WALL PANELS
7. TOP PLATE TO STUD	2-16d COMMON (3 1/2"x0.162") 3-3"x0.131" NAILS 3-3" 14 GA STAPLES	END NAIL
8. STUD TO SOLE PLATE	4-8d COMMON (2 1/2"x0.131") AT 16" O.C. 4-3"x0.131" NAILS 4-3" 14 GA STAPLES	TOE NAIL
	2-16d COMMON (3 1/2"x0.162") 3-3"x0.131" NAILS 3-3" 14 GA STAPLES	END NAIL
9. DOUBLE STUDS	16d COMMON (3 1/2"x0.135") @ 24" O.C. 3"x0.131" NAILS @ 8" O.C. 3" 14 GA STAPLES @ 8" O.C.	FACE NAIL
10. DOUBLE TOP PLATES	16d COMMON (3 1/2"x0.135") AT 16" O.C. 3"x0.131" NAILS AT 12" O.C. 3" 14 GA STAPLES AT 12" O.C.	TYPICAL FACE NAIL
DOUBLE TOP PLATES	8-16d COMMON (3 1/2"x0.162") 12-3"x0.131" NAILS 12-3" 14 GA STAPLES	LAP SPLICE
11. BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATES	3-8d COMMON (2 1/2"x0.131") 3-3" NAILS 3-3" 14 GA STAPLES	TOE NAIL
12. RIM JOIST TO TOP PLATE	8d COMMON (2 1/2"x0.131") AT 6" O.C. 3"x0.131" NAILS AT 6" O.C. 3" 14 GA STAPLES AT 6" O.C.	TOE NAIL
13. TOP PLATE, LAPS AND INTERSECTIONS	2-16d COMMON (3 1/2"x0.162") 3-3"x0.131" NAILS 3-3" 14 GA STAPLES	FACE NAIL
14. CONTINUOUS HEADER, TWO PIECES	16d COMMON (2 1/2"x0.162")	TOE NAIL
15. CEILING JOISTS TO PLATE	3-8d COMMON (2 1/2"x0.131") 5-3"x0.131" NAILS 5-3" 14 GA STAPLES	TOE NAIL
16. CONTINUOUS HEADER TO STUD	4-8d COMMON (2 1/2"x0.131")	TOE NAIL
17. CEILING JOISTS, LAPS OVER PARTITIONS. (SEE SECTION 2308.10.4.1, TABLE 2308.10.4.1.	3-16d COMMON (3 1/2"x0.162") MINIMUM TABLE 2308.10.4.1 4-3"x0.131" NAILS 4-3" 14 GA STAPLES	FACE NAIL
18. CEILING JOISTS TO PARALLEL RAFTERS. (SEE SECTION 2308.10.4.1, TABLE 2308.10.4.1.	3-16d COMMON (3 1/2"x0.162") MINIMUM TABLE 2308.10.4.1 4-3"x0.131" NAILS 4-3" 14 GA STAPLES	FACE NAIL
19. RAFTER TO PLATE (SEE SECTION 2308.10.1, TABLE 2308.10.1)	3-8d COMMON (2 1/2"x0.131") 3-3"x0.131" NAILS 3-3" 14 GA STAPLES	TOE NAIL
20. 1" DIAGONAL BRACE TO EACH STUD PLATE	2-8d COMMON (2 1/2"x0.131") 2-3"x0.131" NAILS 3-3" 14 GA STAPLES	FACE NAIL
21. 1"x6" SHEATHING TO EACH BEARING	3-8d COMMON (2 1/2"x0.131")	FACE NAIL
22. WIDER THAN 1"x8" SHEATHING TO EACH BEARING	3-8d COMMON (2 1/2"x0.131")	FACE NAIL
23. BUILT-UP CORNER STUDS	16d COMMON (3 1/2"x0.162") 3"x0.131" NAILS 3" 14 GA STAPLES	24" O.C. 16" O.C. 16" O.C.
24. BUILT-UP GIRDER AND BEAMS	20d COMMON (4"x0.192") AT 32" O.C. 3"x0.131" NAILS AT 24" O.C. 3" 14 GA STAPLES AT 24" O.C.	FACE NAIL AT TOP & BOTT. STAGGERED ON OPPOSITE SIDES
	2-20d COMMON (4"x0.192") 3-3"x0.131" NAILS 3-3" 14 GA STAPLES	FACE NAIL AT ENDS AND AT EACH SPLICE
25. 2" PLANKS	16d COMMON (3 1/2"x0.162")	AT EACH BEARING
25. COLLAR TIE TO RAFTER	3-10d COMMON (3"x0.148") 4-3"x0.131" NAILS 4-3" 14 GA STAPLES	FACE NAIL
27. JACK RAFTER TO HIP	4-10d COMMON (2 1/2"x0.148") 4-3"x0.131" NAILS 4-3" 14 GA STAPLES	TOE NAIL
	2-16d COMMON (3 1/2"x0.162") 3-3"x0.131" NAILS 3-3" 14 GA STAPLES	FACE NAIL
28. ROOF RAFTER TO 2-BY RIDGE BEAM	2-16d COMMON (3 1/2"x0.162") 3-3"x0.131" NAILS 3-3" 14 GA STAPLES	TOE NAIL
	2-16d COMMON (3 1/2"x0.162") 3-3"x0.131" NAILS 3-3" 14 GA STAPLES	FACE NAIL
28. JOIST TO BAND JOIST	3-16d COMMON (3 1/2"x0.162") 4-3"x0.131" NAILS 43" 14 GA STAPLES	FACE NAIL



RIDGE BOARD 9
1"=1'-0"

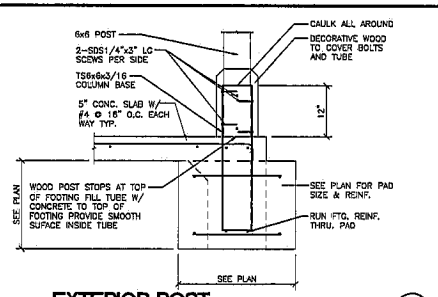


EAVE AT BALCONY 10
1"=1'-0"

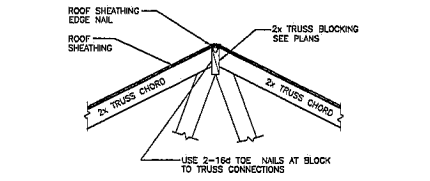


CONN. OF BEAM TO BEAM
BEAM AND POST CONN'S 11
1"=1'-0"

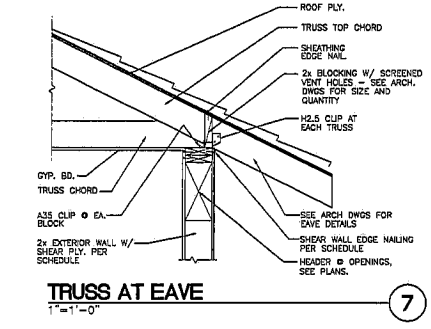
1 Common or box nails may be used except where otherwise stated.
2 Nails spaced at 6 inches on center at edges, 12" at intermediate supports except 6 inches at all supports where spans are 48 inches or more. For nailing of wood structural panel and particleboard diaphragms and shear walls, refer to section 2314A.3 (California Building Code). Nails for wall sheathing may be continuous, box or casing.
3 Common or deformed shank.
4 Common.
5 Deformed shank.
6 Corrosion-resistant siding or casing nails conforming to the requirements of section 2325A.1 (California Building Code).
7 Fasteners spaced 3 inches on center at exterior edges and 6 inches on center at intermediate supports.
8 Corrosion-resistant roofing nails with 7/16-inch-diameter head and 1 1/2 inch length for 1/2-inch sheathing and 1 1/2-inch length for 25/32-inch sheathing conforming to the requirements of section 2325A.1 (California Building Code).
9 Corrosion-resistant staples with nominal 7/16-inch-diameter head and 1 1/2-inch length for 1/2-inch sheathing and 1 1/2 inch length for 25/32-inch sheathing conforming to the requirements of section 2325A.1 (California Building Code).
10 Panel supports at 16 inches [20 inches if strength axis in the long direction of panel, unless otherwise marked]. Casing or finish nails spaced 6 inches on panel edges, 12 inches at intermediate supports.
11 Panel supports at 24 inches. Casing or finish nails spaced 6 inches on panel edges, 12 inches at intermediate supports.



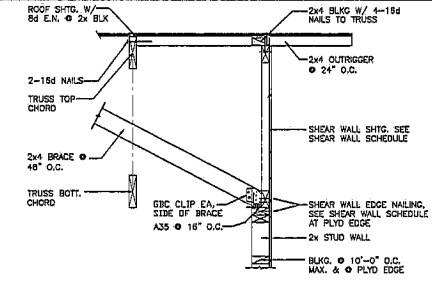
EXTERIOR POST 5
1"=1'-0"



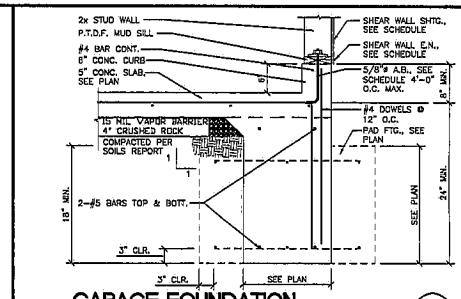
TRUSS BLOCKING 6
1"=1'-0"



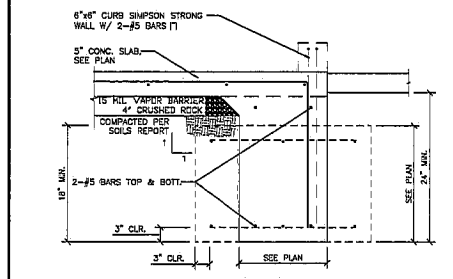
TRUSS AT EAVE 7
1"=1'-0"



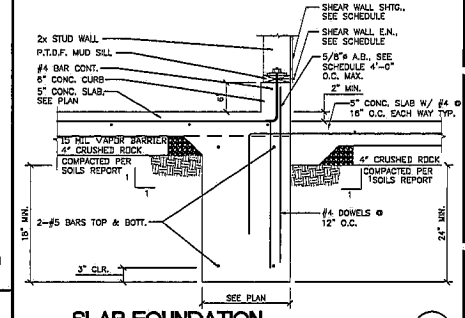
TRUSS RAKE DETAIL 8
1"=1'-0"



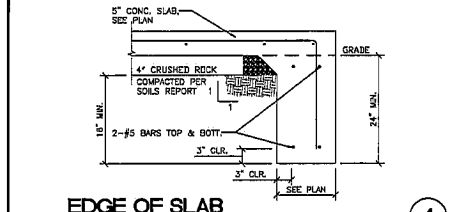
GARAGE FOUNDATION 1
1"=1'-0"



FOOTING AT DRIVEWAY 2
1"=1'-0"



SLAB FOUNDATION 3
1"=1'-0"



EDGE OF SLAB 4
1"=1'-0"

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REGISTERED PROFESSIONAL ENGINEER GREGORY S. CUPPLES S3682 Exp: 3/31/2015 STRUCTURAL STATE OF CALIFORNIA

BCA JOB No. 13384 10/25/201

• PROJECT •

WOODSIDE PRIORY TRACK & FEILD PROJECT
PORTOLA ROAD
PORTOLA VALLEY, CA 9402

• TITLE •

STANDARD DETAILS

SCALE: NOTED

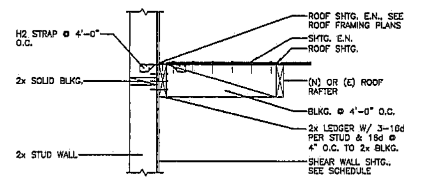
• REVISIONS •

No.	Date	Notes

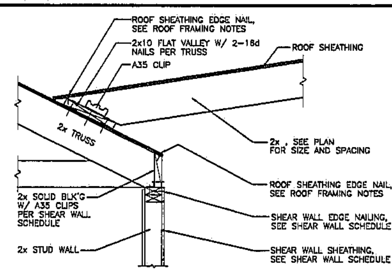
• JOB: -

• DATE: 10/8/2013

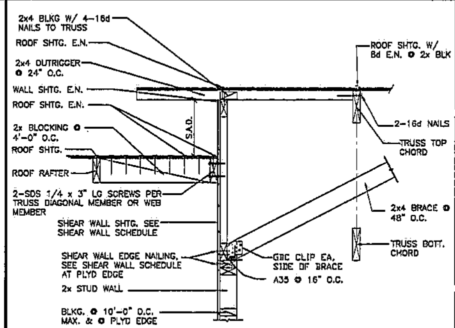
• DWG #: S4



ROOF LEDGER
1"=1'-0" (1)



CALIFORNIA FRAMING
1"=1'-0" (2)



ROOF LEDGER
1"=1'-0" (3)

DETAIL
1"=1'-0" (4)

DETAIL
1"=1'-0" (5)

DETAIL
1"=1'-0" (6)

DETAIL
1"=1'-0" (7)

DETAIL
1"=1'-0" (8)

DETAIL
1"=1'-0" (9)

DETAIL
1"=1'-0" (10)

DETAIL
1"=1'-0" (11)

DETAIL
1"=1'-0" (12)

DETAIL
1"=1'-0" (13)

DETAIL
1"=1'-0" (14)

DETAIL
1"=1'-0" (15)

DETAIL
1"=1'-0" (16)

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BCA JOB No. 13384 10/25/201

• PROJECT •

WOODSIDE PRIORY TRACK & FEILD PROJECT
PORTOLA ROAD
PORTOLA VALLEY, CA 94028

• TITLE •

STRUCTURAL DETAILS

SCALE : NOTED

• REVISIONS •

No.	Date	Notes

• JOB: -

• DATE: 10/8/2013

• DWG #: S5

MEMORANDUM

TOWN OF PORTOLA VALLEY

TO: ASCC

FROM: Karen Kristiansson, Deputy Town Planner

DATE: December 5, 2013

RE: Preliminary review for conformity with CUP X7D-30: New building at Benedictine Square and proposed changes to Benedictine and Church Squares

As is explained in the December 5, 2013 ASCC Agenda Memo from Town Planner Tom Vlasic, the Priory School has been working on plans for new buildings at Benedictine Square for a number of months. A set of plans was submitted to the Town and was originally scheduled for preliminary review at the December 9 ASCC meeting, but the school decided to change both the plans and the architectural team. The new architectural team asked to present some preliminary design concepts to the ASCC at the December 9 meeting to receive initial reactions.

Based on the limited information provided by the new architectural team, the proposed project would involve demolition of one permanent and two temporary buildings now in Benedictine Square, and construction of approximately 9,000 sf of new classroom space in two buildings accommodating 11 classrooms, restrooms, an elevator, and associated service facilities. The proposed building to be located on the north side of Benedictine Square would have two stories, while the building proposed immediately in front of the student center would be one-story. In addition, the paving, landscaping and lighting in both Benedictine Square and Church Square would be modified. Existing buildings at Church Square may also be given new exterior finishes, but the massing of those buildings is not expected to change.

Preliminary conceptual plans site and floor plans are attached, and the plan sheets are listed below. These were prepared by Goring and Straja Architects and are dated 12/4/2013.

- Sheet A0.3, Site Scope
- Sheet A2.1, First Floor Plan
- Sheet A2.2, Second Floor Plan

The architectural team will present these plans, as well as more information that we understand is being developed for the meeting on Monday.

In reacting to these conceptual plans, the ASCC will need to consider conformity with the Town's zoning ordinance and Design Guidelines as it does for all projects, and will also need to look for consistency with the approved Conditional Use Permit X7D-30, including the approved Priory Master Plan. Some initial comments on the proposed project in terms of these guiding documents are provided below.

1. **Considerations regarding Zoning Ordinance Regulations and the Design Guidelines.** More detailed plans and information, including elevations and landscaping plans, will be needed to assess full conformity with the Town's zoning regulations and design guidelines. However, based on discussions with Priory representatives to date, we do not anticipate any significant issues. One key consideration will be whether the proposed building design includes any features that could create glare, lighting or other visual impacts on nearby properties, including those across Portola Road. This can be considered once building elevations are available. Hopefully, the architectural team will present at least rough elevation concepts for discussion at Monday's meeting.

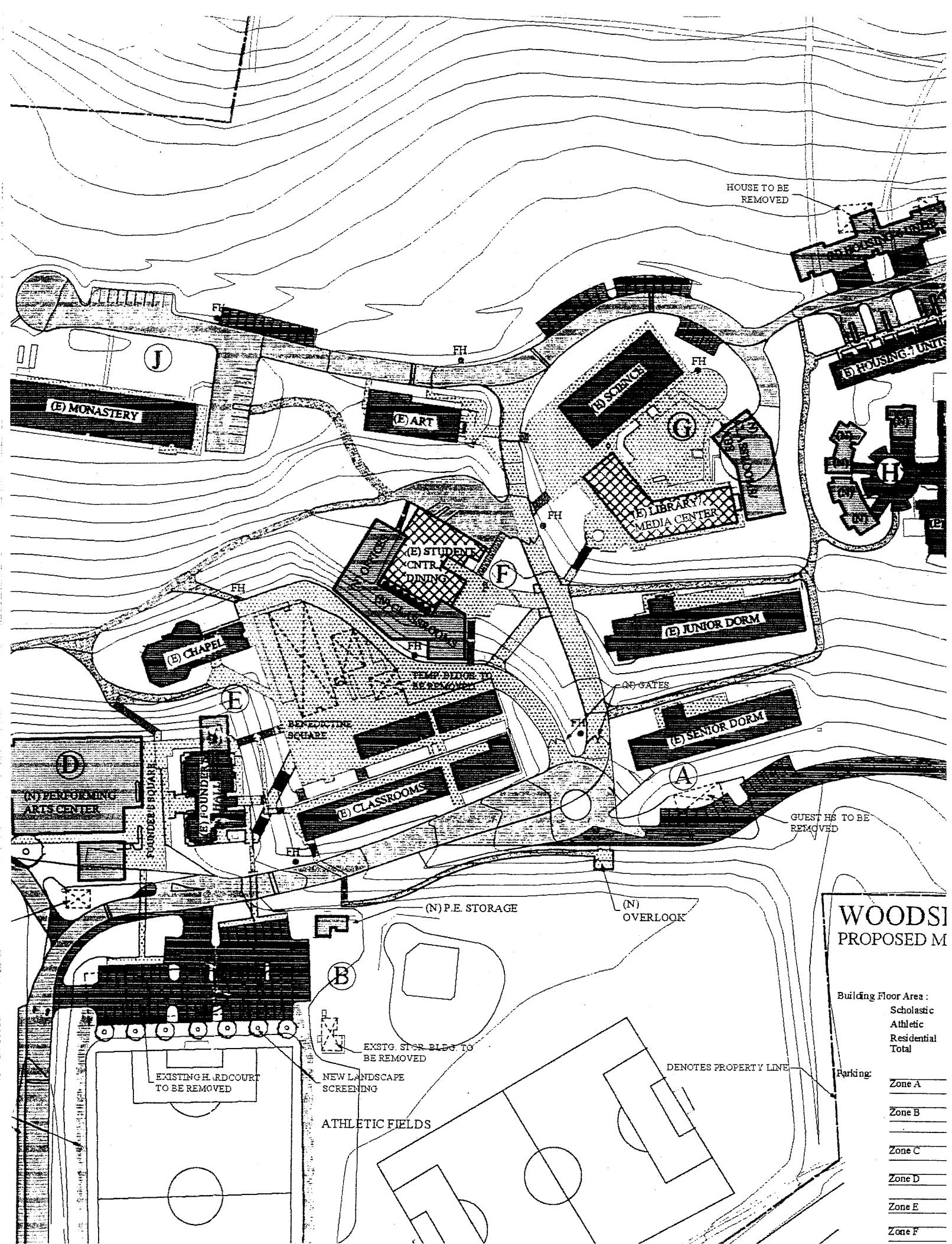
2. **Consistency with the Conditional Use Permit and the Priory Master Plan.** The approved master plan shows demolition of the three buildings in Benedictine Square and construction of a new building with offices and classrooms located around the existing Student Center. An enlargement of the approved master plan diagram showing both Benedictine Square (located near letter E and labelled as "Benedictine Square") and Church Square (located at letter G) is attached. The proposed new classroom buildings are located very close to where they are shown on the master plan, although pulled a little further out from the hill and the Student Center. In addition, one wing has been moved west so that it is located along the north side of Benedictine Square instead of wrapping around the Student Center. Overall, the location for the buildings appears to be generally consistent with what is shown on the master plan.

   The Master Plan includes floor area and impervious surface limits for the campus, and the project will need to comply with these limits. After the new track and field project is accounted for, the Master Plan would allow an additional 23,003 sf of impervious surface. There are separate floor area limits for scholastic, residential and athletic uses on the campus. The proposed new building would be a scholastic building, and the Master Plan would allow an additional 2,570 sf of scholastic floor area, in addition to the amount of floor area which would be available with the removal of the three existing buildings in Benedictine Square.

   Landscaping and lighting should also be consistent with the landscape and exterior lighting master plan approved for the Priory by the ASCC in 2005.

At this point, the plans are very conceptual in nature and the ASCC will be primarily receiving information from the project applicant and, as appropriate, providing initial reactions and guidance. More detailed information is expected to be presented at the meeting on December 9, and the fully developed plans will likely be brought back to the ASCC in early 2014 for review. The project architect has advised that they hope to move the plans ahead fairly rapidly in the next few months so that project construction can proceed in 2014.

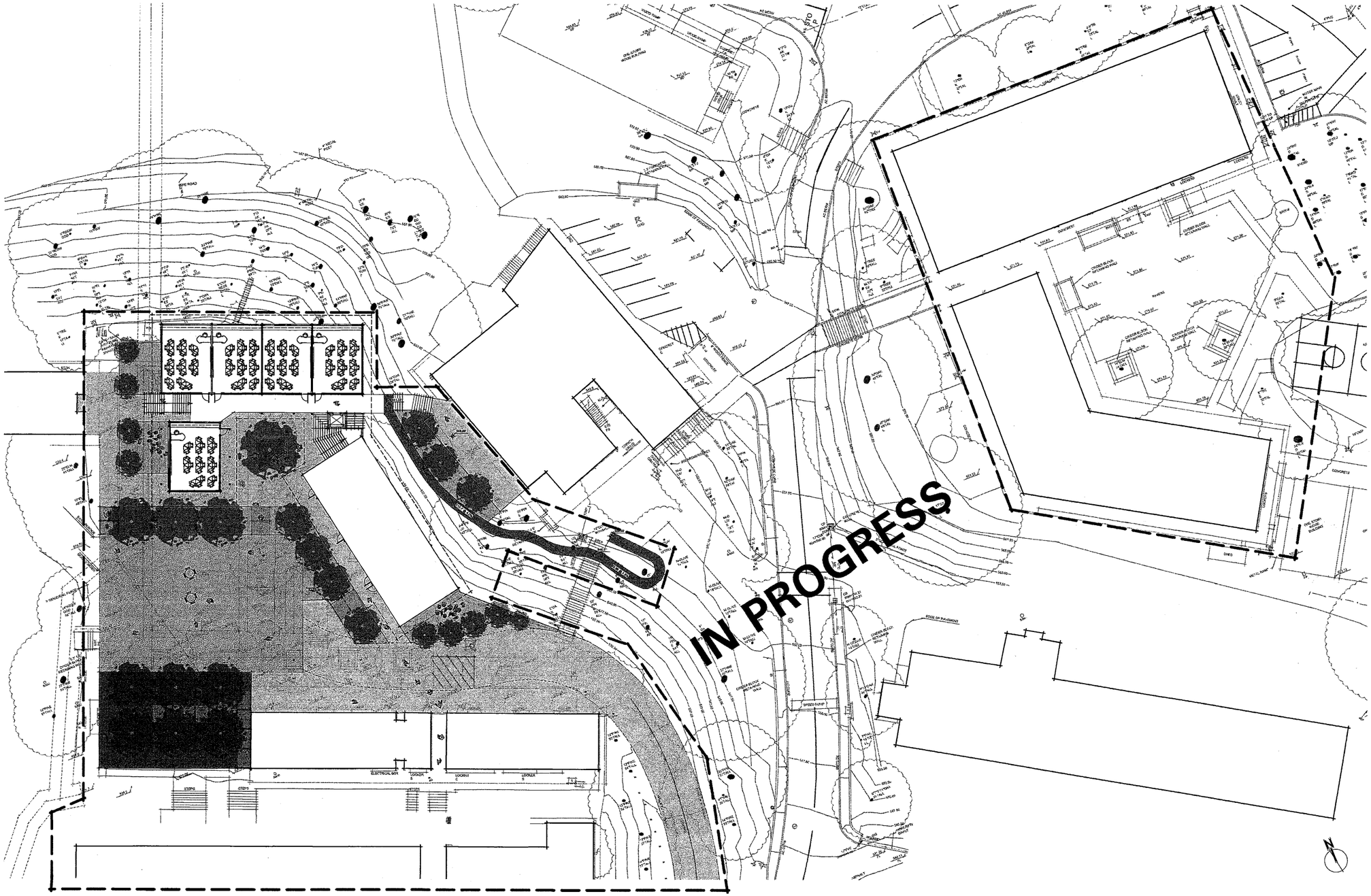
Attachments: Enlargement of Approved Priory Master Plan Diagram
Conceptual Plan Sheets A0.3, A2.1, & A2.2



WOODSI
PROPOSED M

Building Floor Area :
Scholastic
Athletic
Residential
Total

Parking:
Zone A
Zone B
Zone C
Zone D
Zone E
Zone F



1 SITE SCOPE OVERVIEW
Scale: 1" = 20 ft

GORING&STRAJA ARCHITECTS

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Project:

PHASE 2

WOODSIDE PRIORY SCHOOL
302 PORTOLA ROAD
PORTOLA VALLEY, CA 94128

Consultants:

No. Date Issue

Issue Note:
DESIGN
DEVELOPMENT
12/04/2013

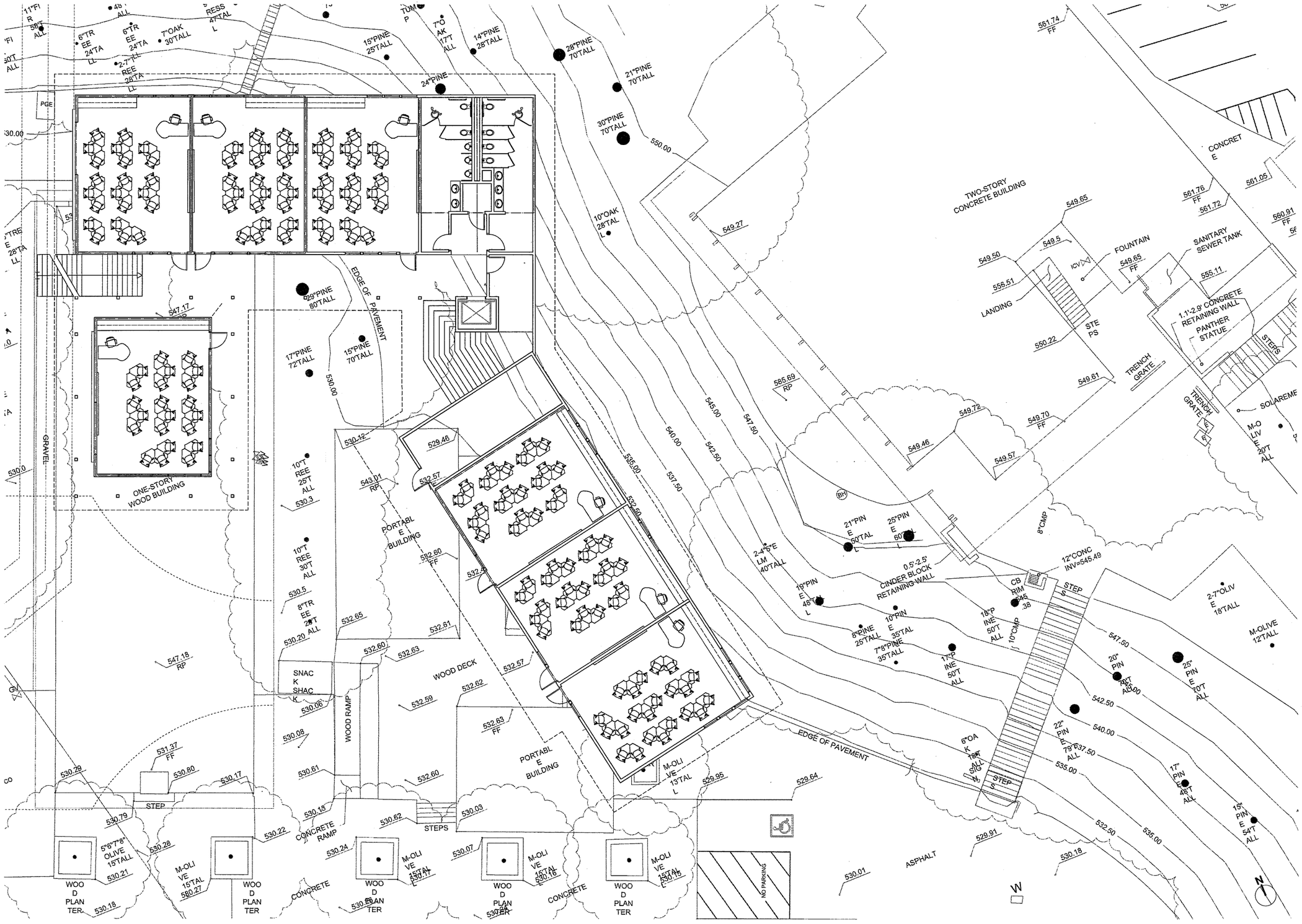
Project ID: Priory
Drawn By: PH
Review By: JG
Plot Date: 12/04/13

Sheet Title:

SITE SCOPE

Sheet No.:

A0.3



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Manteca, CA 95337

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FAX: 209-239-8229

No.	Date	Issue

Issue Note:
DESIGN
DEVELOPMENT
12/02/2013

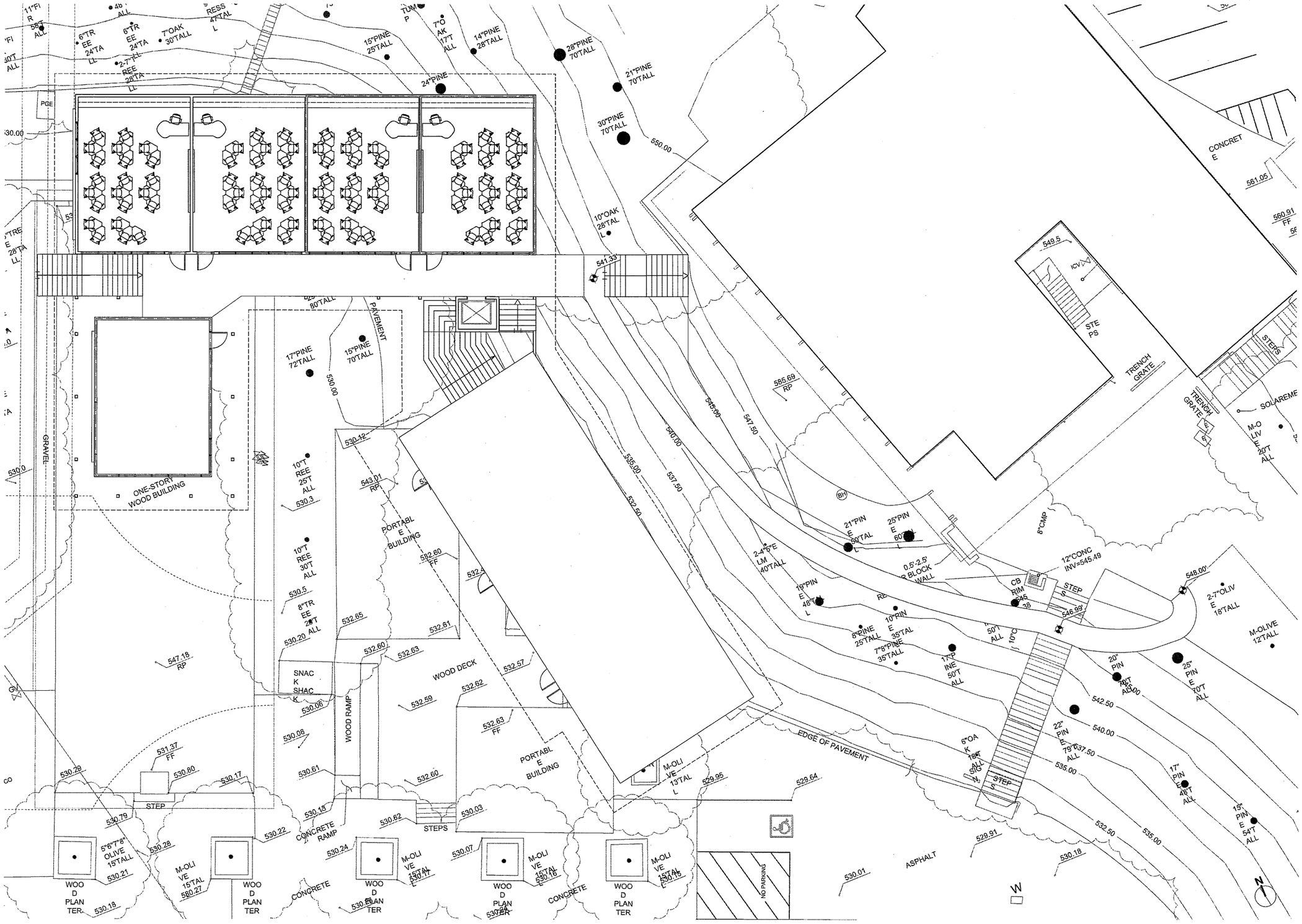
Project ID: Priory
Drawn By: PH
Review By: JG
Plot Date: 12/03/13

Sheet Title:

FIRST FLOOR PLAN

Sheet No.:

A2.1



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TEL: 209-239-8201
FAX: 209-239-8229

No. Date Issue

Issue Note:
DESIGN DEVELOPMENT
12/02/2013

Project ID: Priory
Drawn By: PH
Review By: JG
Plot Date: 12/03/13

Sheet Title:

SECOND FLOOR PLAN

Sheet No.:

A2.2

UNAPPROVED
MINUTES

Architectural and Site Control Commission November 25, 2013
Regular Evening Meeting, 765 Portola Road, Portola Valley, California

Chair Breen called the regular meeting to order at 7:30 p.m. in the Town Center historic School House meeting room.

Roll Call:
ASCC: Breen, Clark, Hughes, Ross
Absent: Koch
Planning Commission Liaison: McKitterick
Town Council Liaison: None
Town Staff: Town Planner Vlasic, Deputy Town Planner Kristiansson, Assistant Planner Borck

Oral Communications

Oral communications were requested, but none were offered.

Prior to consideration of the following request, Clark recused himself noting that he was the previous owner of the property.

Continuing Review, Architectural Review for New Residence and Site Development Permit X9H-664, 10 Sioux Way, Livingston

Borck presented the November 21, 2013 staff report on this continuing review of plans for residential development of the subject vacant 1.09-acre Arrowhead Meadows subdivision property. She noted that, overall, preliminary comments offered at the conclusion of the November 11th meeting were positive relative to the site plan and proposed design, but a number of comments were offered for further consideration.

Borck then reviewed the following revised plans and materials, including a November 18, 2013 transmittal letter from the project architect, and noted how they responded to the preliminary review comments:

Architectural Plans, O'Sullivan Architecture, 11/18/13:
Sheet A1.1, Proposed Site Plan
Sheet A1.2, Exterior House and Landscape Lighting Plan
Sheet A2.1, Proposed Floor Plan
Sheet A2.2, Proposed Roof Plan

Landscape Plans, Late Afternoon Garden Design, 11/18/13:
Sheet L.1, Landscape Layout Plan
Sheet L.2, Planting Plan
Sheet L.3, Irrigation Plan

Transmittal letter from Killian O'Sullivan, response to 11/11/13 ASCC meeting comments

Borck also noted that the following plans and materials considered at the 11/11 meeting are still part of the applications before the ASCC for action:

- Civil Plans, McLeod & Associates:
  Sheet C-1, Topographic Survey, dated 10/4/13
  Sheet C-2, Preliminary Grading & Drainage Plan, dated 10/8/13
  Sheet C-3, Erosion Control Plan, dated 10/8/13
- Architectural Plans, O'Sullivan Architecture, 10/08/13:
  Sheet A0.1, Cover Sheet
  Sheet A1.3, Story Pole Plan
  Sheet A3.0, Proposed Exterior Elevations
  Sheet A3.1, Proposed Exterior Elevations
  Sheet A3.2, Proposed Exterior Elevations
  Sheet A3.3, Proposed Exterior Elevations/Floor Plan of Shed
- Outdoor Water Use Efficiency Checklist, 10/08/13
- Arborist Report by Urban Tree Management, Inc., 9/23/13
- Cut sheets for the proposed exterior and landscape lighting, received 10/08/13
- Colors and materials board, received 10/08/13
- "Exhibit A" – Plant Material Images, received 10/08/13
- "Exhibit B" – Landscape Material Images, received 10/08/13
- Build It Green Checklist, received 10/08/13, with 118 points proposed

Applicants Lori and Randy Livingston were present with project architect Killian O'Sullivan and project landscape architect Nicholas Thayer. They offered they had not additional comments to offer on the revised plans and expressed their appreciation for staff's assistance through the project review process.

Following brief discussion of lighting issues, all ASCC members found the revised plans responsive to the preliminary review comments. The focus of lighting comments were on the proposed driveway lights and, after discussion, ASCC members concluded that the unusual conditions at the driveway intersection with Sioux Way supported the need for one but not two lower driveway lights.

After discussion, Hughes moved, seconded by Ross and passed 3-0 approval of the revised plans and supporting materials subject to the following conditions to be addressed to the satisfaction of planning staff prior to issuance of a building permit:

1. The lighting plans shall be revised to eliminate one of the two proposed lower driveway lights and the light shall be controlled by a switch at the house that has a manual on and automatic off, set to turn off after one hour.

2. All conditions set forth in the October 31, 2013 memo from the Public Works Director shall be complied with.

3. All conditions set forth in the October 28, 2013 letter from the Town Geologist (Cotton, Shires, and Associates) shall be complied with.

4. All conditions set forth in the October 14, 2013 memo from Woodside Fire Protection District shall be complied with.

5. All recommendations for grading and tree protection from the September 23, 2013 report from Urban Tree Management shall be complied with.

6. The irrigation plan shall be corrected so that no irrigation is proposed within the public right-of-way.

7. A construction staging and tree protection plan shall be submitted and approved prior to building permit issuance and, once approved, shall be implemented to the satisfaction of planning staff.

Following the above action, Clark returned to his ASCC position.

Follow-up Architectural Review for photovoltaic and solar thermal roof-mounted panels for new residence, 3 Redberry Ridge, Evans

Borck presented the November 21, 2013 staff report on this follow-up review for compliance with solar panel conditions set with original ASCC project approval on February 25, 2008. She noted the conditions focused on the panel finishes and also how the finishes might contrast with the final materials for the adjacent flat roof areas. She then discussed the following plans and materials submitted to address the solar panel conditions, prepared by Noel Cross, Architect, and, unless otherwise noted, dated November 5, 2013:

Sheet A1.0a, Site Plan
Sheet A5.0, South & West Elevation Plan
Sheet A5.1, North & East Elevation Plan
Sheet A5.2, North & East Elevation Plan, dated 7/24/13
Sheet A6.0, Roof Plan

Also discussed and considered were the following application submittal materials received November 5, 2013:

- Sunpower Solar Panel cut sheet.
- Gull Industries Solar Pool Heating Collector cut sheet.
- Letter from Pat Gelsinger, 5 Redberry Ridge.
- Sample of roof gravel ballast.
- Sample of dark bronze paint for fascia board.

Eric Evans, applicant, and Noel Cross, project architect, presented the request to the ASCC. They discussed the roof and fascia board color samples and also presented color renderings of the project to help facilitate understanding of the current solar panel proposals. They also discussed the solar panel plan review and approval by the Blue Oaks homeowners association (HOA) and noted that the plans and materials currently before the ASCC have been modified to incorporate the requirement of HOA approval.

In response to a question from Clark, Cross advised that the scope of panels was determined based on a spreadsheet analysis of anticipated demand that also took into account site vegetation and potential for shading of panel areas.

Public comments were requested, but none were offered.

Following discussion, Hughes moved, seconded by Ross and passed 4-0 approval of the plans as presented.

Follow-up review for compliance with conditions of approval, review of building permit plans for Faux Pine Colocation "Tree Antenna," Priory School, 302 Portola Road, Conditional Use Permits X7D-132 (Verizon) and X7D-138 (AT&T)

It was noted that, as presented in the November 21st staff report, while ASCC review of the subject building permit plans for the CUP required faux tree antenna was noticed for the November 25th meeting, all of the data needed to satisfy the approval conditions has yet to be provided. After requesting and receiving no public comments, follow-up review was continued to the regular December 9, 2013 ASCC meeting.

Architectural Review for secondary access driveway gate, 330 Golden Hills Drive, Tri-State Capital, LLC

It was noted that, as presented in the November 21, 2013 staff report, the applicant has requested that review of this request for replacement of an existing secondary access driveway gate with related fencing be continued to the regular December 9, 2013 ASCC meeting. Public comments were requested, but none were offered. Thereafter, project consideration was continued to the regular December 9, 2013 ASCC meeting.

Commission and Staff Reports

Breen reported on reviewing plans for additions and remodeling at 140 Westridge Drive and finding that the plans did not need to come to the full ASCC review, but that direction was provided to staff for review of specific items, including skylights.

Ross reported on his follow-up review relative to final lighting plans for 45 Prado Court and 260 Mapache Drive for conformity with ASCC approval conditions.

Clark reported on his follow-up review of the color for the agricultural building and construction staging plans for 555 Portola Road,

Hughes reported and staff also commented on the fact that as of January 1, 2014 the town's current green building ordinance and Built It Green checklists cannot be used due to actions by the state relative to revisions to the state "green building" code. It was clarified that the town will need to seek new state approval of its own green building ordinance, as it did in the past, and that studies needed in support of the town's request to the state will not be available until early in 2014.

Kristiansson reported on the planning commission's 11/20 first study independent session on the 2014 housing element update program and that the commission would be conducting additional study sessions at its December 4th and 18th meetings. It was noted that the two December meetings would focus on the second unit housing programs. Planning Commission liaison McKitterick noted that ASCC input would likely be helpful on the matter of second unit programs and, after discussion, he noted that he might suggest the commission refer the possible second unit zoning ordinance changes to the ASCC for review and comment. ASCC members also requested that they receive the agendas for the housing element study sessions.

Minutes

Minutes

Hughes moved, seconded by Ross, and passed 4-0 approval of the November 11, 2013 meeting minutes with the following abstentions noted for specific applications:

Preliminary Architectural Review, 10 Sioux Way, Clark abstaining
Follow-up Review, CUP X7D-169, 555 Portola Road, Breen abstaining
Architectural Review, 166 Crescent Avenue, Ross abstaining

Adjournment

There being no further business, the meeting was adjourned at 7:58 p.m.

T. Vlasic