

BUILDING PERMIT

Application Form



Facilities Planning

Applicant's Name: Trent Drenon
(Applicant will be the primary contact for this project.)

Today's Date: 4/11/02

Phone Number: 756-5087
783-2369

Department: Aero

Optional:

Names & Phone #s of Jake Schaffner 756-5087

Other Involved Parties Jordi Puig-Suari 756-6479
(Supervisor, dean, advisor, etc.)

Project Name: Groundstation Antenna Install Bldg Name: Advanced Technology Lab

Bldg #: 007-15

Who is Doing the Work?
(Check all that applies)

- Contractor Facilities Services Labor Other (explain)
 Department Labor Student Project

Source of Funding: Grants Est. Cost/Budget: ~\$1200

Description of Project: Polysat would like to place satellite antennas on top of the ATL. We have ready a self-supporting antenna tripod that requires no building attachment. The tripod is held down by weights. A contractor will be hired to install building entry conduit for the coaxial cable. The antennas are essential for the satellite project.

Status of Project: Proposal *(We can only review the concept, not issue a permit.)*
 Plans Ready to Review Under Construction (oops!)

Approval Signature: [Signature] DAN WILSH 4/24/02
(Applicant's Dean, Division Head, or Dept. Head) *(Please print name)*

Other Approvals, Reviews, Formal or Informal: [Signature] 4/30/02

Attachments: _____
(If any...)

Memo

To: Facilities Planning
From: Trent Drenon (T.D.)
CC: Jeff Nadel
Date: April 1, 2002
Re: Request for Permit to Install Antennas and Cabling in Bldg. 007-015

Request

The PolySat project would like a permit to install antennas and conduit in the Multidisciplinary Space Technology Laboratory of the Advanced Technology Building (Bldg. 007 Rm. 15).

PolySat is the first Cal Poly student project to build a satellite. The satellite will be launched into low earth orbit within the next year. The ground station plans call for antennas that are required to communicate with our satellite and existing amateur radio satellites in space. These antennas, therefore, are a requirement for the success of this project, which has been in the works at Cal Poly for close to three years.

The biggest antennas are two 18' directional antennas to be placed horizontally on a 10' mast. The antenna structure would reside on the roof above room 15 using a self-supporting tower that requires no holes to be drilled in the roof. The antenna cable will exit the building ceiling through two 3" ABD conduits. A qualified contractor from Quaglino Roofing will install the conduit. The conduit will be attached to a wall inside the building and proper weather heads will be used to provide a waterproof seal where the cables enter the conduit on the roof. The installation will be installed by standards that assure the building remains weatherproof. The coaxial cable will be neatly routed and attached to the antenna masts securely.

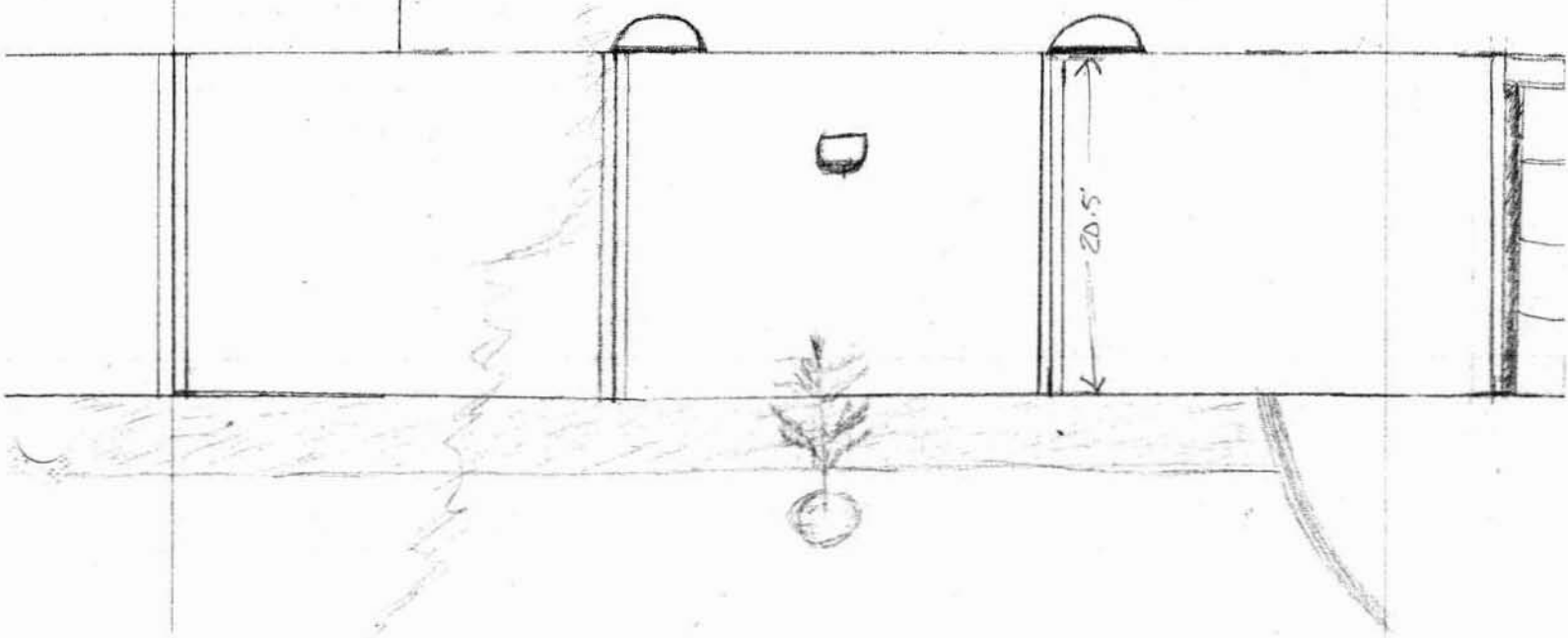
Please see attached pictures and details on the self-supporting tower.

1/2" x 1/2" x 1/2"
 1/2" x 1/2" x 1/2"
 1/2" x 1/2" x 1/2"

SCALE 1/2" = 1'

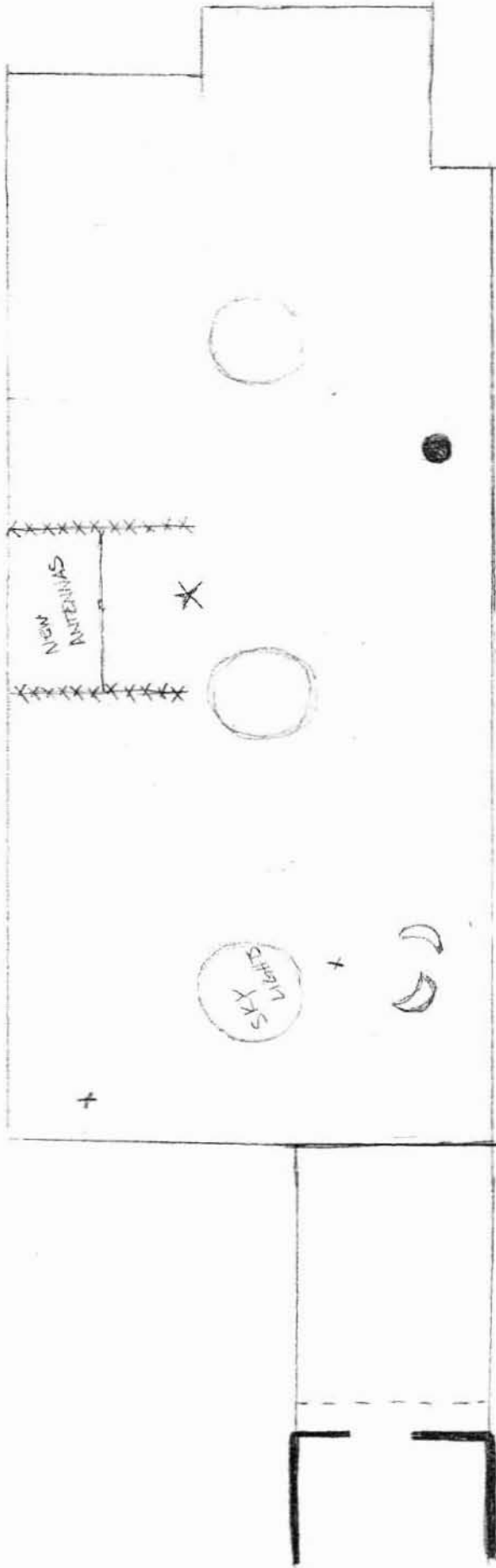
SIDE VIEW

END VIEW



PLD6.13

TOP VIEW



BLDG. 13