

## RECOMMENDATIONS FOR BUILDING ON PARCEL 092-232-03

The topo shows a 12,460 ft<sup>2</sup> parcel size with page C showing maximum land coverage of 20% with an additional 400 foot<sup>2</sup> for driveway.

Do the math:

$$12,460 \text{ ft}^2 \text{ by } .17 = 2118.2 \text{ ft}^2$$

$$12,460 \text{ ft}^2 \text{ by } .20 = 2492 \text{ ft}^2 + 400 = 2892 \text{ ft}^2$$

I strongly suggest building as far back of the road for these reasons:

- 1) TRPA guidelines appear to prefer that.
- 2) The extra height might enable you to have a second story deck to see over the adjacent homes and possibly permitting a peek view of Lake Tahoe looking down Arch Way.

The interesting dynamic in these old documents is the mandatory parking apron in front of the garage of 15 ft depth and width of the garage doors. I will provide for a 3 car garage with a 28 foot by 15 foot parking apron

After playing with several sizes of house apron, I found that 40 feet by 40 ft house apron located at the front at building elevation 510 ft, in the rear at building elevation 516.1 ft provides the data to determine building MAX height per your old TRPA specs page F provided by A. Kennerley. I have preselected a 4 in 12 roof pitch with ridge oriented roughly east/west for these reasons:

- 1) Easier/safer to install solar panels
- 2) Better street look
- 3) For the second floor an open beam ceiling could be dramatic.

Do the math:

$$\begin{array}{rcl} \text{House 40 ft by 40 ft} & & = 1600 \text{ ft}^2 \\ \text{Parking platform 15 ft by 28 ft} & & = \underline{420 \text{ ft}^2} \\ & & 2020 \text{ ft}^2 \end{array}$$

After laying out the house outline and parking platform we compute on the drawing the length of driveway 87.2 ft and the total coverage:

|                          | <u>Used</u>     | <u>Allowed</u>                                |
|--------------------------|-----------------|-----------------------------------------------|
| House                    | 1600            | 12,460 by 20% = 2492                          |
| Parking Apron            | 420             | 400 ft <sup>2</sup> for driveway = <u>400</u> |
| Driveway<br>(10 ft wide) | <u>872</u>      | Allowed total 2892 ft <sup>2</sup>            |
|                          | 2892 Total used |                                               |

Now compute the max building height using pages F and G.

From Topo

Slope throu center of building site. Front elevation 510 ft  
Rear elevation 516.1 ft

$$\frac{516.1-510}{40 \text{ FT}} = \frac{6.1 \text{ FT}}{40 \text{ FT}} = 15.3\% \text{ Slope. } \underline{\text{Round to 16\% per page 3}}$$

Using roof pitch of 4:12

Our max building height is 32 ft, 9 in per page F

On page J we show the cross section of 3 floors at 1600 ft<sup>2</sup> per floor provided for a 4800 ft<sup>2</sup> house with a 3 car garage.

Now compare roof peak elevations of your 3 neighbors to the deck elevations of this proposal to see if a view of some sort is possible.

Eastern neighbor ridge = 527.9 (from topo)  
(Across the street)

Page J second floor deck @ 529 ft is 1.1 above  
Page J first floor deck @ 520 ft is 7.9 below

Northern neighbor ridge = 529.7 (from topo)

Page J second floor deck @ 529 is 8.4 inches below  
Page J first floor deck @ 520 is 9.7 feet ~~below~~ below

Southern neighbor ridge = 525 ft (from topo)

Page J second floor deck @ 528 ft is 3 feet above  
Page J first floor deck @ 520 feet is 5 feet below

Note that these comparisons are to deck floor. Add about 5 ft eyeballs on a 5 ft, 6" tall person.

In closing I must advise that the specs I've used are pretty old and anyone using them **must** get the latest requirements for building at Lake Tahoe. One thing should be noted, the past 20 years have ~~seen~~ an amelioration of some of the severe requirements in building at the lake. Anyone building should seek out the best management practices

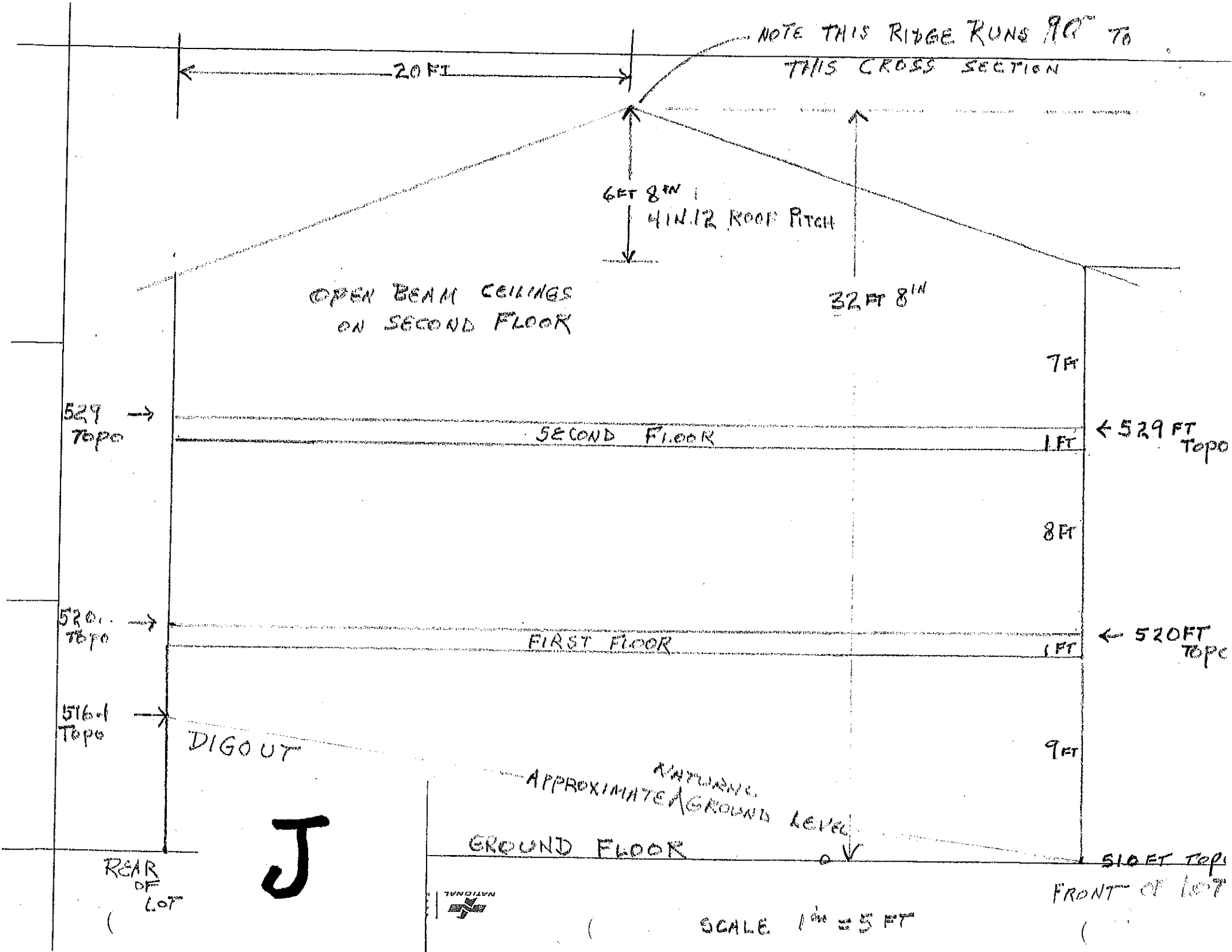
see page K from the TRPA. These BMP's could result in building some really nice decks on this house and also help to keep the lake clean. I recommend you make several copies of the topo available to any builders because there are many, many solutions to building on your lot with a real potential of some lake view down Arch Way because that street drops down from your lot. See page H

Finally let's compute the driveway slope for this case 40 by 40 @ 510. The curved part of the driveway to the property border run 87.2 ft. The parking platform runs 15 feet. Elevation at border of lot is 498 ft. Elevation at house is 510 ft.

Compute driveway slope:

$$\frac{516.1-510}{40 \text{ FT}} = \frac{6.1 \text{ FT}}{40 \text{ FT}} = 15.3\% \text{ Slope} \quad \frac{\text{RISE}}{\text{RUN}} = \frac{510-498}{87.2+15} = 11.7\% \text{ GRADE}$$

At less than 15% driveway looks good slope-wise.



NOTE THIS RIDGE RUNS 90° TO THIS CROSS SECTION

20 FT

6 FT 8 IN  
4 IN 12 ROOF PITCH

32 FT 8 IN

OPEN BEAM CEILINGS ON SECOND FLOOR

7 FT

529 →  
Topo

SECOND FLOOR

1 FT

← 529 FT Topo

8 FT

520 →  
Topo

FIRST FLOOR

1 FT

← 520 FT Topo

516 →  
Topo

DIG OUT

9 FT

NATURAL APPROXIMATE GROUND LEVEL

GROUND FLOOR

← 510 FT Topo  
FRONT OF LOT

REAR OF LOT

J



SCALE 1" = 5 FT