

TOWN OF PARADISE VALLEY

BUILDING PAD HEIGHT

September 15, 2020



AGENDA

Agenda

1. Prior Council Work Study Meetings
2. Planning Commission Review & Recommendations



PRIOR COUNCIL WORK STUDY MEETINGS

Staff previously presented information related to building pad heights at the May 14, 2020 and June 25, 2020 Town Council Work Study meetings. Information presented included:

- Questions raised during construction of new homes related to pad and structure heights
- Town Code Section 5-10-5, B related to building pad height
- Staff interpretation of the Town Code
- Definitions (Fill, Pad, Earthen Material, etc.)
- Example projects and visual impacts
- Surrounding municipal height requirements
- Potential Town Code updates
- Fill under patio and landscape areas



TOWN COUNCIL DISCUSSION

At the May 14, 2020 Town Council Work Study meeting staff was requested to bring back a list of items to present to the Planning Commission to review to determine if any revisions to the Town Code or Community Development Department procedures may be warranted. The items listed below were discussed at the June 25, 2020 Council Work Study. The items were to be brought to the Planning Commission for review, discussion and possible recommendations. Any recommendations from the Planning Commission would then be presented to the Town Council for consideration. The items for review include:

- Should there be a limit on building pad heights
- Should there be a limit on finished floor heights
- Should there be a limit on fill heights outside of building pad area
- Update and/or add Definitions in Town Code Article 5-10, Development
- Impacts to drainage
- Impacts to surrounding properties
- Requirement and timing of finished floor elevation certificate
- Requirement and timing of building height elevation certificate
- Process for feedback from residents and development community



TOWN CODE OVERVIEW

One of the most frequently asked questions associated with new residential construction is in regards to how the building pad heights are determined and what affects it has in the overall allowable height of a structure.

- | | |
|------------------------------|---|
| Town Code Section 5: | Building & Construction |
| Town Code Section 5-10-5: | Grading & Dust Control Regulations |
| Town Code Section 5-10-5, B: | Grading Permits Required For Land Disturbance |
- *“Filling” means dumping or depositing earthen material resulting in raising of the grade at that location.*
 - *“Earthen Material” means any rock, natural soil or any combination thereof.*



TOWN CODE OVERVIEW

Town Code Section 5-10-5, B,2, a: Grading Plans prepared by a Civil Engineer

- *The grading plan shall contain the preparing engineers certification of the 100 year water surface elevation and finished floor elevation.*
- *The building pad shall not exceed two (2) feet in height except where required to protect the building against flooding, in which case the pad shall be one (1) foot above the water surface elevation of the 100 year event*

Concrete Slab (Finished Floor)

Building Pad



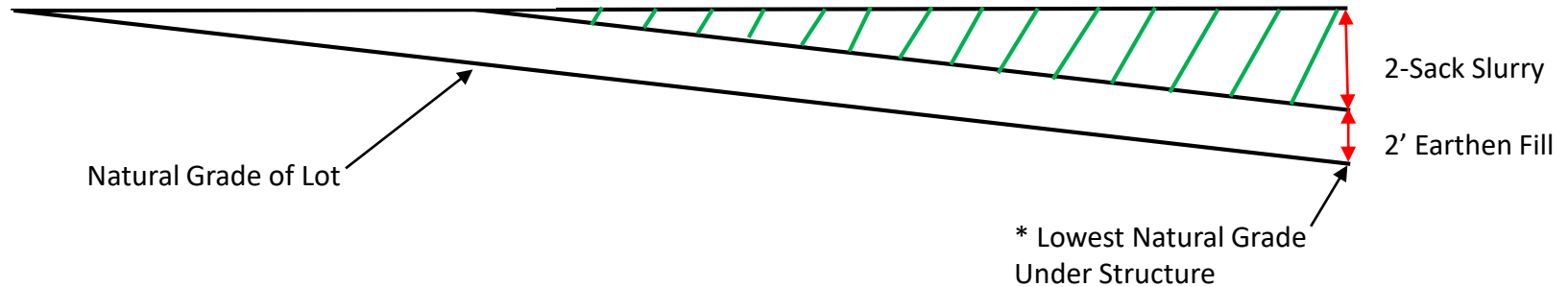
STAFF INTERPRETATION

The building pad shall not exceed two (2) feet in height except where required to protect the building against flooding...

- Engineering staff interprets this section of the Town Code to mean that no more than 2 feet of earthen material may be placed following the natural contour of a property to raise up the building pad unless it is needed to protect the home from flooding.
- Developers and/or property owners desiring a single level home may achieve a level building pad by:
 - a. Addition of non-earthen material such as thickening the slab with 2-sack slurry
 - b. Use stem walls and framed floor with crawl space
 - c. Thickened concrete slab
- Building height measurement is taken from same location (lowest natural grade)



EXAMPLE (BUILDING PAD)



* Building height is measured from Lowest Natural Grade Under Structure

Not To Scale



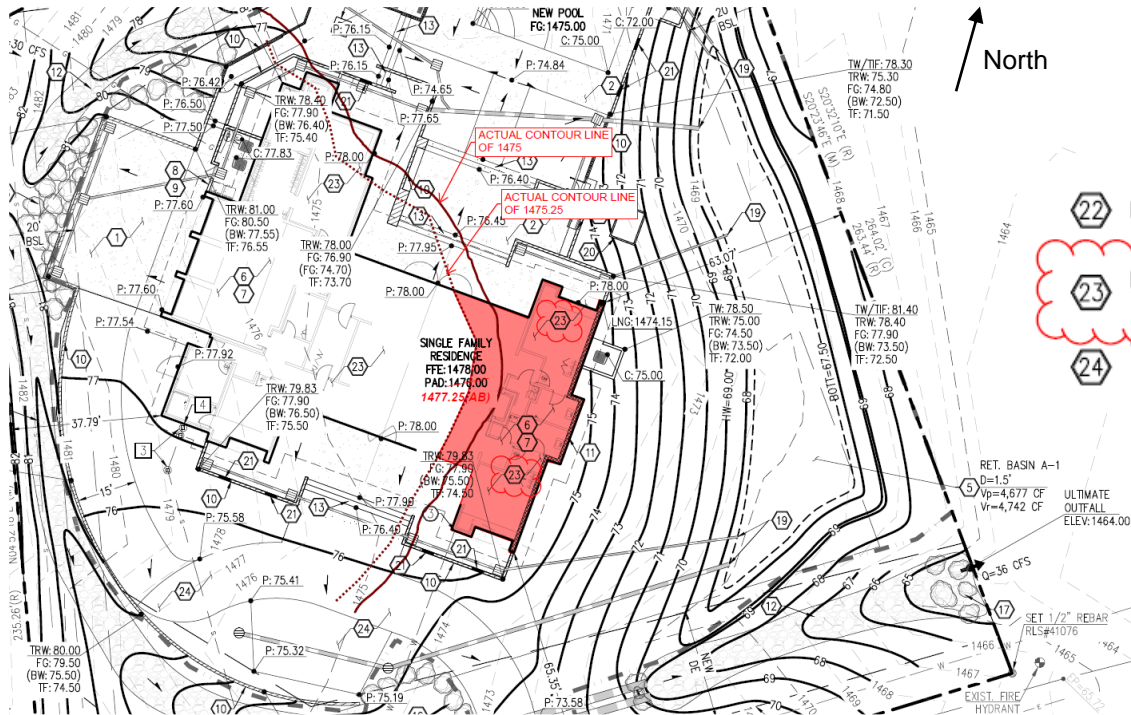
TOWN COUNCIL DISCUSSION

At the May 14, 2020 Town Council Work Study meeting staff was requested to bring back a list of items to present to the Planning Commission to review to determine if any revisions to the Town Code or Community Development Department procedures may be warranted. The items listed below were discussed at the June 25, 2020 Council Work Study. The items were to be brought to the Planning Commission for review, discussion and possible recommendations. Any recommendations from the Planning Commission would then be presented to the Town Council for consideration. The items for review include:

- Should there be a limit on building pad heights
- Should there be a limit on finished floor heights
- Should there be a limit on fill heights outside of building pad area
- Update and/or add Definitions in Town Code Article 5-10, Development
- Impacts to drainage
- Impacts to surrounding properties
- Requirement and timing of finished floor elevation certificate
- Requirement and timing of building height elevation certificate
- Process for feedback from residents and development community



EXAMPLE (1 ACRE LOT)



- 22 INSTALL ANGULAR RIP-RAP D50=8", 1.5' THICK PLACED ON NONWOVEN GEOTEXTILE FABRIC (MIRAFI N-SERIES OR APPROVED EQUAL). SEE GRADATION TABLE ON THIS SHEET.
- 23 POUR 2-SACK SLURRY MIX UP TO 8" BELOW FINISH FLOOR ELEVATION TO LIMIT EARTH FILL UNDER SLAB TO 2 FEET MAX.
- 24 CONSTRUCT STABILIZED DG PAVEMENT ON COMPACTED SUBGRADE PER LANDSCAPE AND ARCHITECTURAL PLANS AND SPECIFICATIONS.

Shaded area indicates use of 2-sack slurry to limit earthen fill under slab to a maximum of 2 feet.



MUNICIPAL FILL & HEIGHT REQUIREMENTS

Fill Limits

No other municipalities were found to have restrictions as to how much fill may be added to raise the pad elevation above natural grade.

Building Height Limits (excludes any HOA restrictions)

- Paradise Valley 24' from lowest natural grade and open space criteria
- Prescott 24' from rolling plane from natural grade (% of roof area may be raised up to 28')
- Cave Creek 25' adjacent natural grade
- Phoenix 30' from adjacent natural grade
- Glendale 30' from rolling plane from natural grade
- Scottsdale 30' from rolling plane from natural grade



EXAMPLE #1

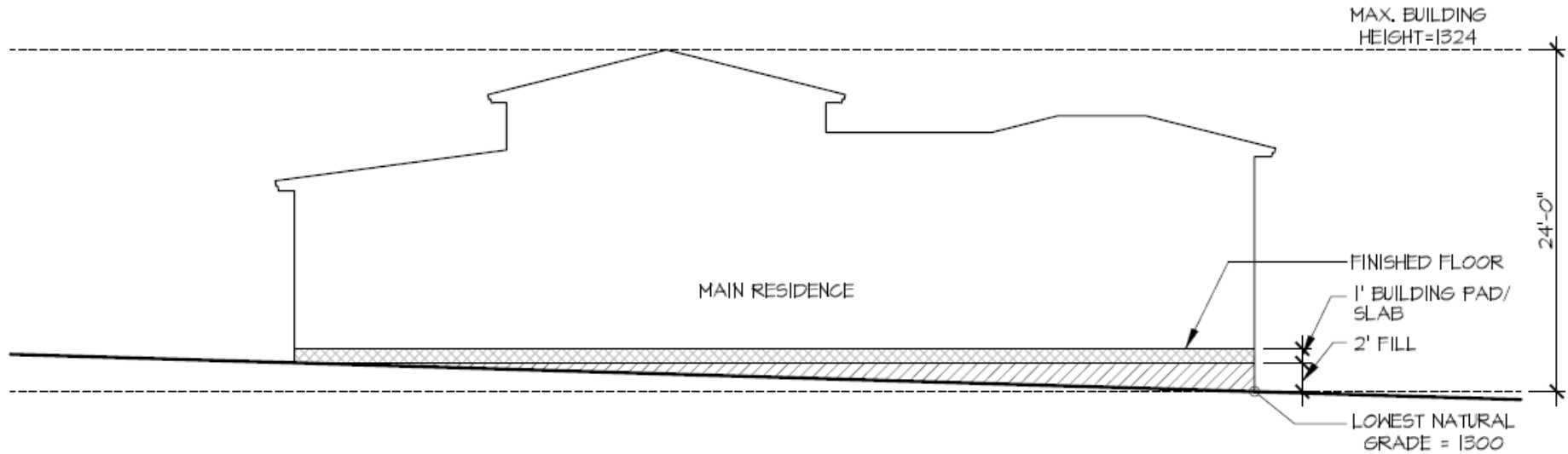


DIAGRAM NO.1
3% SLOPE W/ 2' FILL & 1' BUILDING PAD/SLAB (FLAT FINISHED FLOOR)

Current Code (typical)



EXAMPLE #2

MAX. BUILDING
HEIGHT=1324

24'-0"

FINISHED FLOOR

1' BUILDING PAD/
SLAB

SLURRY BACKFILL

2' FILL

LOWEST NATURAL
GRADE = 1300

MAIN RESIDENCE

DIAGRAM NO.2

4%-5% SLOPE W/ 2' FILL , SLURRY BACKFILL & SLAB (FLAT FINISHED FLOOR)

Current Code Allows (caused concerns)



EXAMPLE #3

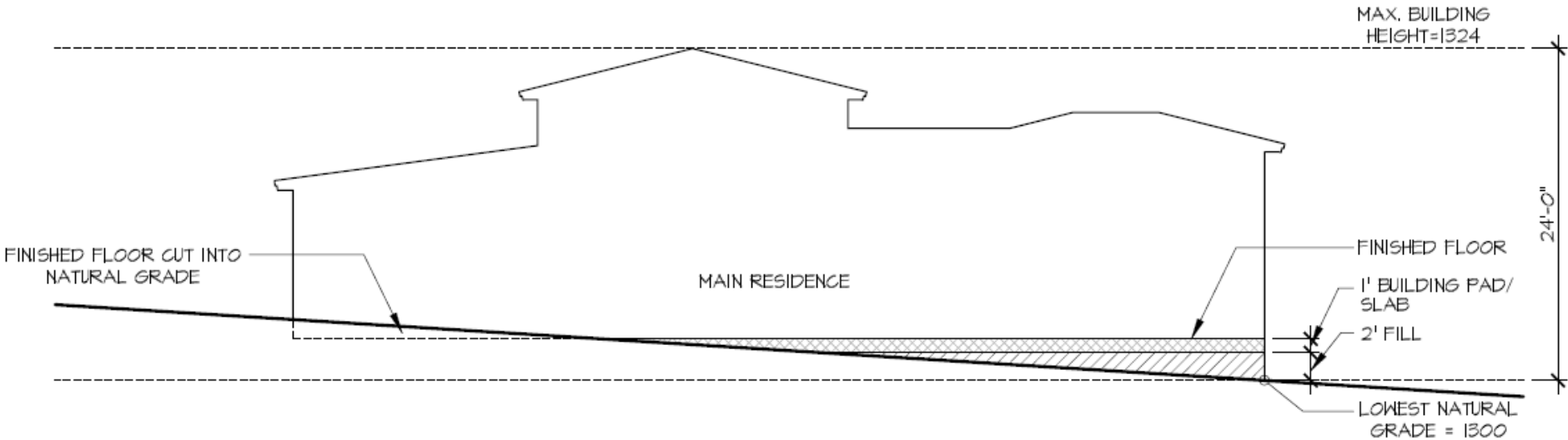


DIAGRAM NO.3

4%-5% SLOPE W/ 2' FILL & 1' BUILDING PAD/SLAB (FLAT FINISHED FLOOR,
WILL REQUIRE NOTCHED OUT)

Current Code Allows



EXAMPLE #4

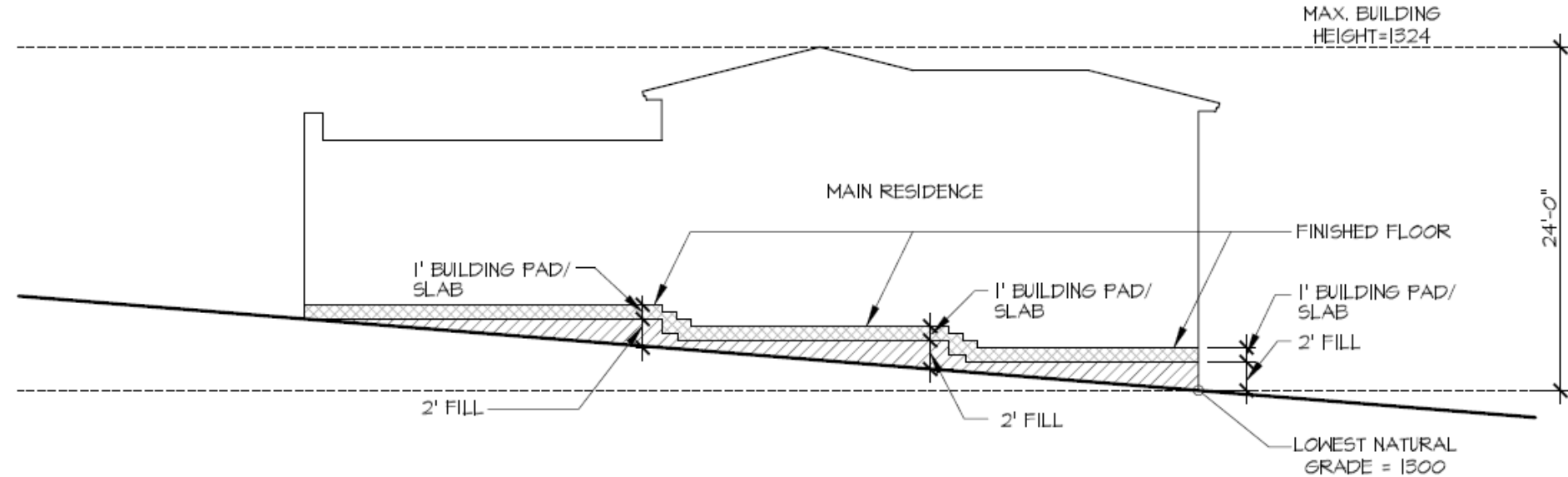
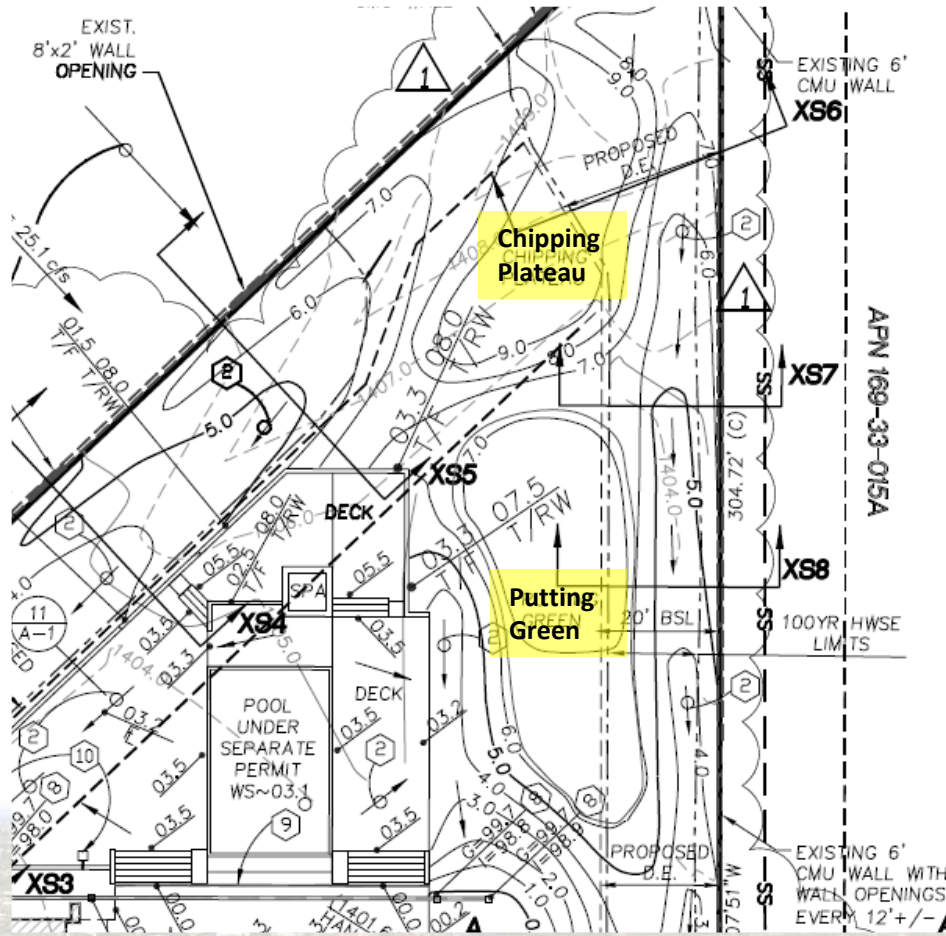


DIAGRAM NO.4
7%-8% SLOPE W/ 2' FILL & 1' BUILDING PAD/SLAB (STEPPED FINISHED FLOOR)

Possible Code Amendment (3' max finished floor from natural grade)



LANDSCAPING FILL



Town Code does not limit the amount of fill for landscaped areas so long as drainage is not affected.

Example grading & drainage plan shows approx. 3' of fill for chipping plateau and approx. 5' of fill for the putting green.



FILL & HEIGHT REQUIREMENTS

Potential Town Code amendments to require non-hillside residential structures to follow the contour of the land.

- Remove maximum 2' fill limitation
- Add maximum finished floor height to 3' above natural grade
- Continue to measure height from lowest natural grade under structure
- Continue to require open space criteria
- Require building pad height certification and possibly rough grading inspection as part of pre-slab inspection



PLANNING COMMISSION DISCUSSION

Items identified for Planning Commission review, discussion and possible recommendations:

- Should there be a limit on building pad heights
- Should there be a limit on finished floor heights
- Should there be a limit on fill heights outside of building pad area
- Update and/or add Definitions in Town Code Article 5-10, Development
- Impacts to drainage
- Impacts to surrounding properties
- Requirement and timing of finished floor elevation certificate
- Requirement and timing of building height elevation certificate
- Process for feedback from residents and development community
- Other



QUESTIONS?

