

TOWN OF PARADISE VALLEY

Hillside Safety Improvement Ordinance

Town Council
Work Session
May 24, 2018



Plan of Action

- ~~May 10 Study Session – Confirm Concepts~~
- ~~Between May 10 and May 24 Study Session~~
 - ~~Town Manager Work Group meet with Bill Sims and review text consistent with direction from May 10 Council meeting on concepts~~
 - ~~Mayor and Council submit text suggestions by Tuesday, May 15~~
- May 24 Study Session – Review text language and make changes
- May 31 Special Study Session – Finalize text and set for adoption
- June 14 Action Item – Adopt Hillside Safety Improvement Ordinance
- Public Comment to be taken at any “Call to the Public” and June 14 Agenda Item



Purpose Statement

- Purpose: Provide majority direction on the concepts of the Hillside Safety Improvement Ordinance. Review draft language.



Safety Section Goal

- Safety section designed to protect lives and property from disasters resulting from development
- Mitigate potential issues:
 - Erosion
 - Boulders rolling
 - Rockfalls
 - Landslides
 - Construction traffic & staging



Safety Section Goal

- *Identify standards and processes that trigger additional safety measures and reviews. Additional safety measures and reviews may be required at Town's discretion during plan review process and/or construction. Examine typical cost of additional review in those standards and modify application fee (SOD)*
- Issue:
 - Hillside properties prone to natural hazards
- Intent:
 - ~~○ Reduce negative impacts of construction on neighbors~~
 - Promote public safety



How to Accomplish

- Three Components:
 - Revised Process
 - Construction Staging Plan
 - Safety Improvement Plan
- Most of this is:
 - Repackaging existing requirements;
 - Adding transparency; and
 - Adding additional review by experienced professionals.
- A question about impact on cost and time



Revised Process

- Will review Revised Process one step at a time with sub-steps, impacts and suggestions.
- Cost legend is
 - \$ = \$100's
 - \$\$ = \$1,000's
 - \$\$\$ = 10,000's
 - \$\$\$\$ = \$100,000's



Current Process Overview

1. Application & Concept Plan submittal
2. Staff Review of Concept Plan submittal to make sure complete and compliant– sometimes minimal, sometimes close to formal
3. Concept Plan Review at HBC – Notification to Neighbors 1,500’
4. Submittal of Formal Plan – Staff review for complete and compliant. Includes geotech report, seismic refraction study, civil drawings
5. Formal Plan Review at HBC – Notification to Neighbors 1,500’
6. Building Permit – Provide general construction regulations sheet (Exhibit H and Construction & Zoning Reg Attachment)



Revised Process Overview

1. ~~Application & Concept Plan Submittal~~ – ~~Notification to Neighbors~~
2. Staff Review of Concept Plan submittal to make sure complete and compliant—sometimes minimal, sometimes close to formal – Checklist, Insurance Alert
3. Concept Plan Review at HBC – Notification to Neighbors 1,500', Final Requirements of ~~Construction Staging and Safety Improvement Plan~~
4. Submittal of Formal Plan & Safety Plan– Staff review for complete and compliant. Review & Approval of Safety Improvement & ~~Construction Staging Plans~~, Notification of Neighbors
5. Formal Plan Review at HBC – Notification to Neighbors 1,500'
6. Building Permit – Applicant submits construction staging plan to be reviewed by Town Engineer and Building Official



Revised Process

1. Applicant Submits Concept Plan

~~A. Applicant notices neighbors within 1,500'~~

~~B. Staff notices through a subscription email "Notify Me" function pre-programmed with current HOA contacts.~~

- Delay notification until HBC Meeting
- This process does not apply to Chair Reviews
- This process does apply to Combined and Formal

Staff w/ Applicant



Revised Process

2. Staff Review of Concept Plan Submittal

Staff w/ Applicant

- D. Town Engineer reviews submittal against *conditions* section of Checklist
- E. Town Engineer using Checklist identifies required elements to be submitted with ~~a Construction Staging Plan and/or a Safety Improvement Plan~~. Exchange with Applicant.
- F. Applicant notified of insurance requirements. \$2M per event and \$5M aggregate. Name Town ~~and neighbors~~ as “additionally insured.” ~~Maintain Insurance for 1 year after CofO.~~
 - Postpone Construction Staging until Building Permit & Make Admin



Revised Process

3. Concept Plan Review at HBC

- G. Applicant notices neighbors within 1,500'
- H. Staff notices through an email "Notify Me" function ~~pre-programmed with current HOA contacts~~ All parties opt-in
- I. Neighbors can voice concerns with project. Rules of procedure to require public participation at Combined, Concept and Final. Applicant may express any concerns with requirements.
- J. ~~Neighbors and HBC Members can ask for things to be addressed in Construction Staging or Safety Plan.~~ Town Engineer (not HBC) decides and ~~what is required in safety plan.~~
- K. ~~Town Engineer~~ states what are required submittals for ~~Construction Staging and/or~~ Safety Improvement Plan.

Public Meeting w/ HBC



Resume Review

- Council reviewed through this step.
- Council directed staff to recombine steps 4 and 5 so that all submittals, including the Safety Improvement Plan, are submitted at the same time.



Revised Process

4. Submittal of Formal Plan to HBC (8 steps)

- L. Applicant turns in Safety plans and notifies neighbors via mail within 1,500 feet that they are on file. Staff to post email alert on “Notify Me” that plans have been submitted and can be obtained.
- M. Town Engineer forwards copies of Safety Improvement Plan(SIP) to third party engineer for review & reviews himself.
- N. **Neighbors** and 3rd party **have 45 days from submittal** to turn in comments from a **technical registrant**. ~~engineered sealed comments.~~
- O. Town Engineer aggregates comments and tells applicant which ones they need to address in resubmittal

Staff w/ Applicant



Revised Process

4. Submittal of Formal Plan to HBC (Continued)

~~P. Town Engineer and Building Official to review Construction Staging Plan. Exchange versions with applicant until satisfied.~~

Q. Town Engineer, third party engineer and **Technical Advisors** (only) are provided copies of SIP resubmittal and review.

R. Exchange plans and redlines with applicant until satisfied, meaning TE, 3rd Party Eng, and any **Technical Advisors** all agree submittal adequate. FWD to HBC. Applicant still responsible (seal)

S. If Applicant feels requirements unreasonable, may challenge in court.

Staff w/ Applicant



Revised Process(Impact)

4. Submittal of Formal Plan to HBC (How Different)

- L. Turning in plans not new. Notifying neighbors that plans available for review is new. Although neighbors could always access plan and packet materials and make comments at meetings. (Minor cost & time to applicant. Minor time to staff)
- M. Third Party review always has been available. This would be more regular (Adds \$\$ per application to Town cost that is transferred to applicant).
- N. 45 day comment period new. Could add 0 days (if already using 3rd Party review) or 45+ days (if plans were already done at time of Concept application). (Costs should be same for SIP, ~~\$\$ for CSP~~)
- O. Aggregation of comments from outside engineers new. Redlines back to applicant not new. (more comments could mean more cost)

Staff w/ Applicant



Revised Process(Impact)

4. Submittal of Formal Plan to HBC (How Different)

~~P. Construction Staging Plan review is new. Always talked about these items informally and addressed problems as they arose during building permit process. (Could add a week(s) to process)~~

Q. Review of resubmittals by TE and 3rd Party already occur. **Adding technical advisors new. More people to coordinate (could add a week or two per review).**

R. Same as Q.

S. Applicant could always challenge an unreasonable requirements in court. No different.

Staff w/ Applicant



Revised Process (Impact)

■ Suggestions

- We are having trouble with Technical Advisory Board
 - Appropriate engineers are also the ones hired for the job and don't want to lose the employment opportunity.
 - They might take assignment if not working that specific job.
 - Looked at professor at ASU. He did not feel qualified.
 - Do have third party, on-call engineer to serve as member
- Changed "TAB" to "Technical Advisors" to T-Engineer
 - Provides back-up to T-Engineer; Uses engineers available & relevant
 - Reduces time if no board meeting



Decision Point

- Is there majority support for items L-S of the Safety and Construction Plan Reviews?



Revised Process

5. Formal Review at HBC:

- U. Applicant notifies neighbors within 1,500' and staff issues a "Notify Me" alert.
- V. ~~Construction Staging and~~ Safety Improvement Plans are attached to HBC packet. Members of the public or HBC members may ask clarifying questions.
- W. Members of public and their engineers can argue that plans are or are not adequate. HBC members can argue not adequate. Town Engineer, in sole discretion, may add, delete or modify plans then or during Building Permit stage.
- X. If neighbors think plans are inadequate, they can challenge in court. No internal appeal procedure

Revised Process (Impact)

5. Formal Review at HBC (How Different)

- U. Notification of neighbors within 1,500' not new. “Notify Me” alert is new.
- V. ~~Construction Staging Plan new.~~ SIP materials of geotech report, seismic refraction, civil drawings not new. Have always been attached and HBC or public could ask questions.
- W. Discussion of Plans and what should or should not be in are all new. (Additions could add time & cost money for applicants) HBC may be concerned they are not final decision maker.
- X. Neighbors have always had legal recourse on Town actions.

Decision Point

- Is there majority support for items U-X of the HBC Formal Plan Review?
- Building Permit process unchanged, unless move Construction Staging Plan to here.



Exhibit F - Estimated Time Line Chart

Estimated Review Times	2 Months	1 Day	7 Months	1 Day	6 Months	
Application Submittal & Concept Reviews	4 to 8-week review depending upon completeness and compliance					
HBC Concept Review	Once deemed complete, submittal goes to HBC for Concept Review	HBC reviews plans & receive neighborhood input. No action taken – input & direction given.				
Formal & SIP Plan Submittal & Reviews			2 to 7-month review depending upon completeness and compliance			
HBC Formal Review				HBC reviews and takes action – approve, approve with stipulations, deny, or continue.		
Building Permit Submittal with Construction Staging Plan					Applicant submits building permit and Construction Staging Plan after HBC approval. Town Bldg. Dept & Eng. Dept review for compliance and completeness.	15 business days per review. Depending upon completeness, new homes average 3 reviews. Average of 4 to 6 months to get Building Permit



Exhibit H – Typical HBC Stipulations

1. All construction parking shall be located on the property as much as possible. Any offsite parking shall be confined to the north side of the street. No construction materials will be allowed to be stored on the Town's right-of-way;
2. No final approval or certificate of occupancy shall be issued until all hillside stipulations and all Town Code requirements are complied with, including, but not limited to, landscaping, fire flow, fire safety and all onsite and offsite improvements;
3. The limits of construction and proposed disturbed areas shall be clearly staked in the field, with visible roping, prior to and during construction and shall conform to the approved individual site analysis plan.
4. Noise from construction that can be heard off-site, including, but not limited to, hydraulic ram hammers, equipment used to cut through rock, machinery with audible back-up warning devices, powered machinery, truck delivery and idling, constant and persistent hammering, shall comply with Article 8-10, Nuisance Noise, as set forth in the Town Code. Heavy Equipment and construction-related deliveries are generally limited between the hours of 7:00 a.m. and 5:00 p.m. Monday through Friday; no work on Saturday, Sunday or legal holidays. Exceptions include a one hour early start time in summer, time exceptions granted by the Town Manager, and construction not defined as Heavy Equipment or deliveries that can occur outside the 7:00 a.m. to 5:00 p.m., Monday through Friday, time frame.

Prior to issuance of a building permit, the applicant shall submit a hillside assurance in the amount of \$\$\$\$.



Construction Staging

- Plan to Address: (Same list but at Building Permit)
 - Location of construction entrances and exit
 - Location of equipment and material staging/storage
 - Circulation for construction vehicles plan
 - Conveyance of neighborhood traffic
 - Trash storage/removal plan
 - Constructing Fencing plans
 - Location of toilet facilities
 - Construction means and methods narrative



Construction Staging (Impact)

- Estimated Cost - \$2,500 to \$5,000
- Many things already required in Construction Regulations
- Time Frame – approximately 1 week to 1 month depending upon how often and how quick turn in redlines
- Suggestion – Civil drawings to substitute for means and methods narrative.



Decision Point

- Is there majority support for a Construction Staging Plan?



Triggers for Safety Plan

- Conditions that create hazards to person or property in vicinity of Building Site:
 - Drainageways (above and below surface)
 - Difficult access to site
 - Unstable rock formations
 - Steep slopes
 - Loose Fill
 - etc.



Safety Improvement Plan

- Plan to Address:
 - Conditions Identified and Mitigated Using:
 - Drainage Reports
 - Seismic Refraction Survey
 - Civil Drawings
 - Geotech Reports
 - Require applicant address recommendations of Geotech report
 - Require applicant to pay for inspection of those recommendations
 - Blasting



Safety Improvement Plan (Impact)

- Surveys, Geo-technical Reports, Seismic Refraction Reports necessary for addressing risks, already required. So minimal impact.
- Addressing Geotech Report Recommendations is new. Could impose a significant cost. Definite cost to inspections (\$\$-\$\$\$)
- Time Frame – adds 3-6 months to the HBC process depending upon number and scope of redlines, turnaround times, quality of work. May only add minimal length to overall time since may have required 3rd party review anyway. Having more engineers review adds time.



Exhibit K – Blasting

- Compared Town's Code with 5 AZ City Codes
- Primary Differences that Other Cities Require:
 - Blasting Mats
 - More Detailed Blasting Schedule
 - Larger Pre-Blasting Radius (500' instead of 300')
- Following Slides Provide Summary Comparison



Town of Paradise Valley

- **Blasting Operation Code – Section 5-10-4**
- **Pre-Blasting Survey Radius of 300'**
- **May require applicant to notify neighbors within blast radius a minimum of 24 hours before blasting**
- **No requirement for blasting mats**

City of Phoenix

- **Blasting via City Fire Code, which references International Fire Code**
- **No Pre-Blasting Survey Radius Identified**
- **Notify utility companies**
- **Blasting mats or other means of protection required in close proximity to utilities or structures**



Town of Paradise Valley	City of Scottsdale
<ul style="list-style-type: none"><li>▪ Blasting Operation Code – Section 5-10-4<li>▪ Pre-Blasting Survey Radius of 300’	<ul style="list-style-type: none"><li>▪ No Blasting Code/Ordinance in their City Code. Follow the International Fire Code requirements and the National Fire Protection Association Guidelines.<li>▪ Pre-Blasting Survey Radius of 300’



Town of Paradise Valley	Town of Fountain Hills
<ul style="list-style-type: none"><li>▪ Blasting Operation Code – Section 5-10-4	<ul style="list-style-type: none"><li>▪ No Blasting Code/Ordinance in their City Code. Follow the International Fire Code requirements, American Task Force guidelines, and the National Fire Protection Association Guidelines.



Town of Paradise Valley	Town of Carefree
<ul style="list-style-type: none"><li>▪ Blasting Operation Code – Section 5-10-4	<ul style="list-style-type: none"><li>▪ Blasting Operations Code – Article 10-5<li>▪ Carefree code very similar to TPV blasting code (both in content and format).



Town of Paradise Valley	Town of Oro Valley
<ul style="list-style-type: none"> ▪ Blasting Operation Code – Section 5-10-4 ▪ Requirements similar to blasting schedule (time limits, signage requirements, etc.). ▪ No requirement for blasting mats 	<ul style="list-style-type: none"> ▪ Blasting via International Fire Code and Town Fire Code ▪ Requires blasting schedule with site’s phased location, proposed number of holes, and time for loading shots and time for blasting. ▪ Blasting mats required for any structures and roadways within 500’ of blasting area. Earthen cover required when structure or roadway between 501’ and 1,320’ of blasting area.



Exhibit E – Hillside/Flat Land Comparison

Regulations/Requirements	Flat Land	Current Hillside Code	Proposed Hillside Code
Committee/Public Body Review	No – If Code Compliant Yes – BofA if Seek Variance	Yes – HBC Review Yes – BofA if Seek Variance	Yes – HBC Review Yes – BofA if Seek Variance
Construction Staging Plan Review	No	No	Yes
Safety Plans	No - Building Code Compliance at Bldg Permit	Yes - Geotech & Drainage Reports - Building Code Compliance at Bldg Permit	Yes - Geotech & Drainage Report - Building Code Compliance at Bldg Permit - Technical Advisory Group Review
Neighborhood Notice	No – If Code Compliant Yes – BofA if Seek Variance	Yes – Concept, Formal & Combined Reviews Yes – BofA if Seek Variance	Yes – Application Submittal, Construction Staging Submittal, Safety Plan Submittal, Concept Review, Formal Review & Combined Review Yes – BofA if Seek Variance
Process/Time	Community Development Code Compliance Review (15 working days per review)	- Hillside Building Committee Review (2 – 6 months depending upon scope of Improvements) - Community Development Code Compliance Review (15 working days per review)	- Hillside Building Committee Review (5 – 9 months depending upon scope of Improvements) - Community Development Code Compliance Review (15 working days per review)
Heights	- 24' from Lowest Natural Grade - Open Space Criteria	- 24' Above Natural Grade - Overall 40' Height Limit	- 24' Above Natural Grade - Overall 40' Height Limit
Disturbance Limits	No	Yes	Yes
Fences	Yes – Solid & View	No – Limited to Retaining Walls, Mechanical Screens, and View Pool Barriers	No – Limited to Retaining Walls, Mechanical Screens, and View Pool Barriers
Floor Area	25% Max	25% Max	25% Max
Disturbance Limits	No	Yes	Yes
Insurance	No	No	Yes



Safety Section Feedback (Cont.)

■ Initial Feedback

- Can only survey conditions on lot controlled
- Concern about added time element
- Burden should be responsibility of contractor not Town
 - Could safety plan be reviewed by project engineer?
- Definition of Narrow Rd will include all PV streets
- Seismic surveys not necessary on lots <15% slope
- Question the intent of the new process



Safety Section Feedback (Cont.)

■ Suggestions

- Survey 200' in every direction from building pad, “up to the limits of the property”
- Redefine Narrow Streets to mean “any street where if parking occurred on both sides, a 12 foot lane could not be preserved.” See sample strips in packet.
- Increase definition of boulder from 10” to 24”.



Decision Point

- Is there majority support for a Safety Improvement Plan?



Decision Point

- Is there majority support for any changes to the Blasting section of the code?



NEXT STEPS

- Incorporate input and edits from today's meeting in text language.
- Tentative Schedule:
 - May 24 – Study Session on Ordinance Text
 - Town Manager Work Group and Bill Sims Review Text between now and May 29.
 - May 31 – Study Session on revised Text
 - June 14 – Public Meeting and Action



Questions?



Exhibit G – DC Ranch HOA Regs

- No construction assurance/bond is required. They do, however, require a \$10,000 construction deposit that is used to repair damage to common HOA property or to leverage the builder to complete the project per plans. Jan stated that there have been many instances where the developer just walks away from the deposit rather than completing items that may not have been constructive exactly per plans.
- They require a “builder’s agreement” to be signed which does have \$2 million of insurance and DC Ranch is named as an additional insured.
- They do not require a construction staging or safety plan. They typically rely on the grading plan and the contractor is required to stage inside the disturbance area shown on the grading plan. It is also up to the contractor to construct the project in a safe manner.
- DC Ranch has a development agreement with the City of Scottsdale and they have modified City of Scottsdale Environmentally Sensitive Land Ordinance (ESLO) requirements.
- The DC Ranch plat requirements are typically more restrictive than the City of Scottsdale and they have modified City of Scottsdale Environmentally Sensitive Land Ordinance for land disturbance and Natural Area Open Space easements.
- They do typically follow the City of Scottsdale guidelines for driveway slopes but there have been exceptions.
- Plats were typically laid out so that no lot has a buildable area with slopes exceeding 35%.
- DC Ranch has a rolling height limit of 30’ and the overall maximum height of 50 feet. However, they do allow decorative elements to extend into the 30’ rolling height and go up to 40’.
- Concealed rock cuts are allowed but require a geotechnical report regarding stability.
- They look at retaining wall heights on a case-by-case basis.
- They have no maximum Floor Area Ratio requirement.
- When asked about boulders and rock outcroppings Jan stated that most of their topography does not have these elements that would cause concerns and that they do not require any additional geotechnical information.
- They do not have any neighborhood notification requirements when a new house comes through the design review process and the Covenant Commission reviews plans in the best interest of all property owners in the community.
- Paint colors have a maximum LRV of 36 for smooth materials and a maximum LRV of 42 for textured materials.