September 24, 2013

Jared Anderson, PE Weber County Engineer 2380 Washington Boulevard, Suite 240 Ogden, Utah 84401



Subject: Summit at Powder Mountain Phase 1 PRUD - Phase 1A & 1B - Initial Review

Mr. Anderson,

The following are comments and responses pertaining to the civil engineering plans from the initial review performed by your office and received on August 8<sup>th</sup>, 2013.

### PHASE 1A Plan Set Specific Comments

1. Need grading, pavement section, and plan and profile for private drive - A separate plan set has been provided for the private driveway and culinary water utilities for the estate lots. We are currently addressing the feasibility of on-site wastewater treatment for the lots in the additional plan set. This includes lots 1-4, 9, and 10. We have assessed the soil conditions and found them suitable. At this point we are in conversations with Weber-Morgan Health Department regarding the type of system that will be acceptable. Additional information will be provided when as system is selected.

#### 2. All Sheets

- a. All lots have been labeled in each drawing Completed
- b. Building envelopes have been shown in each drawing Completed
- c. Utility and lift easements have been shown in applicable drawing. Slope, ski, and trail easements are to be added after initial design is completed Completed
- d. Water and Sewer service has been shown going to all lots Completed
- e. Note on Plat indicating to verify if sewer needs to be pumped from house to the main line In our opinion, this item is not appropriate on the plat or improvement plans.

# 3. Sheet 1.02

a. Some sheet callouts are incorrect. – All sheet callouts have been corrected.

# 4. Sheet 1.03

- a. Show that both horizontal centerline intersection design comply with AASHTO Intersections
  have been designed to AASHTO standard design requirements. We will provide an exhibit
  illustrating design compliance.
- b. Show easement for (1)SS-P Easement is clearly identified.
- c. Show all easements (utility, slope, drainage, ski, trail, etc.)— Easement is clearly identified.
- d. Show easement for 8" SS Easement is clearly identified.
- e. Note showing minimum coverage on (1)SS-P A note has been added.

#### 5. Sheet 1.04

a. Storm drain size discrepancy (18"SD vs. 23.000RCP) – Storm drain pipe size has been corrected.

# 6. Sheet 2.00

- a. Will the water line be revised due to Master Plan change? Or will you have a 14" dead end water line? Waterlines have been revised per the new tank location.
- b. Consider extending guardrail along outside of curve for safety Guardrail has been extended.

## 7. Sheet 2.01

- a. How does fusion coupling work on pressurized sewer line from a 3" to a 4"? The connection has been changed to 3".
- 8. Sheet 2.02
  - a. No grading shown Grading has been turned on.
  - b. Confirm that a 4" force main is intended to serve a single family dwelling Pressure sewer lateral for the single lot has been changed to be per the typical detail.
  - c. How will 14" WL connect to 12" WL, need consistency Pipe sizes have been updated per the revised design associated with the revised tank location.
- 9. Sheet 5.00
  - a. No grate callout for the storm drain. Storm drain grate detail has been added.
- 10. Sheet 5.10
  - a. HP seems low HP has been verified.
  - b. Verify electrical service Electrical design is being finalized currently by Rocky Mountain Power currently. NV5 will provide further detail regarding electrical service upon approval from RMP. Bowen and Collins is finalizing grinder station electrical design currently. Nv5 will provide further details upon final submittal from Bowne and Collins.
  - c. Discharge diameter does not match force main size Force main has been changed to 3" diameter to match discharge from grinder station.

### PHASE 1B Plan Set Specific Comments

- 1. All sheets
  - a. Label all lots Completed
  - b. Show building envelopes Completed
  - c. Show all easements (utility, slope, drainage, ski, trail, etc.) Completed
- 2. First sheet 1.03 misnumbered Sheets have been re-numbered.
- 3. Sheet 1.03
  - a. Storm drain size discrepancy (21"SD vs. 24"RCP) Storm drain pipe size has been corrected.
- 4. Sheet 2.00
  - a. Sewer manholes mislabeled Sewer manholes labels have been updated.
- 5. Sheet 3.00
  - a. Cross sections 11+00 to 14+00, and 17+00 do not appear to match grading plan; missing 19+00 Cross sections have been updated.
- 6. Sheet 5.10
  - a. Force main outlet does not match force main size Force main size has been changed to 2.5" diameter to match discharge from grinder station.
  - b. Delete second sheet 5.10 Second sheet has been deleted.

Please let me know if you have any additional questions or comments

Sincerely,

Ryan Cathey, PE

**Engineering Manager** 

NV5, Inc.