ASPEN SNOWMASS®

ASPEN MOUNTAIN

2018 MASTER DEVELOPMENT PLAN

January 2018

ASPEN SNOWMASS.

ASPEN MOUNTAIN

2018 MASTER DEVELOPMENT PLAN

January 2018

ACCEPTED BY: _____

Scott Fitzwilliams
Forest Supervisor
White River National Forest

DATE: 3/2/2018

PREPARED BY: SE GROUP

CONTENTS

LIST OF TABLES

LIST OF CHARTS

LIST OF FIGURES

APPENDICES

Note: all appendices are provided in electronic format only


ASPEN
ASPEN

III. SITE INVENTORY

Chapter III provides a brief overview of some of the unique physical characteristics of the SUP area that were taken into consideration in the preparation of this MDP.

A. TOPOGRAPHY AT ASPEN MOUNTAIN

Aspen Mountain can be generally described as three separate peaks and/or ridges: Aspen Mountain (including Gentleman's Ridge), Bell Mountain, and Ruthie's Ridge. The topography at Aspen Mountain is typical of the surrounding Elk Mountains, consisting of a series of ridges and sub-ridges with steep rugged slopes. The ski terrain at Aspen Mountain lies entirely below tree line in mostly north-facing aspects, with some terrain falling to the east and west off of the northward running ridges. This is an ideal topographic scenario for a ski area, as it provides a variety of aspects as well as efficient access and circulation between the different peaks that comprise the ski area.

The topography at Aspen Mountain caters to higher ability level guests, with no sustained grades suitable for beginner or novice guests. Although this limits opportunities available for all ability levels, the topography at Aspen Mountain is highly desirable to the more experienced skier or rider that makes up the typical visitor profile of the greater Aspen area. Further, nearby ASC managed resorts (Aspen Highlands, Buttermilk, and Snowmass) have a greater distribution of lower angle terrain suitable for all ability levels.

The highest elevations at Aspen Mountain are served by the Silver Queen Gondola, the Ajax Express, and Gent's Ridge lift. The top terminals of these lifts are located at approximately 11,100 to 11,200 feet above mean sea level (AMSL). The top terminal of the Silver Queen Gondola is at approximately 11,200 feet AMSL. The lowest elevation is at the bottom terminal of Silver Queen Gondola at approximately 7,950 feet AMSL. Thus, total vertical drop at Aspen Mountain is approximately 3,250 feet. The surrounding City of Aspen begins at the bottom terminals of the Silver Queen Gondola and Lift 1A at an average elevation of 8,000 feet AMSL.

B. SLOPE GRADIENTS AT ASPEN MOUNTAIN

As discussed in Chapter II, terrain ability level designations are based on slope gradients and terrain features associated with the varying terrain unique to each mountain. Regardless of the slope gradient for a particular trail, if it feeds into a trail that is rated higher in difficulty, its ability level must be rated accordingly. Conversely, if a trail is fed only by trails of a higher ability level than the maximum slope of the trail would dictate, it also must be rated accordingly.

Slope gradients at Aspen Mountain are depicted in Figure III-1.

- *0 to 8% (0 to 5 degrees):* too flat for skiing and riding, but ideal for base area accommodations and other support facility development
- *8 to 25% (5 to 15 degrees):* ideal for Beginners and Novices, and typically can support some types of development
- *25 to 45% (15 to 25 degrees):* ideal for Intermediates, and typically too steep for development
- *45 to 70% (25 to 35 degrees):* ideal for Advanced and Expert skiers/riders, and pose intermittent avalanche hazards
- *>70% (>35 degrees):* too steep for all but the highest level of skiing/riding. These areas are typically allocated as Expert-only and are closely managed by the resort operator for avalanche control.

As displayed in Figure III-1, all slope gradients are present at Aspen Mountain; however, not all slope gradients are sustained and the entirety of the terrain is characterized by intermediate to expert ability level terrain. As described in the topography section, this deficiency is addressed by greater distributions of lower angle terrain at nearby ASC managed resorts (Aspen Highlands, Buttermilk, and Snowmass). The terrain at Aspen Mountain is largely characterized by steep gladed terrain separated by ridges and sub-ridges. The terrain dropping off the ridges and sub-ridges tends to be quite steep, in a few locations steeper than desired for skiing. In some cases, this presents challenges for consistent fall-line skiing, but the majority of the ski area has consistent grades. In general, intermediate trails tend to follow north facing ridge lines while advanced and expert ability level terrain drops off of ridges on steeper slopes facing east and west.

C. SOLAR ASPECT AT ASPEN MOUNTAIN

Slope aspect plays an important role in snow quality and retention. The variety of exposures on Aspen Mountain present opportunities to provide a range of slope aspects that allow guests to respond to changes in sun angle, temperature, wind direction, and shadows. The following are typical constraints in relation to the various angles of exposure:

- *North-facing:* ideal for snow retention, minimal wind scour, minimal sun exposure
- *Northeast-facing:* ideal for snow retention, minimal wind scour, minimal sun exposure
- *East-facing:* good for snow retention, some wind scour, morning sun exposure
- *Southeast-facing:* fair for snow retention, moderate wind scour, morning and early afternoon sun exposure
- *South-facing:* at lower elevations, poor for snow retention, moderate wind scour, full sun exposure
- *Southwest-facing:* poor for snow retention, high wind scour, full sun exposure
- *West-facing:* good for snow retention, high wind scour, late morning and afternoon sun exposure
- *Northwest-facing:* good for snow retention, moderate wind scour, some afternoon sun

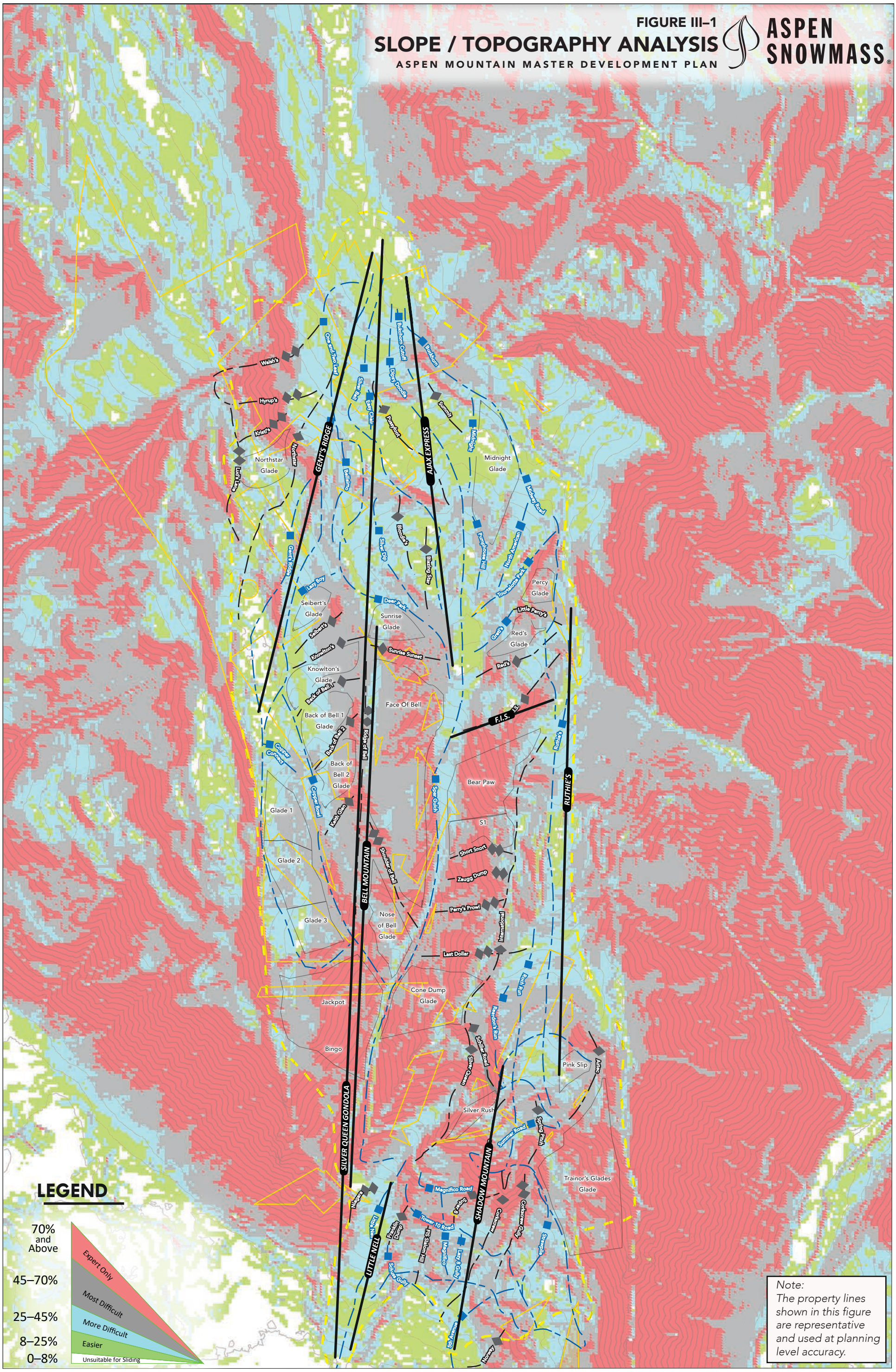
As described in the topography section, the majority of the skiing terrain at Aspen Mountain faces north, with some eastward and westward facing aspects. This range of exposures is ideal, allowing for good snow retention while providing a variety of sun exposures and snow conditions. Aspects of Aspen Mountain are depicted in Figure III-2.

FIGURE III–1

SLOPE / TOPOGRAPHY ANALYSIS

ASPEN MOUNTAIN MASTER DEVELOPMENT PLAN

ASPEN SNOWMASS®



Prepared by:

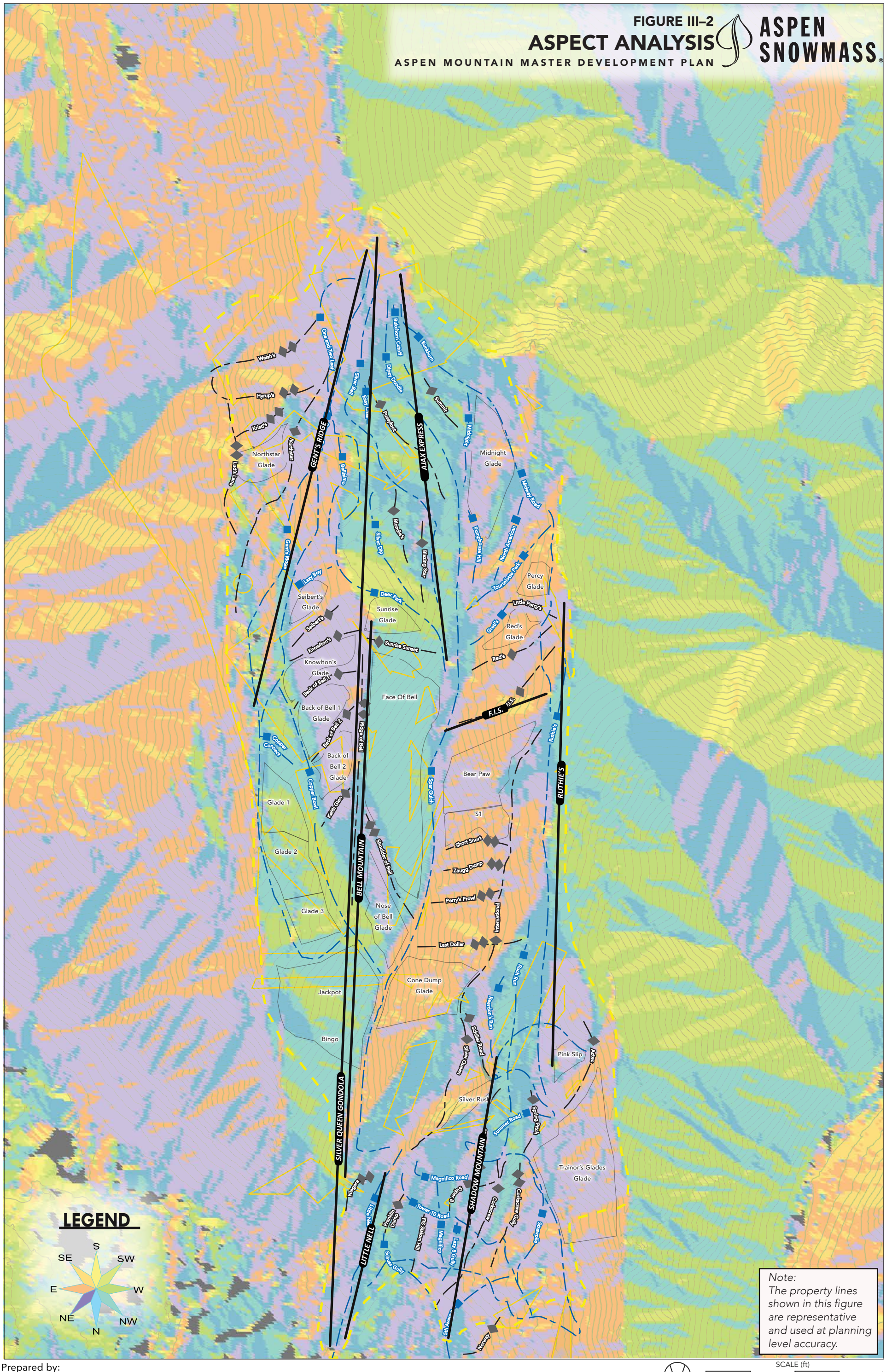
SE GROUP

FIGURE III–2

ASPECT ANALYSIS

ASPEN MOUNTAIN MASTER DEVELOPMENT PLAN

ASPEN SNOWMASS®



LEGEND

Note:
The property lines shown in this figure are representative and used at planning level accuracy.

Prepared by:

SE GROUP

N

SCALE (ft)

0 50 100 150 200