

As requested, I have completed a review of the Opinion of Probable Infrastructure Costs associated with the Downs Project. My understanding of the scope of work to be performed as part of this analysis was to confirm that the assumptions made in the Downs Design Team's cost estimates are reasonable and that the general costs associated with the non-residential components of the project are factored correctly.

Materials Provided

I was provided complete and detailed cost information and had access to the Downs Design Team throughout my analysis. The cost information was presented across ten cost categories; however, for purposes of my review I identified six cost categories (explained below) and further narrowed the analysis to focus on the nonresidential development. From the detailed information provided I have been able to prepare detailed work papers for each element of costs considered. All work performed in this analysis was done under a Non-Disclosure Agreement to protect the proprietary nature of the cost information.

Phase 1 of the Downs project is currently under construction near Route One. The Contractors' costs associated with that portion of the project have been used as one piece of a larger packet of supporting information provided by Gorrill-Palmer and Aceto Landscape Architects. In addition to this information, GP provided an overall Master Plan, Opinion of Cost, and multiple bid tabulations from recent construction projects throughout the region. The future phases have been conceptually laid out as part of a Master Plan for the project.

In addition to the cost estimates provided by the Downs Design Team, I have reviewed recently completed construction projects within the Town of Scarborough to ensure that unit costs were comparative and assumptions were credible.

Analysis Methodology Used

To complete the review analysis of the data provided by the Downs Design Team I first confirmed quantities. With the relative conceptual nature of the plans at this time, independent measurements of the necessary construction elements were

tabulated in a broad manor. From these measurements I separated out what the Town may consider core infrastructure and roadway network necessary to implement the non-residential aspects of the project. Although this is a mixed use project, my analysis focused on the arterial roadway network and related utility infrastructure required to enable the non-residential development and included the Downtown and Innovation District (see attached map). From costs of similar projects, as outlined above, I was able to provide a general unit cost for the major elements of the project. These elements have been broken out into the following categories:

- Roadway Network:
 - Including arterials and main collector roads within the project.
 - Linear cost per foot of roadway which includes: roadway design, construction, permitting, roadway curbing, sidewalks. esplanades, drainage infrastructure, utilities, street lighting, and street trees. Country of the
- Additional Infrastructure
 - Including necessary utilities (sewer and water) within the project that are not covered under the roadway network category because it falls outside of the traditional street right-of-way.
- Intersections and Offsite Improvements
 - This includes the cost of necessary improvements at the main intersections: Route One, Haigis Parkway, and Payne Road.
 - This also includes the widening of Payne Road for additional 0 capacity of the existing roadway from the Payne Road intersection toward Gorham Road (Route 114).

- Environmental Costs
 - This cost includes compensation fees necessary during State and Federal permitting of the project for wetland impacts, which is based on today's fee schedule provided by Maine Department of Environmental Protection.
 - In addition, the project is anticipated to provide an estimated 0 21,000 linear feet of trails.
- Innovation District Activation
 - This cost includes common elements for the development of the overall Innovation District such as a common stormwater management system, which would fall outside of the future rightof-way and lots, but is necessary for permitting and development of the area.

- > Utility Fees
 - Development of expanded utilities networks, including electricity, natural gas and water supply

There were a few items provided by the Downs Design Team that have not been reviewed or verified during this analysis: Loan Closing Fees / Interest Carrying costs, local streets that would be necessary for more residential development than non-residential development, and preparation costs for the individual lots within the Innovation District. The Downs Design Team has valued the costs of these items at nearly \$80,000,000.

In addition to confirming construction, design and permitting costs related to starting the project today, a "future estimate" has been provided which includes an assumed inflation rate per year of 1.9%. Because this project is anticipated to be developed over the next 5 to 10 years, a factor was carried in order to provide a range of costs.

Analysis Conclusions

Based on the analysis outlined in this memorandum, I have confirmed the following:

- 1. The assumptions and costs related to the roadway network and core infrastructure provided by Gorrill-Palmer appear to be reasonable and complete for the level of design provided at this time.
- 2. The quantities related to the Opinion of Probable Cost provided by Gorrill-Palmer appears to be relatively accurate and complete for the level of design provided at this time.

While the assumptions and costs appear to be reasonable, I have scrutinized the numbers more extensively and found a few areas of discrepancies. While these are minor in nature they bring to light the difference in opinion on what is defined as core infrastructure that constitutes extraordinary costs. Therefore in my opinion the probable cost of the enabling infrastructure related to the non-residential development of the Downs is in the range of \$60,000,000 to \$80,000,000. The costs I have verified, when considered with the additional costs they claim, would place overall project costs in the range of \$114,000,000 to \$151,000,000.

This analysis resulted in my own independent Opinion of Probable Infrastructure Costs. It should be noted that my opinion is within 1% their cost estimate. It should be noted that the cost estimate provided by the Downs Design Team, and review of that cost estimate, is based on limited information that is available at this time. This analysis does not benefit from a full design and is based on my opinion as a licensed professional engineer.







