



TOWN OF FAIRFAX

STAFF REPORT

September 17, 2020

TO: Planning Commission

FROM: Ben Berto, Director of Planning and Building Services

SUBJECT: Digitized Zoning Chapter 17.060 Ridgeline Development maps

BACKGROUND

Staff has been working on developing digitized and georeferenced versions of the early 1970's paper baseline maps which are referenced in Title 17 of the Fairfax Municipal Code (Zoning), and code clarifications appurtenant to such maps.

There is consensus that "Visual Resources Map No. 9" referenced in Zoning Chapter 17.60 is the same map as what is shown in the current General Plan as Figure S-1 "Map of Visual Resources".

Staff was directed to continue digitizing the horizontal and vertical Ridgeline Scenic Corridor dimensions called out in Section 17.060,020 Definitions.

DISCUSSION

Georeferenced map

It was noted at the August 20 meeting that 118 parcels located in the ridgeline scenic corridor were not included in the historic list of parcels accompanying the historic map. The georeferenced version of the historic map enabled the identification of the 118 additional parcels due to its ability to be synchronized against the Assessor's Parcel maps covering the areas in question. in captured in the digitized, georeferenced version of the map. Staff suggests entitling this map "Map of Visual Resources - Georeferenced", to established that it is a georeferenced version of the current General Plan map of the same name.

Map Development

Staff is focusing on developing draft georeferenced ridgeline map versions that incorporate 150-foot horizontal and 100-foot vertical. The intention is to apply the Ridgeline Scenic Corridor requirements to every version of the map that is eventually adopted, in addition to the historic map. Ridgeline regulations will cumulatively to whichever map encompasses the most area for a particular parcel in question. With your Commission's direction, once the digitized map versions are in final form, staff will develop revised zoning ordinance language applying all maps cumulatively.

As is described below in greater detail, some challenges have emerged in trying to apply the 150' horizontal and (especially) 100' vertical dimensions to the ridgelines.

100'/150' Ridgeline Scenic Corridor map

The Town has heretofore not been able to accurately map is the area contained within the Ridgeline Scenic Corridor based on the definition section in Section 17.060.020 that reads

...further defined as the area on either side of the ridgeline within 150 feet of the horizontal distance measured at right angles to the ridgeline, or 100 feet vertically of the major ridge, whichever is a greater area...

GIS mapping accurately defined the Ridgeline Scenic Corridor boundaries based on the horizontal and vertical distances from a lidar-developed watershed boundary map in Marin Map. The beauty of using this map to define the ridgeline is its intuitive basis, on either side of the point in space delineating the ridgeline, the water runs one way into one watershed, and the opposite way into another.

150-foot horizontal distance ridgeline map

The definition of a Ridgeline Scenic Corridors in Section 17.60.020 states a 150-foot horizontal distance, measured perpendicular to and extending on both sides of the ridgeline is one of the ways to measure the ridgeline scenic corridor. The Town's GIS specialist found it relatively straightforward to map this width for the most part, as shown in Attachment A. As can be seen, the 150-foot horizontal width (total 300-foot0 it closely approximates the georeferenced Map of Visual Resources / Visual Resources Map No. 9.

There are several instances, however, where the original hand-drawn ridgeline map extends downhill beyond the base of the ridge slope (i.e., where the steep hillside intersects with the relatively flat alluvial "peneplane"). One of these is the westernmost mapped ridgeline in Fairfax, which comes down the south slope of the Elliot Preserve, and as shown on the original paper map, actually crosses Fairfax Creek.

The original map erred in extending some of the designated ridges beyond the base of the slope. Not only are the ridges shown where there is no slope, but the corresponding ridgeline scenic corridor also extends 150 feet out on either side of the flatlands 'ridgeline', affecting properties that are not even on a slope.

Staff recommends that the georeferenced version of the ridgeline clip the originally drawn ridgelines in the old maps, so they do not extend beyond the base of the ridge. Further, the 150-foot horizontal ridgeline scenic corridor widths on either side of the ridgeline should also be redefined so that they do not extend beyond the base of the ridge.

100-foot vertical distance ridgeline map

The ridgeline scenic corridors definition also provides for the area located within 100 vertical feet of major ridges to be within the ridgeline scenic corridor. The 100-foot vertical distance from the ridgeline has proven to be difficult to determine.

For one thing, a “major ridge” is not shown in the Visual Resources Map No. 9/ Map of Visual Resources. However, knowing the historical/archival nature of this mapping effort, Principal Planner Neal found a 1974 map entitled “Surface Hydrology” that calls out “major ridges” (see Attachment B).

As can be seen from the map, there are only two “major ridges” within the jurisdiction limits of Fairfax. Only one of these extends into Fairfax any appreciable distance. The other one of those ridges traverses the skyline to the west of Town, the location, and boundaries of which are relatively straightforward to map.

The other major ridge shown in Attachment B originates to the west of Fairfax and runs downward from roughly west to east.

The downhill terminus of this major ridge results in a significant mapping interpretation problem. Similar to the Elliot Preserve map, the ridgeline called out in the original Visual Resources Map/Visual Resources Map No. 9 runs too far downhill. Although the major ridgeline does not extend into the flatlands, at the ridgeline’s lowest elevation terminus, the 100’ vertical drop from the ridgeline would, if taken literally, encompass the entire flatland area of Fairfax. The defined ridgeline terminates only 80 vertical feet uphill from base of the steep ridge. The remaining vertical distance would therefore have to be taken up by the drop in slope of the relatively flat peneplane (flat alluvial area) extending outwards from the base of the slope. Taken literally, the additional 20 feet in elevation drop necessary to achieve the full 100” vertical drop from the called-out ridgeline would extend the “ridge” completely across the flatland portions of Fairfax (and beyond). Attachment C shows what happens with a literal application of the 100’ vertical drop from the ridgeline terminus.

Even the portions of the lowest 100 vertical foot drop area located on the ridgeline extend hundreds of feet to the sides of the ridgeline. This clearly is not the intent of the ridgeline regulations, as it applies the stringent ridgeline scenic corridor requirements to properties at the bottom of the slope and hundreds of feet from the ridgeline.

Furthermore, there are several instances where the fold in the slopes to the sides of the major ridgeline runs uphill against in the overall downward slope from the ridgeline.

This results in hundreds of feet in width being added to the ridgeline scenic corridor area within the 100-foot vertical distance.

Conclusion

Staff is asking for Commission direction on the following topics:

- Should the Zoning Ordinance be amended to refer to the 2010-2030 General Plan “Map of Visual Resources”, with the understanding that aside from the amended title, both the General Plan and Zoning Ordinance shall use the digitized, georeferenced map?
- Should staff prepare a digital, georeferenced map of the 100’ vertical/150’ horizontal Ridgeline Scenic Corridor, with zoning language to provide the additive nature of this map with to the existing Ridgeline Scenic Corridor map?
- Should the newly digitized and georeferenced map dated July 16, 2020 (see Attachment D) be heretofore considered the official version of “Visual Resources Map No. 9” for zoning reference purposes?

RECOMMENDATION

Provide staff with direction on the three topics outlined above.

ATTACHMENTS

Attachment A – 150’ horizontal distance Ridgeline Scenic Corridor diagram

Attachment B – 1974 Surface Hydrology Map

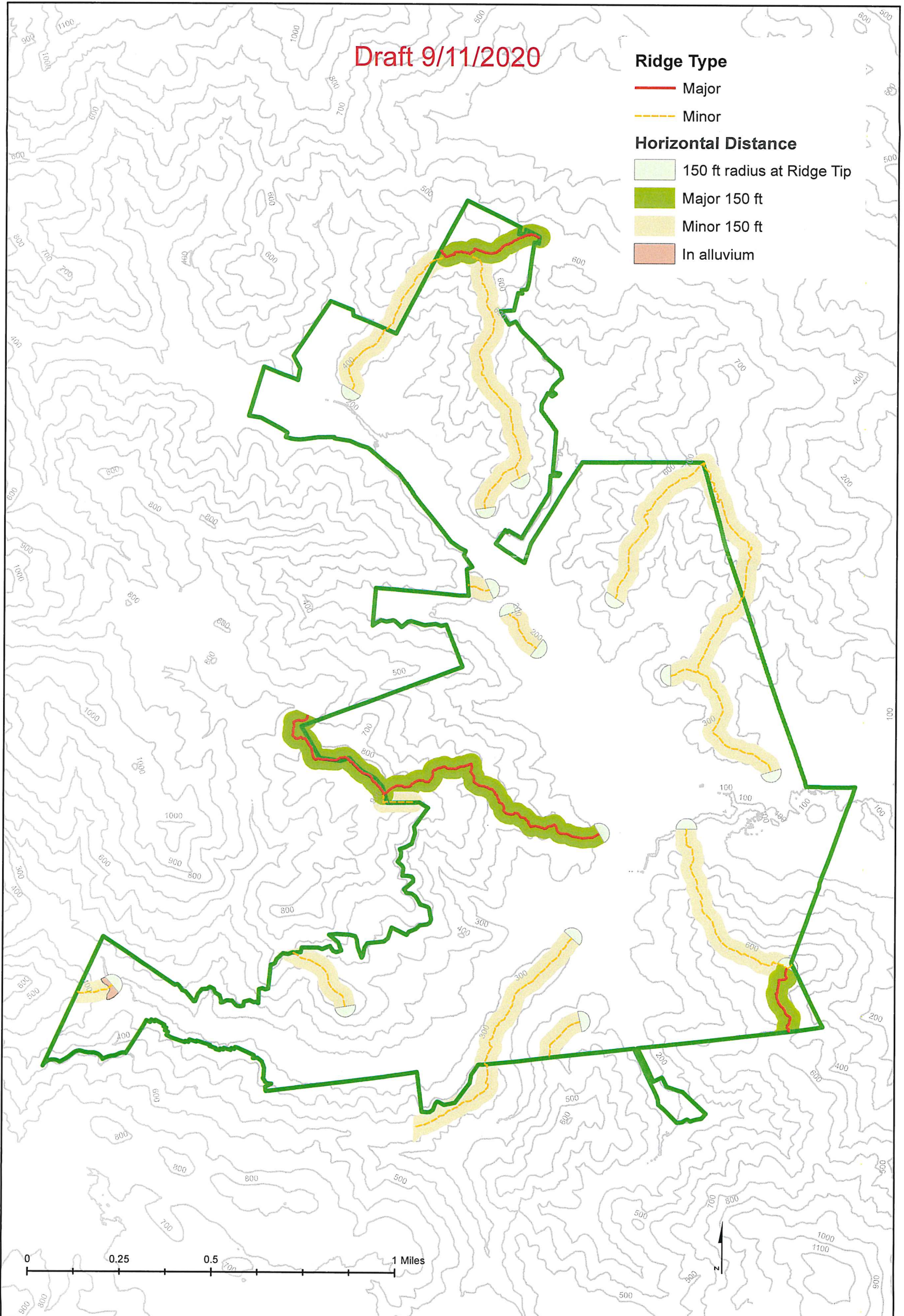
Attachment C - 100’ vertical distance Ridgeline Scenic Corridor diagram

Attachment D – Digitized Fairfax Visual Resources Map No. 9

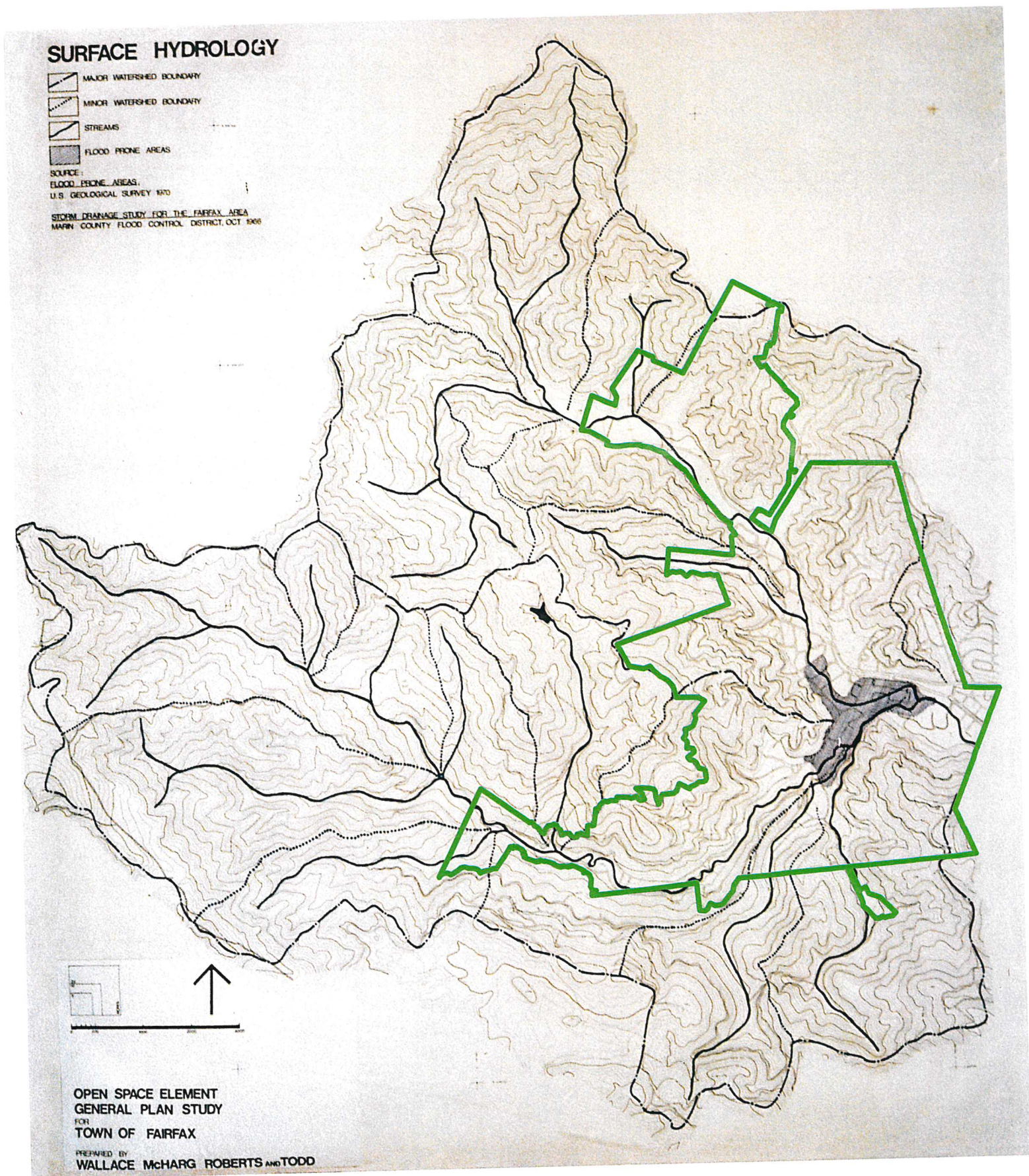
Attachment E – 2010-2030 General Plan Visual Resources Map

Note: Attachment C will be completed and posted to the Town website next week.

Fairfax Ridges 150 Foot Horizontal Distance



Surface Hydrology



0 0.475 0.95 1.9 Miles










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ATTACHMENT C

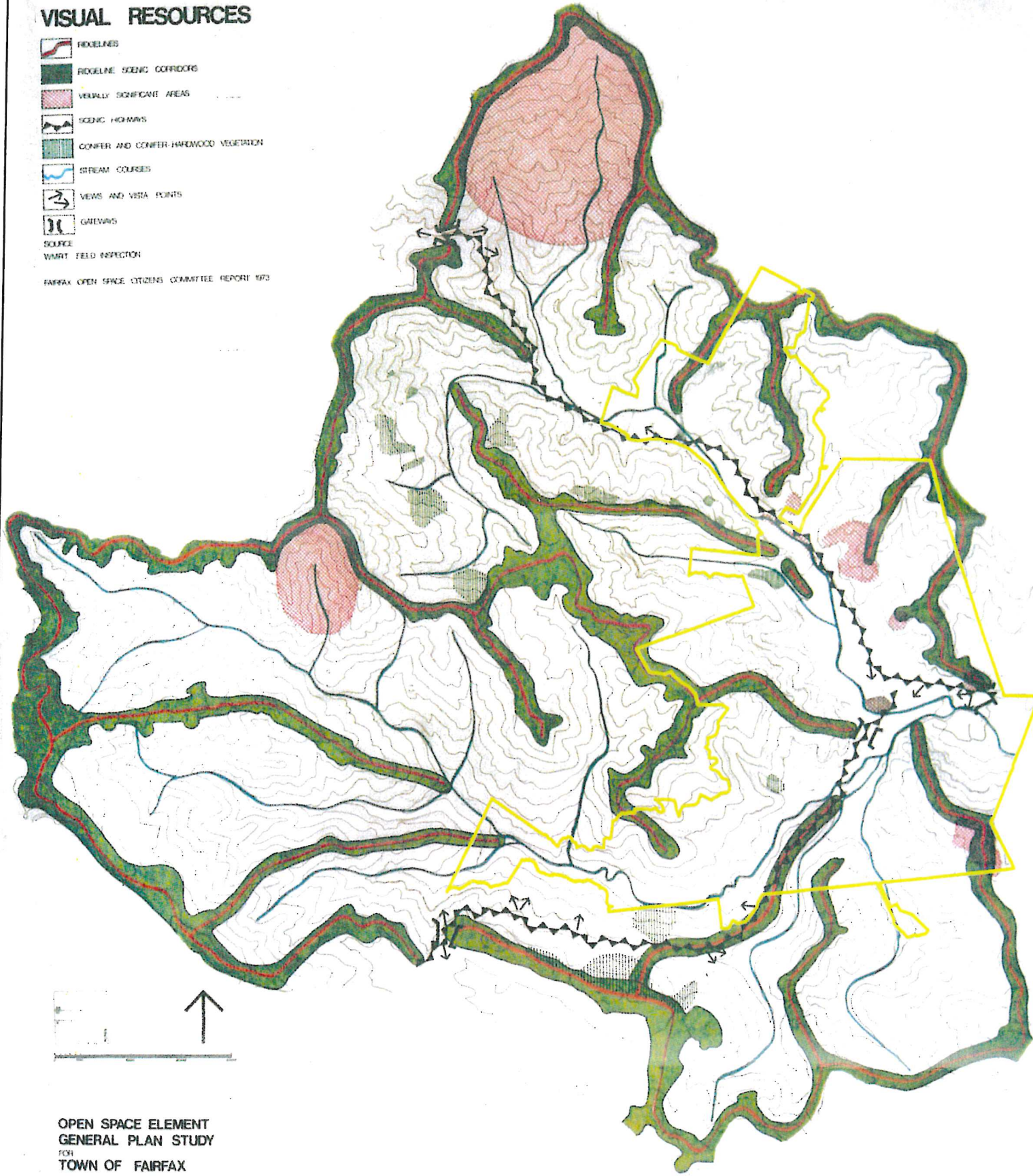
Visual Resources Map No 9

July 16, 2020


VISUAL RESOURCES

-  RIDGELINES
-  RIDGELINE SCENIC CORRIDORS
-  VISUALLY SIGNIFICANT AREAS
-  SCENIC HIGHWAYS
-  CONIFER AND CONIFER-HARDWOOD VEGETATION
-  STREAM COURSES
-  VIEWS AND VISTA POINTS
-  GATEWAYS
-  SOURCE

WAMPT FIELD INSPECTION
FAIRFAX OPEN SPACE CITIZENS' COMMITTEE REPORT 1973



OPEN SPACE ELEMENT
GENERAL PLAN STUDY
FOR
TOWN OF FAIRFAX
PREPARED BY
WALLACE MCHARG ROBERTS AND TODD

 Town of Fairfax

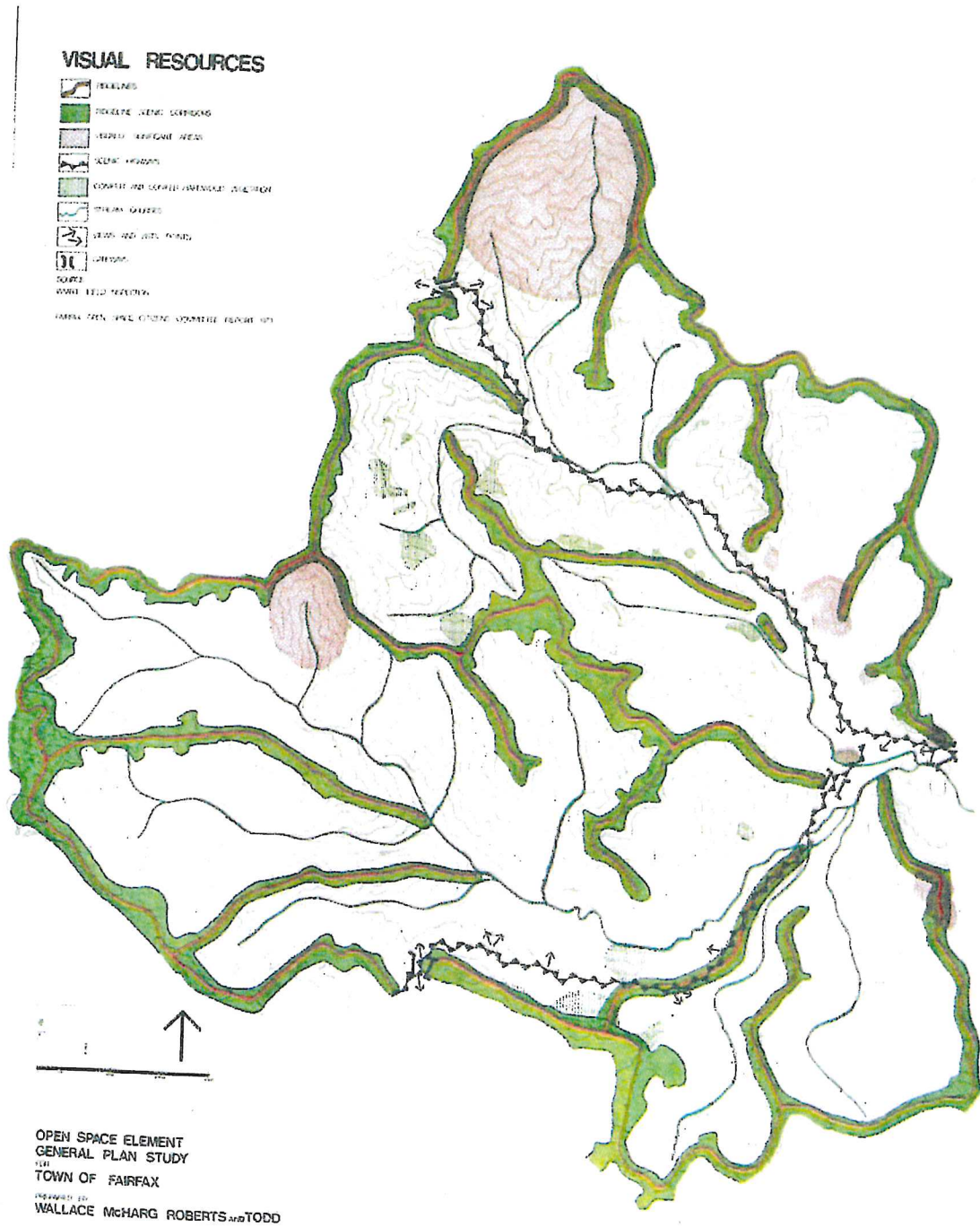


Figure OS-1 Map of Visual Resources