

Property Evaluation

Proposed Orange County Northern Campus Hillsborough, NC

March 29, 2018

Project No. 24032

Prepared For:

Orange County PO Box 8181 Hillsborough, NC 27278



Property Evaluation Proposed Orange County Northern Campus Hillsborough, NC

Purpose

This report will present summary findings regarding the feasibility of developing three parcels located along the south side of US Highway 70 on the west side of Hillsborough, NC for a local government services campus. The subject parcels are identified as PINs 9864392344, 9864398253, and 9864397758, constituting a total land area of approximately 21.3 acres.

The specific facilities proposed for the subject property are a 144-bed Detention Facility to be operated by the Orange County Sheriff's Office; an approximately 17,000 SF administrative facility for the Orange County Department of Environment, Agriculture, Parks, and Recreation; and operational facilities for Parks and Recreation maintenance purposes.

Assumptions and Qualifications

This analysis and resulting opinions are based on current Town of Hillsborough zoning designations and long-range planning documents, applicable land development regulations and policies, typical interpretations relating thereto, mapping and other information provided by others, other available public information, and our substantial experience with other land development projects. The determinations and opinions herein assume that current regulatory conditions will not change in a manner that will adversely or significantly affect development of the subject property.

Site Physical Conditions

The subject property lies on the south side of US Highway 70, approximately 1700 feet east of West Hill Avenue's intersection with Highway 70. The property has approximately 410 feet of frontage on Highway 70, 133 feet of frontage on West Hill Avenue to the southwest, and 200 feet of frontage on Orange Heights Loop to the southeast.

None of the subject property is developed. The majority of the property is currently in a grassed or brush-covered condition, with limited areas of mature and semi-mature wooded areas along the southern and western borders.

An agricultural pond and small stream exist along the western portion of the property, with the stream flowing generally north to south toward West Hill Avenue. East of the stream, overhead electric transmission lines traverse the site within a dedicated and cleared easement, in a generally north-south orientation. These electric facilities are owned by Piedmont Electric Membership Corporation.

The property generally slopes mildly from higher elevations in the north toward lower elevations in the south. Most areas of the site drain to a culvert under West Hill Avenue, with a small portion draining eastward to a small offsite tributary which also drains southward. No steep slope areas exist on the site.

Parcel Summary Data

The following table summarizes selected information relative to various land development parameters for the subject parcels:

Street Address:	1020 US Highway 70 West
Total Acreage:	21.3 acres
Current Land Use:	Vacant
Zoning Jurisdiction:	Town of Hillsborough, ETJ
Current Zoning:	Economic Development District
Zoning Overlays:	None
Future Land Use Designation:	Suburban Office
Municipal Services:	Inside Urban Services Boundary
Environmental Areas:	Stream buffer, wetlands
100-Year Flood Plain:	None
River Basin:	Neuse (Falls Lake)
Street Authority - Highway 70:	NCDOT
Street Authority - West Hill Ave.:	NCDOT
Street Authority - Orange Hts. Loop:	Town of Hillsborough

Zoning and Development Review

The subject parcels are regulated under the planning jurisdiction of the Town of Hillsborough (Town). At Orange County's request, the Town's Board of Commissioners has recently rezoned the subject parcels to Economic Development District. This zoning district allows the proposed land uses to be approved by means of an administrative Site Plan review process, as long as the proposed development is consistent with all Town UDO requirements. Any requested waivers from specific UDO provisions (such as alternate buffers, lighting intensity variations, etc.) would require special consideration and approval by the Town's Board of Adjustment, pursuant to a public hearing limited to the substance of the requested waiver. In our opinion, the current property zoning will adequately accommodate proposed land uses and anticipated development intensity.

In addition to zoning entitlement, detailed plans for development of site infrastructure will require review and approval under typical Town procedures and requirements. These procedures and requirements are not expected to prevent or unduly burden proposed site development.

Public Water Service

Public potable water service and fire protection water service is available from the Town's water system. The water system includes a 6-inch diameter water main along Highway 70, but this existing main is inadequate to serve the subject site. Therefore, project development will require extension of a new 12-inch diameter water main to the site from the intersection of Highway 70 and Holiday Park Road. This connection point is located approximately 1800 feet east of the subject property along Highway 70.

The western portion of the Town's water system along Highway 70 is served by the Northern Water Storage Tank. An existing 6-inch diameter public water main also is present in West Hill Avenue, but this main is served by a different tank which is in a different pressure zone. Therefore, any new water main installed along Highway 70 from the referenced connection point cannot also be connected to the existing main in West Hill Avenue to provide water source redundancy.

Based on system pressure and capacity characteristics provided by the Town, and with the referenced water main extension, the subject property can be adequately served with domestic water service. With these conditions, the site will be marginally served with fire protection water service. A fire pump and possibly a water storage tank may be necessary for anticipated site development. If required, these features are expected to be technically feasible, but would increase project costs.

Public Sanitary Sewer Service

Public sanitary sewer service is available from the Town's sanitary sewer system, although no gravity sewerage facilities exist on or immediately adjacent to the subject parcels. The nearest option for gravity sewer service for the site is an existing 8-inch diameter sewer main located approximately four hundred feet to the east on property owned by others. Construction of an offsite sewer main extension, with easement acquisition from an adjoining landowner, will be necessary for this connection. Other sanitary sewer service options are possible if this option is not practical. These other options would involve either easement acquisition for an alternate gravity sewer route, or a pumping station with force main.

Driveway Access and Roadway Improvements

The NC Department of Transportation will control vehicular access to the subject property from Highway 70. NCDOT will prefer the new access driveway to align with the easternmost driveway of the Division of Motor Vehicles facility across the highway. This alignment may or may not be feasible, as it would require the new driveway to cross an adjoining property currently owned by the State of North Carolina (NCDOT). Details of this driveway location will be resolved as site design proceeds. In our opinion, the driveway could be safely placed along the current property frontage without aligning with the opposing driveway, so resolution of this issue is not a project feasibility matter.

The driveway connection should be made with corresponding widening of Highway 70 to accommodate a protected left-turn lane for west-bound traffic. No traffic study has been done to assess warrants for such a turn lane, but this type of improvement is strongly indicated by observation of baseline traffic and by experience with similar conditions. Subsequent review by NCDOT may reveal other roadway improvement requirements not yet identified, but preliminarily indications imply that no other offsite roadway improvements are expected for the subject project.

West Hill Avenue presents an opportunity for a second driveway connection for the project. Such a driveway would cross an environmentally sensitive area, but could do so with fairly minimal impact. The current site program considers that such a driveway would not be used for full-site access or through-traffic purposes, but as a dedicated secondary gated access for the detention facility, as well as a secondary emergency route into the larger site.

Soil Conditions

We have reviewed the results of onsite soil investigations performed by ECS, Ltd. This investigation specifically considered the proposed land uses and conceptual layout. Virtually all of the native soil on the property is silt, having varying degrees of plasticity. Some of the soil will have marginal or unfavorable characteristics for site development purposes. This condition can be satisfactorily managed but is expected to require above-average mitigation costs. The project budget includes a reasonable allowance for such costs.

Some limited areas of rock and partially weathered rock were found in the initial soil investigations. Subsequent supplementary test pits were excavated on the site to gain a better understanding of subsurface conditions. Where rock was encountered, it was generally easy to remove with the small excavator being used, suggesting that large-scale rock removal will not be necessary to develop the site for the intended purpose.

Near the center of the property, an area consisting of more than one acre has been filled in recent years with imported soil taken from local roadway projects. This soil has been found to be unsuitable as structural soil, but may be usable in some non-structural areas. The current site development strategy will require removal and onsite relocation of part, but not all, of this imported soil.

Environmental Considerations

The existing pond and stream on the property are jurisdictional and therefore regulated by local, State and Federal agencies. The wetland areas associated with the stream have been field delineated by S&EC, a qualified wetlands consultant. The wetland extents will ultimately require verification by the US Army Corps of Engineers, but there is no expectation that these features will significantly change.

A protected stream buffer will be required extending fifty feet outward from each side of the stream and from the pond's edge. This buffer and the jurisdictional features place a moderate

restriction on site development, but they will not prohibit developing the site for the intended purpose.

We have also reviewed a Phase 1 Environmental Report prepared by ECS, Ltd. for the subject parcels. This report identified no evidence of recognized environmental conditions that would be detrimental to site development in the intended manner.

Conclusions

Based upon our research of various matters relating to property development, the summary findings described above, conceptual design work performed to date, coordination with various regulatory agencies having jurisdiction, and an assumption that the project is provided an appropriate capital improvement budget, we believe that the subject parcels can be reasonably developed to meet the intended project program.

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