



T 919 490 1266 F 919 490 1396

www.RNDarchitects.com

#### Limited Site Review

Date: October 19, 2020

Project: Durham County Animal Shelter Proposed Site: 1117 Junction Road, Durham, NC

Parcel: 0842-02-65-0187

The purpose of this limited site review is to determine if the proposed site may be a suitable location for a new Durham County Animal Shelter as recommended in the Durham County Animal Facilities Report dated September 11, 2020. We understand approximate half of the site will used for the new Durham County Public Safety Service Center. If deemed suitable, some portion of remaining site may be available for a new Durham County Animal Shelter.

#### General comments:

The site meets most of the criteria outlined in the Durham County Animal Facilities Report. In particular:

- The proposed site exceeds the recommended minimum project site (6.2 acres) and will accommodate the preferred single-story facility. The existing topography will require some additional site area to accommodate required grading.
- The proposed site has large forested areas that could be developed with multiple dog walking trails.
- The proposed site is located within a 4-minute drive from the current Animal Control Facility, which will likely not be an issue for animal control officer drop off times.
- The proposed site is located near the socioeconomic areas of Durham County that likely have the most needs for service.
- Sharing the site with other Durham County services should work well. There are many positive examples of this approach at other animal shelter facilities.
- The proposed site is not located near public transportation, which will limit access to the shelter by some residents. There may be plans for a future bus route on Junction Road.
- The proposed site is adjacent an existing residential neighborhood, which raises the question about noise. However, if the new Animal Shelter Facility is located in the southern portion of the site it will be setback more than 1,000 feet from the residential properties and such, should reduce noise issues.

For a more detailed assessment, see the attached Brief Due Diligence Site Study prepared by Coulter Jewell Thames and dated 10/19/2020.

Charles Nickelson RND Architects, PA

# DURHAM COUNTY ANIMAL PROTECTION SERVICES Brief DUE DILIGENCE SITE STUDY for JUNCTION ROAD site

19 October 2020

Parcel 0842-02-65-0187

Junction Road south of E Club Blvd

Note this site is in the county (just outside City limits) so an application or annexation would be required to get water and sewer service. Annexation applications are processed only 4 times/year. This process can be done at the end of the site plan and during Public Works construction drawing review period.

Site Zoning: IL (same zoning as the parcel on E Club Blvd)

Kennels and vets are a permitted use in this zone with limitations regarding layout

Total Site Size: 59.9 acres

Frontage length: Junction Road frontage: 790 LF

### **Required Building Setbacks:**

Street Yard: 40'

Side Yard: 30' next to residential uses, 20' next to non-residential uses (there are residential uses to the north and the west). The proposed use to the south is an industrial use. The parcel to the southwest is vacant.

Rear Yard: 25'

#### **Required Parking:**

For kennels, 1 space per 250 sf minimum. Maximum parking is 175% of the minimum. For a building 36,200 sf, the required parking would be 144 – 253 spaces (including 5-7 handicap spaces)

There is no requirement for parking for outdoor kennel area, only the built area.

Bicycle parking required: 1 space per 10,000 sf = 4 bike parking spaces

#### **Utilities**

**Water** - There is a *planned* water main on Junction Road starting just south of the site. This is for a project — Harris - that had an approved site plan 5 years ago, and they are talking again about building in the next year or two. If they do not build, the County would need to install the water main extension. The scale of that would be about 3,000 LF at a cost of about \$ 375,000. When the adjacent Harris project was being planned in 2014, the County had agreed to fund the water line. So this cost item may not be a surprise.

Additionally, there may be a short stretch of main extension to access the site. The project would be required to add fire hydrants on the frontage and likely within the site close to the building.

**Sanitary Sewer** - There is a sanitary sewer running through the stream buffer on site. It is an 18" main and should be sufficient for the project and accessible via gravity sewer service line.

## Off site improvements

**Road Widening** - There is a strong chance the project would be required to provide a northbound left turn lane into the site. That would be a widening for the lane including the turn lane with stacking, and tapers to the south and north. Likely the length of that widening would be about 1600 LF on Junction Road, and the cost of this would be in the \$500,000 range. If the Harris project to the south is built, they also will be required to install a northbound left turn lane, with tapers that extend up to the County parcel. If Harris builds their project and widens the road, it would slightly reduce the amount of widening required for the County site access.

**Sidewalks** - The frontage of this site is 790 LF, and the project would be required to install public sidewalk along the entire frontage.

**Greenway trails and bike lanes** – According to the City's greenway master plan, there are two trails planned for the area east of Junction Road. One is Panther Creek Rail Trail, and the other Chunky Pipe Creek trail. Neither appears to involve trails along Junction Road.

#### **Site Constraints:**

There is a stream running east to west which cuts the site into two parts. The northern portion has more frontage, but total area appears to be fairly equal. Required stream buffers will be 50' from top of bank on both sides, removing approximately half an acre from the developable site area. There are also likely some wetland along this course. This would leave 25-28 acres in the southern portion of the parcel for the animal shelter development. There is no floodplain on site - the nearest floodplain is east of Junction Road and the railway tracks. Before doing any conceptual layout for the County, they would need to get a stream and wetland determination on site to nail down the constrained area. There was a determination done in early 2015, but as that was more than 5 years ago, it will need to be re-done. We would not expect the hydrology to have changed to the benefit of the landowner, and possibly jurisdictional wet areas have expanded. The animal shelter would be able to use these protected areas for nature trails and to fulfil tree coverage requirements.

Because of the stream and the topography on site, it is unlikely that any on-site facilities would be shared with other development on the parcel, for example the proposed Public Safety Service Center. Each use would require their own utility service connections, and because there would be a low point in a stream buffer between the animal shelter and any other use on site, each would need their own stormwater mitigation facility on their own side of the stream. There would be an opportunity for sharing off-site costs though – for example sidewalk frontage, utility main extension, and road widening and driveway access.

There will be a requirement for 10% treesave or 14% tree replanting. It would appear that the site will be left with a large portion of undeveloped and undisturbed land, and that the requirement could be met with existing forest. Existing forest is hardwood along the stream and in the stream buffer, and mixed pine/hardwood in the south portion of the parcel.

The kennel use adjacent to a residential use in a non-residential zone requires a 6' tall screen wall between outdoor areas where animals are kept, and the adjacent residential uses. If the animal shelter were kept south of the stream and related stream buffer, it's possible that requirement could be waived as the kennels would not be direction adjacent to the residential uses.