

Summary of Weaver Dairy Road Extension 10/08/02

Weaver Dairy Road ext (WDR ext) runs westward from the intersection with Airport Rd, bends southward, then bends back westward and meets with Homestead Road. Long range plans called for extending the line along WDR ext to Homestead to serve the load along WDR ext and to improve reliability in the area by providing load switching options during outage situations, including providing loop feeds into the developments in the area.

When Northwoods was initially developed, Duke constructed the three phase bulk feeder along the south side of WDR ext for several poles up to the Northwoods development where the primary lines feeding Northwoods dipped underground. (As a reminder, bulk feeders, if placed underground, are typically placed in concrete encased ductbank. Primary underground feeds within developments can be direct buried).

We had spoken with the previous property owner of Larkspur property some time ago about the need to continue the line extension along WDR ext and past Larkspur. It was determined that the design would include crossing over WDR ext at the first entrance to Northwoods to the north and west side of the road and around the bend in WDR ext. This would eliminate the need to remove trees along the south and east side of WDR ext and the Northwoods development and eliminate the need for span guys at that bend (span guys are supports that require a second pole across the road supporting a cable which supports the pole bearing the tension of the angle).

This line continues until the road begins to bend back to the west. Our plans were to continue construction along the north and west side around the second bend, utilizing span guys (defined above). It would also require a single phase overhead tap line extention across WDR ext to provide for a primary underground feed to the development along the south and east side of WDR ext.

This turn is where Rowe Road (entrance to Northwoods V) and the Larkspur development meet at WDR ext.

The current developer/agent for Larkspur contacted us about alternatives to the line along the north and west side of the WDR ext.

They requested costs to go underground. This would have required 1) agreement from other developers along WDR ext., 2) facilities placed in concrete encased ductbank as this was a three phase bulk feeder; and 3) payment up front by all participating parties. This option was quickly rejected.

Another alternative was to cross over WDR ext as was done at the first bend. This option would eliminate the need for span guys and the single phase tap line for the underground feed.. While this is not Duke's preferred solution (adds cost), it can be designed in way so as to meet all necessary Duke design criteria. We agreed to this option if 1) developer



paid the difference, 2) all necessary rights of way could be secured, and 3) the Town did not object.

We requested a meeting with representatives of the developer and the Town and reviewed the proposed plan to cross WDR ext. The Town, like Duke, preferred the line remain on the north and west side of WDR ext, but indicated that as long as the buffer for Northwoods was retained, we could stay within the public right of way, and could minimize the number of trees impacted, the Town would not object to the proposed plan.

The developer chose this design, paid the cost difference, and the line has been constructed as designed. All design and construction activity is in compliance with the laws of the state and within NC Utility Commission approved rules and regulations.

In summary, the construction of the bulk feeder along WDR ext will allow Duke to meet the electrical needs of all customers in the growing area, and will allow us to improve reliability to customers, including loop feeds, in the general area and beyond. Our preference is to stay on one side of the road and, where necessary, cross over with use of span guys. A single phase overhead tap line across WDR ext. is still necessary in this instance to provide for another underground loop feed for development on the south and east side of WDR ext. A second alternative is to cross over to the outside of the bend to negate the need for span guys and the single phase tap line. This was done at the first bend to the left on WDR ext and could be done just as well at the second bend (near Rowe Road and Larkspur entrance). The area in question is simply an effort to continue that design, moving the line again to the outside of the bend, eliminating the need for span guys.

The conduct of all facets of this project were done with the consultation and consent of the Town of Chapel Hill. All design and construction activity is in compliance with the Franchise Agreement with the Town of Chapel Hill, the laws of the State and within NC Utility Commission approved rules and regulations.

We regret the concern that has been felt and expressed by the resident of Northwoods. We have offered to meet with all parties to discuss this matter further and are working with Town to schedule such a meeting. We will continue to work to design the electrical system necessary to meet the needs of the Chapel Hill citizens in a safe, reliable and cost effective manner.