# KNOXVILLE/KNOX COUNTY METROPOLITAN PLANNING COMMISSION SUBDIVISION REPORT - CONCEPT 

- FILE \#: 6-SD-14-C

AGENDA ITEM \#:
POSTPONEMENT(S): 6/12/2014
AGENDA DATE: 7/10/2014

- SUBDIVISION:

WESTLAND PLACE

- APPLICANT/DEVELOPER:

MESANA INVESTMENTS
OWNER(S):
Mesana Investments

## TAX IDENTIFICATION:

JURISDICTION:
STREET ADDRESS:

- LOCATION:

SECTOR PLAN:
GROWTH POLICY PLAN:
WATERSHED:

- APPROXIMATE ACREAGE:

120 N G 00101
City Council District 2

North side of Westland Dr., east side of Morrell Rd.
West City
Urban Growth Area (Inside City Limits)
Fourth Creek
9.05 acres

- ZONING:
- EXISTING LAND USE:
- PROPOSED USE:

SURROUNDING LAND USE AND ZONING:

## R-1 (Low Density Residential)

## Vacant land

## Detached dwellings

Zoning in the area is $\mathrm{R}-1$ residential and $\mathrm{A}-1$ agricultural. Development consists of single family dwellings to the east and south of the site. NorfolkSouthern Railroad and a city recreation center are located to the north and a religious office / counseling center is located to the west of this site.

- NUMBER OF LOTS: 20

SURVEYOR/ENGINEER: Russell Rackley
ACCESSIBILITY: Access is via Bellingham Dr., a local street with a pavement width of $26^{\prime}$ within a 50 ' right-of-way.

- SUBDIVISION VARIANCES 1. Horizontal curve variance from 250' to 100' at sta. 2+50 of REQUIRED:


## STAFF RECOMMENDATION:

- DENY variance \#1 because the hardship needed to approve the request has not been identified.

DENY the concept plan because the proposed subdivision cannot be developed as shown without approval of the variance

## COMMENTS:

The applicant is proposed to develop a twenty lot subdivision on this 9.08 acre site. This is the tenth concept plan that had been submitted for this site. The previous concept plans have contained lot counts that have ranged between 11 and 22 proposed lots. In addition to the proposed subdivisions, this site has been the subject of seven different zoning applications.

Staff is recommending denial of the horizontal curve radius variance from 250' to 100' as requested by the applicant. Due to the fact that the curve as shown is key to this project going ahead as designed, staff had to recommend denial of the proposed subdivision. The horizontal curve radius variance was required because the road in this project will be an extension to the existing Bellingham Dr. which extends east of Lawford Rd. The total length of Bellingham Dr. will be approximately 2,500 feet. The portion of the road east of Lawford Rd is approximately 1,900 feet in length, and the portion of the road that will be added due to this development will add approximately 600 feet to the overall length of the road. The Subdivision Regulations require that all horizontal curves in a street that is over 1,000 feet in length have a minimum radius of 250 feet. If the total length of the road was less than 1,000 feet, a horizontal curve radius of 100 feet would be permitted and the current design would comply.

The applicant has stated that it is their desire to create a small neighborhood that encourages pedestrian activity. The provision of sidewalks, the tight curve and eyebrow design of the road are intended to encourage slower driving speeds and encourage people to interact with their neighbors. Staff typically endorses these design ideas.

## ESTIMATED TRAFFIC IMPACT: 247 (average daily vehicle trips)

Average Daily Vehicle Trips are computed using national average trip rates reported in the latest edition of "Trip Generation," published by the Institute of Transportation Engineers. Average Daily Vehicle Trips represent the total number of trips that a particular land use can be expected to generate during a 24 -hour day (Monday through Friday), with a "trip" counted each time a vehicle enters or exits a proposed development.

ESTIMATED STUDENT YIELD: 8 (public and private school children, ages 5-18 years)
Schools affected by this proposal: Bearden Elementary, Bearden Middle, and West High.

- School-age population (ages $5-18$ ) is estimated by MPC using data from a variety of sources.
- While most children will attend public schools, the estimate includes population that may be home-schooled, attend private schools at various stages of enrollment, or drop out of the public system.
- Students are assigned to schools based on current attendance zones as determined by Knox County Schools. Zone boundaries are subject to change.
- Estimates presume full build-out of the proposed development. Build-out is subject to market forces, and timing varies widely from proposal to proposal.
- Student yields from new development do not reflect a net addition of children in schools. Additions occur incrementally over the build-out period. New students may replace current population that ages through the system or moves from the attendance zone.
- School capacities are subject to change by Knox County Schools through building additions, curriculum or scheduling changes, or amendments to attendance zone boundaries.

MPC's approval or denial of this request is final, unless the action is appealed to Knox County Chancery Court. The date of the Knox County Chancery Court appeal hearing will depend on when the appeal application is filed.




June 25, 2014
Knoxville MPC
Attn: Dan Kelly
Suite 403 City County Building
400 Main Street
Knoxville, TN 37902
Subject: Road centerline radius; Concept of Westland Place; 6-DS-14-C
Dear Mr. Kelly,
This letter is to express the applicant's position on the issue of the roadway center line radius requirement for the cul-de-sac street proposed on the Concept Plan of Westland Place. The concept plan has the road centerline at 100 FT radius, following the provisions of Knoxville-Knox County Minimum Subdivision Regulations 62-71.5 for a local street less than 1000 LF in length. This proposed cul-de-sac street is 772 LF of road centerline from the intersection with Lawford Road SW. The proposed cul-de-sac street is the exact same roadway on the currently approved concept plan from April 2013 with no variances required (File \# 4-SA-13-C). We have simply reduced the lot widths from 85 ' to gain 3 additional lots.

Our understanding of the purpose of 62-71.5 allowing a reduced centerline radius for roads less than $1000^{\prime}$ in length is due to reduced traffic volume and reduced speeds of short limited access streets. We feel that this proposed cul-de-sac street meets the intent of a street less than 1000 as measured from the intersection with Lawford Road.

The position taken by staff that the 772 LF cul-de-sac road must meet the $62-71.5$ provision for roadways greater than 1000 ' due to the continuation of the road name through the intersection implies that the proposed cul-de-sac street will see the same traffic volume and speeds of a street greater than $1000^{\prime}$ in length. We do not believe this to be true.

We feel with the proximity of the intersection within eyesight of the major roadway (Westland) and with the primary road at the intersection being an improved section (Lawford), coupled with proper 'no outlet' signage at the intersection; it would be unlikely that this short cul-de-sac street would see the traffic volumes and speeds of a 1000' roadway. We feel it should be required to meet the 62-71.5 requirements for roadways less than 1000'; as it is if measured from the intersection.

If it is determined that it must be held to the requirements of a street greater than 1000 LF in length, we ask then for a variance be granted for the 100 FT centerline radius.

The City engineering staff has asked for support for this variance based on accepted standards yet stated the minimum posted speed limit allowed in the City is 25 mph . The minimum centerline radius per AASHTO for 25 mph is 165 FT. However the 'Minimum Subdivision Regulations' allows for a centerline radius of 100 FT for roadways less than 1000 LF in length. One can only assume

Rackley
Engineering
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KNQXVILLE，TN 37930
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that for short limited access roadways（less than 1000 LF），the assume traffic volume and speeds will be acceptable for a 100 LF centerline radius；which is the design speed equivalent to 20 mph according to AASHTO．

Again，we feel this proposed cul－de－sac street which is 772 LF in length from the intersection point meets the intent of the Minimum Subdivision Regulations for allowing a 100 FT centerline radius．

Section 62－37．3 of the Minimum Subdivision Regulations defines Cul－de－sac streets as：＂local streets having only one（1）open end providing no access to another street．The closed end provides a turnaround circle for vehicles．No other street intersects between the two（2）ends， and property fronts on both sides of the street＂．By this definition，we feel the street length should be measured from the intersection；as that is the＂open end＂to the cul－de－sac street．

If it does require a variance，we request that one be granted based on：A）the Minimum Subdivision Regulations allowing a 100 FT centerline radius on streets less than 1000 LF in length． And B）the prior approval of this street as designed．

Sincerely，


Russell N．Rackley，P．E． Consulting Engineer


