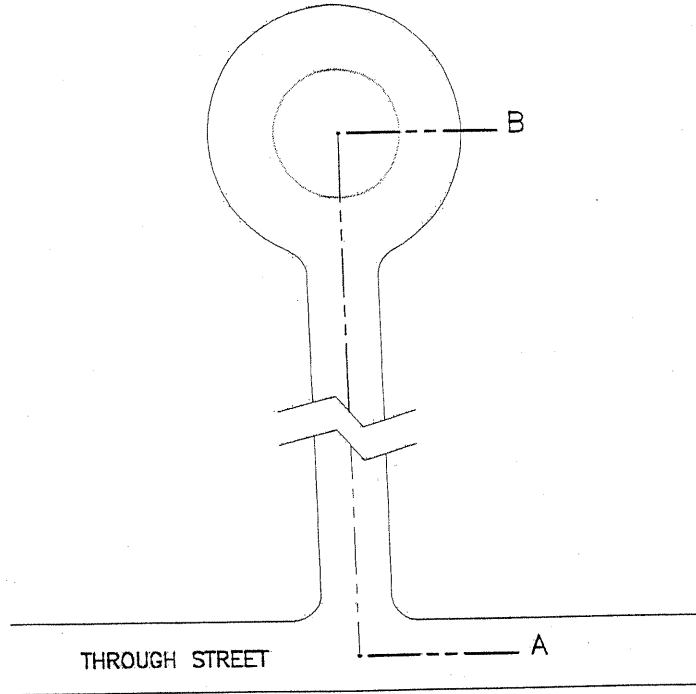


FIGURE 1

MEASURING THE LENGTH OF A CUL-DE-SAC STREET



MAXIMUM LENGTH:

DISTANCE A-B SHALL NOT EXCEED TWELVE HUNDRED (1,200) FEET.

MINIMUM LENGTH: DISTANCE A-B SHALL NOT BE LESS THAN FIVE HUNDRED (500) FEET.

- A = MIDPOINT OF THE THROUGH STREET RIGHT-OF-WAY.
- B = RADIUS POINT OF THE CUL-DE-SAC CIRCLE, TEAR-DROP, OR OFFSET TURN-AROUND DETAIL (SEE BLUE BOOK).

| | |
|--------------|-----------|
| DRAWN BY: | B.M.B. |
| CHECKED BY: | R.L. |
| APPROVED BY: | R.L. |
| SCALE: | NONE |
| DATE: | AUG. 2003 |

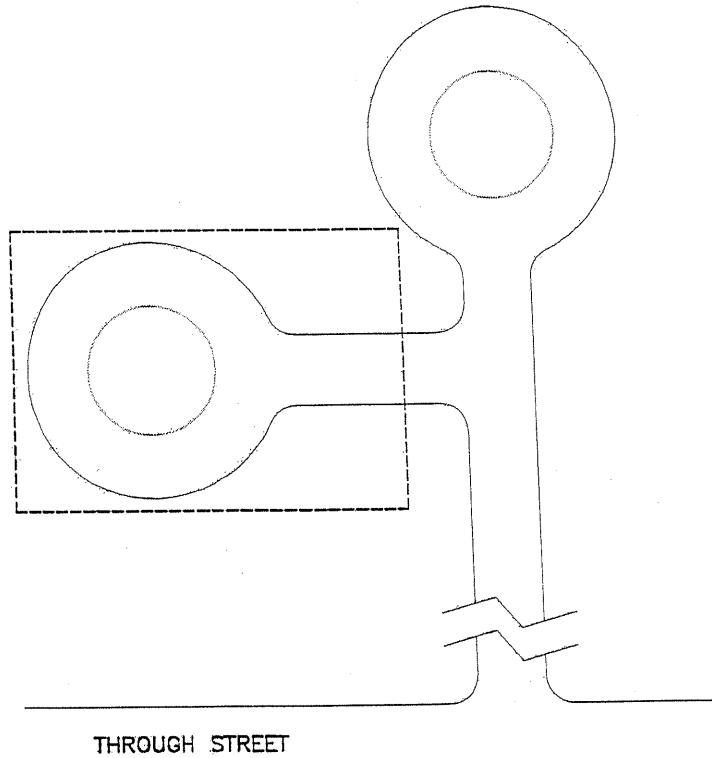
TOWN OF HOOKSETT, NEW HAMPSHIRE
DESIGN SPECIFICATIONS

MEASURING THE LENGTH OF A
CUL-DE-SAC STREET

| REV. | DESCRIPTION | DATE |
|------|-------------|------|
| 1 | A | |

FIGURE 2

CUL-DE-SAC STREET CONFIGURATIONS THAT ARE NOT ALLOWED



NOTE:
 IN NO CASE SHALL A CUL-DE-SAC STREET BRANCH OFF
 OF ANOTHER CUL-DE-SAC STREET.

| | | | | |
|--------------|-----------|---|------|-------------|
| DRAWN BY: | B.M.B. | TOWN OF HOOKSETT, NEW HAMPSHIRE DESIGN SPECIFICATIONS CUL-DE-SAC STREET CONFIGURATIONS THAT ARE NOT ALLOWED | | |
| CHECKED BY: | R.L. | | | |
| APPROVED BY: | R.L. | | | |
| SCALE: | NONE | | REV. | DESCRIPTION |
| DATE: | AUG. 2003 | FIGURE: | | 2 A |

11.11 Street System (cont.)

- c.) In medium-density residential districts, sidewalks shall be required on connector and arterial roads.
 - d.) In low-density districts, either sidewalks or widened paved shoulders shall be required on both sides of arterial and on one side of collector roads.
 - e.) Pedestrian traffic on local roads in medium- and low-density districts shall be accommodated by a paved, widened shoulder or a sidewalk on one side only.
16. Sight distances at intersections and /or grade changes shall be in accordance with AASHTO standards. Sight distance calculations may be required at the discretion of the Planning Board.
17. Street Trees: When required by the Planning Board, street trees shall be planted in the esplanade areas of all new streets. Tree pits shall be at least three (3) feet in diameter by two (2) feet in depth and filled with good loam free of stones over two (2) inches in diameter, sods, and clay.

Note: It is the Planning's Board intent that all new private roadways shall meet Town specifications for public roadways. If private roads are to be accepted as public, they must first be improved to meet Town specifications.

18. Structural Design Requirements: All structural design for headwalls, retaining walls, box culverts, bridges, or other structures shall meet or exceed HS 25-44, or 125% military loading, whichever is greater.

19. Highway Classifications

a.) Arterial Highways:

Route 3 & 28, Hooksett Road
Bypass 28, Londonderry Turnpike
Route 28A, Mammoth Road
Route 3A, West River Road
Route 27, Whitehall Road

b.) Collector Roadways:

Alice Avenue

Auburn Road
 Bicentennial Drive
 Farmer Road.....p/o

11.11 Street System (cont.)

Granite Street
 Hackett Hill Road
 Industrial Park Drive.....p/o
 Legends Drive.....p/o
 Lindsay Road.....p/o
 Main Street
 Martins Ferry Road
 Merrimack Street
 North River Road
 Pleasant Street
 *Shannon Road.....p/o
 Smyth Road
 South Bow Road
 *Thames Road.....p/o
 West Alice Avenue
 Zapora Drive

* Private Roadway
 p/o - Part Of

c.) Local Roads:
 All Other Public Roadways

20. Table of Geometric Standards

a.) Widths for roadways without curbing (open drainage) shall apply where lot frontage for all lots in the street or block within the development is greater than two hundred (200) feet:

| <u>Item</u> | <u>Description</u> | <u>Arterial</u> | <u>Collector</u> | <u>Local</u> |
|-------------|----------------------------------|-----------------|------------------|--------------|
| A. | Travel Way Width - each lane | 12' | 12' | 11' |
| B. | Shoulder Width | | | |
| | - Paved portion – each side | 6' (1) | 2' | 1' |
| | - Crushed gravel (2) – each side | 2' | 2' | 2' |

| | | | | |
|----|--|-------|-------|-------|
| C. | Hot Bituminous Pavement Widths - 1 1/2" Wearing course - Type E, compacted in place | 36' | 28' | 24' |
| D. | - 2 1/2" Binder Course - Type B, compacted in place | 36'6" | 28'6" | 24'6" |

11.11 Street System (cont.)

| | | <u>Arterial</u> | <u>Collector</u> | <u>Local</u> |
|--|---|------------------|------------------|--------------|
| Widths for all other roadways (with curbing and closed drainage): | | | | |
| | | <u>Vert.</u> | <u>Vert.</u> | <u>Vert.</u> |
| E. | Curbed Section (3) - Center line to Face of Curb - per NHDOT specifications | 18' | 14' | 13' |
| General Standards: | | Geometric | | |
| F. | Base Course Material | | | |
| | Thickness | 12" | 9" | 6" |
| | - Crushed Gravel | 18" | 18" | 18" |
| | - Gravel | 18" | 18" | 18" |
| | - Sand | | | |
| | Face of Guard Rail - min. offset to center line | 20' | 16' | 14' |
| G. | Minimum Cross Slope | 2% | 2% | 2% |
| | Maximum Cross Slope (Superelevation) | 8% | 6% | 4% |
| H. | Right-of-Way Width | 100' | 60' | 50' |
| | Design Speed (4) | As required | 30 or 35 MPH | 30 or 35 MPH |
| I. | Maximum Vertical Grades | 6% | 8% | 8% |
| | - Grade within 20' of the intersection | -2% | -2% | -2% |
| | - Maximum grade within 100' of intersection | 2% | 2% | 2% |
| | Minimum vertical grade | .5% | .5% | .5% |
| | Minimum angle of intersection (degrees) | 70 | 60 | 60 |

| | | | | |
|----|---|------|------|------|
| J. | Sidewalks | | | |
| | - Width | 4' | 4' | 4' |
| | - Base course of Crushed Gravel | 9" | 9" | 9" |
| | - H.B.P. base course | 1.5" | 1.5" | 1.5" |
| | - H.B.P. wearing course | 1" | 1" | 1" |
| | - Concrete (PCC) | 4" | 4" | 4" |
| K. | Curb and Property Line radii at intersections | | | |
| | - 90 degree intersection | 30' | 25' | 25' |
| | - - Less than 90 degree | 30' | 30' | 30' |

11.11 Street System (cont.)

Notes:

1. 1. All dimensions for the Arterial Road are minimum requirements. These may be increased where traffic volumes warrant a higher level design or as ordered by the Planning Board.
2. 2. Add 2 ½ feet to the shoulder width at guardrail locations.
3. 3. Requires a closed drainage system, this offset is 20 feet where on-street parking is proposed.
4. 4. To be used in determining the requirements for stopping sight distances (vertical and horizontal), intersection sight distance, minimum centerline radius, superelevation runoffs, and other miscellaneous design criteria. The reference manual, which applies, is the latest edition of the American Association of State Highway and Transportation Official (AASHTO). "A Policy on Geometric Design of Highways and Streets."
5. 5. The Planning Board shall determine the functional classification of a proposed roadway and specify the proposed design speed.
6. 6. In no way are these Guidelines to be considered a substitute for sound engineering judgment.

11.12 Drainage Design and Runoff Control

1. Definitions