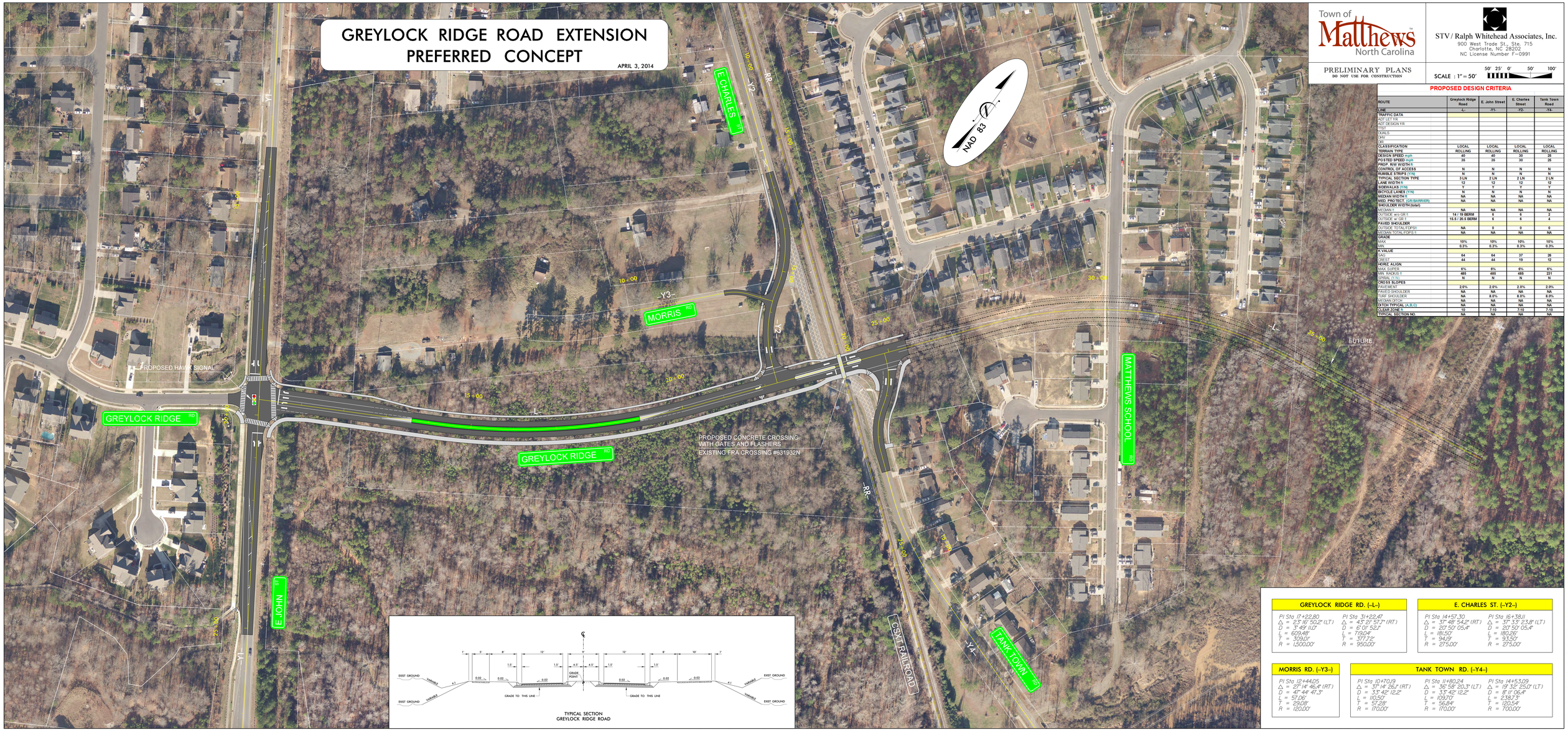
GREYLOCK RIDGE ROAD EXTENSION
PREFERRED CONCEPT

APRIL 3, 2014



TYPICAL SECTION
GREYLOCK RIDGE ROAD

Town of Matthews North Carolina

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

STV / Ralph Whitehead Associates, Inc.
900 West Trade St., Ste. 715
Charlotte, NC 28202
NC License Number F-0991

SCALE : 1" = 50'

50' 25' 0' 50' 100'

PROPOSED DESIGN CRITERIA

ROUTE	Greylock Ridge Road	E. John Street	E. Charles Street	Tank Town Road
LINE	-L-	-Y1-	-Y2-	-Y4-
TRAFFIC DATA				
ADT LET YR				
ADT DESIGN YR				
TTST				
DUALS				
DHV				
DIR				
CLASSIFICATION	LOCAL ROLLING	LOCAL ROLLING	LOCAL ROLLING	LOCAL ROLLING
DESIGN SPEED mph	40	40	30	35
POSTED SPEED mph	35	35	30	25
PROP. R/W WIDTH ft				
CONTROL OF ACCESS	N	N	N	N
RUMBLE STRIPS (Y/N)	N	N	N	N
TYPICAL SECTION TYPE	3 LN	2 LN	2 LN	2 LN
LANE WIDTH ft	12	12	12	12
SIDEWALKS (Y/N)	Y	Y	Y	Y
BICYCLE LANES (Y/N)	N	N	N	N
MEDIAN WIDTH ft	NA	NA	NA	NA
MED. PRO TECT. (CR/BARRIER)	NA	NA	NA	NA
SHOULDER WIDTH (total)				
MEDIAN ft	NA	NA	NA	NA
OUTSIDE w/o CURB ft	14 / 19 BERM	6	6	2
OUTSIDE w/ CURB ft	15.5 / 20.5 BERM	6	6	4
PAVED SHOULDER				
OUTSIDE TOTAL/FDPSS	NA	0	0	0
MEDIAN TOTAL/FDPSS	NA	NA	NA	NA
GRADE				
MAX	10%	10%	10%	10%
MIN	0.3%	0.3%	0.3%	0.3%
K VALUE				
SAG	64	64	37	26
CREST	44	44	19	12
HORIZ ALIGN				
MAX SUPER	6%	6%	6%	6%
MIN RADIUS ft	466	485	485	237
SPIRAL (Y/N)	N	N	N	N
CROSS SLOPES				
PAVEMENT	2.0%	2.0%	2.0%	2.0%
PAVED SHOULDER	NA	NA	NA	NA
TURF SHOULDER	NA	8.0%	8.0%	8.0%
MEDIAN DITCH	NA	NA	NA	NA
DITCH TYPICAL (A,B,C)	NA	NA	NA	NA
CLEAR ZONE ft	10	7-10	7-10	7-10
TYPICAL SECTION NO.	NA	NA	NA	NA

GREYLOCK RIDGE RD. (-L-)

PI Sta 17+22.80
Δ = 23° 16' 50.2" (LT)
D = 3° 49' 11.0"
L = 609.48'
T = 309.01'
R = 1,500.00'

PI Sta 31+22.47
Δ = 43° 21' 57.7" (RT)
D = 6° 01' 52.1"
L = 719.04'
T = 377.72'
R = 950.00'

E. CHARLES ST. (-Y2-)

PI Sta 14+57.30
Δ = 37° 48' 54.2" (RT)
D = 20° 50' 05.4"
L = 181.50'
T = 94.19'
R = 275.00'

PI Sta 16+38.11
Δ = 37° 33' 23.8" (LT)
D = 20° 50' 05.4"
L = 180.26'
T = 93.50'
R = 275.00'

MORRIS RD. (-Y3-)

PI Sta 12+44.05
Δ = 27° 14' 46.4" (RT)
D = 47° 44' 41.3"
L = 57.06'
T = 29.08'
R = 120.00'

TANK TOWN RD. (-Y4-)

PI Sta 10+70.19
Δ = 37° 14' 26.1" (RT)
D = 3° 54' 12.2"
L = 110.50'
T = 57.28'
R = 170.00'

PI Sta 11+80.24
Δ = 36° 58' 20.3" (LT)
D = 3° 54' 12.2"
L = 109.70'
T = 56.84'
R = 170.00'

PI Sta 14+53.09
Δ = 19° 32' 25.0" (LT)
D = 8° 11' 06.4"
L = 238.73'
T = 120.54'
R = 700.00'