TRANSPORTATION PLANNING REPORT
STATE ROUTE 24
FROM STEWART FERRY PIKE TO DISSPAYNE DRIVE
DAVIDSON COUNTY

VOLUME II - BACK UP DATA

Construction Plans (Intersection Improvements and Sidewalk Plans)
Crash Data
Traffic Counts and Capacity Analyses
Left Turn Warrant Analyses
Field Review Meeting Minutes - Attachments 1 & 2
Map of Archaeological Site
ROW Costs (Recent Residential Real Estate Sales)

CONSTRUCTION PLANS
(INTERSECTION IMPROVEMENTS AND
SIDEWALK CONSTRUCTION)

TYPE	YEAR	PROJECT NO.	SHEET NO.
ROW	94	19125-2502-04	4
CONST	95	19125-3503-04	4

REVISION 01-24-95: REVISED OWNERSHIP OF TRACT 6 TO STATE OF TENNESSEE COMBINED TRACT 6 WITH TRACT 1, TRACT 6 NOT USED

RENUMBERED TRACT 7 TO TRACT 9

REVISED OWNERSHIP OF TRACT 9 TO DAVIDSON COUNTY BOARD OF EDUCATION

REVISION: 04-06-95: ADDED PROPOSED FENCE ON TRACT 1

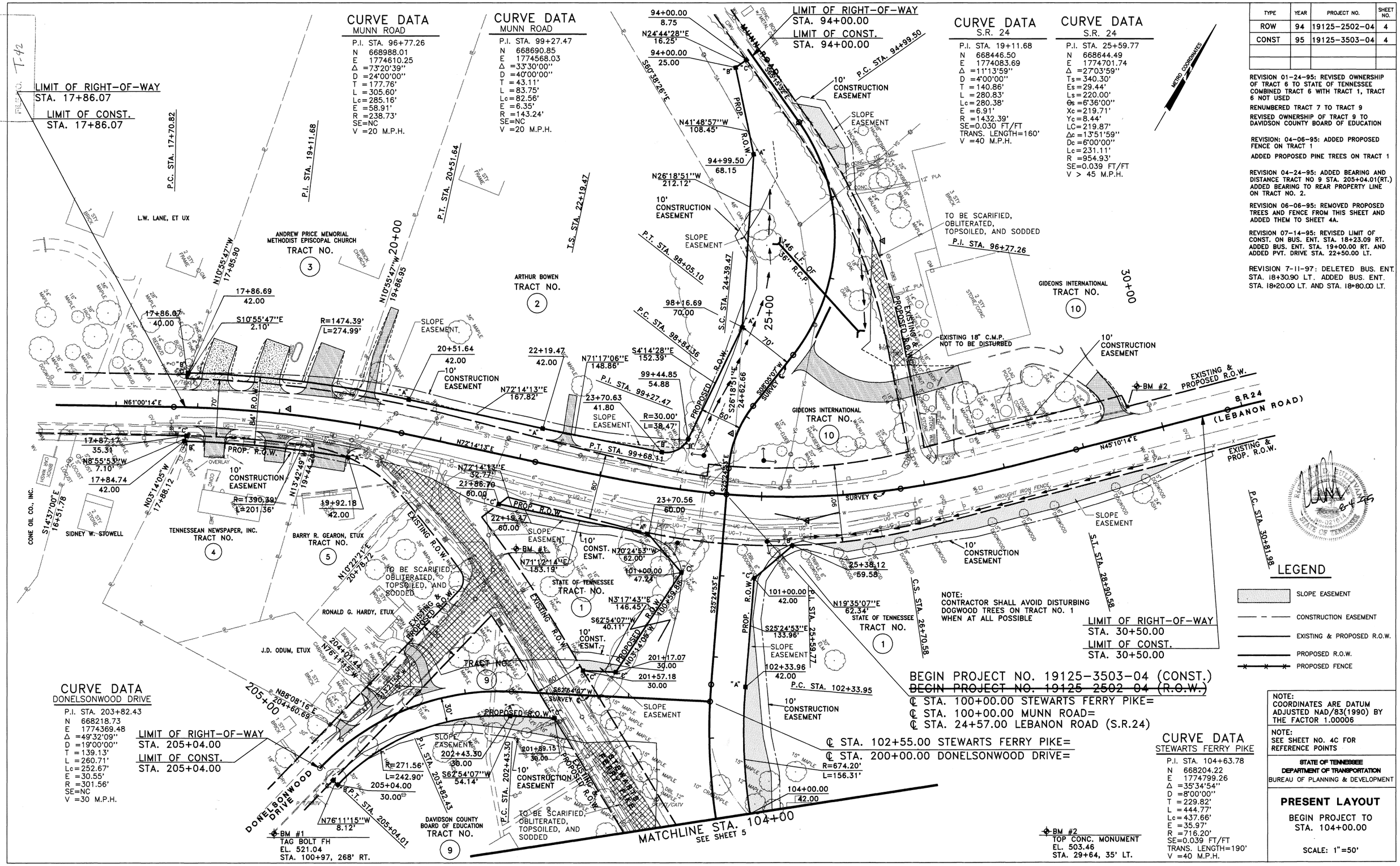
ADDED PROPOSED PINE TREES ON TRACT 1

REVISION 04-24-95: ADDED BEARING AND DISTANCE TRACT NO 9 STA. 205+04.01(RT.) ADDED BEARING TO REAR PROPERTY LINE ON TRACT NO. 2.

REVISION 06-06-95: REMOVED PROPOSED TREES AND FENCE FROM THIS SHEET AND ADDED THEM TO SHEET 4A.

REVISION 07-14-95: REVISED LIMIT OF CONST. ON BUS. ENT. STA. 18+23.09 RT. ADDED BUS. ENT. STA. 19+00.00 RT. AND ADDED PVT. DRIVE STA. 22+50.00 LT.

REVISION 7-11-97: DELETED BUS. ENT. STA. 18+30.90 LT. ADDED BUS. ENT. STA. 18+20.00 LT. AND STA. 18+80.00 LT.



TYPE	YEAR	PROJECT NO.	SHEET NO.
ROW	94	19125-2502-04	4A
CONST	95	19125-3503-04	4A

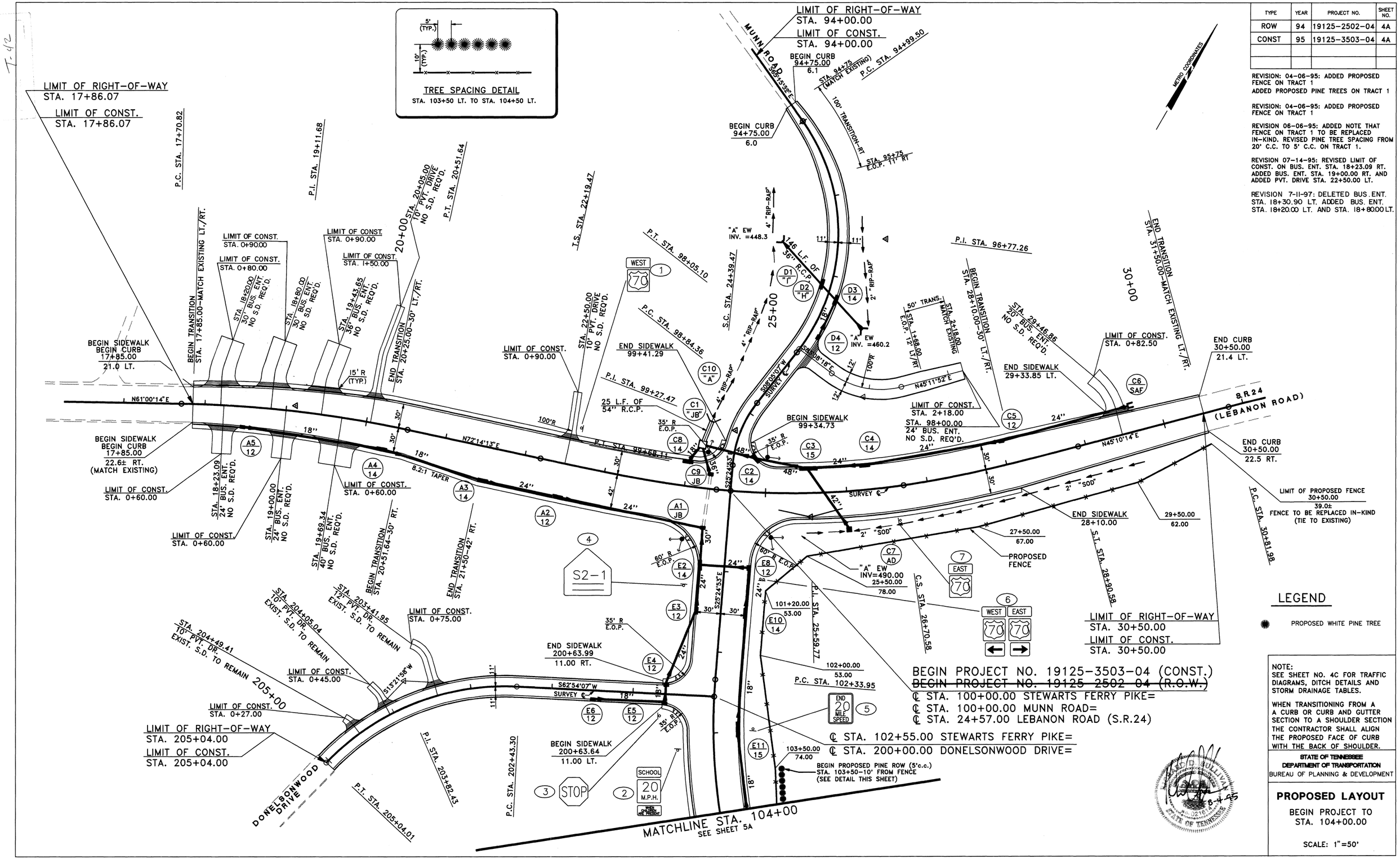
REVISION: 04-06-95: ADDED PROPOSED FENCE ON TRACT 1
ADDED PROPOSED PINE TREES ON TRACT 1

REVISION: 04-06-95: ADDED PROPOSED FENCE ON TRACT 1

REVISION 06-06-95: ADDED NOTE THAT FENCE ON TRACT 1 TO BE REPLACED IN-KIND. REVISED PINE TREE SPACING FROM 20' C.C. TO 5' C.C. ON TRACT 1.

REVISION 07-14-95: REVISED LIMIT OF CONST. ON BUS. ENT. STA. 18+23.09 RT. ADDED BUS. ENT. STA. 19+00.00 RT. AND ADDED PVT. DRIVE STA. 22+50.00 LT.

REVISION 7-11-97: DELETED BUS. ENT. STA. 18+30.90 LT. ADDED BUS. ENT. STA. 18+20.00 LT. AND STA. 18+80.00 LT.



NOTE:
SEE SHEET NO. 4C FOR TRAFFIC DIAGRAMS, DITCH DETAILS AND STORM DRAINAGE TABLES.

WHEN TRANSITIONING FROM A A CURB OR CURB AND GUTTER SECTION TO A SHOULDER SECTION THE CONTRACTOR SHALL ALIGN THE PROPOSED FACE OF CURB WITH THE BACK OF SHOULDER.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPOSED LAYOUT

BEGIN PROJECT TO STA. 104+00.00

SCALE: 1"=50'

TENNESSEE D.O.T. DESIGN DIVISION FILE NO. T-42

R.O.W. ACQUISITION TABLE

TRACT NO.	PROPERTY OWNER	COUNTY RECORDS				AREA ACQUIRED (AC.)			AREA REMAINING(AC.)		EASEMENT (S.F.)			TOTAL AREA (AC.)		
		TAX MAP NO.	PARCEL NO.	DEED BOOK	PAGE	LEFT	RIGHT	TOTAL	LEFT	RIGHT	PERM. DRAIN.	SLOPE	CONST. ⚠	LEFT	RIGHT	TOTAL
1	STATE OF TENNESSEE	96-0	2	1713	90	1.225	0.830	2.055	360.829	2.70	---	19948	21458	362.054	3.536	365.59
2	ARTHUR BOWEN	96-2	5	545	521	0.260	---	0.260	4.95	---	---	396	5343	5.21	---	6.13
3	ANDREW PRICE MEMORIAL M E CHURCH	96-2	4	2243	471	1450 SF	---	1450 SF	2.85	---	---	---	1114	2.89	---	2.89
4	GANNETT SATELLITE INFORMATION NETWORK, INC.	96-2	19	8761	428	---	1065 SF	1065 SF	---	0.81	---	---	308	---	0.84	0.84
5	BARRY R. GEARON, ETUX	96-2	69	6957	599	---	199 SF	199 SF	---	0.55	---	---	360	---	0.56	0.56
9	DAVIDSON COUNTY BOARD OF EDUCATION	96-2	40	2439	241	0.174	0.163	0.337	0	17.653	---	2717	4638	0.174	17.816	17.99
10	GIDEONS INTERNATIONAL	96-2	6 & 8	5335	140	1.489	---	1.489	12.631	---	---	1630	2724	14.12	---	14.12
11	RUTH KAPLAN AND ART E. KAPLAN	96-2	47	7907	294	---	---	---	---	0.41	484	58	482	---	0.41	0.41
12	TOMMIE M.F. ROBERTS	96-2	60	8552	329	---	---	---	---	0.36	---	---	745	---	0.36	0.36

⚠ FOR EROSION CONTROL APPURTENANCES, PERSONNEL AND ACCOMPANYING EQUIPMENT

0 20 40 60 80 100 200 300
SCALE : 1" = 100'

TYPE	YEAR	PROJECT NO.	SHEET NO.
ROW	94	19125-2502-04	3
CONST	95	19125-3503-04	3

REVISION 01-24-95: CHANGED SLOPE AND CONSTRUCTION EASEMENT ON TRACT 1 AND TRACT 9

REVISED OWNERSHIP OF TRACT 6 TO STATE OF TENNESSEE
COMBINED TRACT 6 WITH TRACT 1, TRACT 6 NOT USED

RENUMBERED TRACT 7 TO TRACT 9
RENUMBERER TRACT 8 TO TRACT 11
RENUMBERED TRACT 9 TO TRACT 12

REVISED OWNERSHIP OF TRACT 9 TO DAVIDSON COUNTY BOARD OF EDUCATION

REVISION 04-24-95: ADDED SLOPE ESM'T. TO TRACT NO. 11.

RIGHT-OF-WAY NOTES

1 IT IS INTENDED THAT ALL BUILDINGS AND/OR PORTIONS OF BUILDINGS THAT ARE WITHIN THE PROPOSED RIGHT-OF-WAY AND/OR EASEMENT LINES FOR THE PROJECT, BE REMOVED THEREFROM IN THE PROCESS OF RIGHT-OF-WAY ACQUISITION. IF ANY SUCH BUILDINGS OR IMPROVEMENTS ARE NOT RE-MOVED IN THE COURSE OF RIGHT-OF-WAY ACQUISITION, THEY SHALL BE INDICATED ON THE PLANS AND DESIGNATED AS A PART OF THE CONSTRUCTION CONTRACT.

2 ALL RAMPS MUST CONFORM TO THE TENNESSEE DEPARTMENT OF TRANSPORTATION, "POLICY ON FINANCING CONSTRUCTION OF PUBLIC ROAD INTERSECTIONS AND DRIVEWAYS ON HIGHWAY RESURFACING, RECONSTRUCTION AND CONSTRUCTION PROJECTS ON NEW LOCATIONS", THE MANUAL ON "RULES AND REGULATIONS FOR CONSTRUCTING DRIVEWAYS ON STATE HIGHWAY RIGHT-OF-WAY", STANDARD DRAWING RP-R-1 AND OTHER ACCEPTED DESIGN AND SAFETY STANDARDS.

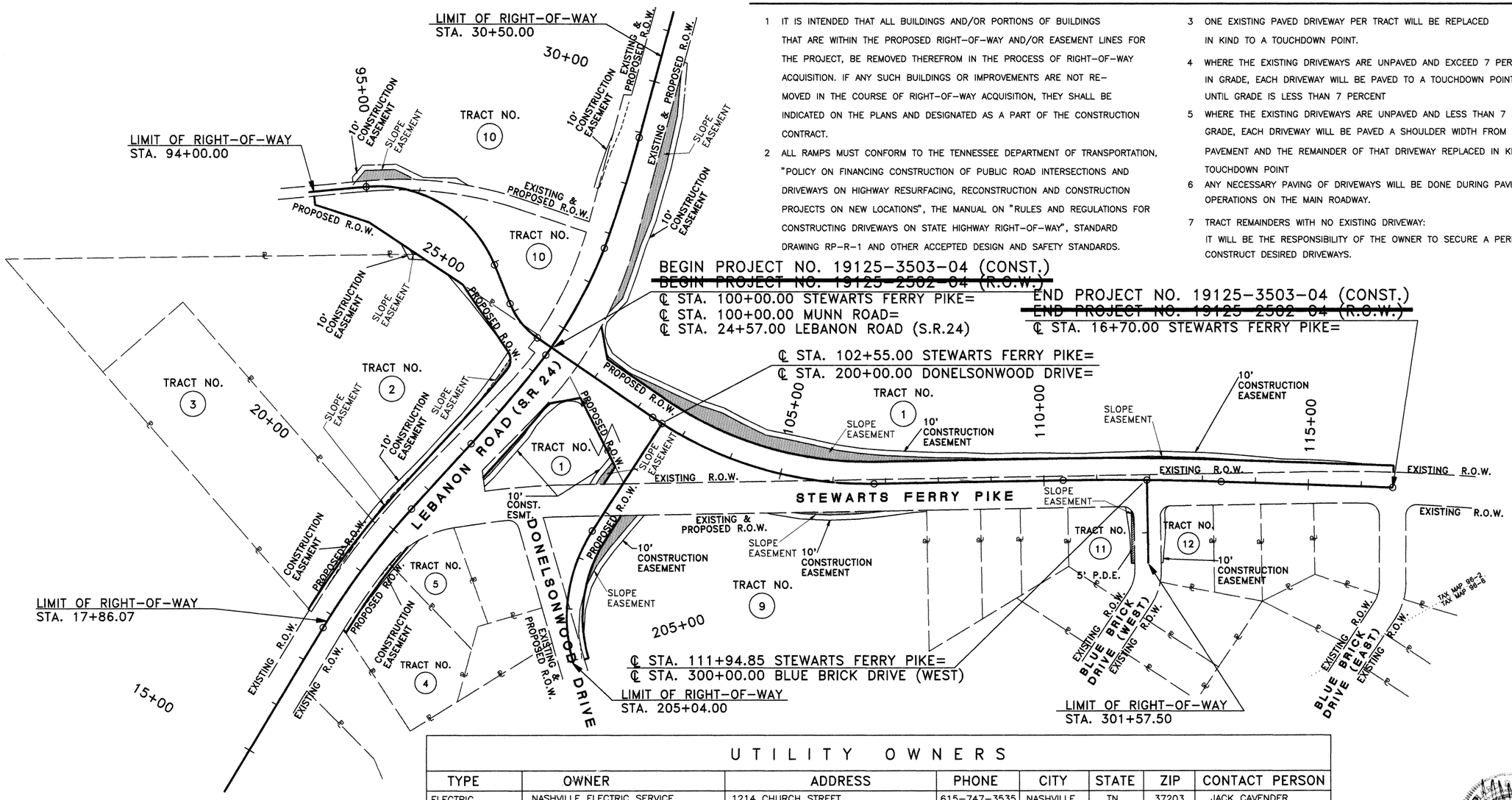
3 ONE EXISTING PAVED DRIVEWAY PER TRACT WILL BE REPLACED IN KIND TO A TOUCHDOWN POINT.

4 WHERE THE EXISTING DRIVEWAYS ARE UNPAVED AND EXCEED 7 PERCENT IN IN GRADE, EACH DRIVEWAY WILL BE PAVED TO A TOUCHDOWN POINT OR UNTIL GRADE IS LESS THAN 7 PERCENT

5 WHERE THE EXISTING DRIVEWAYS ARE UNPAVED AND LESS THAN 7 PERCENT IN GRADE, EACH DRIVEWAY WILL BE PAVED A SHOULDER WIDTH FROM THE EDGE OF PAVEMENT AND THE REMAINDER OF THAT DRIVEWAY REPLACED IN KIND TO A TOUCHDOWN POINT

6 ANY NECESSARY PAVING OF DRIVEWAYS WILL BE DONE DURING PAVING OPERATIONS ON THE MAIN ROADWAY.

7 TRACT REMAINDERS WITH NO EXISTING DRIVEWAY:
IT WILL BE THE RESPONSIBILITY OF THE OWNER TO SECURE A PERMIT AND CONSTRUCT DESIRED DRIVEWAYS.



UTILITY OWNERS

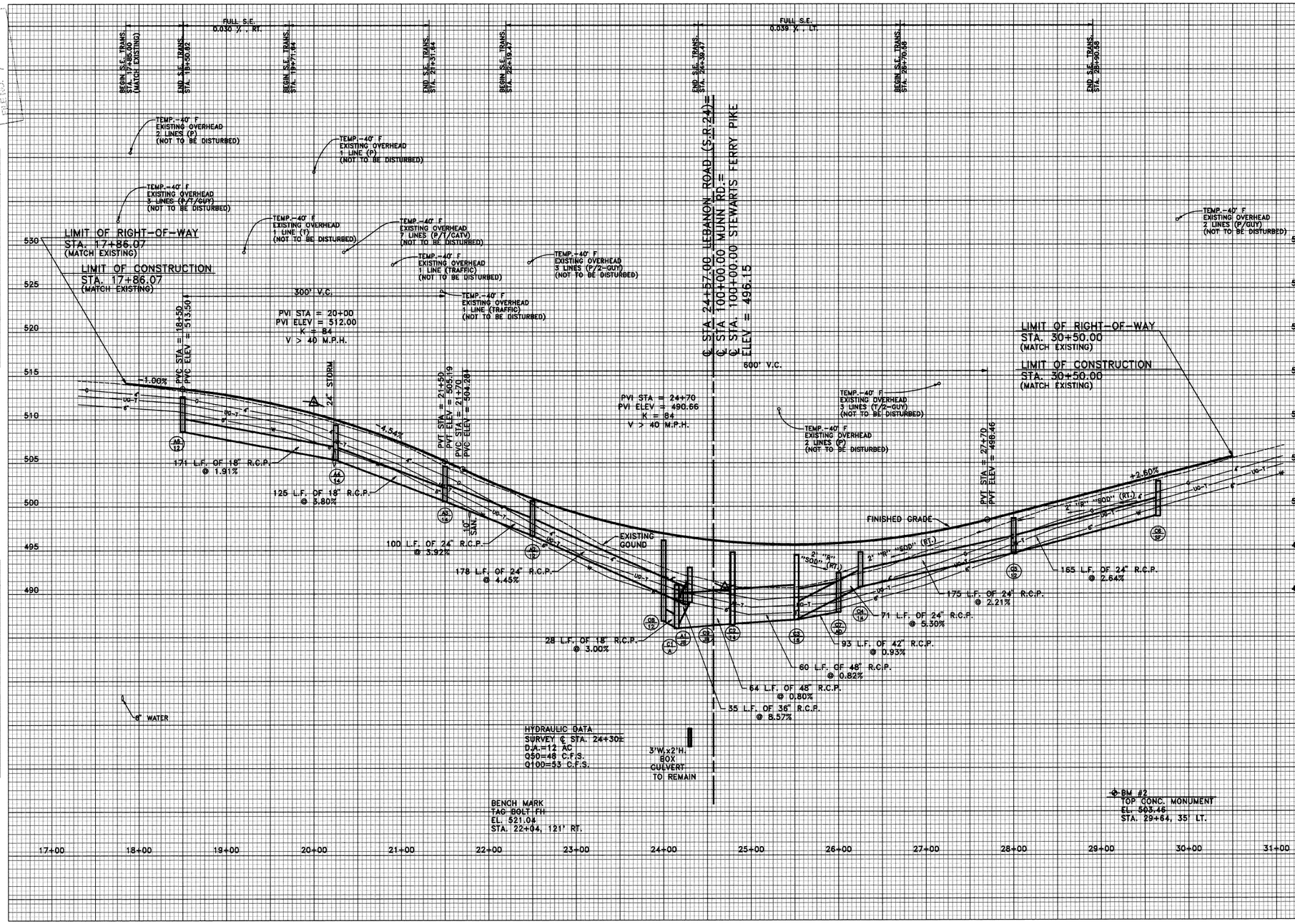
TYPE	OWNER	ADDRESS	PHONE	CITY	STATE	ZIP	CONTACT PERSON
ELECTRIC	NASHVILLE ELECTRIC SERVICE	1214 CHURCH STREET	615-747-3535	NASHVILLE	TN.	37203	JACK CAVENDER
GAS	NASHVILLE GAS COMPANY	665 MAINSTREAM DRIVE	615-734-1760	NASHVILLE	TN.	37208	JIM THWEATT
WATER & SEWER	METRO DEPT. OF WATER & SEWERAGE	1600 2nd AVE. SOUTH	615-862-4906	NASHVILLE	TN.	37208	BOB WINGO
TELEPHONE	SOUTH CENTRAL BELL	333 COMMERCE STREET	615-214-4774	NASHVILLE	TN.	37215	PAM BRASHER
CABLE TV	VIACOM CABLEVISION	660 MAINSTREAM DRIVE	615-244-5990	NASHVILLE	TN.	37208	ROBERTO LUND

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPERTY MAP

SCALE : 1" = 100'

TYPE	YEAR	PROJECT NO.	SHEET NO.
ROW	94	19125-2502-04	6
CONST	95	19125-3503-04	6



FINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, NOTEBOOK NO., BY, DATE

ORIGINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, NOTEBOOK NO., BY, DATE

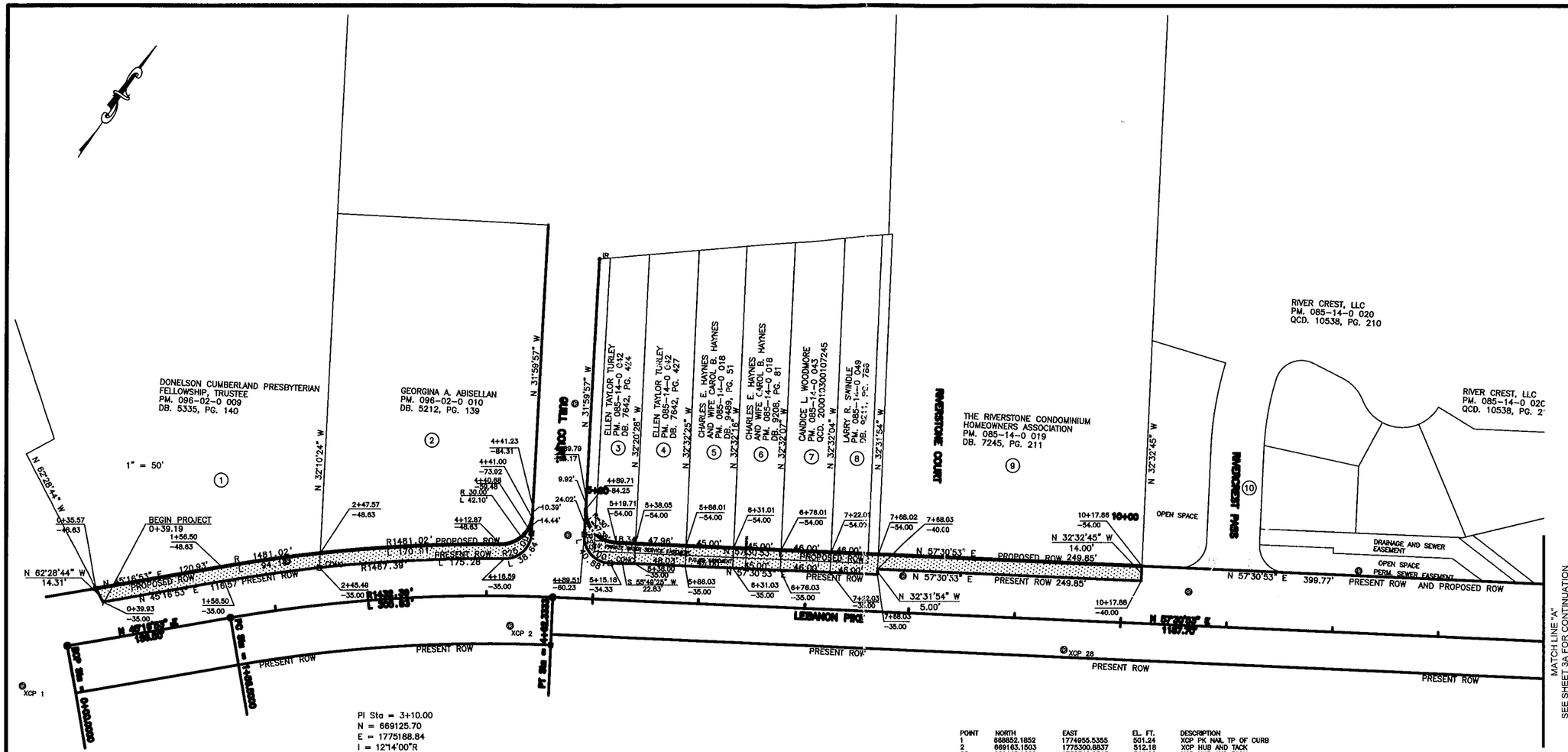
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE

LEBANON ROAD (S.R.24)

SCALE : 1"=50' (HORZ.)
1"=5' (VERT.)

FILE NO.	01R08P3.DWG
DATE:	12-2002
DESIGNED BY:	WJR
DRAWN BY:	WJR
CHECKED BY:	LRK
REVISION BLOCK	
DATE:	
DATE:	
DATE:	



BOP = 0+00.00
E = 1774968.56
N = 668907.58

PI Sta = 3+10.00
N = 669125.70
E = 1775188.84
I = 12°14'00"R

CIRCULAR
Da = 04°00'00"
Dc = 04°00'03"
T = 153.50
R = 1432.39
L = 305.83
C = 305.25
E = 8.20
M = 8.15

POINT	NORTH	EAST	EL. FT.	DESCRIPTION
1	668852.1852	1774955.5355	501.24	XCP PK NAIL TP OF CURB
2	669163.1503	1775300.8837	512.18	XCP HUB AND TACK
28	669445.1680	1775742.8313	514.28	XCP HUB AND TACK
29	669710.4437	1776161.2051	506.91	XCP PK NAIL
1207	669902.4602	1776470.5941	498.56	XCP PK NAIL
1208	670055.9250	1776747.2303	487.98	XCP PK NAIL

LEGEND

- PROPOSED R.O.W.
- TEMPORARY CONSTRUCTION EASEMENT

METROPOLITAN GOVERNMENT
OF NASHVILLE & DAVIDSON COUNTY, TENNESSEE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

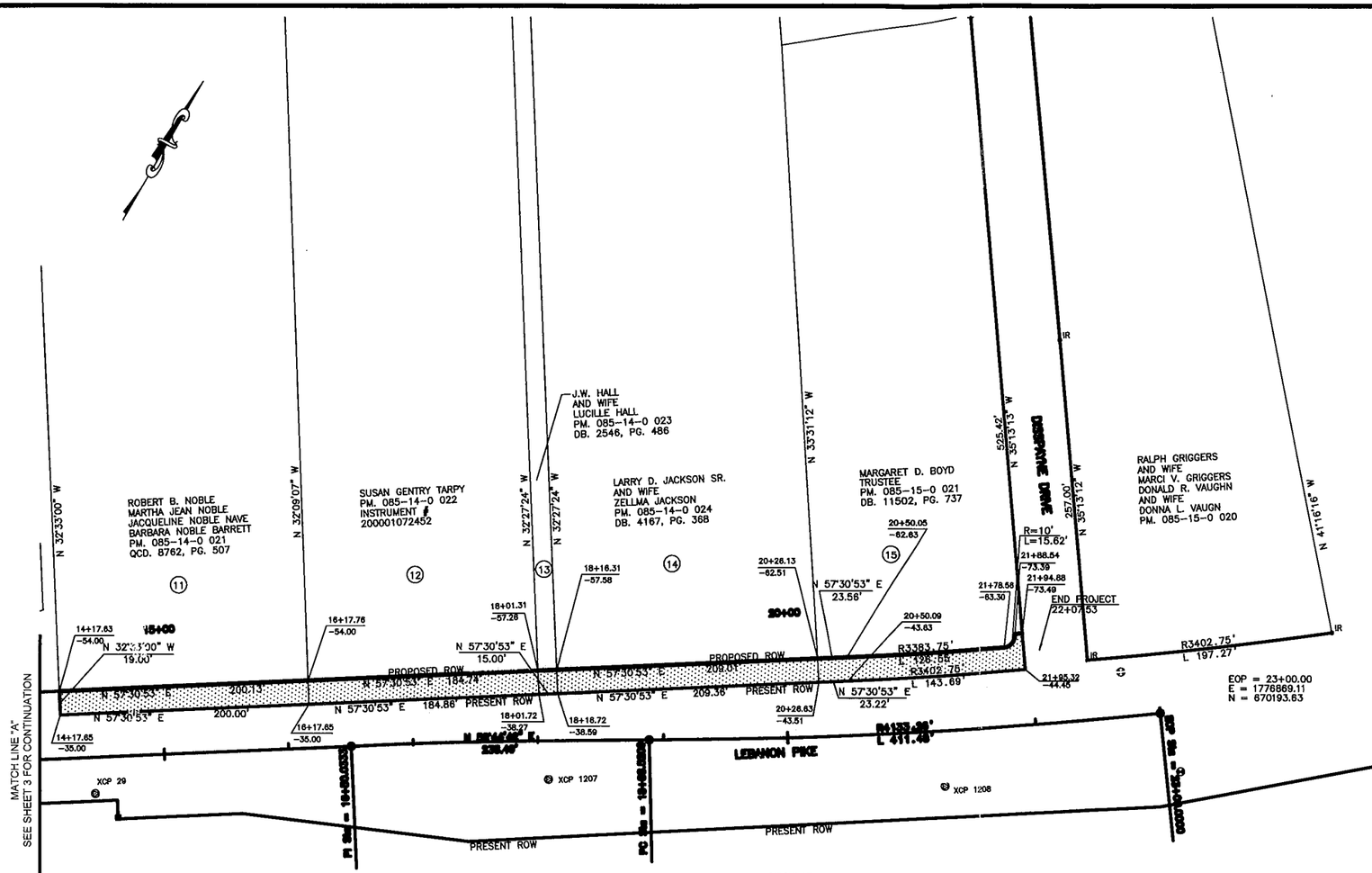
PROJECT NO. 01R08P3

LEBANON PIKE
SIDEWALK
CONSTRUCTION

R.O.W.
SHEETS

SCALES: 1" = 50' HOR

FILE NO.	01R08P3A.DWG
DATE:	12-2002
DESIGNED BY:	WJR
DRAWN BY:	WJR
CHECKED BY:	LRK
REVISION BLOCK	
DATE:	
DATE:	
DATE:	



POINT	NORTH	EAST	EL. FT.	DESCRIPTION
1	668852.1852	1774955.5355	501.24	XCP PK NAIL TP OF CURB
2	669153.1503	1775300.8837	512.18	XCP HUB AND TACK
28	669445.1680	1775742.8313	514.28	XCP HUB AND TACK
29	669710.4437	1776181.2051	506.01	XCP PK NAIL
1207	669902.4602	1776470.5941	496.58	XCP PK NAIL
1208	670055.9250	1776747.2303	487.98	XCP PK NAIL

CIRCULAR
Da = 01°23'10"
Dc = 01°23'10"
T = 205.91
R = 4133.26
L = 411.48
C = 411.31
E = 5.13
M = 5.12

PI Sta = 16+50.03
N = 669846.03
E = 1776320.18
I = 01°13'48"R

PI Sta = 18+88.52
N = 669969.77
E = 1776524.05
I = 01°08'02"R

PI Sta = 20+94.43
N = 670073.11
E = 1776702.16
I = 05°42'14"L

TRACT NO	PROPERTY OWNER NAME	COUNTY RECORDS MAP NO	PARCEL NO	DEED BOOK	PAGE	DEED AREA (ACRES)	AREA ACQUIRED (S F)	AREA REMAINING (ACRES)	EA PARKING (S F)
1	DONALDSON CUMBER AND FREEDITERAN FELLOWSHIP TRUSTEE	96.02	9	5335	143		4049.72		
2	GEORGINA A. FERGUSON	96.02	10	5212	139		3843.43		
3	ELLEN TAYLOR TURLEY	85.14	40	7642	424		1013.79		
4	ELLEN TAYLOR TURLEY	85.14	42	7642	427		211.94		
5	CHARLES E. AND CAROL B. HAYNES	85.14	18	6489	51		855.21		
6	CHARLES E. AND CAROL B. HAYNES	85.14	19	6208	61		855.21		
7	SANDRA L. WOODWARD SUCD # 200010330137745	85.14	43				874.30		
8	LARRY R. SLAUGHER	85.14	44	9211	766		874.21		
9	THE RIVERS CONDOMINIUM HOMEOWNERS ASSOC.	85.14	19	7243	271		3497.86		
10	RIVER CREST LLC	85.14	21	10535	275				
11	ROBERT B. AND MARTHA JEAN NOBLE AND JACQUELINE NOBLE NAVE AND BARBARA NOBLE BARRETT	85.14	7	8762	507		3801.23		
12	SUSAN GENTRY TARPY INST # 200001072452	85.14	22				3511.29		
13	J.W. AND LUCILLE HALL	85.14	23	2546	486		285.52		
14	LARRY D. JACKSON SR. AND ZELLMA JACKSON	85.14	24	4167	368		3974.53		
15	MARGARET D. BOYD	85.14	21	11502	737		3250.15		

LEGEND

- PROPOSED R.O.W.
- TEMPORARY CONSTRUCTION EASEMENT

METROPOLITAN GOVERNMENT
OF NASHVILLE & DAVIDSON COUNTY, TENNESSEE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

PROJECT NO. 01R08P3A

LEBANON PIKE
SIDEWALK
CONSTRUCTION

R.O.W.
SHEETS

SCALES: 1" = 50' HOR

CRASH DATA

TENNESSEE DEPARTMENT OF TRANSPORTATION
PROJECT PLANNING DIVISION
SAFETY PLANNING SECTION

CRASH DATA REQUEST

Requested by: Name: Gary Webber Date: 9/28/07
Division: Project Planning
Address: 1000 J. K.Polk Building Telephone No.: 741-5372
Project No.:
Location: Region: 3 County: Davidson City: Nashville
Route: State Route 24 (US 70) Lebanon Road
Location on Route: From Stewarts Ferry Pike to Disspayne Drive

Beginning Log Mile: 20.01 Ending Log Mile: 20.52

MAP SHOWING LOCATION MUST BE ATTACHED

TYPE OF CRASH DATA REQUESTED

	CHECK Yes	CHECK No	TIME PERIOD OR YEARS REQUESTED (3 Years or Specify)
Crash Listing:	☒	☐	
Collision Diagram:	☐	☒	
Crash Rates:	☒	☐	
High Hazard Rank:	☐	☐	
Update Previous Request:	☐	☐	
Special Request:	☐	☐	Describe Specifics:

LM- 20.03- 20.50 along Road

Request Analyzed By: Date: 10-3-07

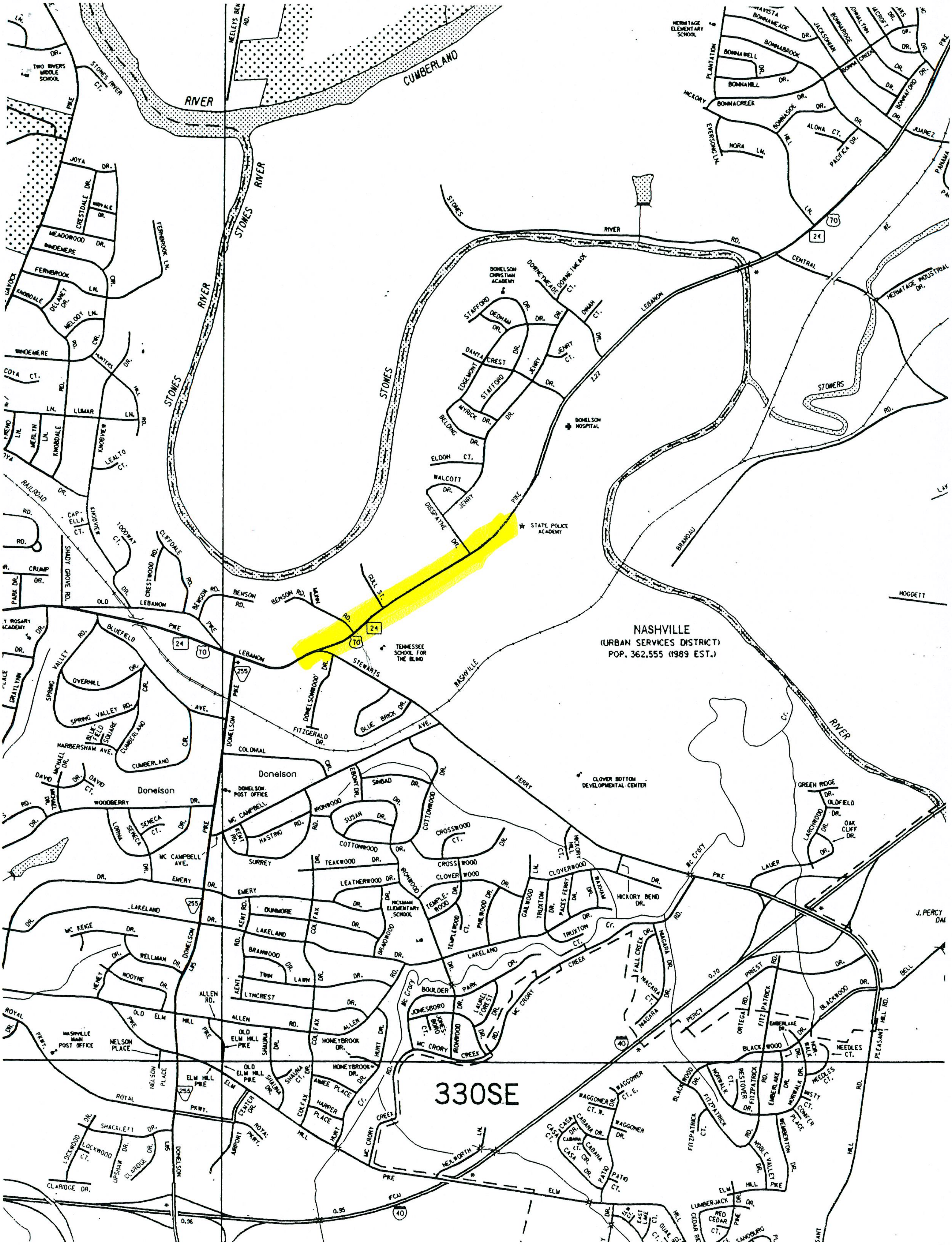
Reviewed By: Date: 10/03/07
David Lollar, Transportation Specialist 2

Date: 10/4/07
Harold Dilmore, Transportation Manager 1

Date: 10/4/07
Bill Anderson, Transportation Manager 2

Comments: The intersctions of SR-24 at Stewarts Ferry Pike/ Munn Road and at Disspayne Drive are signalized and have a center turn lane. The roadway section between those intersections is 4 lane undivided. Stewarts Ferry Pike and Munn Road were realigned into one intersection at SR-24 several years ago.

(REV. 09/05/06)



CUMBERLAND
RIVER
STONES RIVER
NASHVILLE
(URBAN SERVICES DISTRICT)
POP. 362,555 (1989 EST.)
330SE
Donelson
TWO RIVERS MIDDLE SCHOOL
HERMITAGE ELEMENTARY SCHOOL
DONELSON CHRISTIAN ACADEMY
DONELSON HOSPITAL
STATE POLICE ACADEMY
TENNESSEE SCHOOL FOR THE BLIND
CLOVER BOTTOM DEVELOPMENTAL CENTER
DONELSON POST OFFICE
NASHVILLE MAIN POST OFFICE
MCMURRAY ELEMENTARY SCHOOL
LEBANON PIKE
OLD LEBANON DIRT RD.
STONES RIVER RD.
CENTRAL PIKE
STEWARTS FERRY PIKE
ELM HILL PIKE
OLD ELM HILL PIKE
DONELSON PIKE
ROYAL PKWY.
MC CRORY CREEK
MC CAMPBELL AVE.
LAKELAND DR.
EMERY DR.
ALLEN RD.
BENSON RD.
JERRY DR.
DISSPAYNE DR.
GULL ST.
FITZGERALD DR.
BLUE BRICK DR.
COLFAX DR.
STONERS
BRANDAU
PLEASANT HILL RD.
HOGGETT
J. PERCY

TENNESSEE DEPARTMENT OF TRANSPORTATION

COUNTY	= Davidson	Date:	10/1/2007
Route	= SR 24 Lebanon Rd		
Location	= Intersection with Stewarts Ferry Pike and Munn Rd		
Highway Type	= Urban four lane undivided		
FUNCTIONAL CLAS	Urban other principal arterial		
DATA YEARS	= 2003_2004_2005 TRIMS Crash Data		
ADT YEARS USED	= 2007 trims		
COMMENTS	= Traffic light		
ANALYZED BY	= DH		

SECTION = MORE THAN 0.10 MILE / SPOT = LESS THAN 0.10 MILE

BLM	ELM	Length	Average AADT	VMT
0.00		0.00		0
0.00	0.00	0.00	0	0
0.00	0.00	0.00	0	0
0.00	0.00	0.00	0	0
0.00	0.00	0.00	0	0
0.00	0.00	0.00	0	0
0.00	0.00	0.00	0	0
		0.00	0	0

INTERSECTION

Log Mile = 0

Leg		Traffic AADT
North	=	34,260
East	=	14,360
South	=	34,260
West	=	0
Entering AADT	=	41,440

2007 Trims

Urban Four Lane Undivided

2003_2004_2005 Trims Crash Data

		Total	Fatal	Incap. Injury	*Severe Crashes	Other Injury
No. of Crashes	=	26	0	0	0	6
No. of Years	=	3				
SW avg. rate	=	0.830	0.002	0.015	0.017	0.193
03-05 S/W Rates						
Exposure (E)	=	45.3768				
Crash Rate (A)	=	0.573	0.000	0.000	0.000	0.132
Critical Rate (C)	=	1.156				
Severity Index (SI)	=	0.2308				
Actual Rate/SW Average	=	0.69	0.00	0.00	0.00	0.69
Ratio of A/C	=	0.50				

* Severe Crashes are the sum of fatal and incapacitating injury crashes

Revised 4/3/2007

T.D.O.T. PROJECT PLANNING DIVISION (SAFETY PLANNING SECTION) Dh

Crash Summary Report

Date: 10/01/2007

County: DAVIDSON **Route:** SR024 **Spcl Cse:** 0-NONE **Cnty Seq:** 1

Begin LogMile: 20 **End LogMile:** 20.02 **Begin Date:** 01/01/2003 **End Date:** 12/31/2005

Statistics

Fatal Crashes:	0
Total Killed:	0
Incap Injury Crashes:	0
Total Incap Injuries:	0
Other Injury Crashes:	6
Total Other Injuries:	7
Prop Damage Crashes:	20
Total Crashes:	26

Weather Conditions

No Adverse Conditions:	22	Sleet and Fog:	0
Rain:	4	Smog, Smoke:	0
Sleet and Hail:	0	Severe Crosswind:	0
Snow:	0	Other:	0
Foggy:	0	Unknown:	0
Rain and Fog:	0	Blowing Sand, Soil, Dirt, or Snow:	0

Crashes Involving

Pedestrians:	0
Hazardous Cargo:	0
Construction Zones:	1
Fixed Objects:	0
Heavy Trucks:	2
Bicycles:	0

Manner of Collision

Rear End:	17
Head On:	0
Rear-to-Rear:	0
Angle:	7
Sideswipe Same Dir:	2
Sideswipe Opp. Dir:	0
Unknown:	0

Road Conditions

Ice:	0
Snow or Slush:	0
Sand, Mud, Dirt or Oil:	0
Wet:	1
Dry:	10
Other:	0
Unknown:	0

Crash Location

Along Roadway:	1
At Intersection:	25
Railroad Crossing:	0
Bridge:	0
Underpass:	0
Ramp:	0
Private Property:	0
Other:	0

First Harmful Event

Pedestrian:	0
Pedalcycle:	0
Railway Train:	0
Deer (Animal):	0
Other Animal:	0
Motor Vehicle in Transport:	15
Motor Vehicle in Transport in Other Rdway:	0
Parked Motor Vehicle:	0
Other Type Non-Motorist:	0
Fixed Object:	0
Other Object (not fixed):	0
Non Collision:	0

Lighting Conditions

Dawn:	0
Daylight:	22
Dusk:	0
Dark/Lighted:	3
Dark/Not Lighted:	1
Not Indicated:	0

TENNESSEE DEPARTMENT OF TRANSPORTATION

COUNTY	= Davidson	Date:	10/1/2007
Route	= SR 24 Lebanon Rd		
Location	= North of Stewarts Ferry to south of Disspayne Dr		
Highway Type	= Urban four lane undivided		
FUNCTIONAL CLAS	Urban other principal arterial		
DATA YEARS	= 2003_2004_2005 TRIMS Crash Data		
ADT YEARS USED	= 2007 trims		
COMMENTS	= 14 of the crashes occurred at the intersection with Rivercrest Pass		
ANALYZED BY	= DH		

SECTION = MORE THAN 0.10 MILE / SPOT = LESS THAN 0.10 MILE

BLM	ELM	Length	Average AADT	VMT
20.03	20.50	0.47	34,260	16,102
0.00	0.00	0.00	0	0
0.00	0.00	0.00	0	0
0.00	0.00	0.00	0	0
0.00	0.00	0.00	0	0
0.00	0.00	0.00	0	0
0.00	0.00	0.00	0	0
		0.47	34,260	16,102

INTERSECTION

Log Mile = 0

Leg		Traffic AADT
North	=	
East	=	
South	=	
West	=	
Entering AADT	=	0

2007 Trims

Urban Four Lane Undivided

2003_2004_2005 Trims Crash Data

		Total	Fatal	Incap. Injury	*Severe Crashes	Other Injury
No. of Crashes	=	42	0	0	0	18
No. of Years	=	3				
SW avg. rate	=	3.266	0.017	0.081	0.098	0.592
03-05 S/W Rates						
Exposure (E)	=	17.6319				
Crash Rate (A)	=	2.382	0.000	0.000	0.000	1.021
Critical Rate (C)	=	4.296				
Severity Index (SI)	=	0.4286				
Actual Rate/SW Average	=	0.73	0.00	0.00	0.00	1.72
Ratio of A/C	=	0.55				

* Severe Crashes are the sum of fatal and incapacitating injury crashes

Revised 4/3/2007

T.D.O.T. PROJECT PLANNING DIVISION (SAFETY PLANNING SECTION) Dh

Crash Summary Report

Date: 10/01/2007

County: DAVIDSON **Route:** SR024 **Spcl Cse:** 0-NONE **Cnty Seq:** 1

Begin LogMile: 20.03 **End LogMile:** 20.5 **Begin Date:** 01/01/2003 **End Date:** 12/31/2005

Statistics

Fatal Crashes:	0
Total Killed:	0
Incap Injury Crashes:	0
Total Incap Injuries:	0
Other Injury Crashes:	18
Total Other Injuries:	28
Prop Damage Crashes:	~~25~~ 24
Total Crashes:	42 ~~43~~

Weather Conditions

No Adverse Conditions:	~~41~~ 40	Sleet and Fog:	0
Rain:	1	Smog, Smoke:	0
Sleet and Hail:	0	Severe Crosswind:	0
Snow:	0	Other:	0
Foggy:	0	Unknown:	1
Rain and Fog:	0	Blowing Sand, Soil, Dirt, or Snow:	0

Crashes Involving

Pedestrians:	0
Hazardous Cargo:	0
Construction Zones:	2
Fixed Objects:	1
Heavy Trucks:	0
Bicycles:	0

Manner of Collision

Rear End:	31
Head On:	2
Rear-to-Rear:	1
Angle:	5 ~~6~~
Sideswipe Same Dir:	1
Sideswipe Opp. Dir:	0
Unknown:	1

Road Conditions

Ice:	0
Snow or Slush:	0
Sand, Mud, Dirt or Oil:	0
Wet:	1
Dry:	13
Other:	0
Unknown:	0

Crash Location

Along Roadway:	~~25~~ 24
At Intersection:	18
Railroad Crossing:	0
Bridge:	0
Underpass:	0
Ramp:	0
Private Property:	0
Other:	0

First Harmful Event

Pedestrian:	0
Pedalcycle:	0
Railway Train:	0
Deer (Animal):	0
Other Animal:	0
Motor Vehicle in Transport:	26
Motor Vehicle in Transport in Other Rdway:	1
Parked Motor Vehicle:	0
Other Type Non-Motorist:	0
Fixed Object:	1
Other Object (not fixed):	1
Non Collision:	0

Lighting Conditions

Dawn:	0
Daylight:	35
Dusk:	0
Dark/Lighted:	6
Dark/Not Lighted:	1
Not Indicated:	1

TENNESSEE DEPARTMENT OF TRANSPORTATION

COUNTY	= Davidson	Date:	10/1/2007
Route	= SR 24 Lebanon Rd		
Location	= Intersection with Disspayne		
Highway Type	= Urban four lane undivided		
FUNCTIONAL CLAS	Urban other principal arterial		
DATA YEARS	= 2003_2004_2005 TRIMS Crash Data		
ADT YEARS USED	= 2007 trims		
COMMENTS	= Traffic light		
ANALYZED BY	= DH		

SECTION = MORE THAN 0.10 MILE / SPOT = LESS THAN 0.10 MILE

BLM	ELM	Length	Average AADT	VMT
0.00		0.00		0
0.00	0.00	0.00	0	0
0.00	0.00	0.00	0	0
0.00	0.00	0.00	0	0
0.00	0.00	0.00	0	0
0.00	0.00	0.00	0	0
0.00	0.00	0.00	0	0
		0.00	0	0

INTERSECTION

Log Mile = 0

Leg		Traffic AADT
North	=	34,260
East	=	
South	=	34,260
West	=	0
Entering AADT	=	34,260

2007 Trims

Urban Four Lane Undivided

2003_2004_2005 Trims Crash Data

		Total	Fatal	Incap. Injury	*Severe Crashes	Other Injury
No. of Crashes	=	12	0	0	0	3
No. of Years	=	3				
SW avg. rate	=	0.830	0.002	0.015	0.017	0.193
03-05 S/W Rates						
Exposure (E)	=	37.5147				
Crash Rate (A)	=	0.320	0.000	0.000	0.000	0.080
Critical Rate (C)	=	1.189				
Severity Index (SI)	=	0.2500				
Actual Rate/SW Average	=	0.39	0.00	0.00	0.00	0.41
Ratio of A/C	=	0.27				

* Severe Crashes are the sum of fatal and incapacitating injury crashes

Revised 4/3/2007

T.D.O.T. PROJECT PLANNING DIVISION (SAFETY PLANNING SECTION) Dh

Crash Summary Report

Date: 10/01/2007

County: DAVIDSON **Route:** SR024 **Spcl Cse:** 0-NONE **Cnty Seq:** 1

Begin LogMile: 20.51 **End LogMile:** 20.53 **Begin Date:** 01/01/2003 **End Date:** 12/31/2005

Statistics

Fatal Crashes:	0
Total Killed:	0
Incap Injury Crashes:	0
Total Incap Injuries:	0
Other Injury Crashes:	3
Total Other Injuries:	4
Prop Damage Crashes:	9
Total Crashes:	12

Weather Conditions

No Adverse Conditions:	12	Sleet and Fog:	0
Rain:	0	Smog, Smoke:	0
Sleet and Hail:	0	Severe Crosswind:	0
Snow:	0	Other:	0
Foggy:	0	Unknown:	0
Rain and Fog:	0	Blowing Sand, Soil, Dirt, or Snow:	0

Crashes Involving

Pedestrians:	0
Hazardous Cargo:	1
Construction Zones:	1
Fixed Objects:	1
Heavy Trucks:	1
Bicycles:	0

Manner of Collision

Rear End:	9
Head On:	0
Rear-to-Rear:	0
Angle:	1
Sideswipe Same Dir:	1
Sideswipe Opp. Dir:	0
Unknown:	0

Road Conditions

Ice:	0
Snow or Slush:	0
Sand, Mud, Dirt or Oil:	0
Wet:	0
Dry:	2
Other:	0
Unknown:	0

Crash Location

Along Roadway:	0
At Intersection:	12
Railroad Crossing:	0
Bridge:	0
Underpass:	0
Ramp:	0
Private Property:	0
Other:	0

First Harmful Event

Pedestrian:	0
Pedalcycle:	0
Railway Train:	0
Deer (Animal):	0
Other Animal:	0
Motor Vehicle in Transport:	8
Motor Vehicle in Transport in Other Rdway:	0
Parked Motor Vehicle:	0
Other Type Non-Motorist:	0
Fixed Object:	1
Other Object (not fixed):	0
Non Collision:	1

Lighting Conditions

Dawn:	0
Daylight:	9
Dusk:	0
Dark/Lighted:	1
Dark/Not Lighted:	2
Not Indicated:	0

TENNESSEE DEPARTMENT OF TRANSPORTATION

COUNTY	= Davidson	Date:	10/1/2007
Route	= SR 24 Lebanon Rd		
Location	= Intersection Rivercrest Pass		
Highway Type	= Urban four lane undivided		
FUNCTIONAL CLAS	Urban other principal arterial		
DATA YEARS	= 2003_2004_2005 TRIMS Crash Data		
ADT YEARS USED	= 2007 trims		
COMMENTS	=		
ANALYZED BY	= DH		

SECTION = MORE THAN 0.10 MILE / SPOT = LESS THAN 0.10 MILE

BLM	ELM	Length	Average AADT	VMT
0.00		0.00		0
0.00	0.00	0.00	0	0
0.00	0.00	0.00	0	0
0.00	0.00	0.00	0	0
0.00	0.00	0.00	0	0
0.00	0.00	0.00	0	0
0.00	0.00	0.00	0	0
		0.00	0	0

INTERSECTION

Log Mile = 0

Leg		Traffic AADT
North	=	34,260
East	=	0
South	=	34,260
West	=	0
Entering AADT	=	34,260

2007 Trims

Urban Four Lane Undivided

2003_2004_2005 Trims Crash Data

		Total	Fatal	Incap. Injury	*Severe Crashes	Other Injury
No. of Crashes	=	14	0	0	0	9
No. of Years	=	3				
SW avg. rate	=	0.190	0.001	0.000	0.001	0.045
03-05 S/W Rates						
Exposure (E)	=	37.5147				
Crash Rate (A)	=	0.373	0.000	0.000	0.000	0.240
Critical Rate (C)	=	0.369				
Severity Index (SI)	=	0.6429				
Actual Rate/SW Average	=	1.96	0.00	0.00	0.00	5.33
Ratio of A/C	=	1.01				

* Severe Crashes are the sum of fatal and incapacitating injury crashes

Revised 4/3/2007

T.D.O.T. PROJECT PLANNING DIVISION (SAFETY PLANNING SECTION) Dh

ROUTE FEATURE DESCRIPTION LISTING

DAVIDSON County - SR024

COUNTY: DAVIDSON **COUNTY NO.** 19

ROUTE: SR024 **SPECIAL CASE:** None **CTY SEQ:** 1

LOG MILE	ITEM CODE	ROUTE FEATURE	DESC CODE
20.010	9	TRAFFIC SIGNAL	905
20.010	4	3292 STEWARTS FERRY PK. RT.	420
20.010	5	B480 MUNN RD. LT.	530
20.010	9	BEGIN 45 MPH	932
20.150	9	DONELSON CUMBERLAND PRESBYTERIAN CHURCH LT.	912
20.170	9	TENNESSE SCHOOL FOR THE BLIND RT.	915
20.190	5	B370 GULL CT. LT.	530
20.190	9	BEGIN 45 MPH	932
20.310	5	Z999 RIVERCREST PASS LT.	530
20.520	9	TRAFFIC SIGNAL	905
20.520	5	B369 DISSPAYNE DR. LT.	530
20.660	9	EMMANUEL CHURCH OF THE APOSTOLIC FAITH LT.	912
20.880	5	Z999 MEDICAL DR. RT.	520
20.890	5	Z999 WELLINGTON SQUARE LT.	530

ROUTE FEATURE DESCRIPTION LISTING

DAVIDSON County - 03292

COUNTY: DAVIDSON **COUNTY NO.** 19

ROUTE: 03292 **SPECIAL CASE:** None **CTY SEQ:** 1

LOG MILE	ITEM CODE	ROUTE FEATURE	DESC CODE
0.000	3	I-40 RT. & LT. (CENTER OF OVERHEAD) / BEGIN STEWARTS FERRY PK.	360
0.000	9	BEGIN 40 MPH & ILLUM.	932
0.130	7	RAMP FROM I-40 RT. & RAMP TO I-40 LT.	702
0.210	5	B408 LAUER DR. RT.	520
0.400	4	4945 MCCRORY CREEK RD. LT.	430
0.420	2	(19032920001) BRIDGE--MCCRORY CR.	205
0.660	5	B403 HICKORY BEND DR. LT.	530
0.860	5	B404 HICKORY HILL CT. LT.	530
0.940	9	CLOVERBOTTOM DEVELOPMENT CTR. RT.	999
1.400	4	4944 MCCAMPBELL AVE. LT.	430
1.430	6	348660B GRADE CROSSING NASHVILLE & EASTERN RR.	610
1.510	5	B372 BLUE BRICK DR. LT.	530
1.600	5	B372 BLUE BRICK DR. LT.	530
1.680	9	BEGIN 15 MPH SCHOOL ZONE	933
1.720	9	TN. SCHOOL FOR THE BLIND RT. & DONELSON JR. HIGH SCHOOL LT.	915
1.760	9	END 15 MPH SCHOOL ZONE	934
1.780	5	B367 DONELSONWOOD DR. LT.	530
1.820	9	TRAFFIC SIGNAL	905
1.820	3	SR-24 LEBANON PK. RT. & LT.	310

TRIMS TRAFFIC REPORT

DAVIDSON County - 03292

COUNTY: DAVIDSON

ROUTE	SC	CO SQ	BEG LOG MILE	END LOG MILE	YR OF TRAFFIC	AVERAGE DAILY TRAFFIC	PEAK HOUR %	DESIGN HOUR VOLUME	DIRECT DIST %	% PASS CARS	% SINGLE UNIT TRUCKS	% MULTI UNIT TRUCKS	CYCLE COUNTS STATION NBR	CYCLE COUNTS STATION COUNTY	CLASS COUNTS STATION NBR	CLASS COUNTS STATION COUNTY	IS CLASS COUNT?
03292	0	1	0.000	1.820	2007	14360	9	11	65	95	4	1	82	19			

County	Route	Log Mile	Date of Crash	Time of Crash	Total Killed	Total Inj	Type of Crash	Location	Total Veh	First Harmful Event	Manner of First Collision	Weather Cond	Case Number
DAVIDSON	SR024	20.000	12/07/2004	1325	0	0	Prop Damage (over)	AT AN INTERSECTION	4		Rear-End	No Adverse Cond.	8193325
DAVIDSON	SR024	20.000	08/09/2005	1620	0	1	Non-Incap Injury	AT AN INTERSECTION	2	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	8271303
DAVIDSON	SR024	20.000	06/19/2004	1205	0	0	Prop Damage (over)	AT AN INTERSECTION	2	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	8530442
DAVIDSON	SR024	20.000	12/12/2005	1820	0	0	Prop Damage (over)	AT AN INTERSECTION	2		Rear-End	No Adverse Cond.	9070097
DAVIDSON	SR024	20.000	09/23/2005	750	0	1	Non-Incap Injury	AT AN INTERSECTION	2		Rear-End	No Adverse Cond.	9073705
DAVIDSON	SR024	20.000	11/12/2005	1700	0	0	Prop Damage (over)	AT AN INTERSECTION	2		Rear-End	No Adverse Cond.	9074121
DAVIDSON	SR024	20.000	09/24/2004	1045	0	0	Prop Damage (over)	AT AN INTERSECTION	2	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	9592184
DAVIDSON	SR024	20.000	04/14/2005	1500	0	0	Prop Damage (over)	AT AN INTERSECTION	3		Rear-End	No Adverse Cond.	9592254
DAVIDSON	SR024	20.000	03/31/2005	1600	0	0	Prop Damage (over)	AT AN INTERSECTION	2		Rear-End	No Adverse Cond.	9592401
DAVIDSON	SR024	20.000	07/14/2005	1335	0	0	Prop Damage (over)	AT AN INTERSECTION	2		Rear-End	No Adverse Cond.	9592456
DAVIDSON	SR024	20.000	04/26/2005	1300	0	0	Prop Damage (over)	AT AN INTERSECTION	2		Angle	Rain	9592697
DAVIDSON	SR024	20.000	05/06/2005	1605	0	0	Prop Damage (over)	AT AN INTERSECTION	2		Rear-End	No Adverse Cond.	9838256
DAVIDSON	SR024	20.000	06/03/2005	2041	0	1	Non-Incap Injury	AT AN INTERSECTION	2		Angle	No Adverse Cond.	9838669
DAVIDSON	SR024	20.000	08/06/2005	1913	0	0	Prop Damage (over)	AT AN INTERSECTION	2		Rear-End	No Adverse Cond.	9844930
DAVIDSON	SR024	20.010	09/10/2003	1720	0	1	Non-Incap Injury	AT AN INTERSECTION	2	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	8103331
DAVIDSON	SR024	20.010	07/10/2003	1540	0	0	Prop Damage (over)	AT AN INTERSECTION	2	VEHICLE IN TRANSPORT	Sideswipe, Same Dir	No Adverse Cond.	8103778
DAVIDSON	SR024	20.010	12/06/2003	1113	0	0	Prop Damage (over)	AT AN INTERSECTION	2	VEHICLE IN TRANSPORT	Angle	No Adverse Cond.	8105778
DAVIDSON	SR024	20.010	03/20/2004	1425	0	0	Prop Damage (over)	AT AN INTERSECTION	2	VEHICLE IN TRANSPORT	Rear-End	Rain	8106195
DAVIDSON	SR024	20.010	04/07/2003	1600	0	0	Prop Damage (over)	AT AN INTERSECTION	2	VEHICLE IN TRANSPORT	Angle	No Adverse Cond.	8148263
DAVIDSON	SR024	20.010	07/03/2004	44	0	1	Non-Incap Injury	AT AN INTERSECTION	2	VEHICLE IN TRANSPORT	Sideswipe, Same Dir	No Adverse Cond.	8161995
DAVIDSON	SR024	20.010	05/14/2004	2152	0	1	Non-Incap Injury	AT AN INTERSECTION	2	VEHICLE IN TRANSPORT	Angle	Rain	8180093
DAVIDSON	SR024	20.010	04/16/2003	1005	0	0	Prop Damage (over)	AT AN INTERSECTION	2	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	8191440
DAVIDSON	SR024	20.010	05/09/2003	1735	0	1	Prop Damage (over)	AT AN INTERSECTION	2	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	8196974
DAVIDSON	SR024	20.010	04/04/2003	900	0	0	Prop Damage (over)	AT AN INTERSECTION	3	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	8333545
DAVIDSON	SR024	20.010	06/20/2003	1600	0	0	Prop Damage (over)	AT AN INTERSECTION	6	VEHICLE IN TRANSPORT	Angle	No Adverse Cond.	8768527
DAVIDSON	SR024	20.010	08/05/2005	1445	0	0	Prop Damage (over)	ALONG ROADWAY	2	VEHICLE IN TRANSPORT	Angle	Rain	9608229
DAVIDSON	SR024	20.060	12/04/2004	1552	0	0	Prop Damage (over)	ALONG ROADWAY	1		Rear-End	No Adverse Cond.	9599977
DAVIDSON	SR024	20.070	02/28/2004	1800	0	0	Prop Damage (over)	ALONG ROADWAY	3	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	8148280
DAVIDSON	SR024	20.090	03/18/2003	1630	0	0	Prop Damage (over)	ALONG ROADWAY	2	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	8016362
DAVIDSON	SR024	20.100	10/27/2005	1441	0	0	Prop Damage (over)	ALONG ROADWAY	2		Rear-End	No Adverse Cond.	9842432
DAVIDSON	SR024	20.110	11/09/2004	1440	0	0	Prop Damage (over)	ALONG ROADWAY	2	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	8530722
DAVIDSON	SR024	20.120	11/06/2005	9999	0	0	Prop Damage (over)	ALONG ROADWAY	1		Head-On	Unknown	9074905
DAVIDSON	SR024	20.140	01/28/2004	1509	0	0	Prop Damage (over)	ALONG ROADWAY	3	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	8165976
DAVIDSON	SR024	20.160	07/21/2003	840	0	0	Prop Damage (over)	ALONG ROADWAY	2	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	8518033
DAVIDSON	SR024	20.160	09/17/2005	1329	0	0	Prop Damage (over)	ALONG ROADWAY	3		Rear-End	No Adverse Cond.	9843541
DAVIDSON	SR024	20.180	02/04/2005	1728	0	2	Non-Incap Injury	AT AN INTERSECTION	2		Rear-End	No Adverse Cond.	8162097

County	Route	Log Mile	Date of Crash	Time of Crash	Total Killed	Total Inj	Type of Crash	Location	Total Veh	First Harmful Event	Manner of First Collision	Weather Cond	Case Number
DAVIDSON	SR024	20.190	05/01/2003	1520	0	1	Non-Incap Injury	AT AN INTERSECTION	2	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	8020541
DAVIDSON	SR024	20.200	07/07/2003	1235	0	1	Non-Incap Injury	ALONG ROADWAY	2	ı TRANSPORT IN OTHER	Angle	No Adverse Cond.	8149147
DAVIDSON	SR024	20.200	04/29/2003	1434	0	12	Non-Incap Injury	ALONG ROADWAY	3	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	8197219
DAVIDSON	SR024	20.200	08/06/2004	1731	0	0	Prop Damage (over)	ALONG ROADWAY	2	VEHICLE IN TRANSPORT	Rear-to-Rear	No Adverse Cond.	8530773
DAVIDSON	SR024	20.200	08/28/2004	1122	0	0	Prop Damage (over)	AT AN INTERSECTION	2	Tree	No Collision w/ Vehicle	No Adverse Cond.	8841602
DAVIDSON	SR024	20.200	12/18/2005	1000	0	0	Prop Damage (over)	ALONG ROADWAY	1		Head-On	No Adverse Cond.	9074484
DAVIDSON	SR024	20.220	03/10/2003		0	0	Prop Damage (over)	ALONG ROADWAY	2	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	8448406
DAVIDSON	SR024	20.250	06/03/2003	1135	0	1	Non-Incap Injury	ALONG ROADWAY	2	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	8191678
DAVIDSON	SR024	20.250	02/06/2005	1320	0	1	Non-Incap Injury	AT AN INTERSECTION	2		Rear-End	No Adverse Cond.	9599992
DAVIDSON	SR024	20.260	03/08/2004	1520	0	0	Prop Damage (over)	AT AN INTERSECTION	2	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	8106545
DAVIDSON	SR024	20.300	12/17/2003	835	0	3	Non-Incap Injury	AT AN INTERSECTION	4	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	8110149
DAVIDSON	SR024	20.300	12/06/2005	1600	0	2	Non-Incap Injury	AT AN INTERSECTION	2		Angle	No Adverse Cond.	9069903
DAVIDSON	SR024	20.300	12/18/2005	1729	0	0	Prop Damage (over)	AT AN INTERSECTION	2		Rear-End	No Adverse Cond.	9074531
DAVIDSON	SR024	20.300	11/23/2005	1340	0	0	Prop Damage (over)	AT AN INTERSECTION	2	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	9096358
DAVIDSON	SR024	20.300	12/19/2005	1000	0	1	Non-Incap Injury	AT AN INTERSECTION	2		Rear-End	No Adverse Cond.	9287839
DAVIDSON	SR024	20.300	06/06/2005	2245	0	1	Non-Incap Injury	AT AN INTERSECTION	2		Rear-End	No Adverse Cond.	9605019
DAVIDSON	SR024	20.300	06/30/2005	1240	0	1	Non-Incap Injury	AT AN INTERSECTION	2		Rear-End	No Adverse Cond.	9842716
DAVIDSON	SR024	20.310	01/17/2004	1820	0	1	Non-Incap Injury	AT AN INTERSECTION	2	VEHICLE IN TRANSPORT	Rear-End	Rain	7704365
DAVIDSON	SR024	20.310	01/20/2004	806	0	1	Non-Incap Injury	AT AN INTERSECTION	2	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	8101042
DAVIDSON	SR024	20.310	05/14/2005	1414	0	0	Prop Damage (over)	AT AN INTERSECTION	1	Other Object (not fixed)	Unknown	No Adverse Cond.	8110422
DAVIDSON	SR024	20.310	12/02/2004	2055	0	0	Prop Damage (over)	AT AN INTERSECTION	2	VEHICLE IN TRANSPORT	Angle	No Adverse Cond.	8168071
~~DAVIDSON~~	~~SR024~~	~~20.310~~	~~06/05/2003~~	~~1250~~	~~0~~	~~0~~	~~Prop Damage (over)~~	~~ALONG ROADWAY~~	~~2~~	~~VEHICLE IN TRANSPORT~~	~~Angle~~	~~No Adverse Cond.~~	~~8193251~~
DAVIDSON	SR024	20.310	02/07/2003	1534	0	4	Non-Incap Injury	AT AN INTERSECTION	4	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	8768240
DAVIDSON	SR024	20.310	10/04/2004	1610	0	4	Non-Incap Injury	AT AN INTERSECTION	4	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	8834559
DAVIDSON	SR024	20.350	07/19/2004	1700	0	0	Prop Damage (over)	ALONG ROADWAY	2	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	8180003
DAVIDSON	SR024	20.400	02/11/2004	1835	0	1	Non-Incap Injury	ALONG ROADWAY	2	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	8178984
DAVIDSON	SR024	20.420	10/08/2004	1250	0	0	Prop Damage (over)	ALONG ROADWAY	2	VEHICLE IN TRANSPORT	Sideswipe, Same Dir	No Adverse Cond.	8842912
DAVIDSON	SR024	20.450	12/08/2005	715	0	0	Prop Damage (over)	ALONG ROADWAY	2		Rear-End	No Adverse Cond.	9845909
DAVIDSON	SR024	20.470	07/07/2004	1153	0	0	Prop Damage (over)	ALONG ROADWAY	2	VEHICLE IN TRANSPORT	Angle	No Adverse Cond.	8162459
DAVIDSON	SR024	20.470	06/24/2003	818	0	1	Non-Incap Injury	ALONG ROADWAY	2	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	8191861
DAVIDSON	SR024	20.490	05/08/2003	1714	0	1	Non-Incap Injury	ALONG ROADWAY	2	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	8142971
DAVIDSON	SR024	20.490	12/16/2004	730	0	0	Prop Damage (over)	ALONG ROADWAY	2		Rear-End	No Adverse Cond.	9606626
DAVIDSON	SR024	20.500	09/22/2004	1310	0	0	Prop Damage (over)	ALONG ROADWAY	2	VEHICLE IN TRANSPORT	Angle	No Adverse Cond.	8484465
DAVIDSON	SR024	20.520	01/14/2005	741	0	0	Prop Damage (over)	AT AN INTERSECTION	2	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	7466541
DAVIDSON	SR024	20.520	09/25/2004	1307	0	0	Prop Damage (over)	AT AN INTERSECTION	2	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	8162010
DAVIDSON	SR024	20.520	04/17/2004	931	0	0	Prop Damage (over)	AT AN INTERSECTION	2	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	8168505

RiverCrest PASS

County	Route	Log Mile	Date of Crash	Time of Crash	Total Killed	Total Inj	Type of Crash	Location	Total Veh	First Harmful Event	Manner of First Collision	Weather Cond	Case Number
DAVIDSON	SR024	20.520	06/11/2004	1510	0	0	Prop Damage (over)	AT AN INTERSECTION	2	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	8179901
DAVIDSON	SR024	20.520	05/19/2003	1440	0	0	Prop Damage (over)	AT AN INTERSECTION	2	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	8197281
DAVIDSON	SR024	20.520	12/01/2004	1315	0	0	Prop Damage (over)	AT AN INTERSECTION	2	VEHICLE IN TRANSPORT	Sideswipe, Same Dir	No Adverse Cond.	8212382
DAVIDSON	SR024	20.520	03/22/2003	1002	0	1	Non-Incap Injury	AT AN INTERSECTION	2	Overturn	Rear-End	No Adverse Cond.	8212651
DAVIDSON	SR024	20.520	10/24/2003	2100	0	1	Non-Incap Injury	AT AN INTERSECTION	2	VEHICLE IN TRANSPORT	Angle	No Adverse Cond.	8216885
DAVIDSON	SR024	20.520	05/27/2004	2015	0	0	Prop Damage (over)	AT AN INTERSECTION	1	Ditch	No Collision w/ Vehicle	No Adverse Cond.	8325799
DAVIDSON	SR024	20.520	11/29/2004	1340	0	0	Prop Damage (over)	AT AN INTERSECTION	2	VEHICLE IN TRANSPORT	Rear-End	No Adverse Cond.	8842917
DAVIDSON	SR024	20.520	10/16/2005	1223	0	2	Non-Incap Injury	AT AN INTERSECTION	2		Rear-End	No Adverse Cond.	9073831
DAVIDSON	SR024	20.520	03/10/2005	1815	0	0	Prop Damage (over)	AT AN INTERSECTION	2		Rear-End	No Adverse Cond.	9599840

TRAFFIC COUNTS
AND
CAPACITY ANALYSES

TENNESSEE DEPARTMENT OF TRANSPORTATION
PROJECT PLANNING DIVISION

PROJECT NO.: _____ ROUTE: S.R. 24 (U.S. 70)
COUNTY: DAVIDSON CITY: NASHVILLE
PROJECT PIN NUMBER: _____
PROJECT DESCRIPTION: S.R. 24 (U.S. 70) LEBANON ROAD
FROM STEWARTS FERRY PIKE TO DISSPAYNE DRIVE
PROPOSED WIDENING OF THE FOUR LANE UNDIVIDED SECTION

DIVISION REQUESTING:

		PAVEMENT DESIGN	☐
MAINTENANCE	☐	STRUCTURES	☐
PLANNING	☒	SURVEY & DESIGN	☐
PROG. DEVELOPMENT & ADM.	☐	TRAFFIC SIGNAL DESIGN	☐
PUBLIC TRANS. & AERO.	☐	OTHER _____	☐

YEAR PROJECT PROGRAMMED FOR CONSTRUCTION: _____
PROJECTED LETTING DATE: _____

TRAFFIC ASSIGNMENT:

BASE YEAR		DESIGN YEAR					DESIGN ROADWAY % TRUCKS		DESIGN AVERAGE DAILY LOADS	
AADT	YEAR	AADT	DHV	%	YEAR	DIR.DIST.	DHV	AADT	FLEX	RIGID
47,470	2012	52,280	5,228	10	2032	70-30	1	2		

REQUESTED BY: NAME GARY WEBBER DATE 9/21/07
DIVISION PROJECT PLANNING
ADDRESS 1000 JAMES K. POLK BLDG.
NASHVILLE, TN 37243

REVIEWED BY: TONY ARMSTRONG Tony Armstrong DATE 12·19·07
TRANSPORTATION MANAGER 1
SUITE 1000, JAMES K. POLK BUILDING

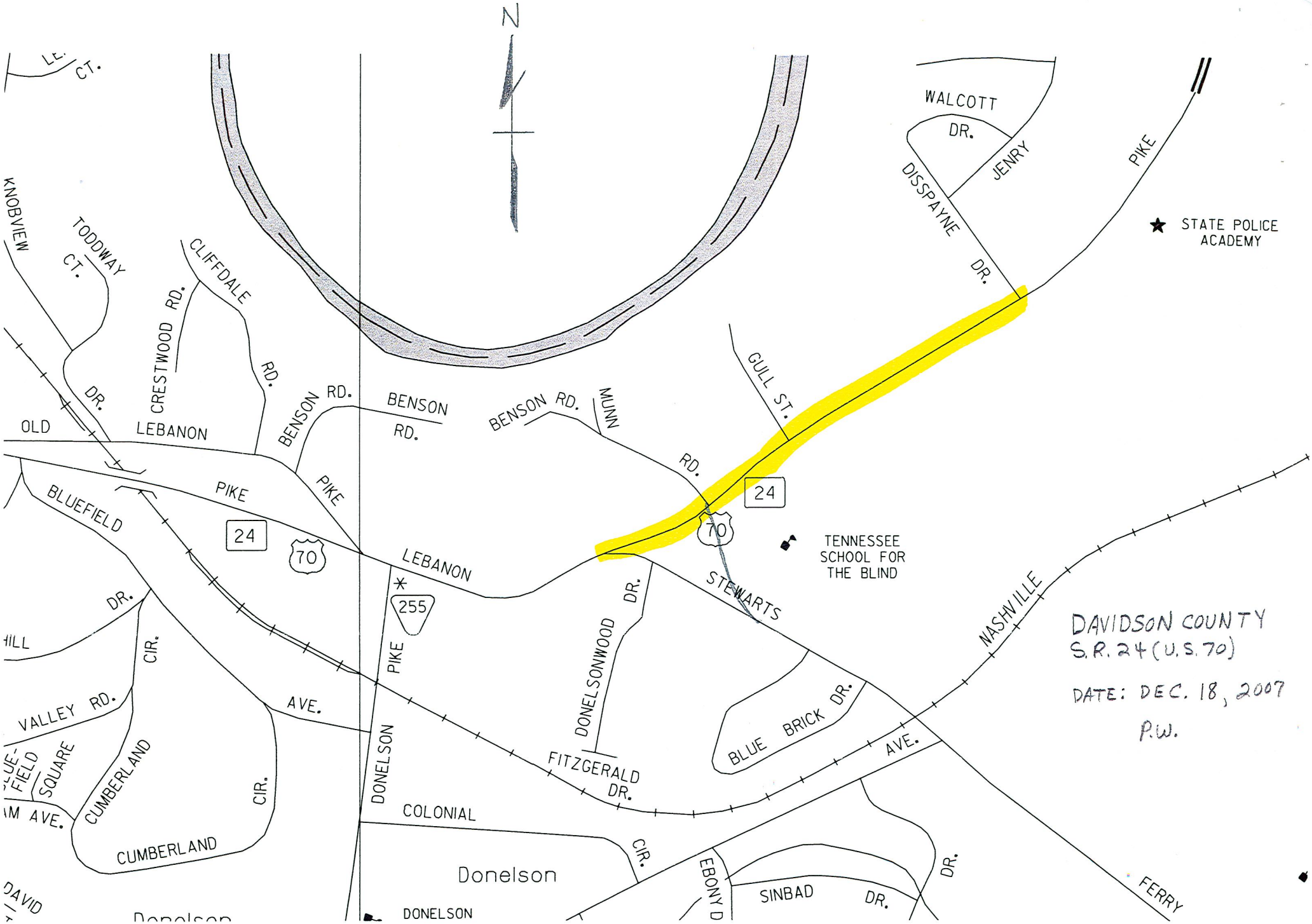
APPROVED BY: BILL HART Bill Hart DATE 12/19/07
TRANSPORTATION MANAGER 2
SUITE 1000, JAMES K. POLK BUILDING

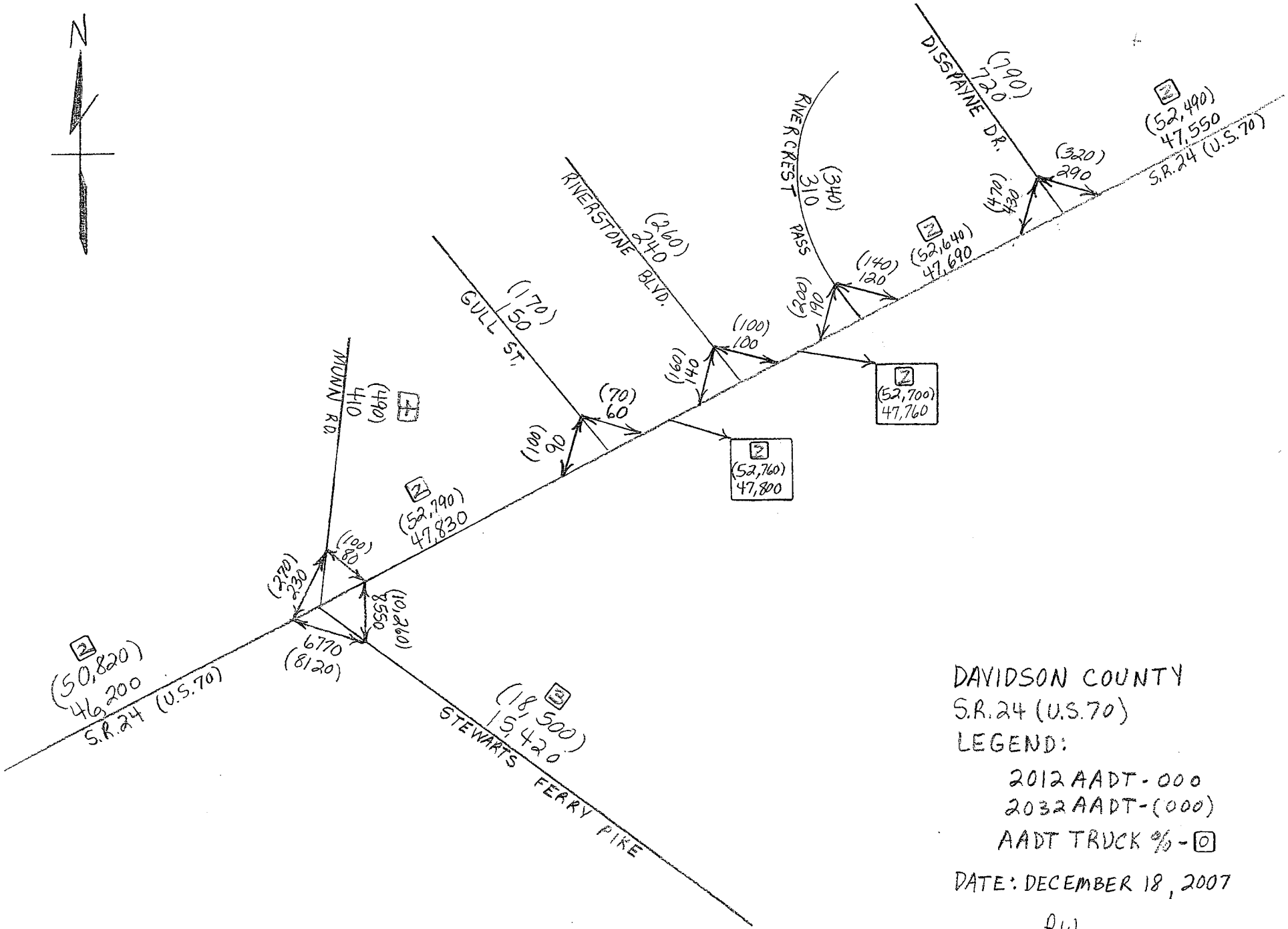
COMMENTS:

THIS TRAFFIC BASED ON 2007 CYCLE COUNTS, 4 SPECIAL 24-HOUR MACHINE COUNTS DONE 12/6/07 AND A 12-HOUR TURNING MOVEMENT COUNT DONE 12/4/07 IN DAVIDSON COUNTY. FUTURE TRAFFIC BASED ON GROWTH RATE FROM THE NASHVILLE MPO COMPUTER ASSIGNMENT MODEL.

DHV'S ARE NOT REQUIRED FOR SIDE ROADS LESS THAN 1000 AADT.

NOTE: FOR BRIDGE REPLACEMENT PROJECTS, ADLs ARE NOT REQUIRED FOR AADT's OF 1000 OR LESS AND PERCENTAGE OF TRUCKS OF 7% OR LESS.
SEE ATTACHMENTS FOR TURNING MOVEMENTS AND/OR OTHER DETAILS. (REV. 9/20/07)

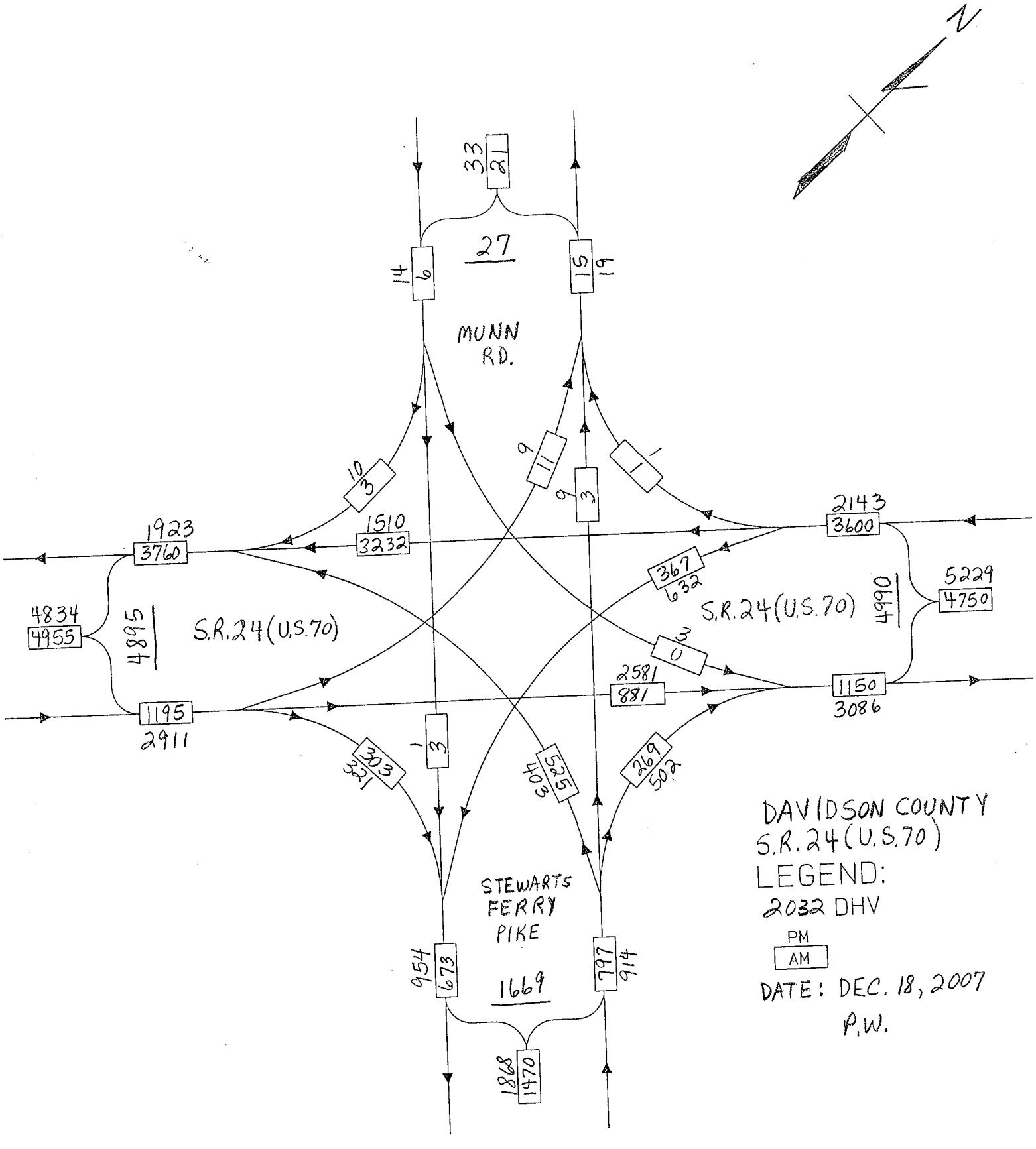

N
WALCOTT
DR.
JENRY
DISSPAYNE
DR.
PIKE
STATE POLICE
ACADEMY
KNOBVIEW
TODDWAY
CT.
CLIFFDALE
CRESTWOOD RD.
RD.
DR.
OLD
LEBANON
BENSON RD.
BENSON
RD.
BENSON RD.
MUNN
RD.
GULL ST.
BLUEFIELD
PIKE
PIKE
24
70
24
70
TENNESSEE
SCHOOL FOR
THE BLIND
LEBANON
255
PIKE
DONELSON
DR.
STEWARTS
NASHVILLE
DR.
CIR.
VALLEY RD.
AVE.
DONELSONWOOD
BLUE BRICK DR.
AVE.
SQUARE
CUMBERLAND
CIR.
FITZGERALD
DR.
COLONIAL
CUMBERLAND
CIR.
Donelson
EBONY
SINBAD
DR.
DR.
FERRY
DONELSON
DAVID
DAVIDSON COUNTY
S.R. 24 (U.S. 70)
DATE: DEC. 18, 2007
P.W.



DAVIDSON COUNTY
S.R.24 (U.S.70)
LEGEND:
2012 AADT - 000
2032 AADT - (000)
AADT TRUCK % - [0]

DATE: DECEMBER 18, 2007

P.W.


N
33
21
27
14
6
15
19
MUNN RD.
10
3
9
11
9
3
1
1923
3760
1510
3232
2143
3600
367
632
5229
4750
4990
4834
4955
4895
S.R.24(U.S.70)
S.R.24(U.S.70)
3
0
2581
881
1150
3086
1195
2911
303
321
1
3
525
403
269
502
STEWARTS FERRY PIKE
954
673
797
914
1669
1868
1470
DAVIDSON COUNTY
S.R.24(U.S.70)
LEGEND:
2032 DHV
PM
AM
DATE: DEC. 18, 2007
P.W.

TENNESSEE DEPARTMENT OF TRANSPORTATION
PROJECT PLANNING DIVISION

TRAFFIC REQUEST FOR FIELD DATA

REQUESTED BY: TONY ARMSTRONG DATE: 11/27/07
ASSIGNED TO: _____ DATE: _____
MADE BY: _____ DATE: _____
ANALYZED BY: _____ DATE: _____
RECEIVED BY: _____ DATE: _____

LOCATION OF TRAFFIC STUDY:
COUNTY: DAVIDSON
CITY: NASHVILLE
PROJECT NO.: _____

NUMBER OF COUNTS AND/OR STATIONS REQUESTED:
1 12-HR. TURNING MOVEMENT COUNT

NUMBER OF COUNTS AND/OR STATIONS MADE:
_____

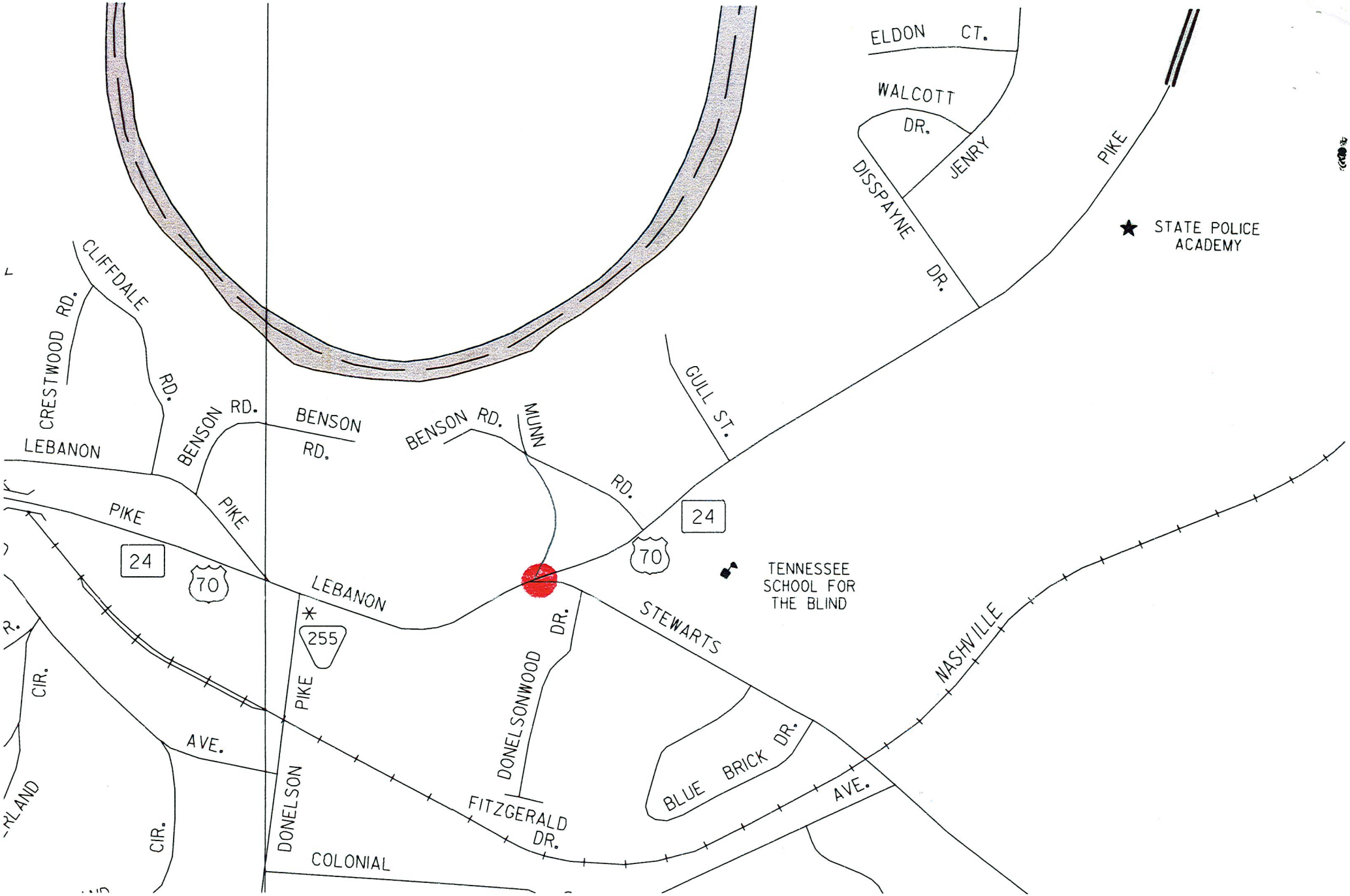
MAPS PROVIDED: 1 DATE: 11/27/07

MAPS RETURNED: _____ DATE: _____

COMMENTS

1 12-HR. TURNING MOVEMENT COUNT IN DAVIDSON CO. AT THE INTERSECTION OF STEWART'S FERRY PIKE & S.R. 24 (U.S.70).

(REV. 12/2/05)


ELDON CT.
WALCOTT DR.
JENRY
DISSPAYNE DR.
PIKE
STATE POLICE ACADEMY
CLIFFDALE RD.
CRESTWOOD RD.
BENSON RD.
BENSON RD.
BENSON RD.
MUNN RD.
GULL ST.
LEBANON PIKE
24
70
LEBANON PIKE
24
70
TENNESSEE SCHOOL FOR THE BLIND
STEWARTS
NASHVILLE
255
PIKE
DONELSON
DONELSONWOOD DR.
BLUE BRICK DR.
AVE.
FITZGERALD DR.
COLONIAL
CIR.
CIR.
AVE.

T.D.O.T. TURNING MOVEMENT SHEET

Station No.: 1
Location: MUNNS AT STATE ROUTE 24
Count Date: 12/4-5/07
Weather: SUNNY
Recorder: M&KWAKEFIELD
County: DAVIDSON
City: NASHVILLE

N

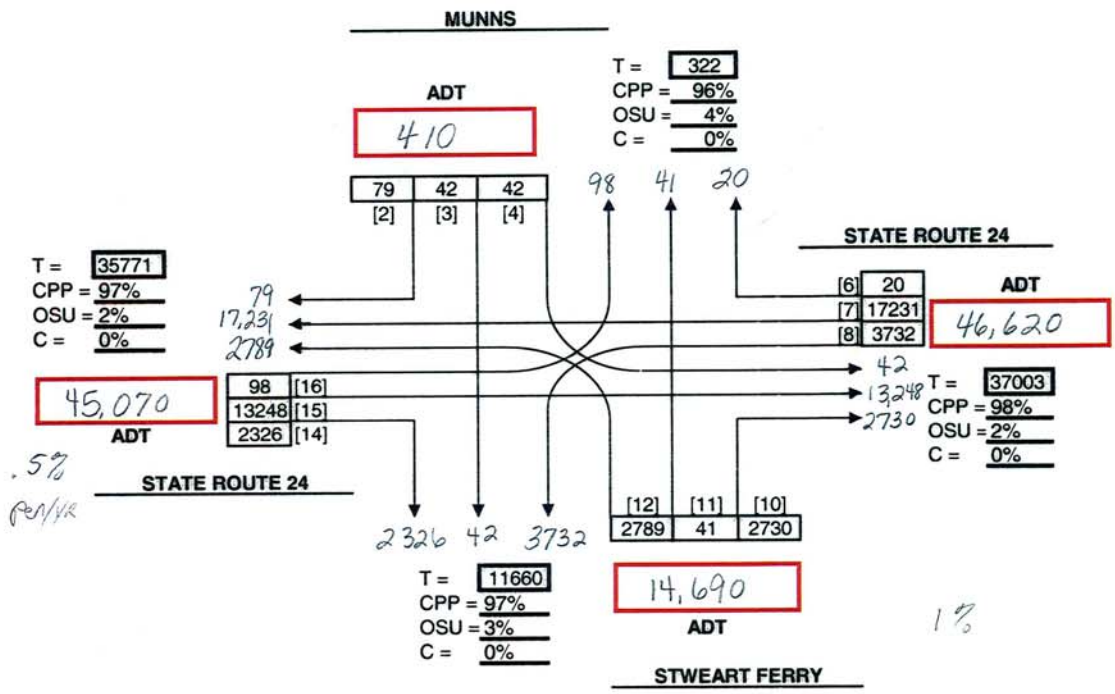
22

PROJECT NUMBER:

LEGEND:
T = TOTAL TRAFFIC PER APPROACH (BOTH DIRECTIONS)
CPP = CARS, PICK-UPS & PANELS
OSU = OTHER SINGLE UNITS
C = COMBINATIONS

2007 ADT
1.26 = FACTOR USED TO INCREASE A COUNT TO A 24 - HOUR VALUE

STA. #82



V.F. = 0.93
DHV = 1.20
G.R. = 1.125

Print Date: 12/14/2007

T.D.O.T. TURNING MOVEMENT SHEET

CARS, PICK-UPS & PANELS

PEAK	Total	PHF
AM	4457	0.894
PM	4765	0.97

TIME	2	3	4	6	7	8	10	11	12	14	15	16	SUB	TOTAL	PEAK	
6:00 - 6:15	0	0	0	0	252	44	14	0	29	19	42	0	400	413	2737	
6:15 - 6:30	0	0	0	0	334	43	14	0	36	16	61	0	504	513	3374	
6:30 - 6:45	0	0	0	0	549	77	19	0	54	39	76	0	814	838	3871	
6:45 - 7:00	0	0	0	0	572	47	34	0	112	58	112	0	935	973	4184	
7:00 - 7:15	0	0	0	0	645	64	39	0	98	44	128	1	1019	1050	4457	*
7:15 - 7:30	2	0	0	0	504	69	57	0	88	61	192	2	975	1010	4323	
7:30 - 7:45	0	1	0	1	625	83	75	0	102	62	165	2	1116	1151	4181	
7:45 - 8:00	0	1	0	0	775	72	37	2	110	54	159	3	1213	1246	3752	#
8:00 - 8:15	6	0	0	0	464	51	47	0	79	64	170	4	885	916	3146	
8:15 - 8:30	1	1	0	1	447	51	59	2	63	31	177	7	840	868	2859	
8:30 - 8:45	0	0	1	0	337	43	39	0	72	37	160	2	691	722	2592	
8:45 - 9:00	0	0	1	0	257	36	46	1	76	28	164	2	611	640	2501	
9:00 - 9:15	1	1	0	1	271	47	27	3	65	25	162	1	604	629	2424	
9:15 - 9:30	1	0	0	1	323	32	26	0	29	39	128	0	579	601	2368	
9:30 - 9:45	1	1	0	1	298	46	33	1	30	29	168	1	609	631	2374	
9:45 - 10:00	0	0	1	1	238	35	41	1	40	29	161	0	547	563	2365	
10:00 - 10:15	1	0	0	0	256	43	33	0	34	19	168	2	556	573	2545	
10:15 - 10:30	3	0	0	1	277	47	34	1	32	20	170	1	586	607	2709	
10:30 - 10:45	1	0	0	0	281	35	55	0	28	27	180	2	609	622	2758	
10:45 - 11:00	5	1	1	0	293	49	74	1	36	23	243	0	726	743	2945	
11:00 - 11:15	1	1	0	0	291	75	58	1	41	18	231	1	718	737	3043	
11:15 - 11:30	1	1	0	0	215	50	46	3	46	37	237	5	641	656	3241	
11:30 - 11:45	4	1	4	0	324	74	75	2	49	42	218	2	795	809	3438	
11:45 - 12:00	4	0	1	1	369	49	63	2	39	36	236	6	806	841	3478	
12:00 - 12:15	4	0	1	0	443	62	58	0	45	41	257	1	912	935	3366	
12:15 - 12:30	0	0	0	0	377	72	57	1	43	44	247	1	842	853	3181	
12:30 - 12:45	1	0	2	1	349	87	52	1	28	46	268	0	835	849	3112	
12:45 - 1:00	0	17	5	0	205	92	33	1	44	49	253	2	701	729	3155	
1:00 - 1:15	0	0	1	0	286	56	44	0	39	38	272	2	738	750	3274	
1:15 - 1:30	2	0	1	0	250	94	36	0	36	56	280	5	760	784	3392	
1:30 - 1:45	3	0	2	0	406	77	31	0	36	43	272	2	872	892	3587	
1:45 - 2:00	2	0	1	0	373	61	44	2	52	39	248	0	822	848	3731	
2:00 - 2:15	2	3	1	1	370	98	30	0	44	41	246	5	841	868	3878	
2:15 - 2:30	5	0	0	0	373	78	51	1	47	58	333	6	952	979	3953	
2:30 - 2:45	3	1	1	1	393	90	52	1	43	62	346	3	996	1036	4128	
2:45 - 3:00	2	0	1	0	383	101	51	0	31	60	327	4	960	995	4271	
3:00 - 3:15	2	0	1	0	256	52	103	3	72	49	377	3	918	943	4504	
3:15 - 3:30	0	0	0	0	239	56	85	0	91	58	597	5	1131	1154	4691	
3:30 - 3:45	3	0	0	1	263	84	129	1	130	60	480	3	1154	1179	4765	*
3:45 - 4:00	3	0	0	0	257	104	118	3	66	56	600	1	1208	1228	4750	#
4:00 - 4:15	1	1	2	0	294	162	71	3	58	70	441	1	1104	1130	4582	
4:15 - 4:30	0	0	0	0	358	145	79	0	59	63	504	2	1210	1228	4534	#
4:30 - 4:45	4	0	5	5	302	141	114	0	86	67	419	3	1146	1164	4525	
4:45 - 5:00	2	0	0	0	280	99	81	2	51	77	458	0	1050	1060	4429	
5:00 - 5:15	4	5	6	0	268	159	71	0	45	73	440	0	1071	1082	4422	
5:15 - 5:30	0	1	1	1	353	161	82	1	50	80	479	0	1209	1219		
5:30 - 5:45	0	0	0	0	285	140	91	0	48	70	420	1	1055	1068		
5:45 - 6:00	2	1	1	0	329	127	60	0	48	68	406	1	1043	1053		
SUBTOTAL	77	38	41	18	16889	3660	2668	40	2680	2225	12878	95	41309			
TOTAL	79	42	42	20	17231	3732	2730	41	2789	2326	13248	98		42378		

Station No.: 1
Location: MUNNS AT STATE ROUTE 24
Date: 12/4-5/07
Weather: SUNNY
Recorder: M&KWAKEFIELD
County: DAVIDSON
City: NASHVILLE

*=Peak Hour
#=Peak 15 min

Print Date: 12/14/2007

T.D.O.T. TURNING MOVEMENT SHEET

OTHER SINGLE UNITS

TIME	2	3	4	6	7	8	10	11	12	14	15	16	SUB
6:00 - 6:15	0	0	0	0	4	1	1	0	1	2	3	0	12
6:15 - 6:30	0	0	0	0	4	0	0	0	1	0	2	0	7
6:30 - 6:45	0	0	0	0	14	1	2	0	4	0	3	0	24
6:45 - 7:00	0	0	0	0	15	2	0	0	8	3	9	0	37
7:00 - 7:15	0	0	0	0	5	0	1	0	3	6	15	0	30
7:15 - 7:30	0	0	0	0	3	3	0	0	7	6	15	0	34
7:30 - 7:45	0	0	0	0	7	1	2	0	6	5	11	1	33
7:45 - 8:00	0	0	0	0	8	0	3	0	3	3	13	0	30
8:00 - 8:15	0	0	0	0	11	2	2	1	5	0	7	0	28
8:15 - 8:30	0	0	0	0	12	1	1	0	5	2	7	0	28
8:30 - 8:45	0	0	0	0	8	0	3	0	5	2	10	0	28
8:45 - 9:00	0	0	0	0	7	2	3	0	3	3	10	0	28
9:00 - 9:15	0	1	0	0	9	0	2	0	1	1	7	1	22
9:15 - 9:30	0	0	0	0	12	0	1	0	3	0	5	0	21
9:30 - 9:45	0	0	0	0	7	1	1	0	2	0	7	0	18
9:45 - 10:00	0	0	0	0	5	2	1	0	0	0	7	0	15
10:00 - 10:15	1	0	0	0	4	1	1	0	3	0	5	0	15
10:15 - 10:30	0	0	0	0	3	5	2	0	1	1	8	1	21
10:30 - 10:45	0	0	0	0	3	1	0	0	0	1	4	0	9
10:45 - 11:00	0	0	0	0	7	0	1	0	0	2	7	0	17
11:00 - 11:15	0	1	0	1	7	0	1	0	0	1	7	0	18
11:15 - 11:30	0	0	0	0	2	0	3	0	0	1	6	0	12
11:30 - 11:45	0	0	0	0	5	2	2	0	1	0	2	0	12
11:45 - 12:00	0	0	0	0	13	2	0	0	3	2	10	0	30
12:00 - 12:15	0	0	0	0	8	1	2	0	2	1	5	0	19
12:15 - 12:30	0	0	0	0	2	1	2	0	0	0	3	0	8
12:30 - 12:45	0	0	0	0	5	1	0	0	1	0	7	0	14
12:45 - 1:00	0	2	0	0	9	1	1	0	4	1	8	0	26
1:00 - 1:15	0	0	0	0	3	0	1	0	2	0	4	0	10
1:15 - 1:30	0	0	0	0	8	3	1	0	3	2	4	0	21
1:30 - 1:45	0	0	0	0	9	0	0	0	0	2	8	0	19
1:45 - 2:00	0	0	0	1	10	0	0	0	3	1	8	0	23
2:00 - 2:15	0	0	1	0	4	3	4	0	2	4	7	0	25
2:15 - 2:30	0	0	0	0	4	3	1	0	1	3	13	0	25
2:30 - 2:45	0	0	0	0	8	0	1	0	1	13	16	0	39
2:45 - 3:00	0	0	0	0	10	9	2	0	0	7	6	0	34
3:00 - 3:15	0	0	0	0	8	2	2	0	2	6	4	0	24
3:15 - 3:30	0	0	0	0	7	2	2	0	5	2	5	0	23
3:30 - 3:45	0	0	0	0	11	4	1	0	2	0	6	0	24
3:45 - 4:00	1	0	0	0	6	1	1	0	1	3	7	0	20
4:00 - 4:15	0	0	0	0	5	3	1	0	4	1	11	0	25
4:15 - 4:30	0	0	0	0	7	0	0	0	1	3	7	0	18
4:30 - 4:45	0	0	0	0	6	2	1	0	1	0	7	0	17
4:45 - 5:00	0	0	0	0	4	1	0	0	1	2	2	0	10
5:00 - 5:15	0	0	0	0	2	1	2	0	0	1	3	0	9
5:15 - 5:30	0	0	0	0	3	0	1	0	0	0	2	0	6
5:30 - 5:45	0	0	0	0	4	1	1	0	0	1	6	0	13
5:45 - 6:00	0	0	0	0	2	1	0	0	0	0	6	0	9
SUBTOTAL	2	4	1	2	320	67	60	1	101	94	335	3	990

Station No.: 1
Location: MUNNS AT STATE ROUTE 24
Date: 12/4-5/07
Weather: SUNNY
Recorder: M&KWAKEFIELD
County: DAVIDSON
City: NASHVILLE

Print Date: 12/14/2007

T.D.O.T. TURNING MOVEMENT SHEET

COMBINATIONS

TIME	2	3	4	6	7	8	10	11	12	14	15	16	SUB
6:00 - 6:15	0	0	0	0	0	0	0	0	0	0	1	0	1
6:15 - 6:30	0	0	0	0	1	0	0	0	0	0	1	0	2
6:30 - 6:45	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 - 7:00	0	0	0	0	0	0	0	0	0	0	1	0	1
7:00 - 7:15	0	0	0	0	0	0	0	0	0	0	1	0	1
7:15 - 7:30	0	0	0	0	0	0	0	0	1	0	0	0	1
7:30 - 7:45	0	0	0	0	2	0	0	0	0	0	0	0	2
7:45 - 8:00	0	0	0	0	0	0	0	0	0	0	3	0	3
8:00 - 8:15	0	0	0	0	1	0	0	0	1	0	1	0	3
8:15 - 8:30	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 - 8:45	0	0	0	0	1	0	0	0	0	0	2	0	3
8:45 - 9:00	0	0	0	0	0	1	0	0	0	0	0	0	1
9:00 - 9:15	0	0	0	0	0	0	0	0	1	2	0	0	3
9:15 - 9:30	0	0	0	0	0	0	0	0	1	0	0	0	1
9:30 - 9:45	0	0	0	0	0	0	0	0	1	0	3	0	4
9:45 - 10:00	0	0	0	0	0	0	0	0	1	0	0	0	1
10:00 - 10:15	0	0	0	0	0	0	0	0	1	0	1	0	2
10:15 - 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 - 10:45	0	0	0	0	1	0	0	0	0	1	2	0	4
10:45 - 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 - 11:15	0	0	0	0	1	0	0	0	0	0	0	0	1
11:15 - 11:30	0	0	0	0	1	0	0	0	0	1	1	0	3
11:30 - 11:45	0	0	0	0	0	1	0	0	0	0	1	0	2
11:45 - 12:00	0	0	0	0	2	0	1	0	0	0	2	0	5
12:00 - 12:15	0	0	0	0	1	1	0	0	0	1	1	0	4
12:15 - 12:30	0	0	0	0	2	0	1	0	0	0	0	0	3
12:30 - 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 - 1:00	0	0	0	0	0	0	0	0	0	0	2	0	2
1:00 - 1:15	0	0	0	0	0	0	0	0	0	0	2	0	2
1:15 - 1:30	0	0	0	0	1	2	0	0	0	0	0	0	3
1:30 - 1:45	0	0	0	0	0	0	0	0	1	0	0	0	1
1:45 - 2:00	0	0	0	0	1	0	0	0	0	0	2	0	3
2:00 - 2:15	0	0	0	0	1	0	0	0	0	0	1	0	2
2:15 - 2:30	0	0	0	0	1	0	0	0	0	0	1	0	2
2:30 - 2:45	0	0	0	0	0	0	0	0	0	1	0	0	1
2:45 - 3:00	0	0	0	0	0	0	0	0	0	0	1	0	1
3:00 - 3:15	0	0	0	0	1	0	0	0	0	0	0	0	1
3:15 - 3:30	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 - 3:45	0	0	0	0	1	0	0	0	0	0	0	0	1
3:45 - 4:00	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 - 4:15	0	0	0	0	1	0	0	0	0	0	0	0	1
4:15 - 4:30	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 - 4:45	0	0	0	0	0	0	0	0	0	0	1	0	1
4:45 - 5:00	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 - 5:15	0	0	0	0	0	0	0	0	0	0	2	0	2
5:15 - 5:30	0	0	0	0	2	0	0	0	0	1	1	0	4
5:30 - 5:45	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 - 6:00	0	0	0	0	0	0	0	0	0	0	1	0	1
SUBTOTAL	0	0	0	0	22	5	2	0	8	7	35	0	79

Station No.: 1
Location: MUNNS AT STATE ROUTE 24
Date: 12/4-5/07
Weather: SUNNY
Recorder: M&KWAKEFIELD
County: DAVIDSON
City: NASHVILLE

Print Date: 12/14/2007

Traffic Signal Optimization Study

Metro Nashville Signal System

KHA 119012000

N-S Street: Lebanon Pike
E-W Street: Disspayne Drive / YMCA
Intersection No. : 4239
Counted By: STE

File Name : 4239
Site Code : 00004239
Start Date : 8/31/2005
Page No : 1

Groups Printed- Unshifted

	Disspayne Drive Southbound				Lebanon Pike Westbound				YMCA Northbound				Lebanon Pike Eastbound				
Start Time	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
07:00 AM	12	0	3	0	0	537	3	6	6	1	4	1	4	177	8	21	783
07:15 AM	26	1	0	1	1	496	5	8	5	0	7	0	7	254	20	12	843
07:30 AM	38	3	2	0	1	454	6	5	3	0	8	0	7	217	25	9	778
07:45 AM	27	3	2	0	0	509	6	12	4	0	5	0	10	239	2	18	837
Total	103	7	7	1	2	1996	20	31	18	1	24	1	28	887	55	60	3241
08:00 AM	7	1	1	0	0	592	10	21	6	1	8	0	18	212	1	12	890
08:15 AM	6	0	1	2	2	594	21	17	4	0	10	0	13	191	2	10	873
08:30 AM	7	1	0	2	0	684	12	14	8	1	8	0	3	223	1	15	979
08:45 AM	4	0	1	0	1	610	15	24	4	0	11	0	5	267	1	31	974
Total	24	2	3	4	3	2480	58	76	22	2	37	0	39	893	5	68	3716
*** BREAK ***																	
11:00 AM	2	1	0	0	0	253	3	13	8	1	5	0	13	256	3	12	570
11:15 AM	3	0	1	0	1	259	6	14	8	0	10	0	12	233	5	8	560
11:30 AM	1	0	0	0	9	279	2	12	3	0	10	0	4	264	1	10	595
11:45 AM	2	0	0	0	1	275	5	9	8	0	4	0	11	306	1	13	635
Total	8	1	1	0	11	1066	16	48	27	1	29	0	40	1059	10	43	2360
12:00 PM	3	0	0	0	0	276	3	11	9	1	8	0	7	285	4	9	616
12:15 PM	4	0	0	1	1	273	0	11	10	0	9	0	12	285	4	11	621
12:30 PM	2	0	0	0	2	300	10	6	10	0	16	2	3	303	5	10	669
12:45 PM	1	0	0	0	2	303	6	7	3	0	5	0	7	294	3	11	642
Total	10	0	0	1	5	1152	19	35	32	1	38	2	29	1167	16	41	2548
*** BREAK ***																	
04:00 PM	3	0	2	1	3	308	7	9	9	0	7	0	8	419	9	14	799
04:15 PM	5	0	1	0	10	235	10	14	6	0	5	0	7	501	9	15	818
04:30 PM	2	0	2	0	0	305	11	10	5	1	8	0	19	493	7	8	871
04:45 PM	3	0	1	0	3	343	12	13	8	2	6	0	21	546	4	10	972
Total	13	0	6	1	16	1191	40	46	28	3	26	0	55	1959	29	47	3460
05:00 PM	6	1	2	0	3	269	11	7	7	0	7	0	22	554	13	17	919
05:15 PM	3	0	1	0	3	340	19	8	8	0	5	0	18	556	17	2	980
05:30 PM	3	2	1	0	1	320	6	8	9	1	8	0	14	510	7	6	896
05:45 PM	5	0	0	0	2	245	11	3	9	2	6	0	13	434	10	5	745
Total	17	3	4	0	9	1174	47	26	33	3	26	0	67	2054	47	30	3540
Grand Total	175	13	21	7	46	9059	200	262	160	11	180	3	258	8019	162	289	18865
Apprch %	81.0	6.0	9.7	3.2	0.5	94.7	2.1	2.7	45.2	3.1	50.8	0.8	3.0	91.9	1.9	3.3	
Total %	0.9	0.1	0.1	0.0	0.2	48.0	1.1	1.4	0.8	0.1	1.0	0.0	1.4	42.5	0.9	1.5	

Peak Hour		Left	Through	Right	Percent Trucks	Left	Through	Right	Percent Trucks	Left	Through	Right	Percent Trucks	Left	Through	Right	Percent Trucks
6:00 - 9:00	Volume	3	2	24	13.8%	58	2480	3	3.0%	37	2	22	13.1%	5	893	39	2.3%
	PHF	0.75	0.50	0.86		0.69	0.91	0.38		0.84	0.50	0.69		0.63	0.84	0.54	
12:00 - 1:00	Volume	0	0	10	10.0	19	1152	5	3.0	38	1	32	2.8	16	1167	29	3.4
	PHF	—	—	0.63		0.48	0.95	0.63		0.59	0.25	0.80		0.86	0.76	0.66	
4:45 - 5:45	Volume	15	3	15	0.0	46	1272	10	2.7	26	3	32	0.0	41	2166	75	1.5
	PHF	0.63	0.38	0.63		0.63	0.93	0.63		0.81	0.38	0.69		0.66	0.97	0.85	

TENNESSEE DEPARTMENT OF TRANSPORTATION
PROJECT PLANNING DIVISION

TRAFFIC REQUEST FOR FIELD DATA

REQUESTED BY: TONY ARMSTRONG DATE: 11/27/07
ASSIGNED TO: _____ DATE: _____
MADE BY: _____ DATE: _____
ANALYZED BY: _____ DATE: _____
RECEIVED BY: _____ DATE: _____

LOCATION OF TRAFFIC STUDY:
COUNTY: DAVIDSON
CITY: NASHVILLE
PROJECT NO.: _____

NUMBER OF COUNTS AND/OR STATIONS REQUESTED:
4 24 HR. MACHINE COUNTS

NUMBER OF COUNTS AND/OR STATIONS MADE:
_____

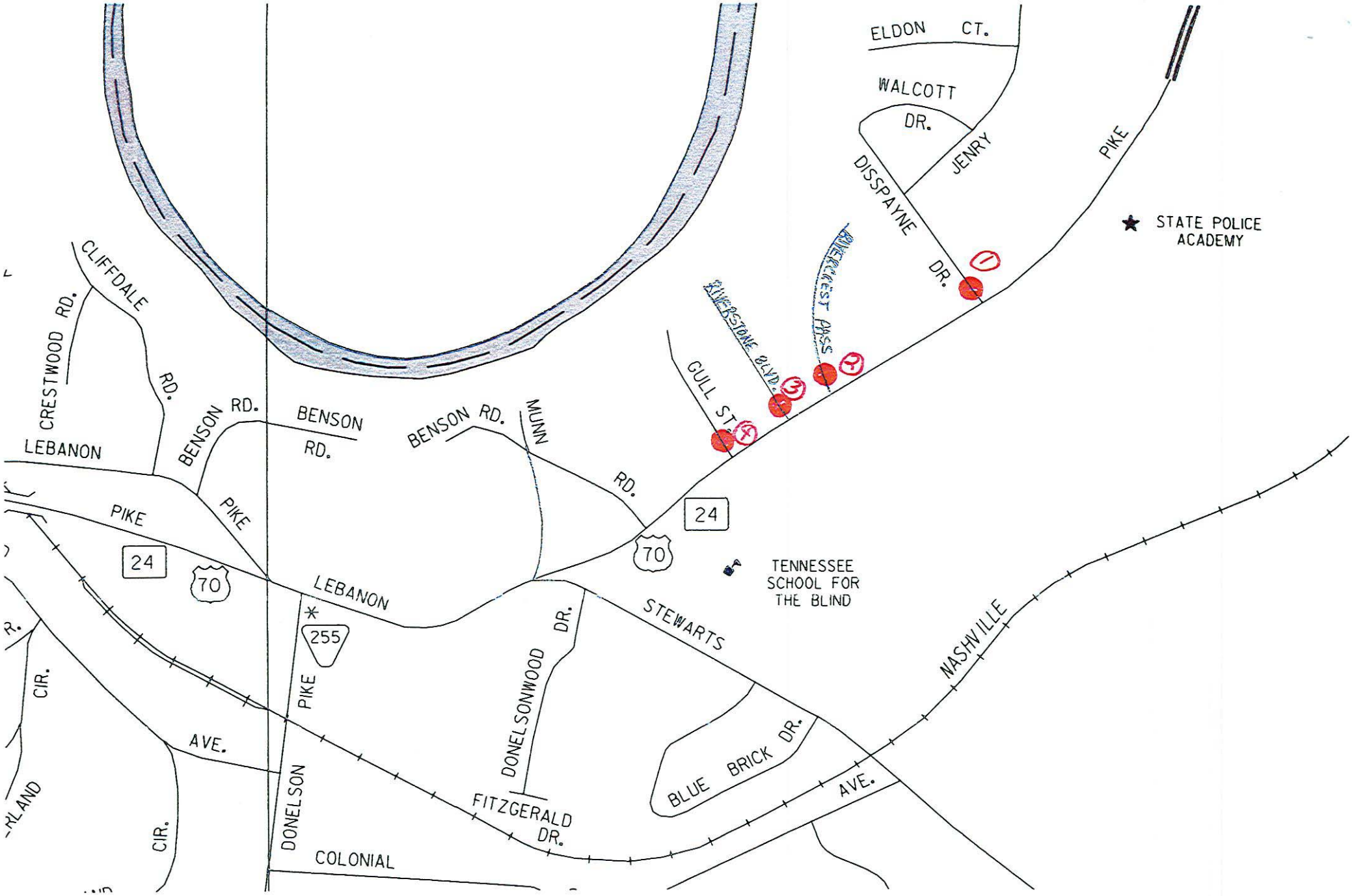
MAPS PROVIDED: 1 DATE: 11/27/07

MAPS RETURNED: _____ DATE: _____

COMMENTS

4 24-HR. MACHINE COUNTS IN DAVIDSON COUNTY.
(1) DISSPAYNE DRIVE & S.R.24 (U.S.70)
(2) RIVERCREST PASS & S.R. 24 (U.S.70)
(3) RIVERSTONE BLVD. & S.R.24 (U.S.70)
(4) GUILL CT. & S.R.24 (U.S.70)

(REV. 12/2/05)


ELDON CT.
WALCOTT DR.
JENRY
DISSPAYNE DR.
PIKE
STATE POLICE ACADEMY
RIVERSTONE BLVD.
RIVERWEST PASS
GULL ST.
CLIFFDALE RD.
CRESTWOOD RD.
BENSON RD.
BENSON RD.
BENSON RD.
MUNN RD.
LEBANON PIKE
LEBANON PIKE
24
70
24
70
255
TENNESSEE SCHOOL FOR THE BLIND
STEWARTS
NASHVILLE
DONELSONWOOD DR.
BLUE BRICK DR.
AVE.
CIR.
CIR.
DONELSON PIKE
FITZGERALD DR.
COLONIAL

*** Hourly Multi-Channel Horizontal ***

****

Site ID : 0000J1900010
Info 1 : STA.1 SR.
Info 2 : NASHVILLE
Factor : 1.000%

Start Time : 13:00
Start Date : Dec 6, 2007 Thu
End Time : 12:45
End Date : Dec 7, 2007 Fri

****

Lane #1 Info :
Lane Mode : Normal

Sensor Used : Axle
Divide By 2 : Yes

****

Date	Day	Time	Lane #1
12/06/07	Thu	14:00	37
		15:00	47
		16:00	60
		17:00	58
		18:00	78
		19:00	28
		20:00	22
		21:00	18
		22:00	24
		23:00	13
		24:00	6
2/07/07	Fri	01:00	2
		02:00	1
		03:00	1
		04:00	0
		05:00	5
		06:00	12
		07:00	42
		08:00	181
		09:00	34
		10:00	26
		11:00	28
		12:00	33
		13:00	39
24 HOUR TOTAL			795
PERCENTS			100%

X .90 = 716 X .98 = 701

Lane	AM Total	AM Avg.	PM Total	PM Avg.	Peak AM	Peak Total	Peak Percent	Peak PM	Peak Total	Peak Percent
#1	365	30.4	430	35.8	07:00	181	22.8%	17:00	78	9.8%

Peak hour: 16:30 to 17:30

∴ Avg of 58 + 78 = 68 → PM Traffic

Splits 61% - 39%

42 26

*** Hourly Multi-Channel Horizontal ***

****

Site ID : 0000J1900020
Info 1 : STA.2 SR.
Info 2 : NASHVILLE
Factor : 1.000%

Start Time : 13:00
Start Date : Dec 6, 2007 Thu
End Time : 12:45
End Date : Dec 7, 2007 Fri

****

Lane #1 Info :
Lane Mode : Normal

Sensor Used : Axle
Divide By 2 : Yes

****

Date	Day	Time	Lane #1
12/06/07	Thu	14|00	29
		15|00	17
		16|00	16
		17|00	18
		18|00	23
		19|00	18
		20|00	30
		21|00	19
		22|00	14
		23|00	8
		24|00	2
07/07	Fri	01|00	0
		02|00	0
		03|00	0
		04|00	1
		05|00	5
		06|00	5
		07|00	13
		08|00	25
		09|00	19
		10|00	24
		11|00	12
		12|00	18
		13|00	24
24 HOUR TOTAL			340
PERCENTS			100%

X .90 = 306 X .98 = 300

Lane	AM Total	AM Avg.	PM Total	PM Avg.	Peak AM	Peak Total	Peak Percent	Peak PM	Peak Total	Peak Percent
#1	122	10.2	218	18.2	07:00	25	7.4%	19:00	30	8.8%

Avg → 21 (PH Traffic)

LT RT.

13 8

*** Hourly Multi-Channel Horizontal ***

****

Site ID : 0000J1900030
Info 1 : STA.3 SR.
Info 2 : NASHVILLE
Factor : 1.000%

Start Time : 13:00
Start Date : Dec 6, 2007 Thu
End Time : 12:45
End Date : Dec 7, 2007 Fri

****

Lane #1 Info :
Lane Mode : Normal

Sensor Used : Axle
Divide By 2 : Yes

****

Date	Day	Time	Lane #1
12/06/07	Thu	14|00	23
		15|00	13
		16|00	9
		17|00	14
		18|00	23
		19|00	19
		20|00	9
		21|00	5
		22|00	11
		23|00	6
		24|00	8
./07/07	Fri	01|00	0
		02|00	3
		03|00	1
		04|00	0
		05|00	9
		06|00	5
		07|00	6
		08|00	17
		09|00	16
		10|00	13
		11|00	14
		12|00	20
		13|00	19
24 HOUR TOTAL			263
PERCENTS			100%

X .90 = 237 X .98 = 232

Lane	AM Total	AM Avg.	PM Total	PM Avg.	Peak AM	Peak Total	Peak Percent	Peak PM	Peak Total	Peak Percent
#1	104	8.7	159	13.3	11:00	20	7.6%	13:00	23	8.7%

Avg → 19 PM traffic

AT RT

12 7

*** Hourly Multi-Channel Horizontal ***

****

Site ID : 0000J1900040
Info 1 : STA.4 SR.
Info 2 : NASHVILLE
Factor : 1.000%

Start Time : 13:00
Start Date : Dec 6, 2007 Thu
End Time : 12:45
End Date : Dec 7, 2007 Fri

****

Lane #1 Info :
Lane Mode : Normal

Sensor Used : Axle
Divide By 2 : Yes

****

Date	Day	Time	Lane #1
12/06/07	Thu	14|00	5
		15|00	13
		16|00	21
		17|00	9
		18|00	9
		19|00	15
		20|00	5
		21|00	4
		22|00	9
		23|00	8
		24|00	1
/07/07	Fri	01|00	1
		02|00	0
		03|00	0
		04|00	0
		05|00	3
		06|00	2
		07|00	3
		08|00	10
		09|00	2
		10|00	7
		11|00	8
		12|00	12
		13|00	15
24 HOUR TOTAL			162
PERCENTS			100%

x .90 = 146 x.98 = 143

Lane	AM Total	AM Avg.	PM Total	PM Avg.	Peak AM	Peak Total	Peak Percent	Peak PM	Peak Total	Peak Percent
#1	48	4.0	114	9.5	11:00	12	7.4%	15:00	21	13.0%

Avg = 9 (PM Traffic).

LT	RT
6	3

KARL F. DEAN
MAYOR

METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY

DEPARTMENT OF PUBLIC WORKS
DIVISION OF ENGINEERING
750 SOUTH FIFTH STREET
NASHVILLE, TENNESSEE 37206
615-862-8760

March 31, 2008

Kim King, E.I.
Transportation Planner
CTE
220 Athens Way
Suite 200
Nashville, TN 37228-1352

Dear Ms. King,

As you requested, please find the enclosed signal timing and phasing data for the intersections of Lebanon Pike and Stewarts Ferry Pike and Lebanon Pike and Disspayne Drive.

Sincerely,

Chip Knauf

Metro Public Works, Traffic Engineering Division

WCK: sbw
Copy: Legal File, MPW Signal Engineering Office

printed on recycled paper

KARL F. DEAN
MAYOR

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Metro Public Works, Traffic Engineering Division

WCK: sbw
Copy: Legal File, MPW Signal Engineering Office

printed on recycled paper

LOCAL CONTROLLER PROGRAMMING

INTERSECTION NUMBER: **4239** ZONE: **A**

INTERSECTION: Lebanon Pike / Disspayne Drive / YMCA

INSTALLATION DATE: _____

PROGRAMMED BY: _____

NOTES: _____

PEEK

PEEK 3000 SERIES

MASTER TYPE: PEEK M3000

MASTER LOCATION: _____

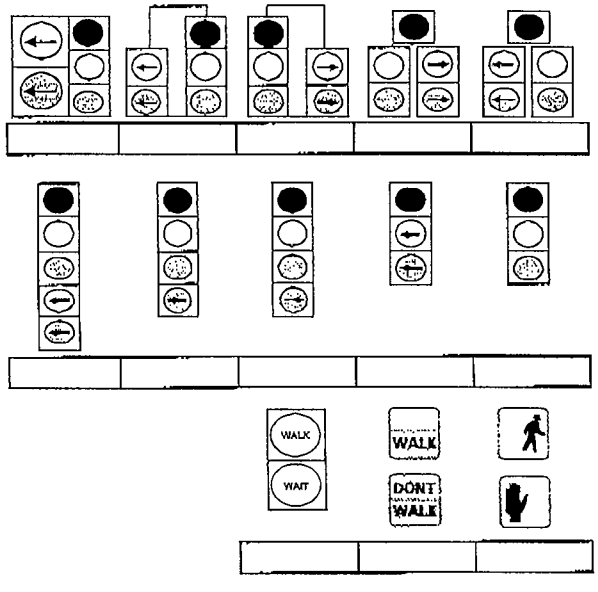
TIME BY PHASE (SEC) & FUNCTIONS

PHASE	1	2	3	4	5	6	7	8
INITIAL	5	20		7	5	20		7
PASSAGE	2.0	2.0		3.0	2.0	2.0		3.0
YELLOW	4.5	4.5		3.5	4.5	4.5		3.5
RED CLEAR	1.5	1.5		3.0	1.5	1.5		3.0
WALK								7
PED CLEAR								19
MAX 1	20	35		25	20	35		25
MAX 2	20	35		25	20	35		25
MAX 3 LIMIT								
MAX 3 ADJUST								
CNA 1								
CNA 2								
WALK REST MOD.								
FLASH WALK								
INHIBIT MAX								
PED RECYCLE								
MIN RECALL								
MAX RECALL								
PED RECALL								
SOFT RECALL								
NON-LOCK								
VEHICLE OMIT								
PED OMIT								
MAX OUTS TO ADJ MAX 3								
GAP OUTS TO ADJ MAX 3								

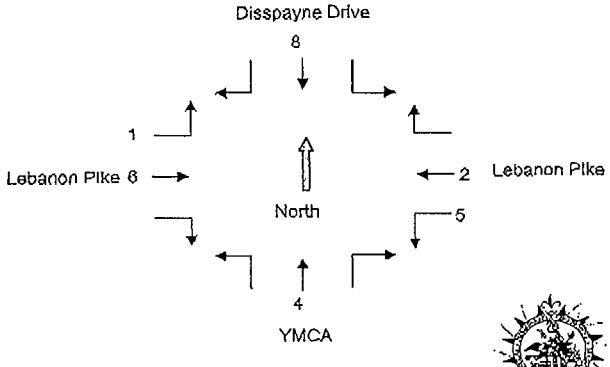
CONTROLLER OPTIONS

PHASE	1	2	3	4	5	6	7	8
START UP								
UCF LAST								
UCF EXIT								
SIM. GAP								
MIN RED REVERT		UCF OVERRIDE HOLD				PRE-EMPT OVERRIDES STOP TIME		
RED REVERT TIME		UCF TEST A OR B						
AUTO PED CLEAR		PASSAGE SEQUENTIAL						
START UP FLASH		ENABLE SIM. GAP						
START UP INTERVAL		ENHANCED PED OPERATION						
START UP ALL RED		EXT. START OVERRIDES						
FLASH								
FREE								
SPECIAL								

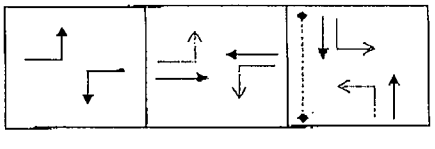
SIGNAL DISPLAYS



PHASING SCHEMATIC



PHASING SEQUENCE



METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY
DEPARTMENT OF PUBLIC WORKS

INTERSECTION NUMBER: **4239** ZONE: **A**

INTERSECTION: Lebanon Pike / Disspayne Drive / YMCA

INSTALLATION DATE: _____

PROGRAMMED BY: _____

NOTES: _____

DETECTOR SETTINGS

PEEK TRAFFIC

PEEK 3000 SERIES

DETECTION DATA

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
LOOPS																
VIDEO																

DETECTOR ASSIGNMENTS

DETECTOR	1	2	3	4	5	6	7	8
DETECTOR 1	X							
DETECTOR 2		X						
DETECTOR 3			X					
DETECTOR 4				X				
DETECTOR 5					X			
DETECTOR 6						X		
DETECTOR 7							X	
DETECTOR 8								X

DETECTOR MODES & TIMING

DETECTOR	DETECTOR MODE	DELAY TIME	STRETCH/ STOP BAR
1			
2			
3			
4			
5			
6			
7			
8			

DELAY INHIBITS

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
DETECTOR 1																
DETECTOR 2																
DETECTOR 3																
DETECTOR 4																
DETECTOR 5																
DETECTOR 6																
DETECTOR 7																
DETECTOR 8																

METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY
DEPARTMENT OF PUBLIC WORKS

INTERSECTION NUMBER: **4239** ZONE: **A**

INTERSECTION: Lebanon Pike / Disspayne Drive / YMCA

INSTALLATION DATE: _____

PROGRAMMED BY: _____

NOTES: _____

COORDINATION AND OPERATION

PEEK TRAFFIC A Company

PEEK 3000 SERIES

PHASE ALLOCATIONS (SEC)

PHASE	1	2	3	4	5	6	7	8
CYCLE 1/SPLIT 1	15	60		15	15	60		15
CYCLE 1/SPLIT 2								
CYCLE 2/SPLIT 1	12	74		14	12	74		14
CYCLE 2/SPLIT 2	15	70		15	15	70		15
CYCLE 3/SPLIT 1	12	83		15	12	83		15
CYCLE 3/SPLIT 2								
CYCLE 4/SPLIT 1								
CYCLE 4/SPLIT 2								

DYNAMIC OMITS

PHASE/OVL	1/A	2/B	3/C	4/D	5/E	6/F	7/G	8/H
OMIT PHASE								
IF PHASE OR OVL ON								
OMIT PHASE								
IF PHASE OR OVL ON								
OMIT PHASE								
IF PHASE OR OVL ON								
OMIT PHASE								
IF PHASE OR OVL ON								

OPERATING MODE

FUNCTION	
AUTO PERM	
END OF MAIN ST	
ENHANCED PERM	
FIXED FORCE OFF	
YELLOW OFFSET	
CENTRAL OVERIDE	
NO PCL OFFSET ADJ	
OFFSET ENTRY IN %	
PERM-PA ENTRY IN %	
INVERT FREE IN	
SPLIT MATRIX	
4 SPLITS / CYCLE	
NO EARLY COORD PED	
CYCLE SOURCE	
SPLIT SOURCE	
OFFSET SOURCE	
FREE SOURCE	
FLASH SOURCE	
INTER. TOD REVERT	
TYPE OF PERM	
OFFSET SEEKING	
PED PERMISSIVE	
YIELD PERCENT	

CYCLE LENGTH / DWELL / OFFSETS

CYCLE	1	2	3	4	5	6
CYCLE LENGTH	90	100	110			
MAX DWELL	60	70	75			
OFFSET 1	73	73	67			
OFFSET 2		5				
OFFSET 3						
OFFSET 4						
OFFSET 5						

PHASE REVERSAL

PATTERN	MODE	PHASES	
		LEAD	LAG

DUAL ENTRY

PHASE	1	2	3	4	5	6	7	8
PHASE 1								
PHASE 2								
PHASE 3								
PHASE 4								
PHASE 5								
PHASE 6								
PHASE 7								
PHASE 8								

COORD. PHASES

CYCLE	PHASES TO BE COORD	
1		
2		
3		
4		
5		
6		

CYCLE / OFFSET / SPLIT / FREE TO TOD CIRCUITS

PLAN	C / O / S / FREE				CKT	CKT	CKT	CKT
1								
2								

METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY
DEPARTMENT OF PUBLIC WORKS

TIME OF DAY PROGRAMMING

PEEK 3000 SERIES

INTERSECTION NUMBER: **4239** ZONE: **A**

INTERSECTION: Lebanon Pike / Disspayne Drive / YMCA

INSTALLATION DATE: _____

PROGRAMMED BY: _____

NOTES: _____

WEEKLY PROGRAM PLAN

PLAN	SUN 1	MON 2	TUE 3	WED 4	THU 5	FRI 6	SAT 7
0	3	1	1	1	1	1	2
1							
2							
3							
4							

DAYLIGHT SAVINGS

	MONTH	W-O-M
SPRING	4	1
FALL	10	5

CIRCUIT OVERRIDES

CKT	SYM	ON/OFF/TOD

TIME DEPENDENT SYNC REF

CYCLE	HH:MM
1	
2	
3	
4	
5	
6	
SYNC REF	

DAY PLAN EVENTS

PLAN	HH:MM	CKT PLAN	C/O/S	CKT	ON/OFF
1	00:00		FLASH	12	ON
1	06:00		2/1/1		
1	09:30		2/2/2		
1	14:30		3/1/1		
1	19:00		1/1/1		
1	23:00		FLASH	12	ON
2	00:00		FLASH	12	ON
2	06:00		FREE	11	ON
2	07:30		1/1/1		
2	09:00		2/2/2		
2	20:00		1/1/1		
2	23:00		FLASH	12	ON
3	00:00		FLASH	12	ON
3	06:00		FREE	11	ON
3	09:00		1/1/1		
3	10:00		2/2/2		
3	19:00		1/1/1		
3	22:00		FREE	11	ON
3	23:00		FLASH	12	ON

TOD CIRCUIT PLANS

PLAN	CKT	ON/OFF	CKT	ON/OFF	CKT	ON/OFF	CKT	ON/OFF
1								
2								
3								

METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY
DEPARTMENT OF PUBLIC WORKS

LOCAL CONTROLLER PROGRAMMING

PEEK

PEEK 3000 SERIES

INTERSECTION NUMBER: **4330** ZONE: **D**

INTERSECTION: Lebanon Pike / Stewarts Ferry Pike

INSTALLATION DATE: _____

PROGRAMMED BY: _____

NOTES: _____

MASTER TYPE: PEEK M3000

MASTER LOCATION: _____

TIME BY PHASE (SEC) & FUNCTIONS

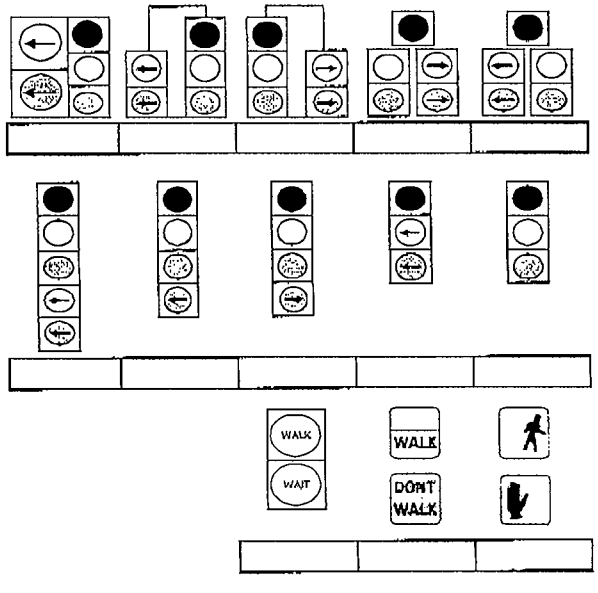
PHASE	1	2	3	4	5	6	7	8
INITIAL	4	10	7	7	4	10		
PASSAGE	2.0	7.0	2.0	2.0	2.0	7.0		
YELLOW	3.5	4.5	4.0	4.5	3.5	4.5		
RED CLEAR	2.5	2.0	2.0	2.5	2.0	2.0		
WALK		8	8	8		8		
PED CLEAR		17	21	19		17		
MAX 1	20	60	15	30	15	60		
MAX 2	20	65	6	15	30	60		
MAX 3 LIMIT								
MAX 3 ADJUST								
CNA 1								
CNA 2								
WALK REST MOD.								
FLASH WALK								
INHIBIT MAX								
PED RECYCLE								
MIN RECALL								
MAX RECALL								
PED RECALL								
SOFT RECALL								
NON-LOCK								
VEHICLE OMIT								
PED OMIT								
MAX OUTS TO ADJ MAX 3								
GAP OUTS TO ADJ MAX 3								

CONTROLLER OPTIONS

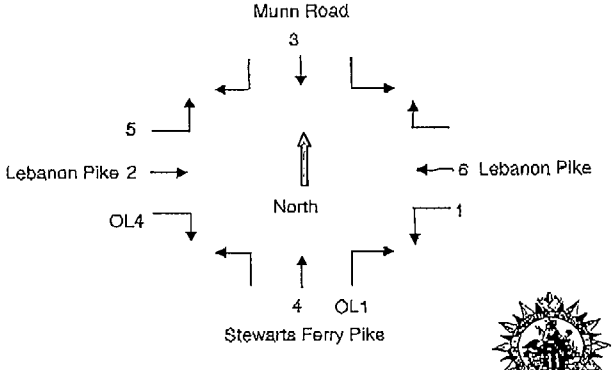
PHASE	1	2	3	4	5	6	7	8
START UP								
UCF LAST								
UCF EXIT								
SIM. GAP								

MIN RED REVERT		UCF OVERRIDE HOLD		PRE-EMPT
RED REVERT TIME		UCF TEST A OR B		OVERRIDES
AUTO PED CLEAR		PASSAGE SEQUENTIAL		STOP TIME
START UP FLASH		ENABLE SIM. GAP		
START UP INTERVAL		ENHANCED PED OPERATION		
START UP ALL RED		EXT. START OVERRIDES		
FLASH				
FREE				
SPECIAL				

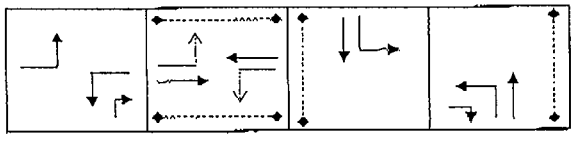
SIGNAL DISPLAYS



PHASING SCHEMATIC



PHASING SEQUENCE



METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY
DEPARTMENT OF PUBLIC WORKS

INTERSECTION NUMBER: **4330** ZONE: **D**

INTERSECTION: Lebanon Pike / Stewarts Ferry Pike

INSTALLATION DATE: _____

PROGRAMMED BY: _____

NOTES: _____

DETECTOR SETTINGS

PEEK TRAFFIC INC. A Siemens Company

PEEK 3000 SERIES

DETECTION DATA

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
LOOPS																
VIDEO																

DETECTOR ASSIGNMENTS

DETECTOR	1	2	3	4	5	6	7	8
DETECTOR 1	X							
DETECTOR 2		X						
DETECTOR 3			X					
DETECTOR 4				X				
DETECTOR 5					X			
DETECTOR 6						X		
DETECTOR 7							X	
DETECTOR 8								X

DETECTOR MODES & TIMING

DETECTOR	DETECTOR MODE	DELAY TIME	STRETCH/ STOP BAR
1			
2			
3			
4			
5			
6			
7			
8			

DELAY INHIBITS

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
DETECTOR 1																
DETECTOR 2																
DETECTOR 3																
DETECTOR 4																
DETECTOR 5																
DETECTOR 6																
DETECTOR 7																
DETECTOR 8																

METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY
DEPARTMENT OF PUBLIC WORKS

INTERSECTION NUMBER: **4330** ZONE: **D**

INTERSECTION: Lebanon Pike / Stewarts Ferry Pike

INSTALLATION DATE:

PROGRAMMED BY:

NOTES:

COORDINATION AND OPERATION

PEEK TRAFFIC A Siemens Company

PEEK 3000 SERIES

PHASE ALLOCATIONS (SEC)

PHASE	1	2	3	4	5	6	7	8
CYCLE 1/SPLIT 1	20	35	15	15	20	35	15	15
CYCLE 1/SPLIT 2								
CYCLE 2/SPLIT 1	18	41	15	16	15	44	15	16
CYCLE 2/SPLIT 2								
CYCLE 3/SPLIT 1	15	52	15	18	15	52	15	52
CYCLE 4/SPLIT 1	15	60	15	20	15	60	15	20
CYCLE 5/SPLIT 1	21	62	15	17	15	68	15	17
CYCLE 5/SPLIT 2								

DYNAMIC OMITS

PHASE/OVL	1/A	2/B	3/C	4/D	5/E	6/F	7/G	8/H
OMIT PHASE								
IF PHASE OR OVL ON								
OMIT PHASE								
IF PHASE OR OVL ON								
OMIT PHASE								
IF PHASE OR OVL ON								
OMIT PHASE								
IF PHASE OR OVL ON								

OPERATING MODE

FUNCTION	
AUTO PERM	
END OF MAIN ST	
ENHANCED PERM	
FIXED FORCE OFF	
YELLOW OFFSET	
CENTRAL OVERIDE	
NO PCL OFFSET ADJ	
OFFSET ENTRY IN %	
PERM-PA ENTRY IN %	
INVERT FREE IN	
SPLIT MATRIX	
4 SPLITS / CYCLE	
NO EARLY COORD PED	
CYCLE SOURCE	
SPLIT SOURCE	
OFFSET SOURCE	
FREE SOURCE	
FLASH SOURCE	
INTER. TOD REVERT	
TYPE OF PERM	
OFFSET SEEKING	
PED PERMISSIVE	
YIELD PERCENT	

CYCLE LENGTH / DWELL / OFFSETS

CYCLE	1	2	3	4	5	6
CYCLE LENGTH	85	90	100	110	115	
MAX DWELL	60	60	70	75	80	
OFFSET 1	25	50	93	23	38	
OFFSET 2						
OFFSET 3						
OFFSET 4						
OFFSET 5						

PHASE REVERSAL

PATTERN	MODE	PHASES	
		LEAD	LAG

DUAL ENTRY

PHASE	1	2	3	4	5	6	7	8
PHASE 1								
PHASE 2								
PHASE 3								
PHASE 4								
PHASE 5								
PHASE 6								
PHASE 7								
PHASE 8								

COORD. PHASES

CYCLE	PHASES TO BE COORD	
1		
2		
3		
4		
5		
6		

CYCLE / OFFSET / SPLIT / FREE TO TOD CIRCUITS

PLAN	C / O / S / FREE				CKT	CKT	CKT	CKT
1								
2								

METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY
DEPARTMENT OF PUBLIC WORKS

INTERSECTION NUMBER: **4330** ZONE: **D**

INTERSECTION: Lebanon Pike / Stewarts Ferry Pike

INSTALLATION DATE: _____

PROGRAMMED BY: _____

NOTES: _____

TIME OF DAY PROGRAMMING

PEEK

PEEK 3000 SERIES

WEEKLY PROGRAM PLAN

PLAN	SUN 1	MON 2	TUE 3	WED 4	THU 5	FRI 6	SAT 7
1	3	1	1	1	1	1	2
2							
3							
4							
5							

DAYLIGHT SAVINGS

	MONTH	W-O-M
SPRING	3	2
FALL	11	1

CIRCUIT OVERRIDES

CKT	SYM	ON/OFF/TOD

TIME DEPENDENT SYNC REF

CYCLE	HH:MM
1	
2	
3	
4	
5	
6	
SYNC REF	

DAY PLAN EVENTS

PLAN	HH:MM	CKT PLAN	C/O/S	CKT	ON/OFF
1	00:00	FREE		11	ON
1	06:00		3/1/1		
1	09:30		2/1/1		
1	14:30		5/1/1		
1	18:30		2/1/1		
1	20:00		1/1/1		
1	23:00	FREE		11	ON
2	00:00	FREE		11	ON
2	07:30		1/1/1		
2	09:00		2/1/1		
2	20:00		1/1/1		
2	23:00	FREE		11	ON
3	00:00	FREE		11	ON
3	09:00		1/1/1		
3	10:00		2/1/1	11	ON
3	19:00		1/1/1		
3	22:00	FREE		11	ON

TOD CIRCUIT PLANS

PLAN	CKT	ON/OFF	CKT	ON/OFF	CKT	ON/OFF	CKT	ON/OFF
1								
2								
3								

METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY
DEPARTMENT OF PUBLIC WORKS

HCS+: Signalized Intersections Release 5.21

Analyst: CTE
Agency:
Date: 4/4/2008
Period:
Project ID: Disspayne Drive @ SR 24
E/W St:

Inter.:
Area Type: All other areas
Jurisd:
Year : 2007
N/S St:

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	2	1	1	2	0	0	1	1	0	1	0
LGConfig	L	T	R	L	TR			LT	R		LTR	
Volume	43	2298	80	51	1349	11	26	3	34	5	3	16
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
RTOR Vol			0			0			0			0

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4			5	6	7	8
EB Left	P	P			NB	Left	P			
Thru		P				Thru	P			
Right		P				Right	P			
Peds						Peds				
WB Left	P	P			SB	Left	P			
Thru		P				Thru	P			
Right		P				Right	P			
Peds						Peds	X			
NB Right					EB	Right				
SB Right					WB	Right				
Green	6.0	77.0	0.0				8.5	0.0		
Yellow	4.5	4.5					3.5			
All Red	1.5	1.5					3.0			

Cycle Length: 110.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
L	334	1805	0.22	0.81	3.9	A		
T	2533	3618	0.94	0.70	11.7	B	11.1	B
R	1130	1615	0.08	0.70	1.5	A		
Westbound								
L	167	1805	0.49	0.81	35.4	D		
TR	2529	3613	0.58	0.70	3.1	A	4.8	A
Northbound								
LT	105	1358	0.33	0.08	56.4	E	55.2	E
R	125	1615	0.30	0.08	54.1	D		
Southbound								
LTR	124	1609	0.33	0.08	55.1	E	55.1	E

Intersection Delay = 10.0- (sec/veh) Intersection LOS = A

HCS+: Signalized Intersections Release 5.21

Analyst: CTE
Agency:
Date: 4/4/2008
Period: Peak Hour (Optimized)
Project ID: SR 24 TPR
E/W St: SR 24

Inter.: SR 24 @ Disspayne
Area Type: All other areas
Jurisd:
Year : 2007 (Metro Counts 05' + 3%)

N/S St: Disspayne Dr

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	2	1	1	2	0	0	1	1	0	1	0
LGConfig	L	T	R	L	TR			LT	R		LTR	
Volume	42	2268	78	49	1346	10	26	3	32	5	3	15
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
RTOR Vol			0			0			0			0

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4			5	6	7	8
EB Left	P	P			NB	Left	P			
Thru		P				Thru	P			
Right		P				Right	P			
Peds						Peds				
WB Left	P	P			SB	Left	P			
Thru		P				Thru	P			
Right		P				Right	P			
Peds						Peds	X			
NB Right					EB	Right				
SB Right					WB	Right				
Green	4.5	90.0	0.0				7.0	0.0		
Yellow	4.5	4.5					3.5			
All Red	1.5	1.5					3.0			

Cycle Length: 120.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
L	330	1805	0.14	0.84	2.5	A		
T	2660	3547	0.95	0.75	11.8	B	11.3	B
R	1211	1615	0.07	0.75	1.0	A		
Westbound								
L	131	1805	0.41	0.84	47.2	D		
TR	2632	3509	0.57	0.75	2.4	A	4.0	A
Northbound								
LT	81	1382	0.40	0.06	68.3	E	67.0	E
R	94	1615	0.38	0.06	65.8	E		
Southbound								
LTR	92	1578	0.28	0.06	61.6	E	61.6	E

Intersection Delay = 9.8 (sec/veh) Intersection LOS = A

HCS+: Signalized Intersections Release 5.21

HCS+: Signalized Intersections Release 5.21

Analyst: CTE
Agency: CTE
Date: 4/4/2008
Period: Peak Hour (Optimized)
Project ID: SR 24 TPR
E/W St: SR 24

Inter.: SR 24 @ Disspayne
Area Type: All other areas
Jurisd:
Year : 2012

N/S St: Disspayne Dr

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	2	1	1	2	0	0	1	1	0	1	0
LGConfig	L	T	R	L	TR			LT	R		LTR	
Volume	30	2875	100	60	1680	20	70	0	110	10	0	10
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
RTOR Vol			0			0			0			0

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4			5	6	7	8
EB Left	P	P			NB	Left	P			
Thru		P				Thru	P			
Right		P				Right	P			
Peds						Peds				
WB Left	P	P			SB	Left	P			
Thru		P				Thru	P			
Right		P				Right	P			
Peds						Peds	X			
NB Right	P				EB	Right				
SB Right					WB	Right				
Green	5.0	91.5	0.0				5.0	0.0		
Yellow	4.5	4.5					3.5			
All Red	1.5	1.5					3.0			

Cycle Length: 120.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
L	255	1805	0.13	0.85	1.4	A		
T	2705	3547	1.18	0.76	95.2	F	91.2	F
R	1231	1615	0.09	0.76	0.9	A		
Westbound								
L	138	1805	0.49	0.85	50.8	D		
TR	2674	3507	0.71	0.76	3.4	A	5.0	A
Northbound								
LT	63	1520	1.24	0.04	248.1	F	132.0	F
R	222	1615	0.55	0.14	57.7	E		
Southbound								
LTR	44	1063	0.50	0.04	91.6	F	91.6	F

Intersection Delay = 62.1 (sec/veh) Intersection LOS = E

HCS+: Signalized Intersections Release 5.21

HCS+: Signalized Intersections Release 5.21

Analyst: CTE Inter.: SR 24 @ Disspayne

Agency: CTE
Date: 4/4/2008
Period: Peak Hour (Optimized)
Project ID: SR 24 TPR
E/W St: SR 24

Area Type: All other areas
Jurisd:
Year : 2032

N/S St: Disspayne Dr

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	2	1	1	2	0	0	1	1	0	1	0
LGConfig	L	T	R	L	TR			LT	R		LTR	
Volume	35	3170	110	70	1850	20	80	0	120	10	2	10
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
RTOR Vol			0			0			0			0

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4			5	6	7	8
EB Left	P	P			NB	Left	P			
Thru		P				Thru	P			
Right		P				Right	P			
Peds						Peds				
WB Left	P	P			SB	Left	P			
Thru		P				Thru	P			
Right		P				Right	P			
Peds						Peds	X			
NB Right	P				EB	Right				
SB Right					WB	Right				
Green	5.0	91.5	0.0				5.0	0.0		
Yellow	4.5	4.5					3.5			
All Red	1.5	1.5					3.0			

Cycle Length: 120.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
L	224	1805	0.17	0.85	1.5	A		
T	2705	3547	1.30	0.76	150.4	F	143.9	F
R	1231	1615	0.10	0.76	0.9	A		
Westbound								
L	138	1805	0.57	0.85	55.0+	E		
TR	2675	3508	0.78	0.76	4.3	A	6.1	A
Northbound								
LT	63	1520	1.41	0.04	314.0	F	161.9	F
R	222	1615	0.60	0.14	60.0	E		
Southbound								
LTR	43	1040	0.56	0.04	99.8	F	99.8	F

Intersection Delay = 95.6 (sec/veh) Intersection LOS = F

HCS+: Signalized Intersections Release 5.21

Analyst: CTE
Agency: CTE
Date: 4/3/2008
Period: PM Peak
Project ID: SR 24

Inter.: SR 24 @ Stewarts Ferry
Area Type: All other areas
Jurisd:
Year : 2007

E/W St: Lebanon Pike N/S St: Munn Rd/Stewarts Ferry Pike

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	2	1	1	2	0	1	1	1	0	1	0
LGConfig	L	T	R	L	TR		L	LT	R		LTR	
Volume	3	1814	301	564	1220	6	234	3	352	12	6	10
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0		12.0	
RTOR Vol			0			0			0			0

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination		1	2	3	4			5	6	7	8
EB	Left	P		P		NB	Left		P		
	Thru			P			Thru		P		
	Right			P			Right		P		
	Peds			X			Peds		X		
WB	Left	P	P	P		SB	Left	P			
	Thru		P	P			Thru	P			
	Right		P	P			Right	P			
	Peds			X			Peds	X			
NB	Right	P	P			EB	Right		P		
SB	Right					WB	Right				
Green		9.0	3.0	56.0	0.0			9.0	10.0	0.0	
Yellow		3.5	3.0	4.5				4.0	4.5		
All Red		2.5	0.0	2.0				2.0	2.0		

Cycle Length: 115.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
L	272	1770	0.01	0.57	11.9	B		
T	1727	3547	1.17	0.49	105.2	F	91.5	F
R	909	1583	0.37	0.57	9.5	A		
Westbound								
L	342	1770	1.83	0.70	426.1	F		
TR	1911	3544	0.71	0.54	16.2	B	145.4	F
Northbound								
L	154	1770	1.69	0.09	388.7	F		
LT	162	1863	0.02	0.09	48.2	D	186.0	F
R	475	1583	0.82	0.30	52.3	D		
Southbound								
LTR	136	1737	0.23	0.08	53.6	D	53.6	D

Intersection Delay = 124.9 (sec/veh) Intersection LOS = F

HCS+: Signalized Intersections Release 5.21

HCS+: Signalized Intersections Release 5.21

Analyst: CTE Inter.: SR 24 @ Stewarts Ferry
Agency: CTE Area Type: All other areas

Date: 4/3/2008 Jurisd:
Period: PM Peak_Optimized Year : 2007 (TDOT Counts)
Project ID: SR 24
E/W St: Lebanon Pike N/S St: Munn Rd/Stewarts Ferry Pike

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	2	1	1	2	0	1	1	1	0	1	0
LGConfig	L	T	R	L	TR		L	LT	R		LTR	
Volume	7	2056	256	503	1203	1	321	7	400	2	1	8
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0		12.0	
RTOR Vol			0			0			0			0

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4			5	6	7	8
EB Left	P		P		NB	Left		P		
Thru			P			Thru		P		
Right			P			Right		P		
Peds			X			Peds		X		
WB Left	P	P	P		SB	Left	P			
Thru		P	P			Thru	P			
Right		P	P			Right	P			
Peds			X			Peds	X			
NB Right	P	P			EB	Right		P		
SB Right					WB	Right				
Green	3.0	10.0	60.0	0.0			5.0	13.0	0.0	
Yellow	3.5	3.5	4.5				4.0	4.5		
All Red	2.5	0.0	2.0				2.0	2.5		

Cycle Length: 120.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
L	240	1805	0.03	0.52	13.9	B		
T	1766	3532	1.29	0.50	159.3	F	142.1	F
R	954	1568	0.30	0.61	7.0	A		
Westbound								
L	342	1770	1.63	0.71	340.6	F		
TR	2143	3498	0.62	0.61	9.3	A	107.0	F
Northbound								
L	192	1770	1.86	0.11	459.5	F		
LT	206	1900	0.04	0.11	48.3	D	232.9	F
R	520	1599	0.85	0.32	54.1	D		
Southbound								
LTR	64	1543	0.19	0.04	61.9	E	61.9	E

Intersection Delay = 143.2 (sec/veh) Intersection LOS = F

HCS+: Signalized Intersections Release 5.21

Analyst: CTE
Agency: CTE
Date: 4/3/2008
Period: PM Peak (Optimized)
Project ID: SR 24
E/W St: Lebanon Pike

Inter.: SR 24 @ Stewarts Ferry
Area Type: All other areas
Jurisd:
Year : 2012

N/S St: Munn Rd/Stewarts Ferry Pike

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	2	1	1	2	0	1	1	1	0	1	0
LGConfig	L	T	R	L	TR		L	LT	R		LTR	
Volume	10	2460	300	475	1460	2	375	10	380	5	0	10
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0		12.0	
RTOR Vol			0			0			0			0

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4		5	6	7	8
EB Left	P		P		NB Left		P		
Thru			P		Thru		P		
Right			P		Right		P		
Peds			X		Peds		X		
WB Left	P	P	P		SB Left	P			
Thru		P	P		Thru	P			
Right		P	P		Right	P			
Peds			X		Peds	X			
NB Right	P	P			EB Right		P		
SB Right					WB Right				
Green	5.0	5.0	65.0			5.0	12.0	0.0	
Yellow	3.5	3.0	4.5			4.0	4.5		
All Red	2.5	0.0	2.0			2.0	2.0		

Cycle Length: 120.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
L	197	1805	0.06	0.58	12.0	B		
T	1913	3532	1.43	0.54	219.1	F	195.2	F
R	1006	1568	0.33	0.64	5.4	A		
Westbound								
L	298	1770	1.77	0.73	403.8	F		
TR	2128	3498	0.76	0.61	12.2	B	108.3	F
Northbound								
L	177	1770	2.36	0.10	681.4	F		
LT	190	1900	0.06	0.10	49.5	D	368.2	F
R	460	1599	0.92	0.29	67.1	E		
Southbound								
LTR	66	1572	0.26	0.04	64.9	E	64.9	E

Intersection Delay = 188.3 (sec/veh) Intersection LOS = F

HCS+: Signalized Intersections Release 5.21

Analyst: CTE
Agency: CTE
Date: 4/4/2008
Period: Peak Hour (Optimized)
Project ID: SR 24 TPR
E/W St: SR 24

Inter.: SR 24 @ Disspayne
Area Type: All other areas
Jurisd:
Year : 2032

N/S St: Disspayne Dr

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	2	1	1	2	0	0	1	1	0	1	0
LGConfig	L	T	R	L	TR			LT	R		LTR	
Volume	35	3170	110	70	1850	20	80	0	120	10	2	10
Lane Width	12.0	12.0	12.0	12.0	12.0			12.0	12.0		12.0	
RTOR Vol			0			0			0			0

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4		5	6	7	8
EB Left	P	P			NB Left	P			
Thru		P			Thru	P			
Right		P			Right	P			
Peds					Peds				
WB Left	P	P			SB Left	P			
Thru		P			Thru	P			
Right		P			Right	P			
Peds					Peds	X			
NB Right	P				EB Right				
SB Right					WB Right				
Green	5.0	91.5	0.0			5.0	0.0		
Yellow	4.5	4.5				3.5			
All Red	1.5	1.5				3.0			

Cycle Length: 120.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
L	224	1805	0.17	0.85	1.5	A		
T	2705	3547	1.30	0.76	150.4	F	143.9	F
R	1231	1615	0.10	0.76	0.9	A		
Westbound								
L	138	1805	0.57	0.85	55.0+	E		
TR	2675	3508	0.78	0.76	4.3	A	6.1	A
Northbound								
LT	63	1520	1.41	0.04	314.0	F	161.9	F
R	222	1615	0.60	0.14	60.0	E		
Southbound								
LTR	43	1040	0.56	0.04	99.8	F	99.8	F

Intersection Delay = 95.6 (sec/veh) Intersection LOS = F

HCS+: Multilane Highways Release 5.21

Phone: Fax:
E-mail:

OPERATIONAL ANALYSIS

Analyst: CTE
Agency/Co: CTE
Date: 5/9/2008
Analysis Period: Peak Hour
Highway: SR 24
From/To: Stewarts Ferry to Disspayne
Jurisdiction:
Analysis Year: 2007
Project ID: SR 24 TPR

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	5.1	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	11.1	ft	12.0	ft
Access points per mile	0		0	
Median type				
Free-flow speed:	Measured		Measured	
FFS or BFFS	45.0	mph	45.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.2	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	45.0	mph	45.0	mph

VOLUME

Direction	1		2	
Volume, V	2400	vph	1030	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	667		286	
Trucks and buses	2	%	2	%
Recreational vehicles	0	%	0	%
Terrain type	Rolling		Rolling	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.5		2.5	
Recreational vehicles PCE, ER	2.0		2.0	
Heavy vehicle adjustment, fHV	0.971		0.971	
Flow rate, vp	1373	pcphpl	589	pcphpl

RESULTS

Direction	1	2

Flow rate, vp	1373	pcphpl	589	pcphpl
Free-flow speed, FFS	45.0	mph	45.0	mph
Avg. passenger-car travel speed, S	45.0	mph	45.0	mph
Level of service, LOS	D		B	
Density, D	30.5	pc/mi/ln	13.1	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

HCS+: Multilane Highways Release 5.21

Phone: Fax:
E-mail:

OPERATIONAL ANALYSIS

Analyst: CTE
Agency/Co: CTE
Date: 5/9/2008
Analysis Period: Peak Hour
Highway: SR 24
From/To: Stewarts Ferry to Disspayne
Jurisdiction:
Analysis Year: 2012
Project ID: SR 24 TPR

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	5.1	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	11.1	ft	12.0	ft
Access points per mile	0		0	
Median type				
Free-flow speed:	Measured		Measured	
FFS or BFFS	45.0	mph	45.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.2	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	45.0	mph	45.0	mph

VOLUME

Direction	1		2	
Volume, V	3325	vph	1425	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	924		396	
Trucks and buses	2	%	2	%
Recreational vehicles	0	%	0	%
Terrain type	Rolling		Rolling	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.5		2.5	
Recreational vehicles PCE, ER	2.0		2.0	
Heavy vehicle adjustment, fHV	0.971		0.971	
Flow rate, vp	1902	pcphpl	815	pcphpl

RESULTS

Direction	1	2

Flow rate, vp	1902	pcphpl	815	pcphpl
Free-flow speed, FFS	45.0	mph	45.0	mph
Avg. passenger-car travel speed, S		mph	45.0	mph
Level of service, LOS	F		C	
Density, D		pc/mi/ln	18.1	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

HCS+: Multilane Highways Release 5.21

Phone: Fax:
E-mail:

OPERATIONAL ANALYSIS

Analyst: CTE
Agency/Co: CTE
Date: 5/9/2008
Analysis Period: Peak Hour
Highway: SR 24
From/To: Stewarts Ferry to Disspayne
Jurisdiction:
Analysis Year: 2012
Project ID: SR 24 TPR

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	5.1	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	11.1	ft	12.0	ft
Access points per mile	0		0	
Median type				
Free-flow speed:	Measured		Measured	
FFS or BFFS	45.0	mph	45.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.2	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	45.0	mph	45.0	mph

VOLUME

Direction	1		2	
Volume, V	3660	vph	1570	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	1017		436	
Trucks and buses	2	%	2	%
Recreational vehicles	0	%	0	%
Terrain type	Rolling		Rolling	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.5		2.5	
Recreational vehicles PCE, ER	2.0		2.0	
Heavy vehicle adjustment, fHV	0.971		0.971	
Flow rate, vp	2094	pcphpl	898	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	2094	pcphpl	898	pcphpl

Free-flow speed, FFS	45.0	mph	45.0	mph
Avg. passenger-car travel speed, S		mph	45.0	mph
Level of service, LOS	F		C	
Density, D		pc/mi/ln	20.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

LEFT TURN WARRANTS ANALYSES

Left Turn Lane Warrant Analyses

Opposing Peak Hour Volume:

TDOT's 2007 turning movement traffic count at the intersection of State Route 24 and Stewarts Ferry/Munn Road estimated the 2007 westbound average daily traffic (ADT) volume as 46,620 vehicles. Mainline traffic information provided by TDOT estimates the design hourly volume (DHV) as 10% of the ADT, and the directional split as 70-30.

Therefore, at each of the residential roadways, the opposing traffic volume (westbound) was estimated to be 1,400 vph:

$$46{,}620\ (0.1)(0.3) = 1{,}398 \text{ vph}$$

Note that peak hour turning movement counts at State Route 24 and Stewarts Ferry Pike indicated a westbound peak hour volume of 1,700 vph (3:30-4:30 PM). 1,400 vph was used as a conservative estimate.

Rivercrest Pass:

TDOT 2007, 24-hour traffic counts on Rivercrest Pass indicate the following bi-directional volumes:

3:00 – 4:00 PM = 17 vph
4:00 – 5:00 PM = 16 vph
5:00 – 6:00 PM = 18 vph Average = 17 vph

Rivercrest Pass serves primarily single family detached housing. According to the ITE Trip Generation Handbook, during the PM peak hour, 63% of the hourly traffic generated by single family detached housing is entering traffic. 37% is existing traffic. Therefore, it was determined that 11 vehicles enter Rivercrest Pass via State Route 24 during the PM peak hour.

$$0.63\ (17) = 11$$

Using the directional split along State Route 24 (70-30), it was estimated that of the 11 vehicles entering Rivercrest Pass during the PM peak hour, 8 enter from the west and 3 enter from the east.

Thus, the left turning volume = 8 vph, and the opposing volume = 1,400 vph.

Riverstone Boulevard:

TDOT 2007, 24-hour traffic counts on Riverstone Boulevard indicate the following bi-directional volumes:

3:00 – 4:00 PM = 13 vph
4:00 – 5:00 PM = 9 vph
5:00 – 6:00 PM = 14 vph Average = 12 vph

Rivercrest Boulevard serves primarily condos/townhomes. According to the ITE Trip Generation Handbook, during the PM peak hour, 67% of the hourly traffic generated by residential condos/townhomes is entering traffic. 33% is existing traffic. Therefore, it was determined that 8 vehicles enter Riverstone Boulevard via State Route 24 during the PM peak hour.

$$0.67\ (12) = 8$$

Using the directional split along State Route 24 (70-30), it was estimated that of the 8 vehicles entering Riverstone Boulevard during the PM peak hour, 6 enter from the west and 2 enter from the east.

Thus, the left turning volume = 6 vph, and the opposing volume = 1,400 vph.

<u>Guill Court:</u>

TDOT 2007, 24-hour traffic counts on Guill Court indicate the following bi-directional volumes:

3:00 – 4:00 PM = 13 vph
4:00 – 5:00 PM = 21 vph
5:00 – 6:00 PM = 9 vph Average = 14 vph

Guill Court serves primarily condos/townhomes. According to the ITE Trip Generation Handbook, during the PM peak hour, 67% of the hourly traffic generated by residential condos/townhomes is entering traffic. 33% is existing traffic. Therefore, it was determined that 9 vehicles enter Guill Court via State Route 24 during the PM peak hour.

$$0.67\ (14) = 9$$

Using the directional split along State Route 24 (70-30), it was estimated that of the 9 vehicles entering Guill Court during the PM peak hour, 6 enter from the west and 3 enter from the east.

Thus, the left turning volume = 6 vph, and the opposing volume = 1,400 vph.

FIELD REVIEW MEETING MINUTES – ATTACHMENTS 1 & 2

ATTACHMENT 1

FIELD REVIEW – April 15, 2008
Transportation Planning Report for
Improvements to State Route 24 (US 70) Lebanon Rd
Nashville, Davidson County

Objective: Widen SR 24 from Stewarts Ferry Pike to Disspayne Drive to include a continuous left turn lane and bicycle facilities. This improvement is programmed for the year 2025 under the Nashville MPO's Long Range Transportation Plan (project number 1121).

Safety:
- Crash rates at the intersection of SR 24 and Rivercrest Pass exceed the statewide average crash rate.

Existing Capacity:
- Harmelink left turn analyses indicate left turn lanes are currently warranted at Rivercrest Pass and Riverstone Blvd.

Existing Pedestrian/Bicycle and Bus Access:
- Bus stops on north and south sides near Stewarts Ferry Pike
- Sidewalk on north side
- Pedestrian signal heads and audible guidance at intersection of SR 24 and Stewarts Ferry Pk
- Bicycle Lanes on north and south sides of SR 24, east of Disspayne Dr. (This portion of Lebanon Rd is shown as an existing state bicycle route in TDOT's LRTP.)

Options for widening:
- Option 1: No Build
- Option 2: Both Sides
- Option 3: North Only
- Option 4: South Only

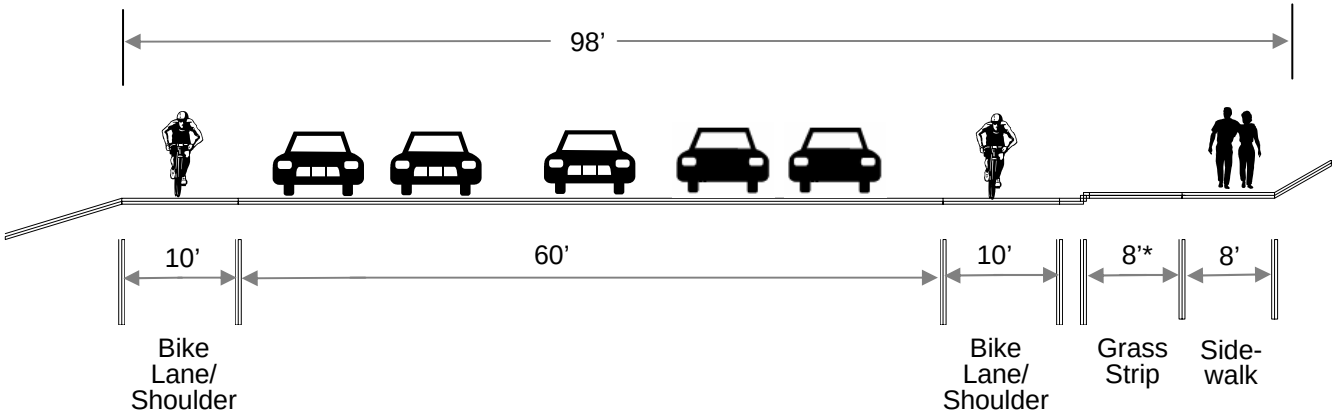
Typical Cross-section:
(See Attached)

Historic Sites:
- Clover Bottom Mansion (Tennessee State Historic Preservation Office) – Listed on National Historic Register (NHR)
- Cedarstone Bank (formerly Gideon's Building) – Soon to be eligible for listing on NHR

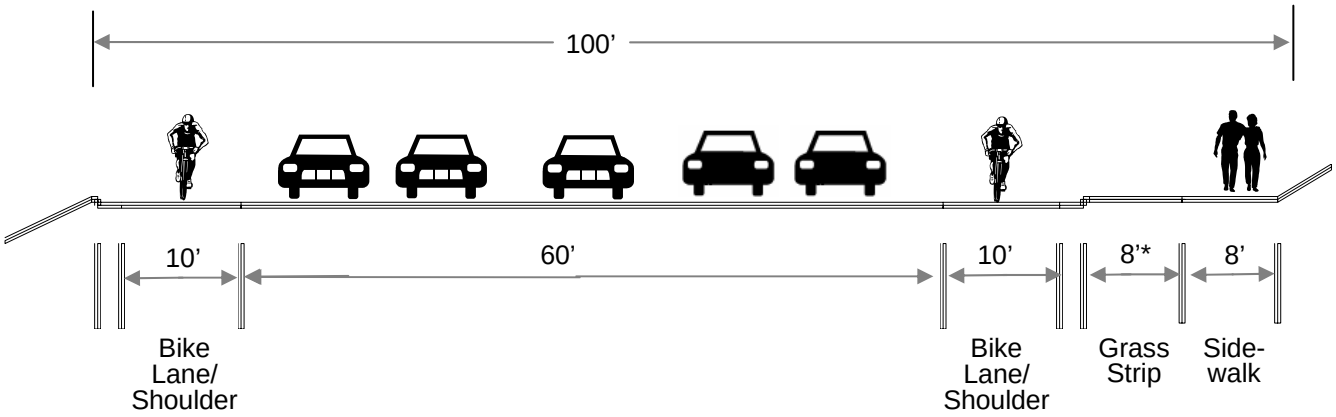
Institutional Sites:
- Tennessee School for the Blind

Cultural Sites:
- Donelson Cumberland Church
- Donelson-Hermitage YMCA

Utilities:
- Poles on north and south sides
- South Central Bell Cables (manholes on south side)

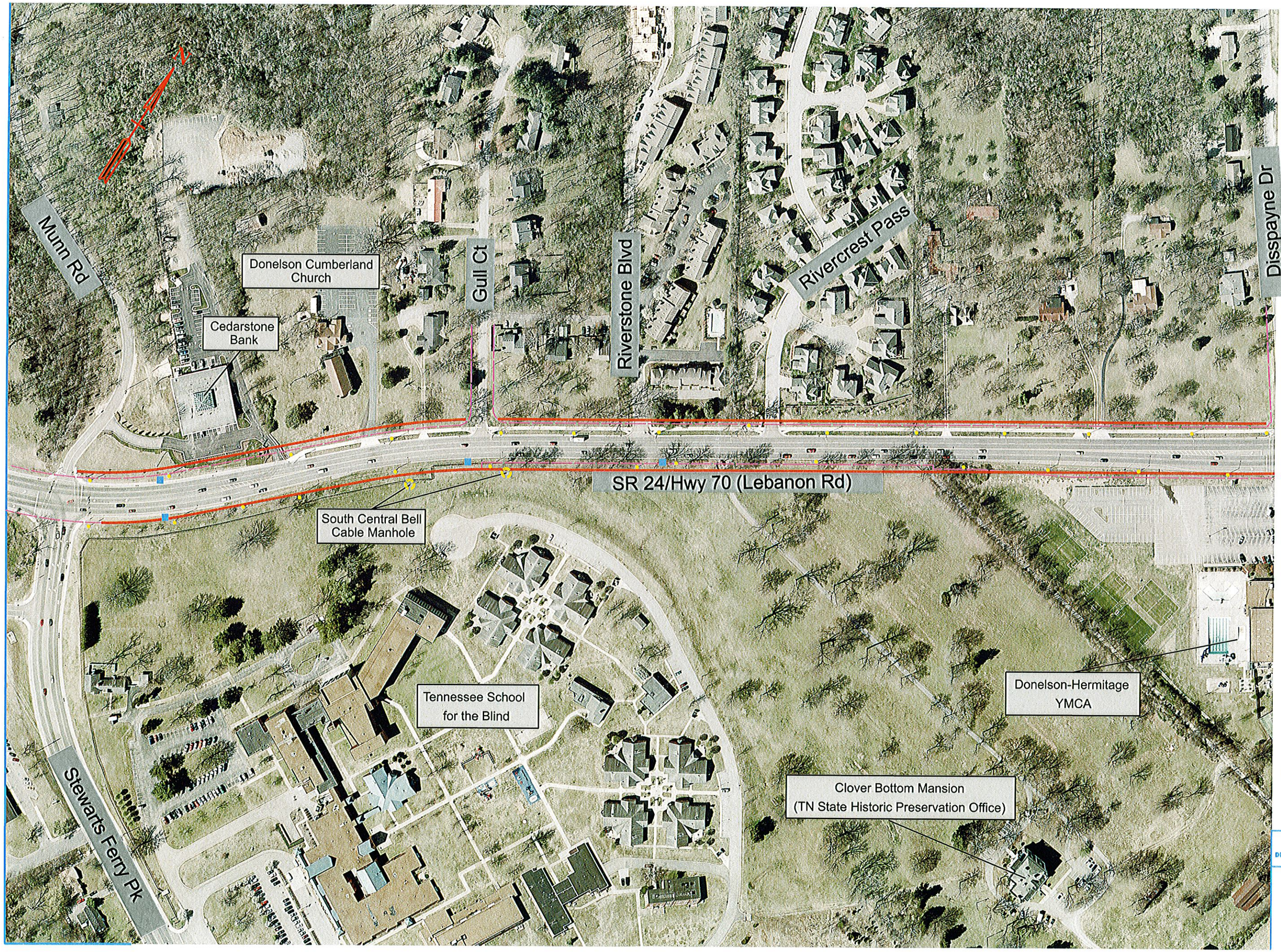


Proposed Cross-section for Option 3



Proposed Cross-section for Options 2 & 4

*Revised per findings during field review



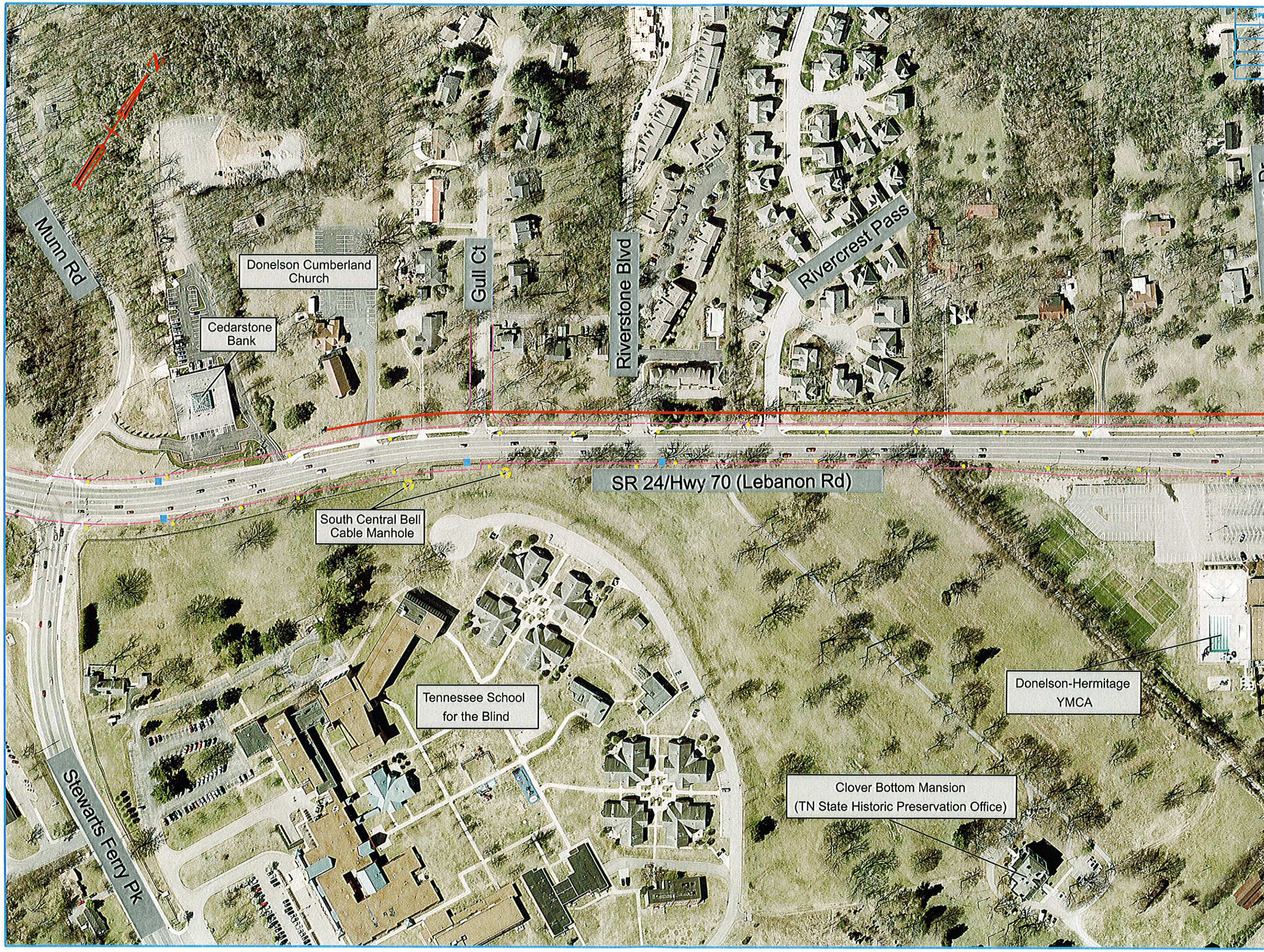
Utility Poles

Bus Stops

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Option 2 -
Widen Both Sides

TYPE	YEAR	PROJECT NO.	SHEET NO.



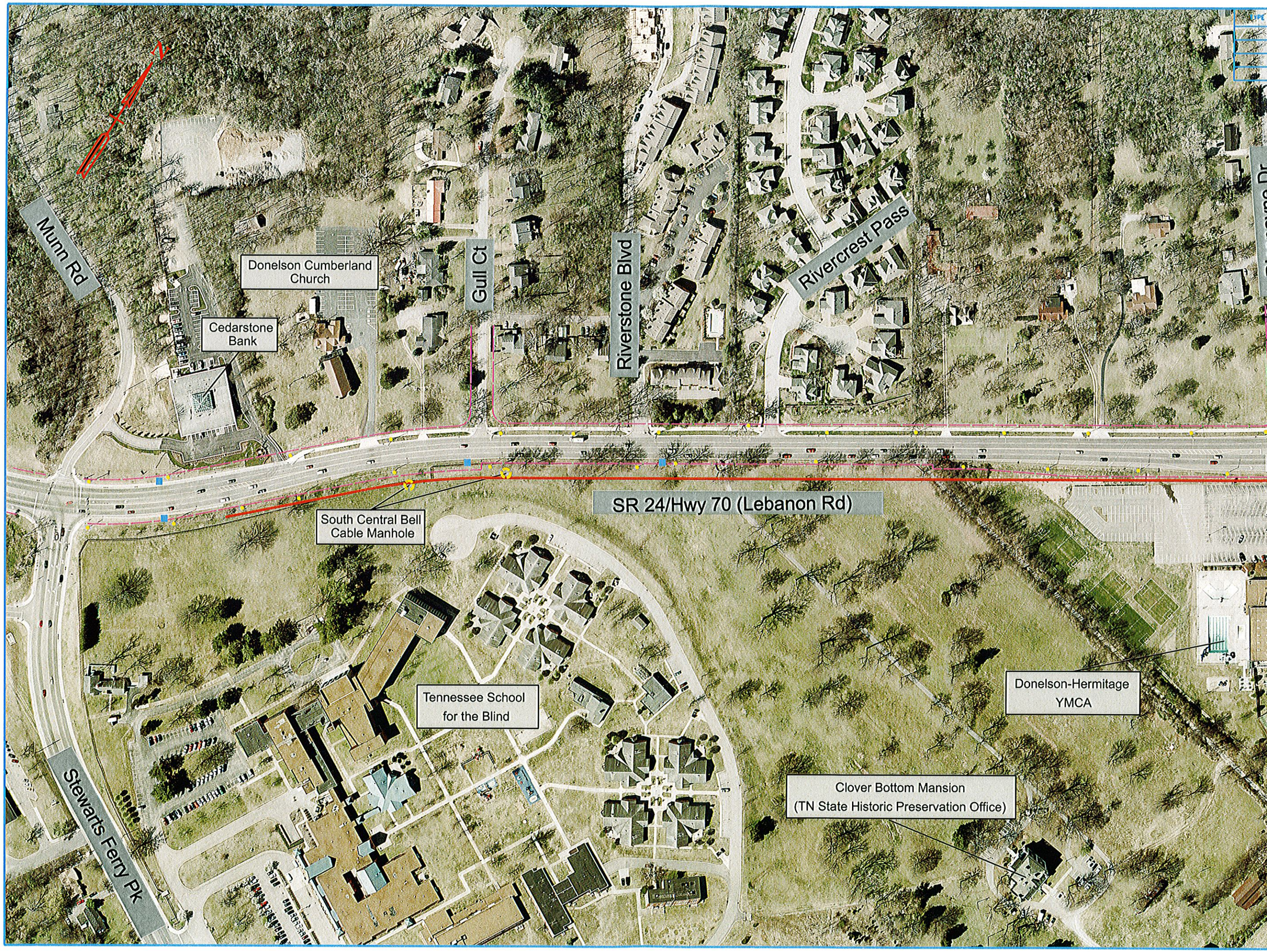
Utility Poles

Bus Stops

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Option 3 -
Widen to North

TYPE	YEAR	PROJECT NO.	SHEET NO.



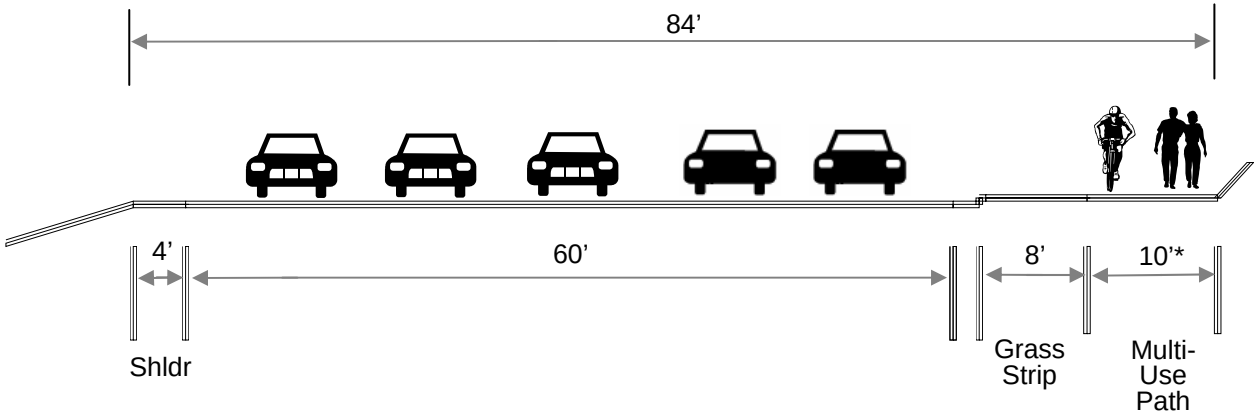
Utility Poles

Bus Stops

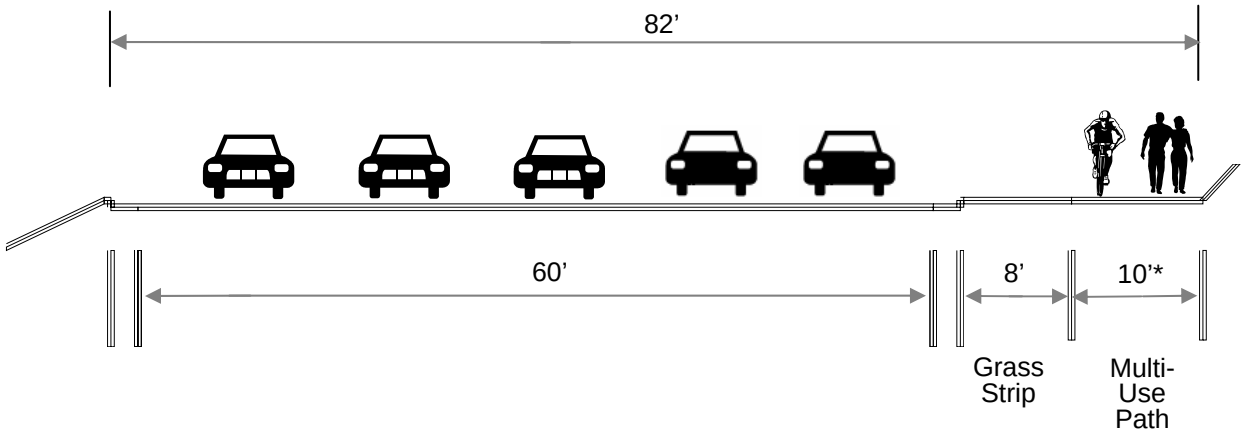
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Option 4 -
Widen to South

ATTACHMENT 2



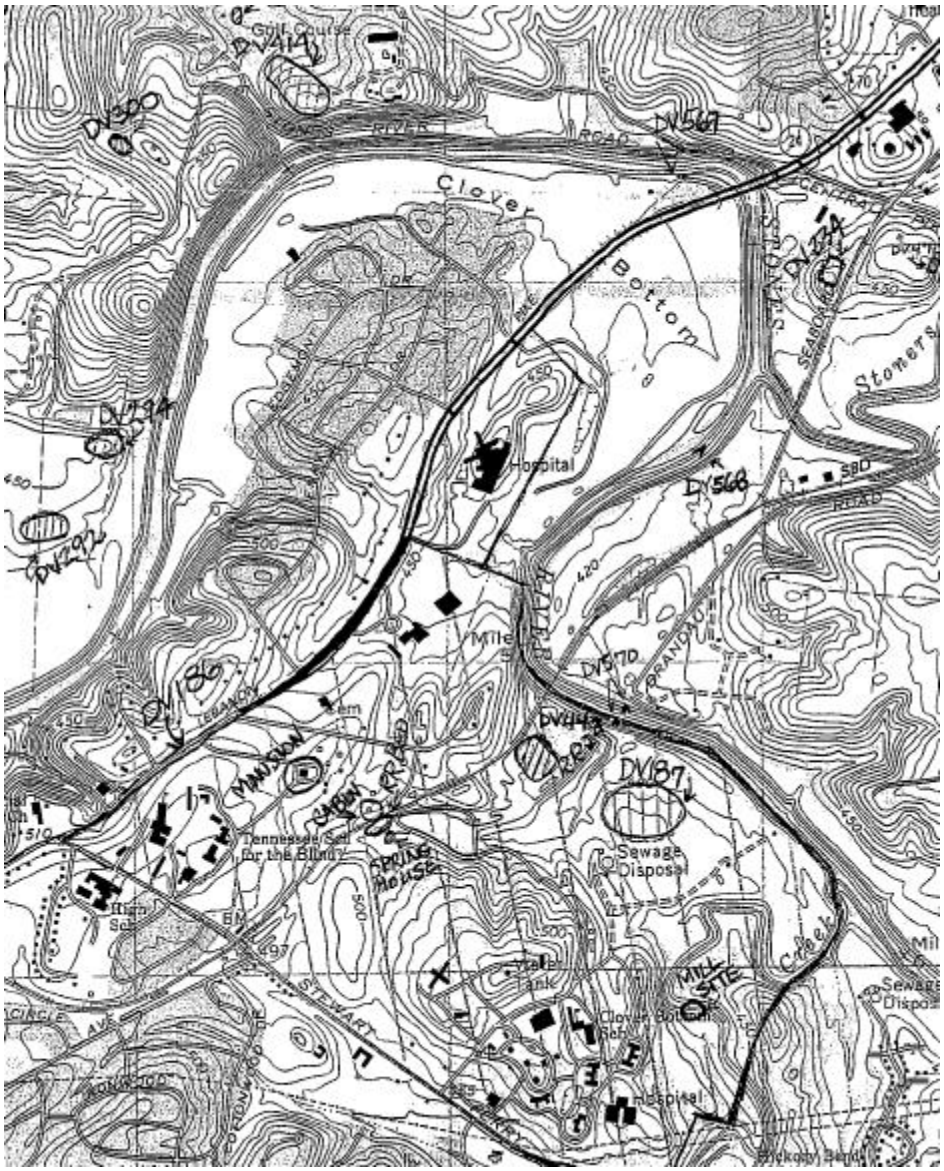
Alternate Proposed Cross-section for Option 3
(Discussed during field review)



Alternate Proposed Cross-section for Options 2 & 4
(Discussed during field review)

*Minimum width for a multi-use path

MAP OF ARCHAEOLOGICAL SITE


Golf Course
DV414
DV300
DV567
Clover
Bottom
Hospital
DV568
DV794
DV292
DV570
DV143
DV187
MANSION
SPRING HOUSE
Tennessee Sch
for the Blind
Sewage
Disposal
MILL SITE
Creek
STEWART
Hospital

ROW COSTS
(RECENT RESIDENTIAL REAL ESTATE SALES)

Address	Road	Recent Sale Date	Type of Property	Acreage	Land value/total value (appraised)	Recent Sale Price	Land Sale Price	Land Price/Acre
3102	Lebanon Pike	7/13/2007	Single Family	1.05 acres	25%	$ 325,000	$ 81,250	$ 77,380
1915	Lebanon Pike	2/29/2008	Single Family	0.39 acres	25%	$ 92,700	$ 23,175	$ 59,400
1909	Lebanon Pike	11/30/2006	Single Family	0.82 acres	22%	$ 195,000	$ 42,900	$ 52,300
102	Guill Ct	10/13/2006	Single Family	1.02 acres	20%	$ 256,000	$ 50,880	$ 49,880

Average	$ 59,740