

**RESOLUTION 18-72**

**A RESOLUTION AUTHORIZING A CONTRACT EXTENSION WITH R.J. WATKINS AND SON CONSTRUCTION, INC. FOR ADDITIONAL SERVICES RELATED TO THE NORTHBOUND RIGHT TURN LANE CONSTRUCTION AT COMMONWEALTH AND MAIN STREET**

**WHEREAS**, the Board of Mayor and Aldermen awarded a contract to R.J. Watkins and Son Construction, Inc. in January 2018; and

**WHEREAS**, the Tennessee Department of Transportation request additional rotomilling to construct the northbound right turn lane at Main Street and Commonwealth; and

**WHEREAS**, R.J. Watkins and Son Construction, Inc. has agreed to perform the extra work in the amount of Twenty-nine Thousand, Five Hundred Dollars; and

**WHEREAS**, the City's consultant Dempsey Dilling and Associates, LLC has reviewed and found the cost to perform the work appropriate; and

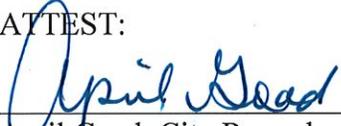
**WHEREAS**, the Budget and Finance Committee reviewed the contract extension on May 7, 2018; and

**NOW, THEREFORE BE IT RESOLVED**, that the City of Spring Hill Board of Mayor and Aldermen, authorize a resolution extending the contract price with R.J. Watkins and Son Construction, Inc. in the amount of Twenty Nine Thousand, Five Hundred Dollars (\$29,500.00) using monies from impact fees.

**Passed and Adopted by the Board of Mayor and Aldermen of the City of Spring Hill, Tennessee on the 21<sup>st</sup> day of May 2018.**

  
\_\_\_\_\_  
Rick Graham, Mayor

ATTEST:

  
\_\_\_\_\_  
April Goad, City Recorder

LEGAL FORM APPROVED:

  
\_\_\_\_\_  
Patrick Carter, City Attorney

Date: May 7, 2018

TO: Victor Lay, City Administrator

FROM: Philip Stuckert, P.E. Infrastructure Director

SUBJECT: Contract Extension with R. J. Watkins and Son Construction, Inc. for extra rotomilling work as requested by the Tennessee Department of Transportation

Recommendation:

That the Board of Mayor and Aldermen, by resolution, authorize a contract extension with R. J. Watkins and Son Construction, Inc for extra rotomilling work as requested by the Tennessee Department of Transportation, in the amount of Twenty-Nine Thousand Five Hundred Dollars (\$29,500.00).

Summary:

The recently awarded street contractor, R. J. Watkins and Son Construction, Inc., plans to start work in the coming weeks to construct the north bound right turn lane at Main Street and Commonwealth. Part of their work includes rotomilling the existing pavement surface on Main Street to add the northbound right turn lane.

Details for the rotomilling work were reviewed and approved by TDOT last fall. However, a second review by TDOT, upon issuance of a grading permit, changed the rotomilling work area whereby additional work must be completed.

Additional information about the work in the form of emails and drawings are part of this memorandum.

R. J. Watkins proposes to perform the extra work in an amount not to exceed Twenty Nine Thousand, Five Hundred Dollars. Dempsey Dilling and Associates has reviewed the cost and recommends the City execute the contract extension.

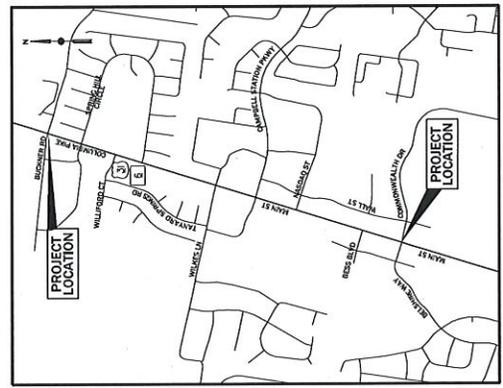
The Budget and Finance Committee reviewed the contract extension on May 7, 2018

City staff has prepared a resolution for BOMA's consideration. Sufficient monies are available in Impact Fees to pay for the extra work.

2017 ROADWAY IMPROVEMENTS  
**CITY OF SPRING HILL**  
 WILLIAMSON COUNTY, TENNESSEE

**RIGHT TURN LANE ADDITION &  
 PEDESTRIAN SIGNALIZATION IMPROVEMENTS  
 ALONG MAIN STREET (HWY 31) - CONTRACT A**

- |                                    |                         |
|------------------------------------|-------------------------|
| <b>BOARD OF MAYOR AND ALDERMEN</b> | <b>MAYOR</b>            |
| HONORABLE RICK GRAHAM              | VICE MAYOR              |
| BRUCE HULL                         | ALDERMAN                |
| MATT FITTNER                       | ALDERMAN                |
| VINCENT FUQUA                      | ALDERMAN                |
| KEVIN GAVIGAN                      | ALDERMAN                |
| JEFF GRAVES                        | ALDERMAN                |
| CHAD WHITTENBURG                   | ALDERMAN                |
| AMY WURTH                          | ALDERMAN                |
| SUSAN ZEMEK                        | ALDERMAN                |
| VICTOR LAY                         | CITY ADMINISTRATOR      |
| PHILIP STUCKERT                    | INFRASTRUCTURE DIRECTOR |
| JEFF FOSTER                        | PUBLIC WORKS DIRECTOR   |



VICINITY MAP  
 SCALE: NONE

**INDEX OF DRAWINGS**  
**SHEET NO. DESCRIPTION**

- |     |   |
|-----|---|
| 1   | COVER                                       |
| 2   | TDOT GENERAL NOTES                          |
| 3   | ESTIMATED QUANTITIES AND TDOT DETAILS       |
|     | RIGHT TURN LANE AT US 31 & COMMONWEALTH DR. |
| 4   | EXISTING LAYOUT                             |
| 5   | PROPOSED LAYOUT                             |
| 6   | GRADING AND EPSC PLAN                       |
| 7   | TRAFFIC CONTROL PLAN                        |
| 8   | PROPOSED STRIPING PLAN                      |
|     | PEDESTRIAN SIGNALIZATION IMPROVEMENTS       |
| T-1 | BUCKNER RD EXISTING & PROPOSED LAYOUT       |
| T-2 | SHEET OMITTED FROM PLAN SET                 |
| T-3 | COMMONWEALTH DR EXISTING & PROPOSED LAYOUT  |
| T-4 | NOTES & ESTIMATED QUANTITIES                |
| T-5 | TIMING PLAN                                 |



CITY OF SPRING HILL, TENNESSEE  
 APPROVED BY: *[Signature]*  
 TITLE: *City Administrator* DATE: *11/30/2017*

JOB NO: 0100-398A

**DEMPSEY, DILLING & ASSOCIATES, P.C.**  
 ENGINEERING CONSULTANTS  
 502 HAZELWOOD DRIVE  
 SMYRNA, TENNESSEE 37167  
 OFFICE (615) 220-5800



DATE: DECEMBER, 2017  
 APRIL 26, 2018 ADDED ADDITIONAL  
 MILLING AND PAVING PER TDOT



ESTIMATED ROADWAY QUANTITIES FOR THE TURN LANE AT COMMONWEALTH DR.

ITEM NO.	FOOTNOTE	DESCRIPTION	UNIT	QUANTITY
105-01.50		CONSTRUCTION LAYOUT	LS	1.00
202-03		REMOVAL OF RIGID PAVEMENT, SIDEWALK, ETC.	S.F.	17.00
202-08.10	1	REMOVAL OF CURB (EXTRUDED MOUNTABLE)	L.F.	75.00
203-01		ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	LS	1.00
207-89.91	2	EARTHWORK, SUBGRADE, AND BASE	LS	1.00
209-89.91	4	EROSION CONTROL	LS	1.00
303-01		MINERAL AGGREGATE, TYPE A, BASE, GRADING, D	TON	250.00
307-02.01		ASPHALT CONCRETE MIX (F670-22) (BPME-HM) GRADING A	TON	100.00
307-02.06		ASPHALT CONCRETE MIX (F670-22) (BPME-HM) GRADING B	TON	49.00
403-01		BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	0.56
403-01		BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	0.40
407-20.03		SAW CUTTING ASPHALT PAVEMENT	L.F.	405.00
411-02.10		POSS MIX (F670-22) GRADING D	TON	85.00
701-01.01		CONCRETE SIDEWALK (4")	S.F.	80.00
701-02.03		CONCRETE HANDICAP RAMP	S.F.	115.00
702-01.01		EXTRUDED MOUNTABLE CURB (12")	L.F.	15.00
702-03		CONCRETE COMBINED CURB & GUTTER	C.Y.	3.00
705-02.02	5	SINGLE GUARDRAIL (TYPE 2)	L.F.	260.00
712-01		TRAFFIC CONTROL	LS	1.00
712-04.01		FLEXIBLE DRUMS (CHANNELIZING)	EACH	21.00
712-05.01		WARNING LIGHTS (TYPE A)	EACH	21.00
712-06		SIGNS (CONSTRUCTION)	S.F.	81.00
716-02.04	7	PLASTIC PAVEMENT MARKING (CHANNELIZATION STRIPING)	S.Y.	5.00
716-02.05	7	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	68.00
716-02.19	7	PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	3.00
716-04.05	7	PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK)	L.F.	284.00
716-08.01		REMOVAL OF PAVEMENT MARKING (STOP LINE)	L.F.	0.00
716-08.05		REMOVAL OF PAVEMENT MARKING (TURN LANE ARROW)	EACH	0.00
716-08.06		REMOVAL OF PAVEMENT MARKING (STRAIGHT ARROW)	EACH	0.00
716-12.02	8	ENHANCED FLATLINE THERMO PVT MARKING (6IN LINE)	L.M.	0.05
716-12.05	8	ENHANCED FLATLINE THERMO PVT MARKING (6IN DOTTED LINE)	L.F.	30.00
716-13.02	9	SPRAY THERMO PVT MARKING (60 mil) (6IN LINE)	L.M.	0.07
717-01		MOBILIZATION	LS	1.00
920-10.05	10	SAW SLOT & LOOP WIRE	LS	1.00

FOOTNOTES

- REMOVAL OF CURB SHALL INCLUDE ALL REMOVAL OF ASPHALT AND EXISTING BASE STONE UNDERNEATH THE CURB.
- LINE ITEM SHALL INCLUDE REMOVAL OF ALL ASPHALT, EXISTING BASE STONE, AND SUBGRADE DOWN TO 17.5" BELOW EXISTING ROADWAY PAVEMENT. SHALL ALSO INCLUDE ANY EXCAVATION ASSOCIATED WITH MOVING THE EDGE OF THE CONCRETE ISLAND TO ACCOMMODATE THE SPACING REQUIREMENTS FOR THE NEW CROSSEWALK.
- QUANTITY INCLUDES ALL EXCAVATION, BORROWED MATERIAL, WASTE MATERIAL, AND FINISH GRADING NECESSARY TO ACHIEVE THE PROPOSED GRADING LAYOUT. ALL DISTURBED AREAS SHALL BE TOPPED WITH A MINIMUM OF 4 INCHES OF TOP SOIL.
- LINE ITEM SHALL INCLUDE ALL TEMPORARY EROSION CONTROL MEASURES REQUIRED DURING CONSTRUCTION AND SODDING OF ALL DISTURBED AREAS.
- QUANTITY INCLUDES REMOVAL OF THE EXISTING GUARDRAIL THAT WILL CONFLICT WITH THE PROPOSED TURN LANE.
- ALL ADDITIONAL TRAFFIC CONTROL COMPONENTS NECESSARY TO COMPLETE THE PROJECT SHALL BE INCLUDED IN THE PROJECT LUMP SUM BID PRICE.
- ALL THERMOELASTIC PAVEMENT MARKINGS SHALL BE APPLIED BY THE SCREEN EXTRUSION METHOD AS APPLICABLE. PAVEMENT MARKINGS SHALL NOT BE PERFORMED THERMOELASTIC MARKING MATERIAL.
- SHALL BE USED FOR ROADWAY EDGE LINES. (APPROXIMATELY 275 LINEAR FEET)
- SHALL BE USED FOR ROADWAY LANE LINES. (APPROXIMATELY 373 LINEAR FEET)
- QUANTITY SHALL INCLUDE INSTALLING NEW LOOP WIRES ON COMMONWEALTH DRIVE AND MAIN STREET. ADDITIONALLY, ANY DAMAGED LOOPS AS A RESULT OF CONSTRUCTION OR ASPHALT MILLING SHALL BE REPAIRED/REPLACED AS WELL.

NOTE:

THE QUANTITIES LISTED ABOVE ARE ESTIMATED QUANTITIES OF THE WORK NECESSARY TO COMPLETE THE PROPOSED IMPROVEMENTS. THE CONTRACTOR IS SOLELY RESPONSIBLE TO VERIFY ALL QUANTITIES AND ENSURE ALL NECESSARY COSTS ARE INCLUDED IN THEIR LUMP SUM BID PRICE.

TENNESSEE DEPARTMENT OF TRANSPORTATION (TDOT) STANDARD ROADWAY

DRAWING NO.	REVISION	DESCRIPTION
RD-MC2	2/28/2002	STANDARD OF SLOPING (MOUNTABLE) CONCRETE CURBS AND CONCRETE GUTTERS
RD-MC-10	10/15/2003	CONCRETE CURB RAMP, DETAIL INDICATED SOME SURFACE DETAIL
RD-H9	10/10/2016	PARALLEL CURB RAMP IN CURVE
RD-S-7	2/5/2016	DETAILS FOR STANDARD CONCRETE SIDEWALKS
S-GR31-1	3/28/2017	V-BEAM GUARDRAIL
S-GR31-1A	5/12/2016	V-BEAM BARRIER FASTENING HARDWARE
T-S-20	11/1/2011	SIGN DETAILS
TRAFFIC CONTROL DESIGN		
TM-1	7/24/2014	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
TM-3	7/24/2014	MARKING STANDARDS FOR TRAFFIC ISLANDS, MEDIANS PAVED SHOULDERS ON CONVENTIONAL ROADS
TM-4	10/10/2016	STANDARD INTERSECTION PAVEMENT MARKINGS
EROSION PREVENTION AND SEDIMENT CONTROL		
EC-STR-3B	3/16/2017	SILT FENCE
SIGNALS		
T-SG-2	6/27/2016	LOOP LEADINS, CONDUIT AND PULL BOXES
T-SG-3	6/27/2016	STANDARD NOTES AND DETAILS OF INDUCTIVE LOOPS

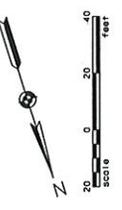
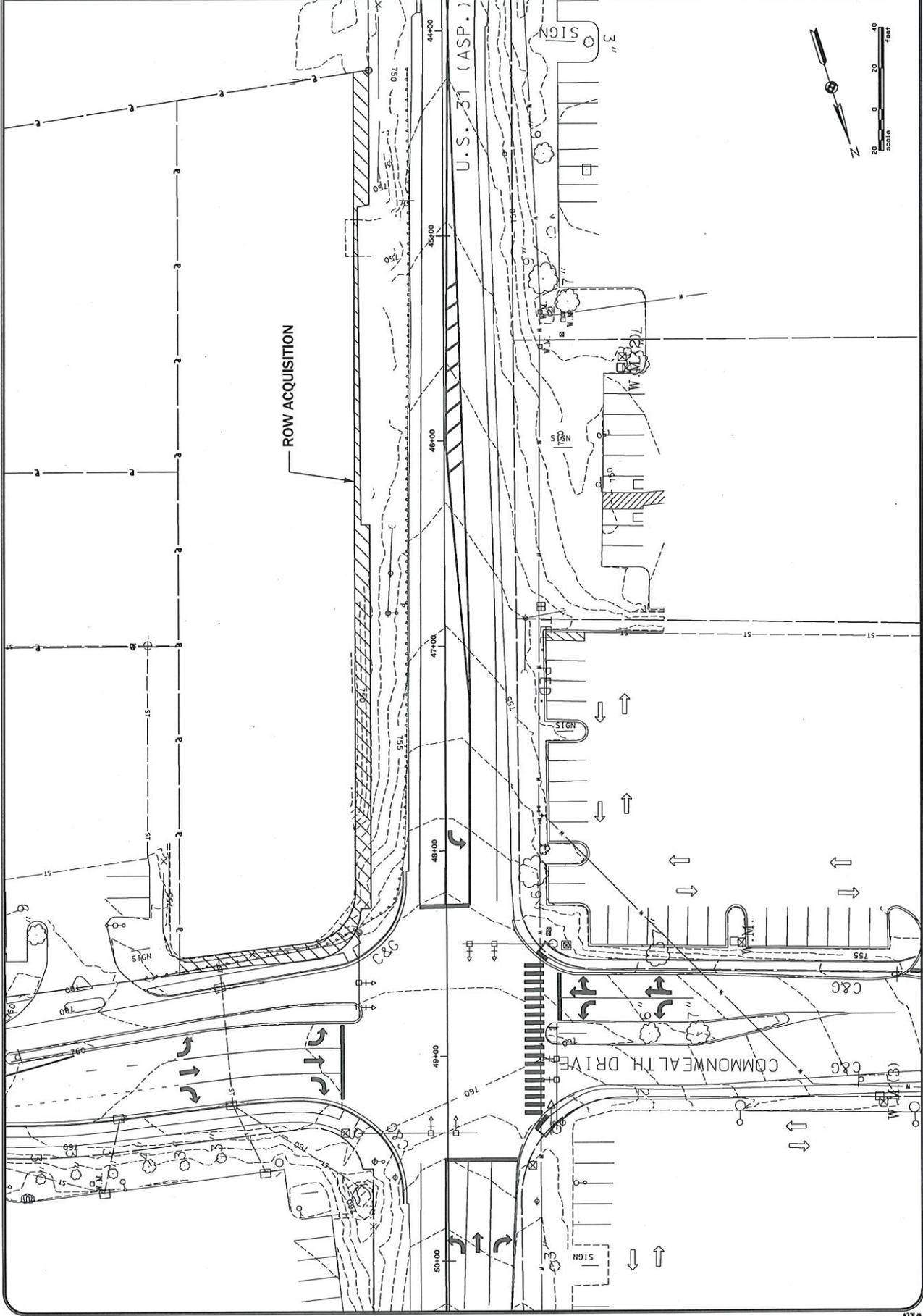
REFER TO SHEET T-4 FOR ESTIMATED SIGNALIZATION QUANTITIES AT BUCKNER ROAD AND COMMONWEALTH DRIVE.

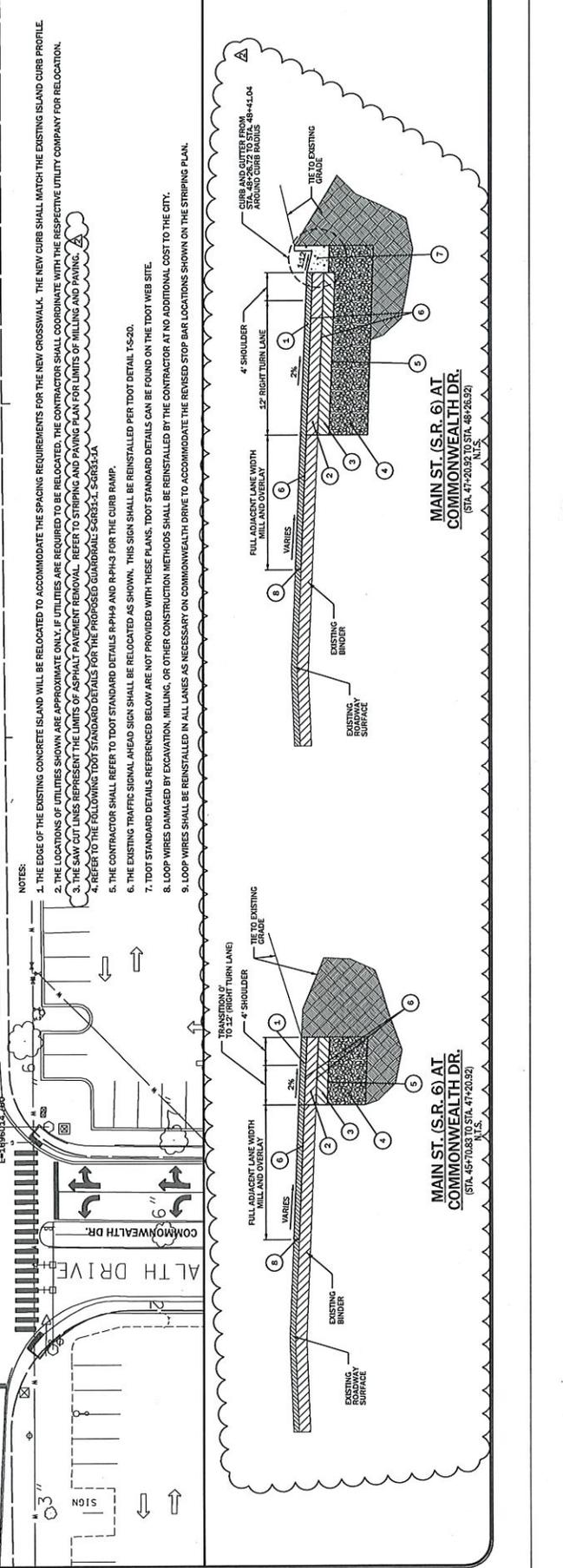
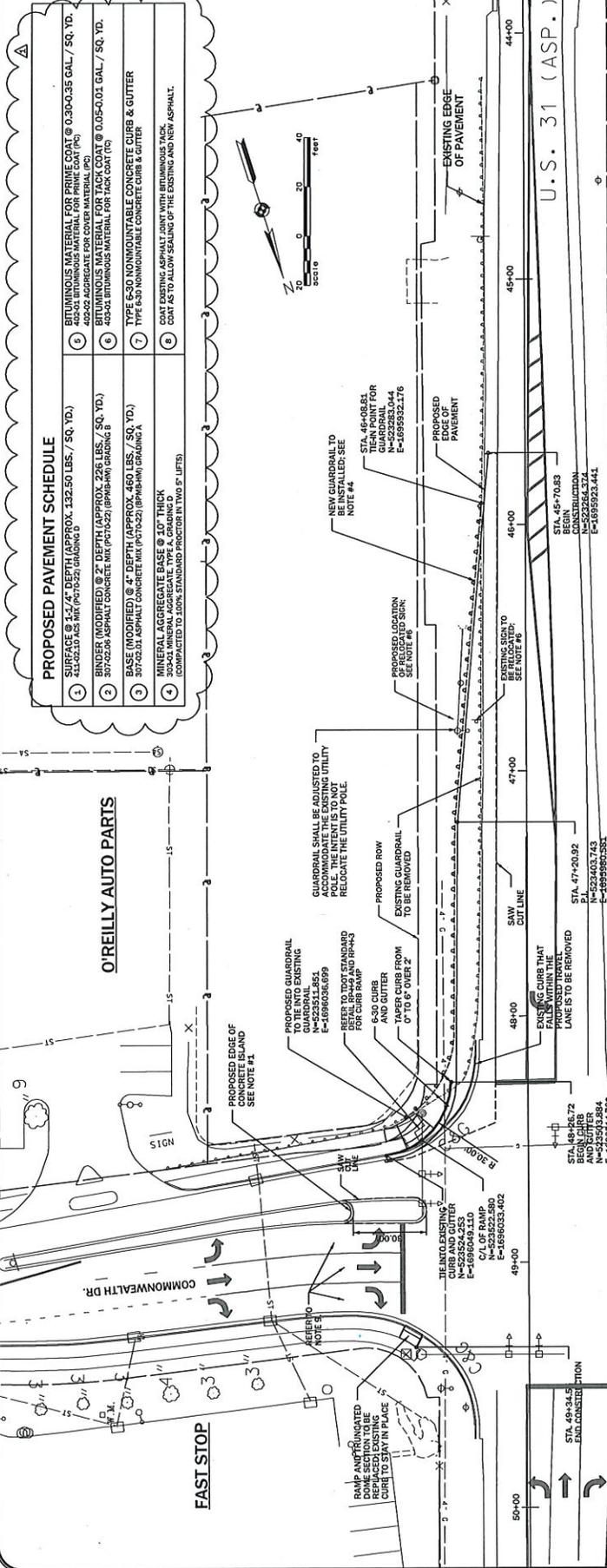
**EXISTING LAYOUT**  
**2017 ROADWAY IMPROVEMENTS**  
**TURN LANE AND PEDESTRIAN CROSSWALKS**  
**CITY OF SPRING HILL**  
**WILLIAMSON COUNTY, TENNESSEE**

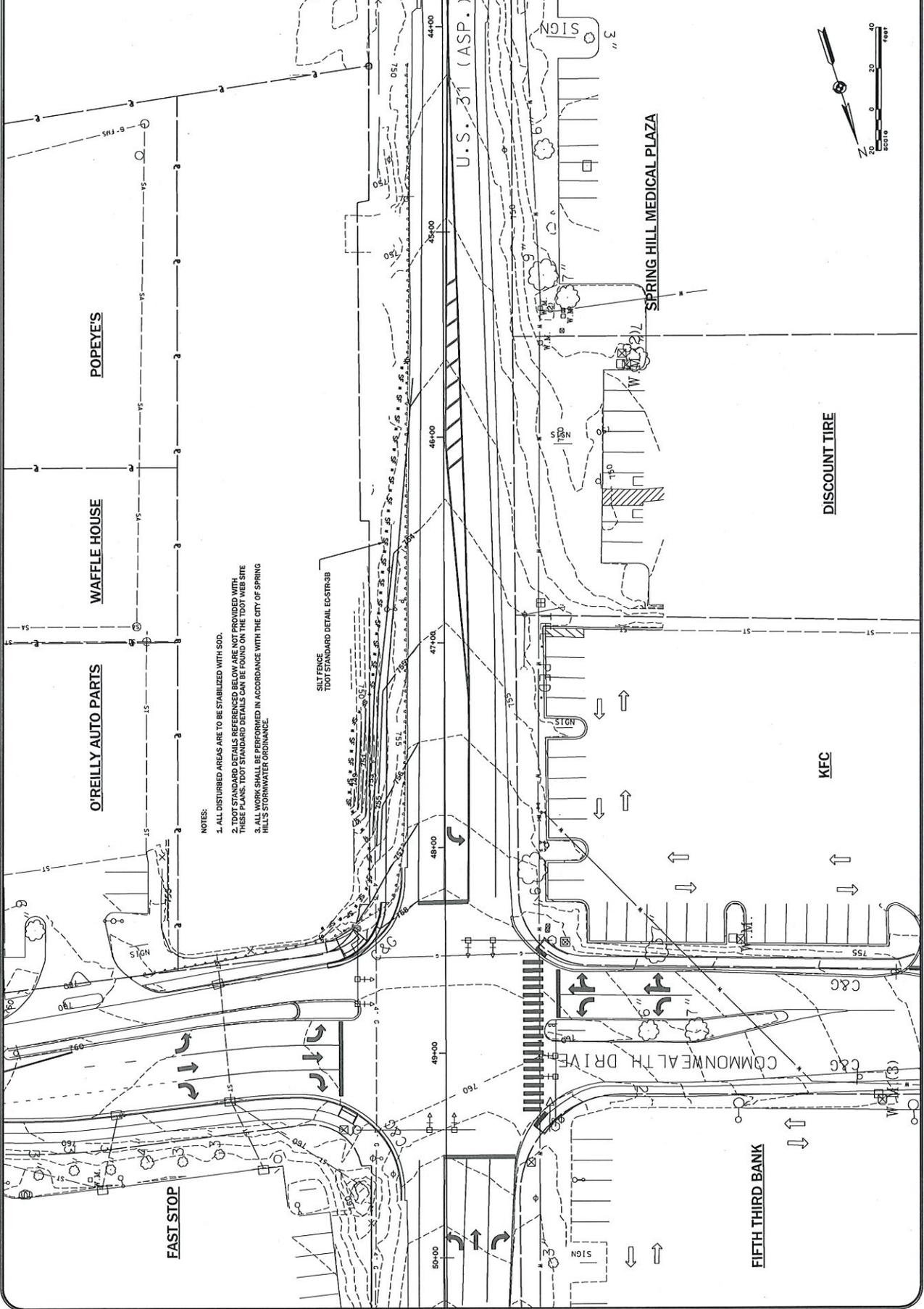
DATE:	APRIL 2018
DRAWN BY:	MM
CHECKED BY:	MM
APPROVED BY:	MM
PROJECT NO.:	2017-001
PROJECT NAME:	2017 ROADWAY IMPROVEMENTS
LOCATION:	TURN LANE AND PEDESTRIAN CROSSWALKS
SCALE:	AS SHOWN

Engineering Consultants  
 Smyrna, Tennessee 37167  
 602 Hazelwood Drive  
 PH: (615) 220-5800  
 www.dempseydilling.com

**DEMPESEY, DILLING & ASSOCIATES, P.C.**



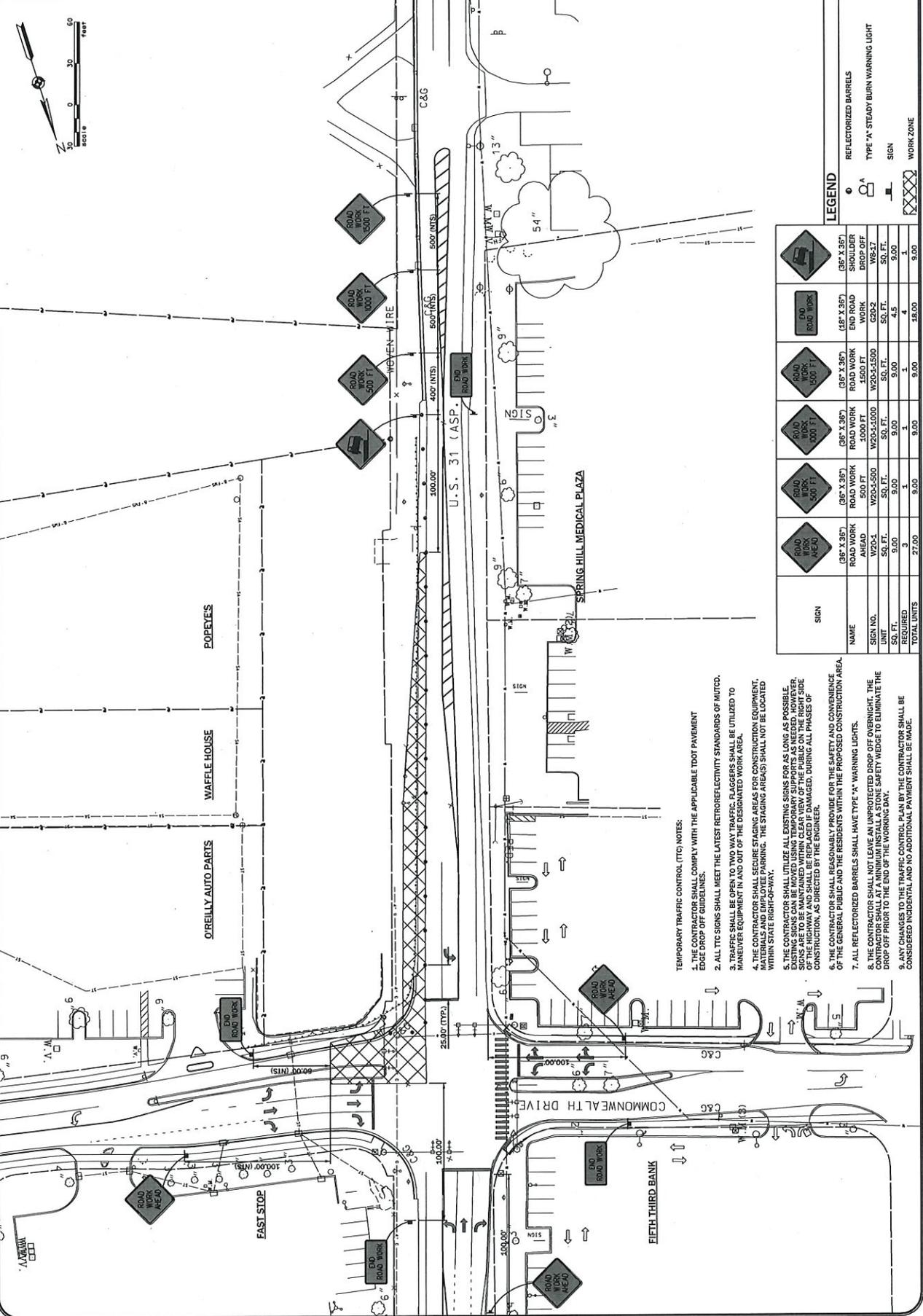




- NOTES:
1. ALL DISTURBED AREAS ARE TO BE STABILIZED WITH SOD.
  2. TOOT STANDARD DETAILS REFERENCED BELOW ARE NOT PROVIDED WITH THESE PLANS. TOOT STANDARD DETAILS CAN BE FOUND ON THE TOOT WEB SITE
  3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF SPRING HILL'S STORMWATER ORDINANCE



DATE	08/01/2014
DESIGNED BY	DM
CHECKED BY	DM
DATE	08/01/2014
PROJECT NO.	7
DATE	
DESCRIPTION	
DATE	
DESCRIPTION	



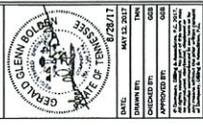
- TEMPORARY TRAFFIC CONTROL (TTC) NOTES:
1. THE CONTRACTOR SHALL COMPLY WITH THE APPLICABLE TDOT PAVEMENT EDGE DROP OFF GUIDELINES.
  2. ALL TTC SIGNS SHALL MEET THE LATEST RETROREFLECTIVITY STANDARDS OF MUTCD.
  3. TRAFFIC SHALL BE OPEN TO TWO WAY TRAFFIC. FLAGGERS SHALL BE UTILIZED TO MANUEVER EQUIPMENT IN AND OUT OF THE DESIGNATED WORK AREA.
  4. THE CONTRACTOR SHALL SECURE STAGING AREAS FOR CONSTRUCTION EQUIPMENT, MATERIALS AND EMPLOYEE PARKING. THE STAGING AREAS(S) SHALL NOT BE LOCATED WITHIN STATE RIGHT-OF-WAY.
  5. THE CONTRACTOR SHALL UTILIZE ALL EXISTING SIGNS FOR AS LONG AS POSSIBLE. SIGNAGE SHALL BE MAINTAINED WITHIN CLEAR VIEW OF THE PUBLIC ON THE RIGHT SIDE OF THE HIGHWAY AND SHALL BE REPLACED IF DAMAGED, DURING ALL PHASES OF CONSTRUCTION, AS DIRECTED BY THE ENGINEER.
  6. THE CONTRACTOR SHALL REASONABLY PROVIDE FOR THE SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC AND THE RESIDENTS WITHIN THE PROPOSED CONSTRUCTION AREA.
  7. ALL REFLECTORIZED BARRELS SHALL HAVE TYPE "A" WARNING LIGHTS.
  8. THE CONTRACTOR SHALL NOT LEAVE AN UNPROTECTED DROP OFF OVERNIGHT. THE CONTRACTOR SHALL AT A MINIMUM INSTALL A STONE SAFETY WEDGE TO ELIMINATE THE DROP OFF PRIOR TO THE END OF THE WORKING DAY.
  9. ANY CHANGES TO THE TRAFFIC CONTROL PLAN BY THE CONTRACTOR SHALL BE CONSIDERED INCIDENTAL AND NO ADDITIONAL PAYMENT SHALL BE MADE.

SIGN	(36" X 36") ROAD WORK AHEAD	(36" X 36") ROAD WORK 500 FT	(36" X 36") ROAD WORK 1000 FT	(36" X 36") ROAD WORK 1500 FT	(36" X 36") ROAD WORK 2000 FT	(36" X 36") END ROAD WORK	(36" X 36") SHOULDER DROP OFF
NAME	ROAD WORK AHEAD	ROAD WORK 500 FT	ROAD WORK 1000 FT	ROAD WORK 1500 FT	ROAD WORK 2000 FT	END ROAD WORK	SHOULDER DROP OFF
SIGN NO.	W20-150	W20-150	W20-150	W20-150	W20-150	W20-150	W20-150
UNIT	50 FT	50 FT	50 FT	50 FT	50 FT	50 FT	50 FT
SA. FT.	9.00	9.00	9.00	9.00	9.00	4.5	4.5
REQUIRED	3	1	1	1	1	4	1
TOTAL UNITS	27.00	9.00	9.00	9.00	9.00	36.00	9.00

LEGEND

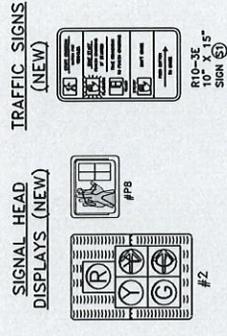
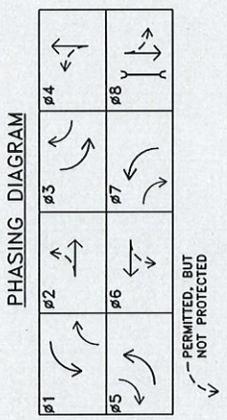
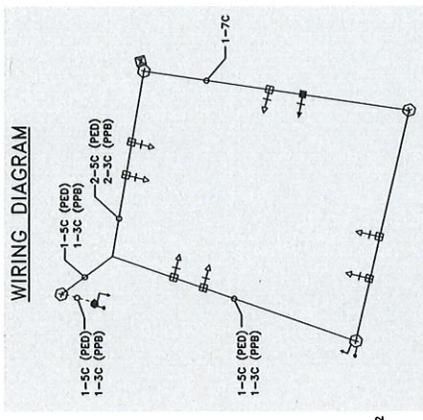
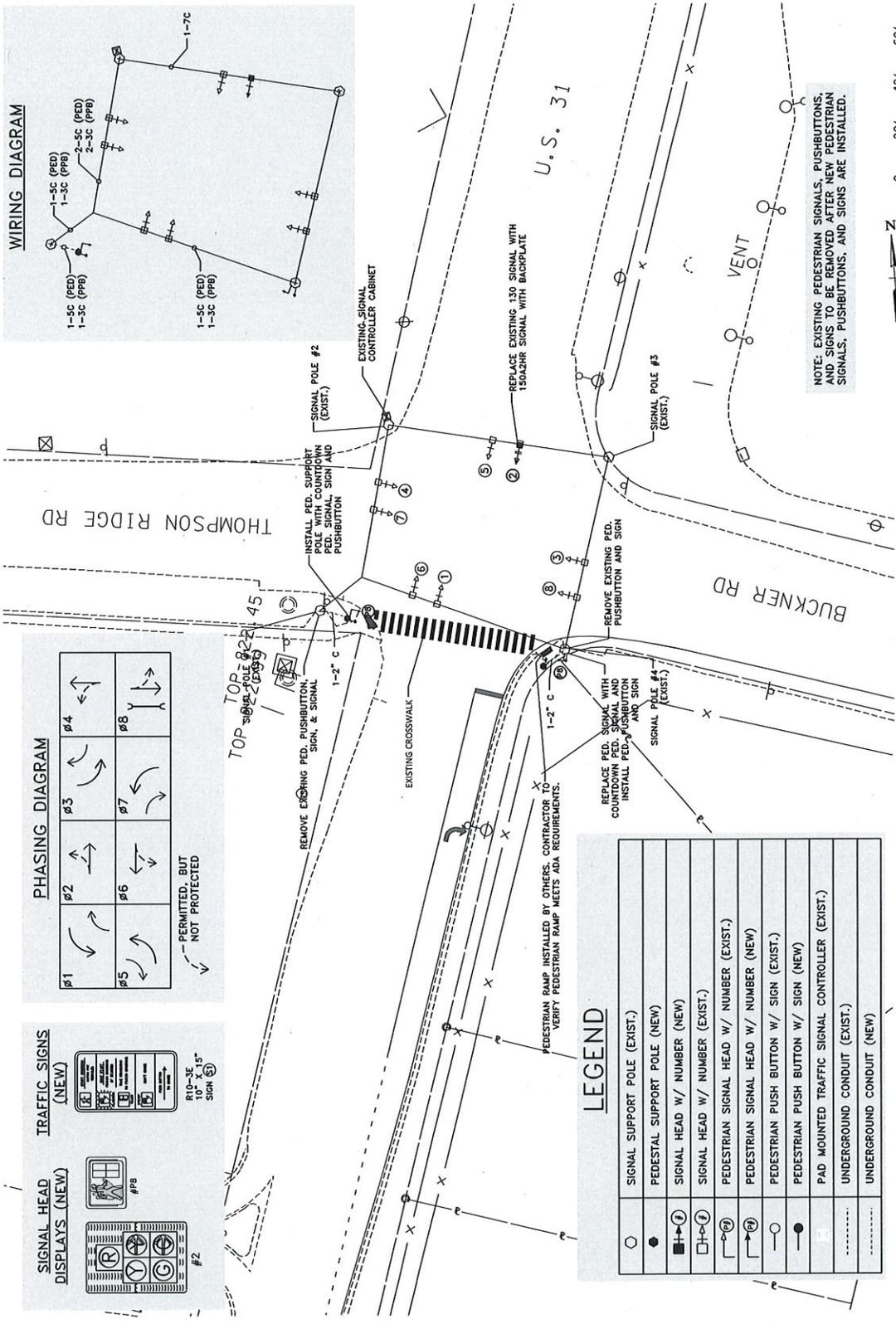
- REFLECTORIZED BARRELS
- TYPE "A" STEADY BURN WARNING LIGHT
- SIGN
- WORK ZONE





DATE:	08/28/17
DESIGNED BY:	MD
CHECKED BY:	MD
DATE:	08/28/17
DESIGNED BY:	MD
CHECKED BY:	MD

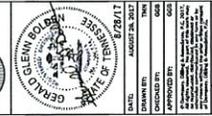
SHEET NO.	T-1
DATE	
DESCRIPTION	
SCALE	



**LEGEND**

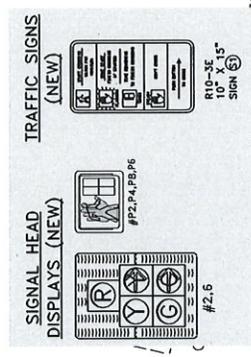
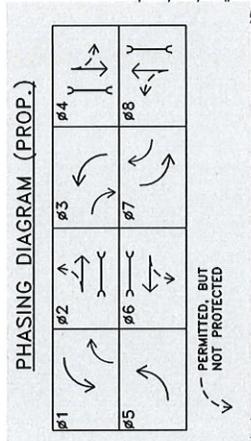
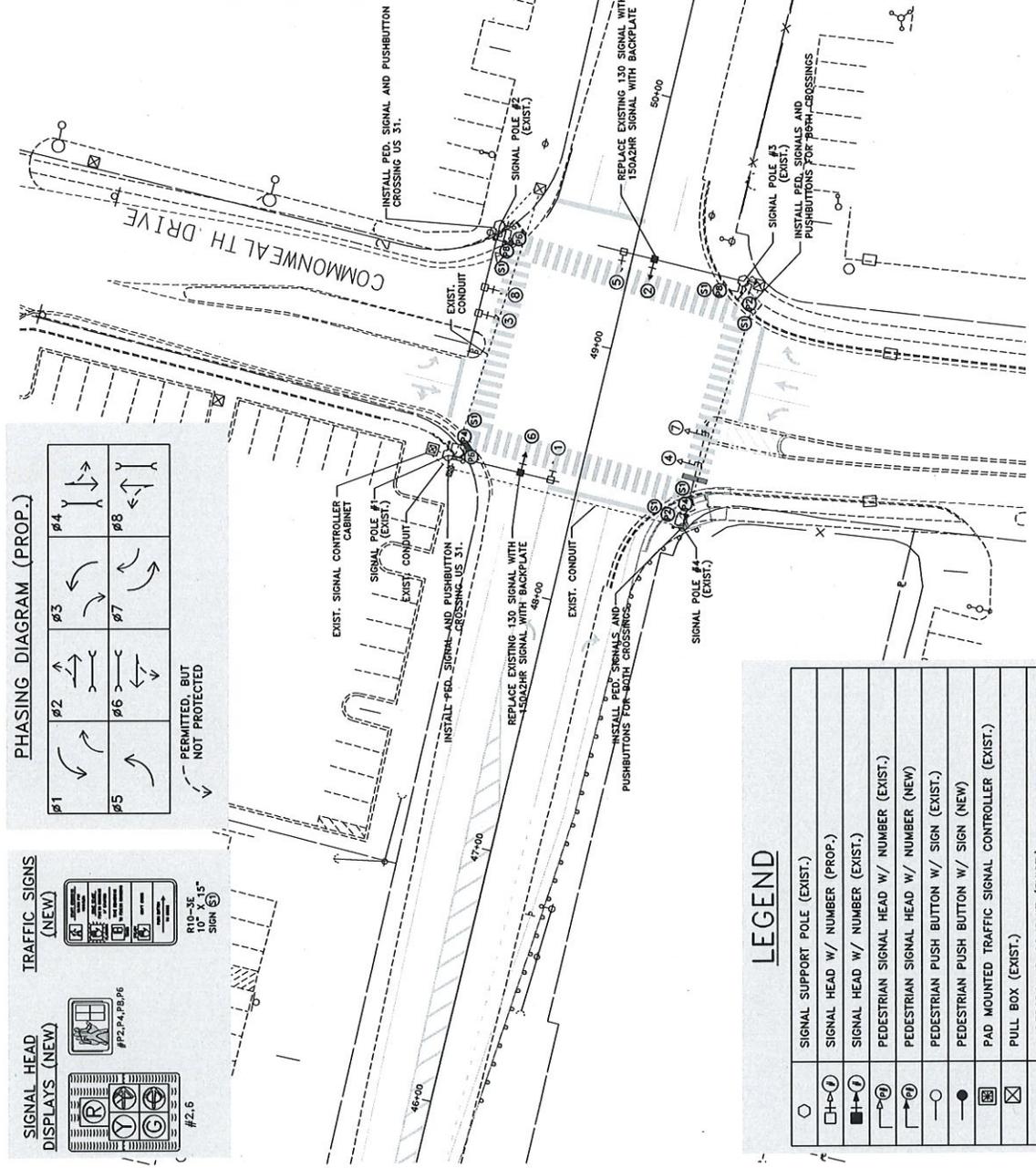
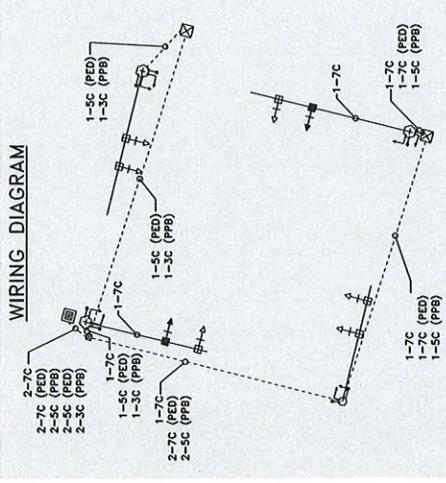
○	SIGNAL SUPPORT POLE (EXIST.)
●	PEDESTAL SUPPORT POLE (NEW)
□	SIGNAL HEAD W/ NUMBER (NEW)
□	SIGNAL HEAD W/ NUMBER (EXIST.)
□	PEDESTRIAN SIGNAL HEAD W/ NUMBER (EXIST.)
□	PEDESTRIAN SIGNAL HEAD W/ NUMBER (NEW)
○	PEDESTRIAN PUSH BUTTON W/ SIGN (EXIST.)
○	PEDESTRIAN PUSH BUTTON W/ SIGN (NEW)
□	PAD MOUNTED TRAFFIC SIGNAL CONTROLLER (EXIST.)
---	UNDERGROUND CONDUIT (EXIST.)
---	UNDERGROUND CONDUIT (NEW)

NOTE: EXISTING PEDESTRIAN SIGNALS, PUSHBUTTONS, AND SIGNS TO BE REMOVED AFTER NEW PEDESTRIAN SIGNALS, PUSHBUTTONS, AND SIGNS ARE INSTALLED.



NO.	DESCRIPTION	DATE

PROJECT NO. \_\_\_\_\_  
 SHEET NO. T-3



**LEGEND**

○	SIGNAL SUPPORT POLE (EXIST.)
□	SIGNAL HEAD W/ NUMBER (PROP.)
■	SIGNAL HEAD W/ NUMBER (EXIST.)
⊕	PEDESTRIAN SIGNAL HEAD W/ NUMBER (EXIST.)
⊖	PEDESTRIAN SIGNAL HEAD W/ NUMBER (NEW)
⊕	PEDESTRIAN PUSH BUTTON W/ SIGN (EXIST.)
⊖	PEDESTRIAN PUSH BUTTON W/ SIGN (NEW)
⊕	PAD MOUNTED TRAFFIC SIGNAL CONTROLLER (EXIST.)
⊖	PULL BOX (EXIST.)
-----	UNDERGROUND CONDUIT (EXIST.)

## GENERAL NOTES

### SIGNALIZATION

- (1) EQUIPMENT AND INSTALLATION OF TRAFFIC SIGNALS SHALL COMPLY WITH 1001 STANDARD SPECIFICATIONS, SECTION 730.
- (2) SALVAGEABLE EQUIPMENT SHALL BECOME THE PROPERTY OF THE CITY OF SMYRNA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION DESIGNATED BY THE CITY ENGINEER. THE CONTRACTOR SHALL CONTACT THOMAS WOLF, CITY ENGINEER (811-986-2232 EXT. 488) TO COORDINATE LOCATION AND PICKUP.
- (3) IF RESURFACING IS INCLUDED IN THE PROJECT, SIGNAL DETECTION LOOPS SHALL BE INSTALLED BEFORE THE FINAL SURFACE IS APPLIED.
- (4) ANY SIGNAL HEADS, WHEN VISIBLE TO DRIVERS BUT NOT OPERATIONAL, SHALL BE COMPLETELY COVERED.
- (5) SIGNAL HEADS SHALL FLASH A MINIMUM OF SEVEN (7) DAYS PRIOR TO ACTIVATION OF THE SIGNAL.
- (6) THE CONTRACTOR SHALL CONTACT THOMAS WOLF A MINIMUM OF THIRTY (30) DAYS PRIOR TO ACTIVATION OF THE SIGNAL TO OBTAIN THE INITIAL SIGNAL TIMINGS.
- (7) THE PROJECT ENGINEER SHALL NOTIFY THE LOCAL GOVERNMENTAL AGENCY RESPONSIBLE FOR TRAFFIC CONTROL, MAINTENANCE AT LEAST ONE (1) DAY IN ADVANCE OF THE COMMENCEMENT OF ANY SIGNALIZED INTERSECTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISCONNECTING THE LOOP DETECTORS AND MAKING ANY NECESSARY TIMING ADJUSTMENTS IN THE SIGNAL CONTROLLER PRIOR TO THE CONSTRUCTION.
- (8) THE PROJECT ENGINEER SHALL BE RESPONSIBLE FOR SUPPLYING THE SIGNAL CONTROLLER. THE CONTRACTOR SHALL PROVIDE THE CONTRACTOR WITH THE DESIRED LOCATION FOR DETECTOR LOOP REPLACEMENT.
- (9) LOOPS SHALL BE INSTALLED IN THE LEVELING COURSE IF A LEVELING COURSE IS PROVIDED.
- (10) LOOP REPLACEMENT SHALL BE IN ACCORDANCE WITH SECTION 730 OF THE STANDARD SPECIFICATIONS.

### SPECIAL NOTES REGARDING SIGNAL HEADS

- (1) ALL CIRCULAR AND ARROW INDICATIONS WITHIN ALL VEHICULAR SIGNAL HEADS PROPOSED FOR THIS PROJECT SHALL CONSIST OF AN LED (LIGHT EMITTING DIODE) SIGNAL MODULE UNLESS OTHERWISE NOTED IN THE PLANS.
- (2) CIRCULAR INDICATIONS SHALL MEET THE VIOSH-LED CIRCULAR SIGNAL SUPPLEMENT FOR EXPANDED EXTENDED VIEW ARROW INDICATIONS FOR EXPANDED EXTENDED VIEW.
- (3) INCANDESCENT OR SCREW-IN MODULES ARE NOT ACCEPTABLE.
- (4) COMPATIBILITY WITH CONFLICT MONITORS AND LOAD SWITCHES SHALL BE TESTED AND CONFIRMED.
- (5) MANUFACTURER SHALL PROVIDE A MINIMUM FIVE-YEAR WARRANTY FOR OPERATION OF THE UNIT.
- (6) ALL SIGNAL HEADS WITH LED LENSES SHALL INCLUDE SWIVEL BALANCE ADJUSTERS TO MAINTAIN THE PROPER VISIBILITY. COSTS OF ADJUSTERS TO BE INCLUDED IN COSTS OF SIGNAL HEADS.
- (7) THE ATTACHMENT OF THE TETHER WIRE TO THE POLE SHALL BE LOCATED BELOW THE LOWEST ELEVATION OF THE SIGNAL HEADS.

## STANDARD ROADWAY DRAWINGS

DWG. NO	REV.	DESCRIPTION
<b>ROADWAY DESIGN STANDARDS</b>		
RD-A-1	12-18-99	STANDARD ABBREVIATIONS
RD-A-1	10-26-84	STANDARD LEGEND
RD-L-3	04-15-04	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING
RD-L-4	04-15-04	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING
<b>SAFETY APPURTENANCES AND FENCE</b>		
S-CZ-1		CLEAR ZONE CRITERIA
<b>TRAFFIC CONTROL APPURTENANCES</b>		
T-FAB-1	05-27-77	FLASHING YELLOW ARROW BOARD
T-SG-1	05-27-76	WOOD POLE DETAILS FOR SPAN MOUNTED SIGNALS
T-SG-2	05-27-76	LOOP LEAD-IN'S, CONDUIT AND PULL BOXES
T-SG-3	05-27-76	STANDARD NOTES AND DETAILS OF INDUCTIVE LOOPS
T-SG-3A	05-27-76	ALTERNATE DETECTION DETAILS
T-SG-4	05-27-76	SPAN WIRE AND MESSENGER CABLE DETAILS
T-SG-4	05-27-76	CONTROLLER CABINET DETAILS
T-SG-4	05-27-76	PEDESTRIAN SIGNAL DETAILS
T-SG-7	05-27-76	SIGNAL HEAD ASSEMBLIES
T-SG-7A	05-27-76	TYPICAL SIGNAL HEAD PLACEMENT
T-SG-7E	05-27-76	TYPICAL SIGNAL HEAD PLACEMENT - THREE LANE APPROACHES
T-SG-8	05-27-76	STRAIN POLE DETAILS FOR SPAN MOUNTED SIGNALS
T-SG-9	05-27-76	DETAILS OF CANTILEVER SIGNAL SUPPORT
T-SG-9A	05-27-76	MISCELLANEOUS SIGNAL DETAILS
T-SG-10	05-27-76	MAST ARM POLE AND STRAIN POLES FOUNDATION DETAILS
T-SG-11	05-27-76	MAINTENANCE OF EXISTING SIGNALS DURING HIGHWAY CONSTRUCTION
T-SG-12	11-01-11	TYPICAL WIRING FOR SIGNAL HEADS AND DETECTION LOOPS
T-WZ-51	04-02-12	TRAFFIC CONTROL FOR SIGNALS ONLY PROJECTS ON 4 OR 5 LANE MAJOR ROUTES
T-WZ-52	04-02-12	TRAFFIC CONTROL FOR SIGNALS ON 4 OR 5 LANE MAJOR AND MINOR ROUTES
T-WZ-55		SIDEWALK TRAFFIC CONTROL

## ESTIMATED SIGNAL QUANTITIES

U. S. 31 AND BUCKNER ROAD

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
730-01-01	TRUCKING	L.F.	20
730-01-02	REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT	L.F.	1
730-01-03	INSTALLATION OF EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
730-01-04	SIGNAL HEAD ASSEMBLY (5/8"X24" WITH BACKPLATE)	L.F.	300
730-01-05	SIGNAL CABLE - 3 CONDUCTOR	L.F.	100
730-01-06	SIGNAL CABLE - 5 CONDUCTOR	L.F.	100
730-01-07	SIGNAL CABLE - 7 CONDUCTOR	L.F.	100
730-01-08	PEDESTRIAN PUSHBUTTON AND SIGN	EACH	1
730-01-09	PEDESTRIAN PUSHBUTTON AND SIGN	EACH	2
730-01-10	COUNTDOWN PEDESTRIAN SIGNAL	EACH	2

## ESTIMATED SIGNAL QUANTITIES

U. S. 31 AND BELSHIRE WAY/COMMONWEALTH DRIVE

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
730-01-03	CONCRETE CURB RAMP	S.F.	155
730-01-04	INSTALLATION OF EXISTING TRAFFIC SIGNAL EQUIPMENT	L.F.	1
730-01-07	SIGNAL HEAD ASSEMBLY (5/8"X24" WITH BACKPLATE)	EACH	2
730-01-01	SIGNAL CABLE - 3 CONDUCTOR	L.F.	200
730-01-02	SIGNAL CABLE - 5 CONDUCTOR	L.F.	200
730-01-03	SIGNAL CABLE - 7 CONDUCTOR	L.F.	200
730-01-08	PEDESTRIAN PUSHBUTTON AND SIGN	EACH	6
730-01-09	COUNTDOWN PEDESTRIAN SIGNAL	EACH	6

### FOOTNOTES:

- (1) ITEM INCLUDES SUPPORT POLE AND INSTALLATION OF POLE AND FOUNDATION.
- (2) ITEM INCLUDES FURNISHING AND INSTALLING PEDESTRIAN PUSHBUTTONS AND SIGNS
- (3) ITEM INCLUDES MODIFICATION OF SIGNAL TIMINGS IN CONTROLLER TO ACCOMMODATE NEW PEDESTRIAN CROSSING PHASES AND RIGHT TURN OVERLAPS.





US 31 @ Belshire Way/Commonwealth Dr

Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7
INITIAL	6.0	37.0	6.0	20.0	6.0	17.0
PASSAGE	3.5	5.0	2.5	2.5	2.5	2.5
YELLOW CHANGE	1.0	4.5	3.0	3.5	3.0	3.5
RED CLEARANCE	2.5	1.5	2.5	2.5	1.5	2.5
WALK	7.0	7.0	7.0	7.0	7.0	7.0
NO. CLEAR	16.0	16.0	16.0	16.0	16.0	16.0
MAX 1	20.0	80.0	20.0	25.0	20.0	20.0
MAX 2	20.0	80.0	20.0	25.0	20.0	20.0
MAX 3	20.0	80.0	20.0	25.0	20.0	20.0
MAX 4	20.0	80.0	20.0	25.0	20.0	20.0
MAX 5	20.0	80.0	20.0	25.0	20.0	20.0
MAX 6	20.0	80.0	20.0	25.0	20.0	20.0
MAX 7	20.0	80.0	20.0	25.0	20.0	20.0
MAX 8	20.0	80.0	20.0	25.0	20.0	20.0
MAX 9	20.0	80.0	20.0	25.0	20.0	20.0
MAX 10	20.0	80.0	20.0	25.0	20.0	20.0
MAX 11	20.0	80.0	20.0	25.0	20.0	20.0
MAX 12	20.0	80.0	20.0	25.0	20.0	20.0
MAX 13	20.0	80.0	20.0	25.0	20.0	20.0
MAX 14	20.0	80.0	20.0	25.0	20.0	20.0
MAX 15	20.0	80.0	20.0	25.0	20.0	20.0
MAX 16	20.0	80.0	20.0	25.0	20.0	20.0
MAX 17	20.0	80.0	20.0	25.0	20.0	20.0
MAX 18	20.0	80.0	20.0	25.0	20.0	20.0
MAX 19	20.0	80.0	20.0	25.0	20.0	20.0
MAX 20	20.0	80.0	20.0	25.0	20.0	20.0
MAX 21	20.0	80.0	20.0	25.0	20.0	20.0
MAX 22	20.0	80.0	20.0	25.0	20.0	20.0
MAX 23	20.0	80.0	20.0	25.0	20.0	20.0
MAX 24	20.0	80.0	20.0	25.0	20.0	20.0
MAX 25	20.0	80.0	20.0	25.0	20.0	20.0
MAX 26	20.0	80.0	20.0	25.0	20.0	20.0
MAX 27	20.0	80.0	20.0	25.0	20.0	20.0
MAX 28	20.0	80.0	20.0	25.0	20.0	20.0
MAX 29	20.0	80.0	20.0	25.0	20.0	20.0
MAX 30	20.0	80.0	20.0	25.0	20.0	20.0
MAX 31	20.0	80.0	20.0	25.0	20.0	20.0
MAX 32	20.0	80.0	20.0	25.0	20.0	20.0
MAX 33	20.0	80.0	20.0	25.0	20.0	20.0
MAX 34	20.0	80.0	20.0	25.0	20.0	20.0
MAX 35	20.0	80.0	20.0	25.0	20.0	20.0
MAX 36	20.0	80.0	20.0	25.0	20.0	20.0
MAX 37	20.0	80.0	20.0	25.0	20.0	20.0
MAX 38	20.0	80.0	20.0	25.0	20.0	20.0
MAX 39	20.0	80.0	20.0	25.0	20.0	20.0
MAX 40	20.0	80.0	20.0	25.0	20.0	20.0
MAX 41	20.0	80.0	20.0	25.0	20.0	20.0
MAX 42	20.0	80.0	20.0	25.0	20.0	20.0
MAX 43	20.0	80.0	20.0	25.0	20.0	20.0
MAX 44	20.0	80.0	20.0	25.0	20.0	20.0
MAX 45	20.0	80.0	20.0	25.0	20.0	20.0
MAX 46	20.0	80.0	20.0	25.0	20.0	20.0
MAX 47	20.0	80.0	20.0	25.0	20.0	20.0
MAX 48	20.0	80.0	20.0	25.0	20.0	20.0
MAX 49	20.0	80.0	20.0	25.0	20.0	20.0
MAX 50	20.0	80.0	20.0	25.0	20.0	20.0
MAX 51	20.0	80.0	20.0	25.0	20.0	20.0
MAX 52	20.0	80.0	20.0	25.0	20.0	20.0
MAX 53	20.0	80.0	20.0	25.0	20.0	20.0
MAX 54	20.0	80.0	20.0	25.0	20.0	20.0
MAX 55	20.0	80.0	20.0	25.0	20.0	20.0
MAX 56	20.0	80.0	20.0	25.0	20.0	20.0
MAX 57	20.0	80.0	20.0	25.0	20.0	20.0
MAX 58	20.0	80.0	20.0	25.0	20.0	20.0
MAX 59	20.0	80.0	20.0	25.0	20.0	20.0
MAX 60	20.0	80.0	20.0	25.0	20.0	20.0
MAX 61	20.0	80.0	20.0	25.0	20.0	20.0
MAX 62	20.0	80.0	20.0	25.0	20.0	20.0
MAX 63	20.0	80.0	20.0	25.0	20.0	20.0
MAX 64	20.0	80.0	20.0	25.0	20.0	20.0
MAX 65	20.0	80.0	20.0	25.0	20.0	20.0
MAX 66	20.0	80.0	20.0	25.0	20.0	20.0
MAX 67	20.0	80.0	20.0	25.0	20.0	20.0
MAX 68	20.0	80.0	20.0	25.0	20.0	20.0
MAX 69	20.0	80.0	20.0	25.0	20.0	20.0
MAX 70	20.0	80.0	20.0	25.0	20.0	20.0
MAX 71	20.0	80.0	20.0	25.0	20.0	20.0
MAX 72	20.0	80.0	20.0	25.0	20.0	20.0
MAX 73	20.0	80.0	20.0	25.0	20.0	20.0
MAX 74	20.0	80.0	20.0	25.0	20.0	20.0
MAX 75	20.0	80.0	20.0	25.0	20.0	20.0
MAX 76	20.0	80.0	20.0	25.0	20.0	20.0
MAX 77	20.0	80.0	20.0	25.0	20.0	20.0
MAX 78	20.0	80.0	20.0	25.0	20.0	20.0
MAX 79	20.0	80.0	20.0	25.0	20.0	20.0
MAX 80	20.0	80.0	20.0	25.0	20.0	20.0
MAX 81	20.0	80.0	20.0	25.0	20.0	20.0
MAX 82	20.0	80.0	20.0	25.0	20.0	20.0
MAX 83	20.0	80.0	20.0	25.0	20.0	20.0
MAX 84	20.0	80.0	20.0	25.0	20.0	20.0
MAX 85	20.0	80.0	20.0	25.0	20.0	20.0
MAX 86	20.0	80.0	20.0	25.0	20.0	20.0
MAX 87	20.0	80.0	20.0	25.0	20.0	20.0
MAX 88	20.0	80.0	20.0	25.0	20.0	20.0
MAX 89	20.0	80.0	20.0	25.0	20.0	20.0
MAX 90	20.0	80.0	20.0	25.0	20.0	20.0
MAX 91	20.0	80.0	20.0	25.0	20.0	20.0
MAX 92	20.0	80.0	20.0	25.0	20.0	20.0
MAX 93	20.0	80.0	20.0	25.0	20.0	20.0
MAX 94	20.0	80.0	20.0	25.0	20.0	20.0
MAX 95	20.0	80.0	20.0	25.0	20.0	20.0
MAX 96	20.0	80.0	20.0	25.0	20.0	20.0
MAX 97	20.0	80.0	20.0	25.0	20.0	20.0
MAX 98	20.0	80.0	20.0	25.0	20.0	20.0
MAX 99	20.0	80.0	20.0	25.0	20.0	20.0
MAX 100	20.0	80.0	20.0	25.0	20.0	20.0

Phase	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7
INITIAL	6.0	37.0	6.0	20.0	6.0	17.0	6.0
PASSAGE	3.5	5.0	2.5	2.5	2.5	2.5	2.5
YELLOW CHANGE	1.0	4.5	3.0	3.5	3.0	3.5	3.5
RED CLEARANCE	2.5	1.5	2.5	2.5	1.5	2.5	2.5
WALK	7.0	7.0	7.0	7.0	7.0	7.0	7.0
NO. CLEAR	16.0	16.0	16.0	16.0	16.0	16.0	16.0
MAX 1	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 2	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 3	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 4	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 5	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 6	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 7	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 8	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 9	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 10	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 11	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 12	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 13	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 14	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 15	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 16	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 17	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 18	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 19	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 20	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 21	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 22	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 23	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 24	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 25	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 26	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 27	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 28	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 29	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 30	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 31	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 32	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 33	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 34	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 35	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 36	20.0	80.0	20.0	25.0	20.0	20.0	20.0
MAX 37	20.0						

**From:** Cory Hall  
**To:** [watkinsconstruction@energize.net](mailto:watkinsconstruction@energize.net)  
**Cc:** Phillip Stuckert; "Mr. Shane Shamanur"; "Jerome Dempsey"; Tom Wolf  
**Subject:** RE: Spring Hill - Main Street (S.R. 6) Turn Lane  
**Date:** Monday, April 30, 2018 11:12:27 AM  
**Attachments:** [image001.png](#)  
[Hwy 31 Turn Lane Plans Revised 4-26-2018.pdf](#)

Zach,

TDOT is going to require the milling and overlay of the adjacent lane of traffic. As a result, I have attached a full revised set of plans showing this additional work. We are formally requesting a Lump Sum Change Order Price to complete the additional work.

Saw slot and loop wire is still estimated as a lump sum price, but there is the potential to have to redo some of the loops on Main Street now with the additional milling. With the additional milling, we will go ahead and mill back on Commonwealth which will eliminate the striping removal line items. The line items impacted by this change include the following:

ESTIMATED ROADWAY QUANTITIES FOR THE TURN LANE AT COMMONWEALTH DR.				
ITEM NO.	DESCRIPTION	UNIT	Old QTY	New Qty
403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	0.14	0.40
411-02.10	ACS MIX (PG70-22) GRADING D	TON	35.00	95.00
716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	55.00	68.00
716-08.01	REMOVAL OF PAVEMENT MARKING (LINE)	L.F.	9.00	0.00
716-08.05	REMOVAL OF PAVEMENT MARKING (STOP LINE)	L.F.	37.00	0.00
716-08.06	REMOVAL OF PAVEMENT MARKING (TURN LANE ARROW)	EACH	2.00	0.00
716-08.07	REMOVAL OF PAVEMENT MARKING (STRAIGHT ARROW)	EACH	1.00	0.00
716-12.02	ENHANCED FLATLINE THERMO PVT MRKNG (6IN LINE)	L.M.	0.03	0.05
920-10.05	SAW SLOT & LOOP WIRE	LS	1.00	1.00
<b>NOTE:</b>				
THE QUANTITIES LISTED ABOVE ARE ESTIMATED QUANTITIES OF THE WORK NECESSARY TO COMPLETE THE PROPOSED IMPROVEMENTS. THE CONTRACTOR IS SOLELY RESPONSIBLE TO VERIFY ALL QUANTITIES AND ENSURE ALL NECESSARY COSTS ARE INCLUDED IN THEIR LUMP SUM BID PRICE. CHANGE ORDER PRICE SHALL INCLUDE ALL WORK NECESSARY TO COMPLETE THE WORK IN ACCORDANCE WITH THE REVISIONS SHOWN ON THE PLANS.				

Thanks

Cory D. Hall, P.E.  
 Dempsey, Dilling, & Associates, P.C.  
**Engineering Consultants**  
 502 Hazelwood Drive  
 Smyrna, TN 37167  
 Tel: 615-220-5800

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**From:** Greg Woerdeman [<mailto:Greg.Woerdeman@tn.gov>]  
**Sent:** Tuesday, April 24, 2018 3:09 PM  
**To:** Cory Hall; 'Phillip Stuckert'; [watkinsconstruction@energize.net](mailto:watkinsconstruction@energize.net)  
**Cc:** 'Mr. Shane Shamanur'; 'Jerome Dempsey'; Eric Atkinson; David Bowker; 'Tom Wolf'  
**Subject:** RE: Spring Hill - Main Street (S.R. 6) Turn Lane

Cory,

I spoke with my District Engineer and you have to overlay **one full lane** width over. Not just one foot past the joint. We do typically do overlay the entire roadway, but since this a recently paved section they will make that compromise. Please feel free to call if you have any questions.

Thank you,



Greg Woerdeman, PE | District Operations Supervisor  
Region 3 Operations | District 37 Maintenance  
Building I  
6601 Centennial Blvd, Nashville, TN 37243  
Office: (615)-350-4407 Cell: (615)-598-2053  
[Greg.Woerdeman@tn.gov](mailto:Greg.Woerdeman@tn.gov)

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**From:** Cory Hall [mailto:chall@dempseydilling.com]  
**Sent:** Tuesday, April 24, 2018 9:59 AM  
**To:** 'Phillip Stuckert'; watkinsconstruction@energize.net  
**Cc:** 'Mr. Shane Shamanur'; 'Jerome Dempsey'; Eric Atkinson; David Bowker; Greg Woerdeman; 'Tom Wolf'  
**Subject:** FW: Spring Hill - Main Street (S.R. 6) Turn Lane

Philip/Zach,

I spoke with TDOT this morning, and the approved stamp on the plans noting mill and overlay does not require us to overlay the entire width of the highway. As he stated below the mill and overlay applies to the right turn lane section. However, since we are completely constructing the turn lane with a new pavement section, the note would not really be applicable. We are ok to proceed as shown on the plans with just the 1-foot overlay joint in the surface course into the adjacent lane.

Thanks

Cory D. Hall, P.E.  
Dempsey, Dilling, & Associates, P.C.  
*Engineering Consultants*  
502 Hazelwood Drive  
Smyrna, TN 37167  
Tel: 615-220-5800

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**From:** Eric Atkinson [mailto:Eric.Atkinson@tn.gov]  
**Sent:** Tuesday, April 24, 2018 9:53 AM  
**To:** Cory Hall  
**Subject:** RE: Spring Hill - Main Street (S.R. 6) Turn Lane

Cory,

Stanley and I reviewed this site right turn lane addition to Sr-6. The mill and overlay applies to the right turn lane section.

---

**From:** Cory Hall [mailto:chall@dempseydilling.com]  
**Sent:** Tuesday, April 24, 2018 9:35 AM  
**To:** Eric Atkinson  
**Cc:** Greg Woerdeman; David Bowker  
**Subject:** RE: Spring Hill - Main Street (S.R. 6) Turn Lane

Eric,

This is the addition of a northbound right turn lane at Commonwealth on S.R. 6. The plans were submitted with an overlapping joint onto the adjacent existing lane since S.R. 6 was just paved last summer. Attached are the full plans which were submitted.

I have copied Greg Woerdeman and David Bowker because I had spoke with them this morning as well.

Thanks

Cory D. Hall, P.E.  
Dempsey, Dilling, & Associates, P.C.  
*Engineering Consultants*  
502 Hazelwood Drive  
Smyrna, TN 37167  
Tel: 615-220-5800

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**From:** Eric Atkinson [mailto:Eric.Atkinson@tn.gov]  
**Sent:** Tuesday, April 24, 2018 9:22 AM  
**To:** Cory Hall  
**Subject:** RE: Spring Hill - Main Street (S.R. 6) Turn Lane

Cory,

Is this a revision to the site or is this a new site on Sr-6 in Williamson Co

---

**From:** Cory Hall [mailto:chall@dempseydilling.com]  
**Sent:** Tuesday, April 24, 2018 8:41 AM  
**To:** Eric Atkinson  
**Cc:** 'Phillip Stuckert'; David Bowker  
**Subject:** RE: Spring Hill - Main Street (S.R. 6) Turn Lane  
**Importance:** High

\*\*\* This is an EXTERNAL email. Please exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email - STS-Security. \*\*\*

Eric,

I am following up to see if you have had a chance to review the email below. We had our preconstruction meeting with the contractor last week, and he is getting ready to start construction soon.

Thanks

Cory D. Hall, P.E.  
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**From:** Cory Hall [<mailto:chall@dempseydilling.com>]  
**Sent:** Tuesday, April 17, 2018 10:22 AM  
**To:** 'Eric Atkinson'  
**Cc:** 'Phillip Stuckert'  
**Subject:** RE: Spring Hill - Main Street (S.R. 6) Turn Lane  
**Importance:** High

Eric,

The City of Spring Hill has forwarded me the attached approved grading permit and drawings for the construction of the turn lane on Hwy 31 at Commonwealth Drive. Because Hwy 31 was completely overlaid and restriped last summer, we designed the project so that the surface course of asphalt would overlap the existing roadway 1 foot to eliminate the vertical joint (refer to cross sections on sheet 3 of the attached drawings). This was done so that the entire length and width of the road along the project would not have to be milled and overlaid.

The approved plans were stamped with the note, "Entire Length and Width of Project shall be Overlaid According to TDOT standards and specifications."

I want to verify that we are approved to construct the turn lane as detailed on the plans without milling and overlaying the entire length and width of the project.

Thanks

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**From:** Cory Hall [<mailto:chall@dempseydilling.com>]  
**Sent:** Monday, February 12, 2018 11:48 AM  
**To:** 'Eric Atkinson'  
**Cc:** 'Phillip Stuckert'  
**Subject:** Spring Hill - Main Street (S.R. 6) Turn Lane

Eric,

Attached is the Layout Sheet with the revised pavement section. Please let me know where to send the revised hard

copies of the plan sheet.

Thanks

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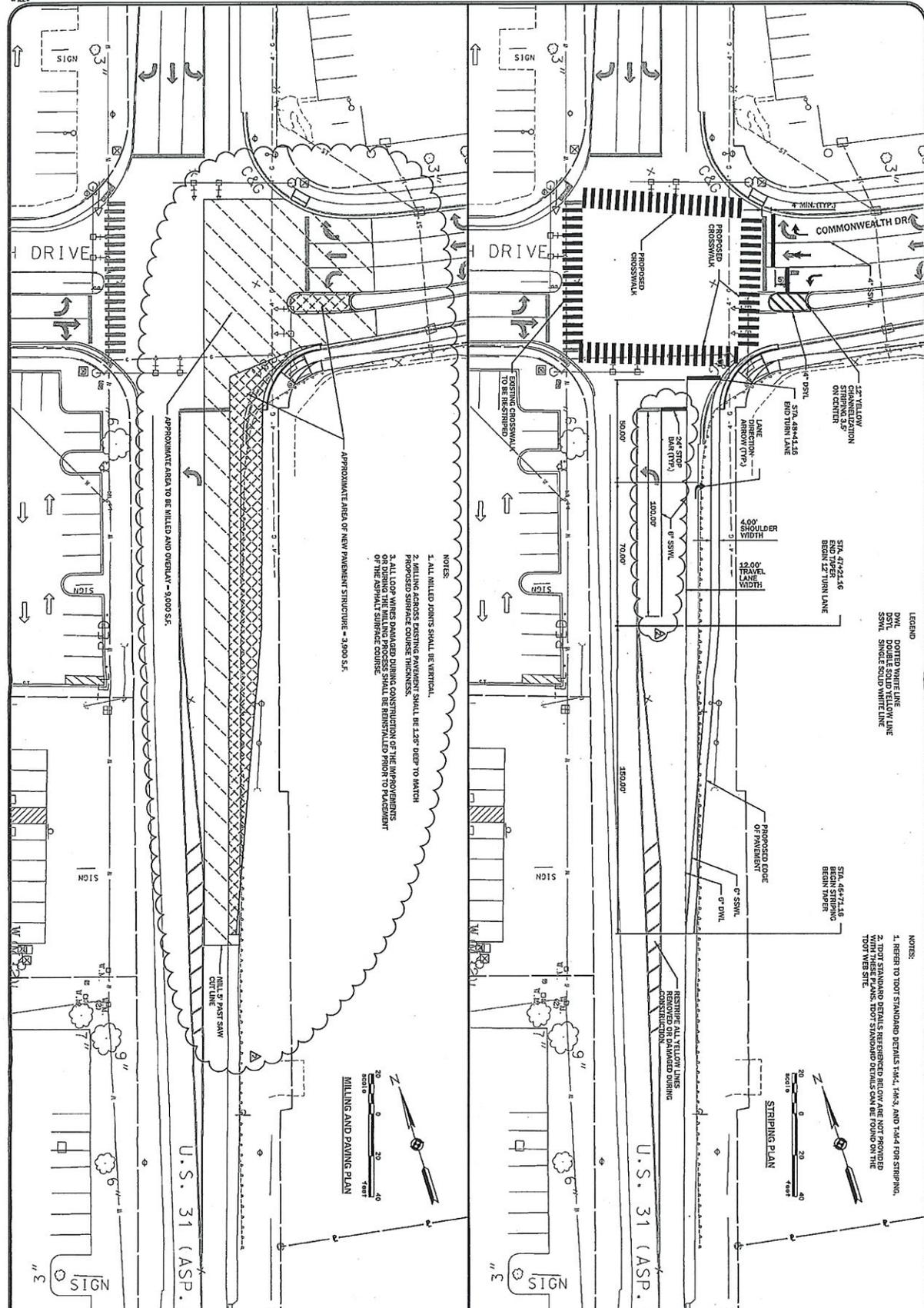
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**From:** Eric Atkinson [<mailto:Eric.Atkinson@tn.gov>]  
**Sent:** Monday, February 12, 2018 9:46 AM  
**To:** [chall@dempseydilling.com](mailto:chall@dempseydilling.com)  
**Subject:** Performance grade mix

Here the copy of the grade mix we discussed .Add it to permit drawing and send copy to our office.

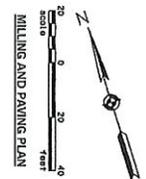
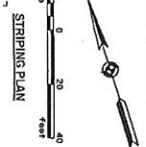
**From:** [noreply@tn.gov](mailto:noreply@tn.gov) [<mailto:noreply@tn.gov>]  
**Sent:** Monday, February 12, 2018 9:45 AM  
**To:** Eric Atkinson  
**Subject:** Attached Image



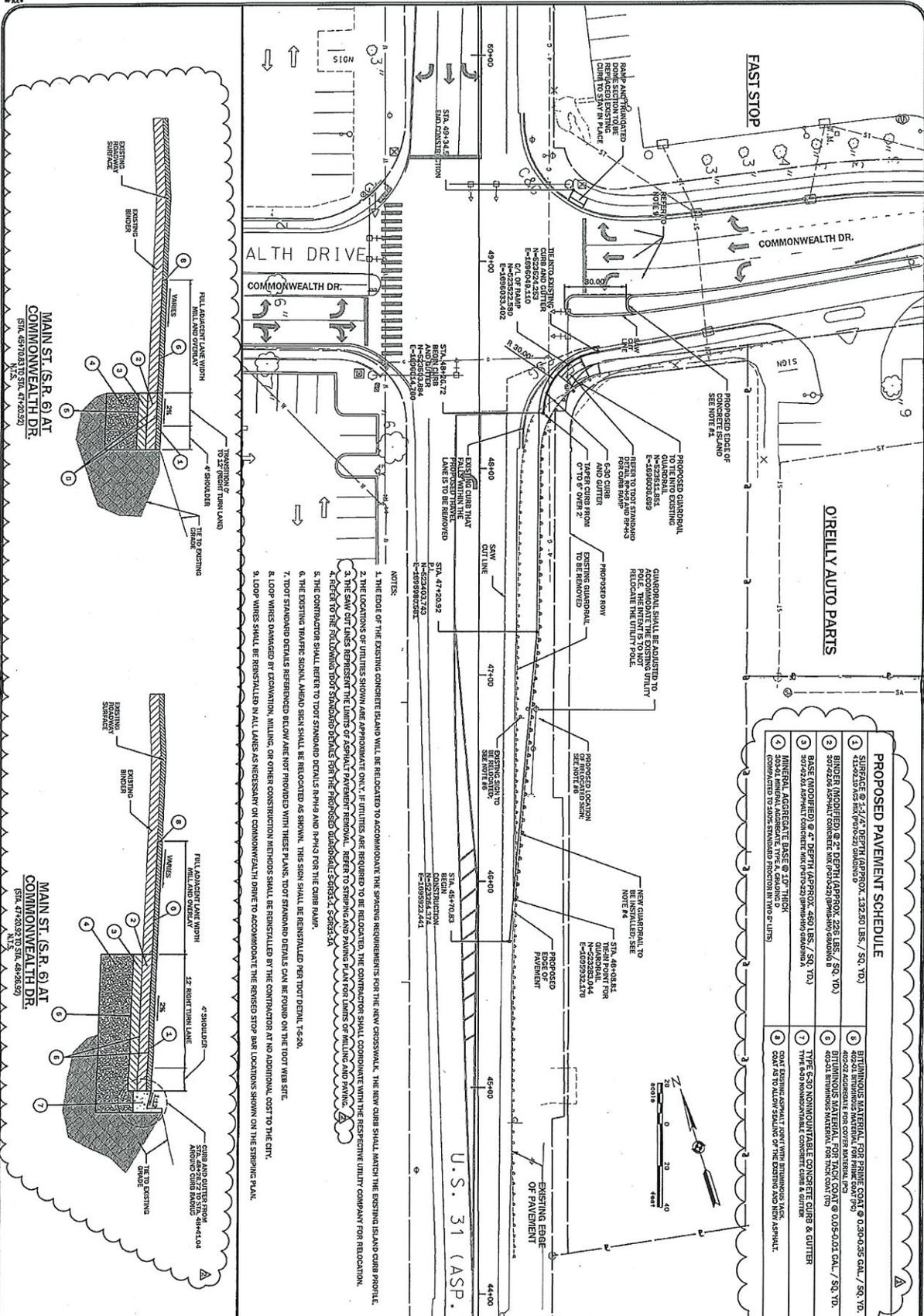
- NOTES:
1. ALL MILLED JOINTS SHALL BE VERTICAL.
  2. MILLING ACROSS EXISTING PAVEMENT SHALL BE 12" DEEP TO MATCH PROPOSED SURFACE COURSE THICKNESS.
  3. ALL LOTS WITH DAMAGED DRAINAGE CONSTRUCTION OF THE IMPROVEMENTS SHALL BE RECONSTRUCTED TO MATCH THE PROPOSED SURFACE COURSE OF THE ASPHALT SURFACE COURSE.

- LEGEND
- DOTTED WHITE LINE
  - DOWL
  - DOUBLE SOLID BELOW LINE
  - SSWL
  - SINGLE SOLID WHITE LINE

- NOTES:
1. REFER TO 2007 STANDARD DETAILS H44, H44.3, AND H44 FOR STRIPING.
  2. TYPICAL STANDARD DETAILS REFERENCED BELOW ARE NOT PROVIDED TYPICAL WEB SITE.



<p>8</p>	<p><b>PROPOSED STRIPING AND PAVING PLAN</b>          2017 ROADWAY IMPROVEMENTS          TURN LANE AND PEDESTRIAN CROSSWALKS          CITY OF SPRING HILL          WILLIAMSON COUNTY, TENNESSEE</p>	 <p><b>DEMPSEY, DILLING &amp; ASSOCIATES, P.C.</b>          Engineering Consultants          502 Hazelwood Drive          Smyrna, Tennessee 37167          ph. (615) 220-5800  <a href="http://www.dempseydilling.com">www.dempseydilling.com</a></p>
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### PROPOSED PAVEMENT SCHEDULE

1	SURFACE @ 1-1/4" DEPTH (APPROX. 130.50 LBS./SQ. YD.)	3	BITUMINOUS MATERIAL FOR PRIME COUR @ 0.300/35 GAL./SQ. YD.
2	4100-21.000 LBS. (4000-20) SANDING	4	4000-21.000 LBS. (4000-20) SANDING
3	BINDER (MODIFIED) @ 2" DEPTH (APPROX. 225 LBS./SQ. YD.)	5	4000-21.000 LBS. (4000-20) SANDING
4	BASE (MODIFIED) @ 2" DEPTH (APPROX. 450 LBS./SQ. YD.)	6	4000-21.000 LBS. (4000-20) SANDING
5	MINERAL AGGREGATE BASE @ 1/2" THICK (300-20.000 LBS. (4000-20) SANDING)	7	TYPE C-301 NONPORTLAND CEMENT CONCRETE CURB & GUTTER
6	4000-21.000 LBS. (4000-20) SANDING	8	CONCRETE CURB & GUTTER
7	4000-21.000 LBS. (4000-20) SANDING	9	CONCRETE CURB & GUTTER
8	4000-21.000 LBS. (4000-20) SANDING	10	CONCRETE CURB & GUTTER
9	4000-21.000 LBS. (4000-20) SANDING	11	CONCRETE CURB & GUTTER

- NOTES:**
1. THE EDGE OF THE EXISTING CONCRETE ISLAND WILL BE RELOCATED TO ACCOMMODATE THE SPACING REQUIREMENTS FOR THE NEW CROSSWALK. THE NEW CURB SHALL MATCH THE EXISTING ISLAND CURB PROFILE.
  2. THE LOCATIONS OF UTILITIES SHOWN ARE APPROXIMATE ONLY. IF UTILITIES ARE REQUIRED TO BE RELOCATED, THE CONTRACTOR SHALL COORDINATE WITH THE RESPECTIVE UTILITY COMPANY FOR RELOCATION.
  3. THE SAW CUT LINES REPRESENT THE LIMITS OF ASPHALT PAVEMENT REMOVAL. REFER TO STRIPING AND PAINTING PLAN FOR LINES OF MILLING AND PAINTING.
  4. REFER TO THE FOLLOWING FOR STANDARD DETAILS FOR THE PROPOSED QUARANTINE WALLS: SDCS-23.4.
  5. THE CONTRACTOR SHALL REFER TO TOOT STANDARD DETAILS RPH-9 AND RPH-3 FOR THE CURB RAMP.
  6. THE EXISTING TRAFFIC SIGNAL HEAD SIGN SHALL BE RELOCATED AS SHOWN. THIS SIGN SHALL BE REINSTALLED PER TOOT DETAIL T-5-20.
  7. TOOT STANDARD DETAILS REFERENCED BELOW ARE NOT PROVIDED WITH THESE PLANS. TOOT STANDARD DETAILS CAN BE FOUND ON THE TOOT WEBSITE.
  8. LOOP WHIMS DAMAGED BY CONSTRUCTION, MILLING, OR OTHER CONSTRUCTION METHODS SHALL BE REINSTALLED BY THE CONTRACTOR AT AN ADDITIONAL COST TO THE CITY.
  9. LOOP WHIMS SHALL BE REINSTALLED BY THE CONTRACTOR AT AN ADDITIONAL COST TO THE CITY.

MAIN ST. (S.R. 61) AT  
COMMONWEALTH DR.  
(S.R. 497.003 TO S.R. 472.032)

MAIN ST. (S.R. 61) AT  
COMMONWEALTH DR.  
(S.R. 472.032 TO S.R. 497.003)

**PROPOSED LAYOUT**  
2017 ROADWAY IMPROVEMENTS  
TURN LANE AND PEDESTRIAN CROSSWALKS  
CITY OF SPRING HILL  
WILLIAMSON COUNTY, TENNESSEE

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