FOR ADDISON USE ONLY
Permit Number: W-1356
Location: 14650 Landmark Blvd.

APPLICATION
Right of Way Work Permit-FRANCHISE
(For Franchise Utility/CTP – Street Cut/Excavation/Lane Closure)

PLEASE PRINT LEGIBLY

Date of Application: 3/22/2018

Facility Owner Company: Spectrum Company Phone #: 214-319-4811

Utility/CTP Representative: Jose Galarza Cell Phone #: 214-406-7140

Utility/CTP Representative E-mail: jose.galarza@charter.com

General Contractor: TCS Communications LLC Company Phone # 817-864-9337

Site Supervisor Name: Gary Cantwell 24-hour Phone # 214-766-5092

Contractor E-mail: gary.cantwell@tcscomm.com Site Foreman E-mail: Gary Cantwell

Work Site Address and Location: 14650 Landmark Blvd

Purpose and general description of work: install new service

Proposed Start Work Date: ~~3/22~~ 4/2/2018 Estimated Completion Date: 7/22/2018

Pavement Cut? ☐Yes ☒No Directional Bore/Boring? ☒Yes ☐No Excavation? ☐Yes ☒No

Lane Closure? ☐Yes ☒No Other:

Kasondra Pipkin		Coordinator / Project Services
Applicant's Printed Name	Signature	Position with Company

Applicant's E-mail: kasondra.pipkin@tcscomm.com Applicant's Phone #: 817-864-9337

Rob Briggs	214-490-0781	TCS Communicaiton LLC
Direct Supervisor's Name	Phone Number	Company Name

Supervisor's E-mail: robert.briggs@tcscomm.com

FOR ADDISON USE ONLY

Received By: Nicole Simpson Entered? ☐Yes Received Date:

Approved By: Dave Wilde Inspector: JF Issue Date: 3.28.18 3/30/18

Plans Submitted? ☒Yes ☐No ☐N/A Traffic Control Plan submitted? ☒Yes ☐No ☐N/A Expiration Date: 4/13/18

Insurance Provided? ☐Yes ☐No ☒On File Performance/Maintenance Bond? ☐Yes ☐No ☐On File ☒N/A

Fee Paid: NA Receipt #: CTP Processed By: Nicole S.

Picked Up By: Gary Company: TCS Date & Time: 3.30.18 12:28PM

TOWN OF ADDISON INFRASTRUCTURE AND DEVELOPMENT SERVICES DEPARTMENT
ATTN.: RIGHT OF WAY PERMIT - DAVE WILDE 972-450-2847
16801 WESTGROVE RD. ADDISON, TX 75001-9010
PHONE: 972-450-2871 FAX: 972-450-2837

FOR ADDISON USE ONLY

Permit Number: W-1356

Location: 14650 Landmark Blvd

APPLICATION

Right of Way Work Permit -FRANCHISE

(For Franchise Utility/CTP - Street Cut/Excavation/Lane Closure)

Sub-Contractor List

PLEASE PRINT LEGIBLY

General Contractor's Name: TCS Communications LLC General Contractor's Phone #: 817-864-9337

Sub-Contractor #1 Company Name: L&J Underground Address: 2334 Mockingbird Ln, Garland

Print Sub-Contractor's Name: Luis Juarez Sub-Contractor Phone #: 214-690-0691

Sub-Contractor's E-mail: ljunderservices@gmail.com

Print Site Supervisor's Name: Luis Juarez Supervisor's Phone #: 214-690-0691

Site Supervisor's E-mail: ljunderservices@gmail.com

Insurance Provided? ☐Yes ☐No ☒On File

Sub-Contractor #2 Company Name: _____ Address: _____

Print Sub-Contractor's Name: _____ Sub-Contractor Phone #: _____

Sub-Contractor's E-mail: _____

Print Supervisor's Name: _____ Supervisor's Phone #: _____

Site Supervisor's E-mail: _____

Insurance Provided? ☐Yes ☐No ☐On File

Sub-Contractor #3 Company Name: _____ Address: _____

Print Sub-Contractor's Name: _____ Sub-Contractor Phone #: _____

Sub-Contractor's E-mail: _____

Print Supervisor's Name: _____ Supervisor's Phone #: _____

Site Supervisor's E-mail: _____

Insurance Provided? ☐Yes ☐No ☐On File

RIGHT OF WAY, EXCAVATION & LANE CLOSURE PERMIT

ADDISON SM

INFRASTRUCTURE & DEVELOPMENT SERVICES

16801 WESTGROVE DRIVE
ADDISON, TEXAS 75001
972.450.2871

W-1356

PERMIT NUMBER

4/02/18

START DATE

7/22/18 — EST. COMPLETION DATE

TCS COMM — CONTRACTOR

SPECTRUM — FOR

14650 LANDMARK BLVD

LOCATION (ADDRESS)

FROM 5000 QUORUM, WEST ON LANDMARK PL, TO LANDMARK BLVD

LOCATION (ACTUAL)

INSTALL CABLE FACILITIES FOR SERVICE TO APARTMENTS

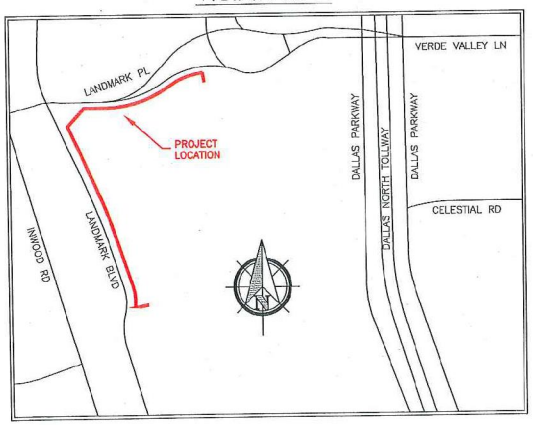
TYPE OF WORK

THIS CARD MUST BE DISPLAYED ON THE JOB SITE AT ALL TIMES.

Spectrum

JEFFERSON LANDMARK
14650 LANDMARK BLVD
FARMERS BRANCH, TEXAS

VICINITY MAP



GENERAL PROJECT NOTES

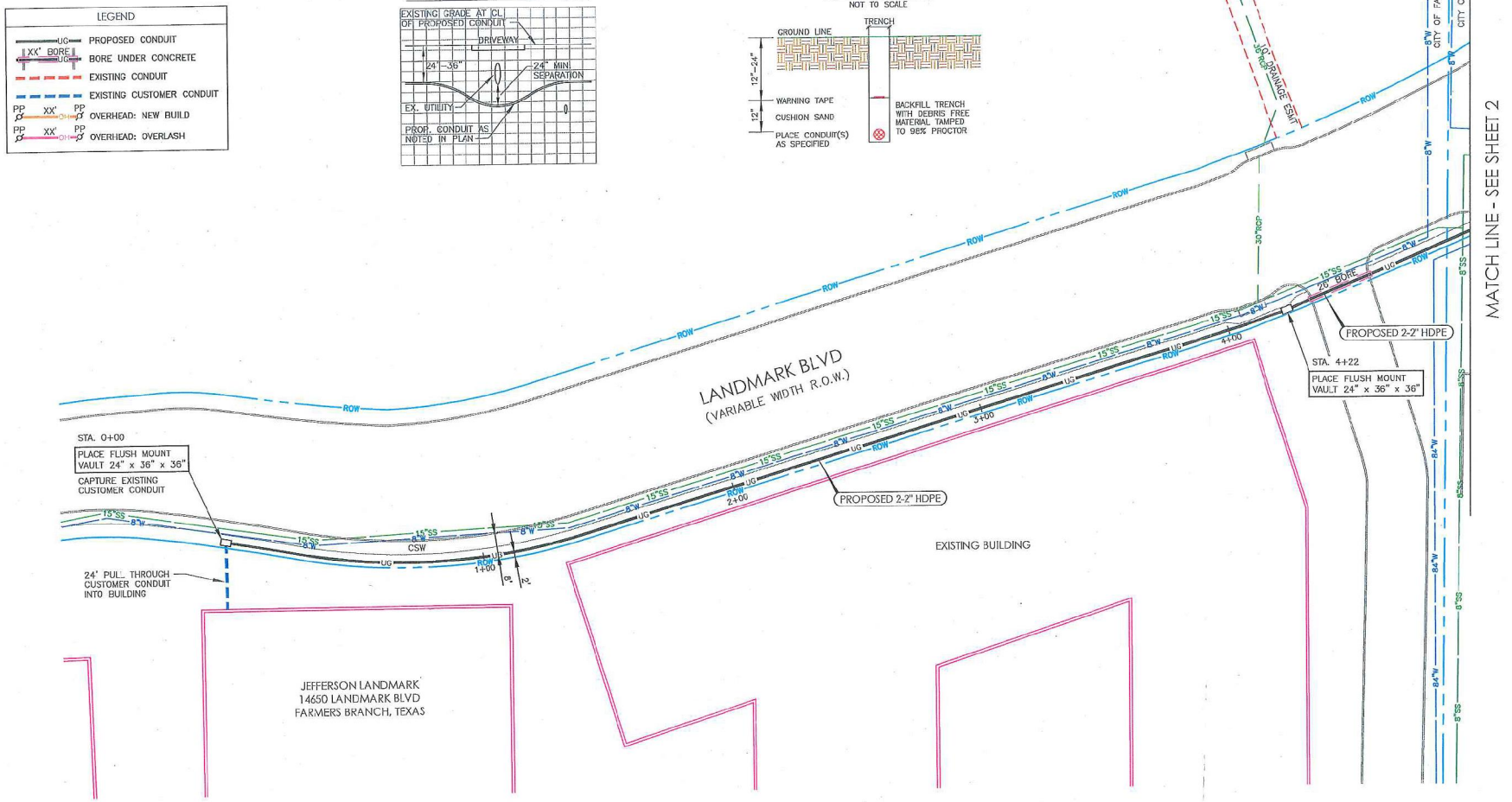
1. ALL CONSTRUCTION WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH THE ORDINANCES AND REGULATIONS OF THE MUNICIPALITY IN WHICH THE WORK IS TO BE PERFORMED.
2. EXISTING UTILITY LOCATIONS SHOWN ARE TAKEN FROM AVAILABLE RECORDS AND MAY NOT BE ALL INCLUSIVE. UTILITY LOCATIONS ARE GENERALLY SCHEMATIC IN NATURE AND MAY NOT ACCURATELY REFLECT THE SIZE AND LOCATION OF EACH PARTICULAR UTILITY. THE CONSTRUCTION CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ACTUAL LINE LOCATES IN THE FIELD AND THE PROTECTION OF ALL EXISTING FACILITIES WHETHER SHOWN OR NOT. THE CONSTRUCTION CONTRACTOR SHALL ALSO ASSUME RESPONSIBILITY FOR REPAIRS TO ANY EXISTING FACILITY DAMAGED AS A DIRECT RESULT OF THE CONSTRUCTION ACTIVITIES WHETHER THE FACILITY IS SHOWN ON THE DRAWINGS OR NOT.
3. THE CONSTRUCTION CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL DEPARTMENTS WITHIN THE MUNICIPALITY AND THE UTILITY COMPANIES AT LEAST TWO WORKING DAYS PRIOR TO THE COMMENCEMENT OF WORK.

CALL BEFORE YOU DIG
811
IT'S THE LAW

4. IT SHALL BE THE RESPONSIBILITY OF THE CONSTRUCTION CONTRACTOR TO: A) PREVENT DAMAGE TO PRIVATE AND PUBLIC PROPERTY. B) RESTORE ALL AREAS EFFECTED BY THE CONSTRUCTION TO ORIGINAL OR BETTER CONDITION.
5. BARRICADING AND TRAFFIC CONTROL SHALL BE THE RESPONSIBILITY OF THE CONSTRUCTION CONTRACTOR AND SHALL CONFORM TO THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES". TRAFFIC FLOW AND ACCESS SHALL BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION. THE CONSTRUCTION CONTRACTOR IS RESPONSIBLE FOR PROVIDING TRAFFIC SAFETY MEASURES FOR WORK ON THE PROJECT. THE WORK SITE SHALL BE SUITABLY LIT AND BARRICADED AT NIGHT.
6. THE CONSTRUCTION CONTRACTOR SHALL ABIDE BY ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS GOVERNING EXCAVATION. THE CONSTRUCTION CONTRACTOR SHALL PROVIDE ALL TRENCH SAFETY SYSTEMS THAT COMPLY WITH ALL LAWS GOVERNING EXCAVATION. THE CONSTRUCTION CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL ASPECTS OF WORK RELATED TO EXCAVATION.
7. ALL CONCRETE USED IN ANY ROADWAY SHALL BE IN COMPLIANCE WITH THE SPECIFIED CLASSES OF CONCRETE IN THE STANDARD SPECIFICATIONS 5.8 "PORTLAND CEMENT CONCRETE PAVEMENT" AND 7.4.5 "QUALITY OF CONCRETE" AS AMENDED BY THE ADDENDUM TO THE NORTH CENTRAL TEXAS STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION – 2004. ALL OTHER CONCRETE SHALL BE CLASS A CONCRETE.
8. ALL REINFORCING STEEL AND DOWEL BARS IN PAVEMENT SHALL BE SUPPORTED AND MAINTAINED AT THE CORRECT CLEARANCES BY THE USE OF BAR CHAINS OR OTHER APPROVED SUPPORT.
9. ALL CONDUIT MUST BE PLACED WITH A MINIMUM 42" OF COVER, UNLESS OTHERWISE SPECIFIED.
10. ALL BACKFILLING WILL BE MECHANICALLY TAMPED IN LIFTS TO A DENSITY OF 95% PROCTOR. THE REQUIRED DENSITY WILL BE OBTAINED BY USING TAMPERS, RAMMERS OR ROLLING EQUIPMENT. LIFTS MAY VARY ACCORDING TO THE TYPE OF EQUIPMENT USED TO OBTAIN THE REQUIRED DENSITY. SAND AND DEBRIS FREE MATERIAL WILL BE USED FOR BACKFILL.

DFWT CONTACT: DAVID HATTON 972.670.2113

PREPARED BY: DFW TELECOM, INC.



PREPARED BY:

DFW TELECOM

DFWT CONTACT:
DAVID HATTON 972.670.2113

ESTIMATED SHEET TOTALS

DESCRIPTION	QUANTITY	DESCRIPTION	QUANTITY
TRENCH & PLACE CONDUIT	472'	PLACE FLUSH MOUNT VAULT	2
BORE & PLACE CONDUIT	26'	PLACE PEDESTAL	
BORE & PLACE STEEL CASING		PLACE FLUSH DROP BUCKET	
PULL THROUGH EXISTING CONDUIT	24'	PLACE POWER SUPPLY	
R & R CONCRETE SIDEWALK (SF)		PLACE WALL BOX & RISER	
R & R CONCRETE PAVEMENT (SF)		PLACE U-GUARD RISER	
OVERHEAD: OVERLASH		OVERHEAD: NEW BUILD	

NORTH

SHEET 1 OF 3

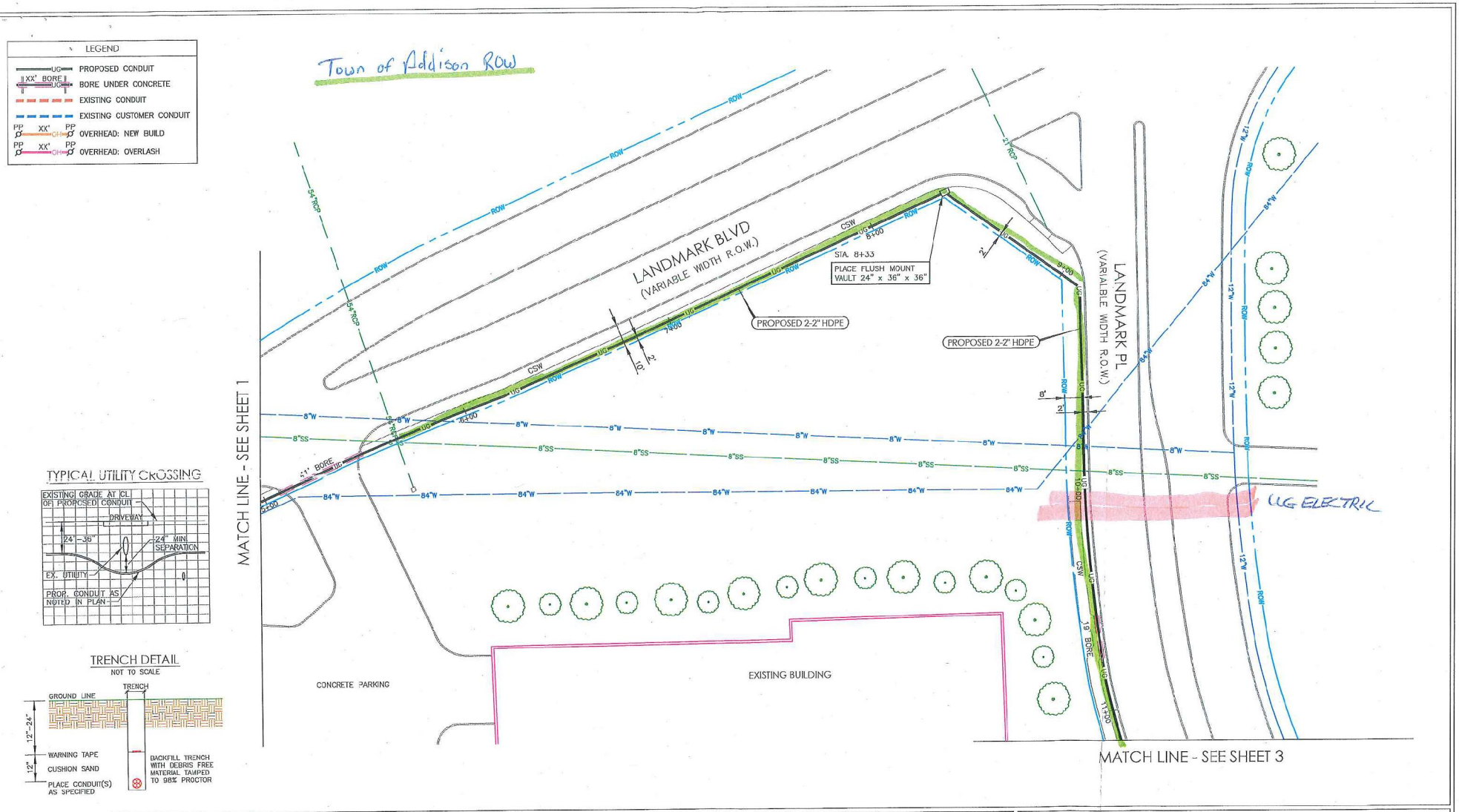
PROJECT: JEFFERSON LANDMARK

ADDRESS: 14650 LANDMARK BLVD

CITY, STATE: FARMERS BRANCH, TEXAS

HORIZONTAL SCALE	VERTICAL SCALE	JOB NUMBER:	DATE:
1" = 40'	1" = 10'	1519491	12/15/2017

Spectrum



PREPARED BY:
DFW TELECOM
DFWT CONTACT:
DAVID HATTON 972.670.2113

ESTIMATED SHEET TOTALS

DESCRIPTION	QUANTITY	DESCRIPTION	QUANTITY
TRENCH & PLACE CONDUIT	554'	PLACE FLUSH MOUNT VAULT	1
BORE & PLACE CONDUIT	60'	PLACE PEDESTAL	
BORE & PLACE STEEL CASING		PLACE FLUSH DROP BUCKET	
PULL THROUGH EXISTING CONDUIT		PLACE POWER SUPPLY	
R & R CONCRETE SIDEWALK (SF)		PLACE WALL BOX & RISER	
R & R CONCRETE PAVEMENT (SF)		PLACE U-GUARD RISER	
OVERHEAD: OVERLASH		OVERHEAD: NEW BUILD	

NORTH

SHEET 2 OF 3

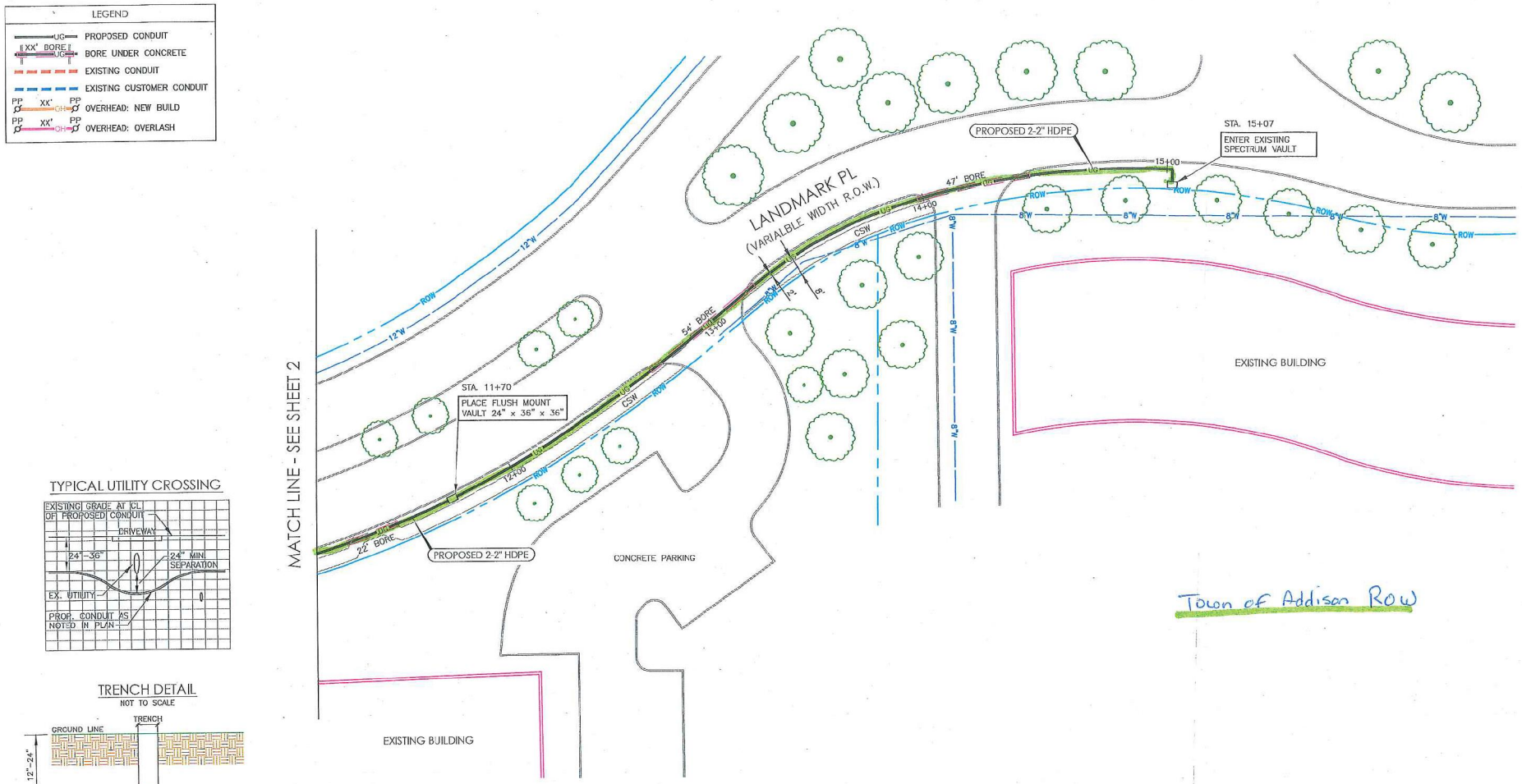
PROJECT: JEFFERSON LANDMARK

ADDRESS: 14650 LANDMARK BLVD

CITY, STATE: FARMERS BRANCH, TEXAS

HORIZONTAL SCALE	VERTICAL SCALE	JOB NUMBER:	DATE:
1" = 40'	1" = 10'	1519491	12/15/2017

Spectrum



TYPICAL UTILITY CROSSING

TRENCH DETAIL

NOT TO SCALE

PREPARED BY:

DFW TELECOM

DFWT CONTACT:
DAVID HATTON 972.670.2113

ESTIMATED SHEET TOTALS

DESCRIPTION	QUANTITY	DESCRIPTION	QUANTITY
TRENCH & PLACE CONDUIT	272'	PLACE FLUSH MOUNT VAULT	1
BORE & PLACE CONDUIT	123'	PLACE PEDESTAL	
BORE & PLACE STEEL CASING		PLACE FLUSH DROP BUCKET	
PULL THROUGH EXISTING CONDUIT		PLACE POWER SUPPLY	
R & R CONCRETE SIDEWALK (SF)		PLACE WALL BOX & RISER	
R & R CONCRETE PAVEMENT (SF)		PLACE U-GUARD RISER	
OVERHEAD: OVERLASH		OVERHEAD: NEW BUILD	

NORTH

SHEET 3 OF 3

PROJECT: JEFFERSON LANDMARK

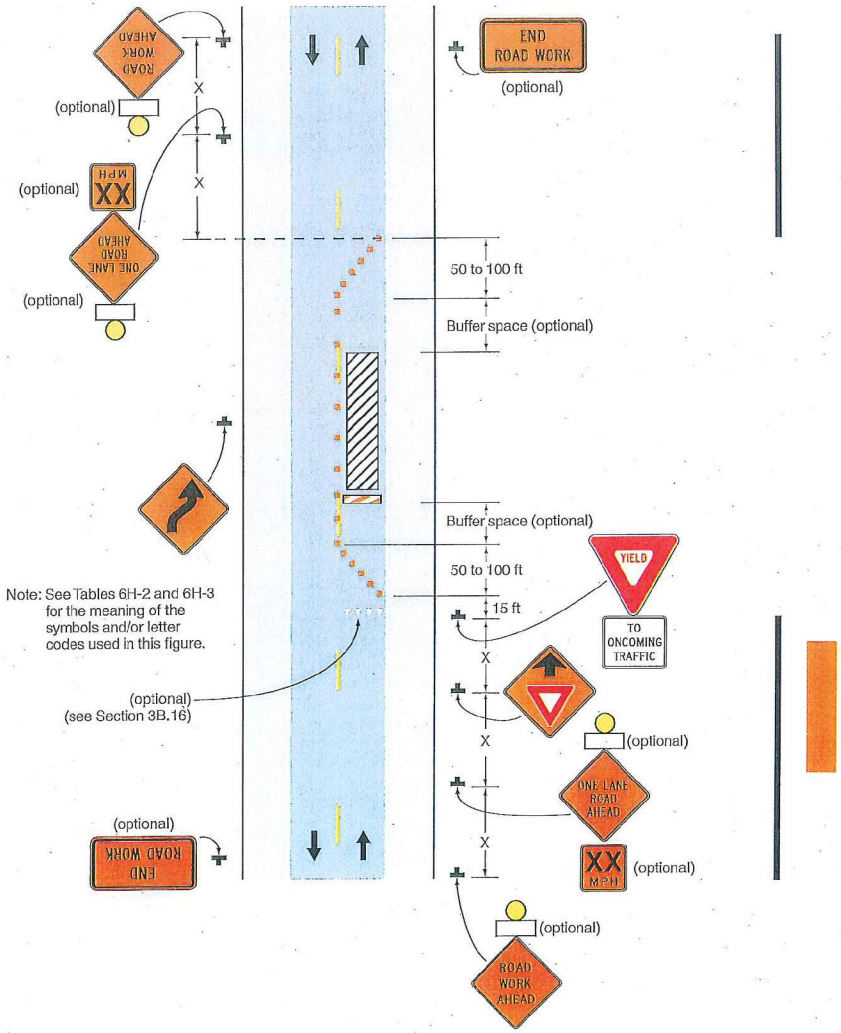
ADDRESS: 14650 LANDMARK BLVD

CITY, STATE: FARMERS BRANCH, TEXAS

HORIZONTAL SCALE	VERTICAL SCALE	JOB NUMBER:	DATE:
1" = 40'	1" = 10'	1519491	12/15/2017

Spectrum

Figure 6H-11. Lane Closure on a Two-Lane Road with Low Traffic Volumes (TA-11)



Typical Application 11

Notes for Figure 6H-11—Typical Application 11
Lane Closure on a Two-Lane Road with Low Traffic Volumes

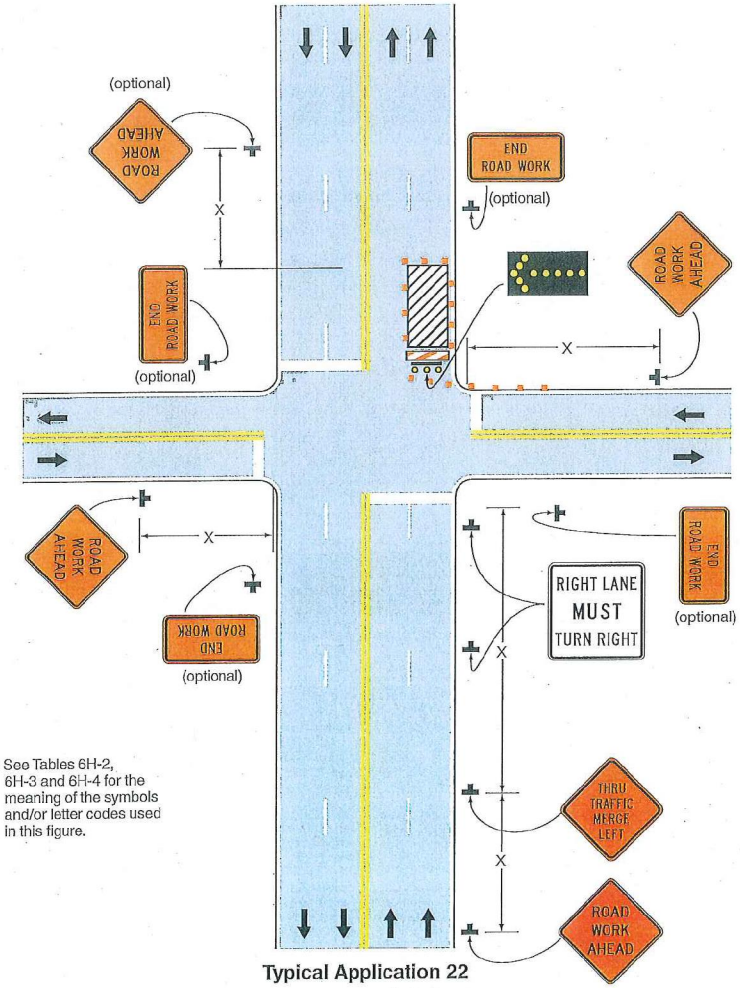
Option:

1. This TTC zone application may be used as an alternate to the TTC application shown in Figure 6H-10 (using flaggers) when the following conditions exist:
   a. Vehicular traffic volume is such that sufficient gaps exist for vehicular traffic that must yield.
   b. Road users from both directions are able to see approaching vehicular traffic through and beyond the worksite and have sufficient visibility of approaching vehicles.
2. The Type B flashing warning lights may be placed on the ROAD WORK AHEAD and the ONE LANE ROAD AHEAD signs whenever a night lane closure is necessary.

Guidance:

3. *The location of the yield bar should be selected using the same considerations as those applying to a flagger station (See section 6E.08, paragraphs 01-03).*

Figure 6H-22. Right-Hand Lane Closure on the Far Side of an Intersection (TA-22)



Note: See Tables 6H-2, 6H-3 and 6H-4 for the meaning of the symbols and/or letter codes used in this figure.

Typical Application 22

Notes for Figure 6H-22—Typical Application 22
Right-Hand Lane Closure on the Far Side of an Intersection

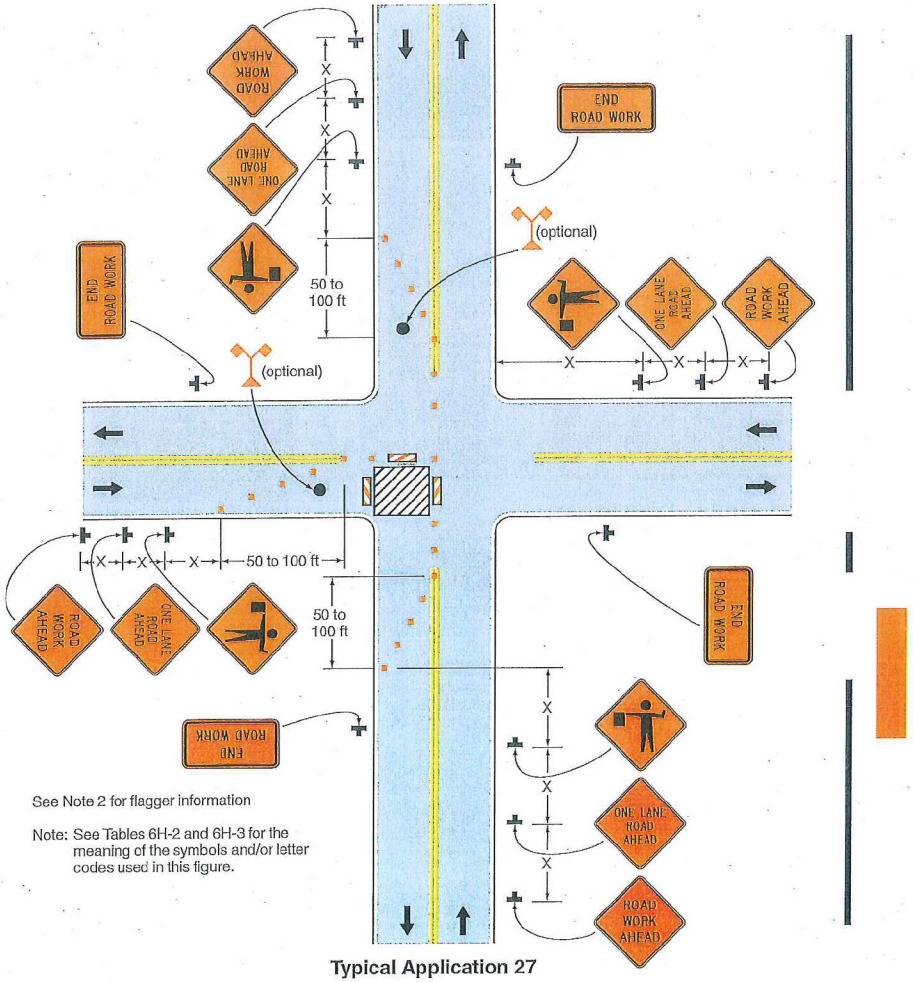
Guidance:

1. *If the work space extends across a crosswalk, the crosswalk should be closed using the information and devices shown in Figure 6H-29.*

Option:

2. The normal procedure is to close on the near side of the intersection any lane that is not carried through the intersection. However, when this results in the closure of a right-hand lane having significant right turning movements, then the right-hand lane may be restricted to right turns only, as shown. This procedure increases the through capacity by eliminating right turns from the open through lane.
3. For intersection approaches reduced to a single lane, left-turning movements may be prohibited to maintain capacity for through vehicular traffic.
4. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.
5. Where the turning radius is large, it may be possible to create a right-turn island using channelizing devices or pavement markings.

Figure 6H-27. Closure at the Side of an Intersection (TA-27)



See Note 2 for flagger information

Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.

Typical Application 27

Notes for Figure 6H-27—Typical Application 27
Closure at the Side of an Intersection

Guidance:

1. *The situation depicted can be simplified by closing one or more of the intersection approaches. If this cannot be done, and/or when capacity is a problem, through vehicular traffic should be directed to other roads or streets.*
2. *Depending on road user conditions, flagger(s) or uniformed law enforcement officer(s) should be used to direct road users within the intersection.*

Standard:

3. **At night, flagger stations shall be illuminated, except in emergencies.**

Option:

4. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.
5. For short-duration work operations, the channelizing devices may be eliminated if a vehicle displaying high-intensity rotating, flashing, oscillating, or strobe lights is positioned in the work space.
6. A BE PREPARED TO STOP sign may be added to the sign series.

Guidance:

7. *When used, the BE PREPARED TO STOP sign should be located before the Flagger symbol sign.*
8. *ONE LANE ROAD AHEAD signs should also be used to provide adequate advance warning.*

Support:

9. Turns can be prohibited as required by vehicular traffic conditions. Unless the streets are wide, it might be physically impossible to make certain turns, especially for large vehicles.

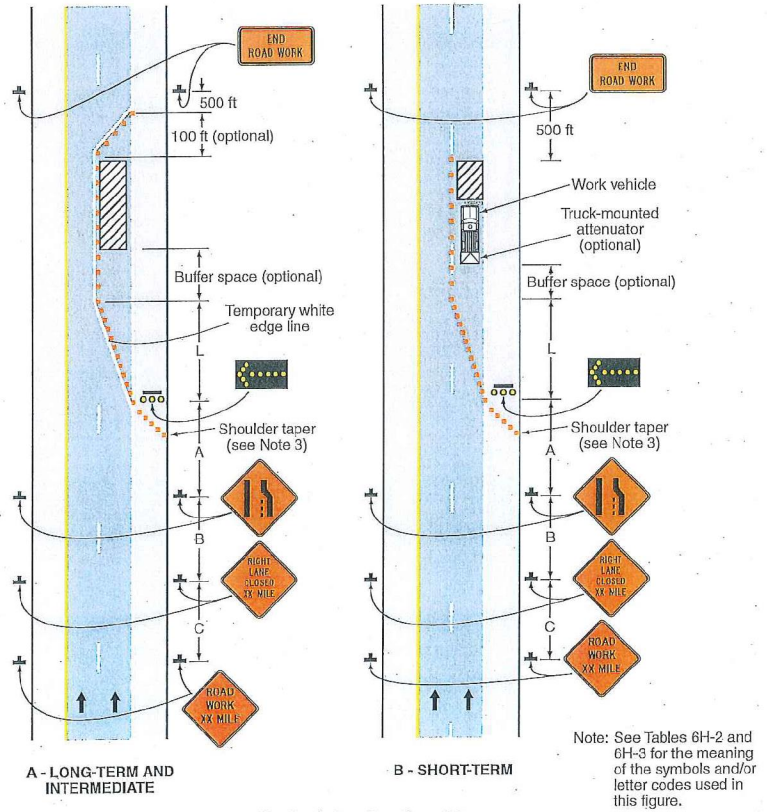
Option:

10. Vehicle hazard warning signals may be used to supplement high-intensity rotating, flashing, oscillating, or strobe lights.

Standard:

11. **Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights.**

Figure 6H-33. Stationary Lane Closure on a Divided Highway (TA-33)



Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.

Typical Application 33

Notes for Figure 6H-33—Typical Application 33 Stationary Lane Closure on a Divided Highway

Standard:

1. **This information also shall be used when work is being performed in the lane adjacent to the median on a divided highway. In this case, the LEFT LANE CLOSED signs and the corresponding Lane Ends signs shall be substituted.**
2. **When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed as needed.**

Guidance:

3. *When paved shoulders having a width of 8 feet or more are closed, channelizing devices should be used to close the shoulder in advance of the merging taper to direct vehicular traffic to remain within the traveled way.*

Option:

4. A truck-mounted attenuator may be used on the work vehicle and/or shadow vehicle.

Support:

5. Where conditions permit, restricting all vehicles, equipment, workers, and their activities to one side of the roadway might be advantageous.

Standard:

6. **An arrow board shall be used when a freeway lane is closed. When more than one freeway lane is closed, a separate arrow board shall be used for each closed lane.**

CHAPTER 6H. TYPICAL APPLICATIONS

Section 6H.01 Typical Applications

Support:

01 Chapter 6G contains discussions of typical TTC activities. This Chapter presents typical applications for a variety of situations commonly encountered. While not every situation is addressed, the information illustrated can generally be adapted to a broad range of conditions. In many instances, an appropriate TTC plan is achieved by combining features from various typical applications. For example, work at an intersection might present a near-side work zone for one street and a far-side work zone for the other street. These treatments are found in two different typical applications, while a third typical application shows how to handle pedestrian crosswalk closures. For convenience in using the typical application diagrams, Tables 6C-1 and 6C-4 are reproduced in this Chapter as Tables 6H-3 and 6H-4, respectively.

02 Procedures for establishing TTC zones vary with such conditions as road configuration, location of the work, work activity, duration of work, road user volumes, road vehicle mix (buses, trucks, cars, motorcycles, and bicycles), and road user speeds.

03 In general, the procedures illustrated represent minimum solutions for the situations depicted. Except for the notes (which are clearly classified using headings as being Standard, Guidance, Option, or Support), the information presented in the typical applications can generally be regarded as Guidance.

Option:

04 Other devices may be added to supplement the devices and device spacing may be adjusted to provide additional reaction time or delineation. Fewer devices may be used based on field conditions.

Support:

05 Figures and tables found throughout Part 6 provide information for the development of TTC plans. Also, Table 6H-3 is used for the determination of sign spacing and other dimensions for various area and roadway types.

06 Table 6H-1 is an index of the 46 typical applications. Typical applications are shown on the right-hand page with notes on the facing page to the left. The legend for the symbols used in the typical applications is provided in Table 6H-2. In many of the typical applications, sign spacings and other dimensions are indicated by letters using the criteria provided in Table 6H-3. The formulas for determining taper lengths are provided in Table 6H-4.

07 Most of the typical applications show TTC devices for only one direction.

Table 6H-1. Index to Typical Applications

Typical Application Description	Typical Application Number
Work Outside of the Shoulder (see Section 6G.06)	
Work Beyond the Shoulder	TA-1
Blasting Zone	TA-2
Work on the Shoulder (see Sections 6G.07 and 6G.08)	
Work on the Shoulders	TA-3
Short Duration or Mobile Operation on a Shoulder	TA-4
Shoulder Closure on a Freeway	TA-5
Shoulder Work with Minor Encroachment	TA-6
Work Within the Traveled Way of a Two-Lane Highway (see Section 6G.10)	
Road Closed with a Diversion	TA-7
Roads Closed with an Off-Site Detour	TA-8
Overlapping Routes with a Detour	TA-9
Lane Closure on a Two-Lane Road Using Flaggers	TA-10
Lane Closure on a Two-Lane Road with Low Traffic Volumes	TA-11
Lane Closure on a Two-Lane Road Using Traffic Control Signals	TA-12
Temporary Road Closure	TA-13
Haul Road Crossing	TA-14
Work in the Center of a Road with Low Traffic Volumes	TA-15
Surveying Along the Center Line of a Road with Low Traffic Volumes	TA-16
Mobile Operations on a Two-Lane Road	TA-17
Work Within the Traveled Way of an Urban Street (see Section 6G.11)	
Lane Closure on a Minor Street	TA-18
Detour for One Travel Direction	TA-19
Detour for a Closed Street	TA-20
Work Within the Traveled Way at an Intersection and on Sidewalks (see Section 6G.13)	
Lane Closure on the Near Side of an Intersection	TA-21
Right-Hand Lane Closure on the Far Side of an Intersection	TA-22
Left-Hand Lane Closure on the Far Side of an Intersection	TA-23
Half Road Closure on the Far Side of an Intersection	TA-24
Multiple Lane Closures at an Intersection	TA-25
Closure in the Center of an Intersection	TA-26
Closure at the Side of an Intersection	TA-27
Sidewalk Detour or Diversion	TA-28
Crosswalk Closures and Pedestrian Detours	TA-29
Work Within the Traveled Way of a Multi-Lane, Non-Access Controlled Highway (see Section 6G.12)	
Interior Lane Closure on a Multi-Lane Street	TA-30
Lane Closure on a Street with Uneven Directional Volumes	TA-31
Half Road Closure on a Multi-Lane, High-Speed Highway	TA-32
Stationary Lane Closure on a Divided Highway	TA-33
Lane Closure with a Temporary Traffic Barrier	TA-34
Mobile Operation on a Multi-Lane Road	TA-35
Work Within the Traveled Way of a Freeway or Expressway (see Section 6G.14)	
Lane Shift on a Freeway	TA-36
Double Lane Closure on a Freeway	TA-37
Interior Lane Closure on a Freeway	TA-38
Median Crossover on a Freeway	TA-39
Median Crossover for an Entrance Ramp	TA-40
Median Crossover for an Exit Ramp	TA-41
Work in the Vicinity of an Exit Ramp	TA-42
Partial Exit Ramp Closure	TA-43
Work in the Vicinity of an Entrance Ramp	TA-44
Temporary Reversible Lane Using Movable Barriers	TA-45
Work in the Vicinity of a Grade Crossing (see Section 6G.18)	
Work in the Vicinity of a Grade Crossing	TA-46

Table 6H-2. Meaning of Symbols on Typical Application Diagrams


Arrow board


Arrow board support or trailer (shown facing down)


Changeable message sign or support trailer

Channelizing device


Crash cushion


Direction of temporary traffic detour


Direction of traffic

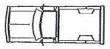

Flagger


High-level warning device (Flag tree)


Longitudinal channelizing device


Luminaire


Pavement markings that should be removed for a long-term project


Shadow vehicle


Sign (shown facing left)


Surveyor


Temporary barrier


Temporary barrier with warning light


Traffic or pedestrian signal


Truck-mounted attenuator


Type 3 barricade


Warning light


Work space

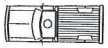

Work vehicle

Table 6H-3. Meaning of Letter Codes on Typical Application Diagrams

Road Type	Distance Between Signs**		
	A	B	C
Urban (low speed)*	100 feet	100 feet	100 feet
Urban (high speed)*	350 feet	350 feet	350 feet
Rural	500 feet	500 feet	500 feet
Expressway / Freeway	1,000 feet	1,500 feet	2,640 feet

* Speed category to be determined by highway agency

** The column headings A, B, and C are the dimensions shown in Figures 6H-1 through 6H-46. The A dimension is the distance from the transition or point of restriction to the first sign. The B dimension is the distance between the first and second signs. The C dimension is the distance between the second and third signs. (The "first sign" is the sign in a three-sign series that is closest to the TTC zone. The "third sign" is the sign that is furthest upstream from the TTC zone.)

Table 6H-4. Formulas for Determining Taper Length

Speed (S)	Taper Length (L) in feet
40 mph or less	$L = \frac{WS^2}{60}$
45 mph or more	$L = WS$

Where: L = taper length in feet
W = width of offset in feet
S = posted speed limit, or off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph