

504-2016-004



APPLICATION AND AGREEMENT FOR USE OF HIGHWAY RIGHT-OF-WAY FOR UTILITIES ACCOMMODATION

FOR DEPARTMENT USE ONLY

Permit Number 504-2016-004 Highway Number IA 117 County Jasper Co.

DOT Project Number F-772 Expiration/Completion Date

APPLICANT (INDIVIDUAL OR COMPANY)

First Name, Middle, Last Name, Phone Number, Ext., Company Name (Dakota Access, LLC), Street Address (1300 Main Street), City/Town (Houston), State (TX), ZIP Code (77002)

INSTALLATION TO BE ACCOMMODATED

Approval is hereby requested to enter within the state highway right-of-way for the accommodation of a utility installation as detailed on the attachments and further described as follows.

The installation shall consist of:

The pipeline is a 30 inch Crude Oil line that is to be installed, operated and maintained by Dakota Access, L.L.C. The pipeline installation (road crossing) will be performed via the bore and jack method. The bore and jack method is a technically advanced process involving specialized equipment and skilled operators. The bore size will be around the same size as the nominal pipe and 140 feet in length

and shall be located as shown on the detailed plan attached hereto. (See current Iowa Department of Transportation Utility Accommodation Policy for submittal of detailed plan requirements.)

WORK SITE LOCATION

The proposed work as described above is located in Section 23 & 24, Twp. 80 North, Range 21 West on Highway No. 117 generally located 0.04 (miles) South (direction) from Hwy F34 (N 35th Ave W) (city, county line, or other land line). Work proposed is more specifically located as being from 11.14 (Milepost #) and 293+21 (Highway Station) to 11.14 (Milepost #) and 293+21 (Highway Station) on the Both side of highway.

Applicant Signature and Agreement

I have read this Agreement, understand its provisions, and agree to abide by it and the utility accommodation policy of the Iowa Department of Transportation

Name of Agent (Print or Type) Rick Hoyer, Agent Owner (Signature), Title Land & ROW Manager, Name of Owner (Print or Type) Dakota Access, LLC, Date 7.10.2015

CITY ACTION (IF PROPOSED WORK IS WITHIN AN INCORPORATED CITY, CITY ACTION IS REQUIRED)

"The undersigned city joins in the grants embodied in the above permit executed by the Iowa Department of Transportation on condition that all of the covenants and undertakings therein running to the Iowa Department of Transportation shall inure to the benefit of the undersigned city and recommends action on said permit application as noted below by the delegated city official".

Recommend Approval Do Not Recommend Approval None Required

Handwritten Signature, Title, Date

Type or Print Name, Authorized Official for the City of

CITY ACTION IF PROPOSED WORK OCCURS COUNTY WIDE OF MAY COUNTY ACTION IS REQUIRED

Special Requirements

Minimum depth/cover to be 5 feet of cover within the ditches as measured from the top of pipe.

No open cuts will be allowed within the right of way.

Only clean material shall be used in the right of way.

Proper drainage shall be maintained at all times. All erosion control that is placed within the right of way shall be maintained. Vegetation shall be restored after completion and it will be the contractor's responsibility to remove any obstructions in the right of way placed by the contractor.

All disturbed areas shall be restored to the IDOT's requirements and satisfaction.

No equipment or material shall be stored in the right of way during non-working hours.

No parking shall be allowed on the shoulders of the roadway.

All access to the work site shall be from approved designated areas by the IDOT.

All crossings shall be constructed as approved by the IDOT.

Crossings of the highway shall be during daylight hours when visibility is clear.

Proper Traffic Control is to be done t all times in accordance to the MUTCD.

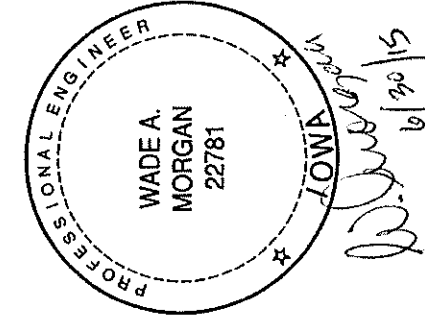
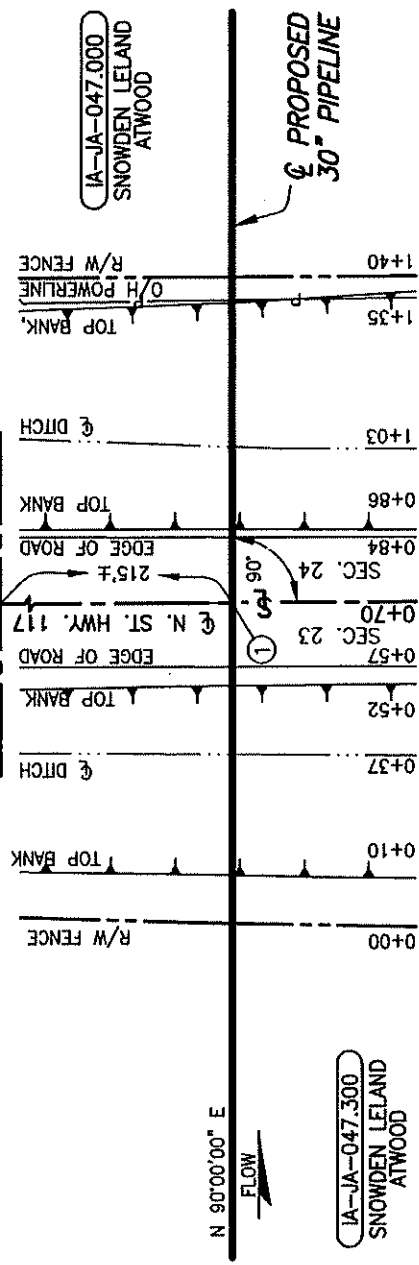
Applicant is responsible to notify 511 in advance of highway crossings.

The highway surface shall be kept clean and free of debris at all times.

Applicant is responsible for all highway crossing damages that may occur, repairs shall be done under the direction and satisfaction of the IDOT in a timely manner.

JASPER COUNTY, IOWA

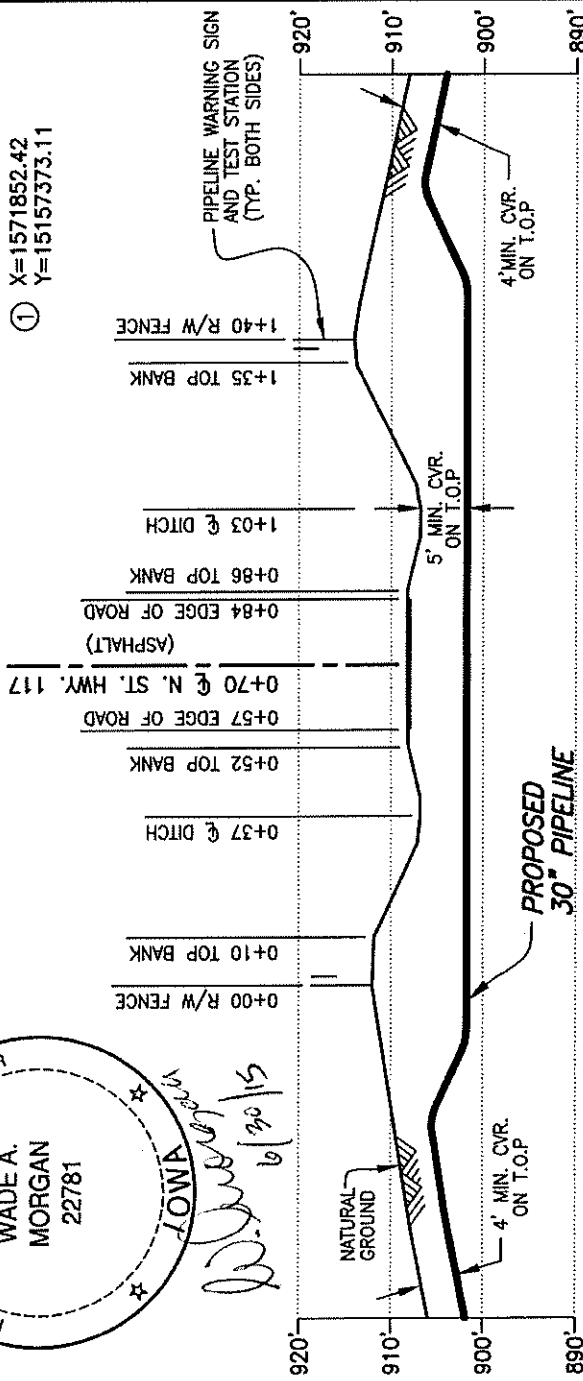
SECTIONS 23 & 24, TOWNSHIP 80 NORTH, RANGE 21 WEST
 & HIGHWAY F34 (N 35TH AVE. W)



PLAN

SCALE: 1"=40'

① X=1571852.42
 Y=15157373.11



PIPE SPECIFICATIONS

PIPE 30" O.D. x 0.625" W.T.
 API 5LX-70 DSAW
 COATING: FBE W/ARO
 SERVICE: CRUDE OIL
 INSTALLATION: BORE
 MIN TEST PRESSURE: 1,800 PSIG
 MOP: 1,440 PSIG
 MIN. YIELD STRENGTH: 70,000 PSI

PROFILE

SCALE: 1"=40" HORIZ.
 1"=20" VERT.

HIGHWAY STATION NO.
 293+21

DATUM:

ALL ELEVATIONS DERIVED FROM GPS
 OBSERVATIONS (GEOID 2012, NAVD 88)
 BEARINGS BASED ON UTM ZONE 15
 NORTH AMERICAN DATUM 1983.
 U.S. SURVEY FEET
 T.B.M.: & NORTH STATE HIGHWAY 117
 AT STA. 0+70 ELEV. 907.67'

NOTES:
 CVR. = COVER
 T.O.P. = TOP OF PIPE

REV.	DATE	BY	DESCRIPTION	CHK.
D	06/30/15	MP	ISSUED FOR USE/PERMIT	AJC
C	03/30/15	MP	ISSUED FOR USE/PERMIT	AJC
B	03/12/15	MP	ISSUED FOR USE/PERMIT	AJC
A	02/03/15	MGJ	ISSUED FOR REVIEW	AJC

PROJECT NO. 10395700

JASPER COUNTY IOWA



DAKOTA ACCESS, LLC

PROPOSED 30" DAPL PIPELINE CROSSING
 NORTH STATE HIGHWAY 117



WOOD GROUP MUSTANG, INC.

DRAWN BY: MGJ DATE: 12/03/14 DWG. NO. IA-JA-045.900

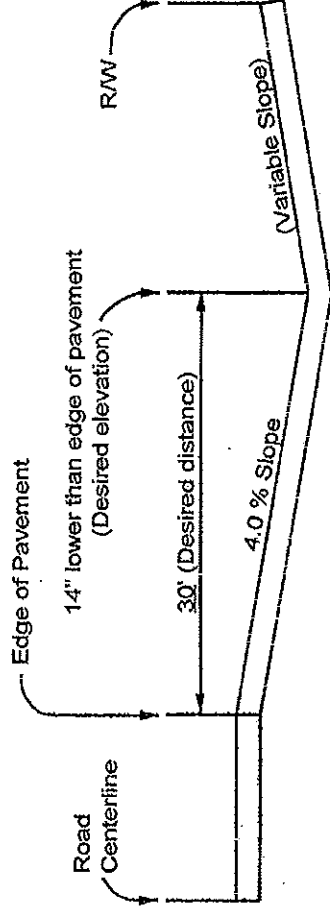
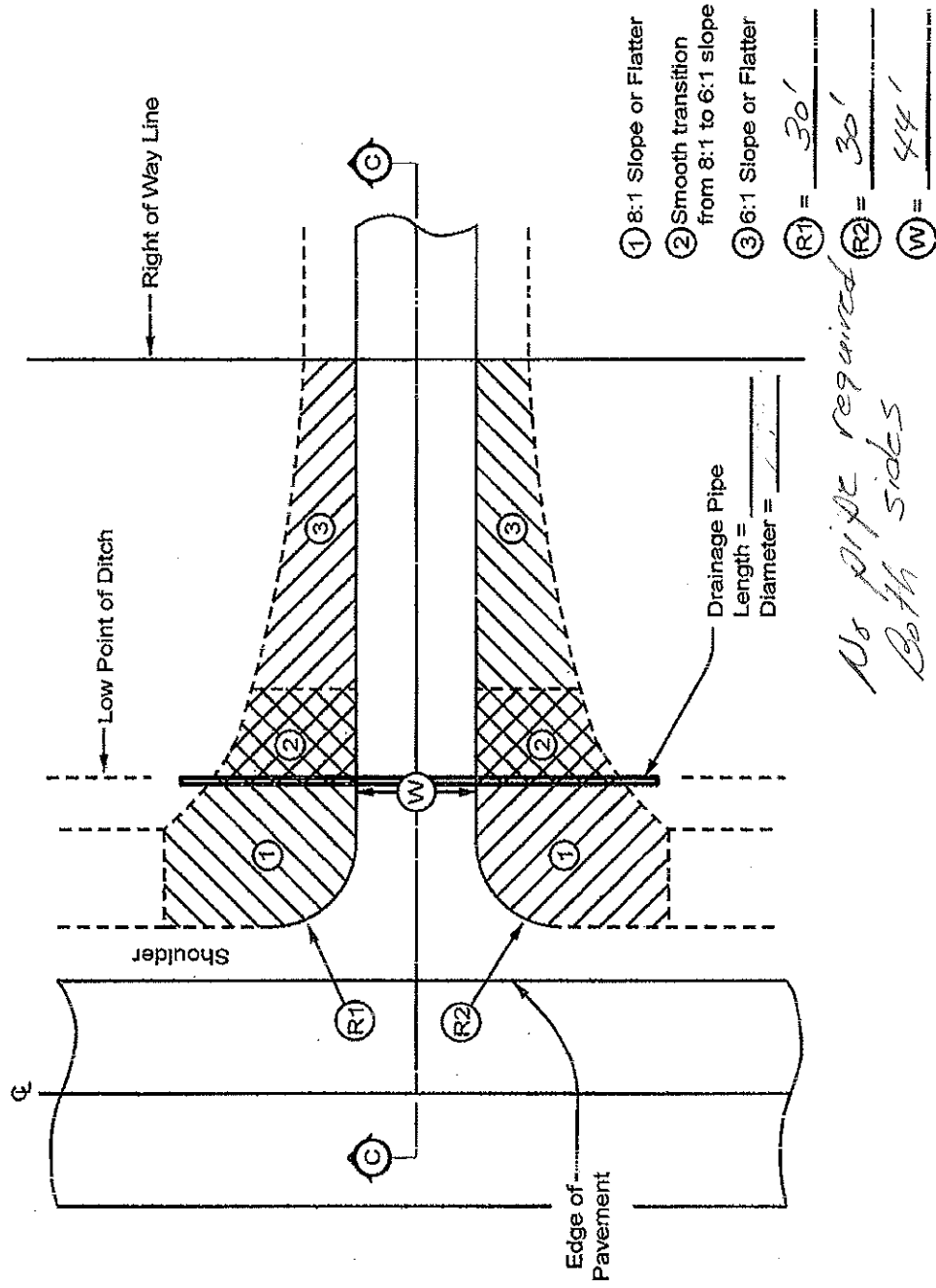
CHECKED BY: AJC DATE: 01/27/15

SCALE: AS SHOWN APP.: WAM

REV.

D

RURAL DESIGNED AREA
GRANULAR ENTRANCE
CULVERT REQUIRED



SECTION C - C

Table 2601.03-1: Rural Stabilizing Crop Seeding Rates and Schedule

March 1 through October 31	
Oat	50 lbs. per acre (56 kg/ha)
Grain rye	50 lbs. per acre (56 kg/ha)
Canada wildrye (<i>Elymus canadensis</i>)	5 lbs PLS. per acre (6 kg/ha)
November 1 through February 28 (or 29)	
Oat	62 lbs. per acre (69 kg/ha)
Grain rye	62 lbs. per acre (69 kg/ha)
Canada wildrye (<i>Elymus canadensis</i>)	7 lbs. PLS. per acre (8 kg/ha)
For stabilizing crop only, Canada wildrye (<i>Elymus canadensis</i>) seed will not be required to be certified as Source Identified Class (Yellow Tag) Source G0-Iowa.	
Canada wildrye (<i>Elymus canadensis</i>) seed shall be debearded or equal to facilitate application of seed.	

Table 2601.03-2: Urban Stabilizing Crop Seeding Rates

Bluegrass, Kentucky	122 lbs. per acre (137 kg/ha)
Ryegrass, Perennial (fineleaf variety)	35 lbs. per acre (39 kg/ha)
Fescue, Creeping Red	18 lbs. per acre (20 kg/ha)

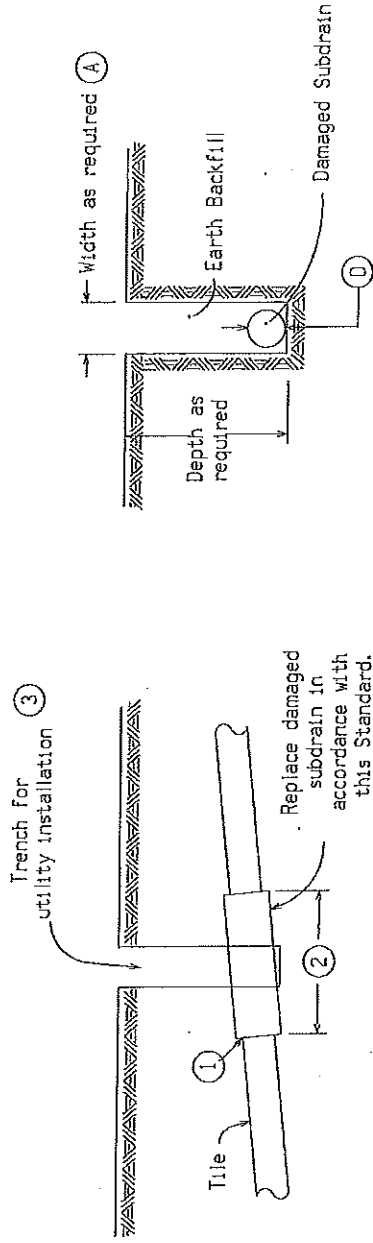
Table 2601.03-3: Permanent Seed Rates, Rural Areas

Fescue, Tall (Fawn)	100 lbs. per acre (112 kg/ha)
Ryegrass, Perennial (Linn)	75 lbs. per acre (84 kg/ha)
Bluegrass, Kentucky	20 lbs. per acre (22 kg/ha)

Table 2601.03-4: Permanent Seed Rates, Urban Areas

Bluegrass, Kentucky	122 lbs. per acre (137 kg/ha)
Ryegrass, Perennial (fineleaf variety)	35 lbs. per acre (39 kg/ha)
Fescue, Creeping Red	18 lbs. per acre (20 kg/ha)

Tile Line Repair Guideline



Note:

Replacement of drainage tile shall be accomplished so as to cause the minimum of disturbance to existing field tile. The repaired drainage tile shall be left in a functional condition with special emphasis placed on maintaining existing flow line elevations.

(A) = A minimum of 24" shall be excavated outside the normal utility trench wall or such greater width as may be required to expose a minimum of 12" of undamaged drain tile.

REPLACEMENT SCHEDULE - CASE 'A'												
Existing Tile	4	6	8	10	12	15	18	21	24	>24		
Proposed Subdrain Size												
Concrete Pipe	-	-	12	15	15	18	21	24	30	D+6"		
Coated C.M.P.	10	12	15	18	21	24	30	36	36	*		

* Replacement sizes provide equivalent capacity based on 6" settlement assuming a 0.20% slope with $n = 0.013$ for concrete pipe and $n = 0.025$ for corrugated pipe (Manning Formula)

NOTES:

Tile lines disturbed within the right-of-way (outside the Roadway Embankment Area *) limits shall be repaired as follows:

May be repaired with schedule 40 PVC pipe of compatible size or in accordance with the replacement schedule-case A as listed above. Replacement with schedule 40 PVC pipe shall require using a connecting device of a Femco plain and plain flexible pipe coupling or equal.

Tile lines disturbed within the "Roadway Embankment Area" shall be replaced in accordance with the replacement schedule - case 'A' stated above and as follows:

- ① Concrete collar to be placed around joint where existing tile line and corrugated aluminized metal pipe connect.

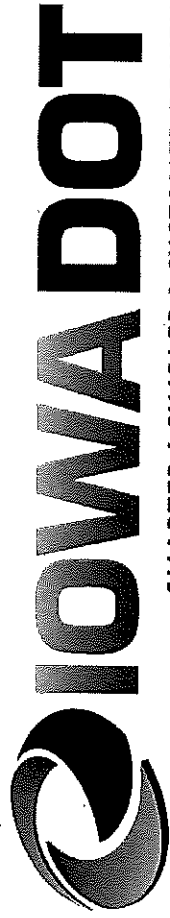
- ② Minimum length of corrugated metal pipe shall be 4 feet. Minimum length of 2 feet on each side of the tile line break location.

- ③ Trench shall be backfilled with 8 inches loose material, compacted to 6 inches with a minimum of 95% compaction of natural density.

A. Backfill and compact area around drain tile to be completed by hand until new tile is completely covered. Remainder of the trench shall be backfilled by acceptable methods.

B. Area shall require inspection by the Iowa Department of Transportation inspectors or their designated personnel prior to backfilling of trench.

* "Roadway Embankment Area" is defined as the area lying between the foreslopes of a two-lane roadway and from near foreslope to far foreslope of a four lane roadway.



SMARTER | SIMPLER | CUSTOMER DRIVEN

www.iowadot.gov

Office of Traffic and Safety
800 Lincoln Way Ames, Iowa 50010
Phone: 515-239-1014
Email: bryan.bradley@dot.iowa.gov

Notification of width or height restrictions on Iowa primary highways – Utility Requirements

To: Utility companies

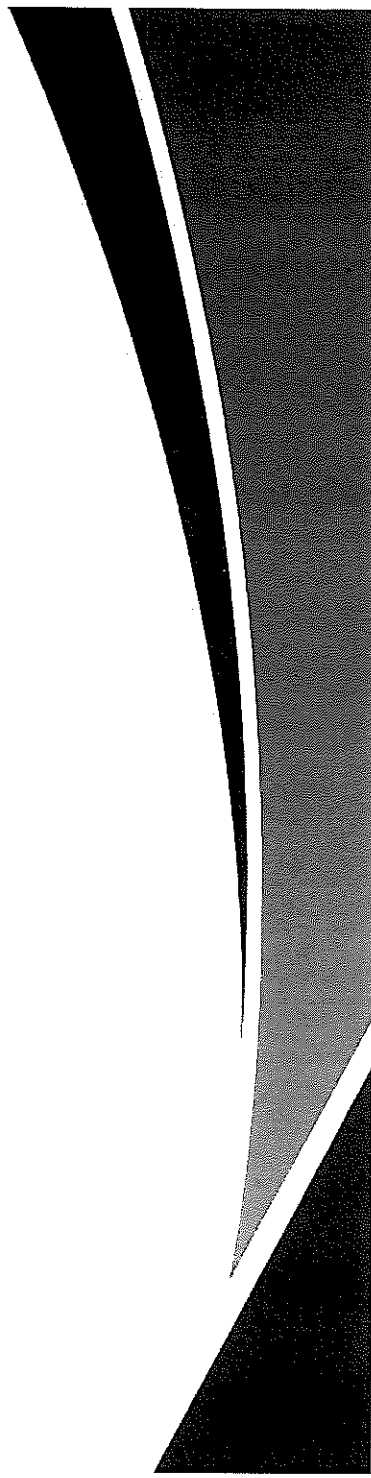
Subject: Notification of width or height restrictions on Iowa primary highways

Date: February 17, 2014

In accordance with the stipulations on all Utility Accommodation permits, utilities may not obstruct or close primary highways without prior consent of the Iowa DOT, except in emergency situations. The permit holder must notify the DOT 48 hours in advance of its intention to start construction or perform routine maintenance on the highway right-of-way. The purpose of this note is to remind you of these requirements and provide guidance on how to give proper notice and information to the Iowa DOT.

Even short term partial closures can have a significant impact on the operation of highway system. The Iowa DOT is working hard to improve the accuracy of the information provided by the Iowa 511 traveler information system, (<http://511ia.org/>) but we need your help. Besides providing real-time information to the traveling public, this system is also used by the Iowa DOT to route oversize loads. Having accurate information on the location, extent and duration of lane restrictions is critical for their routing processes.

Before setting up a lane closure or any vertical/horizontal restriction on a primary highway, call your local Iowa DOT maintenance garage, as shown on the Iowa DOT Districts web page, <http://www.iowadot.gov/districtshome.html> to discuss timing and date of the closure/restriction. Once the maintenance garage concurs with the timing and date, it is your responsibility to call the Iowa DOT Traffic Operations Center (TOC) at (515-239-1440). The TOC will add the information to the 511



system, which generates an automatic message to Iowa DOT Motor Carrier Services (MCS) and the District office.

This notification does not replace the need for a permit application. Permits are required for utility accommodation and for any and all work on right of way, except emergency work.

Except in emergency situations, 48 hour advance notice is the minimum required. The preference is for a 10 day notice as permits for oversize loads are issued up to 10 days in advance. If a 10 day notice is not possible, MCS will have to check for permitted loads on those routes for possible conflicts and work with the permit holders and DOT Maintenance office to resolve the conflicts. In emergency situations, notification should be provided as soon as possible.

When providing notice to the Iowa DOT, you will need to supply detailed information about the restriction. It is advised you have this information (last 2 pages) when you call the TOC. The same detailed information to be provided is also listed at:
http://www.iowadot.gov/local_systems/mailling/2014/january/511_information_form.pdf.

If you have any questions, **please do not reply to this note**. Instead, you may contact either your local Iowa DOT maintenance garage or the TOC.

Thank you in advance for your cooperation.

Sincerely,



Bryan Bradley
State Utility Engineer
515-239-1014
bryan.bradley@iowa.gov
Iowa Department of Transportation

511 Information Required

Before setting up a lane closure or a vertical/horizontal restriction of any kind on a primary highway extension, call your local Iowa DOT maintenance garage to discuss timing and date of the closure/restriction. Once the maintenance garage concurs with the timing and date, call the Iowa DOT Traffic Operations Center (TOC) at **515-239-1440**. The TOC will put the information in the 511 system, which generates an automatic message to Iowa DOT Motor Carrier Services (MCS) and the District office.

The following information is required to enter a maintenance/construction event into the Iowa DOT 511 system.

Requestor: _____ Contact number: _____

Route(s) affected: _____

Project description: _____

Project begin location (detailed description including cross streets and mile markers): _____

Project end location (detailed description including cross streets and mile markers): _____

County/Countries: _____

24 hour project contact: _____ Name _____ Phone _____

Describe the impact on traffic:

- Closed
- Closed intermittently
- Intermittent lane closure
- Alternating lane closures
- Reduced to one lane
- Reduced to two lanes
- Reduced to three lanes

- Right lane closed
- Left lane closed
- Center lane closed
- Right shoulder closed
- Left Shoulder closed
- Exit ramp closed
- Entrance ramp closed

- Two center lanes are closed
- Left exit ramp closed
- Shoulder closed
- Bridge closed
- Intersecting road closed
- Local road closures in area
- Left lane of exit ramp closed
- Road construction
- Work in the median
- Opposing traffic
- Single lane traffic alternating directions

Additional project information (pilot car, flagger, etc.):

Will there be temporary overhead signals? (15' standard height restriction)

- Yes
- No

If yes, please provide the location of the temporary overhead signals in the space provided.

Are there any other width or height restrictions:

- Yes
- No

If yes, please describe:

Additional public website comments:

Project beginning date and time:

Project ending date and time:

Times of closure

- Continuous
- Weekdays (Monday – Friday)
- Nights

Times of closure:

Do not allow work to interfere with the flow of traffic.

When parked, locate vehicles as far from the open traffic lane as possible. Entrances and driveways should be used whenever appropriate.

Equip all vehicles with an amber revolving light or amber strobe light.

① For work lasting longer than one hour, refer to TC-202 or TC-402.



VEHICLE STOPPED ON SHOULDER FOR LESS THAN ONE HOUR ①



SLOW-MOVING OPERATION



Pickup



W20-1
48" x 48"

Or



W21-6
48" x 48"



Pickup



Possible Contract Item:
Traffic Control

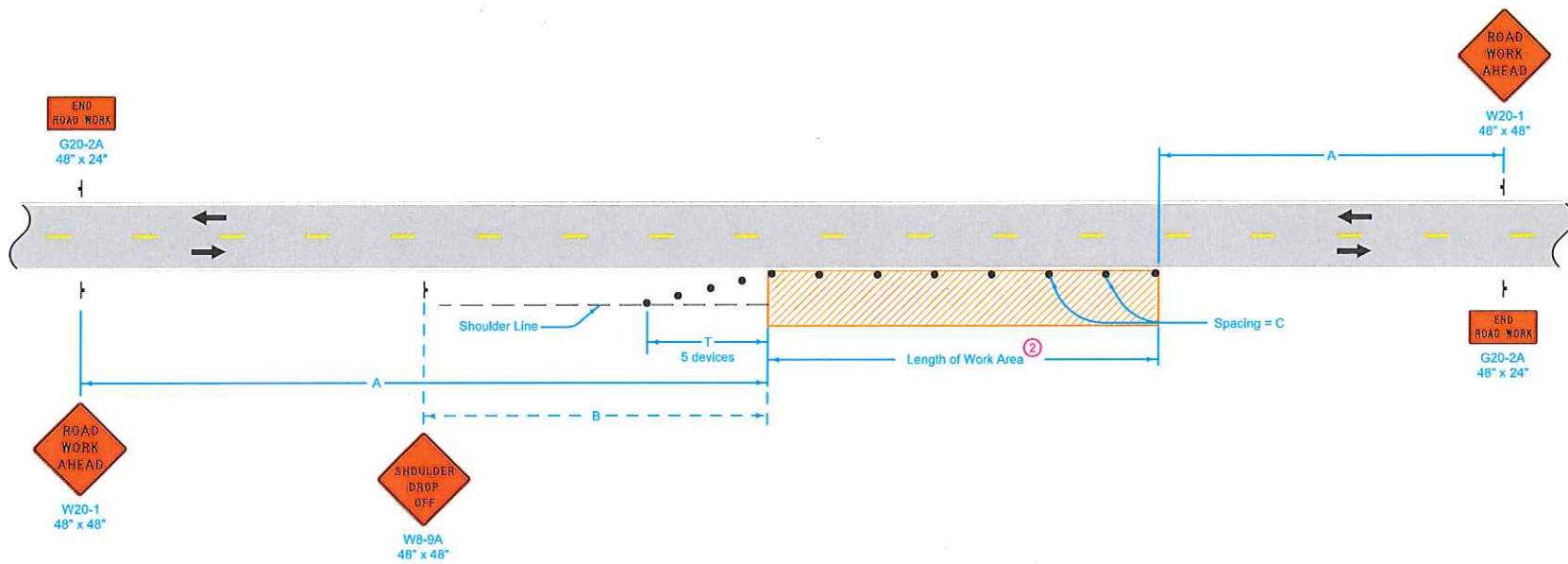
 Iowa Department of Transportation	REVISION	
	2	04-16-13
STANDARD ROAD PLAN	TC-1	
	SHEET 1 of 1	

REVISIONS: Modified note concerning amber Vehicle Warning Light.

Deanna Mifflin
APPROVED BY DESIGN METHODS ENGINEER

**WORK NOT AFFECTING TRAFFIC
(TWO-LANE OR MULTI-LANE)**

LEGEND	
	Traffic Sign
	Direction of Traffic



LEGEND

- Traffic Sign
- 42" Channelizer
- Work Area
- Direction of Traffic

SPEED LIMIT (mph)	A	B	C ^②	T
35 or less	500'	250'	40'	100'
40 - 45	700'	350'	80' ^①	200'
50 or greater	1000'	500'	100' ^①	200'

When a pavement edge drop-off exists, install a SHOULDER DROP-OFF sign.

No pavement edge drop-offs greater than pavement depth will be allowed during non-working hours.

Shoulder edge drop-offs shall be mitigated according to Article 1107.08.L2 of the Standard Specifications.

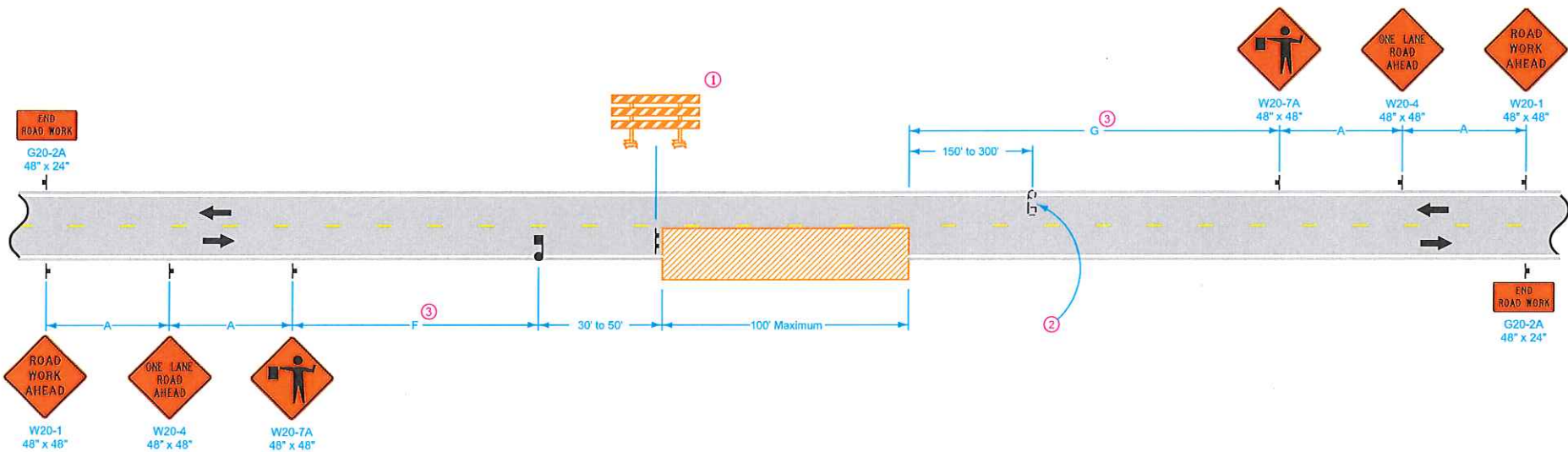
For work lasting less than one hour, refer to TC-1.

^① When the length of a pavement edge drop-off is 1000 feet or less, the temporary fillet requirement of Article 1107.08 of the Standard Specifications does not apply. Reduce channelizer spacing to 40 feet.

^② For work areas less than 200 feet long, use channelizers spaced at 20 foot centers or use a vehicle with an amber revolving light or amber strobe light.

Possible Contract Item:
Traffic Control

	REVISION
	8 04-21-15
	TC-202
SHEET 1 of 1	
REVISIONS: Modified general notes, changed title and replaced the DOT logo in the title block with the new version.	
APPROVED BY DESIGN METHODS ENGINEER	
WORK WITHIN 15 FT OF TRAVELED WAY	



LEGEND

- Traffic Sign
- Flagger
- Work Area
- Type III Barricade
- Direction of Traffic

SPEED LIMIT (mph)	A	F and G Range ^③	F + G Max.
35 or less	250'	250'-3250'	3500'
40 - 45	350'	350'-3350'	3700'
50 or greater	500'	500'-3500'	4000'

- ① A vehicle with an amber revolving light or amber strobe light may be substituted for the Type III barricade.
- ② Provide a second flagger if:
 The flagger's view of approaching traffic in the open lane is less than 1/4 mile or the work site is in an area of restricted sight distance (such as a "No Passing" zone); or
 Excessive traffic delays are encountered.
- ③ F and G distances are to remain as near minimum values as work permits. However, to be able to move the work area without moving the advance signing, F and G distances may be varied within the limits of the table. Maximum movement can be achieved by setting one F or G value at the minimum and the other value at its maximum.

Possible Contract Items:
 Flaggers
 Traffic Control

Iowa Department of Transportation

STANDARD ROAD PLAN

REVISIONS: Modified circle note 1.

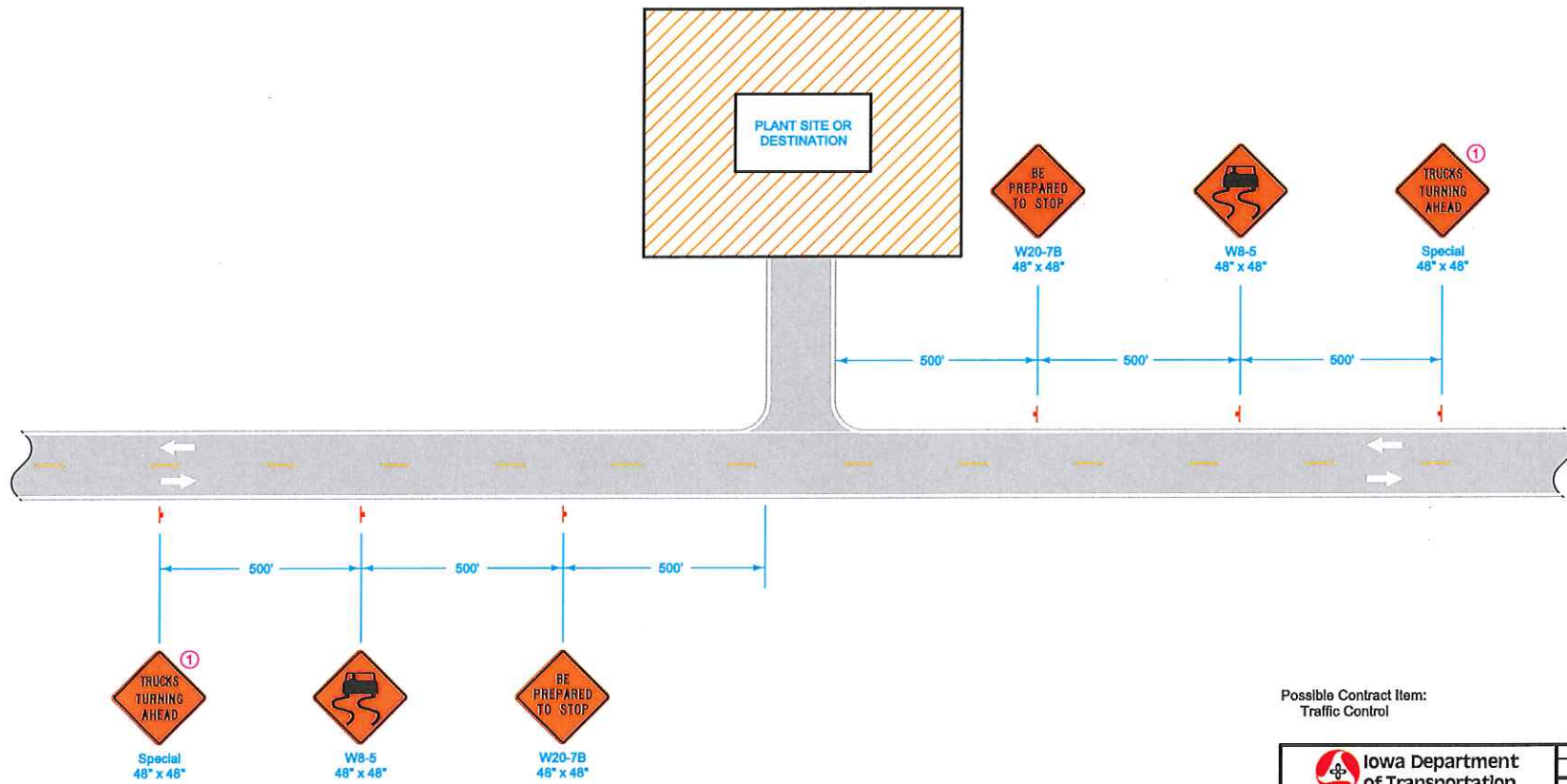
Deanna Macfield
 APPROVED BY DESIGN METHODS ENGINEER

SPOT LOCATION LANE CLOSURE WITH FLAGGERS

REVISION	4	04-16-13
TC-212		
SHEET 1 of 1		

Construction traffic shall yield the right-of-way to mainline traffic.


① Refer to SI-881 for details.




Possible Contract Item:
Traffic Control

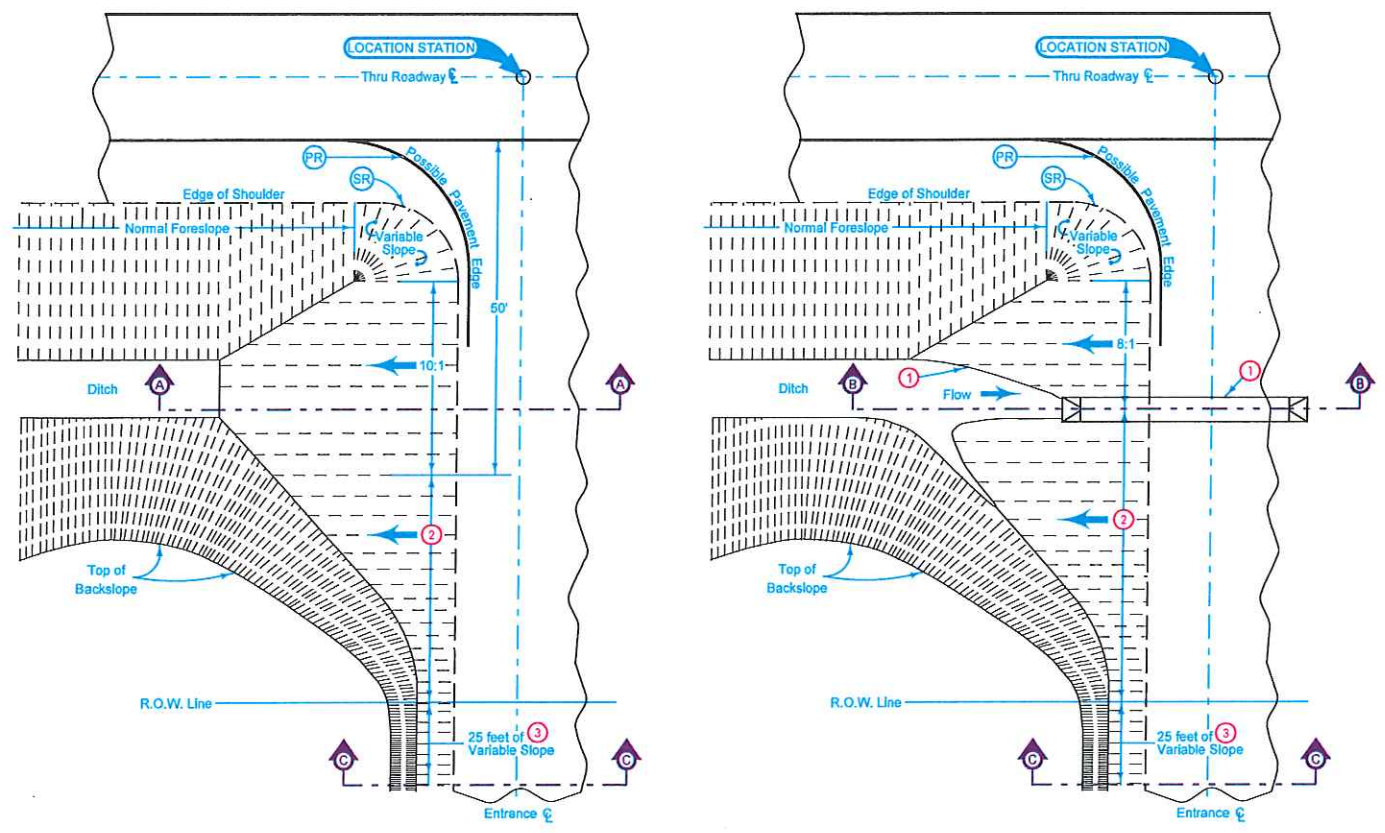
 Iowa Department of Transportation	REVISION
	1 04-20-10
STANDARD ROAD PLAN	TC-273
REVISIONS: Updated references to renamed standards.	SHEET 1 of 1
<i>Deanna Mailick</i> APPROVED BY DESIGN METHODS ENGINEER	
CONSTRUCTION SITE ENTRANCE	

LEGEND

 Traffic Sign

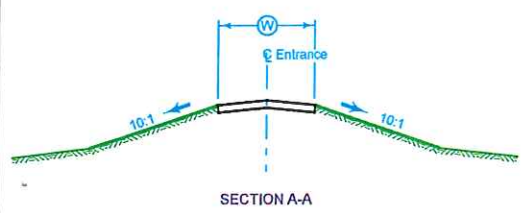
 Direction of Traffic

**DESIGNER
INFO**

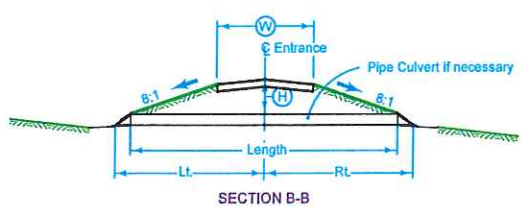


TYPE B OR C ENTRANCE
WITHOUT PIPE

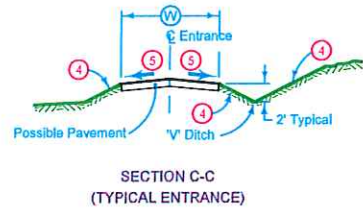
TYPE B OR C ENTRANCE
WITH PIPE



SECTION A-A



SECTION B-B



SECTION C-C
(TYPICAL ENTRANCE)

Smoothly shape and round surface and slopes of entrances where practical to provide minimal hazard to an out of control vehicle from through roadway.

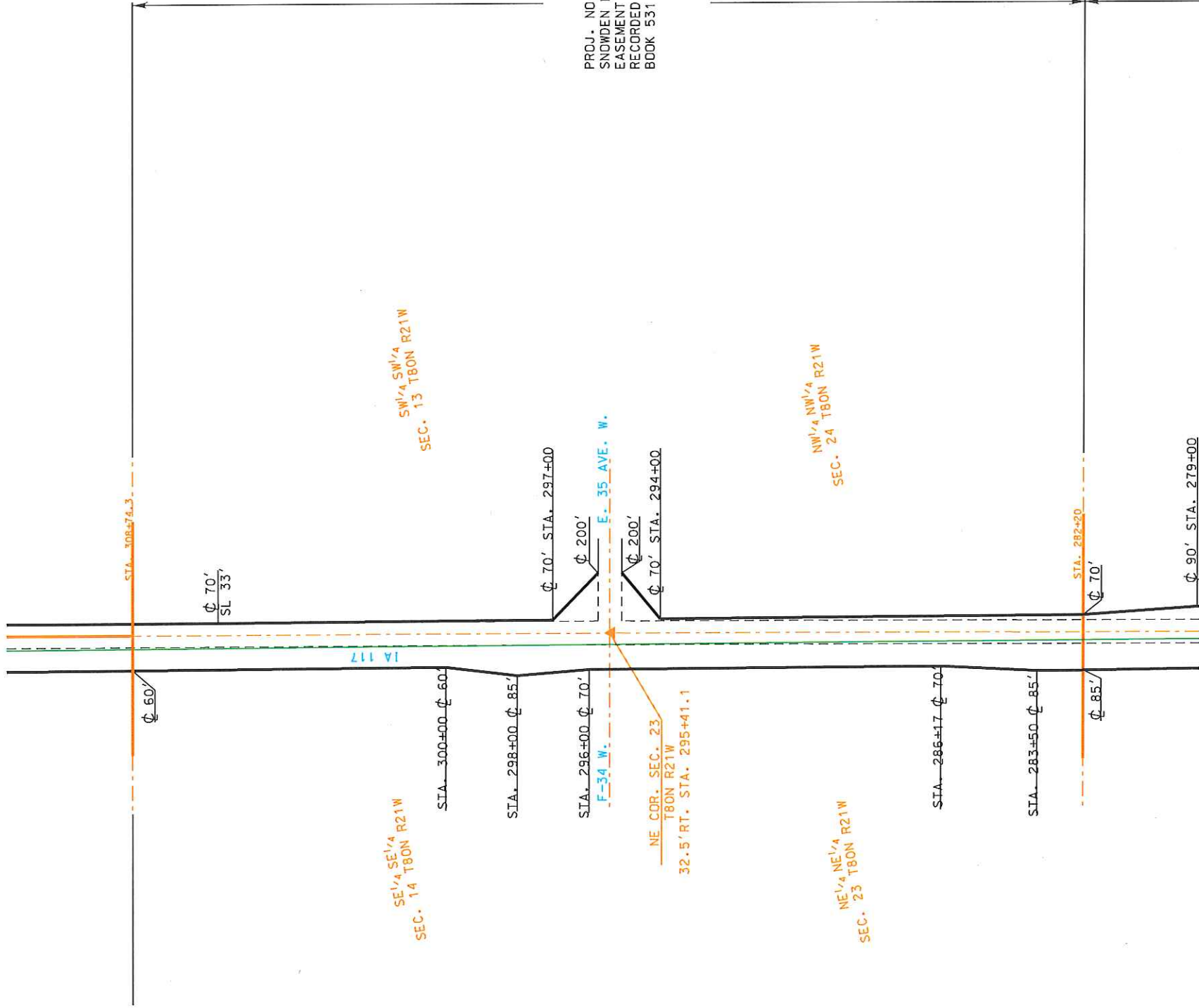
Earthwork and material used for construction of entrances are included in estimate of quantities.

- ① Locate entrance pipe culverts to coincide with the line of the toe of backslopes as shown. Some special shaping of ditch may be required to fit culvert. Refer to tabulation of entrance pipe culverts and cross sections for details of installation.
- ② Smooth transition to 6:1 at ROW line. If foreslopes of existing entrance are 6:1 or flatter, transition to existing entrance foreslopes.
- ③ Smooth transition from 6:1 to existing foreslope if existing foreslope steeper than 6:1.
- ④ 3:1 for new entrance. Existing slope for existing entrance.
- ⑤ 3% for new entrance. Existing slope for existing entrance.

Possible Contract Items:
Aprons, Unclassified
Culvert, Unclassified Entrance Pipe
Excavation, Class 10

Possible Tabulation:
102-3

	REVISION
	1 10-20-15
	EW-501
STANDARD ROAD PLAN	SHEET 1 of 1
REVISIONS: Replaced the DOT logo in the title block with the new version.	
<i>Brian Smith</i> APPROVED BY DESIGN METHODS ENGINEER	
RURAL ENTRANCE	



PROJ. NO. F-772
SNOWDEN L. & RUTY AN
EASEMENT
RECORDED NOV. 8, 195
BOOK 531 PAGE 447

SE 1/4, SE 1/4, T80N R21W
SEC. 14

SW 1/4, SW 1/4, T80N R21W
SEC. 13

NE COR. SEC. 23
T80N R21W
32.5' RT. STA. 295+41.1

NE 1/4, NE 1/4, T80N R21W
SEC. 23

NW 1/4, NW 1/4, T80N R21W
SEC. 24