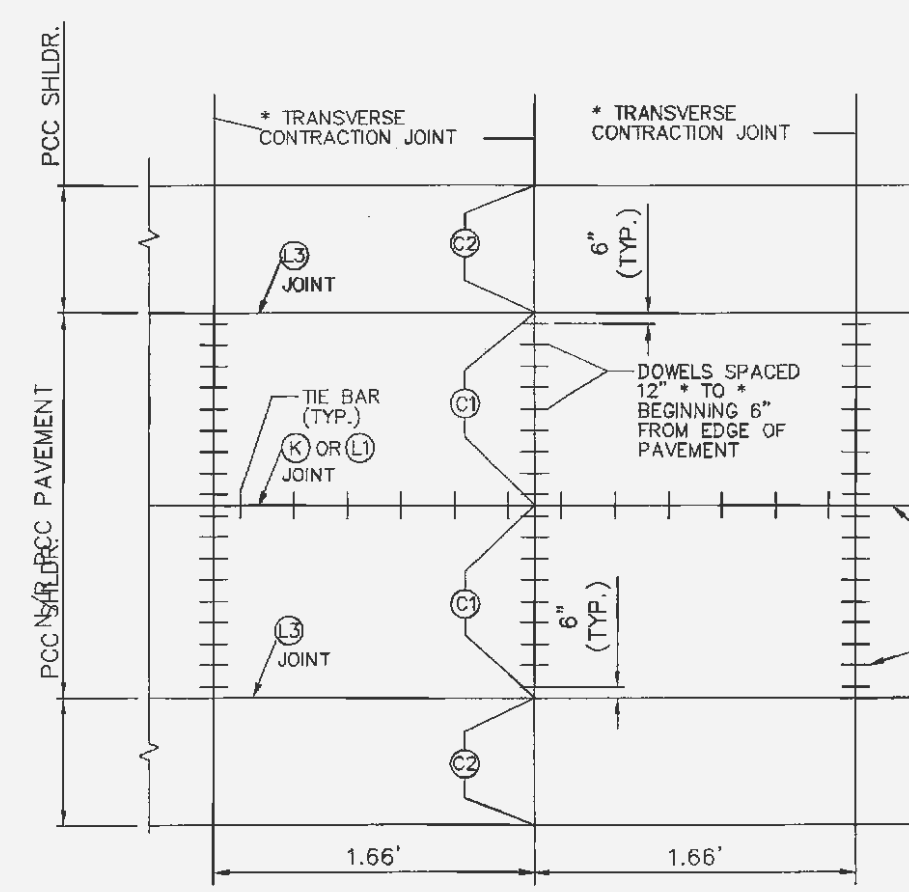


REVISIONS:
09-19-06 Per City Comments
10-02-06 Per MODOT
10-12-06 Per Duckett Creek
10-12-06 Per Client
10-17-06 Per Duckett Creek
11-08-06 Per Cottleville Fire

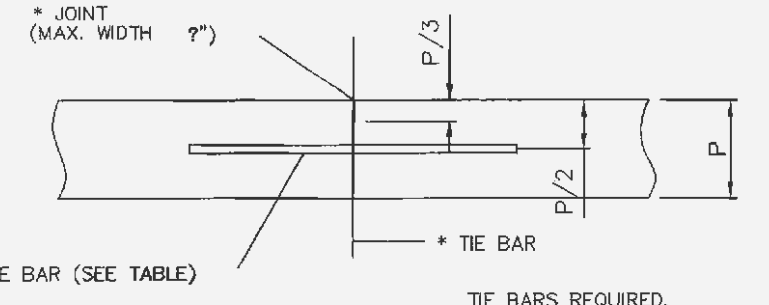
06-13706

10-02-06



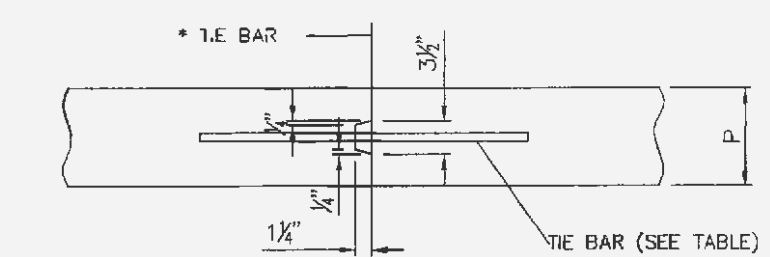
JOINT PLAN AND SPACING FOR CONTRACTION JOINTS (1)

(1) LONGITUDINAL JOINT NOT REQUIRED AT INSIDE SHOULDER ON DIVIDED HIGHWAYS OR AT INSIDE SHOULDER OF RAMPS FOR 4' OR LESS INSIDE SHOULDERS. DOWELS ARE REQUIRED FOR THE FIRST TWO FEET ADJACENT TO THE TRAVEL LANE.

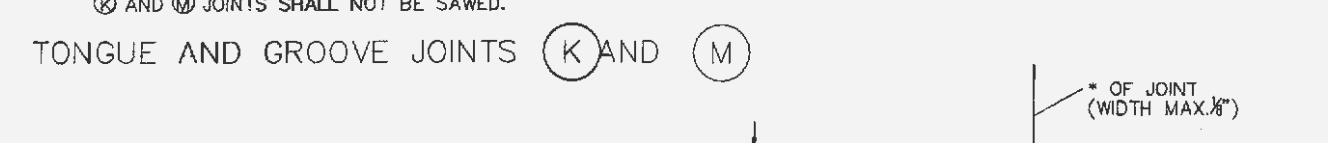


LONGITUDINAL JOINT (L1)

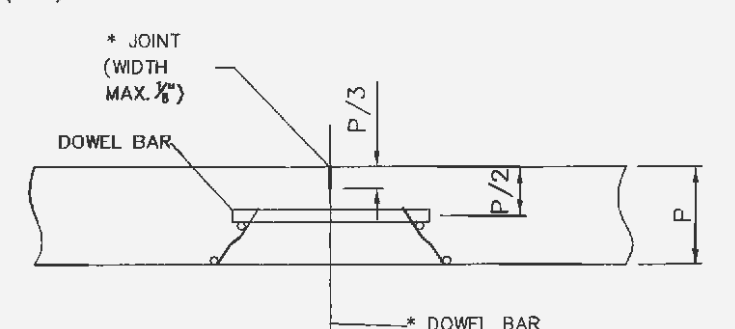
TIE BAR AND DOWEL TABLE				
PCC THICKNESS (P)	DOWEL SIZE	TIE BAR SIZE	DOWEL SPACING	TIE BAR SPACING
LESS THAN 7"	NONE	#5X30"	NONE	30" CTR.-CTR.
7" TO 10"	1"X18"	#5X30"	12" CTR.-CTR.	30" CTR.-CTR.
GREATER THAN 10"	1"X18"	#6X40"	12" CTR.-CTR.	30" CTR.-CTR.



IF METAL IS USED TO FORM KEY DISCONTINUE STRIP FOR DISTANCE OF APPROXIMATELY 3" EACH SIDE OF TRANSVERSE JOINT.
TYPE (K) REQUIRES TIE BAR.
TYPE (M) CONSTRUCTED WITHOUT TIE BARS.
(K) AND (M) JOINTS SHALL NOT BE SAWED.



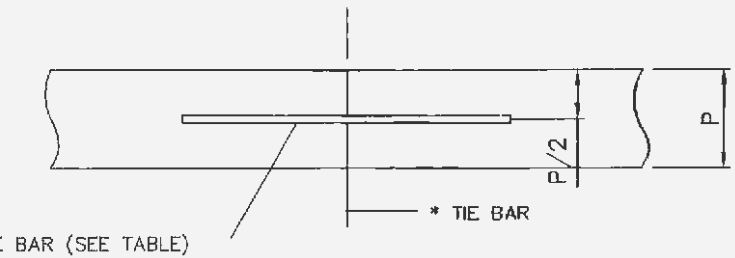
TRANSVERSE CONTRACTION JOINT (C2)



DOWELS REQUIRED FOR PERMISSIBLE TYPES OF DOWELS SUPPORTING UNITS. SEE OTHER DRAWINGS.
TRANSVERSE CONTRACTION JOINTS FOR CONCRETE PAVEMENT OR BASE WIDENING SHALL MATCH EXISTING JOINTS.

TRANSVERSE CONTRACTION JOINT (C1) (2)

(2) DOWEL BARS ARE REQUIRED FOR ALL PAVEMENTS HAVING THE SAME THICKNESS AS THE TRAVELED WAY.



LONGITUDINAL CONSTRUCTION JOINT FOR NEW CONSTRUCTION WITH NO TIE BAR (3)

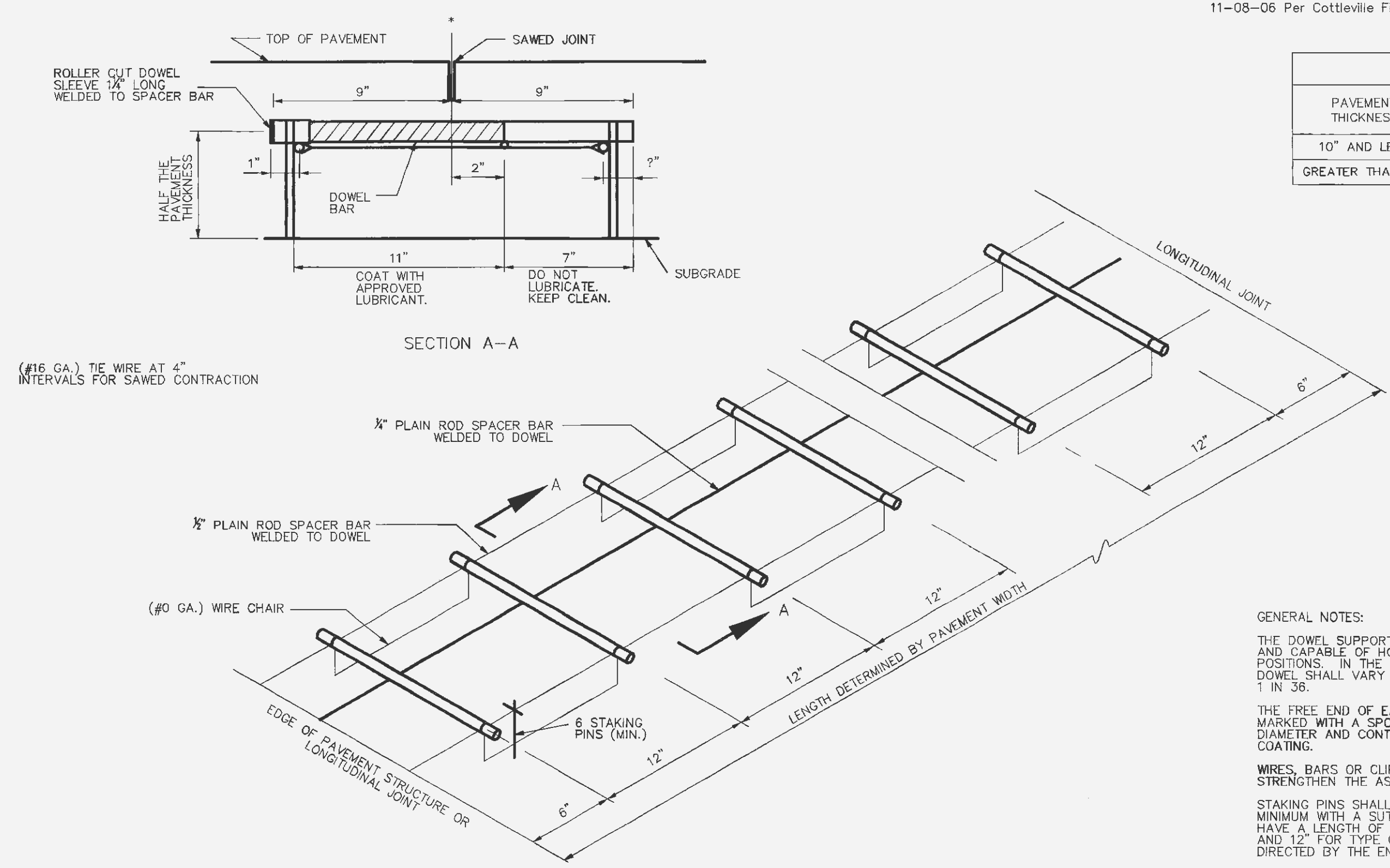
GENERAL NOTES:
THE FINAL POSITION OF ALL DOWELS AND TIE BARS SHALL BE PERPENDICULAR TO THE PLANE OF THE JOINT AND PARALLEL TO THE SURFACE OF THE PAVEMENT AND PARALLEL TO EACH OTHER.



LONGITUDINAL CONSTRUCTION JOINT FOR NEW CONSTRUCTION WITH FULL DEPTH SHOULDERS (L2)

CONCRETE PAVEMENT AND BASE APPURTENANCES FOR 15' JOINT SPACING

07-01-2006 502.05K



(#16 GA.) TIE WIRE AT 4" INTERVALS FOR SAWED CONTRACTION

TYPE A

PAVEMENT THICKNESS	BAR SIZE	
	DIAMETER	LENGTH
10" AND LESS	1 1/2"	18"
GREATER THAN 10"	1 3/4"	18"

GENERAL NOTES:

THE DOWEL SUPPORTING UNITS SHALL BE FACTORY ASSEMBLED AND CAPABLE OF HOLDING THE DOWELS IN THEIR REQUIRED POSITIONS IN THE COMPLETED JOINT INSTALLATION. NO DOWEL SHALL VARY FROM ITS REQUIRED POSITION MORE THAN 1 IN. 36.

THE FREE END OF EACH EPOXY COATED DOWEL SHALL BE MARKED WITH A SPOT OF PAINT AT LEAST ONE INCH IN DIAMETER AND CONTRASTING IN COLOR WITH THE EPOXY COATING.

WIRES, BARS OR CLIPS SHALL BE USED AS NECESSARY TO STRENGTHEN THE ASSEMBLIES.
STAKING PINS SHALL BE FABRICATED FROM 0 GA. WIRE MINIMUM WITH A SUITABLE HOOK. STAKING PINS SHALL HAVE A LENGTH OF 18" TYPE A AND TYPE B ASSEMBLIES AND 12" FOR TYPE C ASSEMBLIES UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

MINOR VARIATIONS IN THE CONFIGURATION OF THE SUPPORT UNITS WILL BE ALLOWED.

DOWEL SUPPORTING UNITS APPROVED FOR USE WITH TRANSVERSE JOINTS

06-01-2006 502.10H

Lane Closure on Left or Right Lane on Divided Highway

SPEED	SIGN SPACING (ft.)		TAPER LENGTH (ft.)		OPTIONAL BUFFER LENGTH (ft.) (S)	CHANNELIZER SPACING (ft.)	
	Undivided (S)	Divided (S)	Shoulder (T1)	Lane (T2)		Buffer/Work Areas	Work Areas
0-35	-	200	70	245	120	35	50
40-45	-	500	150	540	220	40	100
50-55	-	1000	185	680	325	50	100
60-70	-	1000	235	840	500	60	100

TYPE ROADWAY	SIGN HEIGHT	MAXIMUM WORK ZONE LENGTH (L)
URBAN	7 Post	1 MI.
RURAL DIVIDED	7 Post	2 MI.

Notes:
1. Shoulder taper length based on 10 ft. (standard shoulder width) offset. 2. Lane taper length based on 12 ft. (standard lane width) offset.

A protective vehicle shall be used while work is in progress. The protective vehicle shall be equipped with a TMA and flashing arrow panel and positioned at least 150 ft. in advance of the work space. The protective vehicle may be eliminated if the roadway is posted at 45 mph or below, the work vehicle is positioned in advance of the work space, and the work vehicle is equipped with a flashing arrow panel and uses activated rotating lights or strobe lights.

All vehicles, equipment, workers and their activities should be restricted to one side of the pavement.

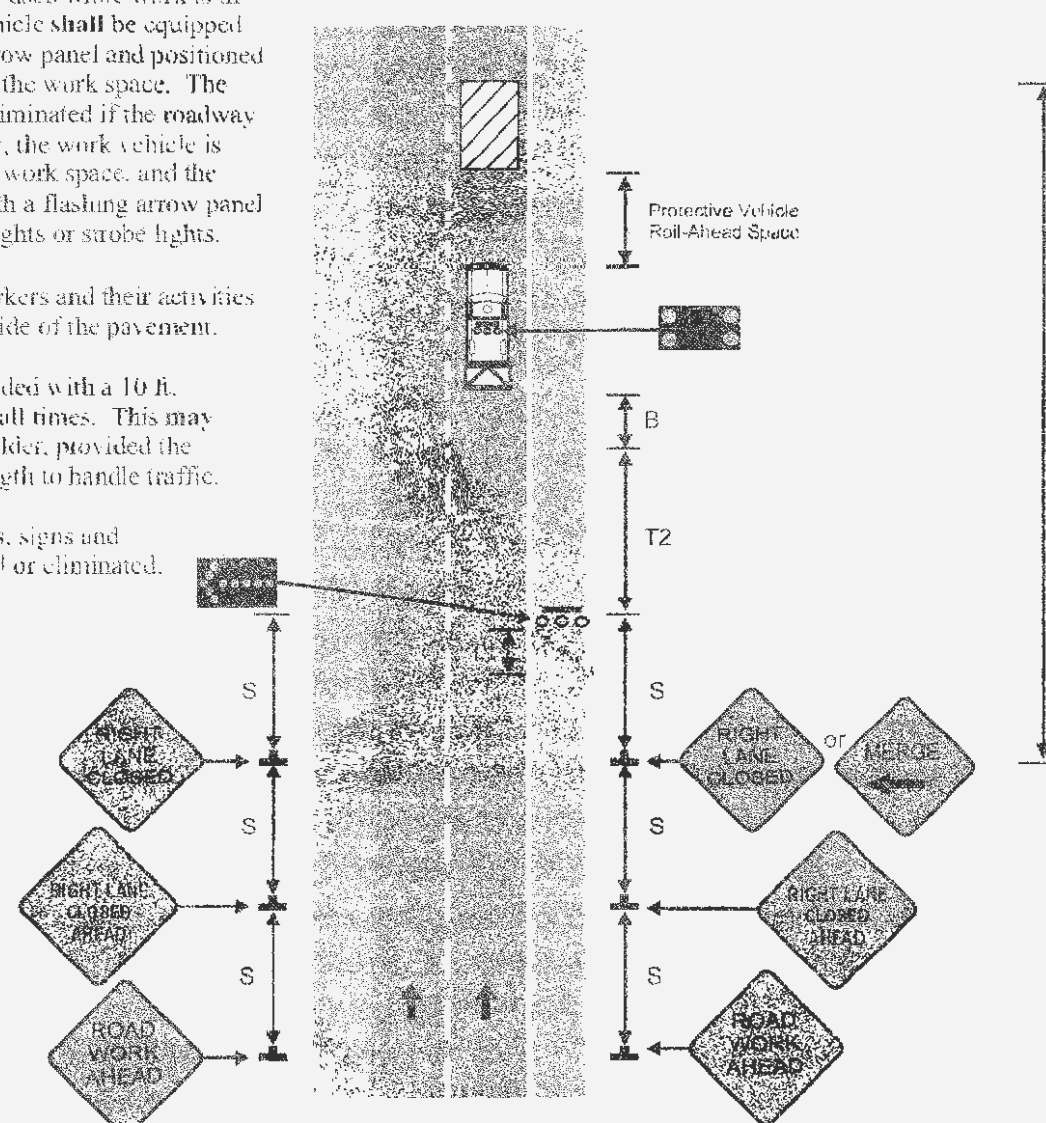
The open lane shall be provided with a 10 ft. minimum driving surface at all times. This may include a portion of the shoulder, provided the shoulder is of adequate strength to handle traffic.

For short duration operations, signs and channelizers may be reduced or eliminated.

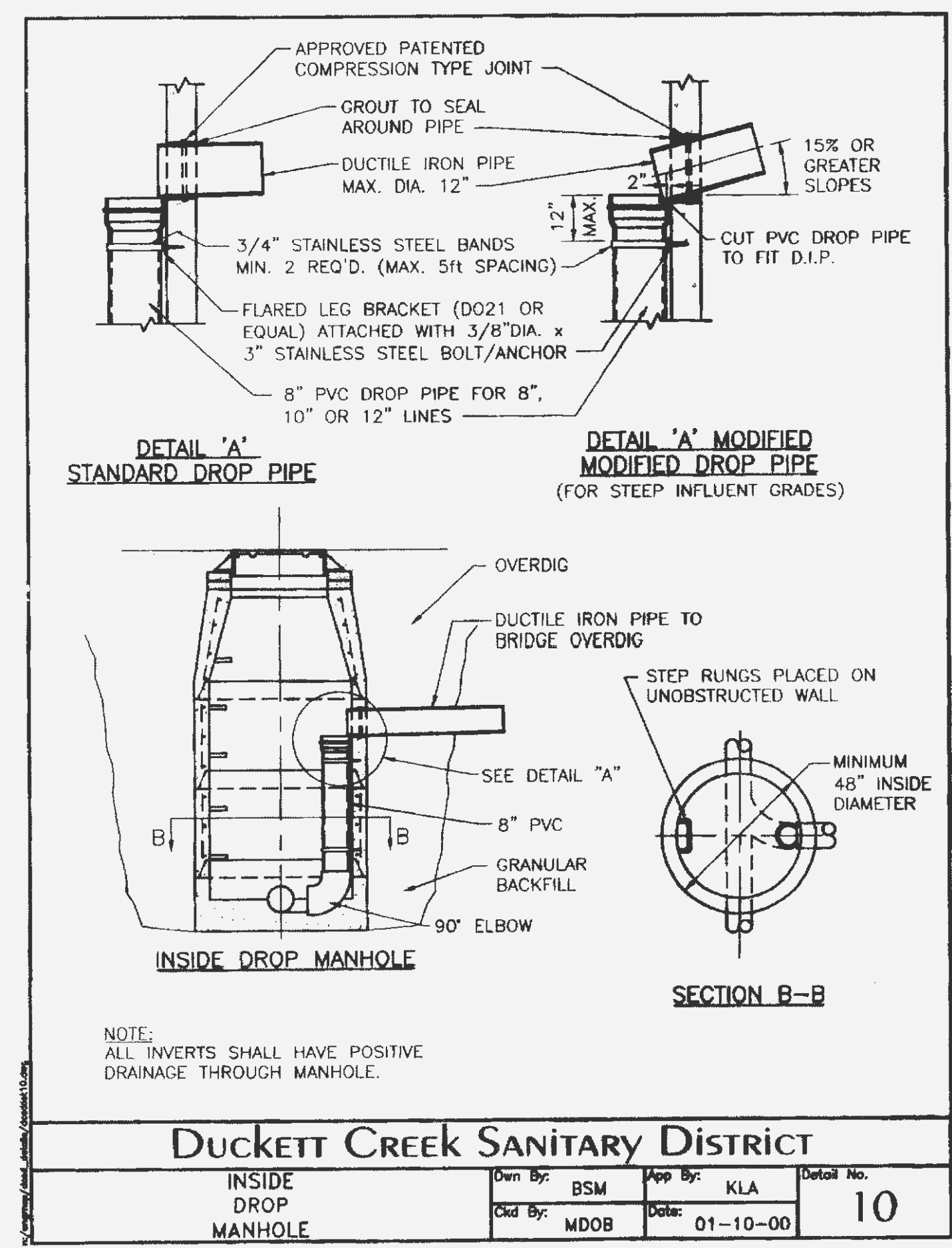
For mobile operations where workers are on foot and move with the operation, channelizers may be reduced or eliminated.

Supplemental warning methods may be used to call attention to the work zone.

Additional warning signs shall be erected at each intersection with another state highway within the work zone. Upon the discretion of the supervisor, additional warning signs may be erected at other intersections within the work zone.

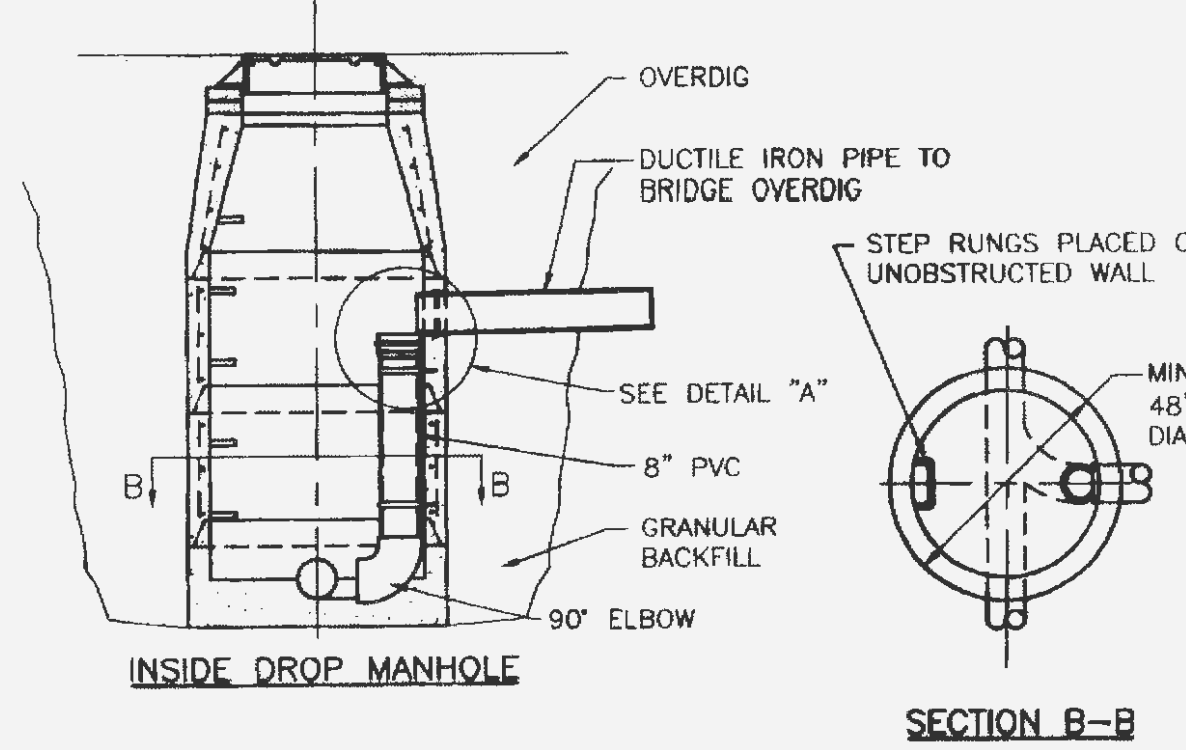


1A-12



DETAIL 'A' STANDARD DROP PIPE

DETAIL 'A' MODIFIED DROP PIPE (FOR STEEP INFLUENT GRADES)



INSIDE DROP MANHOLE

SECTION B-B

NOTE:
ALL INVERTS SHALL HAVE POSITIVE DRAINAGE THROUGH MANHOLE.

Duckett Creek Sanitary District

INSIDE DROP MANHOLE	Drawn By: BSM	App By: KLA	Detail No. 10
	Check By: MDOB	Date: 01-10-00	

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