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HOOVER & K-42 INTERSECTION

TRAFFIC SIGNALIZATION PLAN

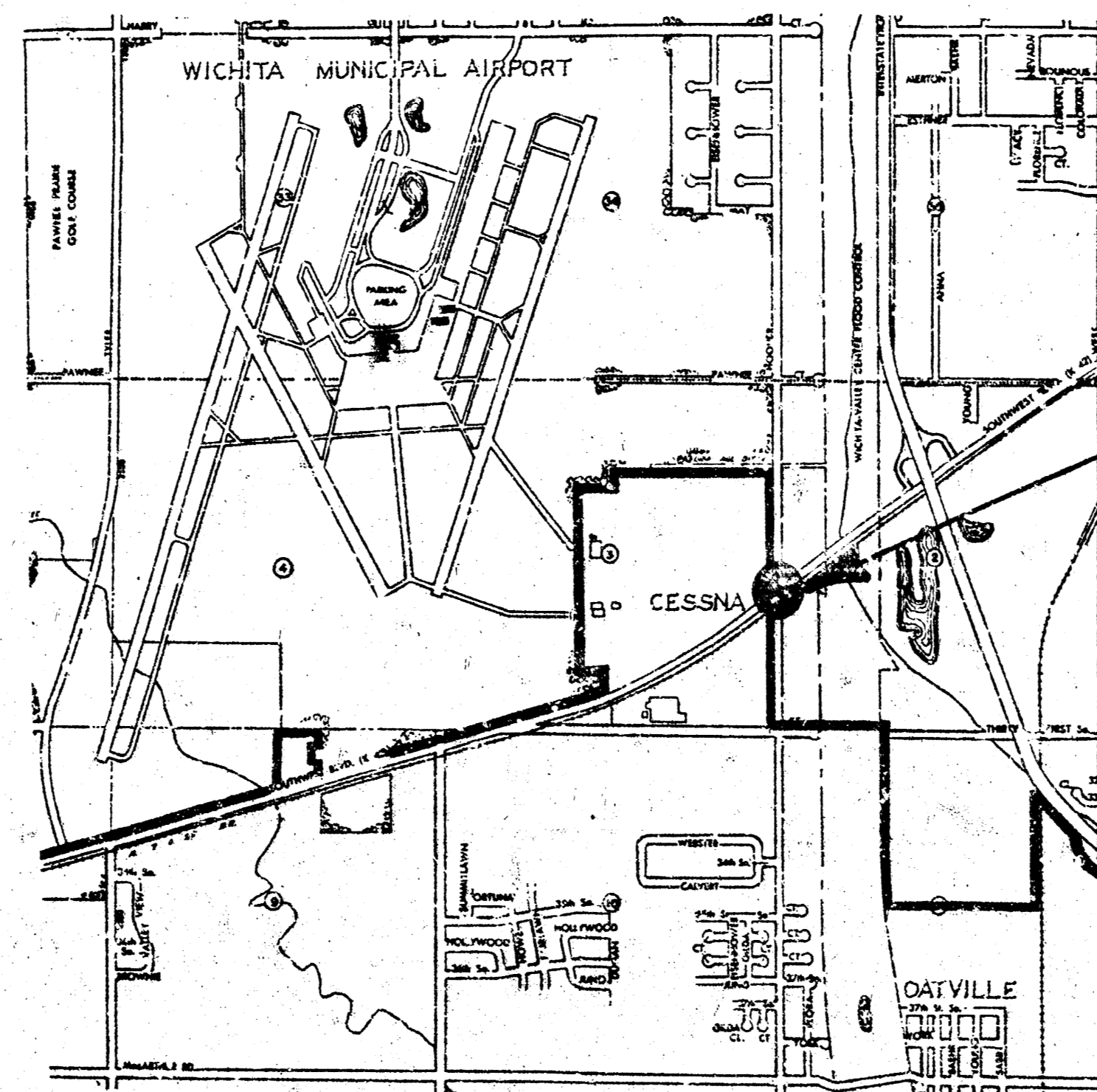
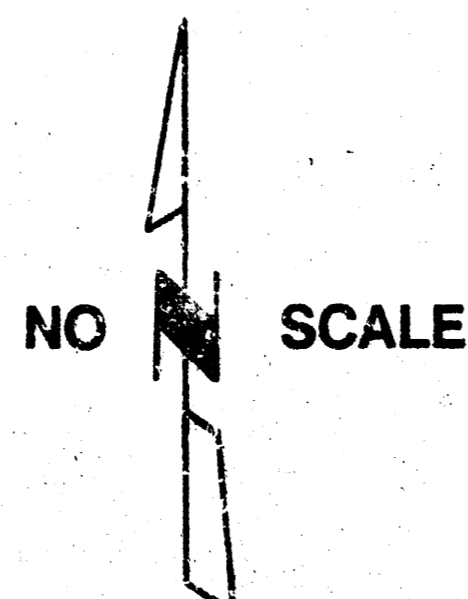
Project No. : 472-76-245-82231-000-000-001

Index # : 710103

GENERAL NOTES:

1. Traffic is to be carried through construction at all times.
2. Existing utilities and their locations, as shown on the plans, represent the best information obtainable for design. The Contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.
3. Rubble from the removal of miscellaneous structures and excess excavation which is to be wasted shall be disposed of on sites to be provided by the Contractor. These sites shall be approved by the engineer as to suitability, appearance and site location. Locations that, in the opinion of the Engineer, will have an unsightly appearance will not be approved.
4. Conduits shall be jacked under existing pavement as necessary.
5. The lump sum price paid for "Traffic Signal Installation" shall be considered full compensation for all labor, tools, materials, equipment and incidentals necessary for the complete installation and satisfactory operation of the proposed traffic signal.
6. Existing turfed areas, disturbed by construction, shall be restored by sodding. This work shall not be paid for directly, but shall be considered subsidiary to the lump sum bid item "Traffic Signal Installation".
7. The contractor shall be required to provide a minimum advance notice of forty-eight (48) hours to each of the following utility companies prior to the beginning of construction and request that any existing lines be flagged:

- | | |
|---|--|
| Kansas One-Call
(For exact location of all underground utilities)
1-800-344-7483 or
316-687-2470 (Local) | KG&E, The Electric Company
1900 East Central
Wichita, Kansas 67214
Don Morgan
316-261-6434 |
| KP&L Gas Service
1021 East 26th Street North
Wichita, Kansas 67219
Calvin Brummer
316-832-0012 | Multi Media Cablevision
701 East Douglas
Wichita, Kansas 67202
Don Shue
316-262-4270 |
| Southwestern Bell Telephone Company
154 North Broadway
Wichita, Kansas 67202
Neal McClanahan
316-268-2245 | Coroco Pipe Line company
8001 Oak Knoll
Wichita, Kansas 67207
Bret Bowen
316-681-3746 |
| City of Wichita
455 North Main
Wichita, Kansas 67202
Water: Dick McClintock
316-268-4533
Sanitary & Storm Sewer:
Steve Palmer
316-268-4210 | |



City of Wichita, Kansas

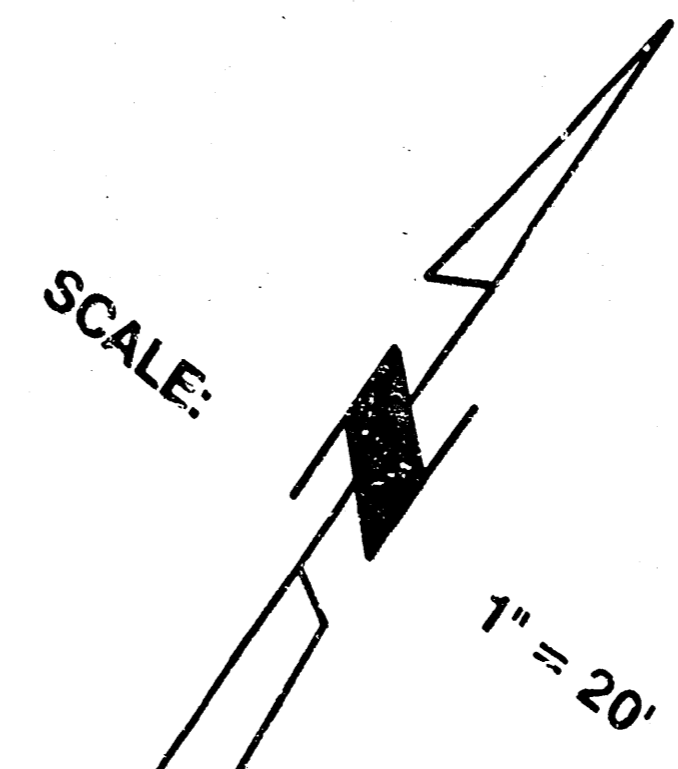
Michael E. Lindebak, P.E., City Engineer



DESCRIPTION	
HOOVER & K-42 INTERSECTION	
TITLE SHEET	
SCALE: NO SCALE	APPROVED BY:
DATE: JULY 92	DRAWN BY: JKB
CITY OF WICHITA	
DEPARTMENT OF PUBLIC WORKS	
ENGINEERING DIVISION	
CITY ENGINEER	DRAWING NUMBER
MICHAEL E. LINDEBAK	

TYPE 170 CONTROLLER SETTINGS

INTERVAL	WAPITI PROGRAM PHASE								NORMAL DISPLAY													
	1	2	3	4	5	6	7	8	TIME CLOCK				FEATURES									
	WBLT	EB	SBLT	NB	EBLT	WB	NBLT	SB	C				F									
MAX	0	20	80		60	20	80	60	0	1	2	3	4	5	6	7	8	VEH RECALL	X	X	X	X
MAX 2	1	20	80		60	20	80	60	1	2	3	4	5	6	7	8	PED RECALL					
WALK	2	0	0		0	0	0	0	2	3	4	5	6	7	8	RED LOCK						
FL DW	3	0	0		0	0	0	0	3	4	5	6	7	8	YEL LOCK	X	X	X	X			
MAX INIT.	4	8	15		15	6	15	15	4	5	6	7	8	Ø PERMIT	X	X	X	X				
MIN GREEN	5	5	15		8	5	15	8	5	6	7	8	PED PHASES									
TBR	6	1.0	15		15	1.0	15	15	6	7	8	LEAD PHASES	X	X	X	X						
TTR	7	1.0	25		25	1.0	25	25	7	8	DBL ENTRY											
	8										SEQUENTIAL											
PASSAGE	9	1.0	3.0		4.0	1.0	3.0	4.0	9	START UP												
MIN GAP	a	1.0	1.5		2.0	1.0	1.5	2.0	a	OVERLAP A												
ADD ACT	b	1.0	2.5		2.5	1.0	2.5	2.5	b	OVERLAP B												
YELLOW	c	3.5	5.0		4.0	3.5	5.0	4.0	c	OVERLAP C												
RED CLR	d	1.5	1.5		2.0	1.5	1.5	2.0	d	OVERLAP D												
RED REV	e								e	EXCLUSIVE												
WALK II	f								f	SIM GAP												



Type 170 Traffic Controller System to include:

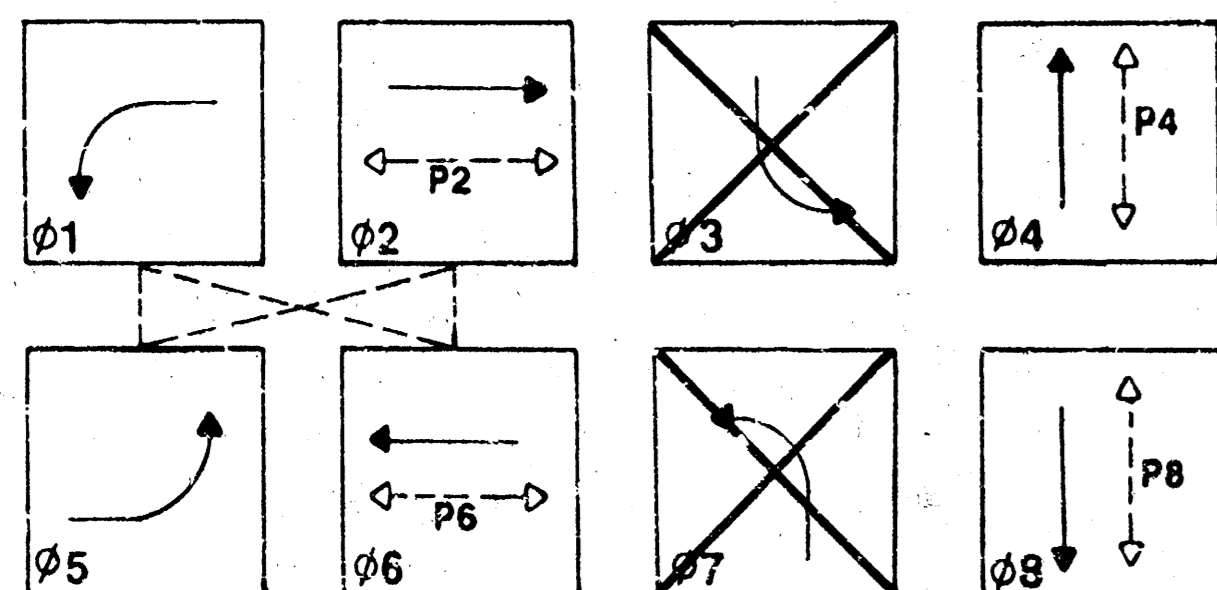
One (1) Model 170 Controller Unit complete with 412 System Memory Module capable of supporting WAPITI Micro System W4IKS (latest revision) Traffic Program and one (1) Model 400 Modem. Provide blank 27256 EPROM.

One (1) Model 332 Cabinet complete with all accessories including four (4) Model 430 Transfer Relays, two (2) Model 204 Flasher Units and one (1) Model 210pc Conflict Monitor.

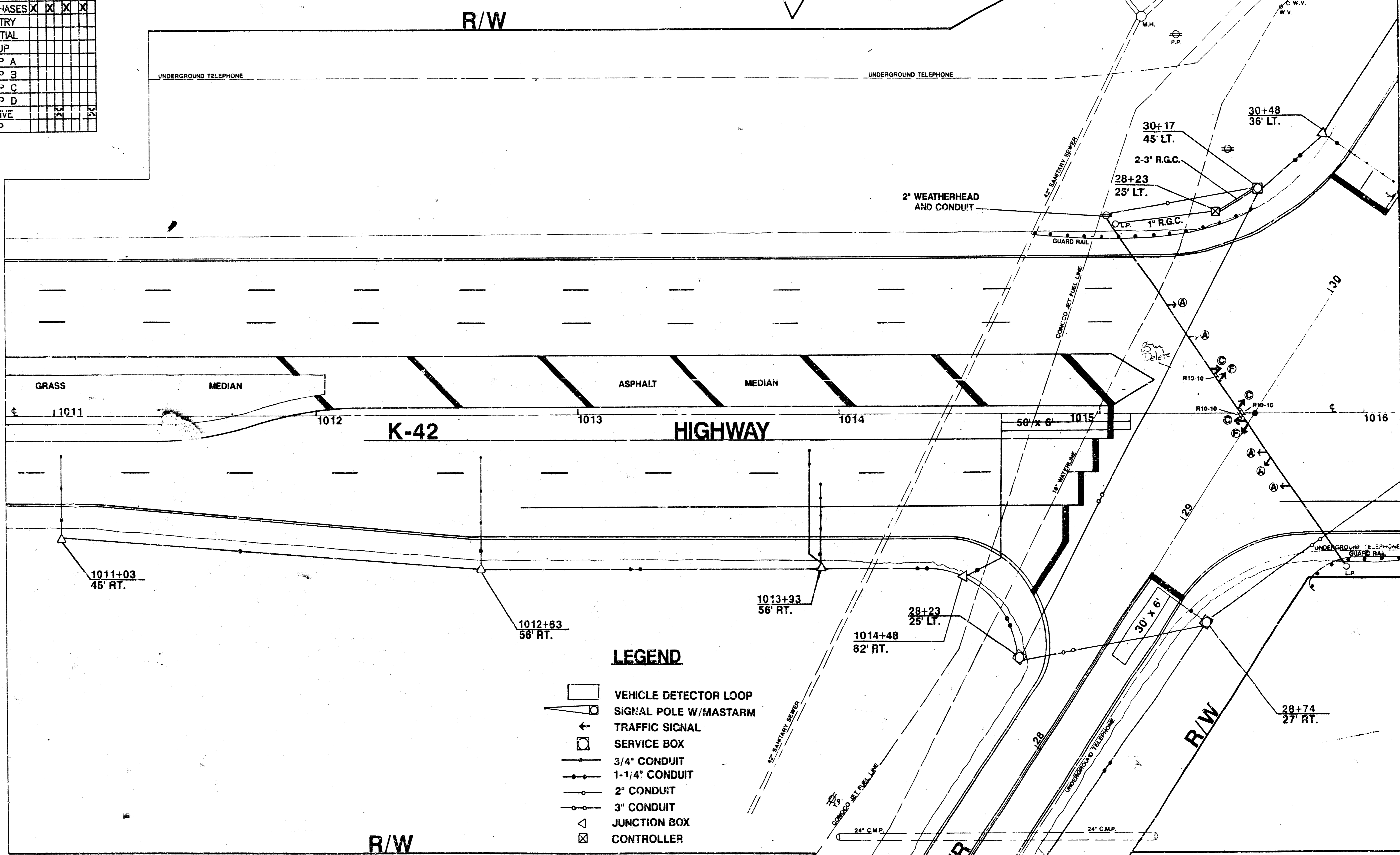
One (1) Model 242 Two Channel Isolators

Twelve (12) Model 222 Two Channel Loop Detector Sensor Units

Ten (10) Model 200 Switch Packs



SIGNAL PHASING

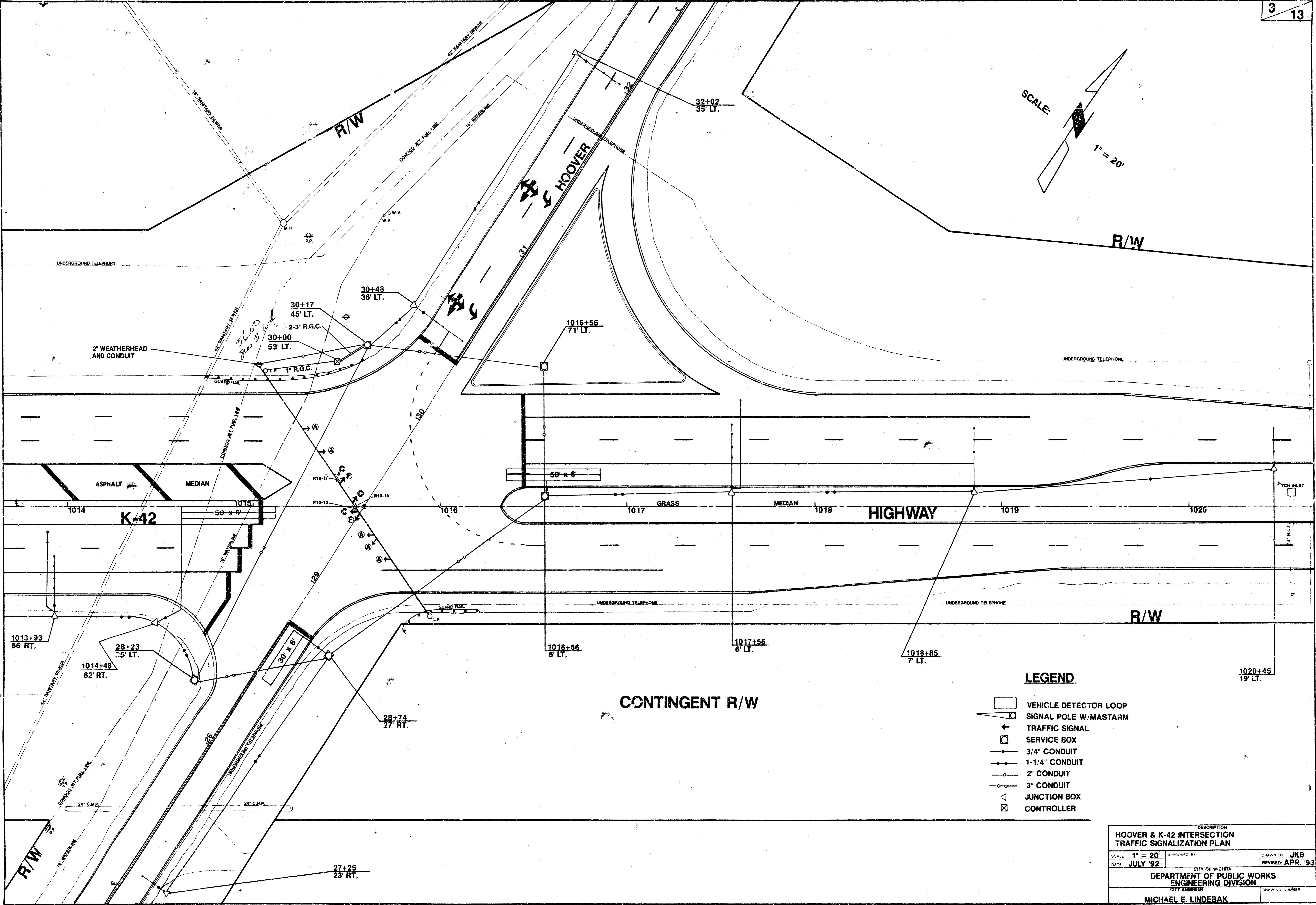
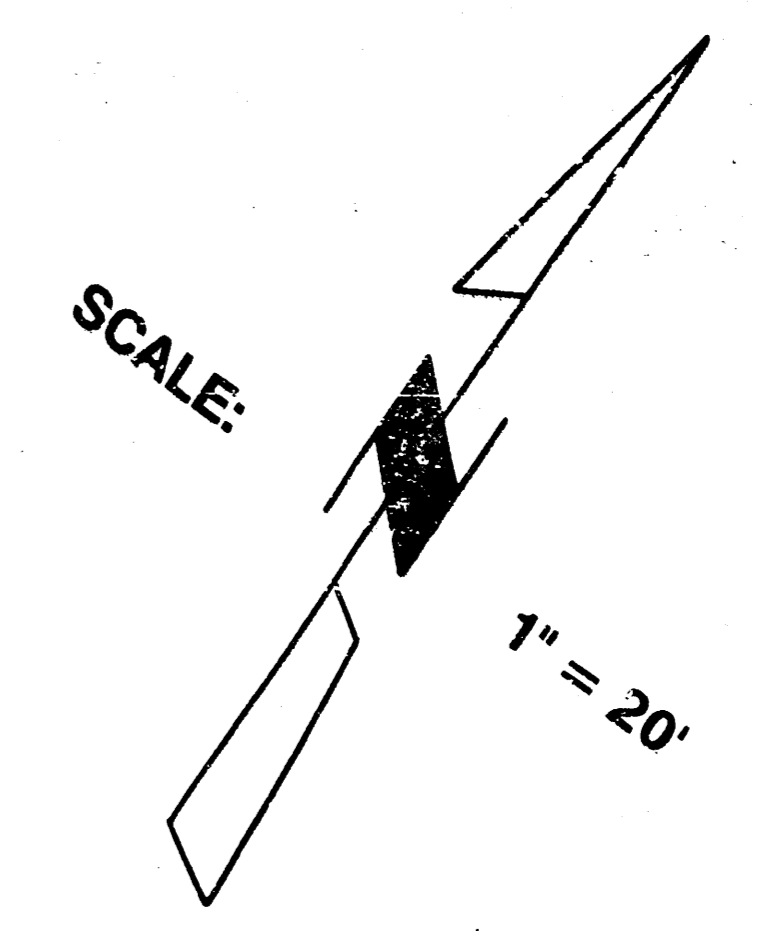


LEGEND

- VEHICLE DETECTOR LOOP
- SIGNAL POLE W/MASTARM
- TRAFFIC SIGNAL
- SERVICE BOX
- 3/4" CONDUIT
- 1-1/4" CONDUIT
- 2" CONDUIT
- 3" CONDUIT
- JUNCTION BOX
- CONTROLLER

DESCRIPTION
HOOVER & K-42 INTERSECTION
TRAFFIC SIGNALIZATION PLAN

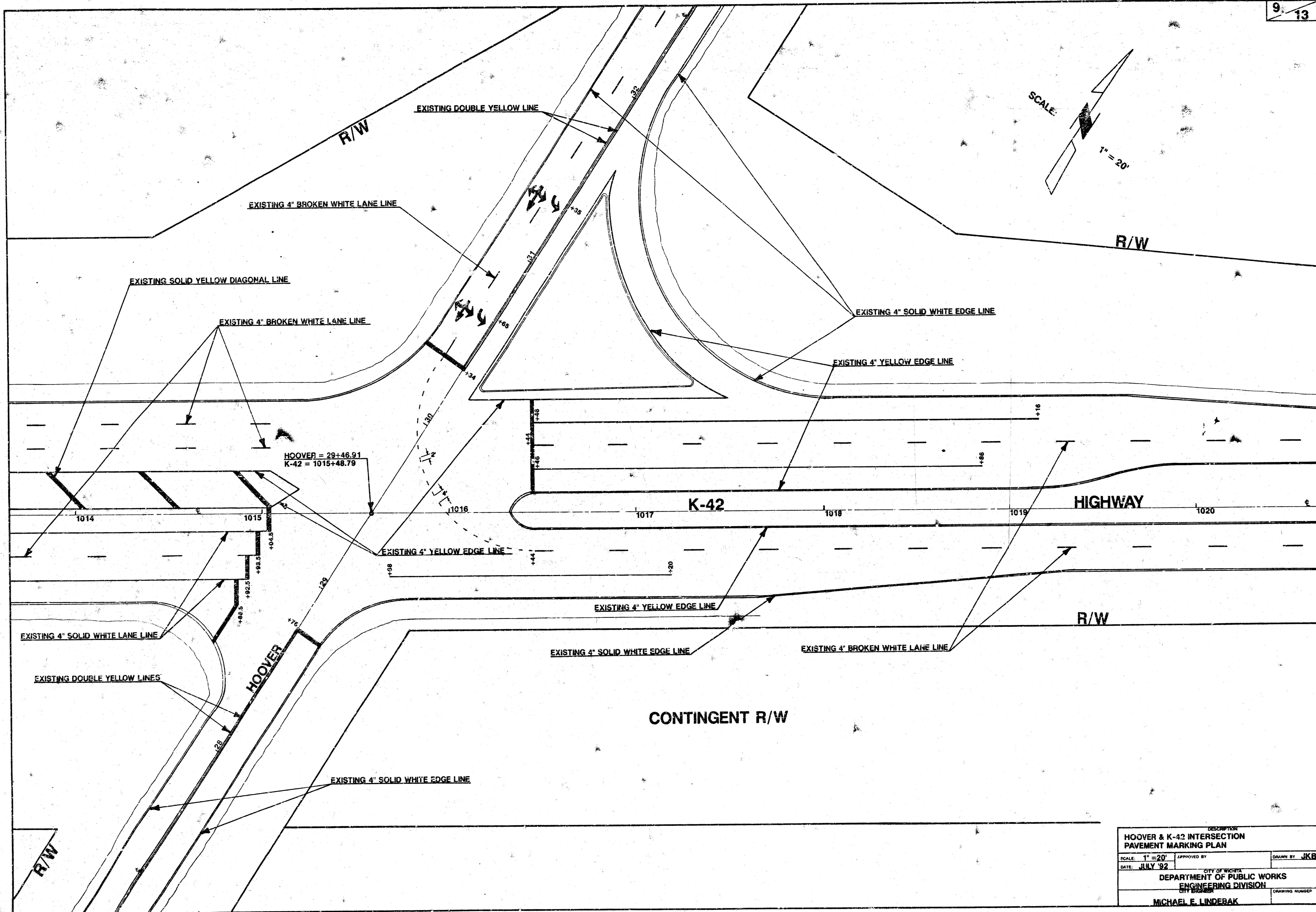
SCALE 1" = 20' APPROVED BY _____ DRAWN BY JKB
 DATE JULY '92 CITY OF WICHITA
 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING DIVISION
 MICHAEL E. LINDEBAK



LEGEND

- VEHICLE DETECTOR LOOP
- SIGNAL POLE W/MASTARM
- TRAFFIC SIGNAL
- SERVICE BOX
- 3/4" CONDUIT
- 1-1/4" CONDUIT
- 2" CONDUIT
- 3" CONDUIT
- JUNCTION BOX
- CONTROLLER

DESCRIPTION		HOOPER & K-42 INTERSECTION TRAFFIC SIGNALIZATION PLAN	
SCALE	1" = 20'	APPROVED BY	CITY OF WICHITA
DATE	JULY 92	DRAWN BY	JKB
		REVISED	APR. '93
DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION			
CITY ENGINEER		DRAWING NUMBER	
MICHAEL E. LINDERAK			

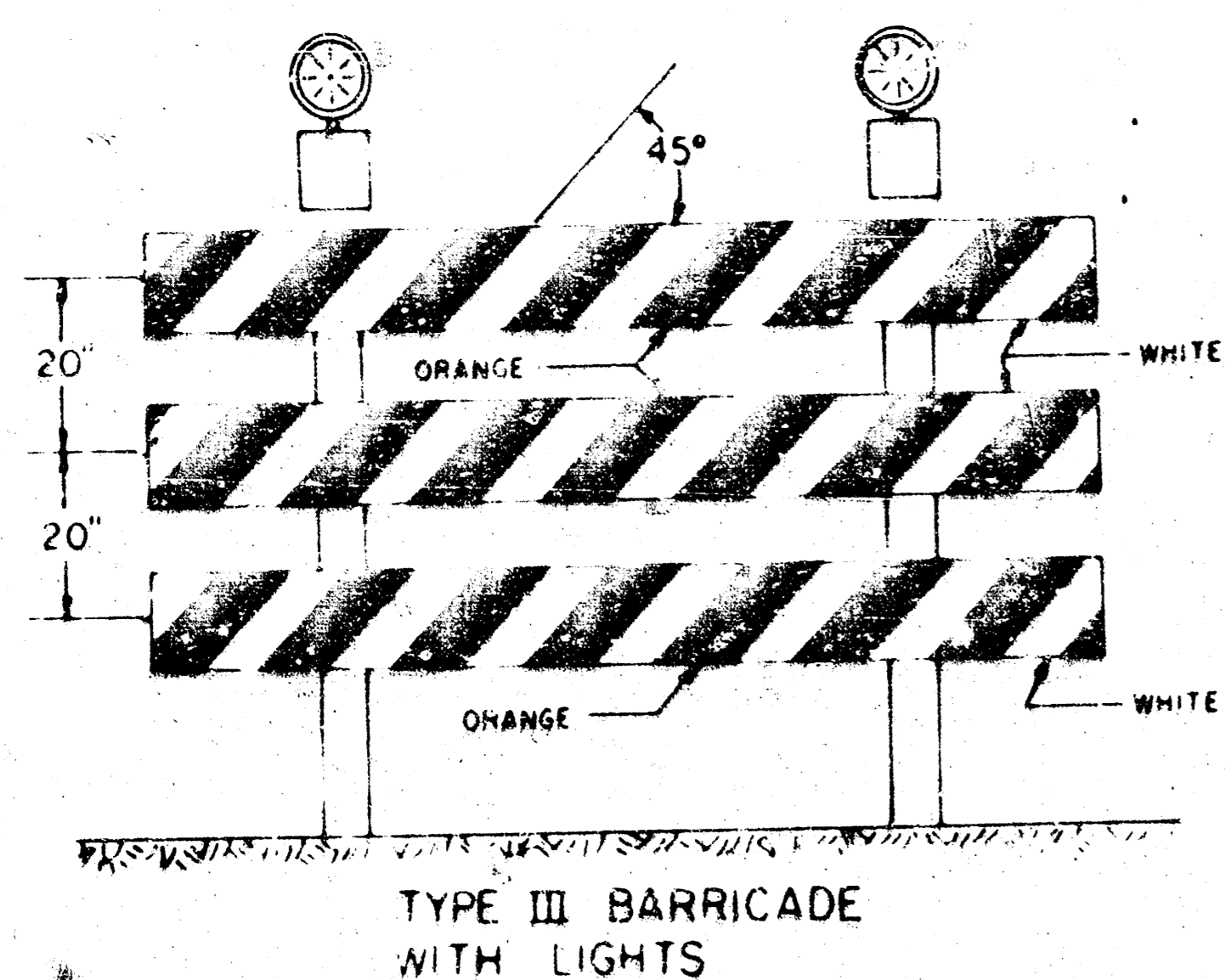


DESCRIPTION		DRAWN BY	
HOOVER & K-42 INTERSECTION PAVEMENT MARKING PLAN		JKB	
SCALE: 1" = 20'	APPROVED BY		
DATE: JULY '92	CITY OF WICHTA		
DEPARTMENT OF PUBLIC WORKS			
ENGINEERING DIVISION			
CITY ENGINEER		DRAWING NUMBER	
MICHAEL E. LINDBAK			

TRAFFIC CONTROL DEVICES

FEDERAL REGION NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS	472-78-245-82231-000-028-001	1980	11	13

CHANNELIZING DEVICES



NOTE:

A minimum of two Type A lights shall be used at each location where a Type III barricade or barricades are used. A light shall be mounted on the outside corner at the end barricades when more than one is used. The lens shall be a minimum of 7" in diameter.

BARRICADE CHARACTERISTICS	TYPE*		
	I	II	III
WIDTH OF RAIL***	8" MIN-12" MAX	8" MIN-12" MAX	8" MIN-12" MAX
LENGTH OF RAIL***	2 FT. MIN	4 FT. MIN	4 FT. MIN
WIDTH OF STRIPES**	6 IN.	6 IN.	6 IN.
HEIGHT	3 FT. MIN	3 FT. MIN	5 FT. MIN
NUMBER OF REFLECTORIZED RAIL FACES	2 (ONE EACH DIRECTION)	4 (TWO EACH DIRECTION)	3 IF FACING TRAFFIC IN ONE DIRECTION 6 IF FACING TRAFFIC IN TWO DIRECTIONS

- * FOR WOODEN BARRICADES NOMINAL LUMBER DIMENSIONS WILL BE SATISFACTORY
- ** FOR RAILS LESS THAN 3 FEET LONG, 4 INCH WIDE STRIPES SHALL BE USED
- *** BARRICADES INTENDED FOR USE ON EXPRESSWAYS, FREEWAYS, AND OTHER HIGH SPEED ROADWAYS SHALL HAVE A MINIMUM OF 270 SQUARE INCHES OF REFLECTIVE AREA FACING TRAFFIC.

WARNING LIGHTS

WARNING LIGHTS SHALL BE IN ACCORDANCE WITH THE CURRENT IBE PURCHASE SPECIFICATIONS FOR FLASHING AND STEADY BURN WARNING LIGHTS.

TYPE A LOW INTENSITY FLASHING WARNING LIGHTS AND TYPE C STEADY BURN WARNING LIGHTS SHALL BE MAINTAINED SO AS TO BE CAPABLE OF BEING VISIBLE ON A CLEAR NIGHT FROM A DISTANCE OF 3,000 FEET. TYPE B HIGH INTENSITY FLASHING WARNING LIGHTS SHALL BE MAINTAINED SO AS TO BE CAPABLE OF BEING VISIBLE ON A SUNNY DAY WHEN VIEWED WITHOUT THE SUN DIRECTLY ON OR BEHIND THE DEVICE FROM A DISTANCE OF 1,000 FEET.

Type C steady burn lights are not to be used on reflectorized drums used in series.

NOTE:

ALL DEVICES SHALL COMPLY WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. WHENEVER THIS STANDARD CONFLICTS WITH THE MANUAL, THIS STANDARD SHALL GOVERN.

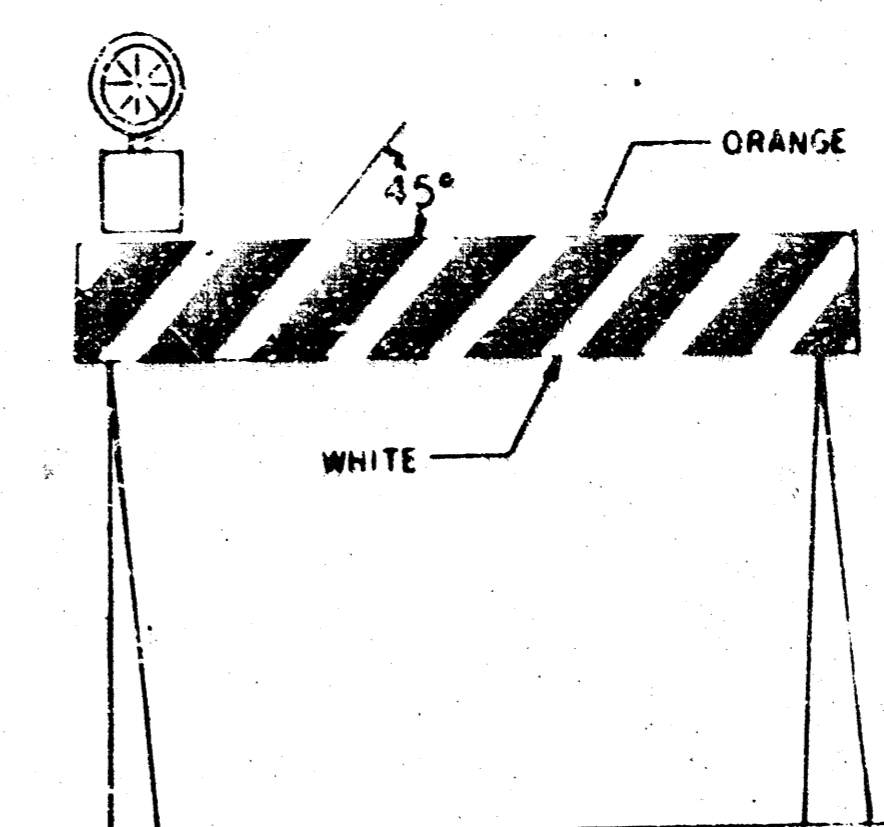
THE ENTIRE AREA OF BARRICADE RAILS AND VERTICAL PANELS ARE TO BE FULLY REFLECTORIZED WITH TYPE II HIGH PERFORMANCE REFLECTIVE SHEETING.

THE NON-METALLIC DRUMS SHALL BE FULLY REFLECTORIZED WITH TYPE II HIGH PERFORMANCE REFLECTIVE SHEETING. IF THERE ARE NON-REFLECTIVE SPACES BETWEEN ADJACENT STRIPES ON DRUMS, THEY SHALL BE NO MORE THAN 7" WIDE.

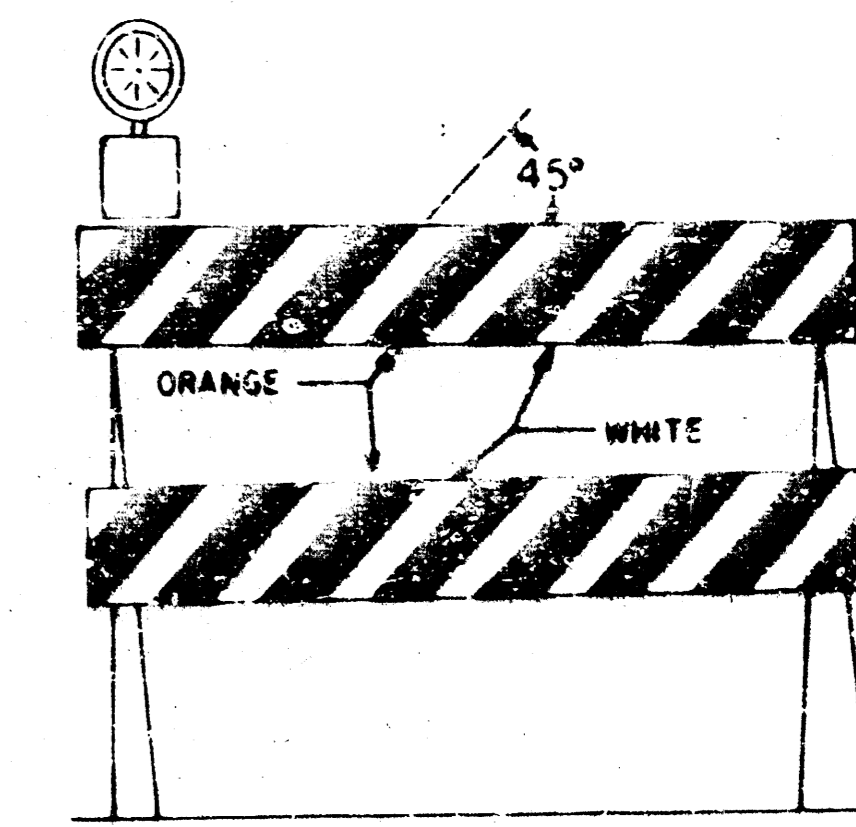
CHANNELIZING DEVICES PLACED ALONG SHOULDER EDGES OR IN DROPOFFS SHALL HAVE A MINIMUM OF 4" FROM THE TOP OF THE CHANNELIZING DEVICE TO THE TOP OF THE PAVEMENT.

THE MINIMUM HEIGHT OF CONES USED ON INTERSTATE AND FREEWAYS SHALL BE 78". ALL OTHER CLASSES OF ROADS ARE TO UTILIZE A CONE WITH A MINIMUM HEIGHT OF 18".

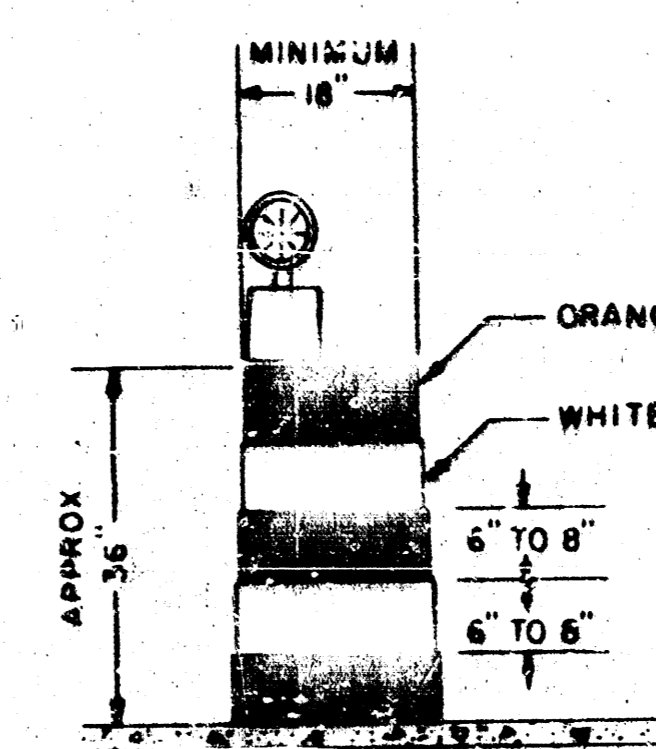
- A solid 4" wide pavement marking tape shall be placed along all transition tapers and crossovers.
- All conflicting pavement markings to be removed as directed by the Engineer.
- All conflicting signs shall be removed or covered as directed by the Engineer.



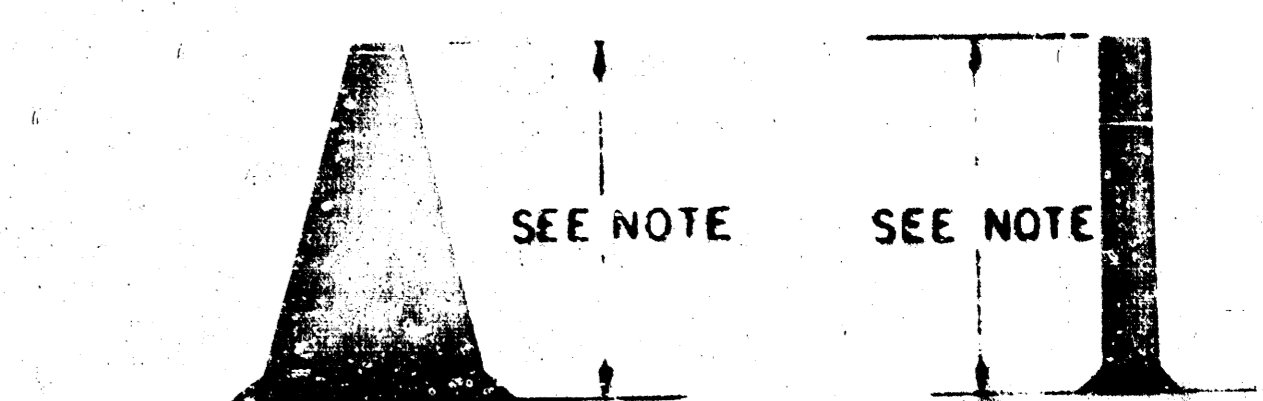
TYPE I BARRICADE WITH LIGHT



TYPE II BARRICADE WITH LIGHT

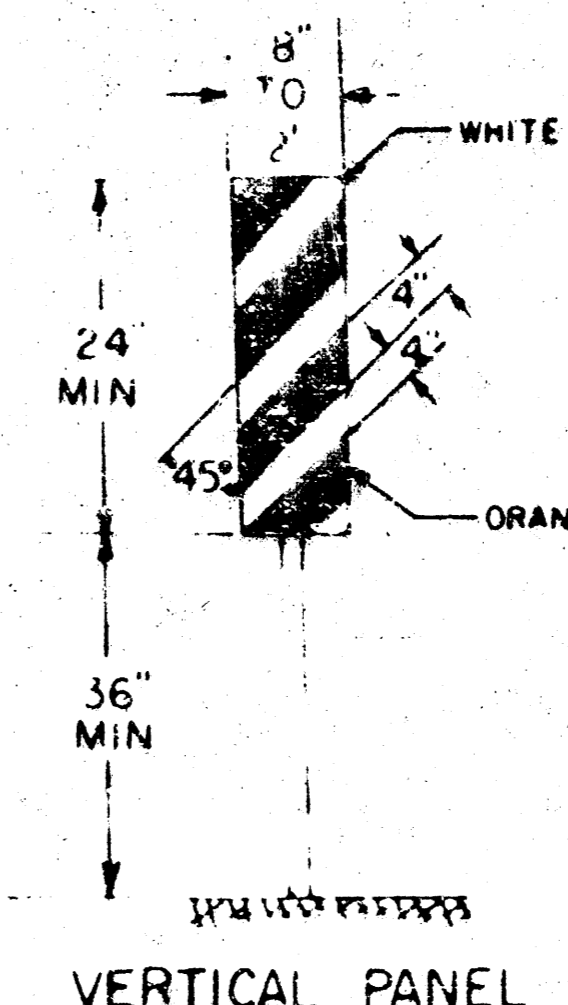


NON-METALLIC REFLECTORIZED DRUM WITH LIGHT

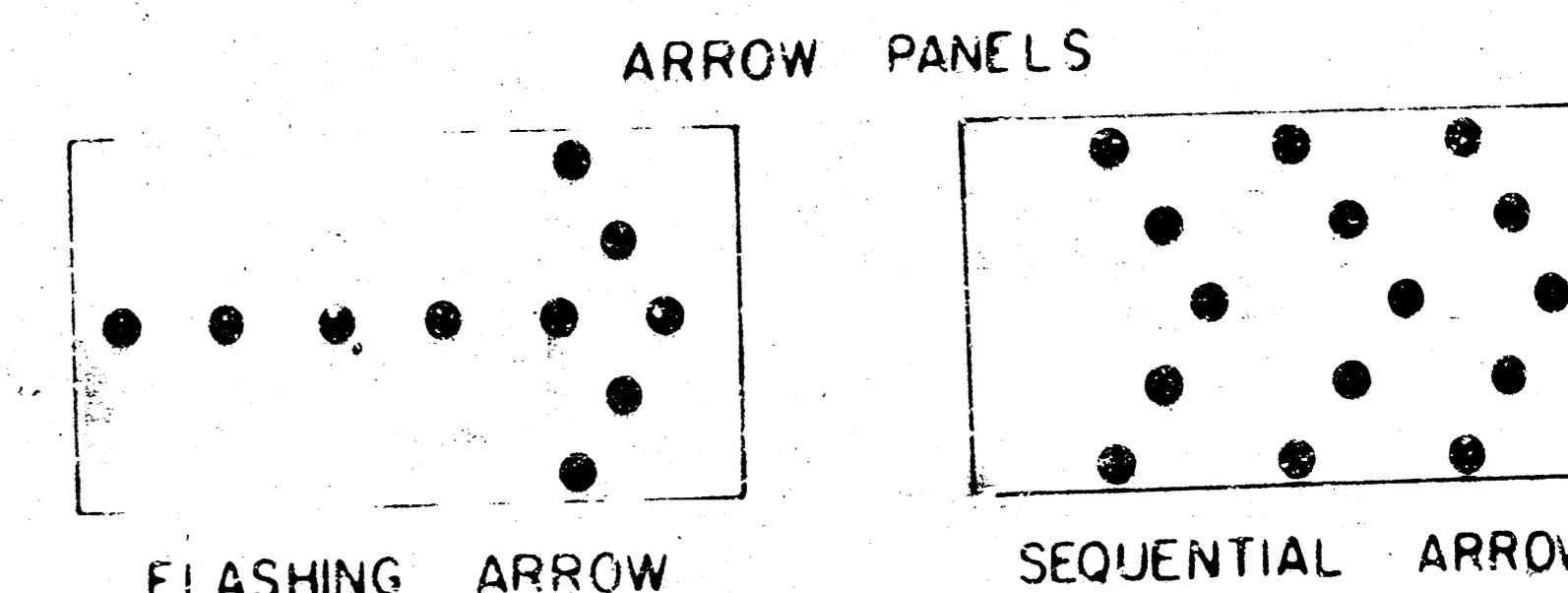


CONES ORANGE IN COLOR

LIGHTS USED ON CHANNELIZING DEVICES WHEN USED SINGLE TYPE "A" FLASHING WHEN USED IN SERIES TYPE "C" STEADY BURN THE LENS SHALL BE A MINIMUM OF 7" IN DIAMETER.

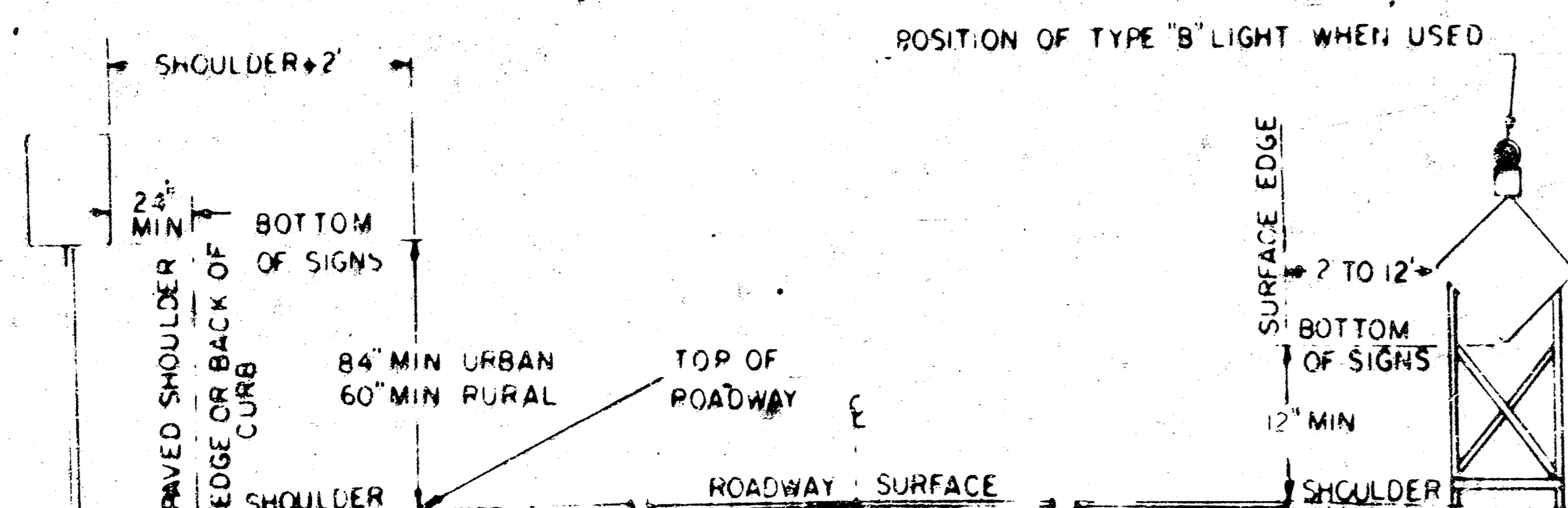


VERTICAL PANEL



FLASHING ARROW

SEQUENTIAL ARROW



HEIGHT AND LATERAL DIMENSIONS FOR SIGNS MOUNTED ON POSTS

HEIGHT AND LATERAL DIMENSIONS FOR SIGNS MOUNTED ON SKIDS OR OTHER MOVABLE MOUNTS.

SUPPORTS USED FOR MOUNTING SIGNS OR DEVICES FOR TEMPORARY CONDITIONS SHALL BE CONSTRUCTED TO YIELD UPON IMPACT TO MINIMIZE HAZARDS TO THE MOTORIST. ADDITIONAL SUPPORTS MAY BE PLACED ON THE BACK SIDE OF SIGNS IN THE FORM OF BRACING FOR RESISTING WIND CURRENTS. GUY WIRES AND TIE-DOWNS WILL NOT BE ALLOWED.

7	2-15-87	REVISED NOTE ON DRUM SHEETING	PR	AFT
6	4-29-87	ADD SIGN BRACING NOTE	PR	AFT
5	2-11-86	270 SQ IN MIN ON BARRICADE	LR	AFT
4	11-7-85	NON-METAL DRUM, NOTE, HI PERF SMTG.	LR	AFT
3	6-27-85	DRUM, CONE, DIMENSIONS & NOTES	PR	AFT
2	6-30-84	REVISE WARNING LIGHT SPECS	PR	AFT
1	11-30-81	REVISE HEIGHT OF TUBULAR MOUNTS	PR	AFT

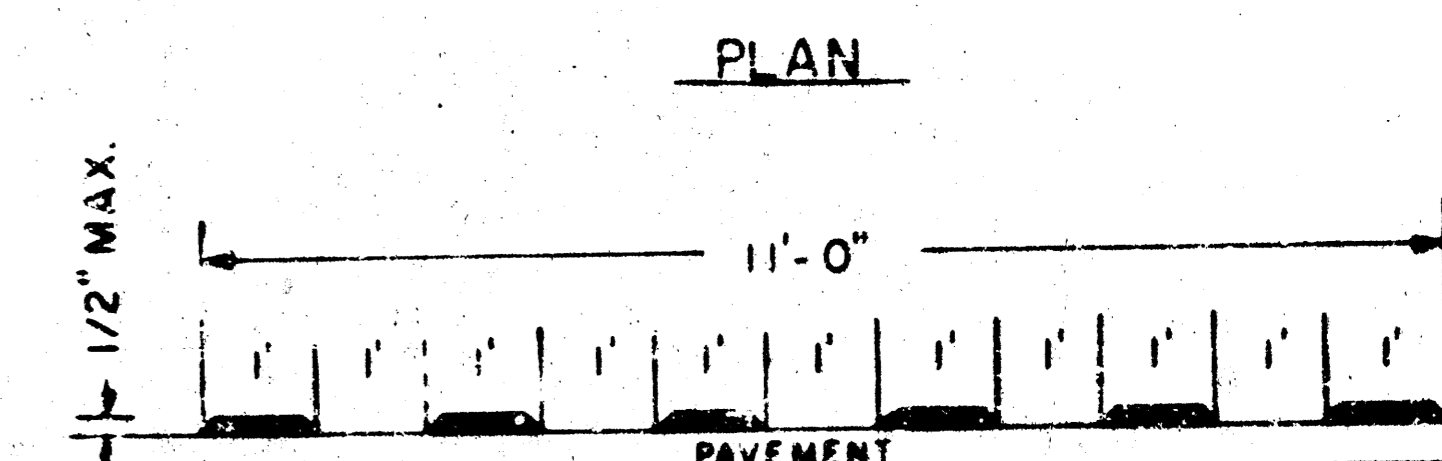
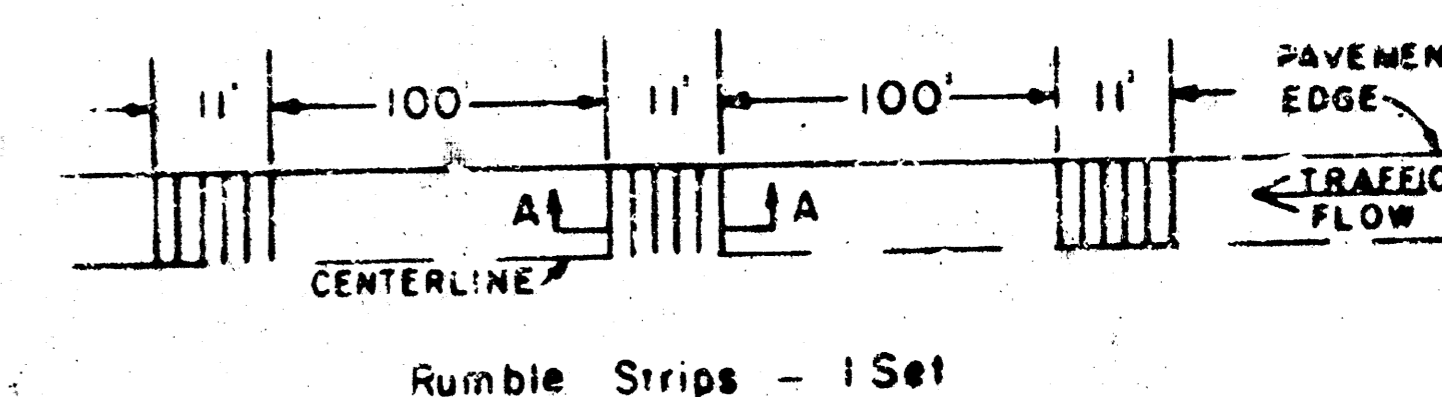
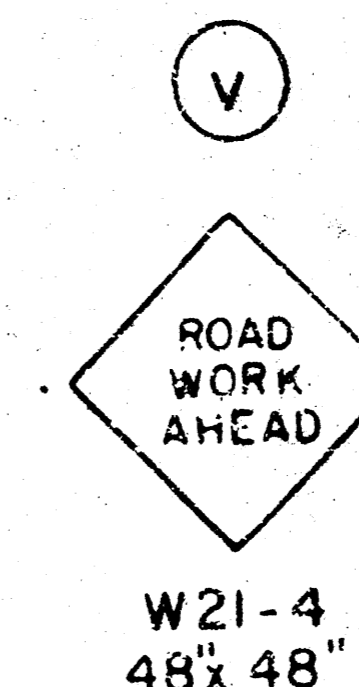
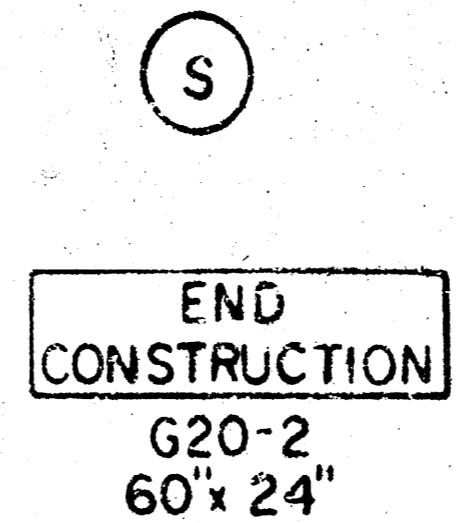
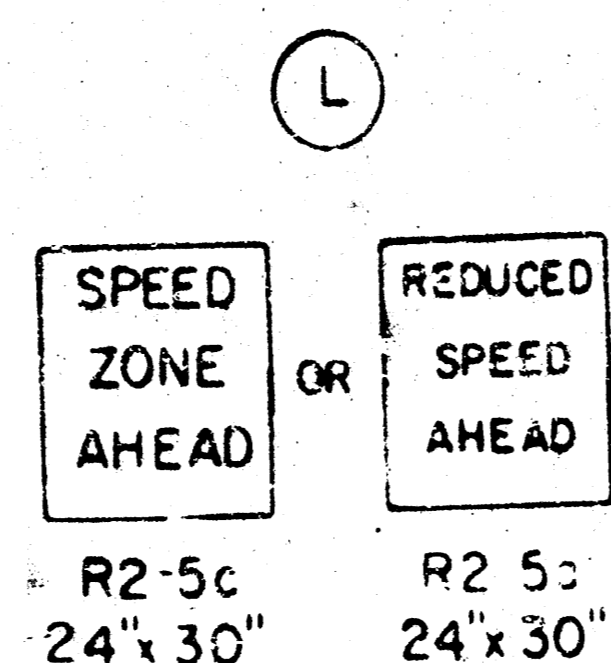
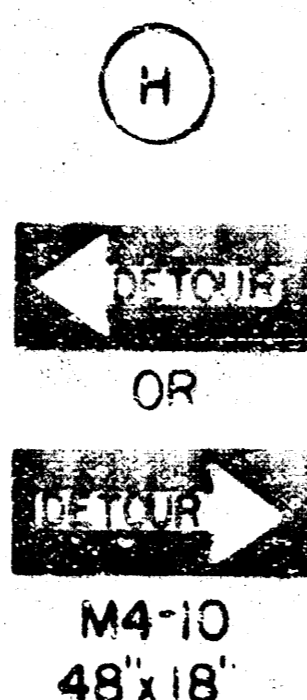
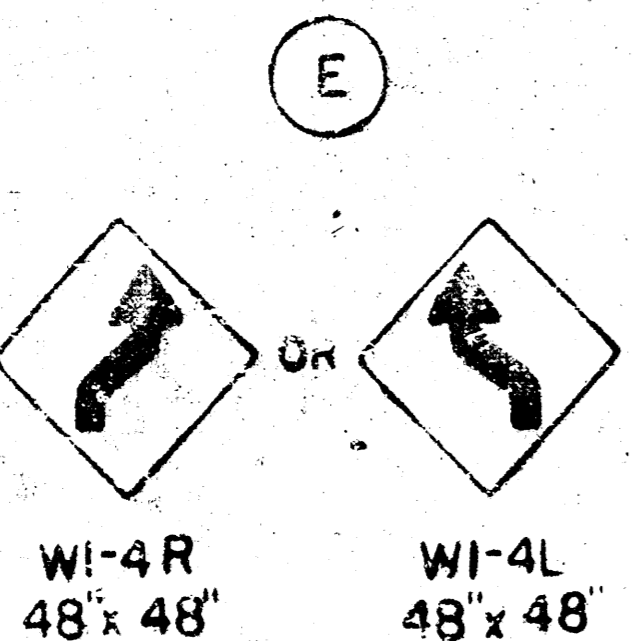
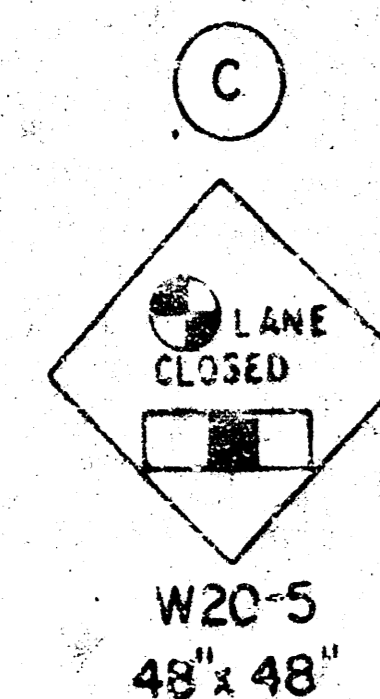
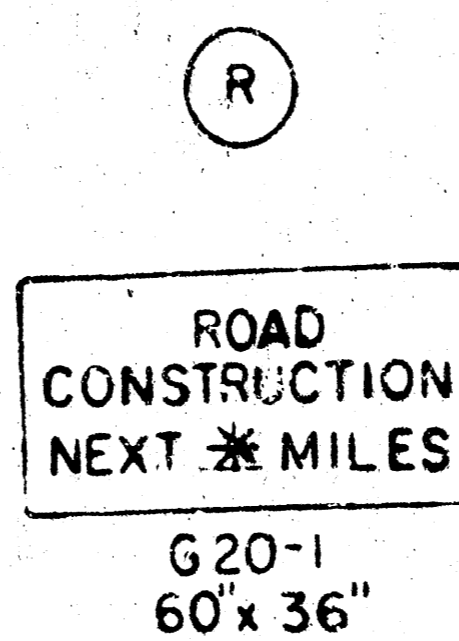
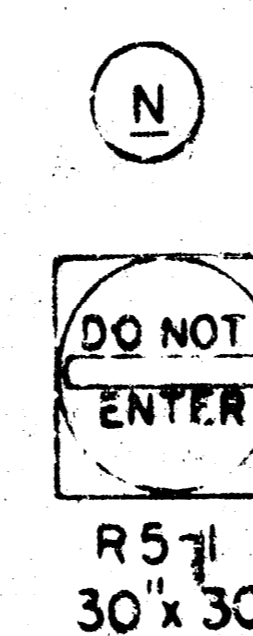
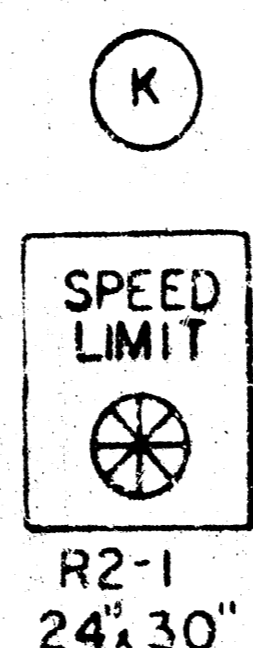
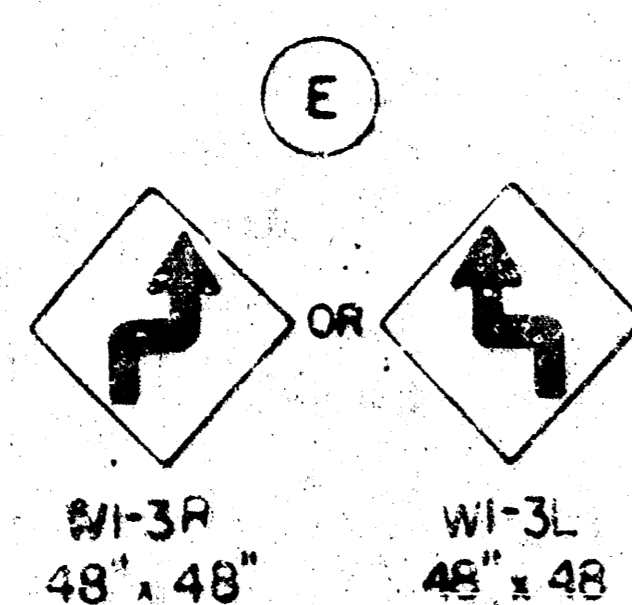
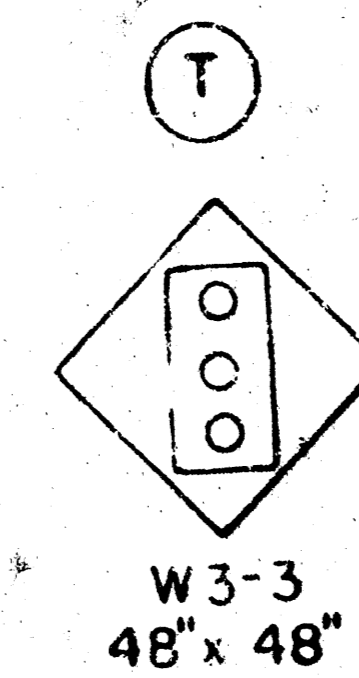
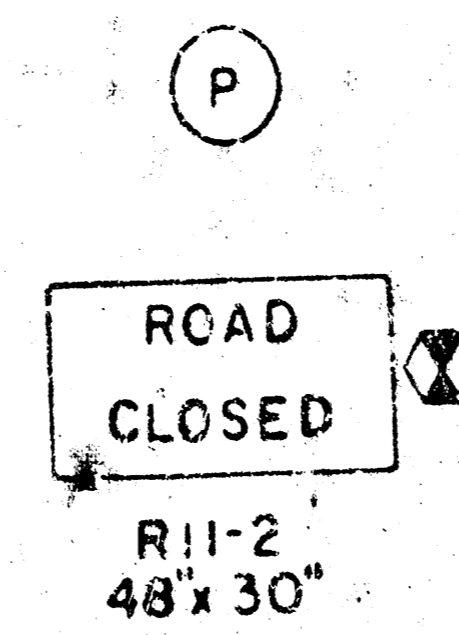
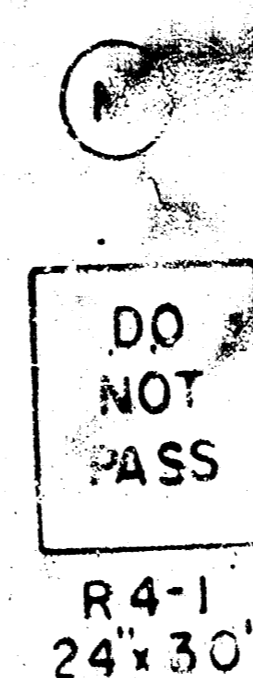
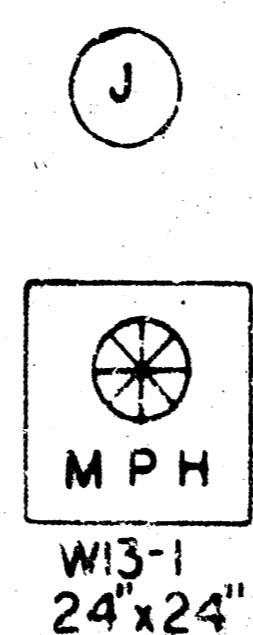
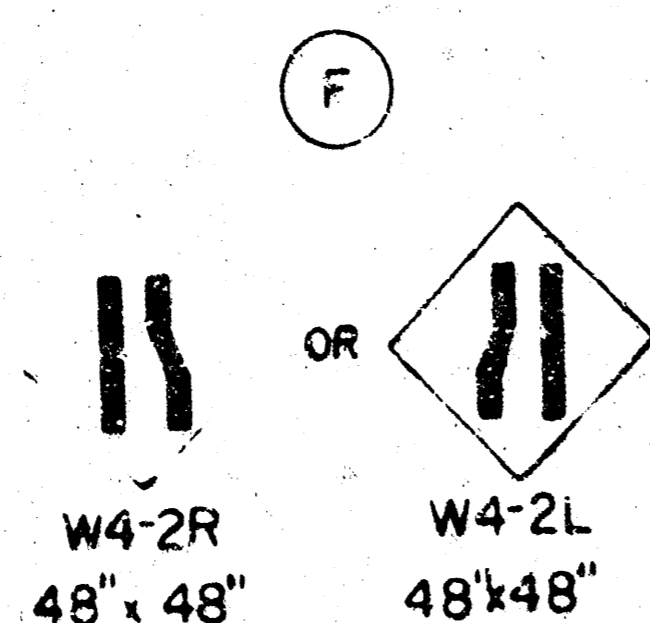
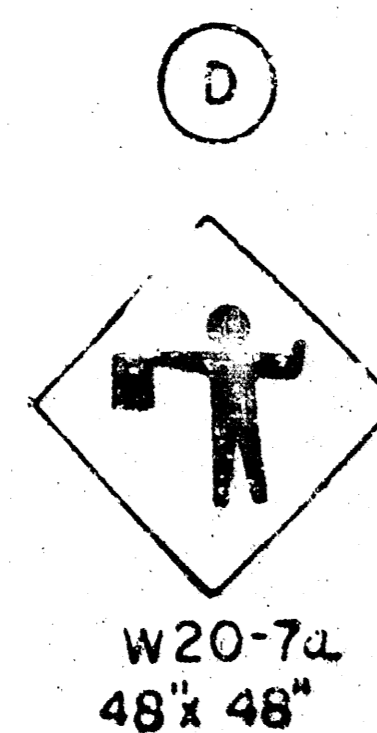
DESIGN DETAILS FOR BARRICADES, CHANNELIZING DEVICES AND SIGN MOUNTING LOCATIONS

STD. 752.1

10	DESIGNED BY	SCALE	APP'D	DATE
9	DESIGNED BY	SCALE	APP'D	DATE
8	DESIGNED BY	SCALE	APP'D	DATE
7	DESIGNED BY	SCALE	APP'D	DATE
6	DESIGNED BY	SCALE	APP'D	DATE
5	DESIGNED BY	SCALE	APP'D	DATE
4	DESIGNED BY	SCALE	APP'D	DATE
3	DESIGNED BY	SCALE	APP'D	DATE
2	DESIGNED BY	SCALE	APP'D	DATE
1	DESIGNED BY	SCALE	APP'D	DATE

TRAFFIC CONTROL DEVICES
FOR HANDLING TRAFFIC THROUGH CONSTRUCTION

FHWA REGION NO.	STATE	PROJECT NO.	YEAR	SHEET TOTAL
7	KANSAS	472-73-245-EG221 D-1-800-281		12 13
				INDEX #710102



TYPICAL RUMBLE STRIP
DETAILS

NOTE:
Materials for rumble strips to be furnished by K.D.O.T. Template, hauling, installation and removal is to be by the contractor. Payment is to be subsidiary to other bid items.

- AHEAD, 1500 FT or 1 MILE Whichever is applicable
- AHEAD, 1000 FT, 1500 FT, or 1/2 MILE Whichever is applicable
- RIGHT or LEFT.
- Speed to be determined by the Engineer.
- To be erected if project exceeds 2 miles in length * mileage to be shown to nearest whole mile.
- Use W1-3 for speeds of 30 MPH or less
- Use W1-4 for speeds over 30 MPH
- Signs (A), (B), (D) and (N) are to be 48" x 60" when used on interstate, freeways or express ways.
- Sign (U) to be eliminated if the safe driving speed is determined to be equal to the existing speed limit.

NOTE:

ALL DEVICES SHALL COMPLY WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. WHENEVER THIS STANDARD CONFLICTS WITH THE MANUAL, THIS STANDARD SHALL GOVERN.

ALL SIGNS SHALL BE FULLY REFLECTORIZED WITH TYPE II HIGH PERFORMANCE REFLECTIVE SHEETING, UNLESS OTHERWISE NOTED, IN ACCORDANCE WITH STANDARD SPECIFICATIONS OR ANY REVISION THERETO.

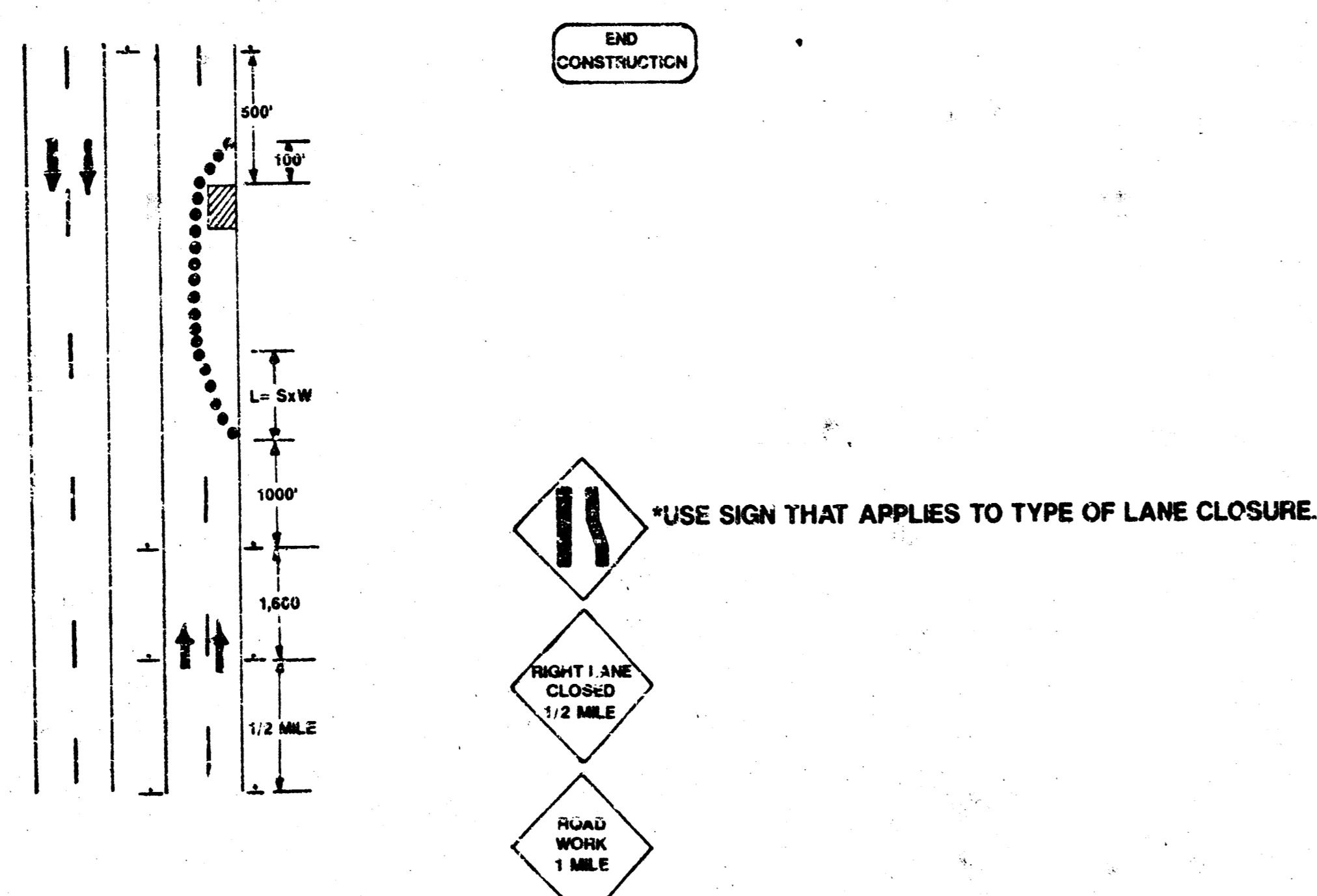
WHERE THE ROAD IS OPEN FOR LOCAL TRAFFIC BEYOND THE POINT OF CLOSURE, EITHER THE R11-5 ROAD CLOSED () MILES AHEAD LOCAL TRAFFIC ONLY OR THE R11-4 ROAD CLOSED TO THRU TRAFFIC SIGN IS TO BE ERRECTED IN PLACE OF THE R11-7 ROAD CLOSED SIGN.

NO.	DATE	REVISIONS	BY	APP'D.
6	7-10-89	REVISE NOTES	PR	APZ
5	2-11-86	NOTE: HIGH PERF. UNLESS NOTED	L.R.	A.F.T.
4	1-7-86	NOTE RE: MUTCD COMPL. & H.P. SHEETG.	L.R.	A.F.T.
3	8-30-84	ADD PAYMENT NOTE	P.R.	A.F.T.
2	8-3-81	R11-2 SIGN NOTE	P.R.	A.F.T.
1	11-14-80	RUMBLE STRIPS	P.R.	A.F.T.

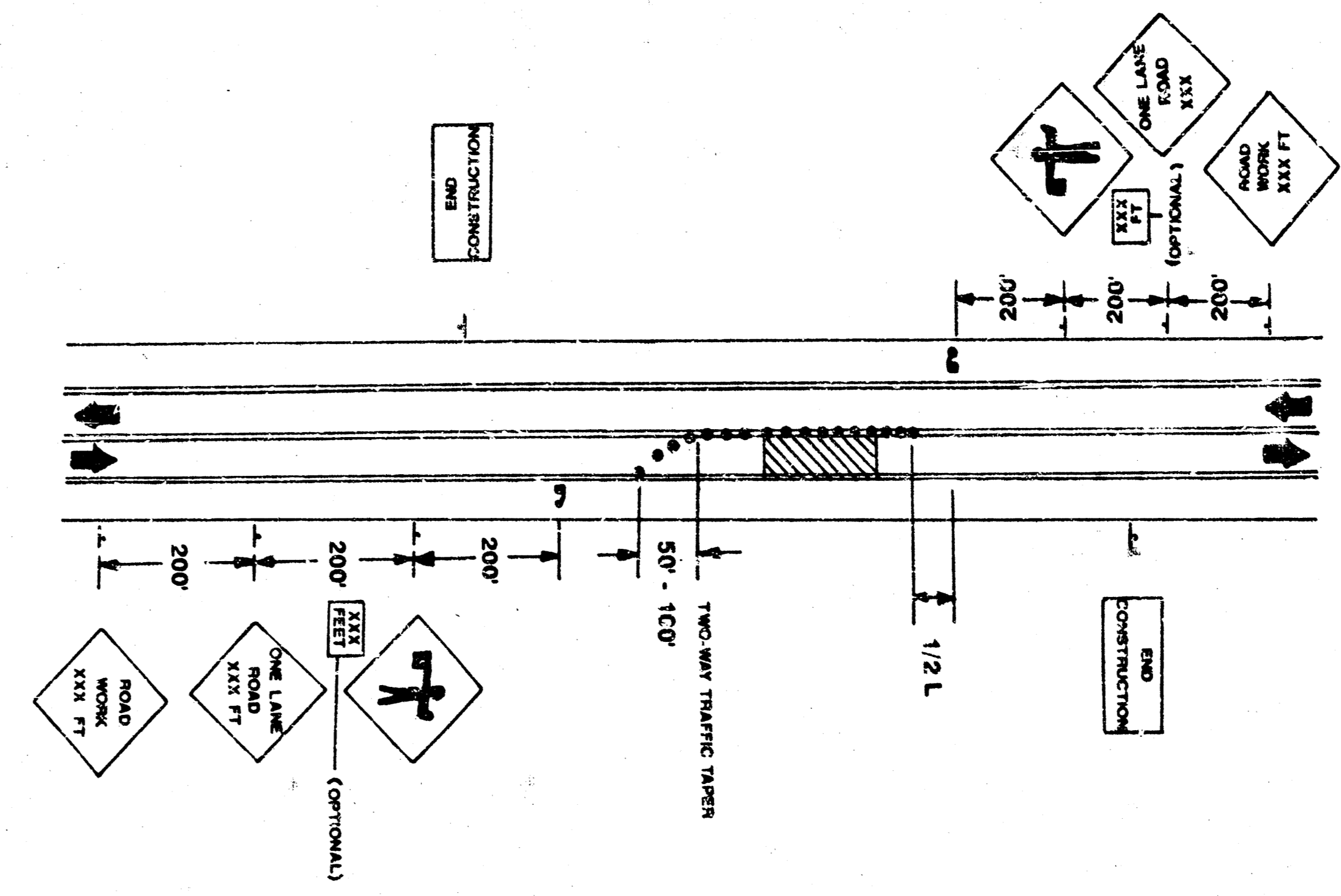
KANSAS DEPARTMENT OF TRANSPORTATION			
SIGNS FOR HANDLING TRAFFIC THROUGH CONSTRUCTION			
STD: 755			
FHWA APPROVAL	7-20-89	APP'D.	APZ
DESIGNED BY	DETAILS BY	QUANTITIES	TRACED
CHECKED BY	DETAILS BY	QUANTITIES	TRACED

FY/HA REGION NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS	472-76-245-82231-000-006-001	1992	13	13

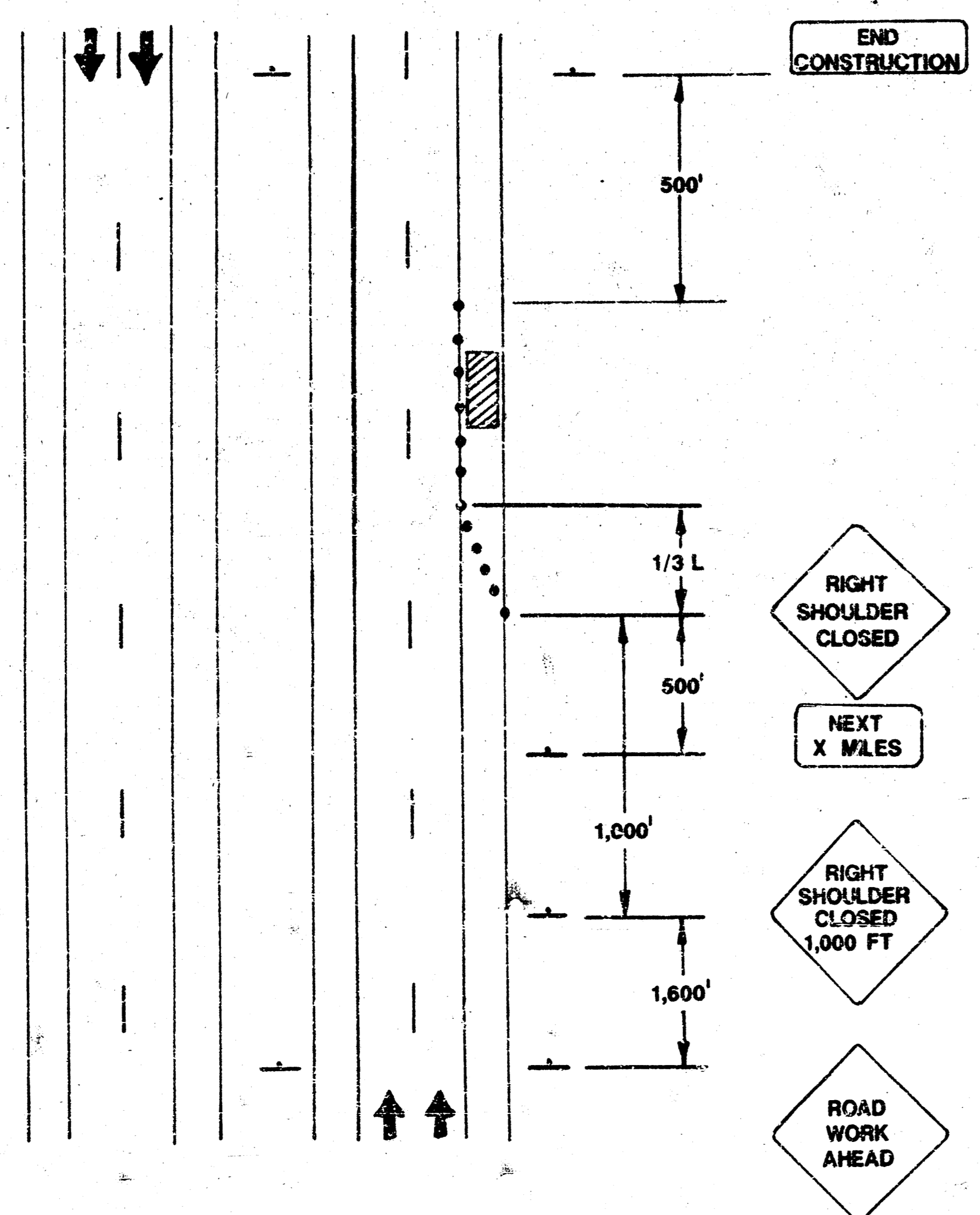
INDEX #710103



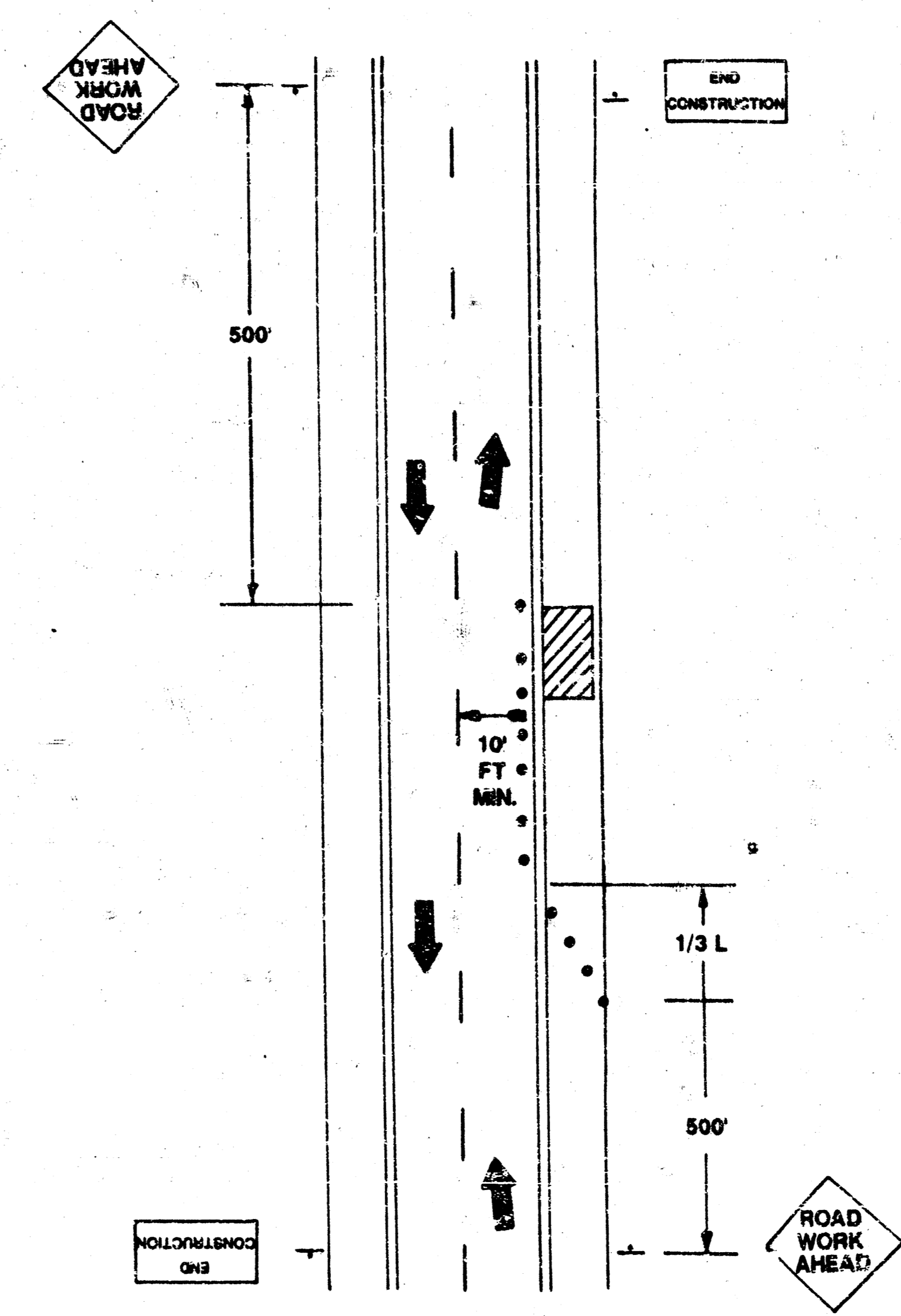
TYPICAL ONE LANE CLOSURE FOR K-42



TYPICAL ONE LANE CLOSURE FOR HOOVER



TYPICAL SHOULDER WORK FOR K-42



TYPICAL SHOULDER WORK FOR HOOVER

NOTE: ALL TRAFFIC CONTROL SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

DESCRIPTION	
HOOVER & K-42 INTERSECTION TRAFFIC CONTROL PLAN	
SCALE: 1" = 20'	APPROVED BY: _____
DATE: AUG. '92	DRAWN BY: JKB
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DEPARTMENT OF PUBLIC WORKS	
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