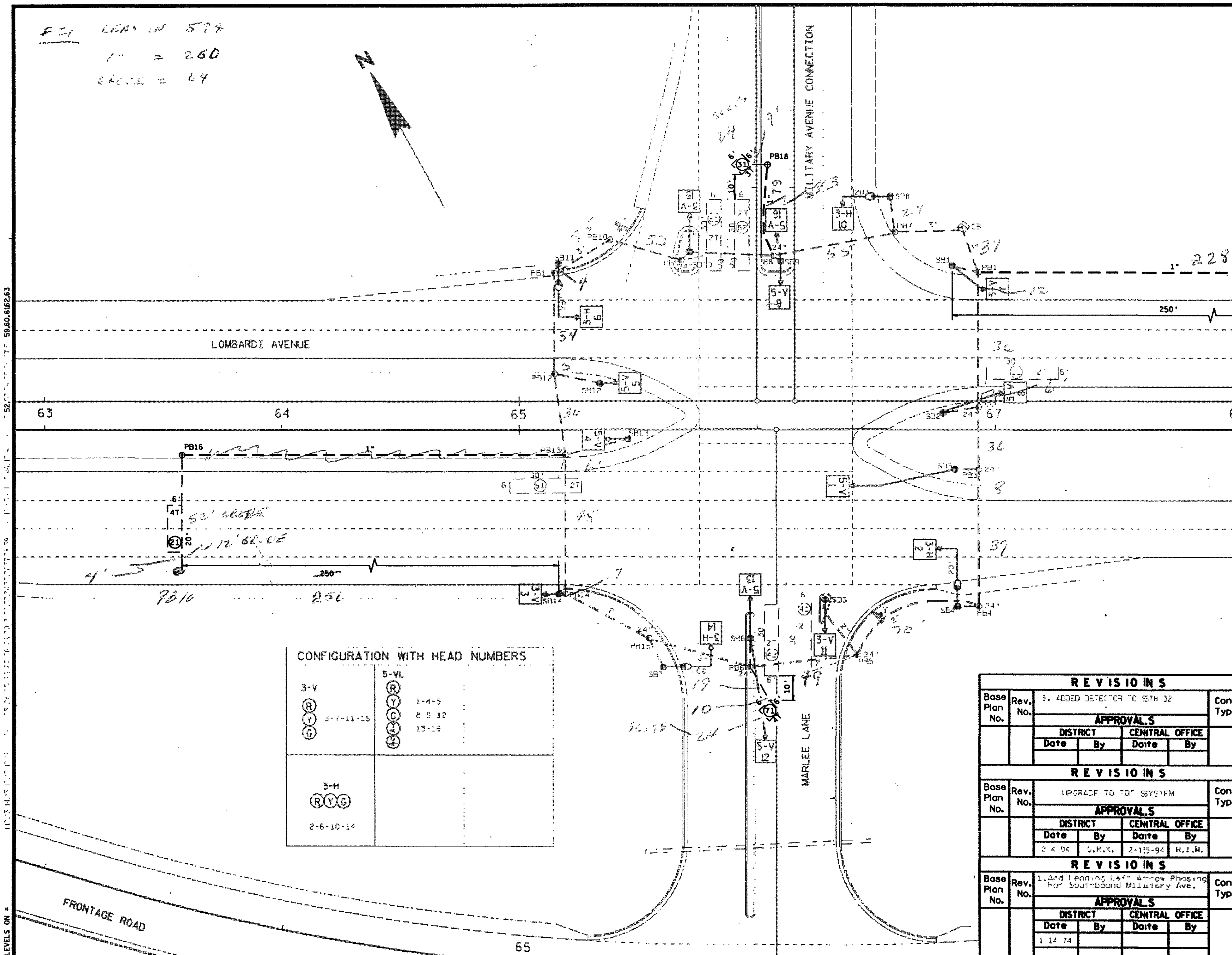
STATE PROJECT NUMBER	SHEET NO.
0083-09-15	5.0

TRAFFIC CONTROL
FOR
LOMBARDI AVE. BROWN CO.

AT MILITARY AVE. CONNECTION



CONFIGURATION WITH HEAD NUMBERS

3-V	5-VL
R Y G 3-7-11-15	R Y G 1-4-5 8-9-12 13-16
3-H R Y G 2-6-10-14	

LEGEND

PULL BOX 12" X 24"
PULL BOX 24" X 36"
SIGNAL HEAD PEDESTAL MOUNT
SIGNAL HEAD MAST ARM MOUNT
CONTROL CABINET BASE
EXISTING CONDUIT
CONDUIT

REVISIONS						
Base Plan No.	Rev. No.	3. ADDED DETECTOR TO STH 32				Cont. Type
		APPROVALS				
		DISTRICT		CENTRAL OFFICE		
		Date	By	Date	By	

REVISIONS						
Base Plan No.	Rev. No.	UPGRADE TO TOT SYSTEM				Cont. Type
		APPROVALS				
		DISTRICT		CENTRAL OFFICE		
		Date	By	Date	By	
		2-4-94	G.H.R.	2-15-94	R.J.N.	

REVISIONS						
Base Plan No.	Rev. No.	1. Add Leading Left Arrow Phasing For Southbound Military Ave.				Cont. Type
		APPROVALS				
		DISTRICT		CENTRAL OFFICE		
		Date	By	Date	By	
		1-14-74				

TRAFFIC CONTROL SIGNALS

LOMBARDI AVE AT MILITARY AVE CONNECTION

SIGNAL NO. 127 SCALE 0 20

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED

Date 3-9-68 DALE BOMEL
DISTRICT TRAFFIC ENGINEER

APPROVED

Date 9-27-68 WAYNE N. VOLK
STATE TRAFFIC ENGINEER

I.D. NO.

FILE NAME: HDGN:D3_TRAFF:TFS10425.DGN

STATE PROJECT NUMBER	SHEET NO.
0083-09-71	5.1

SEQUENCE OF OPERATION

SEQUENCE OF OPERATION

RING 1

	HEAD NUMBERS	01 R/W	01 CLEAR TO **					02 R/W	02 CLEAR TO **					03 R/W	03 CLEAR TO **					04 R/W	04 CLEAR TO **					FLASH
01	5-8	~~G~~	~~Y~~	-				-	-					-	-					-	-					-
02	1-2-3-4	R	R	R				G	R	Y				R	R	R				R	R	R				Y
03	13-16	-	-					-	-					~~G~~	~~Y~~	-				-	-					-
04	9-10-11-12	-	-					R	R	R				R	R	R				G	R	Y				R
05	1-4	-	-					-	-					-	-					-	-					-
06	5-6-7-8	R	R	R				R	R	R				R	R	R				R	R	R				Y
07	9-12	-	-					-	-					-	-					-	-					-
08	13-14-15-16	R	R	R				R	R	R				R	R	R				R	R	R				R

RING 2

	HEAD NUMBERS	05 R/W	05 CLEAR TO **					06 R/W	06 CLEAR TO **					07 R/W	07 CLEAR TO **					08 R/W	08 CLEAR TO **				
01	5-8	-	-					-	-					-	-					-	-				
02	1-2-3-4	R	R	R				R	R	R				R	R	R				R	R	R			
03	13-16	-	-					-	-					-	-					-	-				
04	9-10-11-12	R	R	R				R	R	R				R	R	R				R	R	R			
05	1-4	~~G~~	~~Y~~					-	-					-	-					-	-				
06	5-6-7-8	R	R	R				G	R	Y				R	R	R				R	R	R			
07	9-12	-	-	-				-	-					~~G~~	~~Y~~					-	-				
08	13-14-15-16	R	R	R				R	R	R				R	R	R				G	R	Y			

N

BARRIER

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1 BELOW)

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	CALLS ONLY	EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE
11	1	X			Ø1	Ø1				6X30
21	2	X			Ø2	Ø2				6X20
31	3	X			Ø3	Ø3				6X6
41	4	X			Ø4	Ø4				6X30
42	4	X			Ø4	Ø4				6X30
51	5	X			Ø5	Ø5				6X30
61	6	X			Ø6	Ø6				6X20
71	7	X			Ø7	Ø7				6X6
81	8	X			Ø8	Ø8				6X30
82	8	X			Ø8	Ø8				6X30

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL
1			
2			MIN.
3		W/Ø8	
4		W/Ø8	
5			
6			MIN.
7		W/Ø4	
8		W/Ø4	

RING 1: Ø1 Ø2 Ø3 Ø4

RING 2: Ø5 Ø6 Ø7 Ø8

BARRIER

OVERLAPS

O.L. "A" =
O.L. "B" =
O.L. "C" =
O.L. "D" =

NONE

TYPE OF INTERCONNECT	
NONE	
TBC	X
CLOSED LOOP	
HARDWIRE	
TONE (FREQ)	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	

TYPE OF LIGHTING	
NONE	
IN TRAFFIC CONTROL CABINET	X
IN SEPARATE CONTROL CABINET	

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
Ø1	5-6	2,3,4,7,8
Ø2	5-6	1,3,4,7,8
Ø3	7-8	1,2,4,5,6
Ø4	7-8	1,2,3,5,6
Ø5	1-2	3,4,6,7,8
Ø6	1-2	3,4,5,7,8
Ø7	3-4	1,2,5,6,8
Ø8	3-4	1,2,5,6,7

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)
3. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.

LOMBARDI AVE AT MILITARY AVE CONNECTION

BROWN CO

SIGNAL NO. 127

DATE SHEET NO. OF

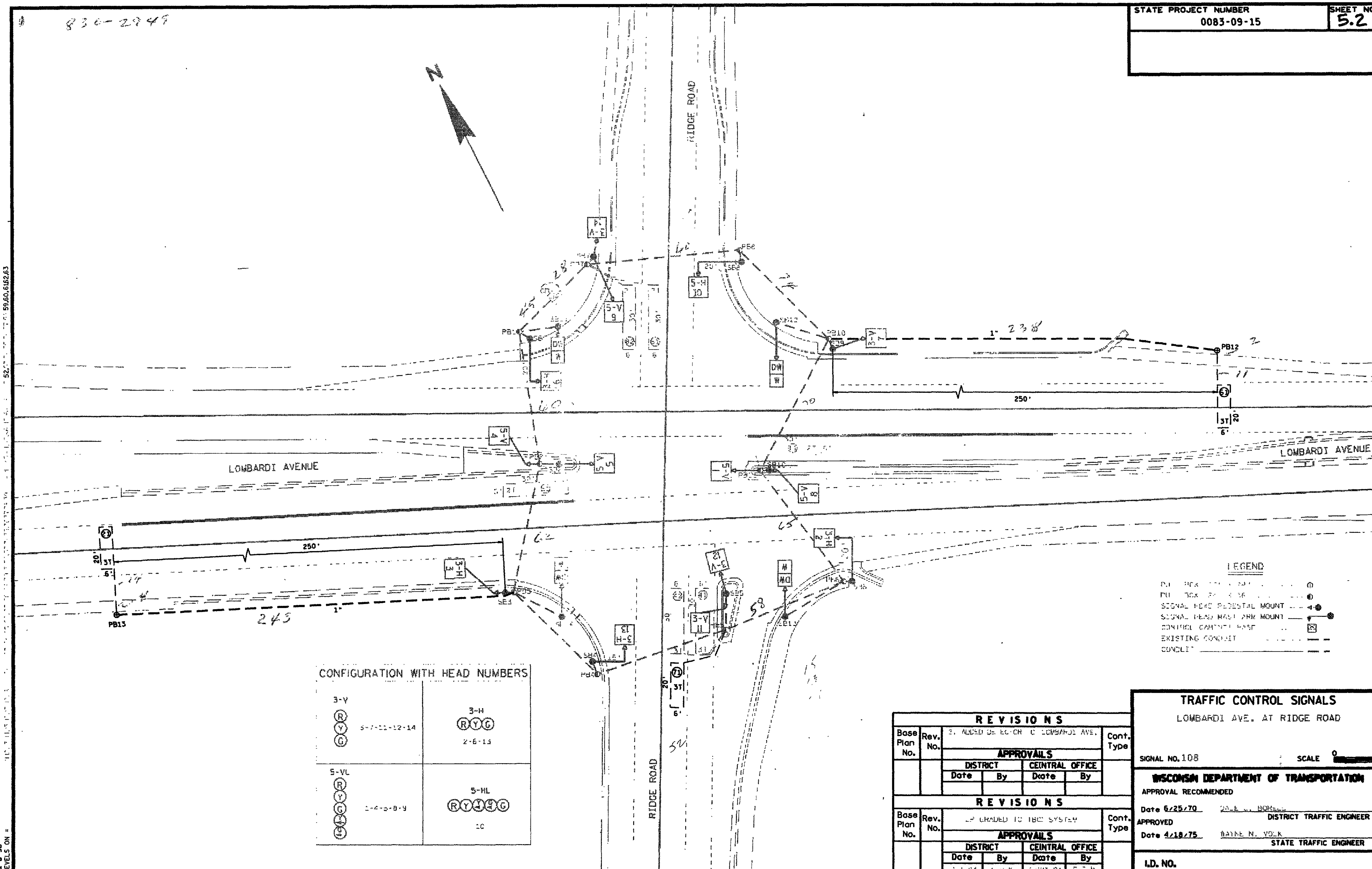
1-8-96

FILE NAME: HDGN:D3 TRAFFIC:TFSIG42S.DGN

12

830-2949

STATE PROJECT NUMBER	SHEET NO.
0083-09-15	5.2



REVISIONS

Base Plan No.	Rev. No.		Cont. Type
		3. ADDED ... LOMBARDI AVE.	
		APPROVALS	
		DISTRICT / CENTRAL OFFICE	
		Date / By / Date / By	

REVISIONS

Base Plan No.	Rev. No.		Cont. Type
		UPGRADED TO TBC SYSTEM	
		APPROVALS	
		DISTRICT: Date 2-4-94, By G.H.K.	
		CENTRAL OFFICE: Date 2-21-94, By R.J.W.	

TRAFFIC CONTROL SIGNALS

LOMBARDI AVE. AT RIDGE ROAD

SIGNAL NO. 108 SCALE 0 20

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED

Date 6/25/70 DALE ... BORELL DISTRICT TRAFFIC ENGINEER

APPROVED

Date 4/18/75 WAYNE N. VOLK STATE TRAFFIC ENGINEER

I.D. NO.

FILE NAME: D3 TRAFF8TFSIG65S.DGN

WISDOT/CADDS SHEET 42

LEVELS ON = 1-8-96

STATE PROJECT NUMBER	SHEET NO.
0083-09-15	5.3

SEQUENCE OF OPERATION

SEQUENCE OF OPERATION

NOT USED

	HEAD NUMBERS	01 R/W	01 CLEAR TO **		02 R/W	02 CLEAR TO **		03 R/W	03 CLEAR TO **		04 R/W	04 CLEAR TO **		FLASH
RING 1														
01	5-8	~~G~~	~~Y~~	-	-	-					-	-		
02	1-2-3-4	R	R	R	G	Y	R				R	R	R	Y
03	NOT USED													
04	9-10-11-12	R	R	R	R	R	R				G	Y	R	R
05	1-2	-	-		-	-					-	-		
06	5-6-7-8	R	R	R	R	R	R				R	R	R	Y
07	9-10	-	-		-	-					-	-		
08	13-14-15	R	R	R	R	R	R				R	R	R	R
ø8P		DW	DW	DW	DW	DW	DW				DW	DW	DW	

	HEAD NUMBERS	05 R/W	05 CLEAR TO **		06 R/W	06 CLEAR TO **		07 R/W	07 CLEAR TO **		08 R/W	08 CLEAR TO **	
RING 2													
01	5-8	-	-		-	-		-	-		-	-	
02	1-2-3-4	R	R	R	R	R	R	R	R	R	R	R	R
03	NOT USED												
04	9-10-11-12	R	R	R	R	R	R	R	R	R	R	R	R
05	1-2	~~G~~	~~Y~~		-	-		-	-		-	-	
06	5-6-7-8	R	R	R	G	Y	R	R	R	R	R	R	R
07	9-10	-	-		-	-		~~G~~	~~Y~~		-	-	
08	13-14-15	R	R	R	R	R	R	R	R	R	G	Y	R
ø8P		DW	DW	DW	DW	DW	DW	DW	DW	DW	*	DW	DW

BARRIER

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1 BELOW)

* WHEN CALLED, TIMED STEADY WALK, THEN FLASHING DON'T WALK, THEN GOES TO STEADY DON'T WALK.

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
01	5-6	2-4-7-8
02	5-6	1-4-7-8
03	NOT USED	-
04	7-8	1-2-5-6
05	1-2	4-6-7-8
06	1-2	4-5-7-8
07	4	1-2-5-6-8
08	4	1-2-5-6-7

DETECTOR LOGIC

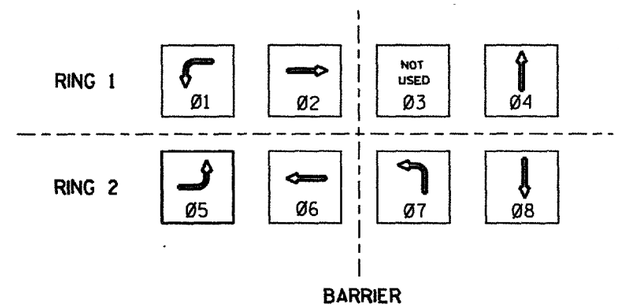
DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	CALLS ONLY	EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE
11	1	X			ø1	ø1				6X30
21	2	X			ø2	ø2				6X20
41	3	X			ø4	ø4				6X30
42	3	X			ø4	ø4				6X30
51	4	X			ø5	ø5				6X30
61	5	X			ø6	ø6				6X20
71	6	X			ø7	ø7				6X20
81	7	X			ø8	ø8				6X30
82	8	X			ø8	ø8		X		6X30

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL
1			
2			MIN.
3			
4		W/ø8	
5			
6			MIN.
7		W/ø4	
8		W/ø4	

OVERLAPS

O.L. "A" =
O.L. "B" =
O.L. "C" =
O.L. "D" =
NONE



TYPE OF INTERCONNECT	
NONE	
TBC	X
CLOSED LOOP	
HARDWIRE	
TONE (FREQ)	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	

TYPE OF LIGHTING	
NONE	X
IN TRAFFIC CONTROL CABINET	
IN SEPARATE CONTROL CABINET	

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)
3. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.

LOMBARDI AVE. AT RIDGE ROAD

SIGNAL NO. 108

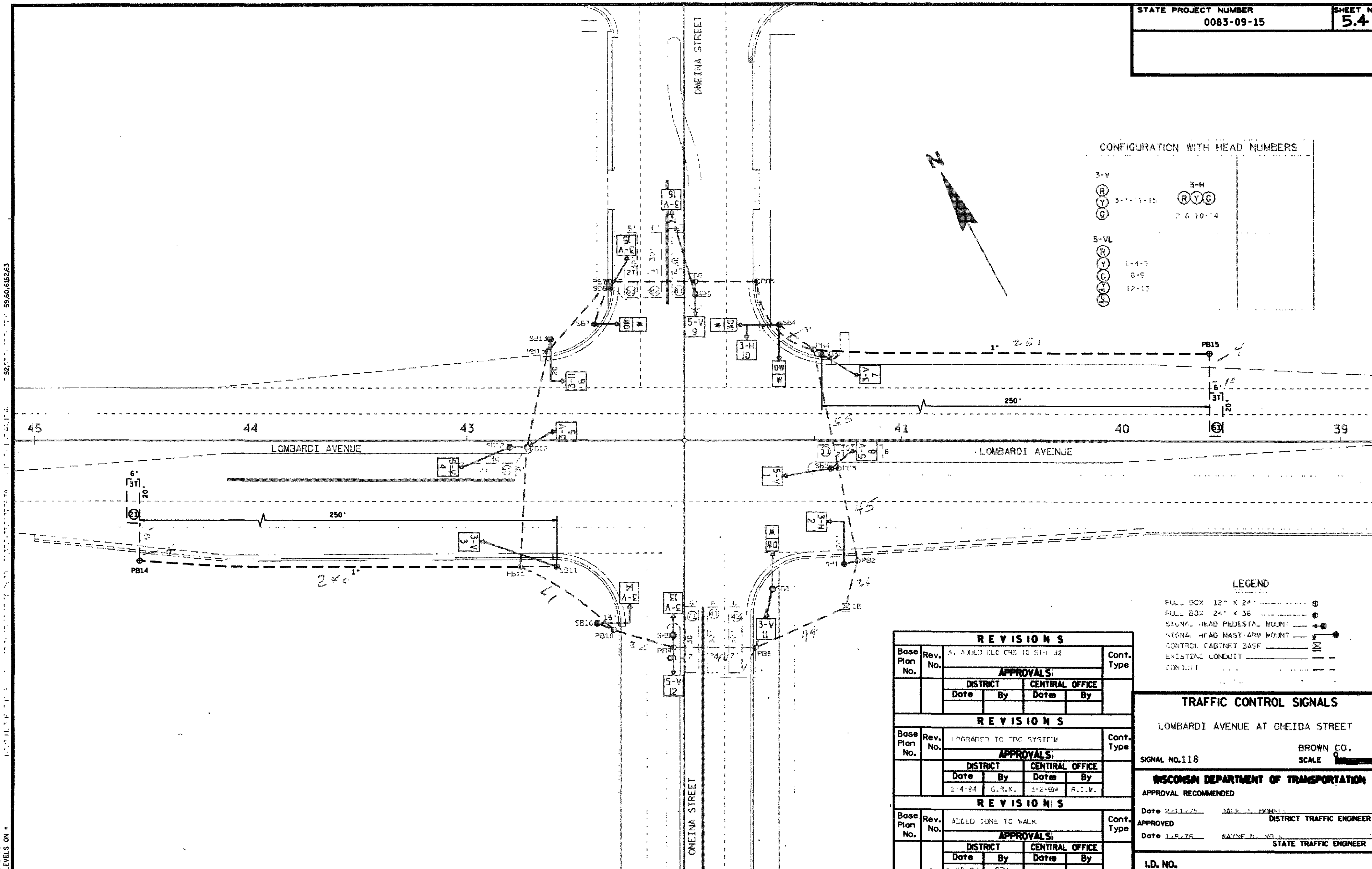
DATE

SHEET NO. OF

1-8-96

FILE NAME: HDGN:D3 TRAFF:TFSIG65S.DGN

STATE PROJECT NUMBER	SHEET NO.
0083-09-15	5.4



REVISIONS						
Base Plan No.	Rev. No.	[illegible]				Cont. Type
		APPROVALS				
		DISTRICT		CENTRAL OFFICE		
		Date	By	Date	By	

REVISIONS						
Base Plan No.	Rev. No.	UPGRADED TO TRC SYSTEM				Cont. Type
		APPROVALS				
		DISTRICT		CENTRAL OFFICE		
		Date	By	Date	By	
		2-4-94	G.R.K.	2-2-94	R.I.M.	

REVISIONS						
Base Plan No.	Rev. No.	ADDED TONE TO WALK				Cont. Type
		APPROVALS				
		DISTRICT		CENTRAL OFFICE		
		Date	By	Date	By	
	2	1/25/87	GRK			

TRAFFIC CONTROL SIGNALS

LOMBARDI AVENUE AT ONEIDA STREET

BROWN CO.

SIGNAL NO. 118

SCALE 0 20

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED

Date 2-11-75 DALE J. BOHN DISTRICT TRAFFIC ENGINEER

APPROVED

Date 1-9-76 WAYNE N. VOLK STATE TRAFFIC ENGINEER

I.D. NO.

FILE NAME: D3 TRAFF:TFSIG645.DGN

1-8-96 LEVELS ON = 59,60,61,62,63

STATE PROJECT NUMBER	SHEET NO.
0083-09-15	5.5

SEQUENCE OF OPERATION

SEQUENCE OF OPERATION

RING 1

	HEAD NUMBERS	01 R/W	01 CLEAR TO **			02 R/W	02 CLEAR TO **			03 (NOT USED) R/W	03 CLEAR TO **			04 R/W	04 CLEAR TO **			FLASH
01	5-8	~~G~~	~~Y~~	-		-	-	-						-	-	-		-
02	1-2-3-4	R	R	R		G	Y	R						R	R	R		Y
03	NOT USED																	
04	9-10-11-12	R	R	R		R	R	R						G	Y	R		R
05	1-2	-	-	-		-	-	-						R	R	R		-
06	5-6-7-8	R	R	R		R	R	R						R	R	R		Y
07	9-10	-	-	-		-	-	-						-	-	-		-
08	13-14-15	R	R	R		R	R	R						R	R	R		R
Ø6P		DW	DW	DW		DW	DW	DW						DW	DW	DW		
Ø4P		DW	DW	DW		DW	DW	DW						DW	DW	DW		

RING 2

	HEAD NUMBERS	05 R/W	05 CLEAR TO **			06 R/W	06 CLEAR TO **			07 R/W	07 CLEAR TO **			08 R/W	08 CLEAR TO **		
01	5-8	-	-	-		-	-	-		-	-	-		-	-	-	
02	1-2-3-4	R	R	R		R	R	R		R	R	R		R	R	R	
03	NOT USED																
04	9-10-11-12	R	R	R		R	R	R		R	R	R		R	R	R	
05	1-2	~~G~~	~~Y~~	-		-	-	-		-	-	-		-	-	-	
06	5-6-7-8	R	R	R		G	Y	R		R	R	R		R	R	R	
07	9-10	-	-	-		-	-	-		~~G~~	~~Y~~	-		-	-	-	
08	13-14-15	R	R	R		R	R	R		R	R	R		G	Y	R	
Ø6P		DW	DW	DW		*	DW	DW		DW	DW	DW		DW	DW	DW	
Ø4P		DW	DW	DW		DW	DW	DW		DW	DW	DW		*	DW	DW	

BARRIER

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1 BELOW)

* WHEN CALLED, TIMED STEADY WALK, THEN FLASHING DON'T WALK, THEN GOES TO STEADY DON'T WALK.

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
Ø1	5-6	2-4-7-8
Ø2	5-6	1-4-7-8
Ø3	NOT USED	-
Ø4	7-8	1-2-5-6
Ø5	1-2	4-6-7-8
Ø6	1-2	4-5-7-8
Ø7	4	1-2-5-6-8
Ø8	4	1-2-5-6-7

DETECTOR LOGIC

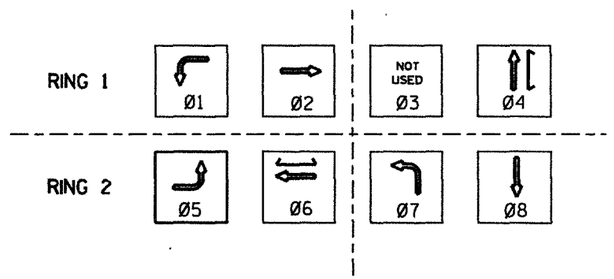
DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	CALLS ONLY	EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE
11	1	X			Ø1	Ø1				6X30
21	2	X			Ø2	Ø2				6X20
41	3	X			Ø4	Ø4				6X30
42	4	X			Ø4	Ø4		X		6X30
51	5	X			Ø5	Ø5				6X30
61	6	X			Ø6	Ø6				6X20
71	7	X			Ø7	Ø7				6X30
81	8	X			Ø8	Ø8				6X20
82	8	X			Ø8	Ø8				6X30
83	9	X			Ø8	Ø8		X		6X30

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL
1			
2			MIN.
3			
4		W/Ø8	
5			
6			MIN.
7		W/Ø4	
8		W/Ø4	

OVERLAPS

O.L. "A" =
O.L. "B" =
O.L. "C" =
O.L. "D" =
NONE



TYPE OF INTERCONNECT	
NONE	
TBC	X
CLOSED LOOP	
HARDWIRE	
TONE (FREQ)	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	

TYPE OF LIGHTING	
NONE	X
IN TRAFFIC CONTROL CABINET	
IN SEPARATIE CONTROL CABINET	

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)
3. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.

LOMBARDI AVE. AT ONEIDA STREET

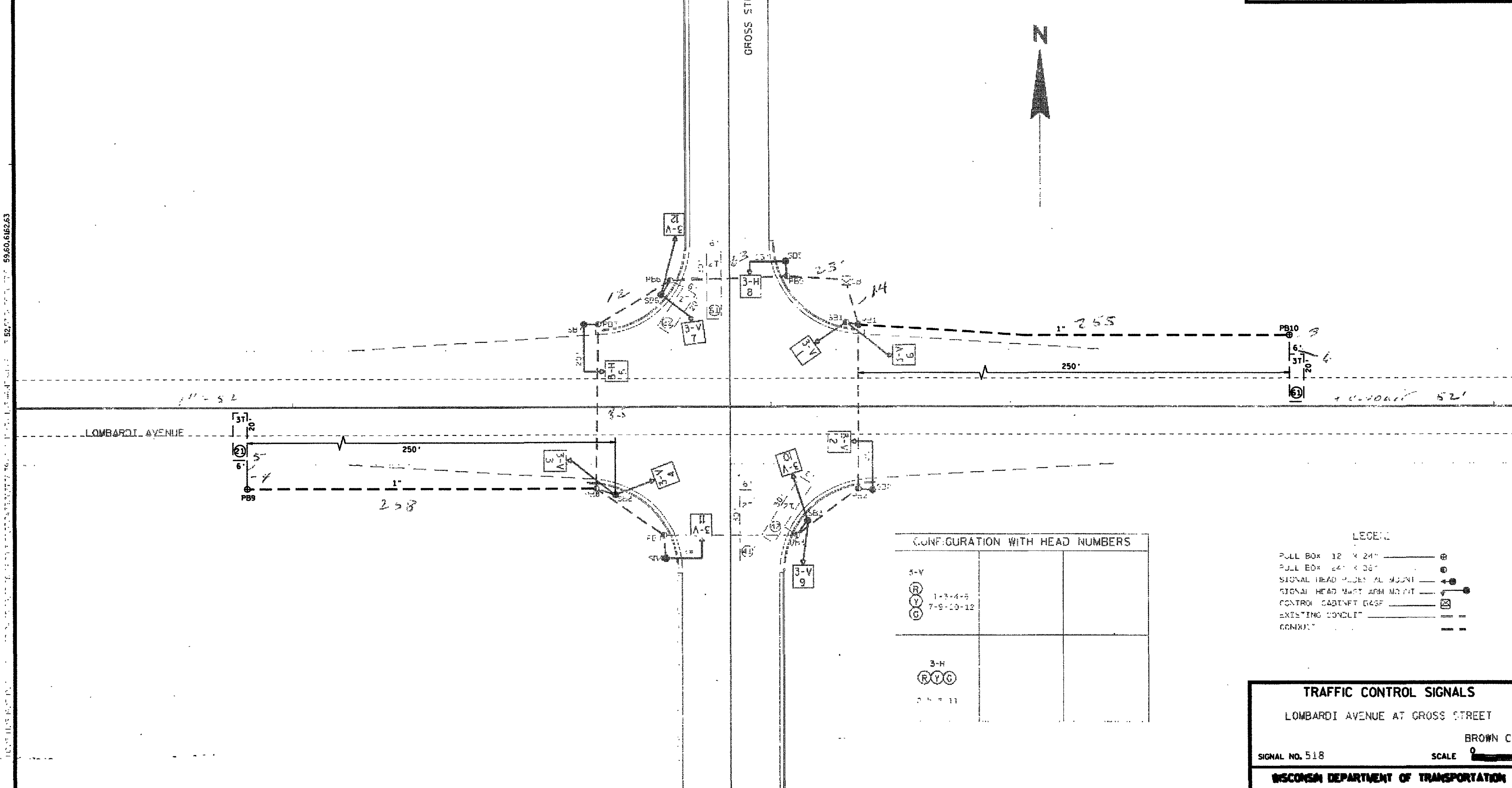
SIGNAL NO. 118

DATE SHEET NO. OF

12-18-95

FILE NAME: HDGN:D5 TRAFF:TFSIG64S.DGN

STATE PROJECT NUMBER	SHEET NO.
0083-09-15	5.6



TRAFFIC CONTROL SIGNALS

LOMBARDI AVENUE AT GROSS STREET

BROWN CO.

SIGNAL NO. 518 SCALE 0 20

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED

Date 2-4-94 GERALD P. KURTZ
DISTRICT TRAFFIC ENGINEER

APPROVED

Date 2-18-94 R.I. MOE
STATE TRAFFIC ENGINEER

I.D. NO.

REVISIONS						
Base Plan No.	Rev. No.	1. ADD DETECTORS TO STH 32				Cont. Type
		APPROVALS				
		DISTRICT		CENTRAL OFFICE		
		Date	By	Date	By	

FILE NAME: D3 TRAFFIC:TFSIG68S.DGN

LEVELS ON = 1-8-96

WISDOT/CADDS SHEET 42

STATE PROJECT NUMBER	SHEET NO.
0083-09-15	5.7

SEQUENCE OF OPERATION

SEQUENCE OF OPERATION

RING 1

	HEAD NUMBERS	Ø1 (NOT USED) R/W	Ø1 CLEAR TO **	Ø2 R/W	Ø2 CLEAR TO **	Ø3 (NOT USED) R/W	Ø3 CLEAR TO **	Ø4 R/W	Ø4 CLEAR TO **	FLASH
Ø1										
Ø2	1-2-3			G	Y R			R	R R	Y
Ø3										
Ø4	7-8-9			R	R R			G	Y R	R
Ø5										
Ø6	4-5-6			R	R R			R	R R	Y
Ø7										
Ø8	10-11-12			R	R R			R	R R	R
OL"A"										
OL"B"										
OL"C"										
OL"D"										

RING 2

	HEAD NUMBERS	Ø5 (NOT USED) R/W	Ø5 CLEAR TO **	Ø6 R/W	Ø6 CLEAR TO **	Ø7 (NOT USED) R/W	Ø7 CLEAR TO **	Ø8 R/W	Ø8 CLEAR TO **
Ø1									
Ø2	1.2.3			R	R R			R	R R
Ø3									
Ø4	7.8.9			R	R R			R	R R
Ø5									
Ø6	4.5.6			G	Y R			R	R R
Ø7									
Ø8	10.11.12			R	R R			G	Y R
OL"A"									
OL"B"									
OL"C"									
OL"D"									

N

BARRIER

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1 BELOW)

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	CALLS ONLY	EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE
21	1	X			Ø2	Ø2				6X20
41	2	X			Ø4	Ø4				6X30
42	3	X			Ø4	Ø4		X		6X30
61	4	X			Ø6	Ø6				6X20
81	5	X			Ø8	Ø8				6X30
82	6	X			Ø8	Ø8		X		6X30

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY Ø / Ø	PHASE RECALL
1			
2			MIN.
3			
4		Ø/Ø8	
5			
6			MIN.
7			
8		Ø/Ø4	

RING				
RING 1	NOT USED Ø1	Ø2	NOT USED Ø3	Ø4
RING 2	NOT USED Ø5	Ø6	NOT USED Ø7	Ø8

BARRIER

OVERLAPS

O.L. "A" =
O.L. "B" =
O.L. "C" =
O.L. "D" =

NONE

TYPE OF INTERCONNECT	
NONE	
TBC	X
CLOSED LOOP	
HARDWIRE	
TONE (FREQ)	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	

TYPE OF LIGHTING	
NONE	X
IN TRAFFIC CONTROL CABINET	
IN SEPARATE CONTROL CABINET	

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
Ø1	NOT USED	
Ø2	Ø6	4-8
Ø3	NOT USED	
Ø4	Ø8	2-6
Ø5	NOT USED	
Ø6	Ø2	4-8
Ø7	NOT USED	
Ø8	Ø4	2-6

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)
3. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.

LOMBARDI AVE. AT GROSS AVE.

SIGNAL NO. 518

DATE

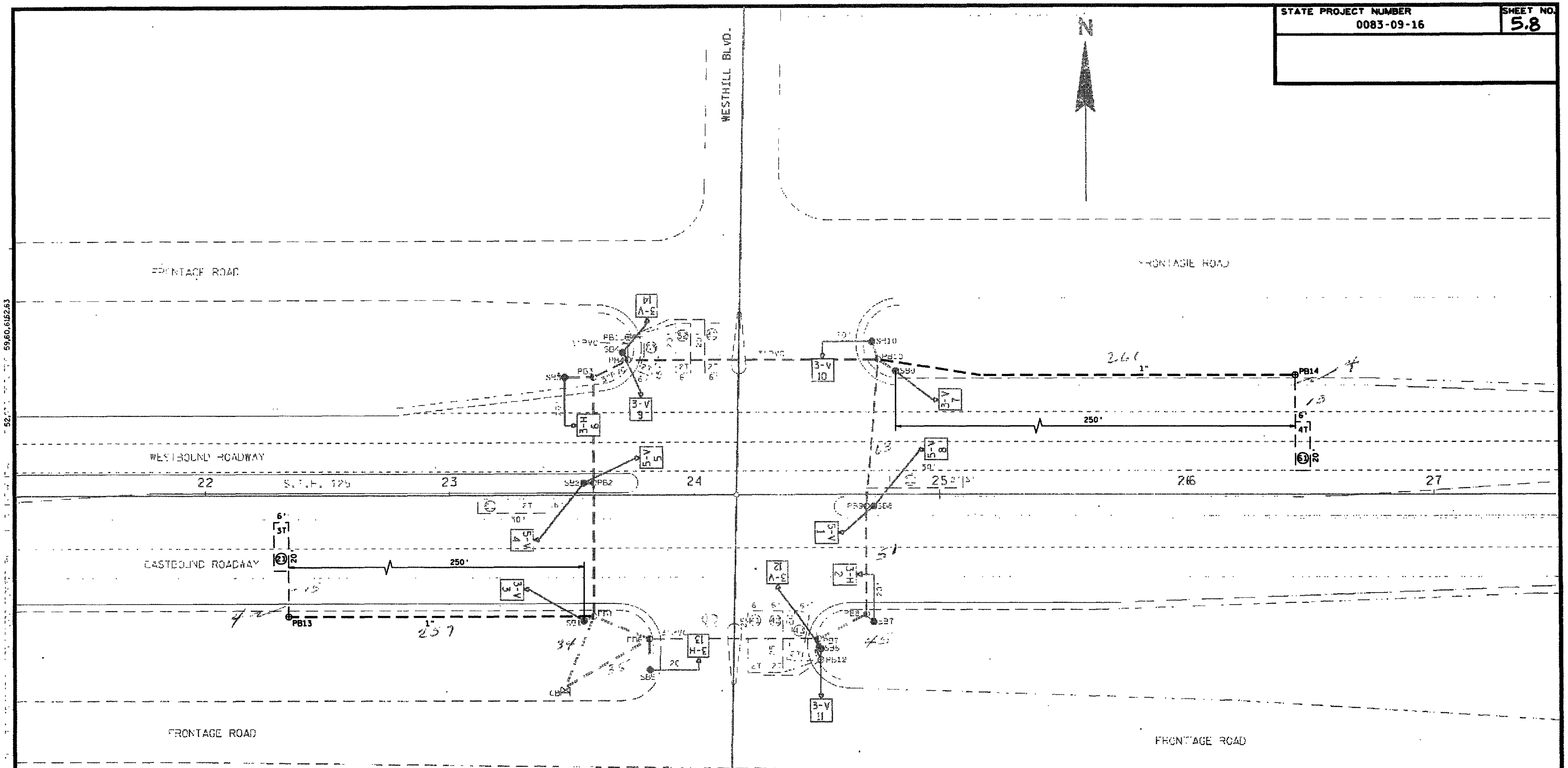
SHEET NO. OF

12-18-95

FILE NAME: HDGN:D3 TRAFF:TFSIG685.DGN

6

STATE PROJECT NUMBER	SHEET NO.
0083-09-16	5.8



CONFIGURATION WITH HEAD NUMBERS

3-V	5-VL
R Y G — 3,7 / 9,11,12 / 14	R Y G ← ← — 1,4 / 5,8
3-H: R Y G — 2,6,10,13	

LEGEND

- PULL BOX 12" x 24"
- PULL BOX 18" x 24"
- PULL BOX 24" x 30"
- SIGNAL HEAD PEDESTAL MOUNT
- SIGNAL HEAD MAST-ARM MOUNT
- CONTROL CABINET BASE
- EXISTING CONDUIT
- CONDUIT

REVISIONS

Base Plan No.	Rev. No.					Cont. Type
		3. ADD DETECTORS TO STH 125 4.				
		APPROVALS				
		DISTRICT		CENTRAL OFFICE		
		Date	By	Date	By	

REVISIONS

Base Plan No.	Rev. No.					Cont. Type
		1. ADDED LEFT TURNS ON S.T.H. 125 2. UPGRADE TO TBC SYSTEM				
		APPROVALS				
		DISTRICT		CENTRAL OFFICE		
		Date	By	Date	By	
	1	3-14-91	G.P.K.	3-26-91	H.O.P.	
	2	2-4-94	G.R.K.	2-15-94	R.I.M.	

TRAFFIC CONTROL SIGNALS

S.T.H. 125 AT WESTHILL-KOOLS

OUTAGAMIE CO.

SIGNAL NO. 331 SCALE 0 20

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED

Date 3-5-85 GERALD R. KURTZ, DISTRICT TRAFFIC ENGINEER

APPROVED

Date 7-5-85 HARRY O. PRICE, STATE TRAFFIC ENGINEER

I.D. NO.

1-22-96 LEVELS ON = 59,60,61,62,63

FILE NAME: HDGNID3 TRAFFI TFSIG595

STATE PROJECT NUMBER	SHEET NO.
0083-09-16	5.9

SEQUENCE OF OPERATION

SEQUENCE OF OPERATION

NOT USED

RING 1	HEAD NUMBERS	01 R/W	01 CLEAR TO **	02 R/W	02 CLEAR TO **	03 R/W	03 CLEAR TO **	04 R/W	04 CLEAR TO **	FLASH
01	5,8	~~G~~	~~Y~~	-	-			-	-	-
02	1,2,3,4	R	R R	G	Y R			R	R R	Y
03	-									-
04	9,10,11	R	R R	R	R R			G	Y R	R
05	1,4	-	- -	-	- -			-	- -	-
06	5,6,7,8	R	R R	R	R R			R	R R	Y
07	-									-
08	12,13,14	R	R R	R	R R			R	R R	R
OL "A"										
OL "B"										
OL "C"										
OL "D"										

NOT USED

RING 2	HEAD NUMBERS	05 R/W	05 CLEAR TO **	06 R/W	06 CLEAR TO **	07 R/W	07 CLEAR TO **	08 R/W	08 CLEAR TO **
01	5,8	-	- -	-	- -			-	- -
02	1,2,3,4	R	R R	R	R R			R	R R
03	-								
04	9,10,11	R	R R	R	R R			R	R R
05	1,4	~~G~~	~~Y~~	-	- -			-	- -
06	5,6,7,8	R	R R	G	Y R			R	R R
07	-								
08	12,13,14	R	R R	R	R R			G	Y R
OL "A"									
OL "B"									
OL "C"									
OL "D"									

N

BARRIER

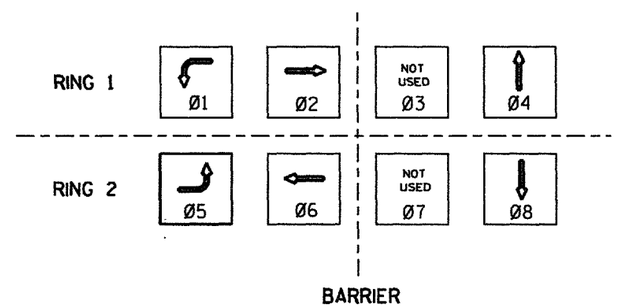
** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1 BELOW)

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
01	5,6	2,4,8
02	5,6	1,4,8
03	-	-
04	8	1,2,5,6
05	1,2	4,6,8
06	1,2	4,5,8
07	-	-
08	4	1,2,5,6

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	CALLS ONLY	EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE
11	1	X			ø1	ø1				6X30
21	2	X			ø2	ø2				6X20
41	3	X			ø4	ø4				6X25
42	4	X			ø4	ø4				6X25
43	5	X			ø4	ø4		X		6X20
51	6	X			ø5	ø5				6X30
61	7	X			ø6	ø6				6X20
81	8	X			ø8	ø8				6X25
82	8	X			ø8	ø8				6X25
83	9	X			ø8	ø8		X		



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL
1		W/ø6	
2			
3			
4		W/ø8	
5		W/ø2	
6			
7			
8		W/ø4	

OVERLAPS

O.L. "A" =
O.L. "B" =
O.L. "C" =
O.L. "D" =
NONE

TYPE OF INTERCONNECT	
NONE	
TBC	X
CLOSED LOOP	
HARDWIRE	
TONE (FREQ)	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	

TYPE OF LIGHTING	
NONE	X
IN TRAFFIC CONTROL CABINET	
IN SEPARATE CONTROL CABINET	

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.

S.T.H. 125 AT WESTHILL-KOOLS

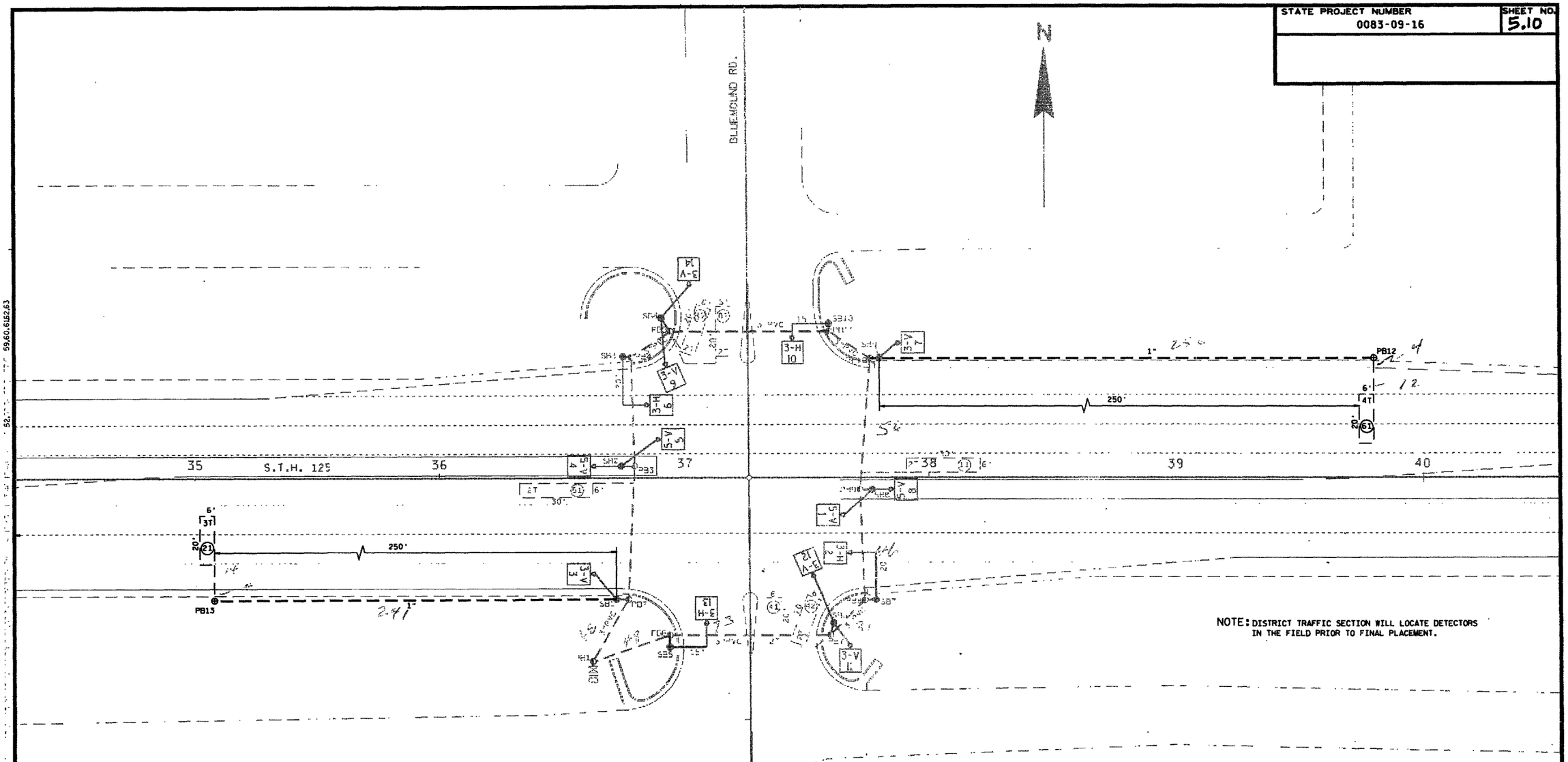
SIGNAL NO. 331

DATE SHEET NO. OF

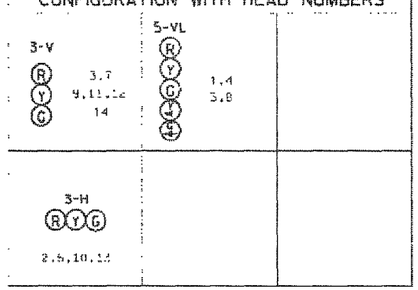
12-18-95

FILE NAME: HDGNED3 TRAFFIETFSIG59S

STATE PROJECT NUMBER	SHEET NO.
0083-09-16	5.10



CONFIGURATION WITH HEAD NUMBERS



LEGEND

- PULL BOX 12" x 24"
- PULL BOX 18" x 24"
- PULL BOX 24" x 30"
- SIGNAL HEAD PEDESTAL MOUNT
- SIGNAL HEAD MAST-ARM MOUNT
- CONTROL CABINET BASE
- EXISTING CONDUIT
- CONDUIT

REVISIONS						
Base Plan No.	Rev. No.	1. [illegible] 4.				Cont. Type
		APPROVALS				
		DISTRICT		CENTRAL OFFICE		
		Date	By	Date	By	

REVISIONS						
Base Plan No.	Rev. No.	1. LEGEND REMOVAL 2. UPGRADE TO TBC SYSTEM				Cont. Type
		APPROVALS				
		DISTRICT		CENTRAL OFFICE		
		Date	By	Date	By	
	1	[illegible]	[illegible]	12-13-88	[illegible]	
	2	[illegible]-94	C.P.N.	2-15-94	R.T.N.	

TRAFFIC CONTROL SIGNALS

S.T.H. 125 AT BLUEMOUND RD.

OUTAGAMIE CO.

SIGNAL NO. 104

SCALE 0 — 20

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED

Date 5-12-74 — DALE BORELL, DISTRICT TRAFFIC ENGINEER

APPROVED

Date 7-1-74 — WAYNE N. VOLK, STATE TRAFFIC ENGINEER

I.D. NO.

1-5-96 LEVELS ON =

FILE NAME: HDGNSD3 TRAFF:TFSIG60S

WISDOT/CADDS SHEET 42

STATE PROJECT NUMBER	SHEET NO.
0083-09-16	5.11

SEQUENCE OF OPERATION

SEQUENCE OF OPERATION

		HEAD NUMBERS	01 R/W	01 CLEAR TO **				02 R/W	02 CLEAR TO **				03 R/W	03 CLEAR TO **				04 R/W	04 CLEAR TO **				FLASH
RING 1	01	5,8	~~G~~	~~Y~~				-	-									-	-				
	02	1,2,3,4	R	R	R			G	Y	R								R	R	R			-
	03	-																					Y
	04	9,10,11	R	R	R			R	R	R								G	Y	R			-
	05	1,4	-	-	-			-	-									-	-				R
	06	5,6,7,8	R	R	R			R	R	R								R	R	R			-
	07	-																					Y
	08	12,13,14	R	R	R			R	R	R								R	R	R			-
	OL"A"																						R
	OL"B"																						
	OL"C"																						
	OL"D"																						

BARRIER

		HEAD NUMBERS	05 R/W	05 CLEAR TO **				06 R/W	06 CLEAR TO **				07 R/W	07 CLEAR TO **				08 R/W	08 CLEAR TO **			
RING 2	01	5,8	-	-				-	-									-	-				
	02	1,2,3,4	R	R	R			R	R	R								R	R	R			
	03	-																					
	04	9,10,11	R	R	R			R	R	R								R	R	R			
	05	1,4	~~G~~	~~Y~~				-	-									-	-				
	06	5,6,7,8	R	R	R			G	Y	R								R	R	R			
	07	-																					
	08	12,13,14	R	R	R			R	R	R								G	Y	R			
	OL"A"																						
	OL"B"																						
	OL"C"																						
	OL"D"																						

BARRIER

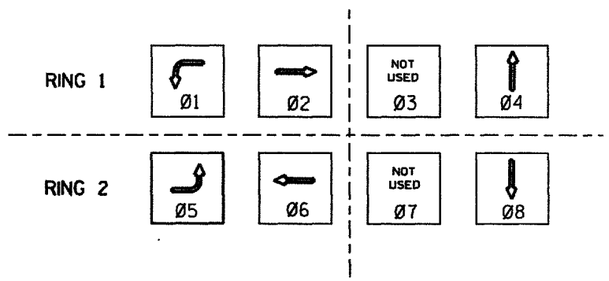
** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1 BELOW)

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	DETECTOR OPERATION: CALLS ONLY	DETECTOR OPERATION: EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE
11	1	X			ø1	ø1				6X30
21	2	X			ø2	ø2				6X20
41	3	X			ø4	ø4				6X20
42	3	X			ø4	ø4				6X20
51	4	X			ø5	ø5				6X30
61	5	X			ø6	ø6				6X20
81	6	X			ø8	ø8				6X20
82	6	X			ø8	ø8				6X20

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL
1		W/ø6	
2			MIN.
3			
4		W/ø8	
5		W/ø2	
6			MIN.
7			
8		W/ø4	



OVERLAPS

O.L. "A" =
O.L. "B" =
O.L. "C" =
O.L. "D" =
NONE

TYPE OF INTERCONNECT	
NONE	
TBC	X
CLOSED LOOP	
HARDWIRE	
TONE (FREQ)	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	

TYIPE OF LIGHTING	
NONE	X
IN TRAFFIC CONTROL CABINET	
IN SEPARATE CONTROL CABINET	

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
Ø1	5,6	2,4,8
Ø2	5,6	1,4,8
Ø3	-	-
Ø4	8	1,2,5,6
Ø5	1,2	4,6,8
Ø6	1,2	4,5,8
Ø7	-	-
Ø8	4	1,2,5,6

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED).
2. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.

S.T.H. 125 AT BLUEMOUND RD.

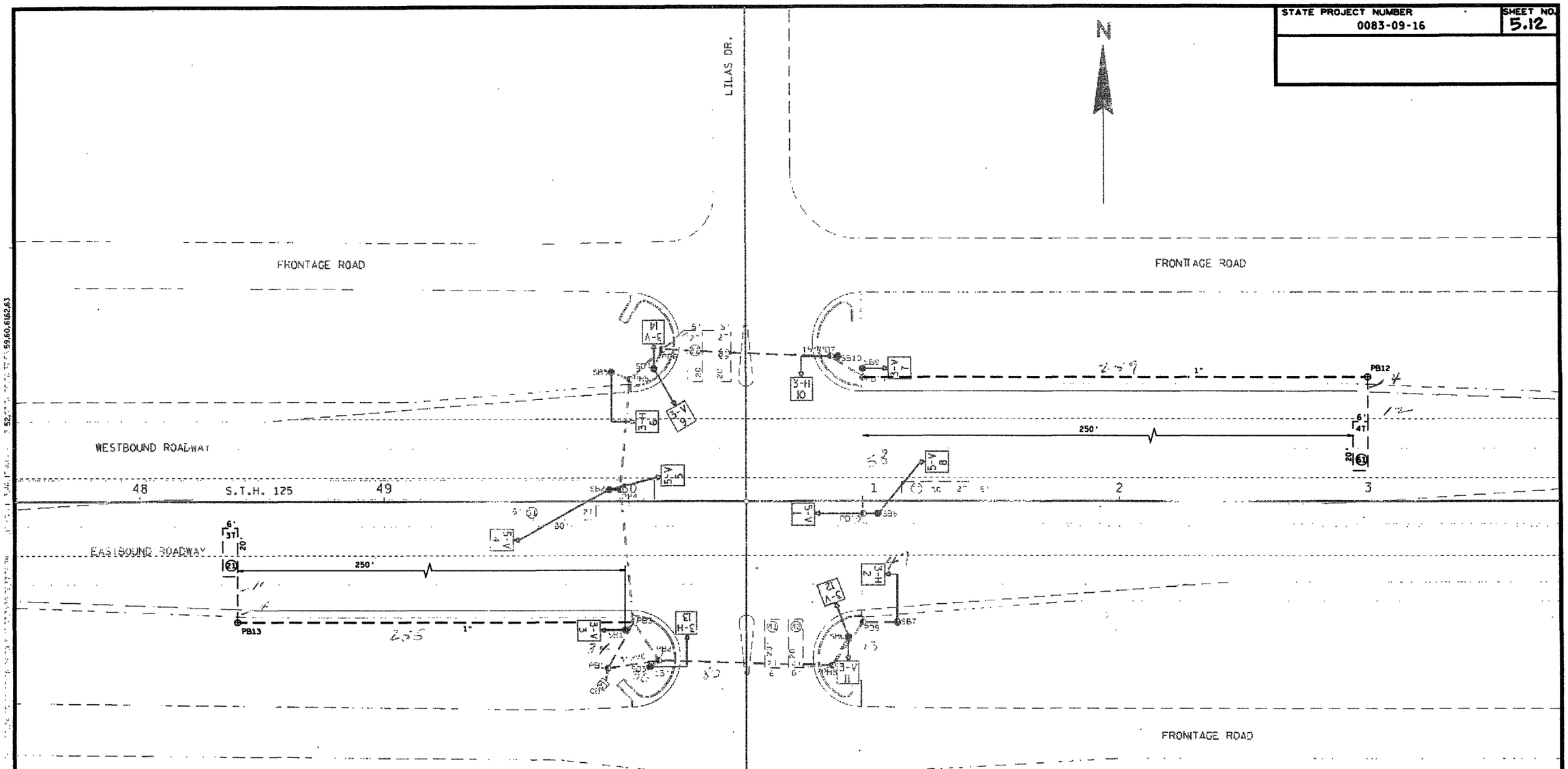
SIGNAL NO. 104

DATE SHEET NO. OF /6

1-5-96

FILE NAME: HDGN:D3 TRAFFI:TFSIG60S

STATE PROJECT NUMBER	SHEET NO.
0083-09-16	5.12



CONFIGURATION WITH HEAD NUMBERS

3-V (R Y G) 5,7 9,11,12 14	5-VL (R Y G) 1,4 6,8	
3-H (R Y G) 2,3,10,13		

LEGEND

- PULL BOX 12" X 24"
- PULL BOX 15" X 24"
- PULL BOX 24" X 36"
- SIGNAL HEAD PEDESTAL MOUNT
- SIGNAL HEAD MAST-ARM MOUNT
- CONTROL CABINET BASE
- EXISTING CONDUIT
- CONDUIT

REVISIONS

Base Plan No.	Rev. No.		Cont. Type
		1. UPGRADE TO TBC SYSTEM 2. ADDED DETECTORS TO STH 125	

APPROVALS

	DISTRICT Date	DISTRICT By	CENTRAL OFFICE Date	CENTRAL OFFICE By
1	2-2-94	G.R.K.	2-15-96	R.I.M.
2				

TRAFFIC CONTROL SIGNALS

S.T.H. 125 AT LILAS

OUTAGAMIE CO.

SIGNAL NO. 392

SCALE 0 20

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED

Date 11-21-88 GERALD R. KURTZ
DISTRICT TRAFFIC ENGINEER

APPROVED

Date 12-1-88 HARRY O. PRICE
STATE TRAFFIC ENGINEER

I.D. NO.

1-8-96 LEVELS ON =

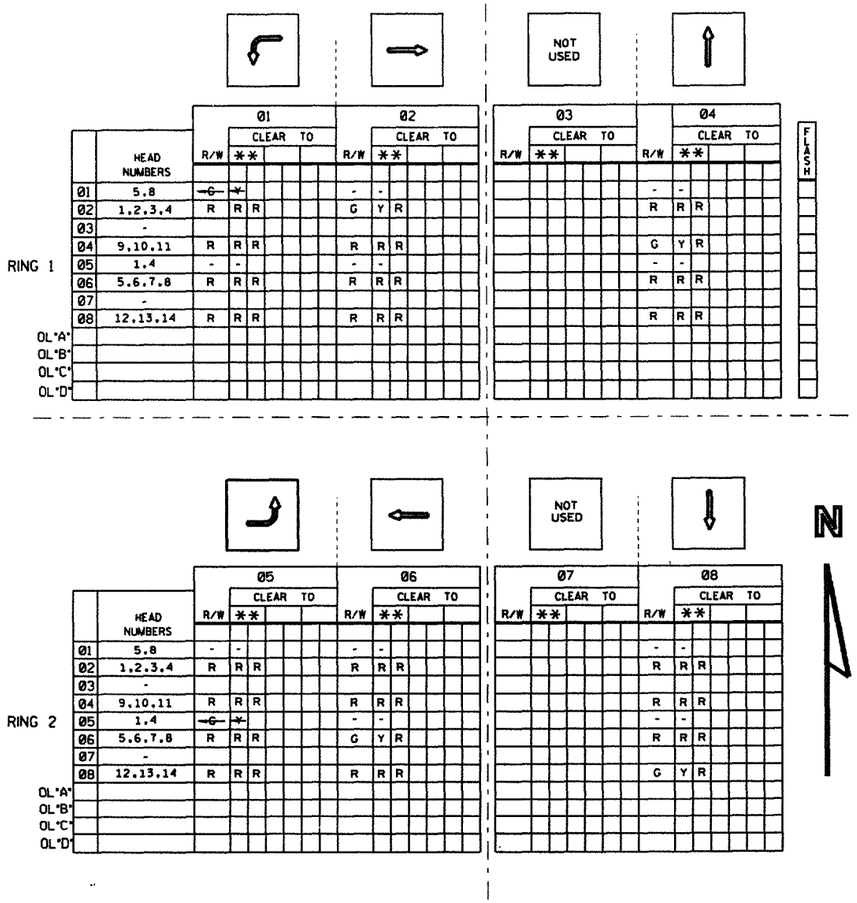
FILE NAME: HDGN:D3 TRAFF:TFSIG61S.DGN

WISDOT/CADDS SHEET 42

STATE PROJECT NUMBER	SHEET NO.
0083-09-16	5.13

SEQUENCE OF OPERATION

SEQUENCE OF OPERATION



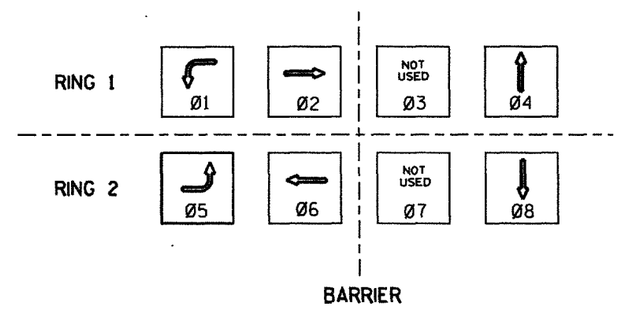
** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1 BELOW)

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
01	5,6	2,4,8
02	5,6	1,4,8
03	-	-
04	8	1,2,5,6
05	1,2	4,6,8
06	1,2	4,5,8
07	-	-
08	4	1,2,5,6

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION			PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE
		CALLS AND EXTENDS	CALLS ONLY	EXTENDS ONLY						
11	1	X			ø1	ø1				6X30
21	2	X			ø2	ø2				6X20
41	3	X			ø4	ø4				6X20
42	3	X			ø4	ø4				6X20
43	4	X			ø4	ø4		X		6X15
51	5	X			ø5	ø5				6X30
61	6	X			ø6	ø6				6X20
81	7	X			ø8	ø8				6X20
82	7	X			ø8	ø8				6X20
83	8	X			ø8	ø8		X		6X15



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL
1		W/ø6	
2			MIN.
3			
4		W/ø8	
5		W/ø2	
6			MIN.
7			
8		W/ø4	

OVERLAPS

O.L. "A" =	NONE
O.L. "B" =	
O.L. "C" =	
O.L. "D" =	

TYPE OF INTERCONNECT	
NONE	
TBC	X
CLOSED LOOP	
HARDWIRE	
TONE (FREQ)	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	

TYPE OF LIGHTING	
NONE	X
IN TRAFFIC CONTROL CABINET	
IN SEPARATE CONTROL CABINET	

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.

S.T.H. 125 AT LILAS

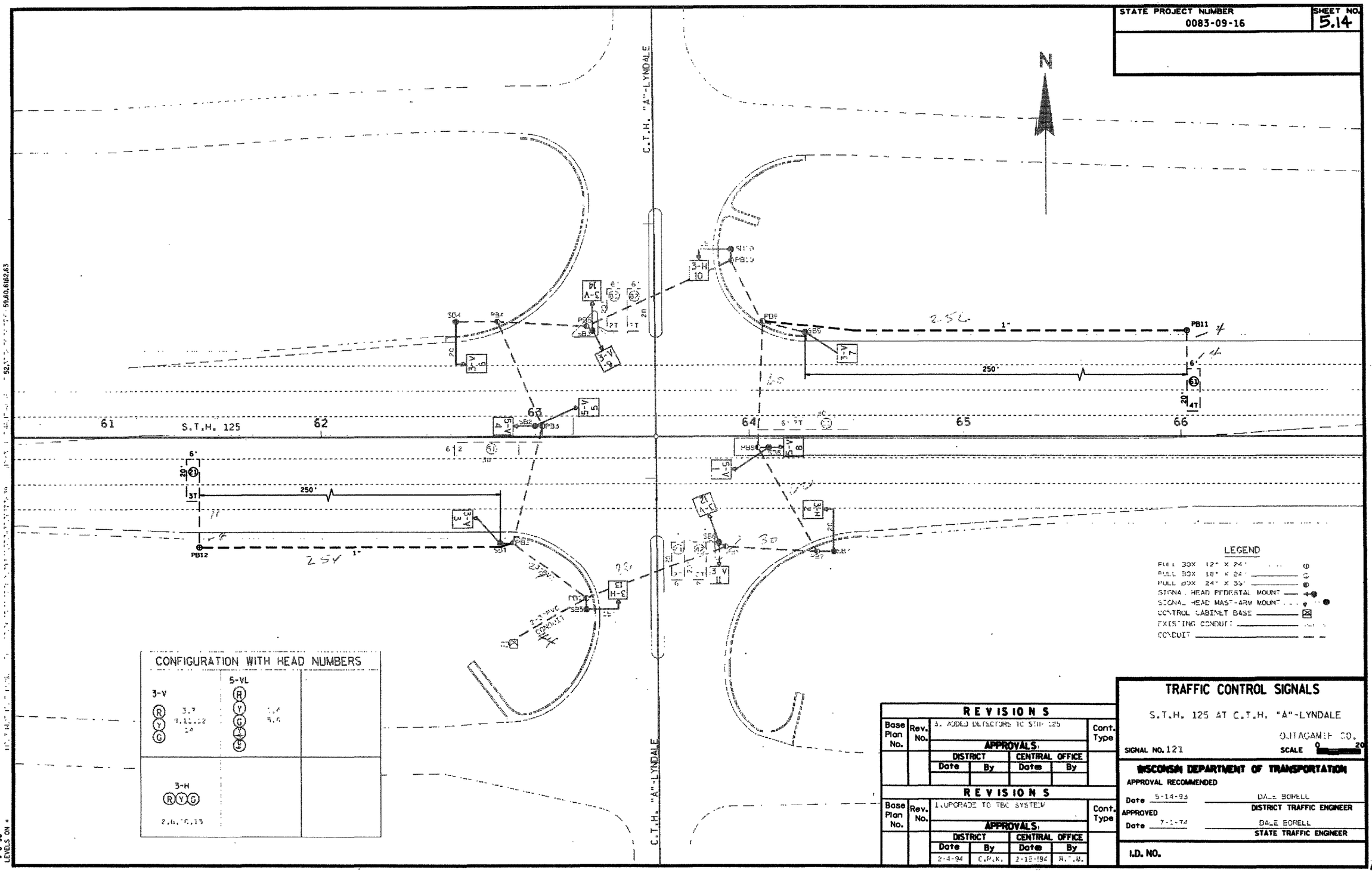
SIGNAL NO. 392

DATE SHEET NO. OF

12-26-95

FILE NAME: HDGN:D3 TRAFFIC:TFSIG61S.DGN

STATE PROJECT NUMBER	SHEET NO.
0083-09-16	5.14



REVISIONS					
Base Plan No.	Rev. No.	3. ADDED DETECTORS TO STH 125			Cont. Type
		APPROVALS			
		DISTRICT		CENTRAL OFFICE	
		Date	By	Date	By

REVISIONS					
Base Plan No.	Rev. No.	1. UPGRADE TO TBC SYSTEM			Cont. Type
		APPROVALS			
		DISTRICT		CENTRAL OFFICE	
		Date	By	Date	By
		2-4-94	C.P.K.	2-18-94	R.T.W.

TRAFFIC CONTROL SIGNALS

S.T.H. 125 AT C.T.H. "A"-LYNDALE

OUTAGAMIE CO.

SIGNAL NO. 121

SCALE 0 20

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED

Date 5-14-93 — DALE BORELL, DISTRICT TRAFFIC ENGINEER

APPROVED

Date 7-1-94 — DALE BORELL, STATE TRAFFIC ENGINEER

I.D. NO.

1-8-96
LEVELS ON =

FILE NAME: HDGNSD3 TRAFFIS\TFSIG63S

WISDOT/CADDS SHEET 42

STATE PROJECT NUMBER	SHEET NO.
0083-09-16	5.15

SEQUENCE OF OPERATION

SEQUENCE OF OPERATION

		HEAD NUMBERS	01 R/W	01 CLEAR TO **	02 R/W	02 CLEAR TO **	03 R/W	03 CLEAR TO **	04 R/W	04 CLEAR TO **	FLASH
RING 1	01	5.8	~~G~~	~~Y~~	-	-			-	-	-
	02	1.2.3.4	R	R R	G	Y R			R	R R	Y
	03										
	04	12.13.14	R	R R	R	R R			G	Y R	R
	05	1.4			-	-			-	-	-
	06	5.6.7.8	R	R R	R	R R			R	R R	Y
	07										
	08	9.10.11	R	R R	R	R R			R	R R	R
	OL"A"										
	OL"B"										
	OL"C"										
	OL"D"										

NOT USED

		HEAD NUMBERS	05 R/W	05 CLEAR TO **	06 R/W	06 CLEAR TO **	07 R/W	07 CLEAR TO **	08 R/W	08 CLEAR TO **
RING 2	01	5.8	-	-	-	-			-	-
	02	1.2.3.4	R	R R	R	R R			R	R R
	03									
	04	12.13.14	R	R R	R	R R			R	R R
	05	1.4	~~G~~	~~Y~~	-	- -			-	- -
	06	5.6.7.8	R	R R	G	Y R			R	R R
	07								G	Y R
	08	9.10.11	R	R R	R	R R				
	OL"A"									
	OL"B"									
	OL"C"									
	OL"D"									

NOT USED

N

BARRIER

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1 BELOW)

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
01	5.6	2.4.8
02	5.6	1.4.8
03	-	-
04	8	1.2.5.6
05	1.2	4.6.8
06	1.2	4.5.8
07	-	
08	4	1.2.5.6

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	DETECTOR OPERATION: CALLS ONLY	DETECTOR OPERATION: EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE
11	1	X			Ø1	Ø1				6X30
21	2	X			Ø2	Ø2				6X20
41	3	X			Ø4	Ø4				6X20
42	3	X			Ø4	Ø4				6X20
51	4	X			Ø5	Ø5				6X30
61	5	X			Ø6	Ø6				6X20
81	6	X			Ø8	Ø8				6X20
82	6	X			Ø8	Ø8				6X20

RING 1: Ø1, Ø2, NOT USED Ø3, Ø4

RING 2: Ø5, Ø6, NOT USED Ø7, Ø8

BARRIER

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL
1		W/Ø6	
2			MIN.
3			
4		W/Ø8	
5		W/Ø2	
6			MIN.
7			
8		W/Ø4	

OVERLAPS

O.L. "A" =
O.L. "B" =
O.L. "C" =
O.L. "D" =
NONE

TYPE OF INTERCONNECT	
NONE	
TBC	X
CLOSED LOOP	
HARDWIRE	
TONE (FREQ)	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	

TYPE OF LIGHTING	
NONE	X
IN TRAFFIC CONTROL CABINET	
IN SEPARATE CONTROL CABINET	

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.

S.T.H. 125 AT C.T.H. "A"-LYNDALE

SIGNAL NO. 121

DATE SHEET NO. OF

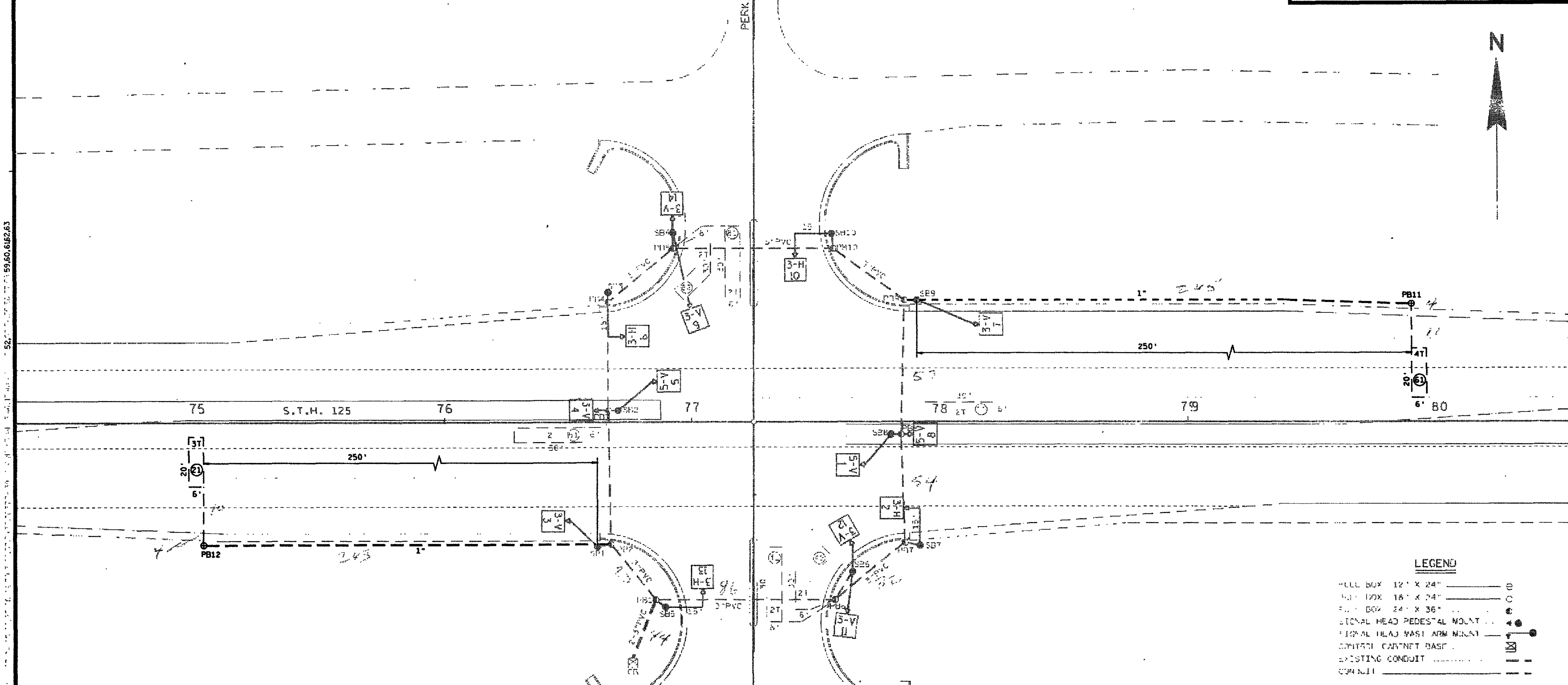
1-8-96

FILE NAME: HDGN:D3 TRAFF:TFSIG63S.DGN

20

STATE PROJECT NUMBER 4659-05-90

SHEET NO. 5.16



CONFIGURATION WITH HEAD NUMBERS

3-V		5-VL	
R Y G	3,7 / 9,11,12 / 14	R Y G	1,4 / 5,8

3-H

R Y G

2,6,10,13

REVISIONS

Base Plan No.	Rev. No.					Cont. Type
		1. ADDED ... TO S.T.H. 125				
		APPROVALS				
		DISTRICT		CENTRAL OFFICE		
		Date	By	Date	By	

REVISIONS

Base Plan No.	Rev. No.					Cont. Type
		1. ADD LEFT TURN INDICATIONS 2. UPGRADE TO TBC SYSTEM				
		APPROVALS				
		DISTRICT		CENTRAL OFFICE		
		Date	By	Date	By	
	1	9-28-88	C.R.P.	10-31-88	H.O.P.	
	2	2-4-94	C.R.K.	2-18-94	R.I.M.	

TRAFFIC CONTROL SIGNALS

S.T.H. 125 AT PERKINS

OUTAGAMIE CO.

SIGNAL NO. 220

SCALE 0 20

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED

Date 4-5-77 DALE BORTH — DISTRICT TRAFFIC ENGINEER

APPROVED

Date 4-19-77 WAYNE N. VOLK — STATE TRAFFIC ENGINEER

I.D. NO.

FILE NAME: HDGNID3 TRAFF:TFSI062S

21

WISDOT/CADDS SHEET 42

1-8-96 LEVELS ON =

STATE PROJECT NUMBER	SHEET NO.
[redacted]	5.17

SEQUENCE OF OPERATION

SEQUENCE OF OPERATION

NOT USED

RING 1

	HEAD NUMBERS	01 R/W	01 CLEAR TO **	02 R/W	02 CLEAR TO **	03 R/W	03 CLEAR TO **	04 R/W	04 CLEAR TO **	FLASH
01	5.8	~~G~~	~~Y~~	-	-			-	-	-
02	1.2.3.4	R	R R	G	Y R			R	R R	Y
03	-									-
04	9.10.11	R	R R	R	R R			G	Y R	R
05	1.4	-	-	-	-			-	-	-
06	5.6.7.8	R	R R	R	R R			R	R R	Y
07	-									-
08	12.13.14	R	R R	R	R R			R	R R	R
OL"A"										
OL"B"										
OL"C"										
OL"D"										

NOT USED

RING 2

	HEAD NUMBERS	05 R/W	05 CLEAR TO **	06 R/W	06 CLEAR TO **	07 R/W	07 CLEAR TO **	08 R/W	08 CLEAR TO **
01	5.8	-	-	-	-			-	-
02	1.2.3.4	R	R R	R	R R			R	R R
03	-								
04	9.10.11	R	R R	R	R R			R	R R
05	1.4	~~G~~	~~Y~~	-	-			-	-
06	5.6.7.8	R	R R	G	Y R			R	R R
07	-								
08	12.13.14	R	R R	R	R R			G	Y R
OL"A"									
OL"B"									
OL"C"									
OL"D"									

N

BARRIER

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1 BELOW)

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
01	5.6	2.4.8
02	5.6	1.4.8
03	-	-
04	8	1.2.5.6
05	1.2	4.6.8
06	1.2	4.5.8
07	-	
08	4	1.2.5.6

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	DETECTOR OPERATION: CALLS ONLY	DETECTOR OPERATION: EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE
11	1	X			Ø1	Ø1				6X30
21	2	X			Ø2	Ø2				6X20
41	3	X			Ø4	Ø1				6X30
42	4	X			Ø4	Ø4		X		6X30
51	5	X			Ø5	Ø5				6X30
61	6	X			Ø6	Ø6				6X20
81	7	X			Ø8	Ø8				6X30
82	8	X			Ø8	Ø8		X		6X30

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL
1		W/Ø6	
2			MIN.
3			
4		W/Ø8	
5		W/Ø2	
6			MIN.
7			
8		W/Ø4	

RING 1: Ø1, Ø2, NOT USED Ø3, Ø4

RING 2: Ø5, Ø6, NOT USED Ø7, Ø8

BARRIER

OVERLAPS

O.L. "A" =	NONE
O.L. "B" =	
O.L. "C" =	
O.L. "D" =	

TYPE OF INTERCONNECT	
NONE	
TBC	X
CLOSED LOOP	
HARDWIRE	
TONE (FREQ)	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	

TYPE OF LIGHTING	
NONE	X
IN TRAFFIC CONTROL CABINET	
IN SEPARATE CONTROL CABINET	

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)
3. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.

S.T.H. 125 AT PERKINS

SIGNAL NO. 220

DATE SHEET NO. OF

12-26-95

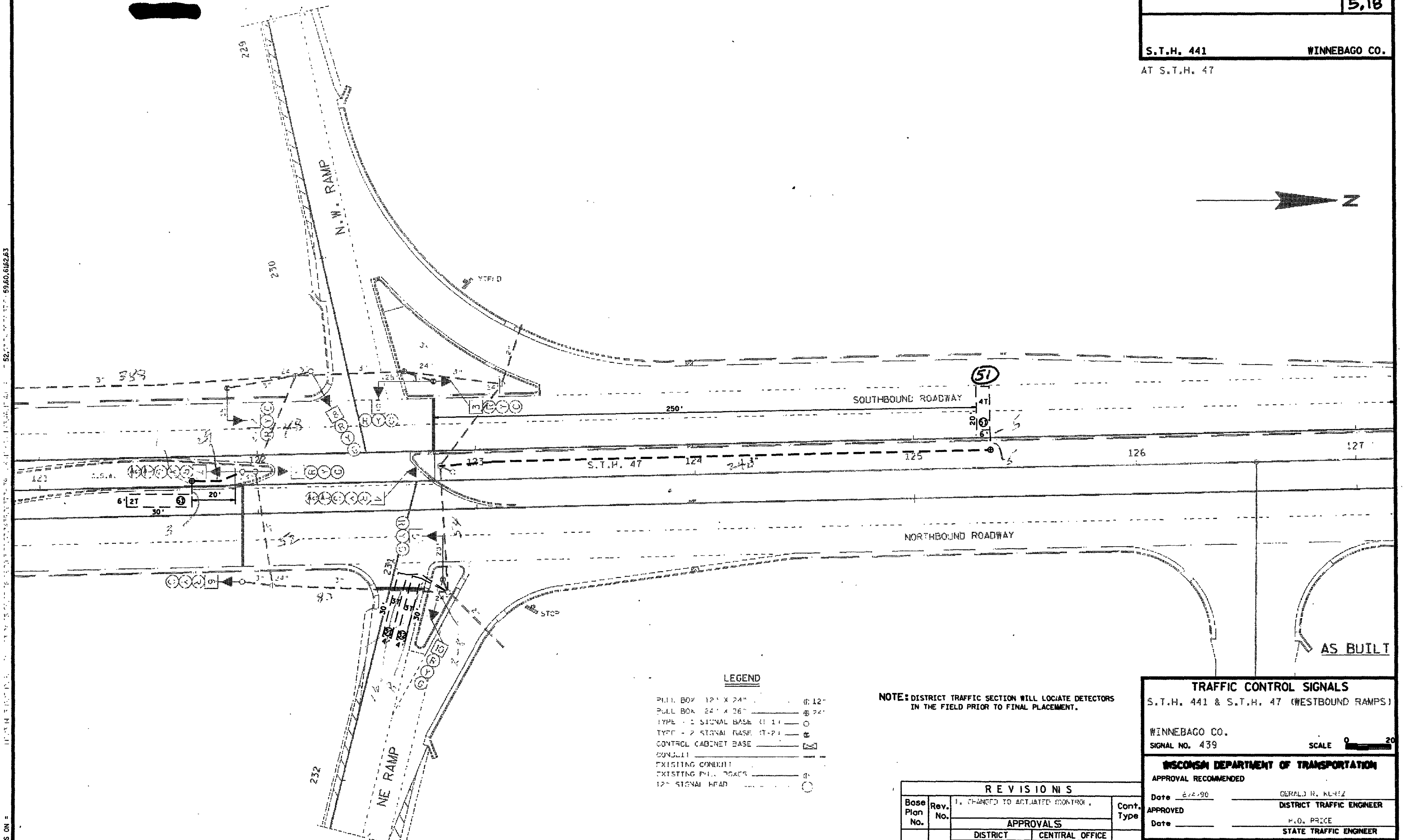
FILE NAME: HDGN:D3 TRAFFIC:TFSIG62S.DGN

22

STATE PROJECT NUMBER	SHEET NO. 5,18
S.T.H. 441	WINNEBAGO CO.

AT S.T.H. 47

[redacted]



LEGEND

PULL BOX 12" X 24" — 12"
PULL BOX 24" X 36" — 24"
TYPE - 1 SIGNAL BASE (T-1)
TYPE - 2 SIGNAL BASE (T-2)
CONTROL CABINET BASE
CONDUIT
EXISTING CONDUIT
EXISTING PULL BOXES
12" SIGNAL HEAD

NOTE: DISTRICT TRAFFIC SECTION WILL LOCATE DETECTORS IN THE FIELD PRIOR TO FINAL PLACEMENT.

REVISIONS					
Base Plan No.	Rev. No.	1. CHANGED TO ACTUATED CONTROL.			Cont. Type
		APPROVALS			
		DISTRICT		CENTRAL OFFICE	
		Date	By	Date	By

TRAFFIC CONTROL SIGNALS

S.T.H. 441 & S.T.H. 47 (WESTBOUND RAMPS)

WINNEBAGO CO.

SIGNAL NO. 439 SCALE 0 20

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED

Date 6/2/90 GERALD R. KURTZ
DISTRICT TRAFFIC ENGINEER

APPROVED

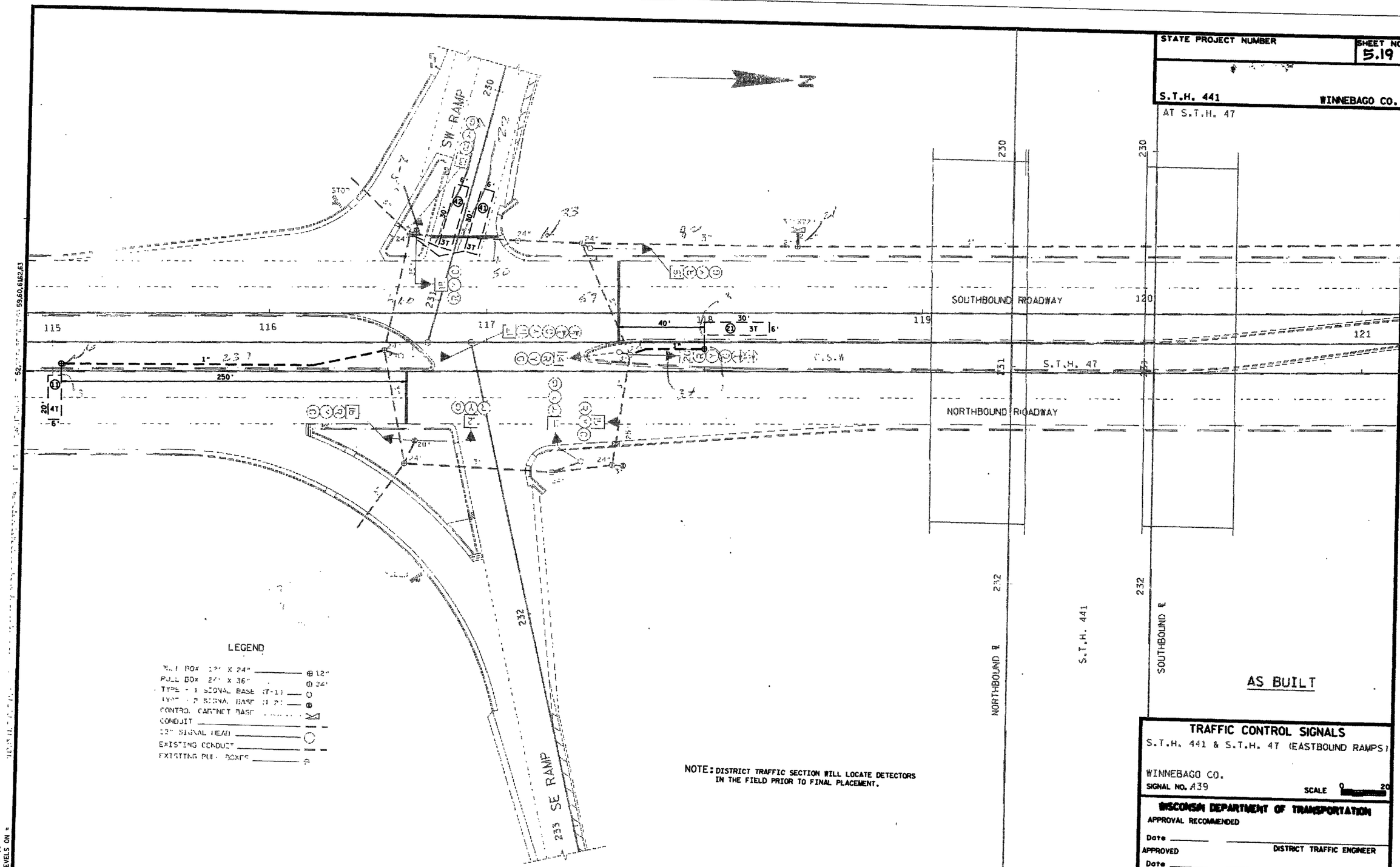
Date ______ H.O. PRICE
STATE TRAFFIC ENGINEER

I.D. NO.

FILE NAME: HDGN:D3_TRAFF:TFSIG39S.DGN

STATE PROJECT NUMBER	SHEET NO. 5.19
S.T.H. 441	WINNEBAGO CO.

AT S.T.H. 47



NOTE: DISTRICT TRAFFIC SECTION WILL LOCATE DETECTORS IN THE FIELD PRIOR TO FINAL PLACEMENT.

AS BUILT

TRAFFIC CONTROL SIGNALS

S.T.H. 441 & S.T.H. 47 (EASTBOUND RAMPS)

WINNEBAGO CO.

SIGNAL NO. A39

SCALE 0 20

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED

Date _____ _____ DISTRICT TRAFFIC ENGINEER

APPROVED

Date _____ _____ STATE TRAFFIC ENGINEER

I.D. NO.

1-22-96
LEVELS ON =

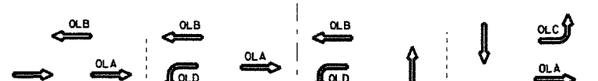
FILE NAME: HDGN:D3_TRAFF:TFSIG40S.DGN

WISDOT/CADDS SHEET 42

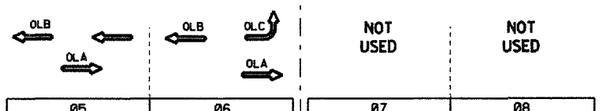
STATE PROJECT NUMBER	SHEET NO.
0083-09-16	5.20

SEQUENCE OF OPERATION

SEQUENCE OF OPERATION



		HEAD NUMBERS	01 R/W	01 CLEAR TO **	02 R/W	02 CLEAR TO **	03 R/W	03 CLEAR TO **	04 R/W	04 CLEAR TO **	FLASH
RING 1	01	14.15.16	G	Y R	R	R R	R	R R	R	R R	Y
	02	17.20	-	- -	~~G~~	~~Y~~ -	-	- -	-	- -	-
	03	8.9.10	R	R R	R	R R	G	Y R	R	R R	R
	04	11.12.13	R	R R	R	R R	R	R R	G	Y R	R
	05	1.2.3	R	R R	R	R R	R	R R	R	R R	Y
	06	4.7	-	- -	-	- -	-	- -	-	- -	-
	07										
	08										
OL"A"		4.5.6.7	G	Y R	G	Y R	R	R R	G	Y R	Y
OL"B"		17.18.19.20	G	Y R	G	Y R	G	Y R	R	R R	Y
OL"C"		4.7	-	- -	-	- -	-	- -	~~G~~	~~Y~~ -	-
OL"D"		17.20	-	- -	~~G~~	~~Y~~ -	~~G~~	~~Y~~ -	-	- -	-



		HEAD NUMBERS	05 R/W	05 CLEAR TO **	06 R/W	06 CLEAR TO **	07 R/W	07 CLEAR TO **	08 R/W	08 CLEAR TO **
RING 2	01	14.15.16	R	R R	R	R R				
	02	17.20	-	- -	-	- -				
	03	8.9.10	R	R R	R	R R				
	04	11.12.13	R	R R	R	R R				
	05	1.2.3	G	Y R	R	R R				
	06	4.7	-	- -	~~G~~	~~Y~~ -				
	07									
	08									
OL"A"		4.5.6.7	G	Y R	G	Y R				
OL"B"		17.18.19.20	G	Y R	G	Y R				
OL"C"		4.7	-	- -	~~G~~	~~Y~~ -				
OL"D"		17.20	-	- -	-	- -				

BARRIER

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1 BELOW)

* WHEN CALLED, TIMED STEADY WALK, THEN FLASHING DON'T WALK, THEN GOES TO STEADY DON'T WALK.

CHART 1

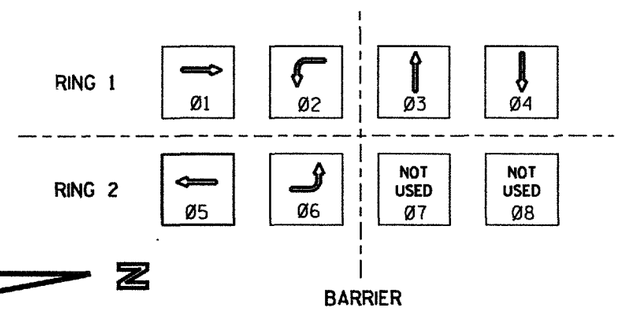
PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
01	ø5,ø6	ø2,ø3,ø4
02	ø5,ø6	ø1,ø3,ø4
03	NONE	ø1,ø2,ø4,ø5,ø6
04	NONE	ø1,ø2,ø3,ø5,ø6
05	ø1,ø2	ø3,ø4,ø6
06	ø1,ø2	ø3,ø4,ø5
07		
08		

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	CALLS ONLY	EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE	NUMBER OF TURNS
11	1	X			ø1	ø1				6X20	4
21	2	X			ø2	ø2				6X30	3
31	3	X			ø3	ø3				6X30	3
32	3	X			ø3	ø3				6X30	3
41	4	X			ø4	ø4				6X30	3
42	4	X			ø4	ø4				6X30	3
51	5	X			ø5	ø5				6X20	4
61	6	X			ø6	ø6				6X30	2

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL
1			MIN
2			
3			
4			
5			MIN
6			
7			
8			



OVERLAPS

O.L. "A" = ø1,ø2,ø4,ø5,ø6
O.L. "B" = ø1,ø2,ø3,ø5,ø6
O.L. "C" = ø4,ø6
O.L. "D" = ø2,ø3

TYPE OF INTERCONNECT	
NONE	
TBC	X
CLOSED LOOP	
HARDWIRE	
TONE (FREQ)	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	

TYPE OF LIGHTING	
NONE	X
IN TRAFFIC CONTROL CABINET	
IN SEPARATE CONTROL CABINET	

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)
3. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.
4. PROVIDE FOR HAND CONTROL OPERATION.

STH 441 & STH 47

SIGNAL NO. 439

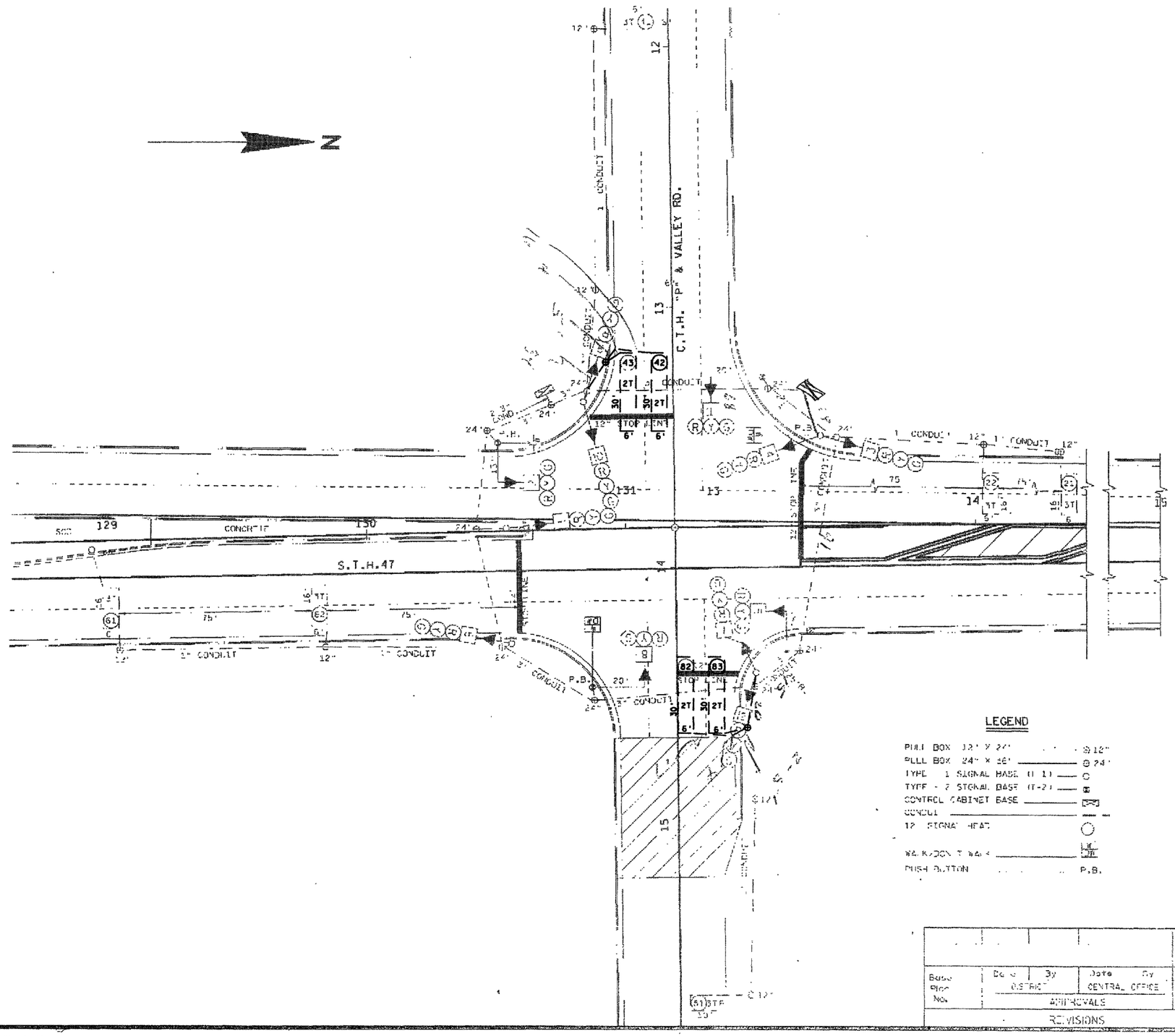
DATE SHEET NO. OF

25

FILE NAME: HDGN:D3 TRAFF:TFSIG39S.DGN

STATE PROJECT NUMBER	SHEET NO.
0083-09-16	5.21

WINNEBAGO CO.



NOTE: DISTRICT TRAFFIC SECTION WILL LOCATE DETECTORS IN THE FIELD PRIOR TO FINAL PLACEMENT.

Base Plan No.	Date	By	Date	By	Cert. Type
	DISTRICT		CENTRAL OFFICE		
	APPROVALS				
REVISIONS					

TRAFFIC CONTROL SIGNALS

S.T.H. 47 & C.T.H. "P"

SIGNAL NO. 192 SCALE 0 20

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED

Date 3-29-89 GERALD R. KURTZ
DISTRICT TRAFFIC ENGINEER

APPROVED

Date 4-9-89 H.O. PRICE
STATE TRAFFIC ENGINEER

I.D. NO.

FILE NAME: HDGN\D3_TRAFF\TFSIG24S

WISDOT/CADDS SHEET 42

STATE PROJECT NUMBER	SHEET NO.
0083-09-16	5.22

SEQUENCE OF OPERATION

SEQUENCE OF OPERATION

RING 1 (NOT USED | ⇐ | NOT USED | ⇓)

RING 1	HEAD NUMBERS	Ø1 R/W	Ø1 CLEAR TO **	Ø2 R/W	Ø2 CLEAR TO **	Ø3 R/W	Ø3 CLEAR TO **	Ø4 R/W	Ø4 CLEAR TO **	FLASH
Ø1										
Ø2	1-3			G	Y R			R	R R	Y
Ø3										
Ø4	7-9			R	R R			G	Y R	R
Ø5										
Ø6	4-6			R	R R			R	R R	Y
Ø7										
Ø8	10-12			R	R R			R	R R	R
OL"A"										
OL"B"										
OL"C"										
OL"D"										

RING 2 (NOT USED | ⇒ | NOT USED | ⇑)

RING 2	HEAD NUMBERS	Ø5 R/W	Ø5 CLEAR TO **	Ø6 R/W	Ø6 CLEAR TO **	Ø7 R/W	Ø7 CLEAR TO **	Ø8 R/W	Ø8 CLEAR TO **
Ø1									
Ø2	1-3			R	R R			R	R R
Ø3									
Ø4	7-9			R	R R			R	R R
Ø5									
Ø6	4-6			G	Y R			R	R R
Ø7									
Ø8	10-12			R	R R			G	Y R
OL"A"									
OL"B"									
OL"C"									
OL"D"									

N

BARRIER

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1 BELOW)

* WHEN CALLED, TIMED STEADY WALK, THEN FLASHING DON'T WALK, THEN GOES TO STEADY DON'T WALK.

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
Ø1	NOT USED	-
Ø2	ϕ6	ϕ4, ϕ8
Ø3	NOT USED	-
Ø4	ϕ8	ϕ2, ϕ6
Ø5	NOT USED	-
Ø6	ϕ2	ϕ4, ϕ8
Ø7	NOT USED	-
Ø8	ϕ4	ϕ2, ϕ6

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	CALLS ONLY	EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	NUMBER OF TURNS
21	1	X			ϕ2	ϕ2				
22	2	X			ϕ2	ϕ2				
41	3			X	-	ϕ4			X	
42	4	X			ϕ4	ϕ4				2
43	5	X			ϕ4	ϕ4		X		2
61	6	X			ϕ6	ϕ6				
62	7	X			ϕ6	ϕ6				
81	8			X	-	ϕ8			X	
82	9	X			ϕ8	ϕ8				2
83	10	X			ϕ8	ϕ8		X		2

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL
2	X	MIN	W/6
4	X		W/8
6	X	MIN	W/2
8	X		W/4

	NOT USED	⇐	NOT USED	⇓
RING 1	NOT USED Ø1	Ø2	NOT USED Ø3	Ø4
RING 2	NOT USED Ø5	⇒ Ø6	NOT USED Ø7	⇑ Ø8

BARRIER

OVERLAPS

O.L. "A" =
O.L. "B" =
O.L. "C" =
O.L. "D" =

TYPE OF INTERCONNECT	
NONE	
TBC	
CLOSED LOOP	
HARDWIRE	
TONE (FREQ)	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	

TYPE OF LIGHTING	
NONE	
IN TRAFFIC CONTROL CABINET	
IN SEPARATE CONTROL CABINET	

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)
3. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.
4. PROVIDE FOR HAND CONTROL OPERATION.

S.T.H. 47 & C.T.H. "P"

SIGNAL NO. 192

DATE　　SHEET NO.　　OF

12-19-95

FILE NAME: HDGN:D3 TRAFF:TFSIG24S.DGN