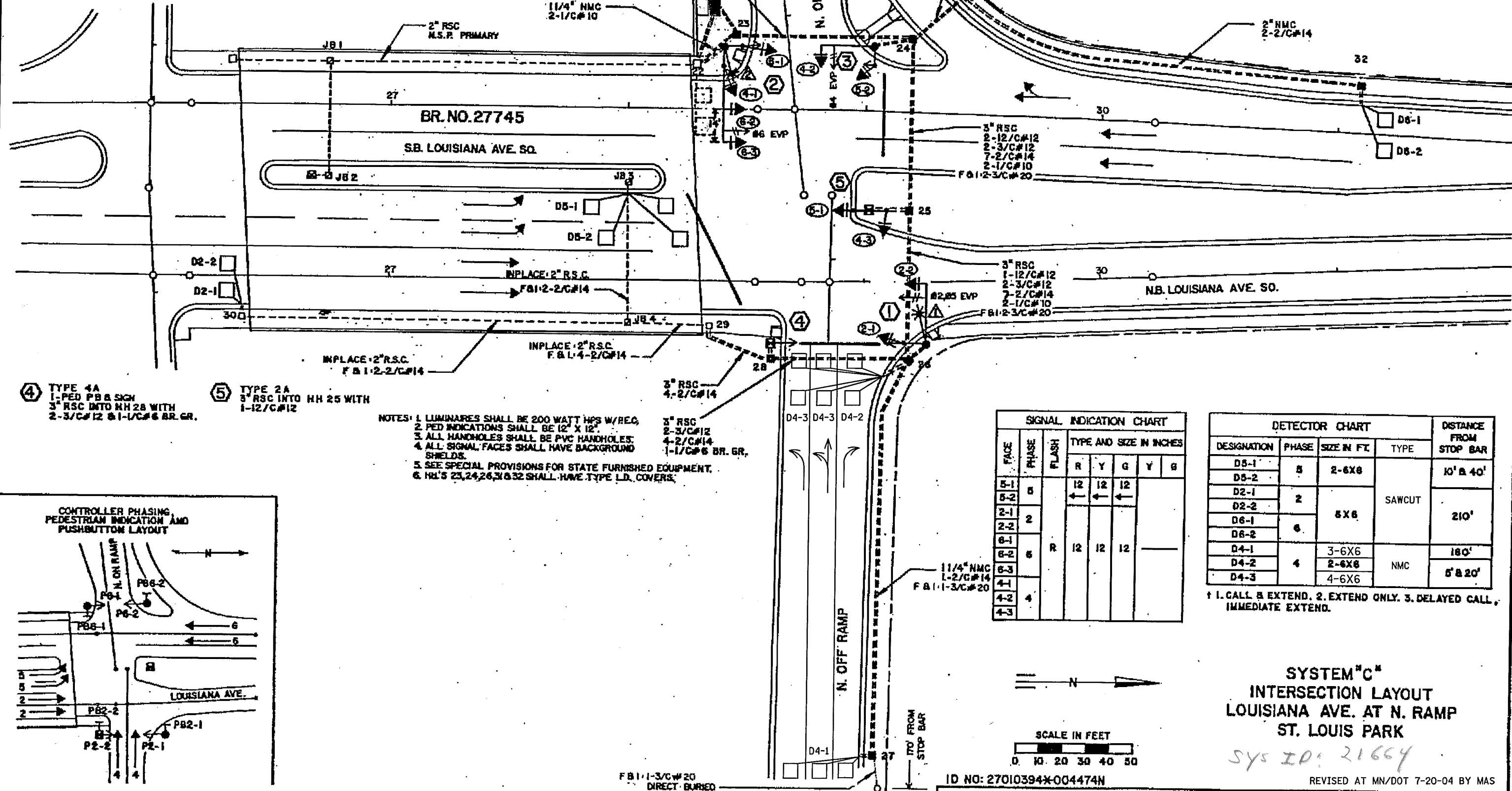


① TYPE P90-A25-D40-9
ONE WAY SIGNAL (OVERHEAD)
TYPE JOB AT 270°
LUM AT 355°
1-PED PB & SIGN
3" RSC INTO HH 25 WITH
1-12/C#12, 2-3/C#12,
2-1/C#10 & 1-1/C#6 BR. GR.
F & I:
ONE WAY EVP DETECTOR &
CONFIRMATORY LIGHT (2' FROM
END OF MAST ARM) -
1-3/C#20

② TYPE P100-A40-D40-9
2-ONE WAY SIGNALS (OVERHEAD)
TYPE JOB AT 270°
TYPE JOB AT 270°
LUM AT 355°
1-PED PB & SIGN
3" RSC INTO HH 22 WITH
2-12/C#12, 1-3/C#12 &
2-1/C#10
F & I:
ONE WAY EVP DETECTOR &
CONFIRMATORY LIGHT (2' FROM
END OF MAST ARM)
1-3/C#20

③ TYPE P90-A25
ONE WAY SIGNAL (OVERHEAD)
TYPE JOB AT 270°
1-PED PB & SIGN
3" RSC INTO HH 24 WITH
1-12/C#12 & 3-3/C#12
F & I:
ONE WAY EVP DETECTOR &
CONFIRMATORY LIGHT (2' FROM
END OF MAST ARM)
1-3/C#20

Ⓐ CABINET & CONTROLLER
PAD MOUNTED METER & DISCONNECT
EXTEND INTO HH 23, 4" RSC FROM CONTROLLER
WITH 3-12/C#12, 2-3/C#12 & 2-2/C#14
F & I: 3-3/C#20
EXTEND INTO HH 22, 4" RSC WITH 2-12/C#12,
1-3/C#12 & 1-25 PR#19
STUB OUT & CAP 3" RSC
F & I: 1-3/C#20
EXTEND INTO CONTROLLER FROM DISCONNECT
1 1/4" RSC, 2-1/C#6 & 1-1/C#6 BR. GR.
EXTEND INTO HH 22 FROM METER & DISCONNECT
4-1/C#10



④ TYPE 4A
1-PED PB & SIGN
3" RSC INTO HH 28 WITH
2-3/C#12 & 1-1/C#6 BR. GR.

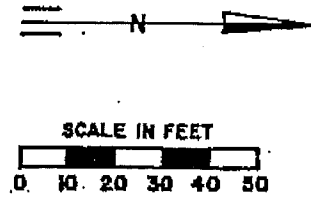
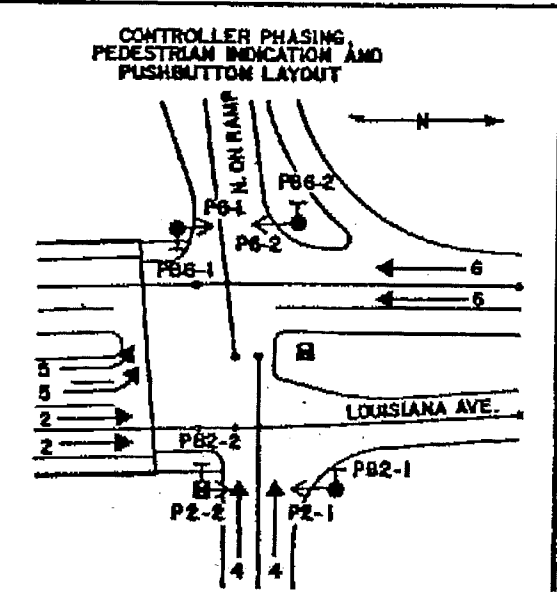
⑤ TYPE 2A
3" RSC INTO HH 25 WITH
1-12/C#12

NOTES: 1. LUMINAIRES SHALL BE 200 WATT HPS W/REC.
2. PED INDICATIONS SHALL BE 12" X 12".
3. ALL HANDHOLES SHALL BE PVC HANDHOLES.
4. ALL SIGNAL FACES SHALL HAVE BACKGROUND SHIELDS.
5. SEE SPECIAL PROVISIONS FOR STATE FURNISHED EQUIPMENT.
6. HL'S 23, 24, 26, 31 & 32 SHALL HAVE TYPE LD. COVERS.

FACE	PHASE	FLASH	TYPE AND SIZE IN INCHES				
			R	Y	G	Y	G
5-1	5		12	12	12		
5-2	5		←	←	←		
2-1	2						
2-2	2						
6-1	6	R	12	12	12		
6-2	6						
4-1	4						
4-2	4						
4-3	4						

DESIGNATION	PHASE	SIZE IN FT.	TYPE	DISTANCE FROM STOP BAR
D5-1	5	2-6X8		10' & 40'
D5-2	5	2-6X8		10' & 40'
D2-1	2	6X6	SAWCUT	210'
D2-2	2	6X6	SAWCUT	210'
D6-1	6	6X6		210'
D6-2	6	6X6		210'
D4-1	4	3-6X6	NMC	180'
D4-2	4	2-6X6	NMC	5' & 20'
D4-3	4	4-6X6	NMC	5' & 20'

† 1. CALL & EXTEND. 2. EXTEND ONLY. 3. DELAYED CALL, IMMEDIATE EXTEND.



SYSTEM "C"
INTERSECTION LAYOUT
LOUISIANA AVE. AT N. RAMP
ST. LOUIS PARK

SYS ID: 21664

FBI-1-3/C#20
DIRECT BURIED

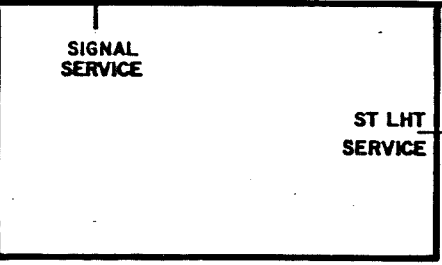
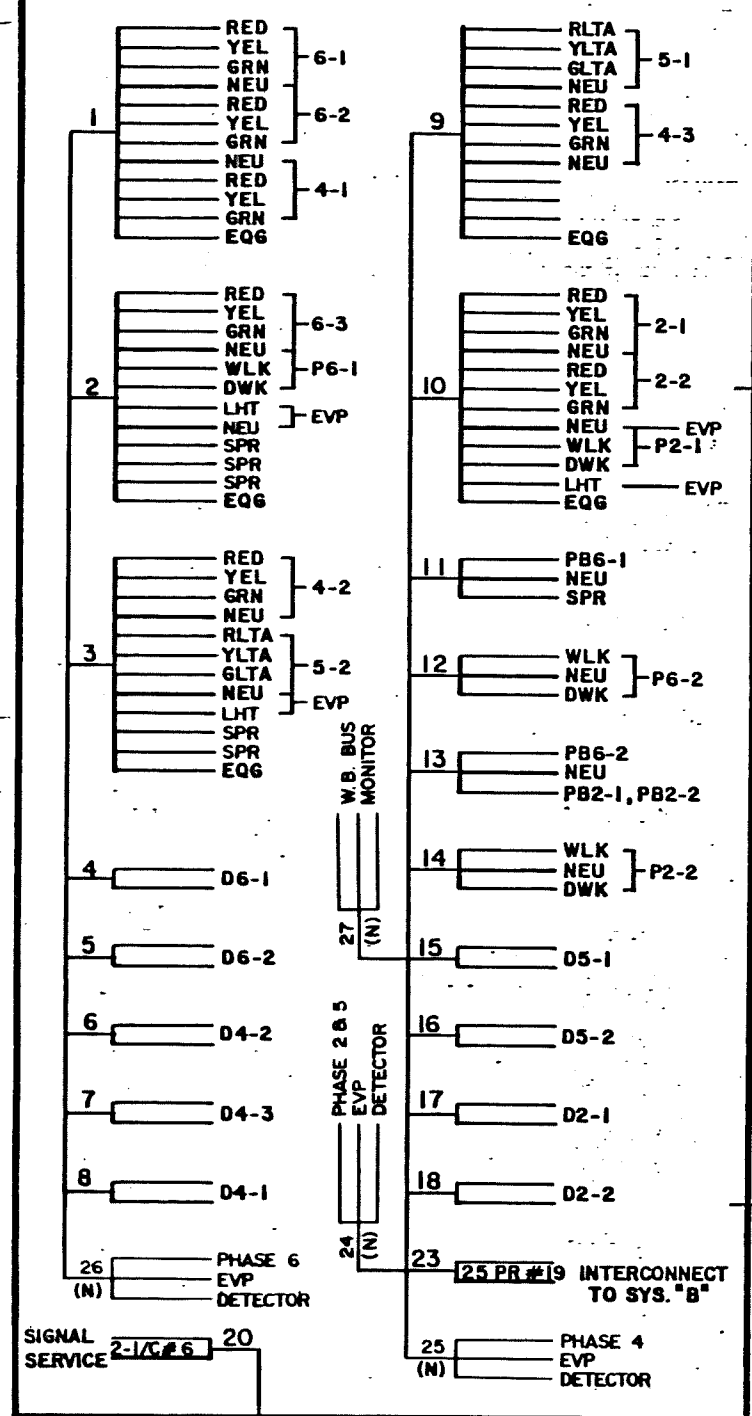
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State Proj. No. 2789-17 (T.H.394)

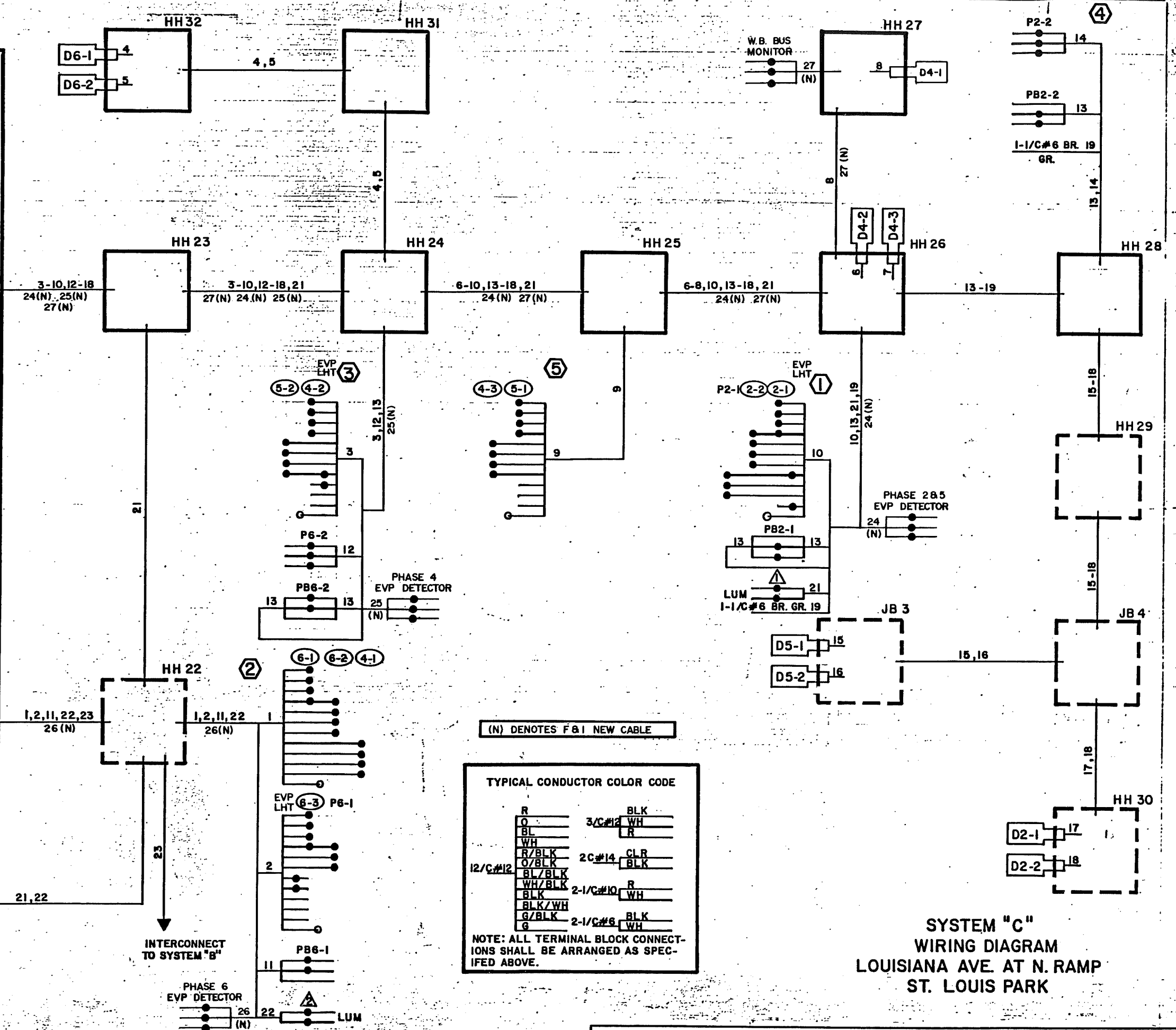
REVISED AT MN/DOT 7-20-04 BY MAS

Sheet No. of Sheets

CONTROLLER CABINET



EQUIPMENT PAD



(N) DENOTES F&I NEW CABLE

TYPICAL CONDUCTOR COLOR CODE

R	BLK
0	3/C#12 WH
BL	R
WH	2C#14 CLR
R/BLK	BLK
O/BLK	R
BL/BLK	WH
WH/BLK	2-1/C#10
BLK	BLK
BLK/WH	2-1/C#6
G/BLK	WH
G	

NOTE: ALL TERMINAL BLOCK CONNECTIONS SHALL BE ARRANGED AS SPECIFIED ABOVE.

SYSTEM "C"
WIRING DIAGRAM
LOUISIANA AVE. AT N. RAMP
ST. LOUIS PARK

NOTES

- 1) SEE SPECIAL PROVISIONS FOR STATE FURNISHED MATERIALS.
- 2) EACH VEHICLE SIGNAL FACE SHALL BE 3-SECTION, 12-INCH, R-Y-G.
- 3) EACH VEHICLE SIGNAL FACE SHALL HAVE A BACKGROUND SHIELD.
- 4) PEDESTRIAN INDICATIONS SHALL BE SIZE 12" X 12".
- 5) HANDHOLES SHALL BE PVC HANDHOLES WITH CONCRETE COVERS—SEE SPECIAL PROVISIONS.
- 6) CONTRACTOR SHALL INSTALL LOOP DETECTORS IN ROADWAY AFTER PAVEMENT MARKINGS AND LANE LINES HAVE BEEN ESTABLISHED AT THE INTERSECTION.
- 7) SEE SHEET FOR TYPE "D" SIGN PANELS.
- 8) SIGNAL SYSTEM FLASH MODE SHALL BE ALL-RED.

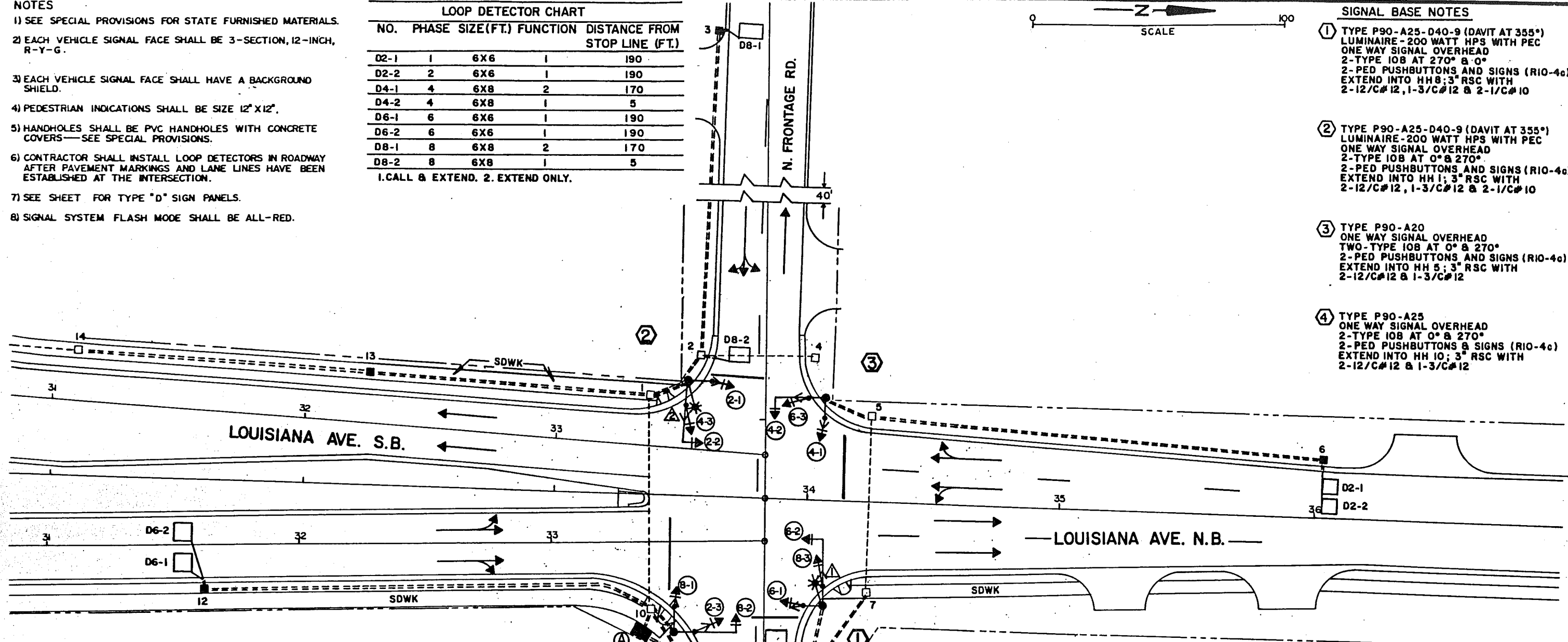
LOOP DETECTOR CHART				
NO.	PHASE	SIZE (FT.)	FUNCTION	DISTANCE FROM STOP LINE (FT.)
D2-1	1	6X6	1	190
D2-2	2	6X6	1	190
D4-1	4	6X8	2	170
D4-2	4	6X8	1	5
D6-1	6	6X6	1	190
D6-2	6	6X6	1	190
D8-1	8	6X8	2	170
D8-2	8	6X8	1	5

1. CALL & EXTEND. 2. EXTEND ONLY.

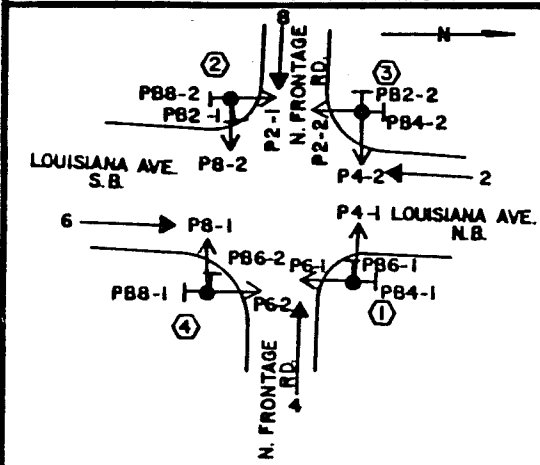


SIGNAL BASE NOTES

- ① TYPE P90-A25-D40-9 (DAVIT AT 355°)
LUMINAIRE-200 WATT HPS WITH PEC
ONE WAY SIGNAL OVERHEAD
2-TYPE 10B AT 270° & 0°
2-PED PUSHBUTTONS AND SIGNS (RI0-4c)
EXTEND INTO HH 8; 3" RSC WITH
2-12/C#12, 1-3/C#12 & 2-1/C#10
- ② TYPE P90-A25-D40-9 (DAVIT AT 355°)
LUMINAIRE-200 WATT HPS WITH PEC
ONE WAY SIGNAL OVERHEAD
2-TYPE 10B AT 0° & 270°
2-PED PUSHBUTTONS AND SIGNS (RI0-4c)
EXTEND INTO HH 1; 3" RSC WITH
2-12/C#12, 1-3/C#12 & 2-1/C#10
- ③ TYPE P90-A20
ONE WAY SIGNAL OVERHEAD
TWO-TYPE 10B AT 0° & 270°
2-PED PUSHBUTTONS AND SIGNS (RI0-4c)
EXTEND INTO HH 5; 3" RSC WITH
2-12/C#12 & 1-3/C#12
- ④ TYPE P90-A25
ONE WAY SIGNAL OVERHEAD
2-TYPE 10B AT 0° & 270°
2-PED PUSHBUTTONS & SIGNS (RI0-4c)
EXTEND INTO HH 10; 3" RSC WITH
2-12/C#12 & 1-3/C#12



CONTROLLER PHASING - PEDESTRIAN INDICATION AND PUSH BUTTON LAYOUT



- HH 1 TO HH 13 TO HH 14
3" RSC
1-25 PR#19
- HH 2 TO HH 3
3" RSC
1-2/C#14
- HH 1 TO HH 10
INPL 3" RSC
F&I 2-12/C#12
1-3/C#12
2-2/C#14
2-1/C#10
- HH 11 TO HH 8
INPL 3" RSC
F&I 4-12/C#12
2-3/C#12
4-2/C#14
2-1/C#10
- HH 10 TO HH 11
3" RSC
2-1/C#10
- HH 7 TO HH 8
3" RSC
2-12/C#12
1-3/C#12
2-2/C#14
- HH 2 TO HH 4
INPL 3" RSC
- HH 8 TO HH 9
3" RSC
1-2/C#14
- HH 5 TO HH 6
1 1/4" NMC
2-2/C#14
- HH 10 TO HH 11
3" RSC
1-25 PR#19
- HH 5 TO HH 7
INPL 3" RSC
2-12/C#12
1-3/C#12
2-2/C#14
- HH 14 TO N. RAMP
INPL 3" RSC
1-25 PR#19
- HH 10 TO HH 12
1 1/4" NMC
2-2/C#14

- Ⓐ EQUIPMENT PAD (SEE DETAIL)
CONTROLLER AND CABINET
LOAD CENTER (PAD MOUNTED)
- CABINET TO HH 10:
4" RSC
4-12/C#12
2-3/C#12
4-2/C#14
1-25 PR#19
 - LOAD CENTER TO HH 10:
2" RSC
4-1/C#10
 - LOAD CENTER TO CABINET
1 1/4" RSC
2-1/C#6
 - CABINET TO HH 11:
4" RSC
4-12/C#12
2-3/C#12
2-2/C#14
2-1/C#10
 - 1-1/C#6 BR. GR.

**INTERSECTION LAYOUT
T.H. 394
LOUISIANA AVE. AT N. FRONTAGE RD.
GOLDEN VALLEY**