

MSW 41		
4	IL	MB10W
5	IC	F41
6	IR	G
	2L	
	2C	
	2R	

MSW 44		
4	IL	F41
5	IC	F44
6	IR	G
	2L	
	2C	
	2R	

MSW 43		
4	IL	MB10E
5	IC	F43
6	IR	G
	2L	
8	2C	MBX10
7	2R	MB10E

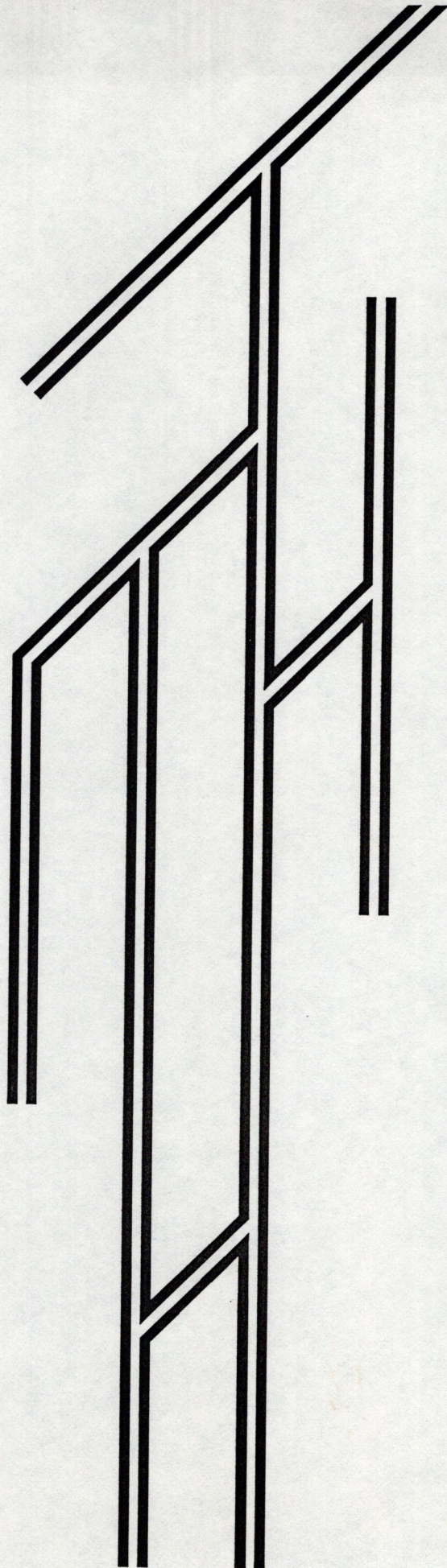
MISSION BAY

ADDED CABOOSE TRACK

4-16-91

*[Signature]*

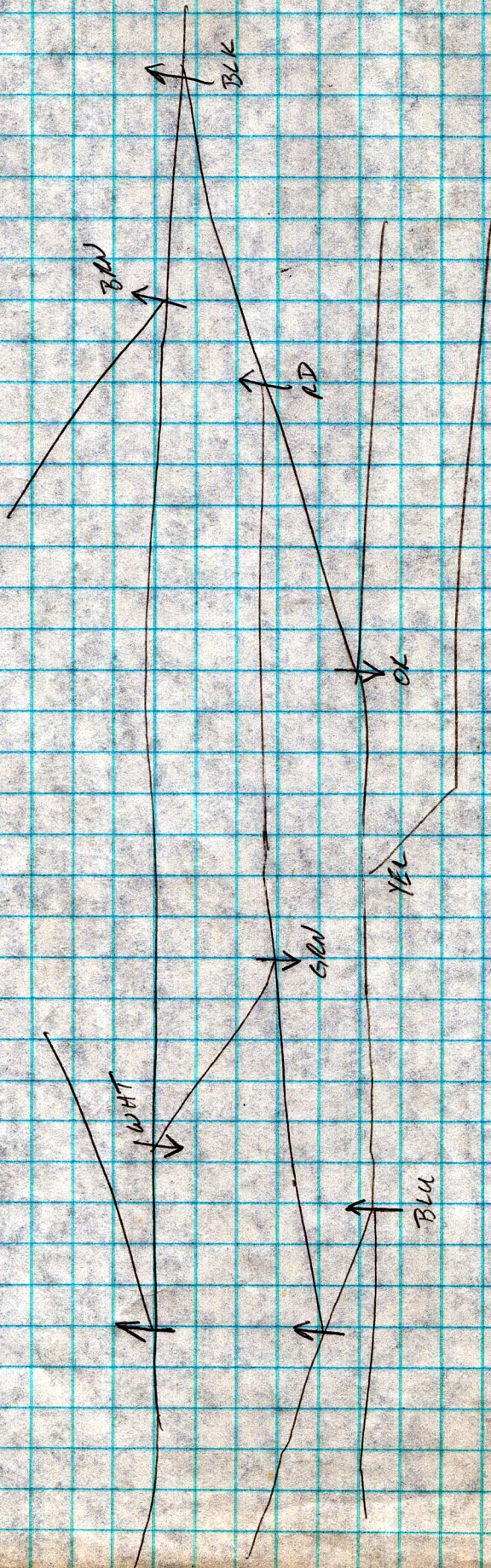
**KEGG PIT**



**Klamath  
Junction**

TWO COLUMNNE - POINT DIRECTION FOR  
 MOTOR DRIVE AWAY FROM  
 MICHRO SWITCH

11/12/50



BLK } BLK, YEL  
 BRN }  
 RED } BRN, GRN  
 ORG }  
 YEL } RD, BLU  
 GRN }  
 BLU } ORG, WHT  
 WHT }

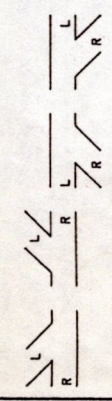
PIN 1 TO Control BOARD

PIN 3 TO ALSO BOARD

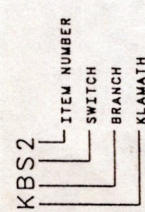
5-12-83	INITIAL DRAWING	DOS
5-20-83	CHANGE AT5 TO AF7	DOS
7-28-88	ADD "X" SECTIONS & AISLE	DOS



**NOTES:**



- TURNOUT NOMENCLATURE (ABOVE)
- GENERAL NOMENCLATURE:



- 2L - LEFT
- 2C - COMMON
- 2R - RIGHT

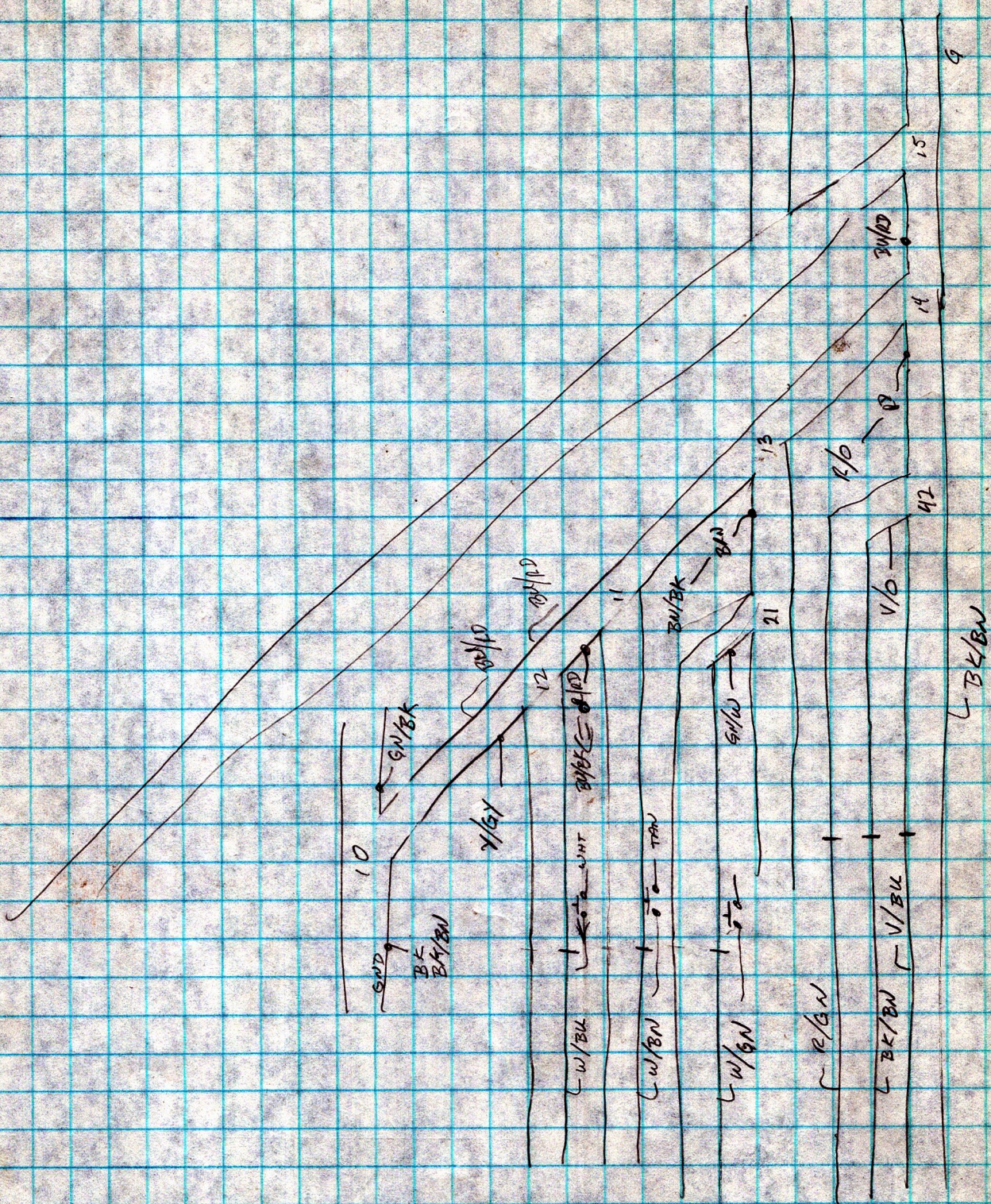
- POSITION WHEN CONNECTED
- CONTACT SET NUMBER  
IE 1=(4, 5, 6) AND 2=(7, 8, 9)

- GAPS IN THIS DIAGRAM CORRESPOND TO GAPS IN THE TRACKWORK.
- ABBREVIATIONS: (EXAMPLES)

- S=SWITCH
- L=LEFT
- R=RIGHT
- D=DOWN
- F=UP
- C=COMMON
- T=TRACK (POWER RAIL)
- G=GROUND
- SW=SWITCH
- NC=NO CONNECTION
- Y=YARD
- X=XING

TITLE: DRAWING AGNEW TRACK WIRING		DATE: 7-27-88
PART NUMBER: LAST_MODIFIED=Fri Jul 29 12:09:26 1988		PAGE: 1 OF 1





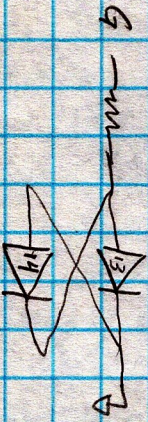
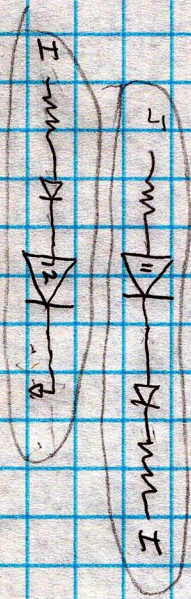
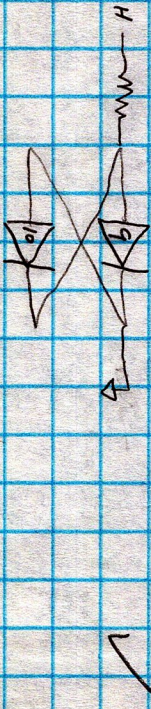
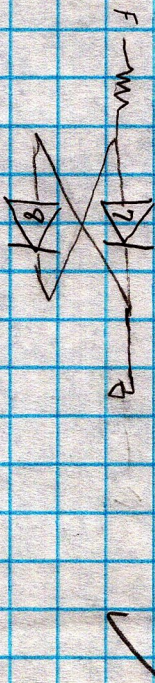
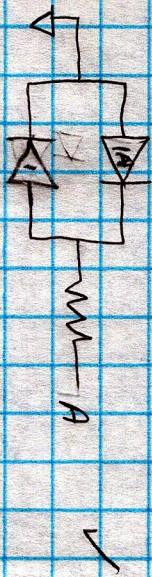
MISSION BAY ENGINE TRACK WIRING 10-2-89

THEOREM

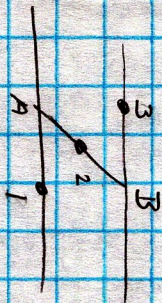
LG HTS

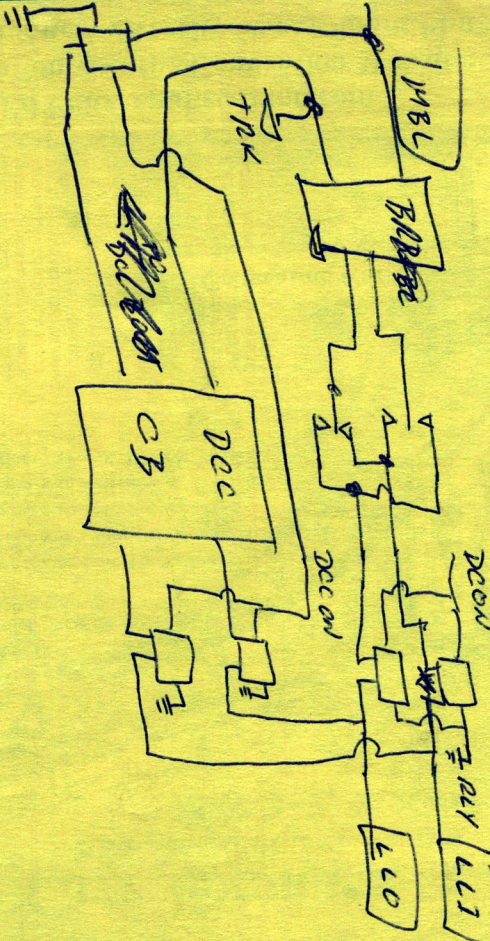
IN SWITCHES

4/30/90



MILES





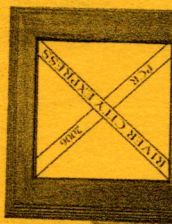
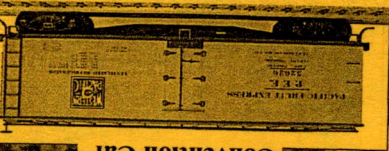
# RIVER CITY EXPRESS

62ND ANNUAL PCR CONVENTION  
MAY 3-7, 2006

- Model Trains - All Scales & Gauges ■ Operating Layouts ■ Vendors ■ Train Show ■ Company Store
- Clinics ■ Contests ■ Layout Tours ■ Prototype Tours ■ Hobo Breakfast ■ Non-Rail Activities
- Special Interest Groups ■ Door Prizes ■ All Ages

Held at the  
DoubleTree Hotel, Sacramento  
916-929-8855

Convention Car



Registrar: Ed Pultz [epultz@juno.com](mailto:epultz@juno.com)

or Info & Registration visit the Convention Website:  
<http://home.earthlink.net/~rivercityexpress/index.htm>



TITLE OF PROJ. OR STUDY \_\_\_\_\_ PROJ. OR STUDY No. \_\_\_\_\_

SUBJECT \_\_\_\_\_ WORKS \_\_\_\_\_

COMPUTER \_\_\_\_\_

DATE \_\_\_\_\_

19 \_\_\_\_\_

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37

ADDITIONAL

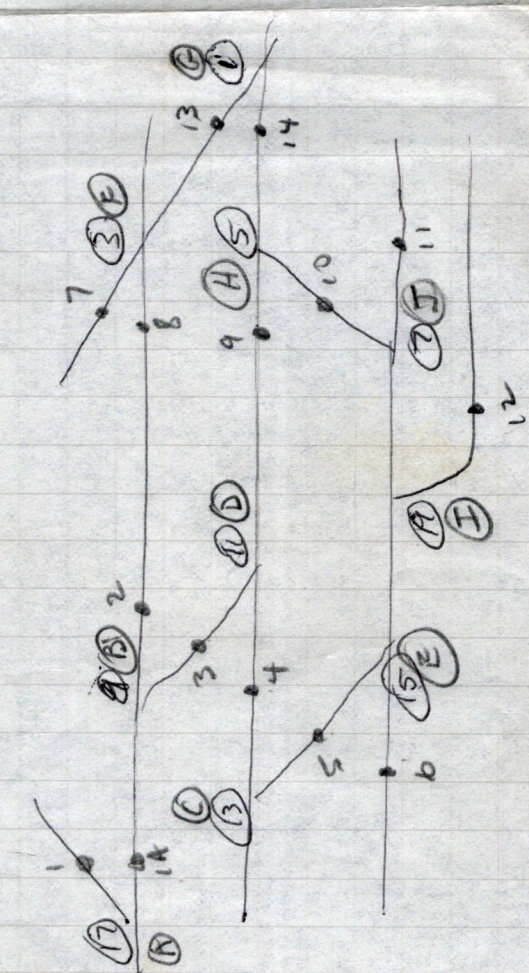
GREEN

YELLOW

CABLE "C"

17=15

- ① BLUE/BLACK
- ③ WHITE/RED
- ⑤ BLUE/RED
- ⑦ WHITE/BLACK
- ⑧ WHITE
- ⑩ WHITE/BLACK/RED
- ⑬ BLACK/RED
- ⑮ GREEN/BLACK
- ⑰ ~~BLACK/WHITE~~
- ⑱ BLUE/GREY

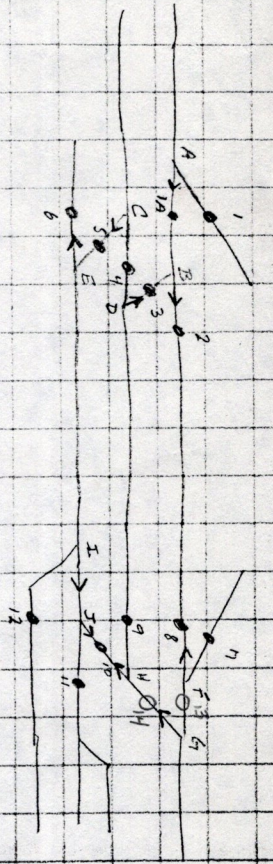


TWO LAMP

DIODE

MATRIX

3-26-80



GRN BLK YEL GRN WHT BRN BLK RED YEL ORN  
 PW 2 BRN ORN DM R EM R FM R GN R HW R IN R JM R

1  
 1A  
 2  
 3  
 4  
 5  
 6  
 7  
 8  
 9  
 10  
 11  
 12

CABLE	THROW COLOR
-	ORN
-	RD
B	BLU
B	WHT
-	BLK
-	BRN
B	RD
B	ORN
B	GRN
B	YEL
A	ORN
A	RD
A	BLK
A	BRN
A	YEL
A	GRN
B	BRN
B	BLK
A	WHT
A	BLU

# AGNEW PANEL CONNECTIONS

3-23-84 *ML*

1	SW1	N	36	OP	DEFECT	CA3
2	SW1	R	37	✓	✓	AG1
3	SW2	N	38	✓	✓	AG2
4	SW2	R	39	✓	✓	AK1
5	SW3	N	40	✓	✓	COMMON
6	SW3	R				
7	SW4	N	41	SW11	N	
8	SW4	R	42	SW11	R	
9	SW5	N				
10	SW5	R				
11	SW6	N				
12	SW6	R				
13	SW7	N				
14	SW7	R				
15	SW8	N				
16	SW8	R				
17	SW9	N				
18	SW9	R				
19	SW10	N				
20	SW10	R				

21 RELAY +  
22 RELAY -

23	REL LAMP+	CA 3
24	✓ ✓ +	AG 1
25	✓ ✓ +	AG 2
26	✓ ✓ +	AK 1
27	✓ ✓ +	AY

28	LOCAL	BLOCK	FEED	CA3
29	✓	✓	✓	AG1
30	✓	✓	✓	AG2
31	✓	✓	✓	AK1
32	✓	✓	✓	AY1
33	✓	✓	✓	AY2

34 AGNEW LOCAL TROTTLE INPAT  
35 AY MAINLINE RELEASE FEED

# CCL MOTOR DRIVE SWITCH MACHINES AUTO INITIALIZE CIRCUIT

## ② REQUIREMENTS :

- A. STALL MOTORS MUST MOVE AT LEAST ONCE
- B. PFM'S TO MOVE AT MOST ONCE
- C. NO SPECIAL WIRING TO THE MACHINES

## ③ POWER SEQUENCE REQUIRED

DISTRIBUTION LINE	STEP					
	POFF	PON	A	B	C	D
-9V	∅	+9	+9	+9	+9	-9
+9V	∅	+9	+9	+9	+9	+9
+5V	∅	+5	+5	+5	+5	+5
BGND	∅	G	G	G	G	G
MGND	∅	+9	G	-9	G	G

SET ALL ⊖ TOGGLE MACHINES TO PROPER POSITION & NORMAL OPERATION  
 MACHINE GROUND TO NORMAL - HOLDS ALL MACHINES SET TO ⊕ POSITION  
 DOUBLE ⊕ MOTION VOLTAGE - INITS, STALL MOTORS THAT STARTED CLOSE TO ⊕ POSITION; NO PFM EFFECT.  
 MOVE ALL STALL MOTORS TO ⊕ POSITION; NO PFM EFFECT  
 POWER STABILIZES - NO MACHINES MOVE - ALL STALL MOTOR RMDIFS SET FOR ⊕ - PFM'S POSITIONED ⊕ SET THEIR RMDIFS TO ⊕

DISTRIBUTION LINE	STEP					
	POFF					
-9V	∅	+9	+9	-9	-9	-9
+9V	∅	+9	+9	+9	-9	+9
+5V	∅	+5	+5	+5	+5	+5
BGND	∅	G	G	G	G	G
MGND	∅	+9	G	G	G	G

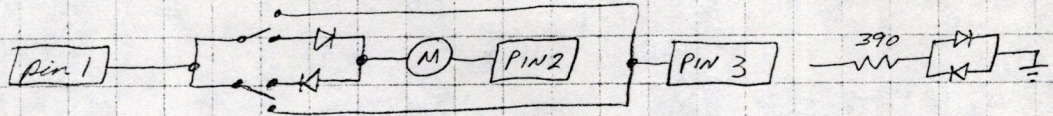
# CCL

## MOTOR DRIVE SWITCH MACHINES AUTO INITIALIZE CIRCUIT

### ① ENVIRONMENT

#### A. MACHINE TYPES

##### 1. PFM-FULGAREX.

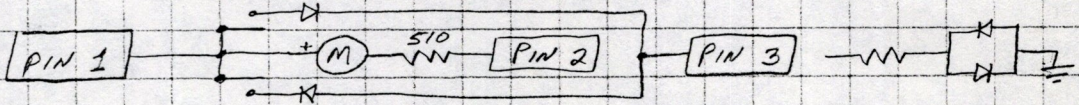


POSITIVE MECHANICAL LOCK

NO SERIES RESISTOR - RELATIVELY HIGH START VOLTAGE

~ 200 mA RUNNING CURRENT

##### 2. HANKSCRAFT STALL MOTORS



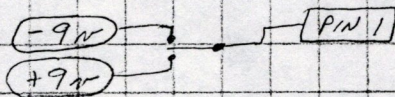
10 mA RUNNING CURRENT - 510Ω SERIES RESISTOR

LOW (3V) START VOLTAGE

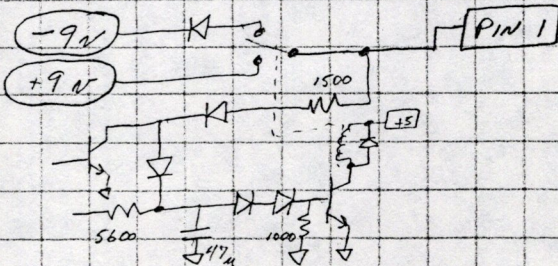
NO MECHANICAL LOCK

#### B. CONTROL TYPES

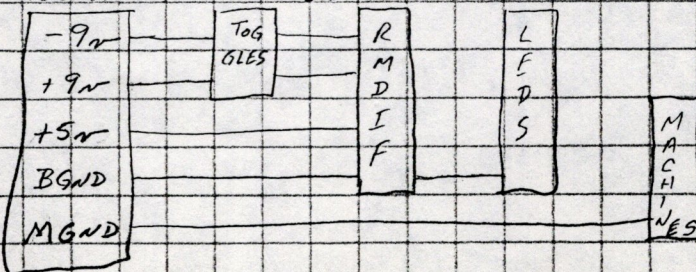
##### 1. TOGGLE SWITCHES



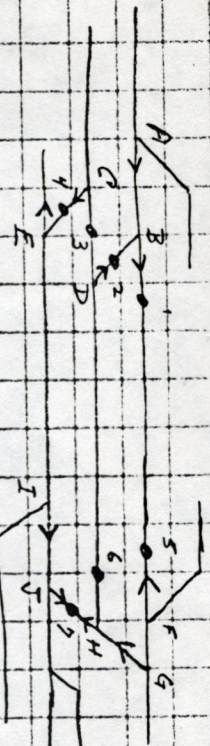
##### 2. PUSHBUTTON CONTROL BOARDS



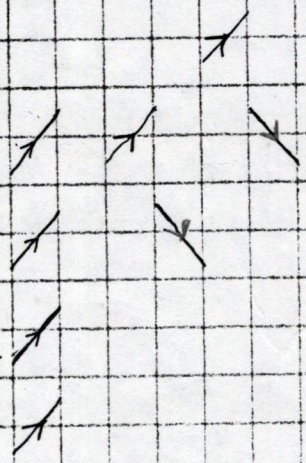
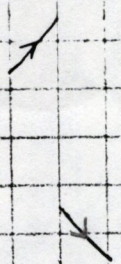
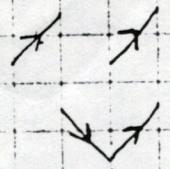
#### C. POWER DISTRIBUTION :



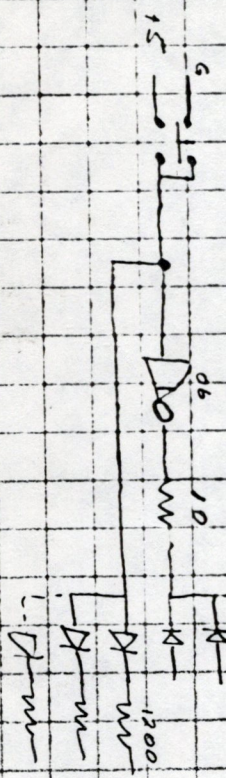
TALAMNE DISPATCHER CONTROL 4-27-90



A	11	B	2	C	9	D	6	E	4	F	3	G	1	H	5	I	8	J	7
---	----	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

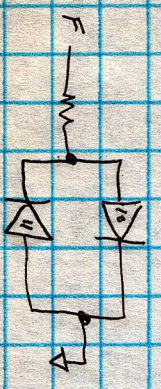
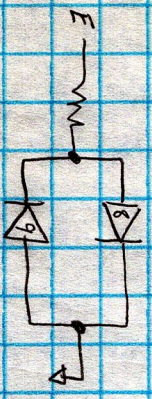
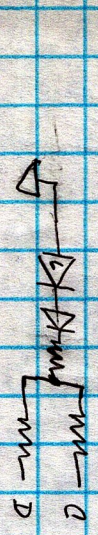
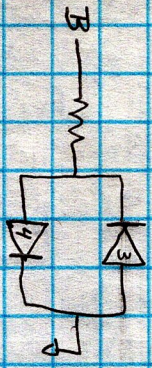
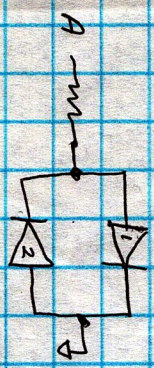
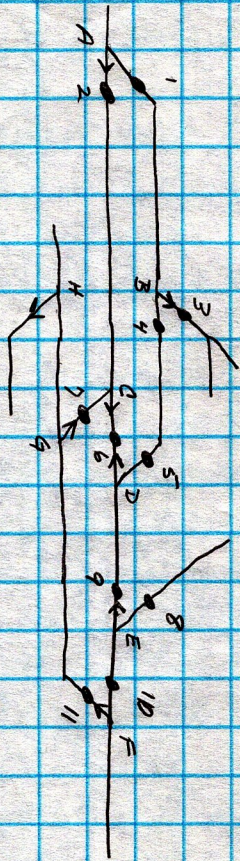


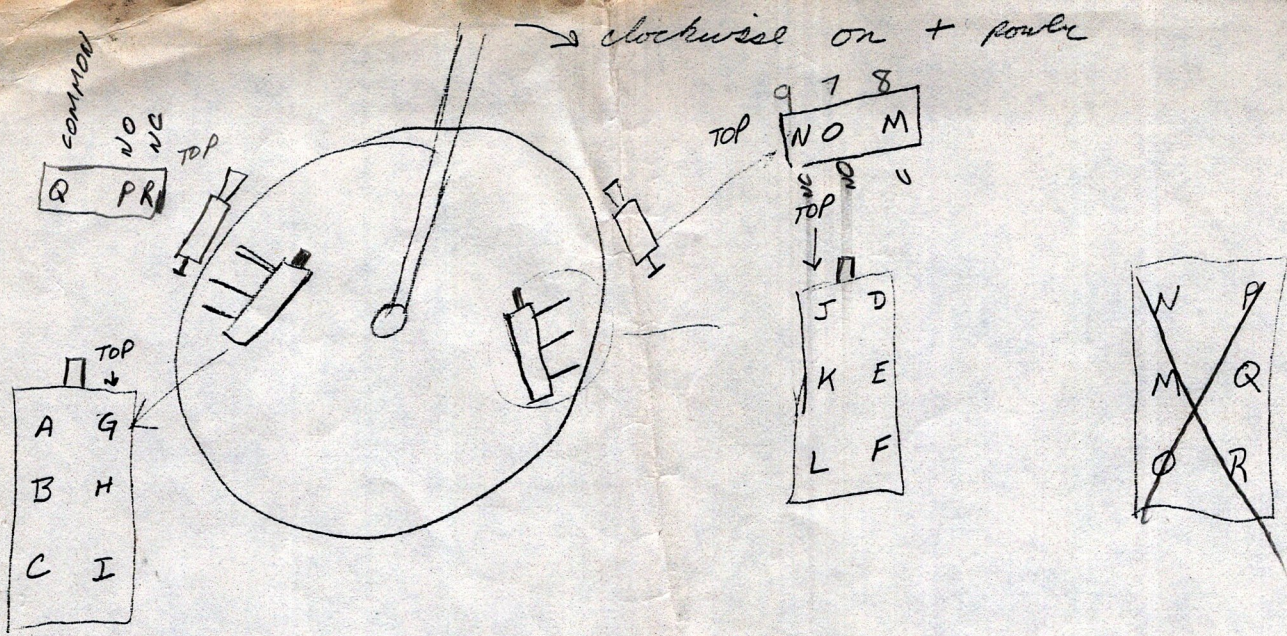
1  
2  
3  
4  
5  
6  
7



2406	1
10 Ω	
1200 Ω	
470 F	1

AGNEW DISPATCHER LIGHTS 5-3-90



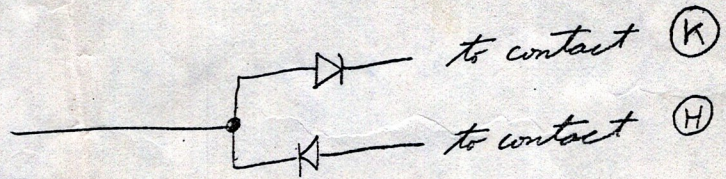


CONNECTOR

- 1 to MOTOR (+) and
- 2  $\frac{1200}{\text{W}}$  to MOTOR (-)
- 3 to contacts (L) and (I)
- 4 to contact (C)
- 5 to contacts (B) and (E)
- 6 to contact (F)

---

- 7 to contact (O)
- 8 to contact (M)
- 9 to contact (N)
- 10 to contact (R)
- 11 to contact (Q)
- 12 to contact (P)



1 Brown	BLACK	1
2 Red	YELLOW	2
3 Orange	VIOLET	3
4 yellow	ORANGE	4
5 Green	BROWN	5
6 Blue	GREEN	6
7 Violet	RED	7
8 Grey	WHITE	8
9 White	BLUE	9
10 Black		
11 Creme		
12 Rose		

(From Micro)

U10

CCW + over

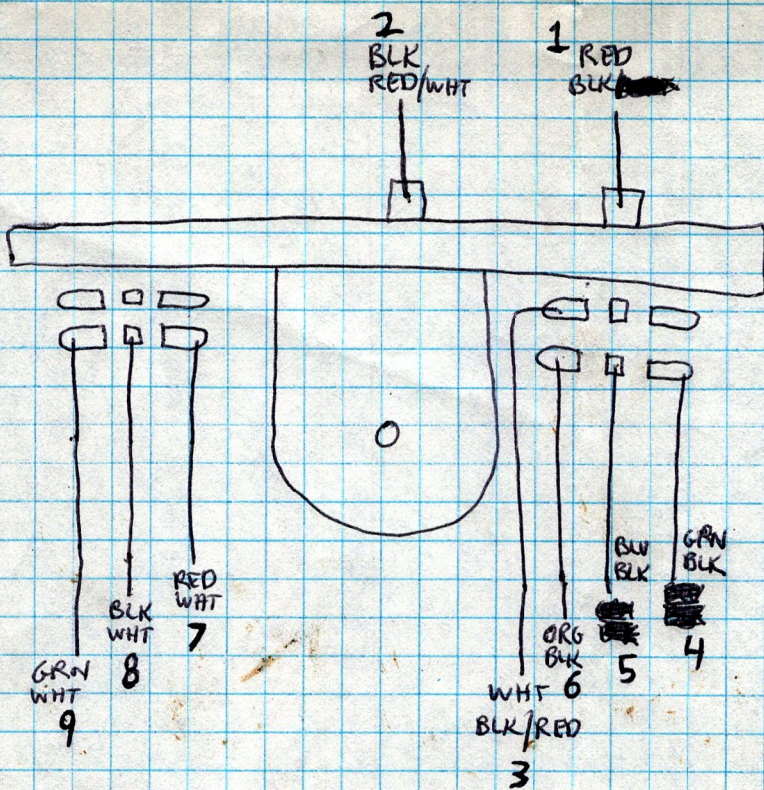
CCW + over

CCW TO XOVER

CCW TO XOVER

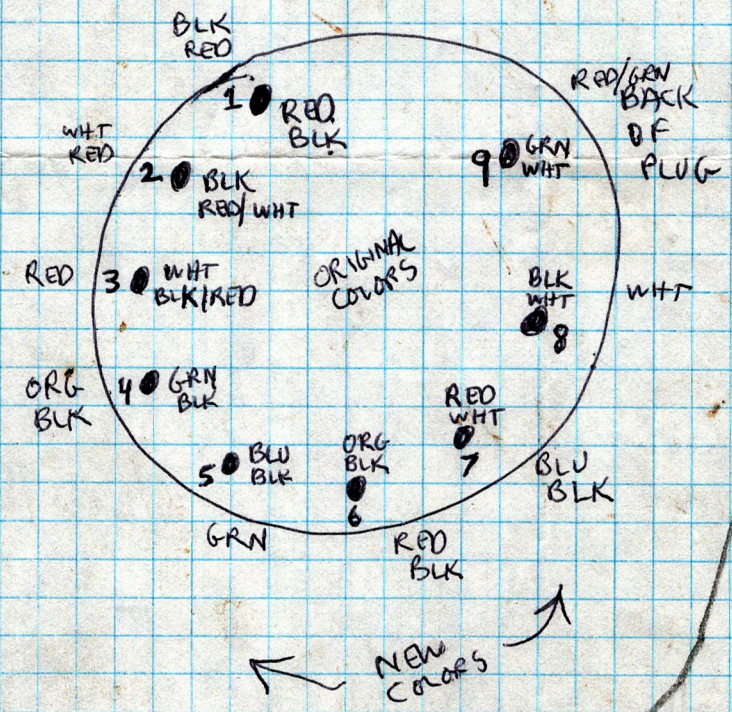
CCW TO 1

CCW TO 1



STALL

ORIGINAL COLORS



SELENIUM SWITCH MACHINE

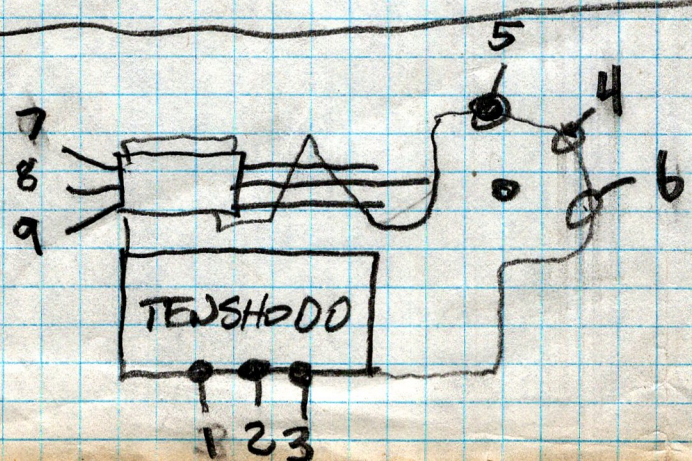
- 1) COIL 1
- 2) COIL COMMON
- 3) COIL 2

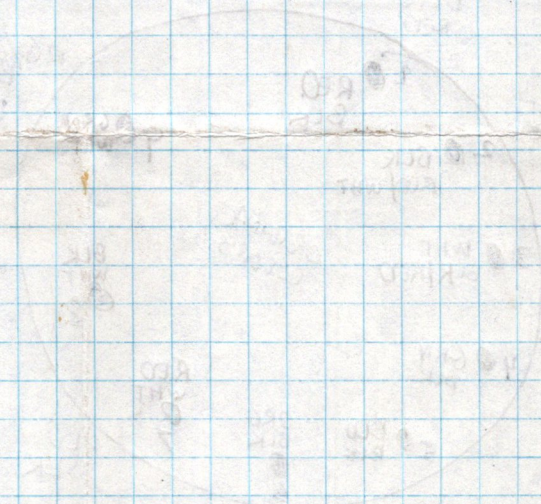
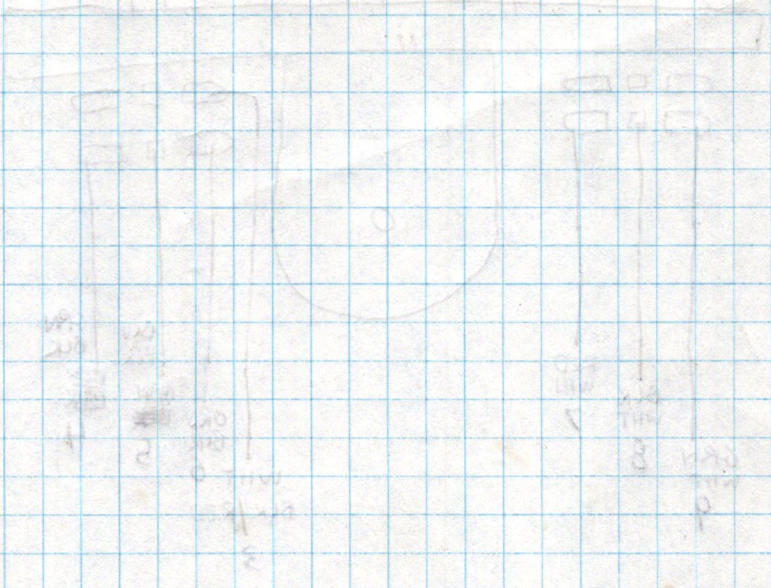
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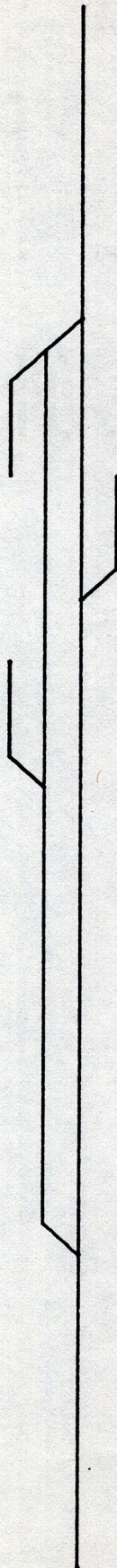
- 4) CONTACT 1 A
- 5) POLE 1
- 6) CONTACT 1 B

---

- 7) CONTACT 2 A
- 8) POLE 2
- 9) CONTACT 2 B

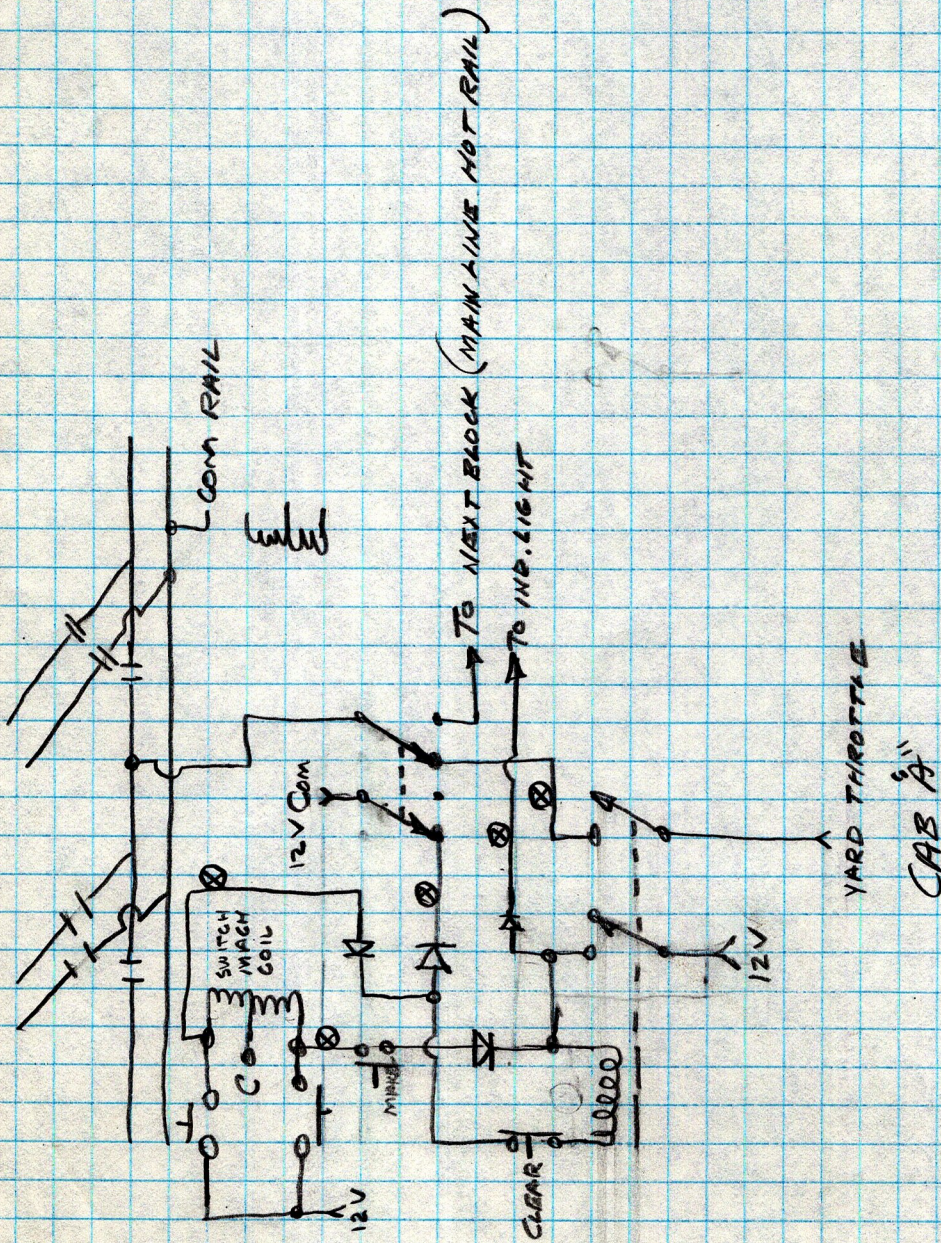




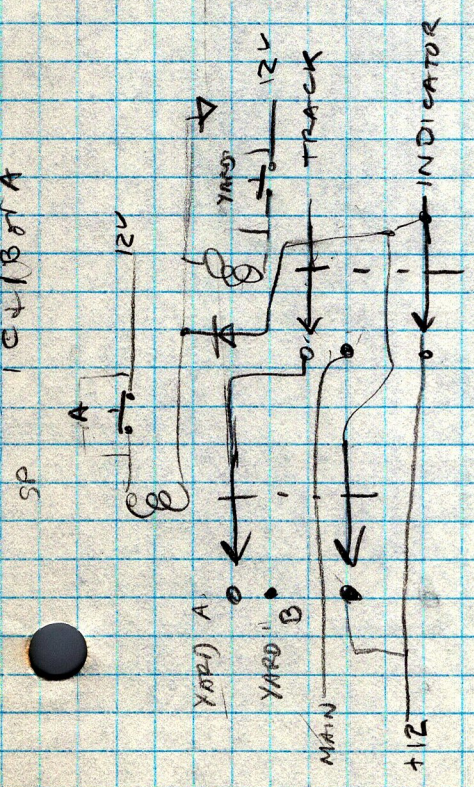
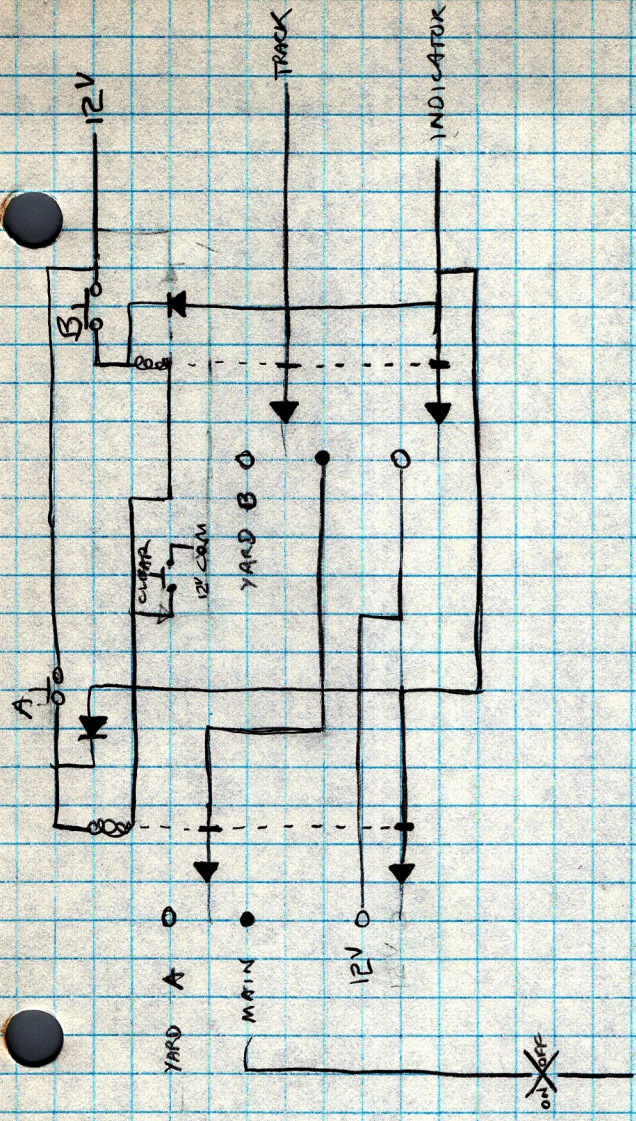


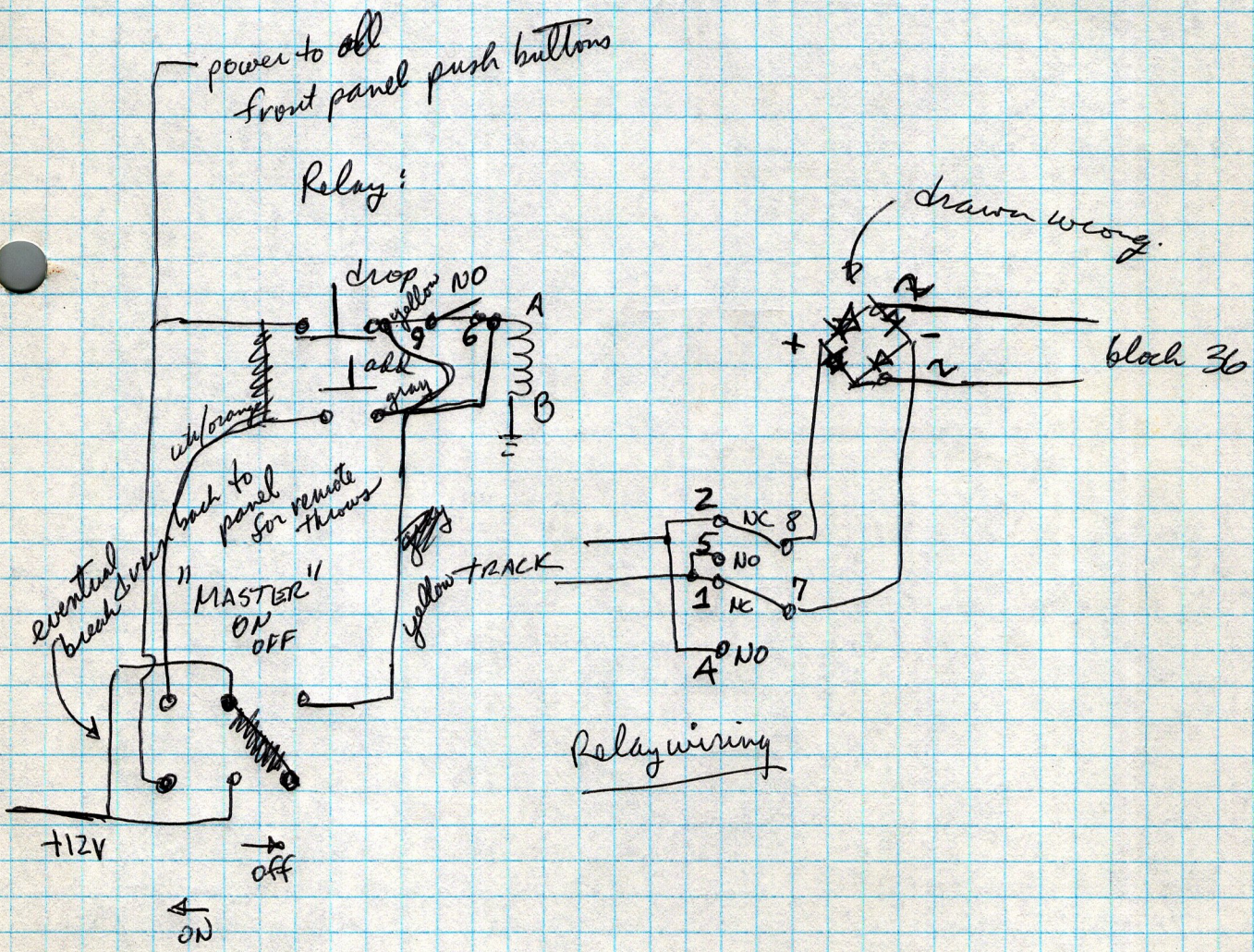
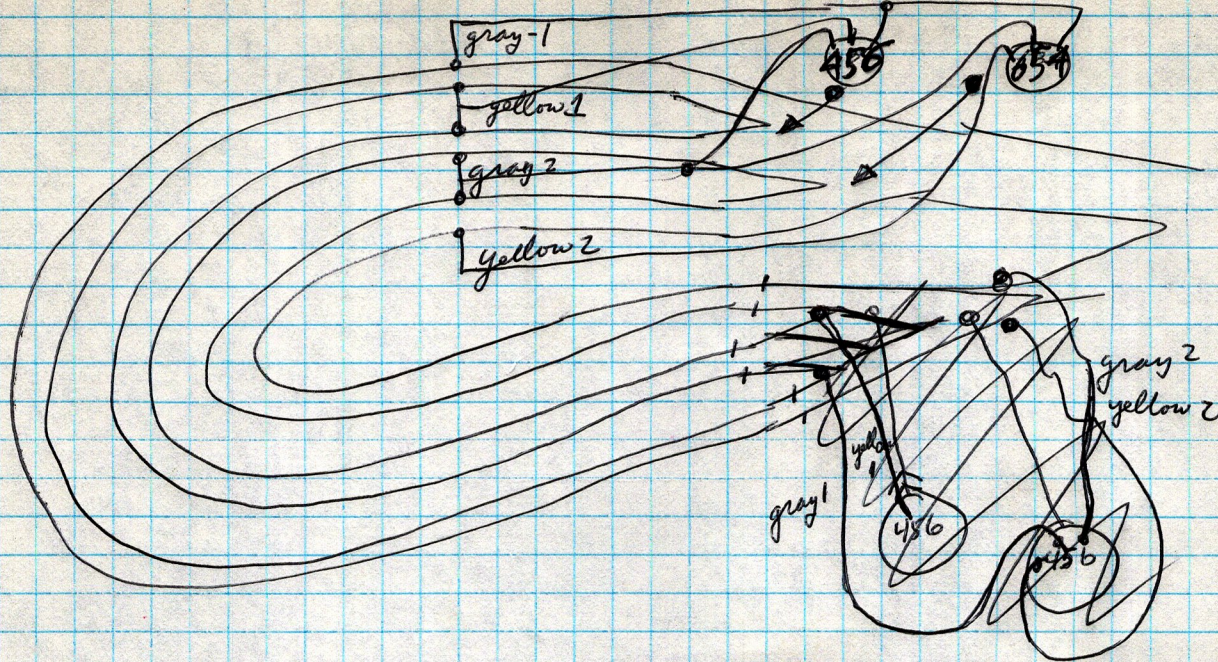
-- CALIFORNIA CENTRAL LINES --

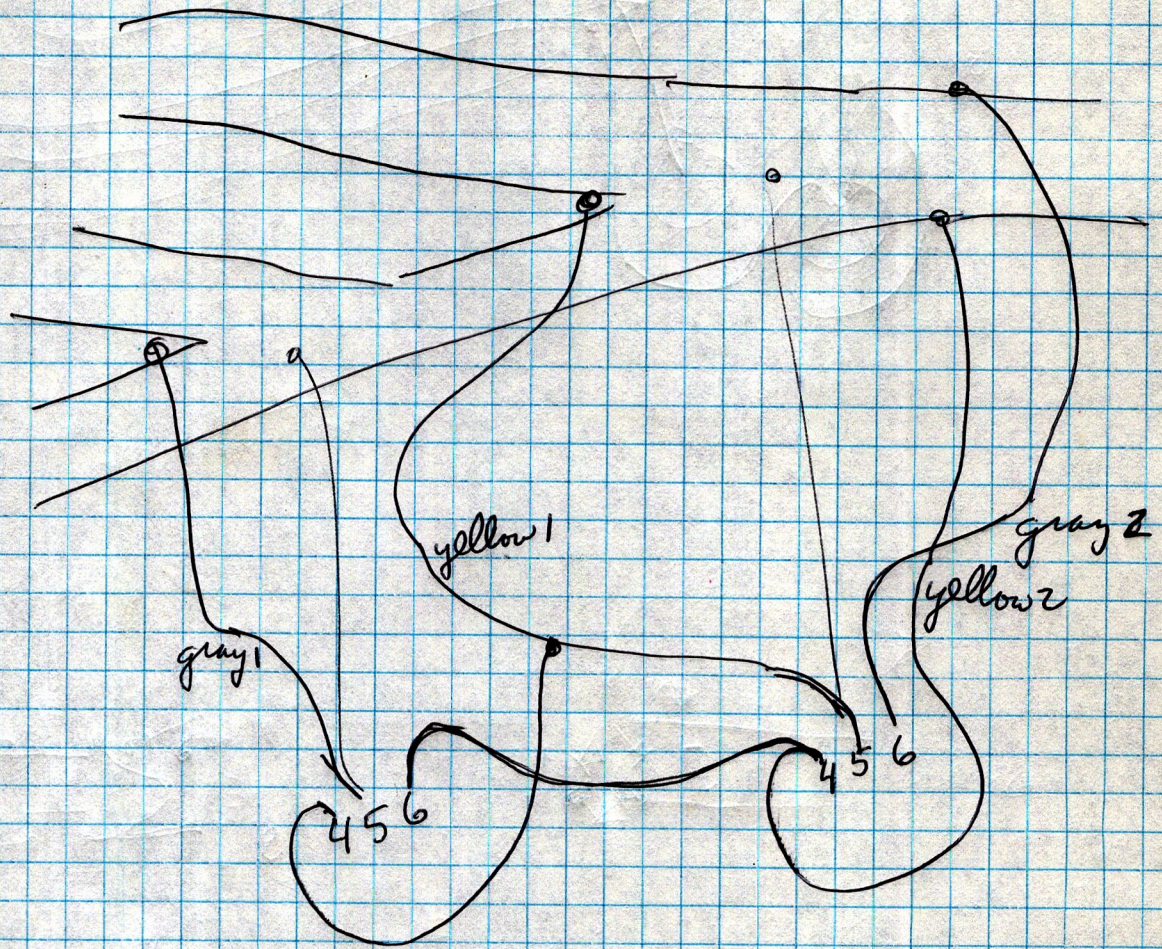
GREEN RIVER AND ADJACENT RIGHT-OF-WAY

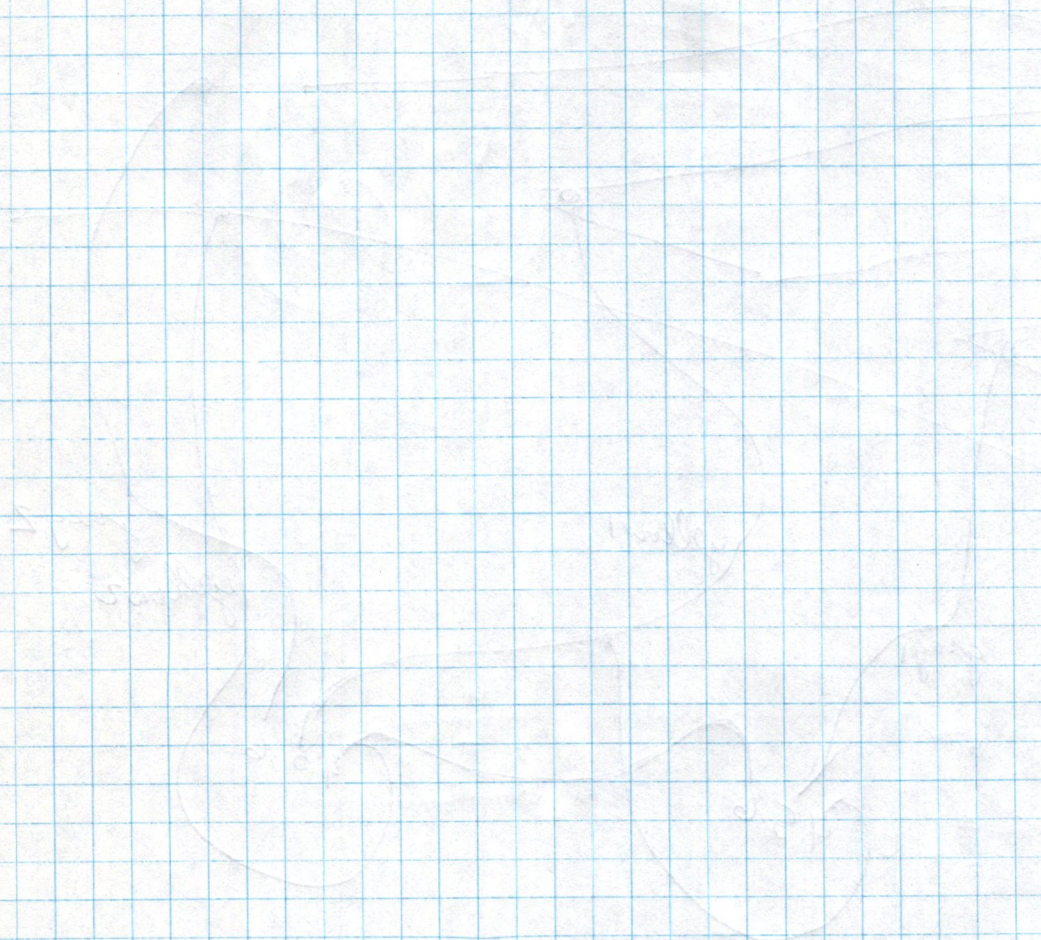


NOTE: CAB "B" WILL BE IDENTICAL AND CONNECTED IN PARALLEL TO THE IND. LIGHT WITH SHOWN PRIOR OCCUPANCY.









build throttles (N)

PANEL TUOLOUNE (M) INSTALL Throttle (J) Wire panel power (J)

PANEL COLFAX (M) INSTALL 2 Throttles (J) Wire panel power (J)

PANEL K JTN (J) INSTALL 3 Throttles (J)

INSTALL SW MACH K JTN (J) INSTALL FRONT SWITCHES (J) INSTALL W/ PANEL WIRING SW. MACHINERY (J) INSTALL POWER ROUTING (J)

INSTALL OTHER. MAINLINE SWITCH MACHINERY (J) INSTALL FRONT SWITCHES (J)

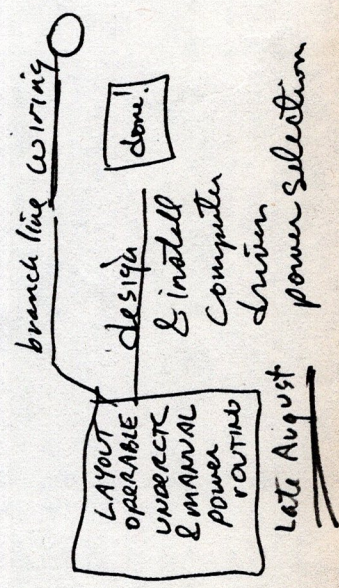
REPLACE MISSION BAY SW MACHINES (J) Complete mission bay yard (J) Wire engine terminal (A) Wire turntable (A)

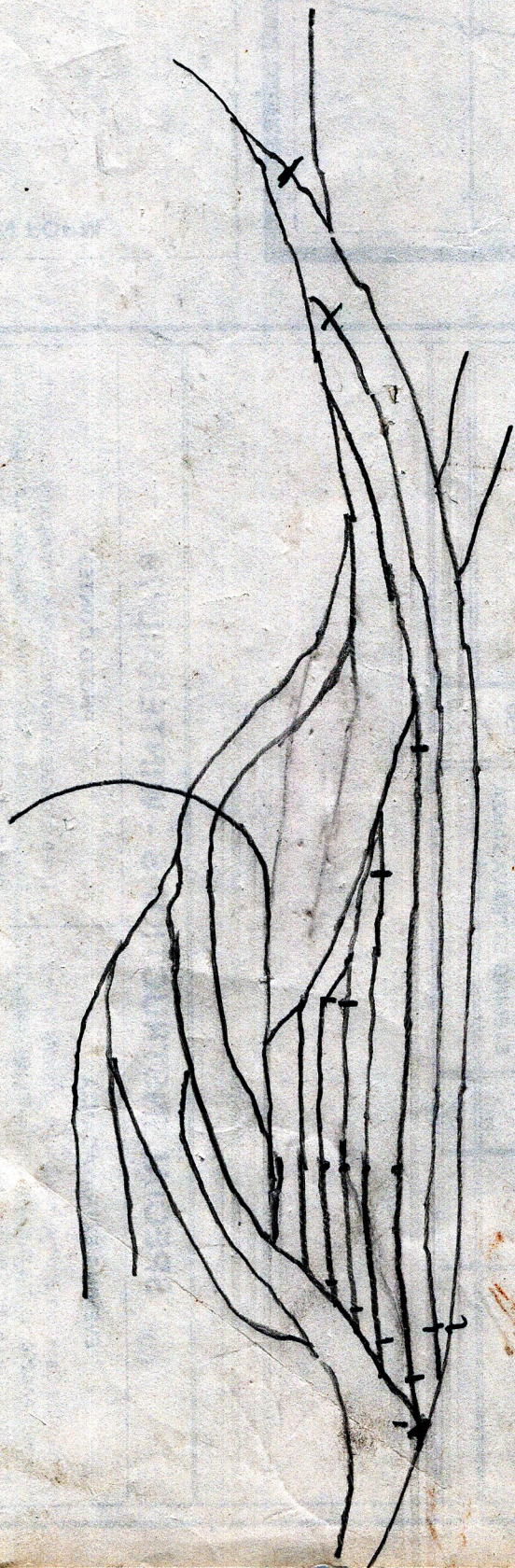
design detection System (M) install detection System (J)

back up panel (M) INSTALL disp SWITCH Throw (J) INSTALL detection on disp panel (J) INSTALL SIGNALING on panel (J)

build upstairs panel (M) wire upstairs panel (J) wire upstairs panel (J) INSTALL angles on panel (A)

build mainline CABS upstairs (M) wire upstairs (J) wire upstairs (A) SIGNALS ON LAYOUT (A) INSTALL SIGNALS ON LAYOUT (A)





# WINTERAIL '79

Holiday Inn  
221 N. Center Street  
Stockton, California

**TIMETABLE No. 2**  
SUNDAY, APRIL 20, 1980

**REGISTRATION**  
\$5.00 per person in advance  
\$6.00 at the door

Details of Show	Arrive Sun. Only	EVENTS OF THE DAY	Leave Sun. Only	Details of Show
MULTI-MEDIA SLIDE SHOWS	PM 12:00	<b>REGISTRATION</b>	PM 12:30	SHOW YOUR 10 FAVORITE 35mm SLIDES LIMITED TABLE SPACE AVAILABLE
BUY, SELL, TRADE	12:30	<b>SLIDE PRESENTATIONS</b>		
PLENTY OF BEANERIES NEARBY		<b>FLEA MARKET</b>		
		<b>PHOTO JUDGING</b>	5:30	NOT INCLUDED WITH REGISTRATION FEE
		<b>BEANS</b>	7:00	
		<b>PHOTO CONTEST AWARDS</b>	7:15	
		<b>EVENING EXTRAVAGANZA</b>	10:30	
	PM		PM	
	Arrive		Leave	

## SPECIAL INSTRUCTIONS - WINTERAIL '79

### EVENING EXTRAVAGANZA

Relive the California Zephyr, through the lenswork of Ted Benson and friends, in a special presentation, ten years after the streamliner's demise.

Plus... enjoy the photographic artistry of Denver photographer Mel Patrick.

And more . . .

### SLIDE PRESENTATIONS

Anyone wishing to show their 10 favorite 35mm slides, please check box on form. We supply trays for 35mm, only.

**RULE G** - No host bar available for refreshments

### PHOTO CONTEST

Three separate contests: Black & White prints, Color prints, and Color slides (35mm only); Popular vote judging. All prints must be at least 8x10 and no larger than 16x20. All prints should be mounted. You may enter all three categories, but, please, only one entry per category.

### FLEA MARKET

Limited table space available, to advance registrants only, for a \$3.00 fee. Please check box on form.

**INFORMATION** - Call Dave Stanley, (209) 951-8975

**ADVANCE REGISTRATION FORM**  
CLIP and MAIL

**TO:**

WINTERAIL '79

DAVE STANLEY

P.O. BOX 8771

STOCKTON, CA 95208

**NAME**

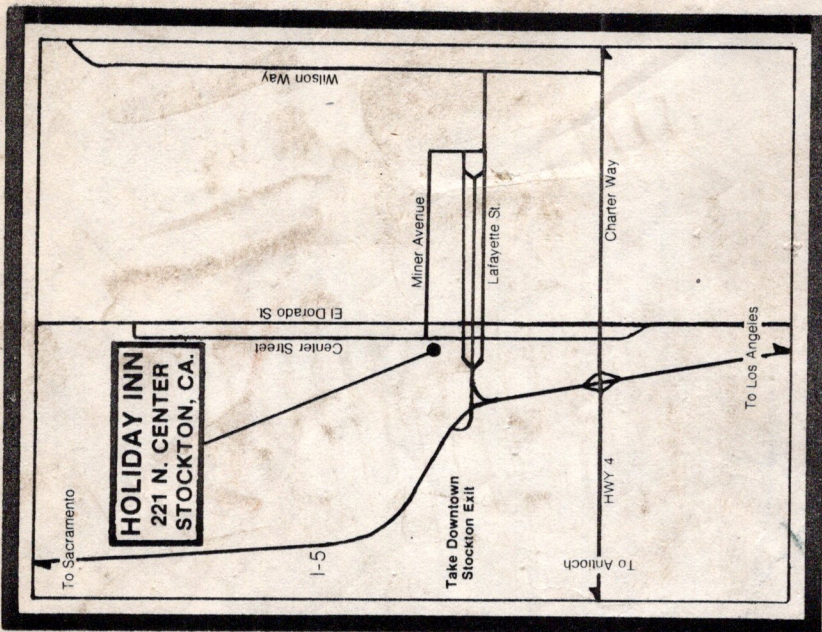
**ADDRESS**

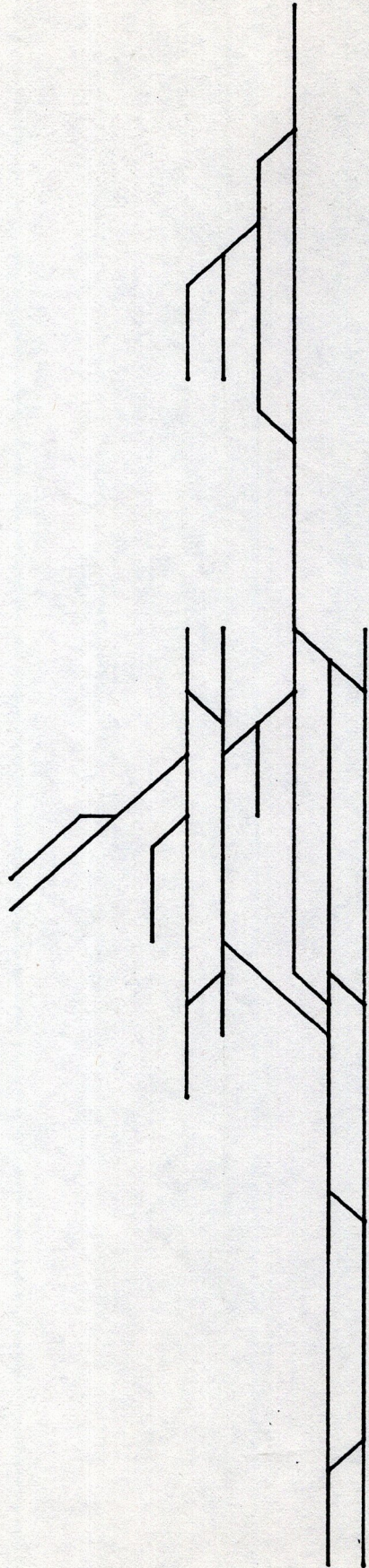
I wish to show ten slides

I wish table space (\$3.00 fee)

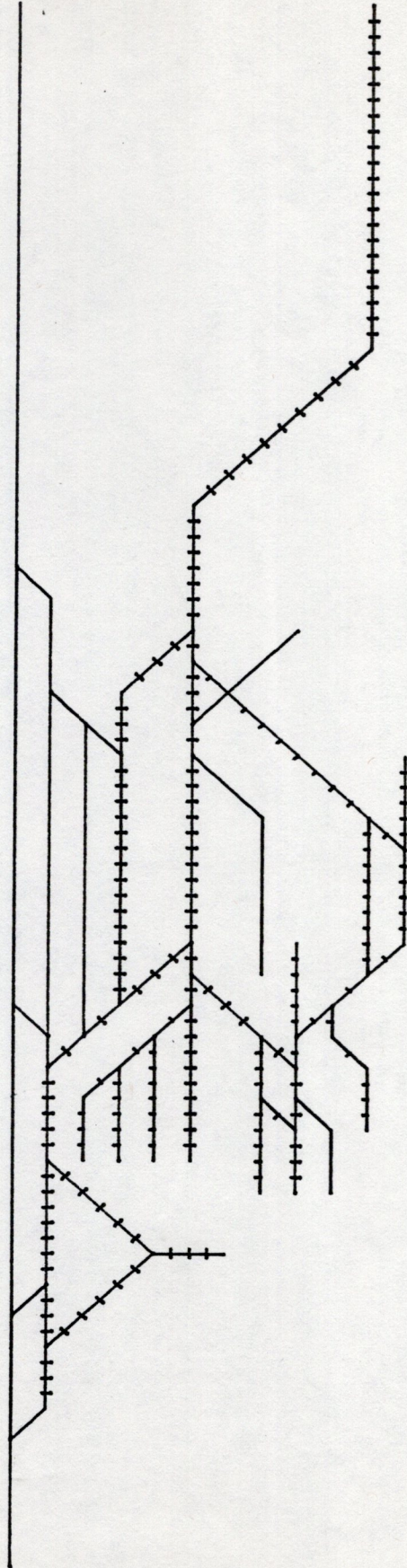
Please make checks payable to Dave Stanley

Seating limited to 200 people, so don't delay!





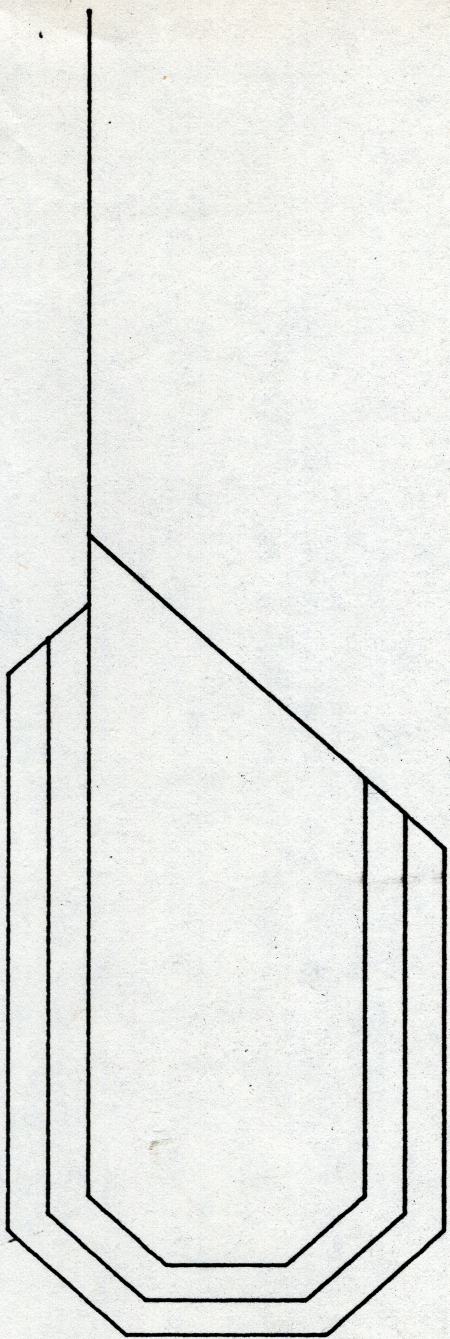
--- CALIFORNIA CENTRAL LINES ---  
TOULUMNE AND ADJACENT RIGHT-OF-WAY



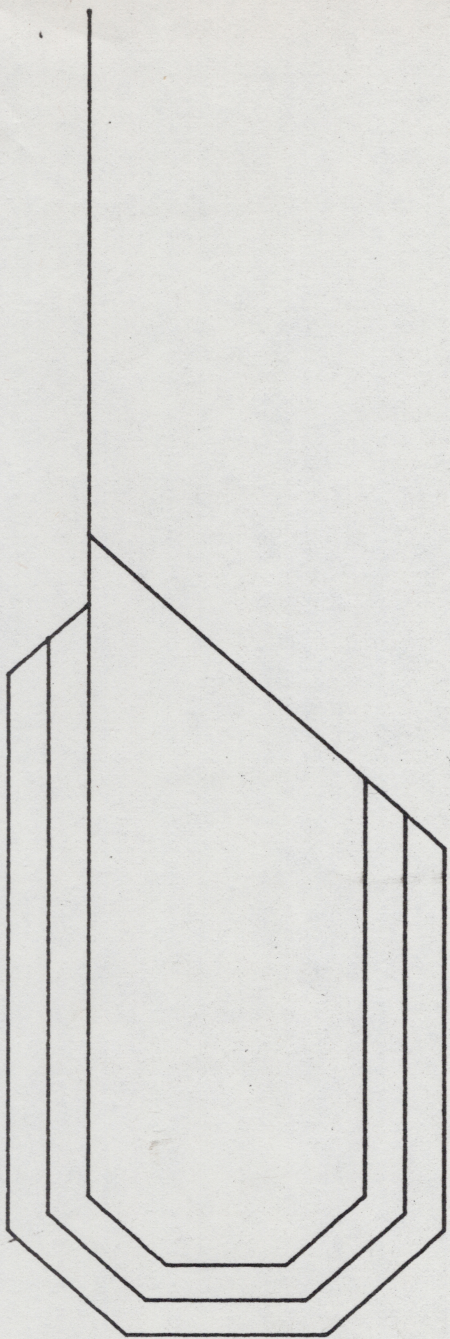
--- CALIFORNIA CENTRAL LINES ---

— STANDARD GAUGE  
 -+ -+ -+ DUAL GAUGE  
 - - - - - NARROW GAUGE

COLFAX YARD AND INTERCHANGE



--- CALIFORNIA CENTRAL LINES ---  
MAINLINE EAST OF KLAMATH JUNCTION



--- CALIFORNIA CENTRAL LINES ---  
MAINLINE EAST OF KLAMATH JUNCTION