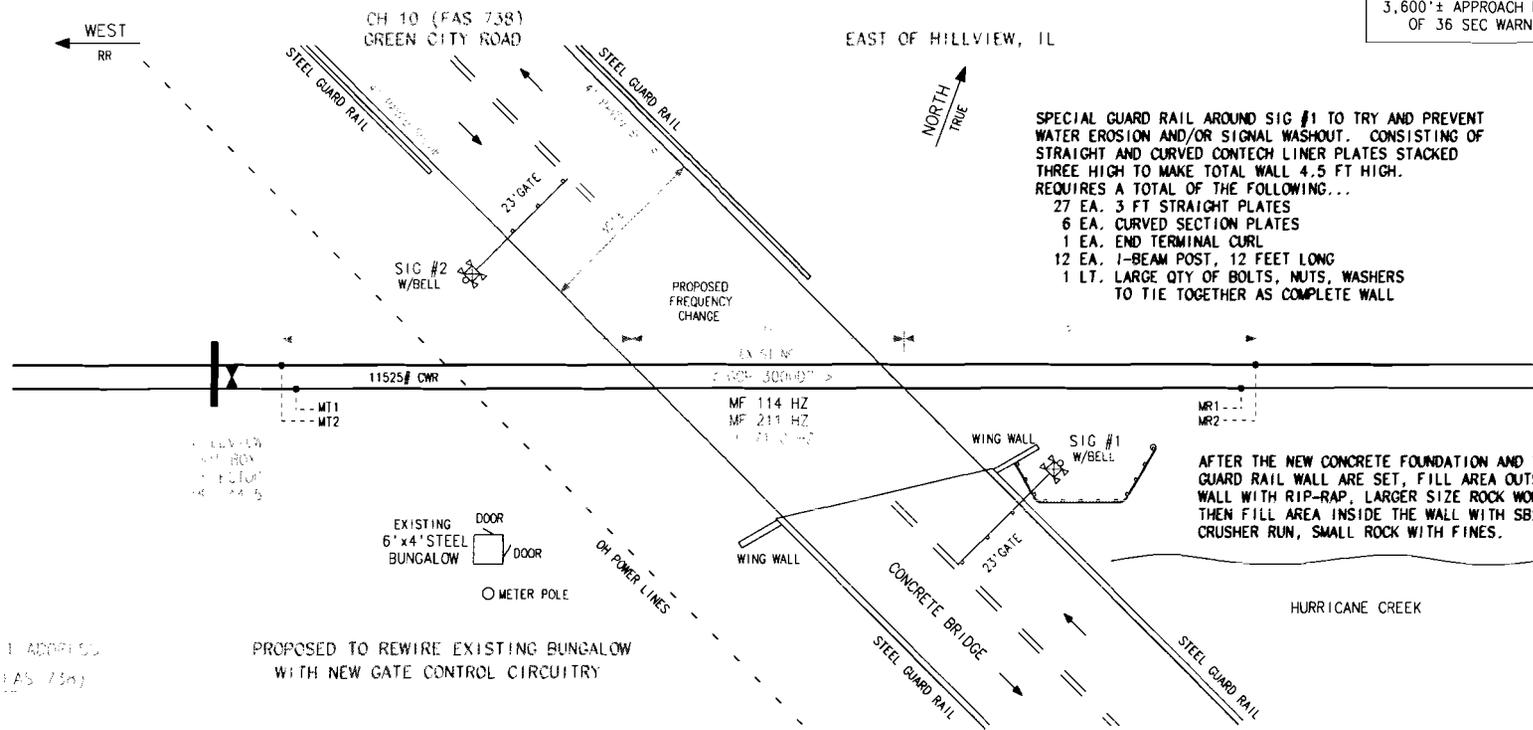


3,600'± APPROACH PROVIDES A MAXIMUM OF 36 SEC WARNING TIME AT 60 MPH



SPECIAL GUARD RAIL AROUND SIG #1 TO TRY AND PREVENT WATER EROSION AND/OR SIGNAL WASHOUT. CONSISTING OF STRAIGHT AND CURVED CONTECH LINER PLATES STACKED THREE HIGH TO MAKE TOTAL WALL 4.5 FT HIGH. REQUIRES A TOTAL OF THE FOLLOWING...

- 27 EA. 3 FT STRAIGHT PLATES
- 6 EA. CURVED SECTION PLATES
- 1 EA. END TERMINAL CURL
- 12 EA. I-BEAM POST, 12 FEET LONG
- 1 LT. LARGE QTY OF BOLTS, NUTS, WASHERS TO TIE TOGETHER AS COMPLETE WALL

AFTER THE NEW CONCRETE FOUNDATION AND THE NEW GUARD RAIL WALL ARE SET, FILL AREA OUTSIDE THE WALL WITH RIP-RAP, LARGER SIZE ROCK WORKS BEST, THEN FILL AREA INSIDE THE WALL WITH SB2 OR CRUSHER RUN, SMALL ROCK WITH FINES.

PROPOSED TO REWIRE EXISTING BUNGALOW WITH NEW GATE CONTROL CIRCUITRY

APPROXIMATE ADDRESS
100 G.C. 10 (FAS 738)

MAXIMUM SPEED REGULATIONS
MP 241.0 TO MP 273.8 ...49 MPH
SPEED RESTRICTIONS
BRG MP 250.5 ILLINOIS RIVER 30 MPH

CROSSING SURFACE INFO:
EXISTING 56' TIMBER & ASPHALT

KCSR TO MEASURE CLEARANCE DISTANCE AND ADD CORRECT CLEARANCE TIME TO THE WARNING TIME, SEE PAGE B1

KCSR PROPERTY - 50' FROM CENTERLINE IN ALL QUADRANTS
CONSTRUCTION SUPERVISOR OR SIGNAL SUPERVISOR TO FILL OUT PIPE OR CONDUIT LOCATION CHART PROVIDED BELOW. PLEASE LABEL PIPES BY AN ALPHA DESIGNATION (EXAMPLE 4" PVC PIPE A)

UG SIGNAL CABLE PIPE LOCATION	DESTINATION QUADRANT		BUNGALOW QUADRANT	
	TO ROAD	TO RAIL	TO ROAD	TO RAIL
4" PVC PIPE A				
4" PVC PIPE B				
4" PVC PIPE C				
4" PVC PIPE D				

ALL DIMENSIONS MEASURED PERPENDICULAR TO ROAD OR PERPENDICULAR TO RAIL

SIG #1 LOCATION:
8'-6"± FROM THE EDGE OF PAVED ROAD, MEASURED PERPENDICULAR TO ROAD FROM CENTER OF SIGNAL POLE TO THE EDGE OF PAVED ROAD
13'-0"± FROM NEAR RAIL AT GATE BASE, 30'-0"± FROM NEAR RAIL AT GATE TIP, MEASURED PERPENDICULAR TO RAIL FROM CENTER OF SIGNAL POLE TO THE NEAREST EDGE OF RAIL

SIG #2 LOCATION:
8'-6"± FROM THE EDGE OF PAVED ROAD, MEASURED PERPENDICULAR TO ROAD FROM CENTER OF SIGNAL POLE TO THE EDGE OF PAVED ROAD
15'-0"± FROM NEAR RAIL AT GATE BASE, 32'-0"± FROM NEAR RAIL AT GATE TIP, MEASURED PERPENDICULAR TO RAIL FROM CENTER OF SIGNAL POLE TO THE NEAREST EDGE OF RAIL

MINIMUM CLEARANCE REGULATIONS
8'-0" MIN FROM EDGE OF TRAVELLED ROAD
12'-0" MIN FROM CENTERLINE OF RAIL
DATE AND TIME BE PERPENDICULAR TO ROAD

MINIMUM CLEARANCE REGULATIONS
8'-0" MIN FROM EDGE OF TRAVELLED ROAD
12'-0" MIN FROM CENTERLINE OF RAIL
DATE AND TIME BE PERPENDICULAR TO ROAD

BUNGALOW LOCATION:
50'-0"± FROM THE EDGE OF PAVED ROAD, MEASURED PARALLEL TO THE RAIL FROM NEAREST SIDE OF BUNGALOW TO EDGE OF THE PAVED ROAD
25'-0"± FROM THE NEAR RAIL, MEASURED PERPENDICULAR TO RAIL FROM NEAREST SIDE OF BUNGALOW TO THE NEAREST EDGE OF RAIL

KANSAS CITY SOUTHERN LINES SIGNAL DEPT.
DWG. NO. SD-31-2-244.49A
LOCATION CH 10 (FAS 738)
GREEN CITY ROAD
E. OF HILLVIEW, IL
FILE SD-31-5-244.49
DOT NO. 293-193J
MILE POST 244.49

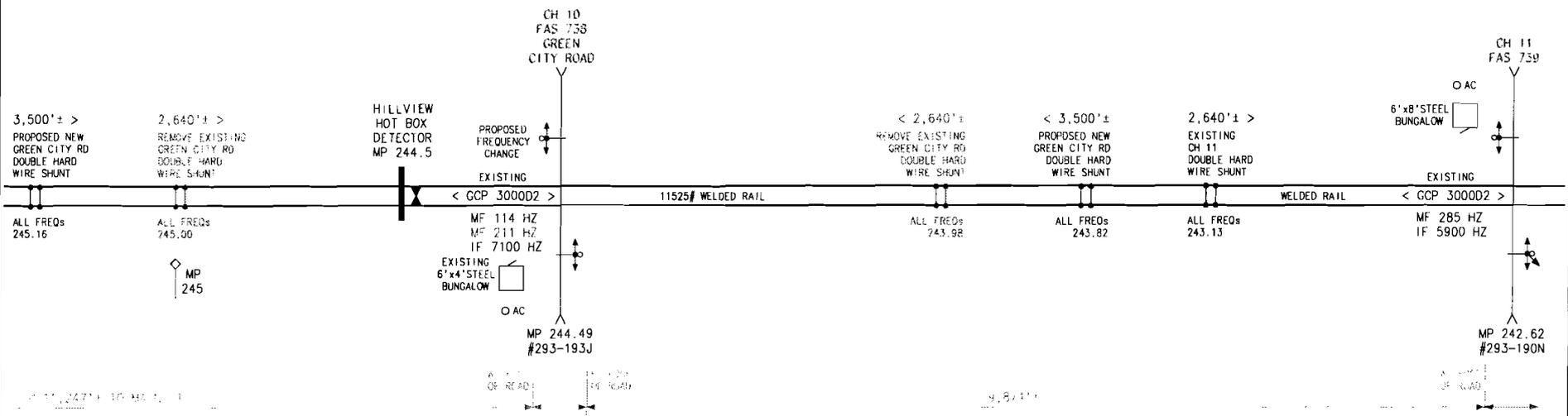
STATE PROJECT IS TO ADD GATES ONLY

ORANGE=OUT
BLUE = IN
GREEN=NOTE
ASSET #982406

REVISION BLOCK
FLASHERS IN SERVICE 02/05/98
FLSHRS & GATES IN SERVICE

WEST
RR

EAST OF HILLVIEW, IL



ASSET #982406
 STATE PROJECT TO ADD GATES,
 NEED TO CHANGE GCP FREQUENCY
 NEED TO LENGTHEN APPROACHES

MAINTENANCE
 CONTAINER

SEE MAINTENANCE CONTAINER AND THE BUNGALOW
 REQUIRED TO MAINTAIN LOCATION OF SIGNALS.
 DIRECTION CONTAINER TO THE ROAD CUT YARD
 EXACT LOCATION NOT SPECIFIED
 10' FROM NEAREST EDGE OF ROAD
 10' FROM NEAREST EDGE OF RAIL
 FOR DIRECT THIS OR EXACT PLACEMENT
 CONTACT MIKE VALIEM (KCSR PROJECT ENGINEER)
 OR FOR 318-677-6209, CELL 318-218-7207
 OR LEVE JONES (KCSR PROJECT MANAGER)
 OR FOR 318-677-6204, CELL 318-347-8111

REVISION
 BLOCK

KANSAS CITY SOUTHERN LINES SIGNAL DEPT.
 DWG. NO. SD-31-2-244.49B
 LOCATION CH 10 (FAS 738)
 GREEN CITY ROAD
 E. OF HILLVIEW, IL
 FILE SD-31-5-244.49
 DOT NO. 293-193J
 MILE POST 244.49

INSTALLATION AND DESIGN INFORMATION

APPROACH AND WARNING TIME CALCULATIONS	GCP-T1 MAIN TRK	OTHER TRK	OTHER TRK	OTHER TRK
MINIMUM WARNING TIME PLUS CLEARANCE TIME PLUS BUFFER TIME	20 SEC 4 SEC 10 SEC			
TOTAL WARNING TIME	34 SEC			
TOTAL WARNING TIME PLUS EQUIP RESPONSE PLUS ADVANCE PREEMPT	34 SEC 5 SEC 0 SEC			
TOTAL APPROACH TIME	39 SEC			
MAX. TRAIN SPEED EQUATION FEET/SECOND SPEED FEET PER SECOND	60 MPH x 1.4667 88.0 FPS			
TOTAL APPROACH TIME SPEED FEET PER SECOND APPROACH DISTANCE (MEASURED FROM TIE-IN POINTS)	39 SEC x 88.0 3,432'			
DISTANCE ROUNDED UP TO	3,500'±			
CLEARANCE DISTANCE FOR DESIGN PURPOSE WAS ESTIMATED TO BE 63'± THIS DISTANCE SHOULD BE MEASURED EXACTLY AS PART OF THE INSTALLATION PROCESS, PER DIRECTIONS SHOWN IN CHART				

MUTCD MINIMUM RESTRICTIONS FOR LOCATION AND CLEARANCE DIMENSIONS FOR FLASHER & GATE SIGNALS SHALL BE:

WHEN THERE IS A CURB...

A HORIZONTAL CLEARANCE OF AT LEAST 2'-0" SHALL BE PROVIDED FROM THE FACE OF THE VERTICAL CURB TO THE CLOSEST PART OF THE SIGNAL OR GATE ARM IN ITS UPRIGHT POSITION.

WHEN THERE IS A SHOULDER, BUT NO CURB...

A HORIZONTAL CLEARANCE OF AT LEAST 2'-0" FROM THE EDGE OF A PAVED OR SURFACED SHOULDER SHALL BE PROVIDED, WITH A CLEARANCE OF AT LEAST 6'-0" FROM THE EDGE OF THE TRAVELED WAY.

WHEN THERE IS NO CURB OR SHOULDER...

THE MINIMUM HORIZONTAL CLEARANCE SHALL BE 6'-0" FROM THE EDGE OF THE TRAVELED WAY.

MUTCD SUGGESTED LATERAL CLEARANCE FOR EQUIPMENT HOUSING (CONTROLLER CABINETS):

EQUIPMENT HOUSING SHOULD HAVE A LATERAL CLEARANCE OF AT LEAST 30'-0" FROM THE EDGE OF THE HIGHWAY AND WHERE RAILROAD PROPERTY AND CONDITIONS ALLOW, AT LEAST 25'-0" FROM THE NEAREST RAIL.

STATES IDENTIFICATION...

GREENE COUNTY
SECTION 03-00058-00-SP
PROJECT RRP-0738(105)
JOB NO. C-98-317-04
CH 10 (FAS 738)
DOT NO. 293-193J
KCS RAILWAY

STATE PROJECT ENGINEER:

MR. DAVID MARTH
COUNTY ENGINEER
RR1 BOX 15
CARROLLTON, IL 62016
217-942-6942
2 WEEKS NOTICE REQUIRED

SIGNAL FOREMAN TO CALL
STATE PROJECT ENGINEER
WHEN GANG SHOWS UP AT
JOB SITE TO BEGIN WORK

PLEASE MEASURE EXACT CLEARANCE DISTANCE AS FOLLOWS:			
MEASURE ALONG THE EDGE OF ROAD - FROM GATE ARM DOWN TO 6' MIN. BEYOND THE FARTHEST RAIL (6' IS MEASURED PERPENDICULAR TO RAIL)			
MEASURE AT CENTER LINE OF ROAD - FROM GATE ARM DOWN TO 6' MIN. BEYOND THE FARTHEST RAIL (6' IS MEASURED PERPENDICULAR TO RAIL)			
USE THE LONGEST DISTANCE MEASURED ABOVE TO DETERMINE CLEARANCE TIME IF OVER 35' MIN., AS PER THE CHART BELOW			
ADD THE LONGEST CLEARANCE TIME TO THE WARNING TIME			
CLEARANCE DISTANCE MEASUREMENTS			
SIG #1 = AT EDGE OF ROAD	SIG #1 = CENTER OF ROAD	SIG #1 = LONGEST DISTANCE	SIG #1 = CLEARANCE TIME = CT
FT	FT	FT	SEC
SIG #2 = AT EDGE OF ROAD	SIG #2 = CENTER OF ROAD	SIG #2 = LONGEST DISTANCE	SIG #2 = CLEARANCE TIME = CT
FT	FT	FT	SEC
CT= CLEARANCE TIME	0' TO 35' = NONE	96' TO 105' = 7 SEC CT	
	36' TO 45' = 1 SEC CT	106' TO 115' = 8 SEC CT	
	46' TO 55' = 2 SEC CT	116' TO 125' = 9 SEC CT	
	56' TO 65' = 3 SEC CT	126' TO 135' = 10 SEC CT	
	66' TO 75' = 4 SEC CT	136' TO 145' = 11 SEC CT	
	76' TO 85' = 5 SEC CT	146' TO 155' = 12 SEC CT	
	86' TO 95' = 6 SEC CT	156' TO 165' = 13 SEC CT	

GREEN CITY ROAD NOTES:

- 1.) PROPOSED TO INSTALL THE FOLLOWING AS PART OF THIS STATE PROJECT:
 - 2 EA. FLASHER & GATE SIGNALS WITH 12" LED LIGHTS
 - WIRE IN NEW GATE CONTROL CIRCUITRY INTO THE EXISTING 6'x4' STEEL BUNGALOW, REFER TO MATERIAL LIST FOR NEW EQUIPMENT
- 2.) 4" PVC CONDUIT FOR SIGNAL CABLING UNDER ROADWAY MAY BE INSTALLED BY DIRECTIONAL BORING METHOD
- 3.) APPROX 200 TONS OF FILL MATERIAL REQUIRED FOR BUNGALOW & SIGNALS
- 4.) ANY UTILITIES THAT INTERFERE WITH PROPER SIGNAL PLACEMENT WILL BE RELOCATED AT PROJECT EXPENSE
- 5.) ANY POWER LINES IN AREA WILL NEED TO BE AT LEAST 10' FROM TIP OF GATE ARM IN RAISED POSITION (VERTICAL)
- 6.) ANY DRAINAGE WORK REQUIRED FOR THE PROPER SIGNAL OR BUNGALOW PLACEMENT WILL BE AT PROJECT EXPENSE
- 7.) ALL PROPOSED DIMENSIONS ARE PLUS OR MINUS AT THE DISCRETION OF THE KCS SIGNAL SUPERVISOR AND/OR THE KCS PROJECT ENGINEER, IF WITHIN THE STATE GUIDELINES

KANSAS CITY SOUTHERN LINES SIGNAL DEPT.

DWG. NO. SD-31-2-244.49B1

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REVISION
BLOCK