

CLASS "B"
DESIGN 3A5B

Date Work Began May 15 1952

Date Work Completed November 21, 1954

Summary of Approved Fishery

Field Change No.1

Use D-14½ Star Lugs for Transverse Contractions instead of Bar Dowels set up on plans.

Field Change No. 2

Apply Prime Coat MC-1 at rate of 0.25 GALLONS/Y
width of 8 feet on all 10 foot wide shoulders.

Net Length of Project = 18,542.66 Ft. = 3.511 MI.
Rural Length = 8,070.67 Ft. = 1.528 MI.
Municipal Length = 10,472.19 Ft. = 1.983 MI.

EXCEPTIONS:

U.S. 75 Overpass - Sta. 81+47.62 to 83+39.12 = 191.50'
T.&N.O. R.R. Overpass - Sta. 91+03.0 to 94+74.5 = 365.50'
Trinity River Bridge - Sta. 115+83.58 to 127+26.41 = 1132.83'
Relief Br. No. 1 - Sta. 131+99.25 to 140+00.75 = 801.50'
Relief Br. No. 2 - Sta. 152+00.00 to 154+00 = 200'
Total = 2901.33'

EQUATIONS:

$\text{Sta } 201 + 50 \text{ Back} = \text{Sta. } 202 + 00 \text{ Fwd.} = -50'$
 $\text{Sta } 282 + 20.4 \text{ Back} = \text{Sta. } 281 + 98.5 \text{ Fwd.} = +21.5'$
 $\text{Total} = -28.1'$

Del'y. Point	DELIVERY Railroad	POINTS FOR MATERIALS Dist. from Proj.	Car Capacity
Elem	T. & N.O.	0.3 Mi.	15
Rack Switch	T & N.O.	0.5 Mi.	10

Specifications adopted by the State Highway Dept. of Texas January 2, 1951 and approved by the U.S. Bureau of Public Roads July 25, 1951 and specification items listed and dated as follows shall govern on this project.
"Required Contract Provisions for Federal Aid Projects approved August 5, 1948."

Federal Project Markers of approved design will be erected at each end of Project prior to Completion.

Note: Barricades "A" with Signs B-1, B-2, B-4, & B-7 to be placed as shown.
Barricades "C" and "E" to be placed at all street and road intersections as directed by the Engineer.

APPROVED

STATE HIGHWAY DEPARTMENT

CORRECT:

12-19-55

CORRECT:

Nov. 20 1911

RECOMMENDED
FOR APPROVALRECOMMENDED
FOR APPROVAL

1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 26

RECOMMENDED
FOR APPROVAL:

12 Feb 19

CHIEF ENGINEER OF PLANNING

Ira S. Clark

E. G. Calvin
DIST. CONSTRUCTION ENGINEER

RECOMMENDED FOR APPROVAL: 12

Frank B. ...
DISTRICT ENGINEER













CHIEF ENGINEER OF PLANNING

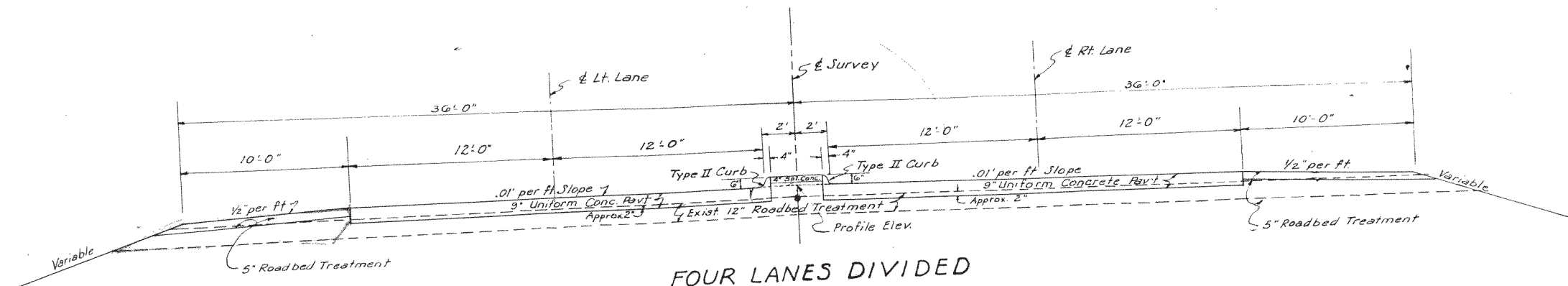
INDEX OF SHEETS

SHEET NO.	DESCRIPTION
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1 TITLE SHEET
2 TYPICAL SECTIONS & MAINT. AGREEMENT
3 ESTIMATE & QUANTITY
4 LAYOUT OF BASE MATERIAL PIT
5 LAYOUT LOOP 12 & U.S. 75 INTERCHANGE
6 SUGGESTED JOINT ARRANGEMENT LAYOUT
7 TRANSITION, T & N.O. R.R. OVERRASS
8 TURNOUTS
9 LAYOUT TEMPORARY CONNECTION WITH US 175
10 CONCRETE CURB DETAILS
11 CPD- 51- 1 (MOD.)
12 CPJ- 51- 2 (MOD.)
13 BASIC-40
14 RR-8
15 SWC-39
16 BW-4G, 1 & 2
17 M-47
18
19-20
21

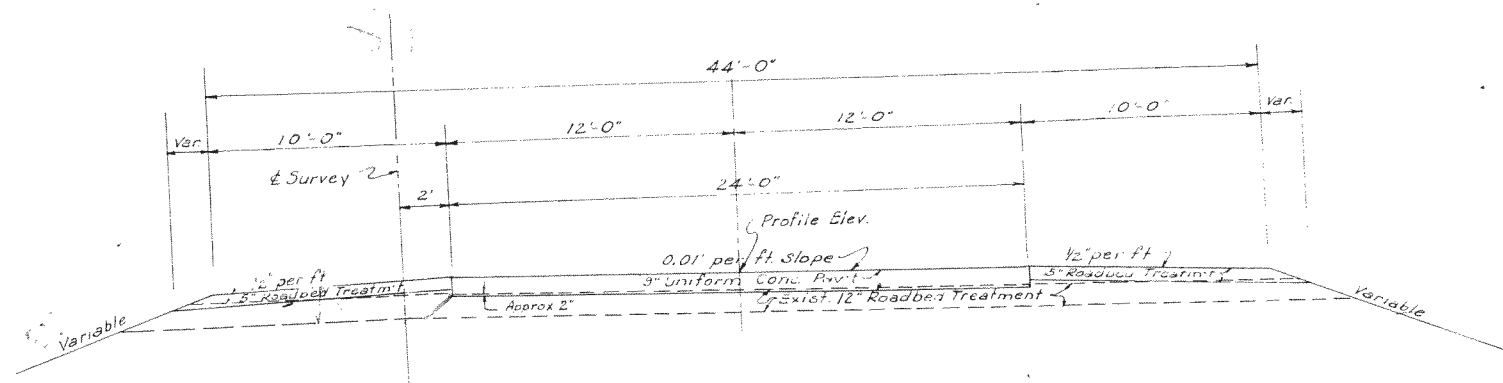
CONVENTIONAL SIGNS

STATE OR NATIONAL LINE	
CITY OR VILLAGE LINE	
COUNTY LINE	
STATE OR OUTSIDE LINE	
RIGHT OF WAY LINE	
RIGHT OF WAY BARRIERS	
BRICK LINE	
RAILROAD	
UNPAVED ROAD	
ROAD END OR BRIDGE	
RAILROAD CROSSING	
RAILROAD ON TELEPHONE	



FOUR LANES DIVIDED

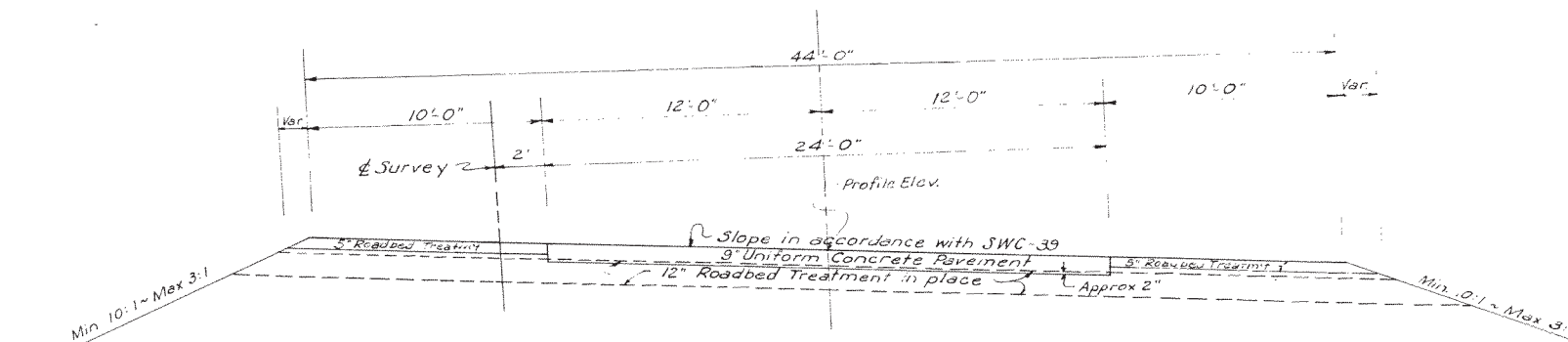
Sta 70+00 to Sta 71+37.48
 Sta 89+80.98 to Sta 91+09.0
 Sta 94+74.5 to Sta 96+33.3
 Sta 281+00 to Sta 282+72.29



NORMAL SECTION

Sta 100+66 to Sta 113+85
 Sta 127+26.41 to Sta 131+99.25
 Sta 140+00.75 to Sta 152+00
 Sta 154+00 to Sta 162+62.2
 Sta 174+60.5 to Sta 209+90.7
 Sta 214+27.4 to Sta 237+47.1
 Sta 241+65.4 to Sta 253+38.9
 Sta 259+52.2 to Sta 270+28.7

NOTE
 TRANSITION FROM 4 LANE TO 2 LANE
 STA. 96+33 TO STA. 100+66.
 (SEE SHEET NO. 10 FOR TYPICAL SECTIONS)

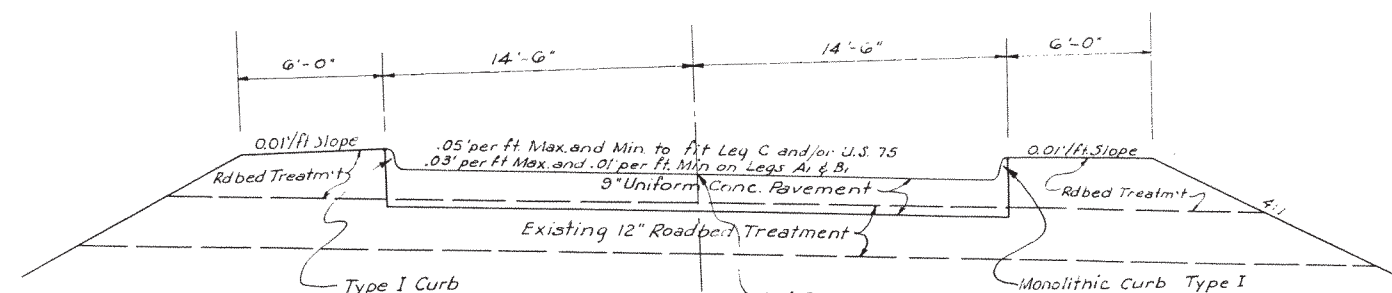
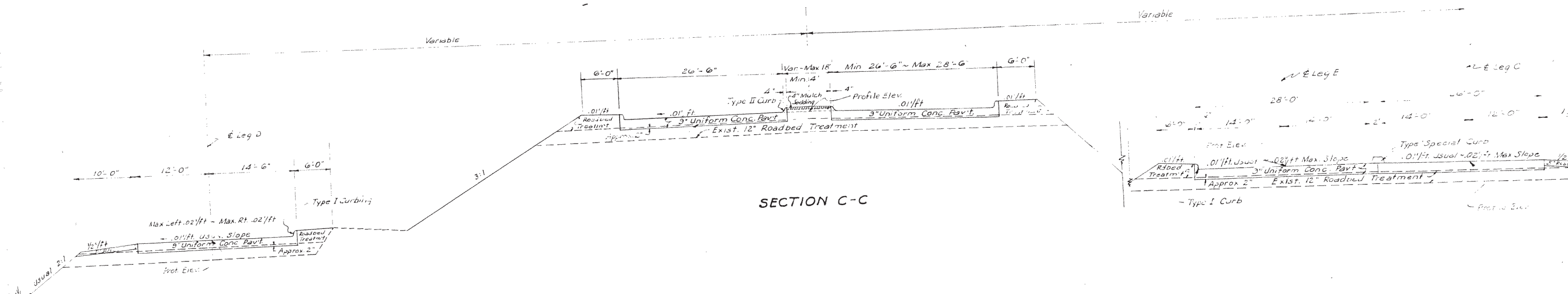
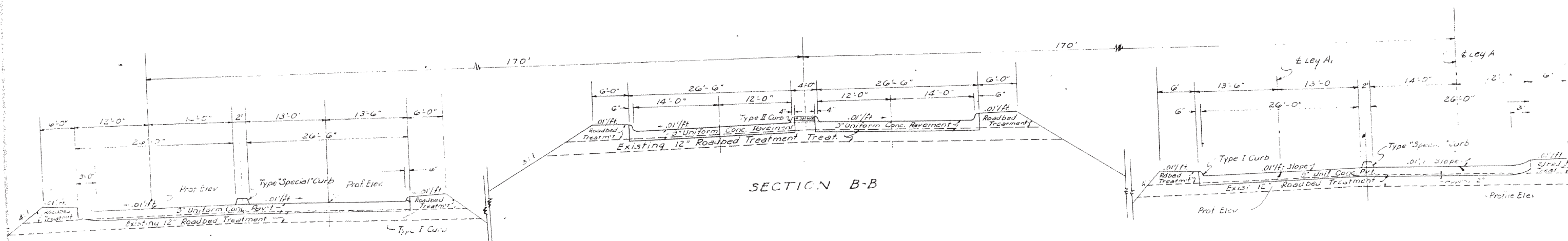
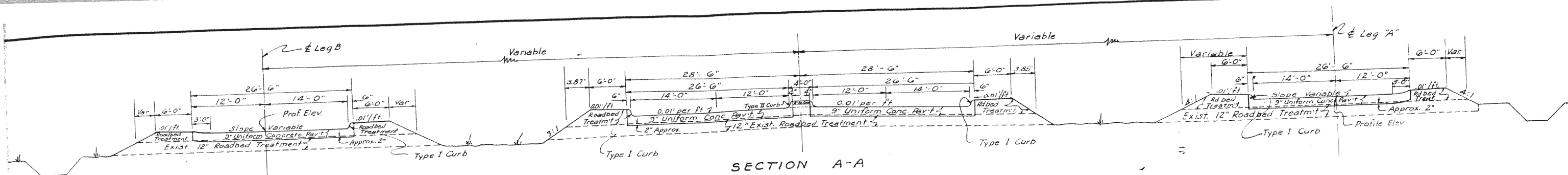


SUPERELEVATED SECTION

Sta 162+62.2 to Sta 174+60.5 (2° Rt.)
 Sta 209+90.7 to Sta 214+27.4 (1° Lt.)
 Sta 237+47.1 to Sta 241+65.4 (1° Rt.)
 Sta 253+38.9 to Sta 259+52.2 (2° Rt.)
 Sta 270+28.7 to Sta 278+00 (2° Lt.)

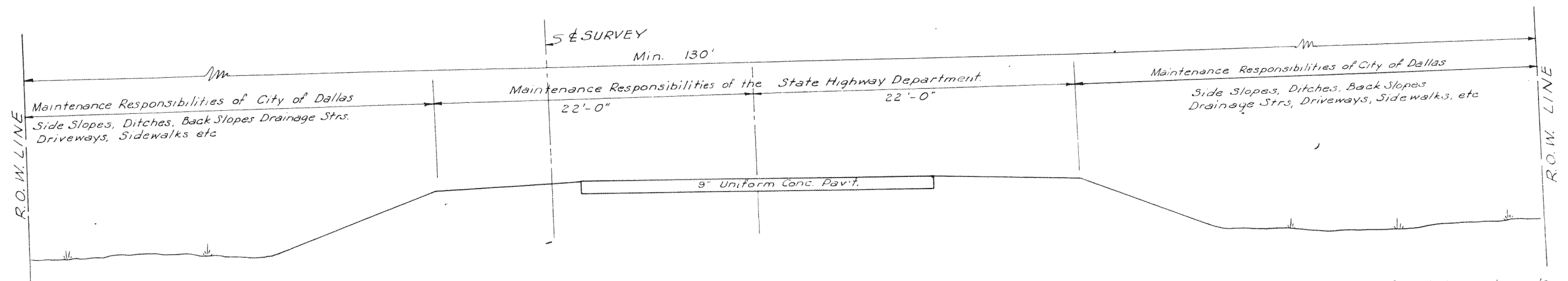
TYPICAL SECTIONS

FED. ROAD DIV. NO.	STATE	FEDERAL AID
6	TEXAS	F 1089
STATE DIST. NO.	COUNTY	CONT. NO.
18	Dallas	52



INTERCHANGE TYPICAL SECTIONS

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJ. NO.
6	TEXAS	F 1089 (4)
STATE DIST. NO.	COUNTY	CONTROLLED NO.
18	Dallas	581



Maintenance of all drainage channels and outfall ditches will be the responsibility of the City of Dallas.

SECTION SHOWING THE RESPECTIVE MAINTENANCE RESPONSIBILITIES OF THE STATE HIGHWAY DEPARTMENT AND THE CITY OF DALLAS ON LOOP 12 FROM STA. 179+72 TO STA. 284+72.29

Maintenance of all drainage channels and outfall ditches will be the responsibility of the City of Dallas

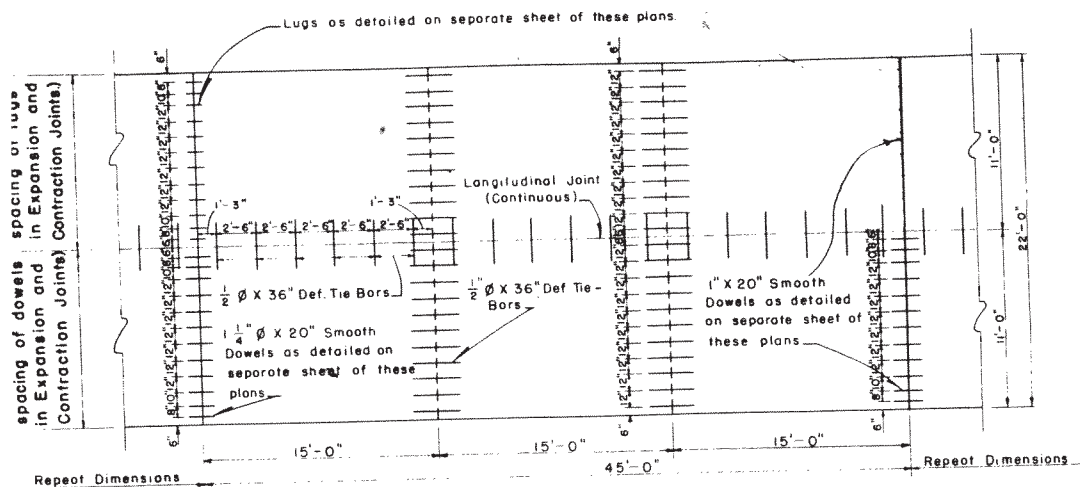
Note: The construction between Sta. 281+00 and Sta. 284+72.29 consists of a Four Lane Divided Roadway. Between these limits maintenance responsibility of the State Highway Department shall be from crown line to crown line and the responsibility of the City of Dallas shall be all other area within the limits of the Right-of-Way.

APPROVED: _____ 19 51

CITY MANAGER OF DALLAS, TEXAS

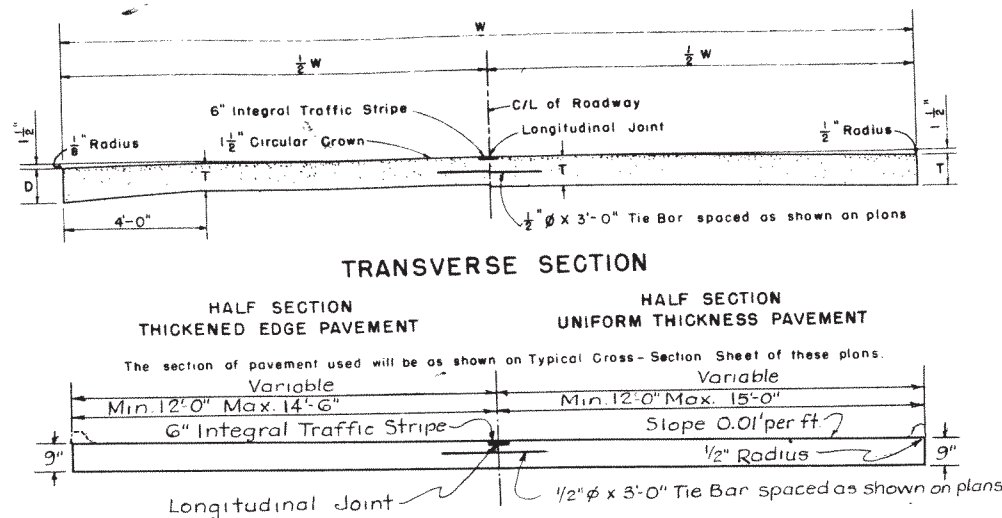
MAINTENANCE AGREEMENT

FED. ROAD DIST. NO.	STATE	FEDERAL AID P.
6	TEXAS	F-108
STATE DIST. NO.	COUNTY	CONTRACT NO.
18	DALLAS	581



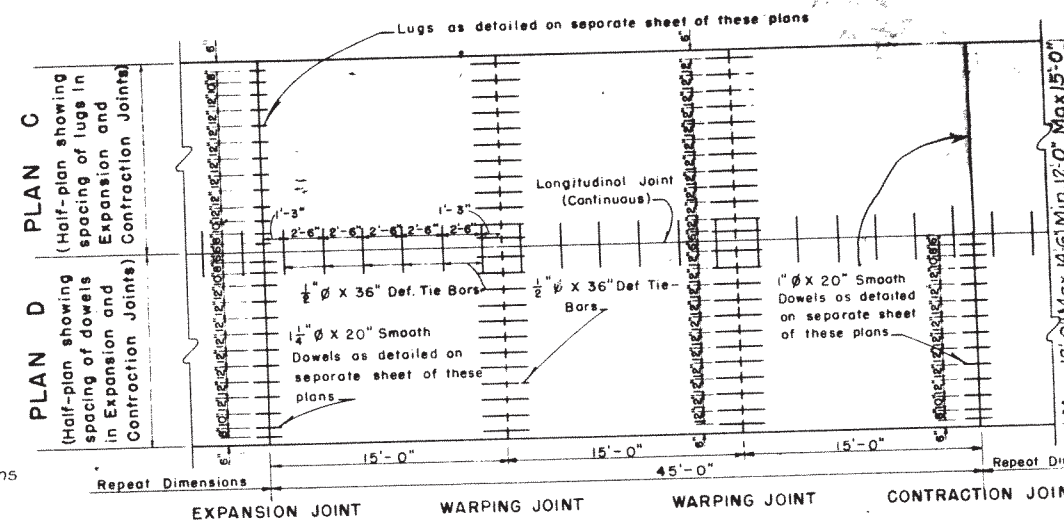
ALTERNATE PLANS A & B

W = 22 FEET
T = 8, 9 or 10 INCHES
(See Transverse Section)



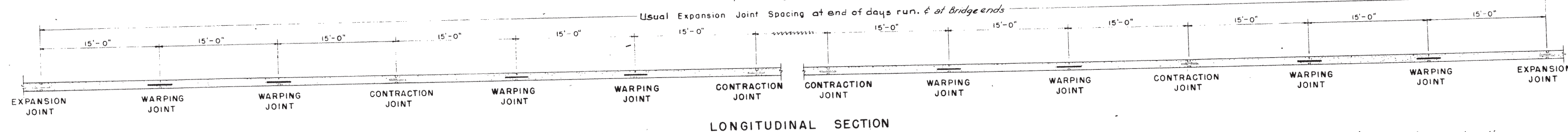
TRANSVERSE SECTION

The section of pavement will be as shown on Typical Cross-Section Sheet of these plans. Amount of steel on each side of Longitudinal Joint on 24'-0" pavement shall be as indicated on Plan C&D. Spacing shown on Standard shall be used for widths varying from the 24'-0" indicated or as directed by the Engineer.



ALTERNATE PLANS C & D

W = MIN. 24'-0" MAX. 38'-0"
T = 9 INCHES
(See Transverse Section)



LONGITUDINAL SECTION

Expansion Joints shall be placed as shown above at a normal contraction joint location and adjacent to bridge approach slabs

Note: Spacing of tie bars in construction joints shall be same as on longitudinal joints.

TABLES OF REINFORCING STEEL FOR 45' TYPICAL SLABS (FOR INFORMATION OF BIDDERS)

(FOR INFORMATION OF BIDDERS)													
PVT. WIDTHS	TYPE OF JOINT						TOTAL WT.	* WT. PER S.Y.	LUGS PER CONTR. JOINT	DOWELS PER CONTR. JOINT	LUGS PER EXPLAN. JOINT	DOWELS PER EXPLAN. JOINT	WT. PER S.Y. TOTAL STEEL BASED ON USE OF STAR LUGS
	WARPING			LONGITUDINAL									
	NO.	SIZE	WT.	NO.	SIZE	WT.							
24'-0"	48	1/2x36	96.19	18	1/2x36	36.07	132.26	1.102	18	26	26	26	1.372
24'-4"	48	"	96.19	18	"	"	132.26	1.087	18	26	26	26	1.354
26'-0"	52	"	104.21	18	"	"	140.28	1.079	20	28	28	28	1.386
26'-6"	52	"	104.21	18	"	"	140.28	1.059	21	29	29	29	1.344
26'-10"	52	"	104.21	18	"	"	140.28	1.046	21	29	29	29	1.327
27'-0"	54	"	108.22	18	"	"	144.29	1.069	21	29	29	29	1.349
27'-6"	54	"	108.22	18	"	"	144.29	1.049	22	30	30	30	1.337
29'-0"	56	"	112.22	18	"	"	148.29	1.023	22	30	30	30	1.296
38'-6"	76	"	152.30	36	"	72.14	224.44	1.166	29	42	42	42	1.446

* Weights shown do not include load transfer devices at expansion and contraction joints.

FOR INFORMATION OF BIDDERS

Approx. Length of Joints
Total Length Longit. Joints = 26,110 Ft. Approx.
Total Length Contr. Joints = 4,190 Ft. Approx.
Total Length Contr. Joints = 16,700 Ft. Approx.
Total Length Warp. Joints = 31,520 Ft. Approx.

GENERAL NOTES:

Contraction Joints shall be constructed in accordance with the governing details in these plans.

At each bridge end construct a thickened and reinforced approach slab as detailed on other sheet in these plans. Additional work, concrete and steel shall be included in unit price bid for "Concrete Pavement."

Pavement on all curves shall be superelevated and widened as indicated on the governing Departmental Curve Standards. On widened curves, the longitudinal joint shall be placed at the center of the pavement.

The furnishing of all material and the installation of all reinforcing steel, tie bars, joints, including load transmission units or dowels and sleeves, and all dowel or bar chairs, shall be subsidiary work and shall be included in the unit price bid for "Concrete Pavement."

Integral Traffic Stripes shall be applied as required by plans and governing specifications. Provisions for use of this patented installation have been made by the State free of royalty charges to the Contractor.

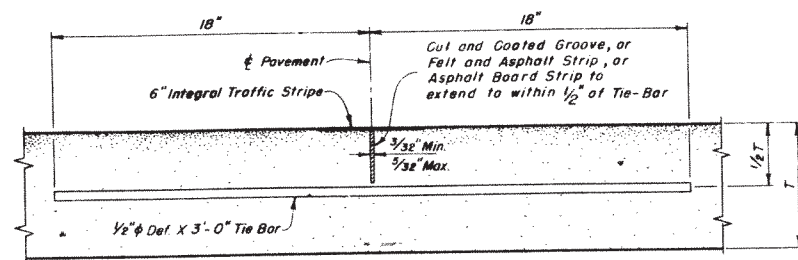
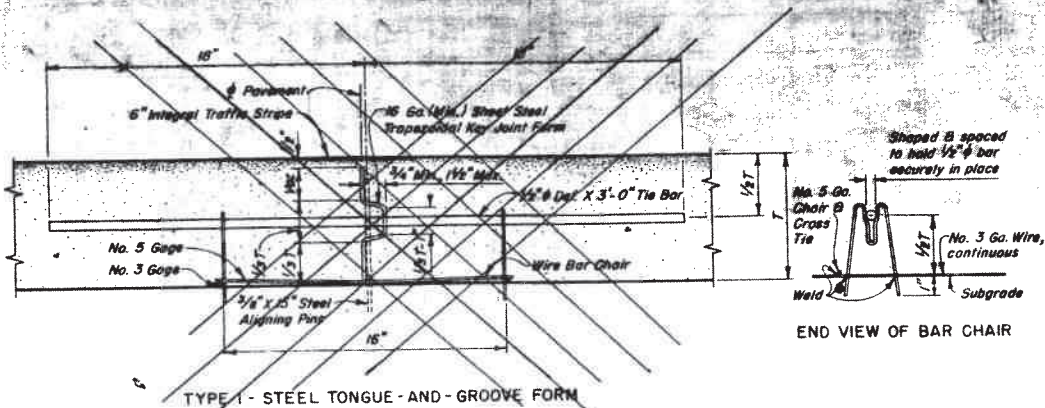
The Contractor shall hold and save the State, its officers, its agents, and its employees harmless to liability of any nature or kind, including costs and expenses, for or on account of any patent or unpatented invention, article or appliance manufactured or used in accordance with the details of these plans.

TEXAS HIGHWAY DEPARTMENT
CONCRETE PAVEMENT
DETAILS
9" SLABS

C.P.D.-
MODIF

Revised Jan. 18-1952

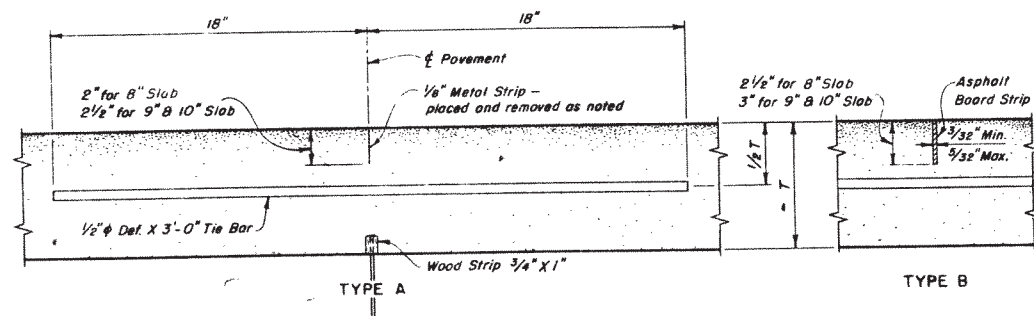
APPROVED	ENGINEER ROAD DESIGN	REV. NO.	6	STATE	TEXAS	FEDERAL AID PROJECT NO.	F 1089 (6)
REVISED							



TYPE 2 - MACHINE CUT GROOVE

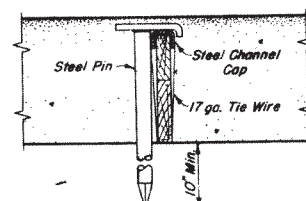
Top groove shall be cut by an approved machine and the vertical faces of the concrete coated with an approved concrete curing compound before closing and final finishing, or a 1/16 inch asphalt impregnated felt strip shall be inserted, continuous between expansion joints, or an asphalt board strip held in an approved continuous metal shield, shall be placed continuously in a groove cut in the concrete by an approved mechanical device operated in advance of the longitudinal float. The strips or groove shall be true to line, vertical, and of the depth shown. Tie bars shall be installed as in Type 1, or accurately placed in position on the screeded concrete by means of an approved template and forced to the proper position with a suitable tool.

ALTERNATE TYPES OF LONGITUDINAL JOINTS



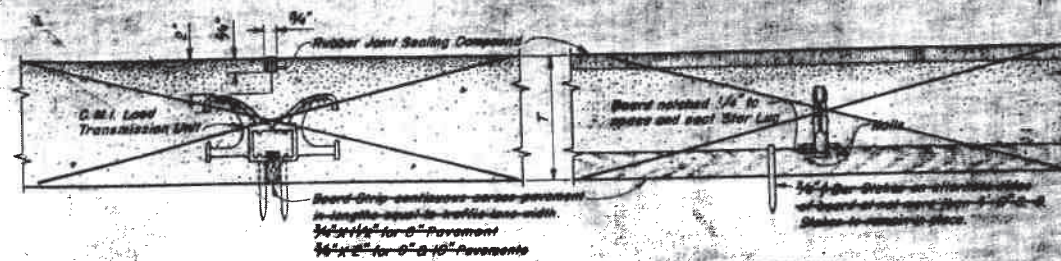
The 3/4 inch X 1 inch Wood Strip as shown for Type A shall be continuous for width of pavement, and shall be securely fastened to the subgrade by 40-penny wire nails driven through drilled holes on not more than 30" centers. Tie Bars shall be placed accurately in position, after screeding, by means of an approved template. The transverse finishing machine shall pass over the joint after installing the bars. Longitudinal Joint Type B shall be used on this project with no alternate. The Contractor shall install sufficient stakes, braces, brackets or other devices as necessary to keep Expansion and Contraction Joints true to required lines and grades and shall leave in place such of these devices as is necessary to keep joints in this position.

ALTERNATE TYPES OF TRANSVERSE WARPING JOINTS



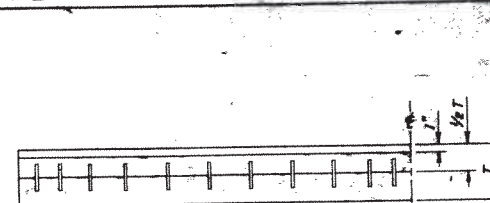
INSTALLING PIN FOR EXPANSION JOINT

Board Joint Filler of specified type shall be secured on subgrade in exact position and line as illustrated or by other approved device. Pins shall be removed after passage of finishing machine, then pavement resurfaced by second pass of finishing machine. After second passage of finishing machine remove concrete to 1" below top of board and nail 3/4 inch X 7/8 inch wood strip to top of board filler to form joint seal space. Replace concrete and finish with longitudinal float. The wood strip shall not be removed until immediately prior to pouring joint seal.

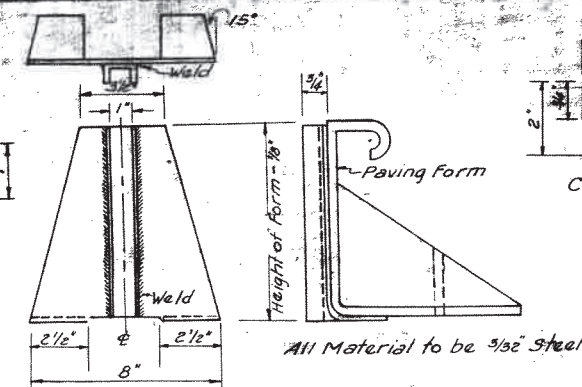


CAST MALLEABLE IRON CANTILEVER TYPE LOAD TRANSMISSION UNIT
D-14 "STAR LUG" as manufactured by Texas Foundries, Lufkin, Texas, or equal Load Transmission Unit

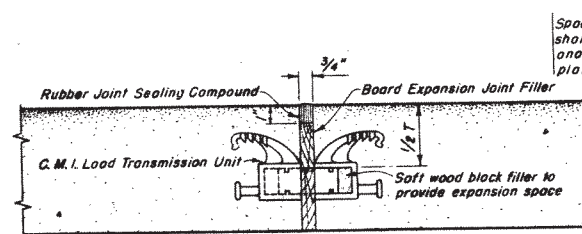
ALTERNATE TYPES OF TRANSVERSE CONTRACTION JOINT



ELEVATION OF BOARD STRIP FOR EXPANSION JOINT WITH C.M.I. LOAD TRANSMISSION UNITS

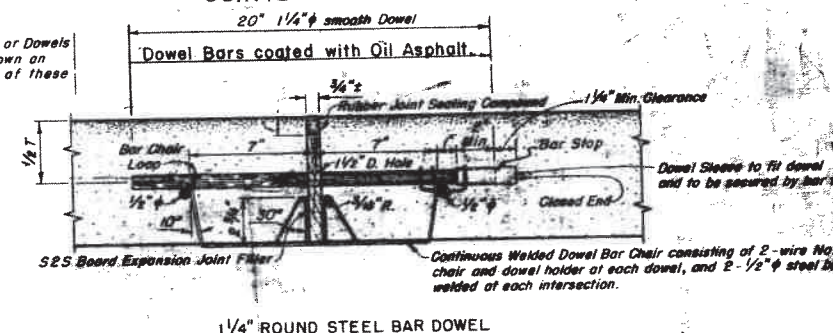


PROPOSED HOLDER FOR TRANSVERSE CONTRACTION AND EXPANSION JOINTS



CAST MALLEABLE IRON CANTILEVER TYPE LOAD TRANSMISSION UNIT
D-15 "STAR LUG" as manufactured by Texas Foundries, Lufkin, Texas, or equal Load Transmission Unit

ALTERNATE TYPES OF TRANSVERSE EXPANSION JOINTS



1/4" ROUND STEEL BAR DOWEL

GENERAL NOTES

Either of the alternate types of Joints shown by these details may be constructed, at the option of the Contractor. If the Contractor desires to use any other alternate device, he shall, prior to its use, secure its approval by the Engineer.

Load Transmission Units or Dowels shall be secured parallel to the pavement surface and center line. All Joints, including all materials, devices, and work required shall be considered subsidiary work and shall be included in the unit price bid for "Concrete Pavement." No direct payment will be made for any material, bar chair, steel, or any other device shown, nor for its installation.

"T" indicates center depth of thickened-edge pavements or depth of uniform pavements. Expansion Joints will be required only at end of days pour and at bridge ends. Longitudinal Joint Type B shall be used on this project with no alternate. The Contractor shall install sufficient stakes, braces, brackets or other devices as necessary to keep Expansion and Contraction Joints true to required lines and grades and shall leave in place such of these devices as is necessary to keep joints in this position.

The Contractor shall hold and save the State, its officers, agents and its employees harmless to liability of any nature or kind, including costs and expenses, for or on account of any patent or unpatented invention, article or appliance manufactured or used in accordance with the details of these plans.

TEXAS HIGHWAY DEPARTMENT CONCRETE PAVEMENT JOINT DETAILS 9" SLABS

Revised Jan. 18 - 1952

APPROVED:	STATE	FEDERAL AID PROJECT
ENGINEER OF ROAD DESIGN	TEXAS	F-100-2-52
REVIEWED:	COUNTY	DATE
	DALLAS	5-21-52

C.P.J-51
MODIFIED