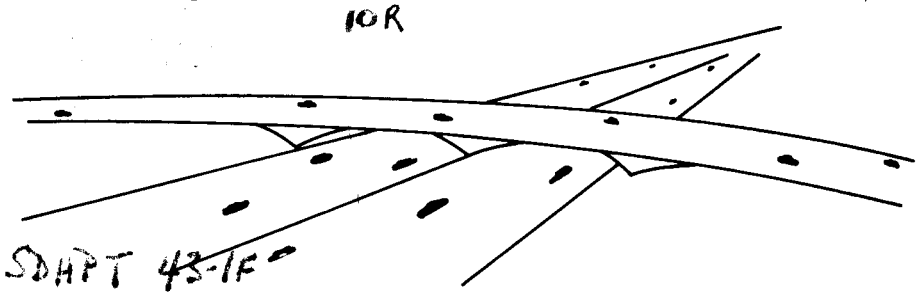

DEPARTMENTAL RESEARCH

Report Number 43 - 1

A HIGHWAY CONSTRUCTION BID PRICE INDEX

by

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and

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Research Project
1-8-63-43

TEXAS HIGHWAY DEPARTMENT

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Research Report Number 43-1

Statistical Studies of Unit
Prices and Specification Development
Research Project Number 1-8-63-43

Conducted by
Highway Design Division
Texas Highway Department

In Cooperation with the
U. S. Department of Commerce
Bureau of Public Roads

March 1965

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I INTRODUCTION

The purchasing power of a dollar made available to the State for highway construction varies from time to time for any number of reasons. In order that those responsible for long range construction planning may have at their disposal a means of measuring this varying purchasing power at any time and projecting it to any future point in time, a cost index of highway construction has been prepared. This index equates the present cost of highway construction to the cost during the index base period or, in more simple terms, indicates the amount of construction one dollar would have purchased if spent during the base period rather than at the present or some past or future year.

In addition to this means of measuring purchasing power, a properly designed index may be of use in estimating individual projects. Knowing the present value of the index and the anticipated trend, the designer should be able to compute the index for the project estimate and arrive at a logical conclusion regarding the validity of the estimate.

This two fold purpose governed the design of the index.

II INDEX DESIGN

As designed, the index presented here may be defined as: "A weighted average of unit bids submitted by the successful bidders during a selected base period for various items representing substantially all of the construction operations provided for in a highway construction contract."

Index Items

The first step in the design of the index was to select the items to be included. In general terms, highway construction operations may be classified as grading, structures, surfacing and incidentals. Strictly speaking, an index should include

all of the contracted bid items of the base period and conversely, an ideal index would be one which contains only one item representing each of the four generalized construction operations. However, neither of these extremes would be practical since the former would involve several hundred individual bid items and the latter would not be truly representative.

The Bureau of Public Roads maintains a bid price index (See Figure 1) made up of weighted average prices for six items. This index is representative of work involved in grading, structures and surfacing and is apparently quite successful in detecting price trends in the entire nation. However, the absence of an item for flexible base and several other construction operations preclude an identical index for Texas.

The Highway Design Division, Bridge Division and Secondary Roads Division are currently using an index based on the year 1949 which includes all of the contract bid items for that base period. Current projects are compared to similar projects in 1949. However, some items included in this index are outdated since items such as continuously reinforced concrete pavement, upgraded flexible bases, cement stabilized bases and asphaltic concrete pavement were not used extensively in 1949.

The Construction Division's Cost Index as reported in 1953 (See Figure 2) includes eleven items which are a comprehensive representation of highway construction from 1949 through 1953. The items contained in this index were selected for tentative inclusion in the new index. During preparation, some changes were made in the minor index items.

Base Period

The selection of the base period for accumulating the average prices con-

stituted the next step in developing the index. The Bureau of Public Roads Index was originally based on the 1925-29 period but was updated and revised for the period 1957-59 in keeping with the effort of all Federal agencies to base any statistical data on this period. The index used by the Design Divisions is based on the year 1949 and the Construction Division Index is based on a five year period from 1949 through 1953; however, construction innovations and specification changes since that period might produce some fictitious variations in application of the index. The 1957-59 base period was selected in order that the index could be correlated with the BPR Index. Average prices were developed for that period and a possible index prepared. The results were somewhat disappointing in that only approximately 50 percent of the total cost of several projects selected at random were represented in the index. Also, this index appeared to indicate a much greater price rise for 1963 than was reflected by the indices used by the Department. This could be attributed to several factors but is believed to be primarily the result of adoption of the current standard specifications with possibly some influence from changes in design such as the advent of continuously reinforced concrete pavement and upgraded flexible base.

The base period was then moved forward to the years 1961-63. Several factors prompted selection of this period as the base. The 1961 specifications (the forerunner of the current standard specifications) were adopted and put into use early in this period and the bid history for both the 1961 and 1962 specifications was stored on the computer. Also, sufficient bid history had been accumulated on continuously reinforced concrete pavement, high-type flexible base and other relatively recent design innovations to assure reliable averages for these items. Projects governed by the 1951 specifications even though they were let in 1961 are not included in the index.

Statistical Derivations

Figure 3 indicates the composition of the index. The items are divided into four general categories: excavation, base, surfacing and structures with the latter three further separated by generalized pay items.

The area and State average prices for excavation include common and unclassified excavation only; however, in computing the relative weight on an individual project, such items as overhaul, borrow, sprinkling and rolling of embankment material should be included in the item weight.

The itemized breakdown of flexible base was deemed necessary to avoid misleading fluctuations of the index. If only one overall State average for flexible base was included as originally planned, one large project containing a substantial quantity of one of the more expensive bases would result in a fictitious rise in the index for that letting. Separate weighted averages for each flexible base item should counteract this and result in a more stable and accurate index. Average prices are included for various types of flexible base. For most of these items an average price for delivered flexible base is also shown. Since shell with sand admixture and shell with sand and caliche admixture are bid both delivered and with haul paid for separately, the average price includes the volume of shell divided into the sum of shell, sand, caliche and additional quarter mile haul. Therefore, the only prices shown for these items are on a delivered basis. Bid history indicates that cement stabilized base and flexible base used in District 21 are always bid on a delivered basis. A delivered price has not been included for caliche, bankrun gravel or foundation course since a delivered bid history for these items was not available. In the future if these items are bid on a delivered basis, an index price can be established.

All flexible base in the index was computed on a cubic yard basis using a conversion factor of 1.4 from ton to cubic yard for caliche, bankrun gravel, processed gravel, iron ore, crushed stone, foundation course and the delivered base used in District 21. The conversion factor from ton to cubic yard on shell with sand admixture and shell with sand and caliche admixture is 1.12.

The conversion factor from ton to cubic yard for cement stabilized base is 2.0. If cement stabilized base is measured by square yard, the conversion factor is derived from dividing 36 by the depth in inches of the cement stabilized base placed. (Figure 5 indicates the conversion factors for various items of the index.)

Surfacing was divided into four categories with a further breakdown to separate jointed reinforced and continuously reinforced concrete pavement. Aggregate and asphalt for surface treatments include all surfacing aggregates and asphalt for seal coats, one, two and three course surface treatments. The average price for asphaltic concrete pavement includes Hot Mix Asphaltic Concrete Pavement only. However, in calculating the weight of each item and relative weight, cold mix limestone rock asphalt pavement, hot mix-cold laid asphaltic concrete pavement and tack coat should be included. Concrete pavement was divided into two groups because of the price variation for a greater amount of reinforcing steel used in the continuously reinforced design. The average prices for concrete pavement were computed on a cubic yard basis. (See Figure 5 for conversion factors.)

The structural items originally included only reinforcing steel, structural steel and structural concrete. However, it was found that prestressed concrete beams constitutes a large percentage of structural items and was added

to the composition of the index. The item of 24 inch pipe was also added as an indicator item to reflect any price changes in areas of construction not directly related to the major items, although it does not constitute a substantial percentage of the index. In calculating the weight of the item and the relative weight for Pipe 24", all sizes of reinforced concrete and corrugated galvanized metal pipe should be included. The average prices for structural steel were developed from I-Beam Steel and Girder Steel omitting miscellaneous structural steel; however, miscellaneous steel should be used in arriving at the relative weights for structural steel.

The items of sprinkling and rolling were originally included in the index; however, they were deleted since they constituted a very minor percentage and the weighted averages obtained were not realistic.

The average prices indicated are derived by dividing the summation of the total contract cost for each item during the base period by the summation of the quantities for the period. In order to determine the weight each item should be given in the index the total contract cost of similar items of work should be added to the item cost, e.g. overhaul, borrow, etc. added to excavation; tack coat added to asphaltic concrete pavement; etc. as previously discussed. The relative weight for the four general categories is then determined from the total adjustment cost of each item and the total cost in the index. The relative weights computed in this manner should approximate the relative proportions of grading, structures, base and surfacing in an ordinary construction contract as shown in Figure 3. The weight of each item and relative weight shown in the composition of the index is based on construction during the three year base period; however, the weight of each item and relative weight should be calculated on each pro-

ject. To calculate price trends for a given period the weight of each item and relative weight should be adjusted according to construction for that period. (See Figure 8D)

Application

In computing the State index for a monthly letting, or any other period of time, the weighted average unit price for each of the index items is calculated as previously described for the index. The item index is then determined by dividing the average price by the index base period average. The weight of each item for those items constituting the excavation, base, surfacing and structures index is then multiplied by this item index and the summation of these products multiplied by the relative weight to arrive at an index factor percentage. Summation of the four index factor percentages results in the overall index.

Figure 4 illustrates the overall index for each month since 1950.

III AREA INDICES

As previously mentioned, an index which could be applied to individual projects could be of significant benefit to the designer in preparing the estimate for highway construction projects. Knowing the average cost of the project, judgment could then be used to determine probable increased or decreased cost due to conditions peculiar to that project. To develop an index suitable for application to individual projects, weighted average prices equivalent to those developed for the statewide index had to be determined for each area of the State having comparable conditions.

Four factors were selected to determine the groupings. Any one of these factors was considered sufficient justification to warrant a separate area grouping.

1. Usual Construction Practice
2. Climate
3. Geological Formation
4. Usual Type of Project

The first factor alone dictates that each of the various districts be separated since even adjacent districts often use different specification bid items. Consideration of the second factor led to a further separation of the lower counties in the coastal area.

Consideration of the geological formation was on an extremely generalized basis. While the presence of large quantities of rock in certain counties was recognized, there was not sufficient bid history in some of the counties from which reliable weighted averages could be computed. There was also some indication that portions of a county should be grouped separately; however, this would not be a practical grouping for utilizing the computer history.

Consideration of the last factor dictated that the heavy metropolitan areas having expressway type construction under heavy traffic be separated from other counties in that district.

Figure 6 indicates the county groupings which resulted from this process. Forty-two separate groupings are indicated.

The index items which constitute the statewide index were extracted from the bid history for each separate area and weighted averages computed. This resulted in a separate index for each area which, when recombined, is identical in average prices, quantities, relative weights, etc. to the State index.

Figures 7A-7D indicate the weighted average prices for each index item. In several instances where prices are not shown, these areas either did not have a history for the particular bid item or did not have sufficient history to reflect a realistic weighted average. When this occurs, the State average

should be used in computing the index on an individual project until such time as sufficient bid history for this item is established.

Application to Individual Projects

Individual index forms have been prepared for each area for computation of the index for individual projects. Samples of these forms with typical project data inserted are shown in Figures 8A-8C. A form for each area with index list price is included in the Appendix.

Figure 8A indicates the procedure followed in computing the index for a typical grading, structures and surfacing project. The estimate price for each index item contained in the project is entered under "Estimated Cost" and divided by the index list price for the particular area to determine the "Item Index". Where more than one bid item is contained in the project for any index item, such as several types of aggregate for surface treatment, an approximate weighted average price should be determined for use in computing the index. Where more than one item is included for each type of work such as will usually be the case for base, surfacing and structures, the weight to be given each item must be determined. This weight may be an approximation or may be an exact calculation based on the total estimated cost of each of the items. In each case the total weight of each of the four general categories must equal 100 percent. For example Excavation is only one item so it equals 100 percent.

Under flexible base the sum of all base items shall equal 100 percent and the same pertains to the surfacing and structural categories.

The product of the item index and weight of each item is the "Item Index Factor".

These factors, when added, determine the composite item index for each type of construction.

The relative weights shown on figure 8A are those determined from the composition of the index; however, these should be adjusted to correspond with the project. The product of this weight and the composite item index determines the index factor percent which, when added, produces the project index.

Figure 8B and 8C show application of the index to projects having only base and surfacing and surfacing respectively. The procedure to be followed in computing the index is identical to that described above except for relative weight. These weights were adjusted to the actual proportions of the types of construction contemplated in the project.

The index for individual projects is not so critical that strict rules need to be established for its computation. Since one of the functions of the index is to aid the designer in estimating the project, considerable latitude may be exercised in arriving at the weight of each item, adjusted relative weights, etc. The most important factor determined is probably the item index since this figure represents the deviation of the estimated price from the weighted average of past bid history in that area. Judgment and experience can be used to determine if this deviation is justified by conditions peculiar to the project.

IV FUTURE MODIFICATIONS

From time to time it will become apparent that newly developed items should be added to the index. Such construction items as lightweight surfacing aggregates, asphalt stabilized base, etc. will no doubt need to be added

to assure representation of a high percentage of the cost of individual projects. New items may be added to the statewide index or to the area indices at any time by converting the price of the new item back to the base period. However, it will be necessary to accumulate a sufficient price history on a new item to assure a realistic weighted average.

V FORMS AND FIGURES

THE HIGHWAY CONSTRUCTION BID PRICE INDEX

COMPILED BY THE BUREAU OF PUBLIC ROADS

Item	Unit	Base quantity	Base unit price	Base dollar amount	Relative weight
		Thousands		Thousands	Percent
Excavation	Cu. Yd.	3,641,885	$0.42	$1,529,592	33.8
Surfacing:					
Portland cement concrete	sq. yd.	154,953	4.38	678,221	15.0
Bituminous concrete	ton	111,516	6.66	742,472	16.4
Subtotal, surfaces				1,420,693	31.4
Structures:					
Reinforcing steel	lb.	2,206.879	.129	285,139	6.3
Structural steel	lb.	2,581,462	.195	502,294	11.1
Structural concrete	cu. yd.	14,583	54.18	790,027	17.4
Subtotal, structures				1,577,460	34.8
Total				4,527,745	100.0

Basic values and relative weights of the 1957-59 base index

Figure 1

CONSTRUCTION DIVISION

ORIGINAL COST INDEX

1949-1953 Base

Period_____

	Item	Unit	Relative Index (Current Rate / Base Rate)	Weight (% of '49-'53 Base)	Amount
1. & 1A.	Roadway Excavation (Ord. Comp. & Dens. Cont.)	Cu. Yd.		11.90	
2.	Sprinkling	M. G.		2.93	
3.	Rolling	Hour		3.02	
4. & 4A.	Flexible Base (Ord. Comp. & Dens. Cont.)	Cu. Yd.		25.23	
5.	Asphalt	Gal.		6.75	
6.	Aggregate	Cu. Yd.		5.28	
7. & 7A.	Concrete Pavement (Jointed & Cont. Reinf.)	Cu. Yd.		10.68	
8,9,10.	Bituminous Mixtures	Ton		10.78	
11.	Class "A" Concrete	Cu. Yd.		12.57	
12.	Reinforcing Steel	Lbs.		5.13	
13.	Structural Steel	Lbs.		5.73	
				100.00	
		Total			
		Index			

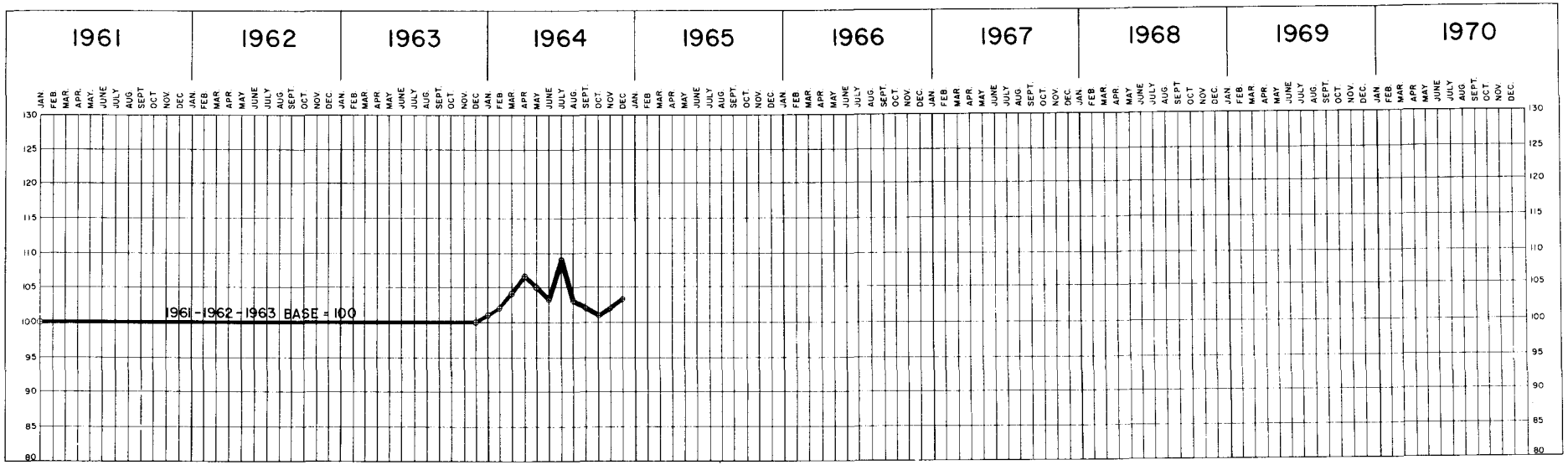
Figure 2

Item	Quantities	Av. Price	Total	Total Money Added to Item	Total to be Incl in Weight	Price to be Used for State Average	Weight of Each Item Percent	Relative Weight Percent
1. EXCAVATION	130,452,447.	$ .43	$ 56,269,859.	$ 26,109,913.	$ 82,379,772.	$ .43	100.	
				TOTAL EXCAVATION	82,379,772.			18.
2. BASE								
(a) Caliche (232)	8,465,917.	1.32	11,216,867.	3,544,559.				
Delivered				----------	14,761,426.	1.32	13.5	
(b) Shell with Sd. Adm. (234)(Delivered)	2,149,176	3.64	7,814,898.	----------	7,814,898.	3.64	6.	
(c) Bank Run Gr. (236)	710,632.	1.01	715,452.	428,080.	1,143,532.	1.01	1.	
(d) Processed Gr. (238)	2,579,320.	1.19	3,066,773.	1,271,182.	4,337,955.	1.19	4.	
Delivered	346,982.	2.43	843,519.	----------	843,519.	2.43	.5	
(e) Iron Ore (240)	2,735,675.	.97	2,644,305.	2,174,749.	4,819,054.	.97	4.	
Delivered	534,579.	2.90	1,547,868.	----------	1,547,868.	2.90	1.	
(f) Crushed Stone (242)	10,329,450.	1.45	15,023,120.	4,049,303.	19,072,423.	1.45	17.	
Delivered	9,207,741.	2.94	27,089,725.	----------	27,089,725.	2.94	24.	
(g) Fnd Crse (246)	11,254,187.	1.06	11,880,692.	4,507,447.	16,338,139.	1.06	14.	
(h) Cem Stab Base	806,498.	10.29	8,301,508.	----------	8,301,508.	10.29	12.	
(i) Shell with Sand & Cal (Ty E) Delivered	414,258.	2.74	1,134,377.	----------	1,134,377.	2.74	1.	
(j) Delivered Base Dist. 21	1,084,453.	2.52	2,735,435.	----------	2,735,435.	2.52	2.	
Average All Base	50,798,814.	2.17	94,594,177.	15,395,682.	109,989,859.	2.17	100.	
				TOTAL BASE	109,989,859.			25.
3. SURFACING								
(a) Aggr for Surf Treat	3,124,870.	6.19	19,332,410.	----------	19,332,410.	6.19	14.	
(b) Asph for Surf Treat	93,861,760.	.15	13,763,071.	----------	13,763,071.	.15	10.	
(c) ACP	5,527,743.	5.98	33,069,603.	4,289,401.	37,359,004.	5.98	27.	
(d) Conc Pav								
(1) Jtd Reinf	1,001,814.	19.33	19,363,216.	624,125.	19,987,341.	19.33	15.	
(2) Contin Reinf	2,113,793.	22.03	46,557,254.	573,441.	47,130,695.	22.03	34.	
				TOTAL SURFACING	137,572,521.		100.	31.
4. STRUCTURES								
(a) Cl A Conc	1,140,812.	46.63	53,197,117.	----------	53,197,117.	46.63	46.	
(b) Reinf Stl	229,119,655.	.10	23,680,603.	----------	23,680,603.	.10	20.	
(c) Str Stl	121,455,365.	.15	18,258,900.	----------	18,258,900.	.15	16.	
(d) Prestr Conc Beams	791,132.	14.31	11,322,269.	----------	11,322,269.	14.31	10.	
(e) Pipe 24"	392,695.	4.84	1,899,710.	7,377,316.	9,277,026.	4.84	8.	
				TOTAL STRUCTURES	115,735,915.		100.	26.
				TOTAL ALL ITEMS	445,678,063.			100.

COMPOSITION OF INDEX

Figure 3

PRICE TRENDS



PREVIOUS PRICE TRENDS

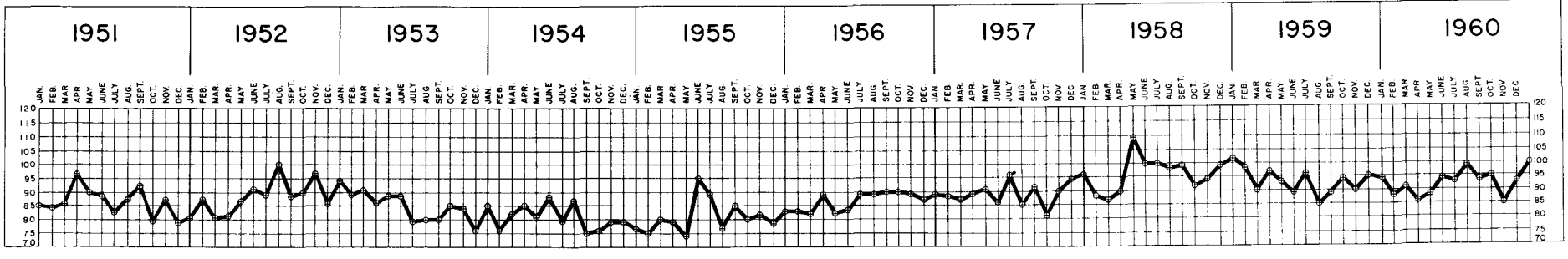


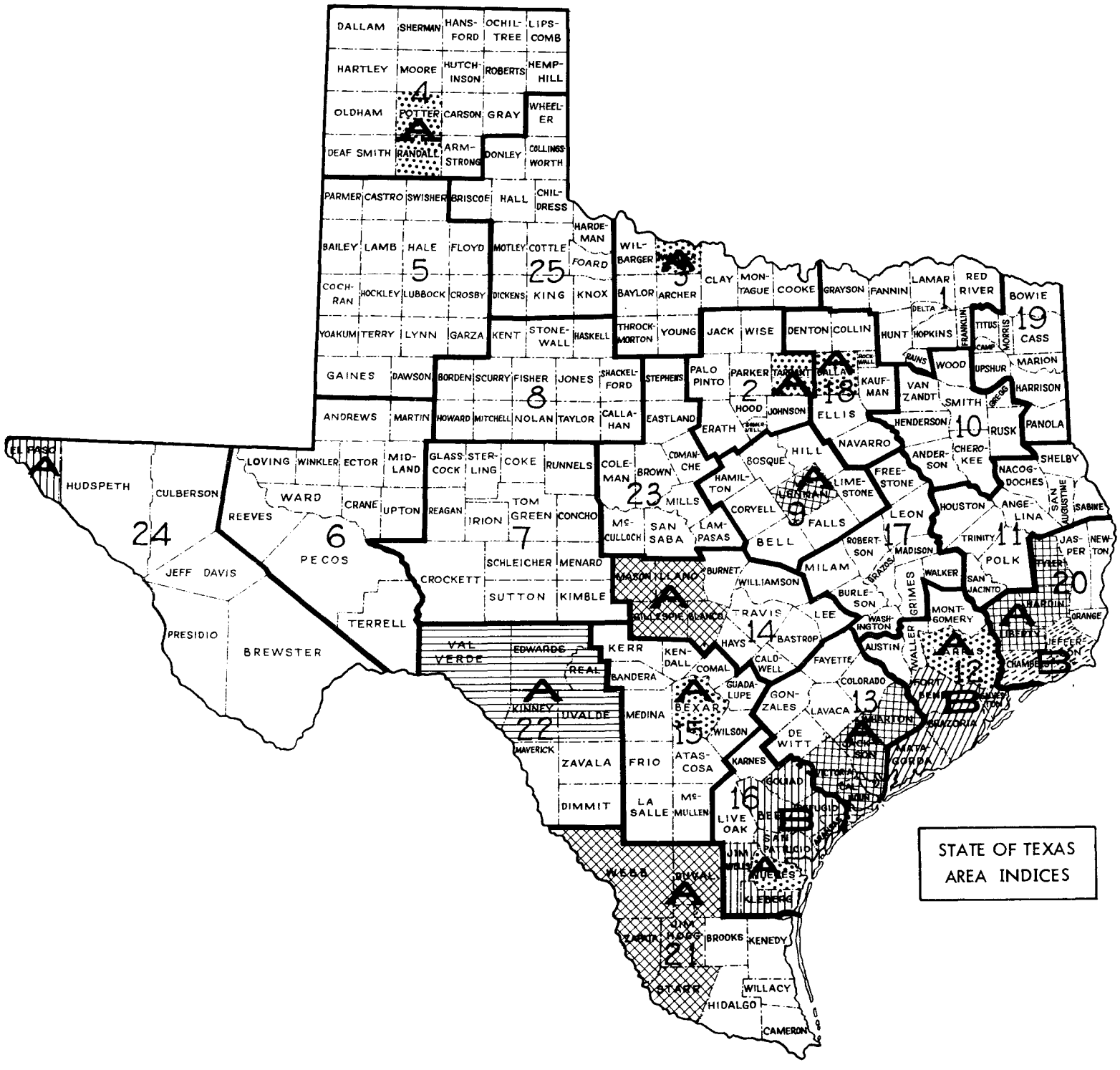
FIGURE 4

CONVERSION FACTORS

Types of Base Included in Each Item	Conversion Factor From Ton to CY
a. Caliche(232)	1.40
b. Shell with Sand Admix(234)&(Type D)	1.12
c. Bank Run Gravel(236)	1.40
d. Processed Gravel(238)&(Type B)	1.40
e. Iron Ore(240)&(Type C)	1.40
f. Crushed Stone(242)&(Type A)	1.40
g. Foundation Course(246)	1.40
h. Cement Stabilized Base	2.00
i. Shell with Sand & Caliche Admix(Type E)	1.12
j. Delivered Base used in Dist. 21	1.40

Concrete Pavement and Cement Stabilized Base Depth SY	Conversion Factor From SY to CY
6 Inch	6.0
7 "	5.143
8 "	4.5
9 "	4.0
10 "	3.6
11 "	3.273
12 "	3.0

Figure 5



STATE OF TEXAS
AREA INDICES

FIGURE 6

ITEM NO. 1

EXCAVATION
(Common & Unclassified)
CUBIC YARDS
STATE AVERAGE $ .43

Area	Average	Area	Average
1	$ .34	14A	$ .52
2	.50	15	.44
2A	.50	15A	.40
3	.36	16	.33
3A	.40	16A	.42
4	.40	16B	.48
4A	.45	17	.37
5	.39	18	.36
6	.66	18A	.63
7	.58	19	.33
8	.43	20	.44
9	.48	20A	.55
9A	.51	20B	.80
10	.31	21	.30
11	.35	21A	.32
12	.37	22	.37
12A	.78	22A	.77
12B	.58	23	.46
13	.39	24	.46
13A	.61	24A	.33
14	.44	25	.30

Figure 7A

ITEM NO 2

FLEXIBLE BASE

CUBIC YARDS

Haul Not Included

	CALICHE	SHELL WITH SAND ADM	BANK RUN GRAVEL	PROCESSED GRAVEL	IRON ORE	CRUSHED STONE	FOUNDATION COURSE	CEMENT STAB BASE	SHELL WITH SD.& CAL(TY E)	DELIVERED BASE(DIST 21)
State Average	$ 1.32		$ 1.01	$ 1.19	$ .97	$ 1.45	$ 1.06			
1						1.57	1.35			
2			1.18	1.06		1.49	1.36			
2A										
3			.90	.74		1.63	.91			
3A							1.53			
4	1.38			1.34			1.41			
4A				1.34			1.40			
5	1.38						1.27			
6	1.44		1.25			1.80	1.26			
7						1.41	.65			
8	1.47			.90		1.42	.83			
9						1.54	.95			
9A				1.52		1.85	.97			
10	1.34			.95	1.07	1.69	1.44			
11					.93	1.94	1.03			
12										
12A										
12B										
13			1.48		1.25		1.11			
13A				1.16			1.11			
14			.56			1.54	1.28			
14A						1.47	.97			
15	1.42		.85			1.28	.81			
15A						1.15				
16						1.01	.87			
16A	1.10						1.09			
16B	1.36						1.18			
17			.78		.79	1.85	.91			
18			1.22	1.48		1.66	1.35			
18A						2.38				
19			.95		.86					
20					.92	1.60				
20A					1.20		.93			
20B										
21										
21A	1.18									
22	.74					1.17	.58			
22A	.80					1.27	1.27			
23	1.29			.95		1.36	.60			
24	1.06			.99		1.06	.88			
24A						1.15				
25	1.05			1.09		1.19	1.01			

DELIVERED AVERAGES

State Average		$ 3.64		$ 2.43	$ 2.90	$2.94	$ 1.46	$10.29	$ 2.74	$ 2.52
1						3.98				
2				1.75		2.28				
2A				2.12		2.14				
3						3.45				
3A										
4										
4A										
5										
6										
7										
8						2.91				
9										
9A										
10				2.10						
11						5.35				
12				2.89	2.64			7.50		
12A		3.54			3.51			10.41		
12B		3.66			4.48			10.89		
13										
13A		3.91							3.51	
14						2.24				
14A										
15						2.03				
15A						2.45				
16										
16A									2.67	
16B									2.84	
17					2.19	3.87				
18				2.45		3.22				
18A						4.70				
19					2.32	3.62				
20		3.20								
20A		3.84								
20B		3.57								
21										2.52
21A										
22										
22A										
23						2.34				
24						2.45				
24A						2.03				
25										

Figure 7B

ITEM NO. 3

SURFACING

	ASPHALT Gal.	AGGREGATE C.Y.	ACP Ton	CONCRETE PAVEMENT JTD. REINF. C.Y.	CONCRETE PAVEMENT CONTIN. REINF. C.Y.
State Average	$ .15	$ 6.19	$ 5.98	$ 19.33	$ 22.03
1	.15	7.70	6.44	17.42	21.50
2	.15	6.30	5.84		19.71
2A	.17	7.31	6.57		21.50
3	.14	5.26	5.54	14.47	
3A	.15	6.21	6.74	16.13	21.50
4	.15	6.15	6.93		
4A	.16	6.25	6.88	17.54	25.42
5	.15	5.86	7.01		
6	.15	5.01	8.06	19.62	
7	.15	5.55	6.02		
8	.15	5.12	5.90		
9	.13	5.90	5.89		20.62
9A	.14	6.00	5.53	17.71	20.49
10	.15	7.71	7.27		21.67
11	.13	7.87	6.58	19.23	
12	.16	7.89	5.19		
12A	.16	8.74	6.71	22.08	24.71
12B	.16	8.04	6.04	22.02	
13	.15	6.88	6.56	18.85	19.27
13A	.14	6.51	6.12	21.82	
14	.15	4.86	5.13		
14A	.15	5.71	5.64		
15	.14	5.28	4.87		
15A	.14	4.89	4.92		17.36
16	.14	7.01	6.16		
16A	.14	6.88	6.27		
16B	.13	6.24	5.77		
17	.14	6.51	5.99		21.62
18	.15	7.16	6.26	17.04	20.57
18A	.16	7.13	7.28	17.32	23.38
19	.14	6.92	6.87		
20	.15	8.25	10.18	20.77	
20A	.12	7.34	7.81	21.60	25.56
20B	.14	9.19	8.90	22.77	24.17
21	.15	6.72	6.31		
21A	.16	6.56	5.65		
22	.14	5.64	5.94		
22A	.15	5.35	5.95		
23	.15	5.43	6.27		
24	.16	4.89	4.66		
24A	.16	5.30	5.03		20.16
25	.15	5.90	5.16		

Figure 7C

ITEM NO. 4

STRUCTURES

	CLASS A CONCRETE C.Y.	REINFORCING STEEL Lb.	STRUCTURAL STEEL Lb.	PRESTRESSED CONC. BEAMS L.F.	PIPE 24" L.F.
State Average	$ 46.63	$ .10	$ .15	$ 14.31	$ 4.84
1	43.97	.10	.15	14.95	4.41
2	48.95	.11	.15	13.98	4.64
2A	45.62	.10	.15	14.58	4.15
3	44.46	.10	.14	14.26	4.37
3A	47.03	.10	.15	14.91	4.64
4	58.66	.12	.15	-	4.93
4A	48.69	.11	.15	-	4.12
5	55.06	.11	.15	-	4.73
6	51.05	.12	.19	16.50	5.56
7	48.41	.11	.15	17.57	4.92
8	45.97	.10	.14	-	4.87
9	48.72	.11	.17	15.91	4.81
9A	46.07	.10	.20	16.83	4.30
10	45.01	.10	.14	15.00	4.03
11	49.10	.11	.17	13.67	4.61
12	48.26	.11	.18	15.83	5.26
12A	50.02	.10	.15	13.83	6.22
12B	57.07	.11	.20	14.32	5.89
13	44.15	.11	.15	14.00	5.18
13A	51.83	.11	.21	13.00	5.80
14	44.77	.10	.16	12.83	4.69
14A	51.11	.11	-	12.37	5.04
15	46.75	.11	.15	14.03	4.66
15A	34.85	.09	.11	14.25	4.91
16	47.48	.11	.17	-	5.43
16A	48.23	.10	-	12.93	5.42
16B	51.32	.11	.14	15.37	4.85
17	48.83	.11	.17	13.82	4.50
18	43.26	.10	.14	13.02	4.29
18A	48.55	.10	.15	14.14	4.31
19	46.11	.10	.15	15.64	4.34
20	55.92	.12	-	-	4.63
20A	53.19	.12	-	-	5.32
20B	56.02	.12	.15	19.36	6.25
21	47.64	.10	.13	-	5.39
21A	44.77	.11	-	12.62	5.93
22	46.30	.11	-	-	5.04
22A	42.48	.10	.22	20.43	5.22
23	45.05	.11	.16	15.27	4.87
24	49.89	.11	-	17.15	5.43
24A	40.61	.10	.16	15.02	5.21
25	47.56	.11	.15	-	5.03

Figure 7D

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation	.49	.50	.98	100	.98			
						.98	18.	.176
2. Base								
(a) Caliche Delivered								
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered		2.12						
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered	2.34	2.14	1.09	100	1.09			
(g) Fnd Crse Delivered								
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
						1.09	25.	.272
3. Surfacing								
(a) Aggr for Surf Treat	8.00	7.31	1.09	14	.153			
(b) Asph for Surf Treat	.17	.17	1.00	10	.10			
(c) ACP	6.40	6.57	.97	27	.262			
(d) Conc Pavement								
(1) Jtd Reinf	—							
(2) Contin Reinf	22.47	21.50	1.04	49	.509			
						1.02	31.	.316
4. Structures								
(a) Cl A Conc	50.00	45.62	1.10	56	.616			
(b) Reinf Stl	.10	.10	1.00	20	.20			
(c) Str Stl	.15	.15	1.00	16	.16			
(d) Prestr Conc Beams	—	14.58	—	—				
(e) Pipe 24"	4.10	4.15	.99	8	.079			
						1.05	26.	.273
						Index		1.04

Control:
Project: I 820-4(73)441, etc.
Highway: Int. 820
County: Tarrant

Tab No. 2A
Counties Tarrant

Figure 8A

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.39						
2. Base								
(a) Caliche Delivered	1.30	1.38	.942	100	.942			
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered								
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered								
(g) Fnd Crse Delivered		1.27						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
						.942	75	.707
3. Surfacing								
(a) Aggr for Surf Treat	6.25	5.86	1.07	55	.589			
(b) Asph for Surf Treat	.16	.15	1.07	45	.482			
(c) ACP		7.01						
(d) Conc Pavement								
(1) Jtd Reinf								
(2) Contin Reinf								
						1.07	25	.268
4. Structures								
(a) Cl A Conc		55.06						
(b) Reinf Stl		.11						
(c) Str Stl		.15						
(d) Prestr Conc Beams		4.73						
(e) Pipe 24"								

Control:
Project: S. 125 (2)
Highway:
County: Yoakum

Tab No. 5
Counties: All Counties in District 5

Index .98

Figure 8B

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.31						
2. Base								
(a) Caliche Delivered		1.34						
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered								
(d) Processed Gravel		.95						
Delivered		2.10						
(e) Iron Ore Delivered		1.07						
(f) Crushed Stone Delivered		1.69						
(g) Fnd Crse Delivered		1.44						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat	7.00	7.71	.907	7	.063			
(b) Asph for Surf Treat	.16	.15	1.07	3	.032			
(c) ACP	7.47	7.27	1.03	90	.918			
(d) Conc Pavement								
(1) Jtd Reinf								
(2) Contin Reinf		21.67						
						1.01	100	1.01
4. Structures								
(a) Cl A Conc		45.01						
(b) Reinf Stl		.10						
(c) Str Stl		.14						
(d) Prestr Conc Beams		15.00						
(e) Pipe 24"		4.03						

Control: 191-2-25,Etc.
Project: C 191-2-25,Etc.
Highway:
County: Cherokee

Tab No. 10
Counties: All Counties in District 10

Index 1.01

Figure 8C

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation	.487	.43	1.13	100%	1.13			
						1.13	12	.136
2. Base								
(a) Caliche	1.63	1.32	1.23	17.3	.213			
Delivered	-							
(b) Shell with Sand Admix	-	3.64						
(c) Bank Run Gravel	.95	1.01	.94	.1	.001			
Delivered	-							
(d) Processed Gravel	-	1.19						
Delivered	-	2.43						
(e) Iron Ore	.97	.97	1.00	.5	.005			
Delivered	2.40	2.90	.83	5.2	.043			
(f) Crushed Stone	1.46	1.45	1.01	13.7	.138			
Delivered	2.71	2.94	.92	54.6	.502			
(g) Fnd Crse	1.38	1.06	1.30	8.2	.107			
Delivered	-							
(h) Cem Stab Base (Shell)	13.44	10.29	1.31	.4	.005			
(i) Shell with Sand & Cal (Ty E)	-	2.74						
(j) Delivered Base (Dist. 21)	-	2.52						
				100%		1.014	30	.304
3. Surfacing								
(a) Aggr for Surf Treat	6.36	6.19	1.03	6	.062			
(b) Asph for Surf Treat	.16	.15	1.07	5	.054			
(c) ACP	6.17	5.98	1.03	34	.350			
(d) Conc Pavement								
(1) Jtd Reinf	17.67	19.33	.91	5	.046			
(2) Contin Reinf	20.14	22.03	.91	50	.455			
				100%		.967	33	.319
4. Structures								
(a) Cl A Conc	49.00	46.63	1.05	54	.567			
(b) Reinf Stl	.108	.10	1.08	21	.227			
(c) Str Stl	.15	.15	1.00	12	.120			
(d) Prestr Conc Beams	14.07	14.31	.98	4	.039			
(e) Pipe 24"	5.01	4.84	1.03	9	.093			
				100%		1.046	25	.261

STATE AVERAGE PRICES FOR USE IN CALCULATING A MONTHLY OR YEARLY INDEX

WEIGHT OF EACH ITEM AND RELATIVE WEIGHTS HAVE BEEN ADJUSTED

Index	1.02

Figure 8D

VI APPENDIX

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.34						
2. Base								
(a) Caliche Delivered								
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered								
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered		1.57 3.98						
(g) Fnd Crse Delivered		1.35						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		7.70						
(b) Asph for Surf Treat		.15						
(c) ACP		6.44						
(d) Conc Pavement								
(1) Jtd Reinf		17.42						
(2) Contin Reinf		21.50						
4. Structures								
(a) Cl A Conc		43.97						
(b) Reinf Stl		.10						
(c) Str Stl		.15						
(d) Prestr Conc Beams		14.95						
(e) Pipe 24"		4.41						
						Index		

Tab No. 1

Counties: All Counties in District 1

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.50						
2. Base								
(a) Caliche Delivered								
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered		1.18						
(d) Processed Gravel Delivered		1.06 1.75						
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered		1.49 2.28						
(g) Fnd Crse Delivered		1.36						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		6.30						
(b) Asph for Surf Treat		.15						
(c) ACP		5.84						
(d) Conc Pavement								
(1) Jtd Reinf		----						
(2) Contin Reinf		19.71						
4. Structures								
(a) Cl A Conc		48.95						
(b) Reinf Stl		.11						
(c) Str Stl		.15						
(d) Prestr Conc Beams		13.98						
(e) Pipe 24"		4.64						
						Index		

Tab No. 2

Counties: All Counties in District 2 except Tarrant

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.50						
2. Base								
(a) Caliche Delivered								
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered		2.12						
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered		2.14						
(g) Fnd Crse Delivered								
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		7.31						
(b) Asph for Surf Treat		.17						
(c) ACP		6.57						
(d) Conc Pavement								
(1) Jtd Reinf		----						
(2) Contin Reinf		21.50						
4. Structures								
(a) Cl A Conc		45.62						
(b) Reinf Stl		.10						
(c) Str Stl		.15						
(d) Prestr Conc Beams		14.58						
(e) Pipe 24"		4.15						
						Index		

Tab No. 2 A

Counties: Tarrant

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.36						
2. Base								
(a) Caliche Delivered								
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered		.90						
(d) Processed Gravel Delivered		.74						
(e) Iron Ore Delivered								
(f) Crushed Stone		1.63						
Delivered		3.45						
(g) Fnd Crse Delivered		.91						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		5.26						
(b) Asph for Surf Treat		.14						
(c) ACP		5.54						
(d) Conc Pavement								
(1) Jtd Reinf		14.47						
(2) Contin Reinf								
4. Structures								
(a) Cl A Conc		44.46						
(b) Reinf Stl		.10						
(c) Str Stl		.14						
(d) Prestr Conc Beams		14.26						
(e) Pipe 24"		4.37						
						Index		

Tab No. 3

Counties: All Counties in District 3 except Wichita

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.40						
2. Base								
(a) Caliche Delivered								
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered								
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered								
(g) Fnd Crse Delivered		1.53						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		6.21						
(b) Asph for Surf Treat		.15						
(c) ACP		6.73						
(d) Conc Pavement								
(1) Jtd Reinf		16.13						
(2) Contin Reinf		21.50						
4. Structures								
(a) Cl A Conc		47.03						
(b) Reinf Stl		.10						
(c) Str Stl		.15						
(d) Prestr Conc Beams		14.91						
(e) Pipe 24"		4.64						
						Index		

Tab No. 3 A

Counties: Wichita

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.40						
2. Base								
(a) Caliche Delivered		1.38						
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered		1.34						
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered								
(g) Fnd Crse Delivered		1.41						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		6.15						
(b) Asph for Surf Treat		.15						
(c) ACP		6.93						
(d) Conc Pavement								
(1) Jtd Reinf								
(2) Contin Reinf								
4. Structures								
(a) Cl A Conc		58.66						
(b) Reinf Stl		.12						
(c) Str Stl		.15						
(d) Prestr Conc Beams								
(e) Pipe 24"		4.93						
						Index		

Tab No. 4

Counties: All Counties in District 4 except Randall and Potter

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.45						
2. Base								
(a) Caliche Delivered								
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered		1.34						
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered								
(g) Fnd Crse Delivered		1.40						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		6.25						
(b) Asph for Surf Treat		.16						
(c) ACP		6.88						
(d) Conc Pavement								
(1) Jtd Reinf		17.54						
(2) Contin Reinf		25.52						
4. Structures								
(a) Cl A Conc		48.69						
(b) Reinf Stl		.11						
(c) Str Stl		.15						
(d) Prestr Conc Beams								
(e) Pipe 24"		4.12						
						Index		

Tab No. 4 A

Counties: Potter and Randall

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.39						
2. Base								
(a) Caliche Delivered		1.38						
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered								
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered								
(g) Fnd Crse Delivered		1.27						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		5.86						
(b) Asph for Surf Treat		.15						
(c) ACP		7.01						
(d) Conc Pavement								
(1) Jtd Reinf								
(2) Contin Reinf								
4. Structures								
(a) Cl A Conc		55.06						
(b) Reinf Stl		.11						
(c) Str Stl		.15						
(d) Prestr Conc Beams								
(e) Pipe 24"		4.73						
						Index		

Tab No. 5

Counties: All Counties in District 5

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.66						
2. Base								
(a) Caliche Delivered		1.44						
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered		1.25						
(d) Processed Gravel Delivered								
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered		1.80						
(g) Fnd Crse Delivered		1.26						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		5.01						
(b) Asph for Surf Treat		.15						
(c) ACP		8.06						
(d) Conc Pavement								
(1) Jtd Reinf		19.62						
(2) Contin Reinf								
4. Structures								
(a) Cl A Conc		51.05						
(b) Reinf Stl		.12						
(c) Str Stl		.19						
(d) Prestr Conc Beams		16.50						
(e) Pipe 24"		5.56						
						Index		

Tab No. 6

Counties: All Counties in District 6

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.58						
2. Base								
(a) Caliche Delivered								
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered								
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered		1.42						
(g) Fnd Crse Delivered		.65						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		5.55						
(b) Asph for Surf Treat		.15						
(c) ACP		6.02						
(d) Conc Pavement								
(1) Jtd Reinf								
(2) Contin Reinf								
4. Structures								
(a) Cl A Conc		48.41						
(b) Reinf Stl		.11						
(c) Str Stl		.15						
(d) Prestr Conc Beams		17.57						
(e) Pipe 24"		4.92						
						Index		

Tab No. 7

Counties: All Counties in District 7

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.43						
2. Base								
(a) Caliche Delivered		1.47						
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered		.90						
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered		1.42 2.91						
(g) Fnd Crse Delivered		.83						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		5.12						
(b) Asph for Surf Treat		.15						
(c) ACP		5.90						
(d) Conc Pavement								
(1) Jtd Reinf								
(2) Contin Reinf								
4. Structures								
(a) Cl A Conc		45.97						
(b) Reinf Stl		.10						
(c) Str Stl		.14						
(d) Prestr Conc Beams								
(e) Pipe 24"		4.87						
						Index		

Tab No. 8
Counties: All Counties in District 8

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.48						
2. Base								
(a) Caliche Delivered								
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered								
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered		1.54						
(g) Fnd Crse Delivered		.95						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		5.90						
(b) Asph for Surf Treat		.13						
(c) ACP		5.89						
(d) Conc Pavement								
(1) Jtd Reinf								
(2) Contin Reinf		26.62						
4. Structures								
(a) Cl A Conc		48.72						
(b) Reinf Stl		.11						
(c) Str Stl		.17						
(d) Prestr Conc Beams		15.91						
(e) Pipe 24"		4.81						
						Index		

Tab No. 9
Counties: All Counties in District 9 except McLennan

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.51						
2. Base								
(a) Caliche Delivered								
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered		1.52						
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered		1.85						
(g) Fnd Crse Delivered		.97						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		6.00						
(b) Asph for Surf Treat		.14						
(c) ACP		5.53						
(d) Conc Pavement								
(1) Jtd Reinf		17.71						
(2) Contin Reinf		20.49						
4. Structures								
(a) Cl A Conc		46.07						
(b) Reinf Stl		.10						
(c) Str Stl		.20						
(d) Prestr Conc Beams		16.83						
(e) Pipe 24"		4.30						
						Index		

Tab No. 9 A

Counties: McLennan

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.31						
2. Base								
(a) Caliche		1.34						
Delivered								
(b) Shell with Sand Admix								
(c) Bank Run Gravel								
Delivered								
(d) Processed Gravel		.95						
Delivered		2.10						
(e) Iron Ore		1.07						
Delivered								
(f) Crushed Stone		1.69						
Delivered								
(g) Fnd Crse		1.44						
Delivered								
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		7.71						
(b) Asph for Surf Treat		.15						
(c) ACP		7.27						
(d) Conc Pavement								
(1) Jtd Reinf								
(2) Contin Reinf		21.67						
4. Structures								
(a) Cl A Conc		45.01						
(b) Reinf Stl		.10						
(c) Str Stl		.14						
(d) Prestr Conc Beams		15.00						
(e) Pipe 24"		4.03						
						Index		

Tab No. 10

Counties: All Counties in District 10

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
2. Excavation		.35						
Base								
(a) Caliche Delivered								
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered								
(e) Iron Ore Delivered		.93						
(f) Crushed Stone Delivered		1.94 5.35						
(g) Fnd Crse Delivered		1.03						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		7.87						
(b) Asph for Surf Treat		.13						
(c) ACP		6.58						
(d) Conc Pavement								
(1) Jtd Reinf		19.23						
(2) Contin Reinf								
4. Structures								
(a) Cl A Conc		49.10						
(b) Reinf Stl		.11						
(c) Str Stl		.17						
(d) Prestr Conc Beams		13.67						
(e) Pipe 24"		4.61						
						Index		

Tab No. 11

Counties: All Counties in District 11

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.37						
2. Base								
(a) Caliche Delivered								
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered		2.89						
(e) Iron Ore Delivered		2.64						
(f) Crushed Stone Delivered								
(g) Fnd Crse Delivered								
(h) Cem Stab Base (Shell)		7.50						
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		7.89						
(b) Asph for Surf Treat		.16						
(c) ACP		5.19						
(d) Conc Pavement								
(1) Jtd Reinf								
(2) Contin Reinf								
4. Structures								
(a) Cl A Conc		48.26						
(b) Reinf Stl		.11						
(c) Str Stl		.18						
(d) Prestr Conc Beams		15.83						
(e) Pipe 24"		5.26						
						Index		

Tab No. 12

Counties: Austin, Waller and Montgomery

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.78						
2. Base								
(a) Caliche Delivered								
(b) Shell with Sand Admix		3.54						
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered								
(e) Iron Ore Delivered		3.51						
(f) Crushed Stone Delivered								
(g) Fnd Crse Delivered								
(h) Cem Stab Base (Shell)		10.41						
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		8.74						
(b) Asph for Surf Treat		.16						
(c) ACP		6.71						
(d) Conc Pavement								
(1) Jtd Reinf		22.08						
(2) Contin Reinf		24.71						
4. Structures								
(a) Cl A Conc		50.02						
(b) Reinf Stl		.10						
(c) Str Stl		.15						
(d) Prestr Conc Beams		13.83						
(e) Pipe 24"		6.22						
						Index		

Tab No. 12 A

Counties: Harris

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.58						
2. Base								
(a) Caliche Delivered								
(b) Shell with Sand Admix		3.66						
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered								
(e) Iron Ore Delivered		4.48						
(f) Crushed Stone Delivered								
(g) Fnd Crse Delivered								
(h) Cem Stab Base (Shell)		10.89						
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		8.04						
(b) Asph for Surf Treat		.16						
(c) ACP		6.04						
(d) Conc Pavement								
(1) Jtd Reinf		22.02						
(2) Contin Reinf								
4. Structures								
(a) Cl A Conc		57.07						
(b) Reinf Stl		.11						
(c) Str Stl		.20						
(d) Prestr Conc Beams		14.32						
(e) Pipe 24"		5.89						
						Index		

Tab No. 12 B
Counties: Brazoria, Ft. Bend, Galveston and Matagorda

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.39						
2. Base								
(a) Caliche Delivered								
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered		1.48						
(d) Processed Gravel Delivered								
(e) Iron Ore Delivered		1.25						
(f) Crushed Stone Delivered								
(g) Fnd Crse Delivered		1.11						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		6.88						
(b) Asph for Surf Treat		.15						
(c) ACP		6.56						
(d) Conc Pavement								
(1) Jtd Reinf		18.85						
(2) Contin Reinf		19.27						
4. Structures								
(a) Cl A Conc		44.15						
(b) Reinf Stl		.11						
(c) Str Stl		.15						
(d) Prestr Conc Beams		14.00						
(e) Pipe 24"		5.18						
						Index		

Tab No. 13
Counties: Fayette, Gonzales, Dewitt, Lavaca & Colorado

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.61						
2. Base								
(a) Caliche Delivered								
(b) Shell with Sand Admix		3.91						
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered		1.16						
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered								
(g) Fnd Crse Delivered		1.11						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)		3.51						
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		6.51						
(b) Asph for Surf Treat		.14						
(c) ACP		6.12						
(d) Conc Pavement								
(1) Jtd Reinf		21.82						
(2) Contin Reinf								
4. Structures								
(a) Cl A Conc		51.83						
(b) Reinf Stl		.11						
(c) Str Stl		.21						
(d) Prestr Conc Beams		13.00						
(e) Pipe 24"		5.80						
						Index		

Tab No. 13 A
Counties: Calhoun, Jackson, Victoria and Wharton

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.44						
2. Base								
(a) Caliche Delivered								
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered		.56						
(d) Processed Gravel Delivered								
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered		1.54 2.24						
(g) Fnd Crse Delivered		1.28						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		4.86						
(b) Asph for Surf Treat		.15						
(c) ACP		5.13						
(d) Conc Pavement								
(1) Jtd Reinf								
(2) Contin Reinf								
4. Structures								
(a) Cl A Conc		44.77						
(b) Reinf Stl		.10						
(c) Str Stl		.16						
(d) Prestr Conc Beams		12.83						
(e) Pipe 24"		4.69						
						Index		

Tab No. 14

Counties: Williamson, Travis, Hays, Caldwell, Bastrop, Lee

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.52						
2. Base								
(a) Caliche Delivered								
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered								
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered		1.47						
(g) Fnd Crse Delivered		.97						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		5.71						
(b) Asph for Surf Treat		.15						
(c) ACP		5.64						
(d) Conc Pavement								
(1) Jtd Reinf								
(2) Contin Reinf								
4. Structures								
(a) Cl A Conc		51.11						
(b) Reinf Stl		.11						
(c) Str Stl								
(d) Prestr Conc Beams		12.37						
(e) Pipe 24"		5.04						
						Index		

Tab No. 14 A

Counties: Blanco, Burnet, Llano, Mason, Gillespie

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.44						
2. Base								
(a) Caliche Delivered		1.42						
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered		.85						
(d) Processed Gravel Delivered								
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered		1.28 2.03						
(g) Fnd Crse Delivered		.81						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		5.28						
(b) Asph for Surf Treat		.14						
(c) ACP		4.87						
(d) Conc Pavement								
(1) Jtd Reinf								
(2) Contin Reinf								
4. Structures								
(a) [illegible] Conc		46.75						
(b) Reinf Stl		.11						
(c) Str Stl		.15						
(d) Prestr Conc Beams		14.03						
(e) Pipe 24"		4.66						
						Index		

Tab No. 15
Counties: All Counties in District 15 except Bexar

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.40						
2. Base								
(a) Caliche Delivered								
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered								
(e) Iron Ore Delivered								
(f) Crushed Stone		1.15						
Delivered		2.45						
(g) Fnd Crse Delivered								
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		4.89						
(b) Asph for Surf Treat		.14						
(c) ACP		4.92						
(d) Conc Pavement								
(1) Jtd Reinf								
(2) Contin Reinf		17.36						
4. Structures								
(a) Cl A Conc		34.85						
(b) Reinf Stl		.09						
(c) Str Stl		.11						
(d) Prestr Conc Beams		14.25						
(e) Pipe 24"		4.91						
						Index		

Tab No. 15 A

Counties: Bexar

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.33						
2. Base								
(a) Caliche Delivered								
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered								
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered		1.01						
(g) Fnd Crse Delivered								
(h) Cem Stab Base (Shell)		.67						
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		7.01						
(b) Asph for Surf Treat		.14						
(c) ACP		6.16						
(d) Conc Pavement								
(1) Jtd Reinf								
(2) Contin Reinf								
4. Structures								
(a) Cl A Conc		47.48						
(b) Reinf Stl		.11						
(c) Str Stl		.17						
(d) Prestr Conc Beams								
(e) Pipe 24"		5.43						
						Index		

Tab No. 16

Counties: Karnes-Live Oak

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.42						
2. Base								
(a) Caliche Delivered		1.10						
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered								
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered								
(g) Fnd Crse Delivered		1.09						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)		2.67						
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		6.88						
(b) Asph for Surf Treat		.14						
(c) ACP		6.27						
(d) Conc Pavement								
(1) Jtd Reinf								
(2) Contin Reinf								
4. Structures								
(a) Cl A Conc		48.23						
(b) Reinf Stl		.10						
(c) Str Stl								
(d) Prestr Conc Beams		12.93						
(e) Pipe 24"		5.42						
						Index		

Tab No. 16 A

Counties: Nueces

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.48						
2. Base								
(a) Caliche Delivered		1.36						
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered								
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered								
(g) Fnd Crse Delivered		1.18						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)		2.84						
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		6.24						
(b) Asph for Surf Treat		.13						
(c) ACP		5.77						
(d) Conc Pavement								
(1) Jtd Reinf								
(2) Contin Reinf								
4. Structures								
(a) Cl A Conc		51.32						
(b) Reinf Stl		.11						
(c) Str Stl		.14						
(d) Prestr Conc Beams		15.37						
(e) Pipe 24"		4.85						
						Index		

Tab No. 16 B

Counties: Aransas, Bee, Goliad, Jim Wells, Kleberg, Refugio, San Patricio

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.37						
2. Base								
(a) Caliche Delivered								
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered		.78						
(d) Processed Gravel Delivered								
(e) Iron Ore		.79						
Delivered		2.19						
(f) Crushed Stone		1.85						
Delivered		3.87						
(g) Fnd Crse Delivered		.91						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		6.51						
(b) Asph for Surf Treat		.14						
(c) ACP		5.99						
(d) Conc Pavement								
(1) Jtd Reinf								
(2) Contin Reinf		21.62						
4. Structures								
(a) Cl A Conc		48.83						
(b) Reinf Stl		.11						
(c) Str Stl		.17						
(d) Prestr Conc Beams		13.82						
(e) Pipe 24"		4.50						
						Index		

Tab No. 17

Counties: All Counties in District 17

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.36						
2. Base								
(a) Caliche Delivered								
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered		1.22						
(d) Processed Gravel		1.48						
Delivered		2.45						
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered		1.66 3.22						
(g) Fnd Crse Delivered		1.35						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		7.16						
(b) Asph for Surf Treat		.15						
(c) ACP		6.26						
(d) Conc Pavement								
(1) Jtd Reinf		17.04						
(2) Contin Reinf		20.57						
4. Structures								
(a) Cl A Conc		43.26						
(b) Reinf Stl		.10						
(c) Str Stl		.14						
(d) Prestr Conc Beams		13.02						
(e) Pipe 24"		4.29						
						Index		

Tab No. 18
Counties: All Counties in District 18 except Dallas

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.63						
2. Base								
(a) Caliche Delivered								
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered								
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered		2.38 4.70						
(g) Fnd Crse Delivered								
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		7.13						
(b) Asph for Surf Treat		.16						
(c) ACP		7.28						
(d) Conc Pavement								
(1) Jtd Reinf		17.32						
(2) Contin Reinf		23.38						
4. Structures								
(a) Cl A Conc		48.55						
(b) Reinf Stl		.10						
(c) Str Stl		.15						
(d) Prestr Conc Beams		14.14						
(e) Pipe 24"		4.31						
						Index		

Tab No. 18 A
Counties: Dallas

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.33						
2. Base								
(a) Caliche Delivered								
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered		.95						
(d) Processed Gravel Delivered								
(e) Iron Ore		.86						
Delivered		2.32						
(f) Crushed Stone Delivered		3.62						
(g) Fnd Crse Delivered								
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		6.92						
(b) Asph for Surf Treat		.14						
(c) ACP		6.87						
(d) Conc Pavement								
(1) Jtd Reinf								
(2) Contin Reinf								
4. Structures								
(a) Cl A Conc		46.11						
(b) Reinf Stl		.10						
(c) Str Stl		.15						
(d) Prestr Conc Beams		15.64						
(e) Pipe 24"		4.34						
						Index		

Tab No. 19
Counties: All Counties in District 19

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.44						
2. Base								
(a) Caliche Delivered								
(b) Shell with Sand Admix		3.58						
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered								
(e) Iron Ore Delivered		.92						
(f) Crushed Stone Delivered		1.60						
(g) Fnd Crse Delivered								
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		8.25						
(b) Asph for Surf Treat		.15						
(c) ACP		10.18						
(d) Conc Pavement								
(1) Jtd Reinf		20.77						
(2) Contin Reinf								
4. Structures								
(a) Cl A Conc		55.92						
(b) Reinf Stl		.12						
(c) Str Stl								
(d) Prestr Conc Beams								
(e) Pipe 24"		4.63						
						Index		

Tab No. 20
Counties: Newton, Jasper & Orange

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.55						
2. Base								
(a) Caliche Delivered								
(b) Shell with Sand Admix		3.84						
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered								
(e) Iron Ore Delivered		1.20						
(f) Crushed Stone Delivered								
(g) Fnd Crse Delivered		.93						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		7.34						
(b) Asph for Surf Treat		.12						
(c) ACP		7.81						
(d) Conc Pavement								
(1) Jtd Reinf		21.60						
(2) Contin Reinf		25.56						
4. Structures								
(a) Cl A Conc		53.19						
(b) Reinf Stl		.12						
(c) Str Stl								
(d) Prestr Conc Beams								
(e) Pipe 24"		5.32						
						Index		

Tab No. 20 A
Counties: Tyler-Hardin-Liberty

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.80						
2. Base								
(a) Caliche Delivered								
(b) Shell with Sand Admix		3.57						
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered								
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered								
(g) Fnd Crse Delivered								
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		9.19						
(b) Asph for Surf Treat		.14						
(c) ACP		8.90						
(d) Conc Pavement								
(1) Jtd Reinf		22.77						
(2) Contin Reinf		24.17						
4. Structures								
(a) Cl A Conc		56.02						
(b) Reinf Stl		.12						
(c) Str Stl		.15						
(d) Prestr Conc Beams		19.36						
(e) Pipe 24"		6.25						
						Index		

Tab No. 20 B

Counties: Jefferson - Chambers

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.30						
2. Base								
(a) Caliche Delivered								
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered								
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered								
(g) Fnd Crse Delivered								
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)		2.52						
3. Surfacing								
(a) Aggr for Surf Treat		6.72						
(b) Asph for Surf Treat		.15						
(c) ACP		6.31						
(d) Conc Pavement								
(1) Jtd Reinf		-----						
(2) Contin Reinf		-----						
4. Structures								
(a) Cl A Conc		47.64						
(b) Reinf Stl		.10						
(c) Str Stl		.13						
(d) Prestr Conc Beams		-----						
(e) Pipe 24"		5.39						
						Index		

Tab No. 21

Counties: Brooks-Kennedy-Willacy-Cameron-Hidalgo

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.32						
2. Base								
(a) Caliche Delivered		1.18						
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered								
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered								
(g) Fnd Crse Delivered								
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		6.56						
(b) Asph for Surf Treat		.16						
(c) ACP		5.65						
(d) Conc Pavement								
(1) Jtd Reinf								
(2) Contin Reinf								
4. Structures								
(a) Cl A Conc		44.77						
(b) Reinf Stl		.11						
(c) Str Stl		-----						
(d) Prestr Conc Beams		12.62						
(e) Pipe 24"		5.93						
						Index		

Tab No. 21 A
Counties: Webb-Duval-Jim Hogg-Starr-Zapata

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.37						
2. Base								
(a) Caliche Delivered		.74						
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered								
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered		1.17						
(g) Fnd Crse Delivered		.58						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		5.64						
(b) Asph for Surf Treat		.14						
(c) ACP		5.94						
(d) Conc Pavement								
(1) Jtd Reinf		-----						
(2) Contin Reinf		-----						
4. Structures								
(a) Cl A Conc		46.30						
(b) Reinf Stl		.11						
(c) Str Stl		-----						
(d) Prestr Conc Beams		-----						
(e) Pipe 24"		5.04						
						Index		

Tab No. 22

Counties: Maverick-Zavala-Dimmitt

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.77						
2. Base								
(a) Caliche Delivered		.80						
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered								
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered		1.27						
(g) Fnd Crse Delivered		1.27						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		5.35						
(b) Asph for Surf Treat		.15						
(c) ACP		5.95						
(d) Conc Pavement								
(1) Jtd Reinf		-----						
(2) Contin Reinf		-----						
4. Structures								
(a) Cl A Conc		42.48						
(b) Reinf Stl		.10						
(c) Str Stl		.22						
(d) Prestr Conc Beams		20.43						
(e) Pipe 24"		5.22						
						Index		

Tab No. 22 A
Counties: Val Verde-Edwards-Real-Uvalde-Kinney

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.46						
2. Base								
(a) Caliche Delivered		1.29						
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered		.95						
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered		1.36 2.34						
(g) Fnd Crse Delivered		.60						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		5.43						
(b) Asph for Surf Treat		.15						
(c) ACP		6.27						
(d) Conc Pavement								
(1) Jtd Reinf								
(2) Contin Reinf								
4. Structures								
(a) Cl A Conc		45.05						
(b) Reinf Stl		.11						
(c) Str Stl		.16						
(d) Prestr Conc Beams		15.27						
(e) Pipe 24"		4.87						
						Index		

Tab No. 23

Counties: All Counties in District 23

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.46						
2. Base								
(a) Caliche Delivered		1.06						
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered		.99						
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered		1.06 2.45						
(g) Fnd Crse Delivered		.88						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		4.89						
(b) Asph for Surf Treat		.16						
(c) ACP		4.66						
(d) Conc Pavement								
(1) Jtd Reinf		-----						
(2) Contin Reinf		-----						
4. Structures								
(a) Cl A Conc		49.89						
(b) Reinf Stl		.11						
(c) Str Stl		-----						
(d) Prestr Conc Beams		17.15						
(e) Pipe 24"		5.43						
						Index		

Tab No. 24

Counties: All Counties in District 24 except El Paso

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.33						
2. Base								
(a) Caliche Delivered								
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered								
(e) Iron Ore Delivered								
(f) Crushed Stone		1.15						
Delivered		2.03						
(g) Fnd Crse Delivered								
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		5.30						
(b) Asph for Surf Treat		.16						
(c) ACP		5.03						
(d) Conc Pavement								
(1) Jtd Reinf		-----						
(2) Contin Reinf		20.16						
4. Structures								
(a) Cl A Conc		40.61						
(b) Reinf Stl		.10						
(c) Str Stl		.16						
(d) Prestr Conc Beams		15.02						
(e) Pipe 24"		5.21						
						Index		

Tab No. 24 A

Counties: El Paso

Item	Est. Cost	Index List Price	Item Index	Wt of Each Item (Percent)	Item Index Factor	Composite Item Index	Relative Weight Percent	Index Factor Percent
1. Excavation		.30						
2. Base								
(a) Caliche Delivered		1.05						
(b) Shell with Sand Admix								
(c) Bank Run Gravel Delivered								
(d) Processed Gravel Delivered		1.09						
(e) Iron Ore Delivered								
(f) Crushed Stone Delivered		1.19						
(g) Fnd Crse Delivered		1.01						
(h) Cem Stab Base (Shell)								
(i) Shell with Sand & Cal (Ty E)								
(j) Delivered Base (Dist. 21)								
3. Surfacing								
(a) Aggr for Surf Treat		5.90						
(b) Asph for Surf Treat		.15						
(c) ACP		5.16						
(d) Conc Pavement								
(1) Jtd Reinf		-----						
(2) Contin Reinf		-----						
4. Structures								
(a) Cl A Conc		47.56						
(b) Reinf Stl		.11						
(c) Str Stl		.15						
(d) Prestr Conc Beams								
(e) Pipe 24"		5.03						
						Index		

Tab No. 25

Counties: All Counties in District 25