APPENDIX A

Passenger Terminal Space Program

Wichita Falls Municipal Airport Master Plan Update		TERMINAL SPACE PROGRAM Revised : August 5, 2009				
		Basis of Design : Peak Hour Passenger Enplanements (PHPE)			**Other Factors to Consider**	
		Assumptions: 220 Pax (70 pax Regional Jet+ 150 pax Group III Charter/Air Carrier).			Additional 50 PHP enplanement - New Service	
		Two Airlines serving Wichita Falls				
Ticketing/Check-In	**Existing SF**			**Square Feet**		**Square Feet**
Ticket Counter Positions	5	5 agent positions for 2airlines X4.5ft.per position + 10ft access = 33 lft.	33 lft		Facility will support demand.	
Ticket Counter Area	367	3ft.counter+ 4ft. Circulation+ 3ft.Conveyor =10ft. Ticket counter depth	33 X 10 ft.=	330		
ATO (Airline Ticket Office)	1,647	40ft.depth per 1 ft. of ticket counter frontage	33 X 40 ft.=	1,320		
100% Baggage Screening Area	243	Allowance for one EDS and ETD		1,500	Facility will support demand.	
Airline Baggage Make-Up Area	1,060	40ft depth X length of ticket counter	33 X 40 ft.=	1,500		
Check-In Queue Area	260	30ft depth X length of ticket counter	33X 30 ft.=	990		
Circulation Zone	0	10ft. Wide X length of ticket counter	33X10ft.=	330		
Law Enforcement - Podium	0	Occupies existing ticket counter position		50		
Sub Total	**3,577**		**Sub Total**	**6,020**	**Sub Total**	**0**
Security -Passenger Screening						
Security Check point	885	1 Security StationsX750sq.ft./ each (1 station process an average 200 Pax/H)		750	Facility will support demand.	0
Passenger Queue Area		Assume20% of peak will be in queue at any one time. 220X.20X15sq.ft./pax		660		150
Search Room		6 X 8 Room or cubical		48		0
Security Office (TSA)	1,000	120 sf. FSD office+ 1 X100SF offices /cubicles + 100sf communication room		320		0
Security Staff Lockers/Break-Room / Training		Break room-12 staff X 20sf + 40sf. Kitchenette+ 10sf lockers+ 240sf.training		530		0
Law Enforcement Officer Office	148	Will include monitoring CCTV screens		160		
Sub Total	**2,033**		**Sub Total**	**2,468**	**Sub Total**	**150**
Hold Rooms						
Departure Hold rooms	779	220 PHEP X 100% LF=220 pax in hold room all seated X15sf/pax= 3300		3,300	assume 50% standing and 50% sitting	625
Podium / Check -in Area		2 podium + queue area (200sf /each)		400		
Circulation / Exiting		10% of hold room area		370	12% of added area	90
Restrooms		Men + Women + custodial storage		400	Facility will support demand.	
Vending Machine Alcove				50	Facility will support demand.	
Sub Total	**779**		**Sub Total**	4,520	**Sub Total**	**715**
Baggage Claim						
Baggage Claim Frontage		120 ft. display frontage (assume +/- 12sq.ft./ lineal foot		1,440	Add 20 ft. display frontage.	240
Baggage Claim Area	1,198	Assume 12ft / lineal Foot		1,440		240
Airline Baggage offices		2 closets X50sq.ft. /closet		80		50
Inbound Baggage Area - outside covered area		2/12ft. lanes for tug&bypass+3ft.Working zone+3ft.Conveyor X 60ft.Wide maneuver area		1,800		0
Hotel Board		Assume an area that can accommodate 50 greeters X 10sft /each		100		
Sub Total	**1,198**		**Sub Total**	**4,860**	**Sub Total**	**530**
Rental Car	364	100sf office+10ft.wide X 8ft counter position= 180sf X 3 agencies		**540**	Facility will support demand.	
Sub Total	**364**		**Sub Total**	**540**	**Sub Total**	**0**
Greeters Well-wishers Central Hall						
Public Space		Assume 150 individuals x 10sf / indiv.		1,500		
Information + Tourism Center		Assume Counter and storage area of 100sq ft./ each		100		
Community Cultural Display Area				200		
ATM				20		
Land Side Restrooms	880	Men + Women + Family unit+ Janitor Storage		800	Facility will support demand.	
Public Seating	1,279	Seating for 50 individuals x 20sf		1,000		
Sub Total	**2,159**		**Sub Total**	**3,620**		
Concessions/Retail						
Secure Side	0	See Hold Room		0		0
Public Side-Gift / News				150		0
Public Side-Food / Coffee Concession		Allowance		800		0
Public side Game Room / Vending	678	Allowance		100		0
Office / Business Lease Area		Assume area leased to USO with access from the curb		1,000		0
Storage				150		
Sub Total	**678**		**Sub Total**	**2,200**	**Sub Total**	**0**
Airport Administration						
Airport Manager	893	25 x 20		500		0
Assistant Airport Manager				120		0
Operations Manager				100		0
Reception and Waiting Area		10ftX8ft. Receptionist + 100sf. Waiting		180		0
Toilets				100		0
Conference Room		Assume 25 occupancy		850		0
Kitchen Break Room				150		0
Document Filing				120		0
Printing / Fax / Office Supplies				120		0
Storage / Maintenance	2,265	Includes Janitorial and utilities		1,000		0
Security Operation Center		Part of Law Enforcement.				0
Sub Total	**3,158**		**Sub Total**	**3,240**	**Sub Total**	**0**
Support Areas						
Sky Cap Office		Not applicable		0		0
Service Loading Dock	480	Outside covered space. Not counted in the Terminal Building Area		0		0
Lavatory Truck Disposal		Not applicable		0		0
Janitorial / Utilities	554	Part of Storage & Maintenance		0		0
Sub Total	**554**		**Sub Total**	**0**	**Sub Total**	**0**
Sub total	**14,500**		**Sub total**	**27,468**		**1,395**
Circulation	2,987	**Circulation**	20%	**5,494**	20% of added area	279
			Sub total	**32,962**	**Sub total**	**1,674**
Mech. / Elect. / Com.	0	0.08 of total Area		**2,637**		
Existing Terminal Total SF Area :	**17,487**	**Estimated Total Terminal SF Area:**		**35,599**	**Added Area to the Terminal:**	**1,674**

APPENDIX B

Conceptual Sewer System Layouts

APPENDIX B – CONCEPTUAL SEWER SYSTEM LAYOUTS

Rather than providing only one conceptual sewer system layout for the proposed passenger terminal, URS developed two conceptual configurations for the City's consideration at this time due to uncertainty regarding the structural integrity and ability of the existing sewer system to carry the full load associated with the new terminal. A description of the conceptual configuration of the two optional sewer configurations is presented below.

B.1 EXTEND AND UTILIZE EXISTING GRAVITY SEWER SYSTEM (OPTION A)

This option would require the construction of new gravity sewer mains between the new terminal building and the existing gravity sewer system that runs parallel and on the southwest side of the existing terminal building. Details regarding the configuration of the sewer system for this option follow:

- One or more sewer laterals would exit the new terminal building where they would tie into a new gravity main via a wye connection. All laterals would be placed on a continuous slope from the new terminal building to the new gravity main with clean-outs placed at appropriate locations for each lateral (at least one clean-out per lateral);
- The new gravity main(s) would be installed on an approximate southwest-to-northeast axis running parallel and on the southeast side of the new terminal building generally following the existing grades in the area which range from an approximate elevation of 1,008 feet on the upstream end to an approximate elevation of 1,006 feet on the downstream end;
- A downstream end of the gravity main in the new sewer system would be connected into the closest existing manhole of the existing gravity sewer system. This connection would require modifications to the existing manhole structure;
- Based on initial take-offs from drawings of the proposed terminal building, approximately 200 to 300 linear feet of new sewer main would be required along with one standard 4-foot diameter manholes to allow for access into the new section of sewer main; and
- The new gravity sewer main(s) would have a nominal inside pipe diameter of 8-inches, have a minimum depth of cover of 3-feet, and would be installed at a suitable pitch (slope) to ensure adequate gravity drainage of all wastewater that would be generated within the new terminal building.

To implement this option, the following assumptions would need to be validated:

- The existing gravity sewer collection system that serves the existing terminal and hangars is in good general structural condition and would be able to continue to be reliably used to route wastewater from the new terminal to the City's central wastewater treatment plant;
- The "upstream" end of the existing sewer system is at a sufficient depth to allow an additional run of sewer main to be connected upstream from it, thereby essentially extending the system to serve the new terminal; and
- The wastewater transfer pumps and their associated appurtenances, controls, etc. that are located within the existing lift station located on the south side of the existing terminal/hangar area are in good mechanical working order. In addition, the pumps are sized with sufficient capacity in terms of both flow and head (pressure) so that they can adequately handle future wastewater flows that would be generated by both the existing hangars and the new terminal building.

Based on the relative distance between the new terminal building and the existing sewer system, one new manhole at the upstream end of one new 8-inch gravity main whose other end would be connected into the existing sewer manhole mentioned above would be sufficient to serve the new terminal. However, it is possible that the new run of sewer main would require additional manholes to break the single run into smaller segments in order to avoid a piping conflict with other utilities and/or new infrastructure that would be constructed as part of the new terminal.

The conceptual sewer configuration described above would minimize the overall cost associated with this particular component of the terminal facility. From perspectives of cost effectiveness and construction schedule, this sewer configuration minimizes both costs and time to construct. In addition, this sewer configuration would not increase the number of wastewater pump stations (lift stations) that the City would have to operate and maintain after the project has been completed. However, the assumptions stated above in this subsection would require confirmation before this option could be formally approved and implemented for construction.

B.2 CONSTRUCT NEW PARALLEL SEWER SYSTEM WITH LIFT STATION (OPTION B)

If either of the assumptions listed above for Option A prove not to be true, an alternative sewer configuration would be one whereby a new sanitary lift station would be constructed along with a new sanitary force main to manage all wastewater generated in the new terminal facility. Details regarding the configuration of the sewer system for this option follow:

- Similar to Option A, one or more sewer laterals would exit the new terminal building and would slope down toward a new gravity main where they would be tied into it via wye connections;
- A new 8-inch gravity sewer main would be installed along the same axis; however, it would be sloped so that all wastewater would be routed toward the southwest;
- Sewer laterals from the new terminal facility would tie into the new 8-inch gravity main and a new 4-foot diameter manhole would be installed on the northeast terminal end of the gravity main to allow for access to the new run of sewer main;
- The downstream end of the new sewer main would be connected to a new sanitary pump station of standard design and configuration. The pump station would be equipped with a set of duplex pumps, base mounting plates, guide rails, lifting chains, a set of level float sensors that would be used to control the operation of the two transfer pumps and provide an alarm for a high wastewater level within the station, and a locally-mounted control panel complete with an audible and visual warning horn and light; and

- A new force main ranging in size from 2-inch to 4-inch in diameter would be installed from the new lift station and would continue to the southwest where it would eventually meet the existing 4-inch force main of the existing sewer system. A “hot-tap” (also referred to as a “wet-tap”) of the existing 4-inch force main would be made for the connection of the new force main to it.

This option, or a variation thereof, would be pursued if the existing gravity sewer system is either not configured in such a manner that would allow it to easily be used and/or its condition would preclude it from being used. This statement also would apply to the existing lift station. It should be noted, however, that the existing sewer system could potentially be rehabilitated and/or reconfigured if the total cost (new sewer infrastructure described above for Option A plus rehabilitation/modification of the existing system) would be comparable or less then that associated with the new sewer system described for this option.

B.3 OTHER REQUIREMENTS COMMON TO BOTH SEWER CONFIGURATIONS

Ultimately, the final configuration for either option presented above (or for a variation of those options) would require additional information that either was not available or could not be independently confirmed during this initial master planning effort. This information includes but not limited to the exact location and depth of the existing sewer system components that currently serve the existing terminal facility, the physical condition of those components, and operational parameters of the existing sewer lift station and its associated force main; i.e., optimum range in pumping rates, maximum allowable pumping rate available, cut-off head of the individual pumps, range of total dynamic head within the force main. URS recommends that as part of the engineering design contract for the new terminal facility, a requirement is included for the physical examination of the existing sewer system, an assessment of its condition, and reporting back to the City so that the results from that evaluation could be used to confirm a final sewer configuration for the new terminal.

APPENDIX C

Preferred Terminal Concept – Refined Cost Estimate

CONCEPTUAL COST ESTIMATE 12-11-09
Terminal OPTION FINAL

SUMMARY DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
TERMINAL / CONCOURSE CONCEPT ESTIMATE	38,297	SF	543.57	20,817,000
LANDSIDE IMPROVEMENTS				3,164,000
AIRSIDE (AC/ PCC PAVEMENTS, EQUIP)				5,319,000
SITE UTILITIES				959,000
ESTIMATED TOTAL PROJECT COSTS				**$30,259,000**

DESCRIPTION	QUANTITY	UNIT	COST	TOTAL
DEMOLITION	NOT INCLUDED			
ASBESTOS ABATEMENT	NOT INCLUDED			
SITE, SERVICE, GRADING, GENERAL & PAVING	38,297	SF	5.02	192,263
SITE UTILITIES (FOR SITE WORK WITHIN 5 FT OF THE BUILDING)	38,297	SF	0.82	31,449
GENERAL SITE	38,297	SF		0
OFF SITE				0
SITE MISCELLANEOUS				0
SITE SUBTOTAL	**38,297**	**SF**	**5.83**	**223,388**
FOUNDATION	38,297	SF	16.86	645,848
SPECIAL FOUNDATION			0.00	0
SLAB ON GRADE - DRAINAGE	38,297	SF	6.57	251,595
STRUCTURE	38,297	SF	39.87	1,527,080
FIREPROOFING	38,297	SF	2.56	97,915
STAIRS STRUCTURE	38,297	SF	0.79	30,153
EXT WALLS-PARAPETS-WALL SYST-EXPN JNTS	38,297	SF	38.52	1,475,205
ROOF-INSUL-SOUNDPROOFING-EXP'N-JNTS	46,917	SF	12.70	595,796
CLEARSTORY	38,297	SF	1.44	55,118
INTERIOR CONSTRUCTION	38,297	SF	5.25	201,017
INTERIOR DOORS / WINDOWS	38,297	SF	1.87	71,653
INTERIOR FINISHES	38,297	SF	28.01	1,072,523
GENERAL BUILDING SPECIALTIES	38,297	SF	6.21	237,978
EQUIPMENT	38,297	SF	4.74	181,564
EQUIPMENT - JET BRIDGE	SEPARATE ESTIMATE			
SPECIAL CONSTRUCTION				0
CONVEYING - CONVEYORS	38,297	SF	12.30	470,900
PLUMBING	38,297	SF	6.18	236,681
HVAC	38,297	SF	35.81	1,371,454
FIRE PROTECTION	38,297	SF	5.92	226,630
ELECTRICAL, GENERAL	38,297	SF	25.40	972,663
ELECTRICAL SPECIAL SYSTEMS	38,297	SF	16.42	628,664
BUILDING SUBTOTAL	38,297	SF		**10,350,438**
TOTAL DIRECT COST	**38,297**	**GSF**	**276**	**10,573,826**
General Conditions	8.5%			898,775
General Contractor's Fee	8.0%			917,808
Design Contingency	20.0%			2,478,082
Payment & Performance Bonds	1.2%			178,422
Construction Contingency	10.0%			1,504,691
LEED Requirements	2.0%			331,032
Escalation	0.0%			0
Subtotal				**16,882,636**
Owner Soft Costs				
Project Management	3.0%			506,479
Construction manager	6.0%			1,012,958
Planning and Preconstruction	0.2%			33,765
Architectural / Engineering Design	10.0%			1,688,264
Architectural / Engineering Constr Admin	2.0%			337,653
Airport Staff	0.0%			0
Materials Testing	1.4%			236,357
Plan Check Services	0.1%			16,883
Cost Estimating and Scheduling	0.3%			50,648
Artwork	0.3%			50,648
Opinion of Probable Construction Cost				**20,817,000**

Wichita Falls Master Plan Update - Terminal Utilities
Wichita Falls Municipal Airport
Preliminary Construction Cost Estimate

Project name	Terminal Utilities
Engineer	URS Corp Southern
Estimator	wws
Labor rate table	BCCD2009
Equipment rate table	BCCD2009
Report format	Sorted by 'Uniformat3' 'Detail' summary

URS CORPORATION DETAIL REPORT

Phase	Spreadsheet Level	Takeoff Quantity	Total Cost/Unit	Total Amount
G3010 Water Supply				
02-41-13.33	Minor site demolition, pipe, sewer/water, 12" diameter, remove, excludes excavation, hauling	400.00 lf	6.35 /lf	2,541
03-30-53.40	Thrust Blocks in place, restraining	10.00 cy	362.91 /cy	3,629
31-23-16.13	Excavating, trench or continuous footing, common earth, 3/4 C.Y. excavator, 6' to 10' deep, excludes sheeting or dewatering	700.00 bcy	5.30 /bcy	3,708
31-23-23.13	Backfill, 12" layers, compaction in layers, hand tamp, add to above	700.00 ecy	7.44 /ecy	5,205
33-11-13.25	Water supply distribution piping, piping polyvinyl chloride, 8" diameter, awwa c900, class 150, sdr 18, excludes excavation backfill, unless specified	1,000.00 lf	8.96 /lf	8,963
33-11-13.25	Water supply , fitting polyvinyl chloride, tee, 8" diameter, class 150, D.R. 18, excludes excavation or backfill	10.00 ea	215.12 /ea	2,151
33-12-19.10	Water Utility Distribution Fire Hydrants, two way, 7'-0" depth, 4-1/2" valve, includes mechanical joints, excludes excavation and backfill	6.00 ea	2,166.29 /ea	12,998
G3020 Sanitary Sewer				
02-41-13.33	Minor site demolition, pipe, sewer/water, 12" diameter, remove, excludes excavation, hauling	500.00 lf	6.35 /lf	3,176
31-23-16.13	Excavating, trench or continuous footing, common earth, 3/4 C.Y. excavator, 6' to 10' deep, excludes sheeting or dewatering	1,750.00 bcy	5.30 /bcy	9,270
31-23-23.13	Backfill, 12" layers, compaction in layers, hand tamp, add to above	1,750.00 ecy	7.44 /ecy	13,012
33-11-13.25	Sanitary piping, fitting w/rubber gasket, polyvinyl chloride, tee, 8" diameter	5.00 ea	215.12 /ea	1,076
33-31-13.25	Public Sanitary Utility Sewerage Piping, piping polyvinyl chloride pipe, B & S, 13' lengths, 8" diameter, SDR 35, excludes excavation or backfill	500.00 lf	9.58 /lf	4,791
33-32-13.13	Package Lift Station	1.00 ea	75,000.00 /ea	75,000
G4010 Electrical Distribution				
03-30-53.40	Concrete, in place, continuous strip , 24" x 12", unreinforced,	80.00 cy	181.40 /cy	14,512
26-05-13.16	Medium-cable single cable, copper, XLP shielding, 5 kV, 500 kcmil, in conduit, excl splicing & terminations	160.00 clf	1,363.33 /clf	218,133
26-12-19.10	Transformer, oil-filled, 15 kV with taps, 480 V secondary 3 phase, 1500 kVA, pad mounted	5.00 ea	35,088.26 /ea	175,441
26-12-19.10	Electrical Misc equipment	1.00 ea	35,088.26 /ea	35,088
31-23-16.13	Excavating, trench or continuous footing, common earth, 3/8 C.Y. excavator, 1' to 4' deep, excludes sheeting or dewatering	450.00 bcy	5.85 /bcy	2,632
31-23-23.13	Backfill, bulk, to 300' haul, dozer backfilling, excludes compaction	370.00 lcy	1.28 /lcy	475
31-23-23.13	Backfill, bulk, air tamped compaction, add	370.00 ecy	10.16 /ecy	3,760
33-71-16.20	Demo of power line	4,350.00 lf	3.82 /lf	16,594
33-71-19.17	Undrg duct banks,pvc,4 @ 5"dm,excld excvt,bckfl and cast place concret	1,000.00 lf	20.29 /lf	20,293

Estimate Totals

Description	Amount	Totals	Rate
Labor	139,791		
Material	396,040		
Subcontract	75,000		
Equipment	21,617		
Other			
	632,448	**632,448**	
Taxes & Ins On Labor	53,121		38.000 %
Sales Taxes on Materials	27.723		7.000 %
Taxes on Rental Equipment	1.513		7.000 %
	82,357	**714,805**	
Jobsite Supervision	4.194		3.000 %
Small Tools & Supplies	7.921		2.000 %
Contractors Quality Control	1.398		1.000 %
	13,513	**728,318**	
Home Office Overhead	36.416		5.000 %
Contractor Fee	38.237		5.000 %
Bonds & Insurance	12.045		1.500 %
	86,698	**815,016**	
Contingency	143.826		15.000 %
	143,826	**958,842**	
Design Fee			
		958,842	
Total		***958,842***	

URS CORPORATION DETAIL REPORT

Wichita Falls Master Plan Update - Option 4
Wichita Falls Municipal Airport
Preliminary Construction Cost Estimate

Project name	Option 4
Engineer	URS Corp Southern
Estimator	wws
Labor rate table	BCCD2009
Equipment rate table	BCCD2009
Report format	Sorted by 'Uniformat3' 'Detail' summary

Phase	Spreadsheet Level	Takeoff Quantity	Total Cost/Unit	Total Amount
G1010 Site Clearing				
02-41-13.17	Demolish, remove pavement & curb, remove bituminous pavement, 3" thick, excludes hauling and disposal fees	34,800.00 sy	3.57 /sy	124,183
02-41-13.17	Demolish, remove pavement & curb, remove concrete, mesh reinforced, to 6" thick, hydraulic hammer, excludes hauling and disposal fees	999.00 sy	9.66 /sy	9,646
02-41-13.17	Demolish, remove pavement & curb, remove concrete curbs, reinforced, excludes hauling and disposal fees	2,999.00 lf	4.04 /lf	12,124
31-11-10.10	Clearing & grubbing, cut & chip light trees, to 6" diameter	9.53 acre	2,901.98 /acre	27,656
31-22-16.10	Fine grading, fine grade for slab on grade, hand grading	80,000.00 sy	1.16 /sy	92,995
31-23-23.18	Hauling, excavated or borrow material, loose cubic yards, 5 mile round trip, 1 load/hour, 16.5 C.Y. dump trailer, highway haulers, loading	6,000.00 lcy	7.87 /lcy	47,222
G1030 Site Earthwork				
31-23-23.17	Fill drainage ditch, buy, haul and compact	5,000.00 ecy	11.60 /ecy	58,000
G2020 Parking Lots				
10-14-53.20	Signs, stock, aluminum, reflectorized, high intensity, .080" aluminum, 24" x 24", excludes posts	75.00 ea	98.30 /ea	7,373
10-14-53.20	Signs, 12'-0", excludes posts, add to above for steel posts, galvanized, upright, bolted	100.00 ea	44.40 /ea	4,440
11-12-33.13	Parking gates, barrier gate with programmable controller	6.00 ea	3,550.67 /ea	21,304
11-12-33.13	Parking control equipment, card reader	2.00 ea	2,013.00 /ea	4,026
11-12-33.13	Parking control equipment, ticket spitter w/time date stamp, std	2.00 ea	6,651.00 /ea	13,302
31-32-13.30	Lime Soil Stabilization 4% 8" deep	31,666.00 sy	9.10 /sy	288,161
32-12-16.14	Parking - Asphaltic concrete, parking lots & driveways, 6" stone base, 2" binder course, 1" topping	165,000.00 sf	2.50 /sf	412,307
32-12-16.14	Reconstruct Roadway at Adjacent property	2,250.00 sf	2.50 /sf	5,622
32-12-16.14	Drives - Asphaltic concrete, parking lots & driveways, 6" stone base, 2" binder course, 1" topping	120,000.00 sf	2.50 /sf	299,859
32-13-13.23	Concrete paving surface treatment, 4500 psi, unreinforced, includes joints, finishing, and curing	1,900.00 sy	36.98 /sy	70,264
32-16-13.13	Drive - concrete curbs & gutters, concrete, steel forms, straight, 6" x 18"	7,700.00 lf	7.95 /lf	61,199
32-16-13.13	Parking - concrete curbs & gutters, concrete, steel forms, straight, 6" x 18"	6,500.00 lf	7.95 /lf	51,662
32-17-23.13	Painted pavement markings, thermoplastic, white or yellow, 4" wide	13,520.00 lf	1.03 /lf	13,974
32-17-23.13	Painted pavement markings, thermoplastic, white or yellow, 12" wide	300.00 lf	2.93 /lf	879
32-17-23.13	Painted pavement markings, thermoplastic, white or yellow, arrows	200.00 sf	5.54 /sf	1,108
32-17-23.13	Painted pavement markings, thermoplastic, white or yellow, letters	60.00 sf	5.23 /sf	314
G2040 Site Development				
32-31-13.20	Fence, chain link industrial, overhead slide gate, chain link, 6' high, to 18' wide, includes excavation, in concrete	20.00 lf	192.13 /lf	3,843
G2050 Landscaping				
32-84-23.10	Underground sprinklers irrigation system	130,000.00 sf	0.86 /sf	111,958
32-92-23.10	Sodding,t grass sod, on level ground,	130.00 msf	618.64 /msf	80,423
32-93-33.20	Shrubs, B & B, 2' - 3', planted in prepared beds	200.00 ea	42.09 /ea	8,417
32-93-43.20	Trees, , B & B, 4' - 5', in prepared beds	75.00 ea	164.19 /ea	12,314
G3030 Storm Sewer				
02-41-13.33	Minor site demolition, abandon existing catch basin or manhole, excludes hauling	4.00 ea	158.83 /ea	635
02-41-13.33	Minor site demolition, pipe, sewer/water, 27" to 36" diameter, remove, excludes excavation, hauling	500.00 lf	12.35 /lf	6,177
31-23-16.13	Excavating, trench or continuous footing, common earth, 1/2 C.Y. excavator, 1' to 4' deep, excludes sheeting or dewatering	500.00 bcy	4.64 /bcy	2,322

URS CORPORATION DETAIL REPORT

Phase	Spreadsheet Level	Takeoff Quantity	Total Cost/Unit	Total Amount
G3030 Storm Sewer				
31-23-23.13	Backfill, 12" layers, compaction in layers, hand tamp, add to above	500.00 ecy	7.44 /ecy	3,718
33-41-13.40	Storm Collector Pipe for Roof Drains Front	500.00 lf	90.04 /lf	45,018
33-41-13.40	Storm Pipe to outfall	300.00 lf	90.04 /lf	27,011
33-49-13.10	Storm Structures - weirs, JB's,roof risers	5.00 ea	4,623.68 /ea	23,118
G4020 Site Lighting				
03-30-53.40	Structural concrete, c.i.p foundation, industrial, minimum, includes forms(4 uses), reinforcing steel, and finishing	25.00 cy	299.75 /cy	7,494
26-05-19.90	Wire, copper, stranded, 600 volt, #8, type THW, in raceway	300.00 clf	90.50 /clf	27,150
26-05-33.10	PVC 1" diameter, UG	6,000.00 lf	3.20 /lf	19,179
26-05-33.65	Pull boxes, poly 10" W x 12" H x 6" D, NEMA 1	25.00 ea	101.44 /ea	2,536
26-56-13.10	Light poles, anchor base, aluminum, 20' high, excl concrete bases	25.00 ea	1,228.90 /ea	30,722
26-56-19.20	Roadway area luminaire, low pressure sodium, 135 watt, incl ballast and lamp, excl pole	60.00 ea	808.00 /ea	48,480

Estimate Totals

Description	Amount	Totals	Rate
Labor	474,518		
Material	1,124,798		
Subcontract	288,161		
Equipment	200,658		
Other			
	2,088,135	**2,088,135**	
Taxes & Ins On Labor	180,317		38.000 %
Sales Taxes on Materials	78.736		7.000 %
Taxes on Rental Equipment	14.046		7.000 %
	273,099	**2,361,234**	
Jobsite Supervision	14.236		3.000 %
Small Tools & Supplies	22.496		2.000 %
Contractors Quality Control	4.745		1.000 %
	41,477	**2,402,711**	
Home Office Overhead	120.135		5.000 %
Contractor Fee	126.142		5.000 %
Bonds & Insurance	39.735		1.500 %
	286,012	**2,688,723**	
Contingency	474.480		15.000 %
	474,480	**3,163,203**	
Design Fee			
		3,163,203	
Total		***3,163,203***	

CONCEPTUAL COST ESTIMATE 9-22-09
AIRSIDE OPTION 4

Note: Airside civil items developed on a unit cost basis, inclusive of contractor overhead, insurance, bonding, markups, etc.

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
Apron Pavement (including site prep and utilities)	16,900	SY	$200	$3,380,000
Infill Pavement for Demolished Terminal	2,500	SY	$150	$375,000
Passenger Boarding Bridge (w/400 Hz, PC Air, PW, RJ Cab)	1	EA	$500,000	$500,000
Subtotal				**$4,255,000**
Engineering and Contingency @25%				$1,063,750
Total - OPTION 4				**$5,319,000**

APPENDIX D

Cost Estimates

APPENDIX D COST ESTIMATES

This appendix presents cost estimates for projects contained in the Facilities Implementation Plan, except for the preferred terminal concept, which is presented in Appendix C. Variations in the percentages shown for contingencies reflect differences in known factors for certain projects. For example, the contingency percentage for Phase I of the Runway 17/35 Rehabilitation is 0% because that project's design is complete. Variations in design fees from project to project reflect the fact that design fees on smaller projects may consume a higher percentage of overall project cost than on larger projects.

PRELIMINARY OPINION OF PROBABLE COST
WICHITA FALL MUNICIPAL AIRPORT
Reconstruct Runway 17/35 - Phase 1

ITEM NO.	SPEC.	DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL
1	G-140-5.1	MOBILIZATION	LS	1	$ 198,193.63	$ 198,193.63
2	G-145-5.1	TEMPORARY FACILITIES, BARRICADES, AND TRAFFIC CONTROL	LS	1	$ 50,000.00	$ 50,000.00
3	P-101-5.1	ASPHALT CONCRETE MILLING, NOMINAL DEPTH 0.5 INCH	SY	830	$ 4.00	$ 3,320.00
4	P-101-5.2	ASPHALT CONCRETE MILLING, VARIABLE DEPTH 0 INCH TO 4 INCHES	SY	830	$ 6.00	$ 4,980.00
5	P-150-4.1	DEMOLITION, ASPHALT CONCRETE PAVEMENT	SY	61,866	$ 4.00	$ 247,464.00
6	P-152-4.1	UNCLASSIFIED EXCAVATION	CY	20,000	$ 8.00	$ 160,000.00
7	P-152-4.2	UNSUITABLE EXCAVATION	CY	1,000	$ 20.00	$ 20,000.00
8	P-154-5.1	SUBBASE COURSE	CY	9,600	$ 43.00	$ 412,800.00
9	P-156-5.1	TEMPORARY POLLUTION, EROSION AND SILTATION CONTROL	LS	1	$ 20,000.00	$ 20,000.00
10	P-209-5.1	CRUSHED AGGREGATE BASE COURSE	CY	10,800	$ 66.00	$ 712,800.00
11	P-301-6.1	SOIL-CEMENT BASE COURSE, 6 INCH DEPTH	SY	63,000	$ 6.00	$ 378,000.00
12	P-301-6.1	CEMENT	CWT	23,800	$ 10.00	$ 238,000.00
13	P-401-8.1	BITUMINOUS SURFACE COURSE	TON	13,400	$ 80.00	$ 1,072,000.00
14	P-620-5.1	TEMPORARY PAVEMENT MARKINGS	SF	58,800	$ 1.00	$ 58,800.00
15	P-620-5.2	PERMANENT PAVEMENT MARKINGS	SF	58,800	$ 2.00	$ 117,600.00
16	P-705-5.1	6-INCH PERFORATED HDPE UNDERDRAIN PIPE	LF	7,151	$ 30.00	$ 214,530.00
17	P-705-5.2	8-INCH NON-PERFORATED HDPE UNDERDRAIN PIPE	LF	434	$ 15.00	$ 6,510.00
18	D-705-5.3	UNDERDRAIN CONNECTION TO STRUCTURE	EA	2	$ 1,000.00	$ 2,000.00
19	D-705-5.4	UNDERDRAIN CLEANOUT	EA	20	$ 300.00	$ 6,000.00
20	D-901-5.1	SEEDING	SY	19,500	$ 1.00	$ 19,500.00
21	T-905-5.1	TOPSOILING (OBTAINED ON-SITE)	CY	1,100	$ 15.00	$ 16,500.00
22	T-908-5.1	MULCHING	SY	19,500	$ 0.25	$ 4,875.00

Construction Cost:	$ 3,963,872.63
Design Cost (Actual):	$ 278,040.00
Inspection and Acceptance Testing (7.5%):	$ 297,290.45
Contingencies (0%):	$ -
Total Project Cost:	$ 4,539,203.08

PRELIMINARY OPINION OF PROBABLE COST
WICHITA FALL MUNICIPAL AIRPORT
Reconstruct Runway 17/35 - Phase 2

ITEM NO.	SPEC.	DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL
1	G-140-5.1	MOBILIZATION	LS	1	$ 223,456.79	$ 223,456.79
2	G-145-5.1	TEMPORARY FACILITIES, BARRICADES, AND TRAFFIC CONTROL	LS	1	$ 50,000.00	$ 50,000.00
3	P-101-5.1	ASPHALT CONCRETE MILLING, NOMINAL DEPTH 0.5 INCH	SY	830	$ 4.00	$ 3,320.00
4	P-101-5.2	ASPHALT CONCRETE MILLING, VARIABLE DEPTH 0 INCH TO 4 INCHES	SY	830	$ 6.00	$ 4,980.00
5	P-150-4.1	DEMOLITION, ASPHALT CONCRETE PAVEMENT	SY	61,866	$ 4.00	$ 247,464.00
6	P-152-4.1	UNCLASSIFIED EXCAVATION	CY	80,000	$ 8.00	$ 640,000.00
7	P-152-4.2	UNSUITABLE EXCAVATION	CY	1,000	$ 20.00	$ 20,000.00
8	P-154-5.1	SUBBASE COURSE	CY	9,600	$ 43.00	$ 412,800.00
9	P-156-5.1	TEMPORARY POLLUTION, EROSION AND SILTATION CONTROL	LS	1	$ 20,000.00	$ 20,000.00
10	P-209-5.1	CRUSHED AGGREGATE BASE COURSE	CY	10,800	$ 66.00	$ 712,800.00
11	P-301-6.1	SOIL-CEMENT BASE COURSE, 6 INCH DEPTH	SY	63,000	$ 6.00	$ 378,000.00
12	P-301-6.1	CEMENT	CWT	23,800	$ 10.00	$ 238,000.00
13	P-401-8.1	BITUMINOUS SURFACE COURSE	TON	13,400	$ 80.00	$ 1,072,000.00
14	P-620-5.1	TEMPORARY PAVEMENT MARKINGS	SF	58,800	$ 1.00	$ 58,800.00
15	P-620-5.2	PERMANENT PAVEMENT MARKINGS	SF	58,800	$ 2.00	$ 117,600.00
16	P-705-5.1	6-INCH PERFORATED HDPE UNDERDRAIN PIPE	LF	7,151	$ 30.00	$ 214,530.00
17	P-705-5.2	8-INCH NON-PERFORATED HDPE UNDERDRAIN PIPE	LF	434	$ 15.00	$ 6,510.00
18	D-705-5.3	UNDERDRAIN CONNECTION TO STRUCTURE	EA	2	$ 1,000.00	$ 2,000.00
19	D-705-5.4	UNDERDRAIN CLEANOUT	EA	20	$ 300.00	$ 6,000.00
20	D-901-5.1	SEEDING	SY	19,500	$ 1.00	$ 19,500.00
21	T-905-5.1	TOPSOILING (OBTAINED ON-SITE)	CY	1,100	$ 15.00	$ 16,500.00
22	T-908-5.1	MULCHING	SY	19,500	$ 0.25	$ 4,875.00

Construction Cost:	$ 4,469,135.79
Design Cost:	$ 50,000.00
Inspection and Acceptance Testing (7.5%):	$ 335,185.18
Contingencies (10%):	$ 485,432.10
Total Project Cost:	$ 5,339,753.07

WICHITA FALLS MUNICIPAL AIRPORT

Master Plan Update - Capital Improvement Plan

21 Construct Rental Car Service Facility

Description	Factors	Cost	Item Totals	Cumulative Totals
CONSTRUCTION COSTS				
			$239,059	**$239,059**
CONTINGENCIES				
Change Order Contingency	10%	$23,906		
			$23,906	**$262,965**
CONSTRUCTION SUBTOTAL				**$262,965**
MANAGEMENT COSTS				
Geotech	1.5%	$3,944		
Surveying	1.5%	$3,944		
Construction Management	6%	$15,778		
Design Svcs. During Construction	4.5%	$11,833		
Design Fees	10%	$26,296		
			$61,797	**$324,761**
				$324,761
PROJECT TOTAL				**$324,761**

URS CORPORATION

WICHITA FALLS MUNICIPAL AIRPORT

21 Construct Rental Car Service Facility

CONCEPTUAL BUDGET
WWS

		Quantity	Unit	Unit Cost	Value	Division Value
SITE						**$66,927**
Clear		0.5	ac	$1,020.00	$510	
Excavation & Grade	1' moved and graded	815	cy	$3.06	$2,493	
Select Fill	1' average site fil	815	cy	$10.20	$8,313	
Paving Lot	8"stab / '6" stone / 2" binder / 1" paving	1,500	sy	$31.60	$47,400	
Storm Retainage		1,000	cy	$3.06	$3,060	
Outfall structure		1	ea	$2,856.00	$2,856	
Grassing		9,000	sf	$0.26	$2,295	
SITE IMPROVEMENTS						**$23,549**
Fence	property line	500	lf	$14.07	$7,035	
Electrical auto gate	auto slider 12' ea way	2	ea	$1,507.50	$3,015	
Gate control access	key button in / detector out	1	ls	$2,263.26	$2,263	
Fuel Tank dbl	500 gal, pump, power	1	ea	$5,527.50	$5,528	
Dumpster Slab and Fuel Slabs		200	sf	$5.03	$1,005	
Bollards		18	ea	$261.30	$4,703	
SITE UTILITIES						**$25,590**
Electrical Service		1	ls	$2,513.75	$2,514	
power to building	from street to building	150	lf	$35.19	$5,279	
Parking Lot Lighting	30' with box fixtues	6	ea	$2,212.10	$13,273	
Water Service	from street to building	150	lf	$15.08	$2,262	
Sanitary Service	from street to building	150	lf	$15.08	$2,262	
PEMB						**$75,181**
Building Slab	pitch to auto drains	1,352	sf	$6.05	$8,185	
Metal Building	No entrance / exit auto doors	1,248	sf	$13.62	$17,000	
Storage, Restroom, Office Room areas		150	sf	$15.14	$2,270	
Electrical	Main Panels / meter / etc	1	ls	$3,531.50	$3,532	
	Lighting	20	ea	$151.35	$3,027	
	Outlets	20	ea	$80.72	$1,614	
	Equipment Power	6	ea	$504.50	$3,027	
	Paddle Fans	8	ea	$151.35	$1,211	
Plumbing	Water to equipment	3	ea	$403.60	$1,211	
	drain car wash water to Sump Pit	50	lf	$30.27	$1,514	
	Floor drain inlets	3	ea	$454.05	$1,362	
Wash Drain Sump Pit	1500 gal / skimmer / oil collector	1	ea	$12,108.00	$12,108	
Equipment	Vacuum unit	1	ea	$2,169.35	$2,169	
	Vacuum piping and hoses(3)	3	ea	$252.25	$757	
	Pressure Wash unit	3	ea	$3,027.00	$9,081	
	Combo washer/extractor 20 lb	1	ea	$4,288.25	$4,288	
	Air Compressor	1	ea	$2,825.20	$2,825	
		Subtotal			$191,247	
CONTRACTOR FEE AND ESTIMATE CONTINGENCY						**$47,812**
Contractor Fee		10%			$19,125	
Estimate Contingency		15%			$28,687	
ESTIMATED CONSTRUCTION VALUE						**$239,059**

PRELIMINARY OPINION OF PROBABLE COST
WICHITA FALL MUNICIPAL AIRPORT
Rehabilitate Existing Air Carrier Aircraft Parking Apron and Install High-Mast Lighting

ITEM NO.	SPEC.	DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL
1	M-101-3.1	MOBILIZATION	LS	1	$ 62,200.00	$ 62,200.00
2	G-145-5.1	TEMPORARY FACILITIES, BARRICADES, AND TRAFFIC CONTROL	LS	1	$ 5,000.00	$ 5,000.00
3	P-150-5.1	PCC PAVEMENT DEMOLITION	SY	1,100	$ 6.50	$ 7,150.00
4	P-501-5.1	PORTLAND CEMENT CONCRETE PAVEMENT	SY	5,400	$ 125.00	$ 675,000.00
5	P-605-5.1	JOINT SEALING FILLER	LF	48,300	$ 3.50	$ 169,050.00
6	P-620-5.1	RUNWAY AND TAXIWAY PAINTING, YELLOW REFECTIVE	SF	2,400	$ 2.50	$ 6,000.00
7	P-620-5.1	RUNWAY AND TAXIWAY PAINTING, BLACK NON-REFECTIVE	SF	4,800	$ 2.00	$ 9,600.00
8	P-634-5.2	CONCRETE PAVEMENT SPALL REPAIR	SF	1,000	$ 110.00	$ 110,000.00
9	L-125-5.1	HIGH-MAST LIGHTS	EA	4	$ 50,000.00	$ 200,000.00

Construction Cost:	$ 1,244,000.00
Design Cost (7.5%):	$ 93,300.00
Inspection and Acceptance Testing (7.5%):	$ 93,300.00
Contingencies (20%):	$ 286,120.00
Total Project Cost:	$ 1,716,720.00

PRELIMINARY OPINION OF PROBABLE COST
WICHITA FALL MUNICIPAL AIRPORT
Rehabilitate Existing General Aviation Aircraft Parking Area

ITEM NO.	SPEC.	DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL
1	G-140-5.1	MOBILIZATION	LS	1	$ 11,004.32	$ 11,004.32
2	G-145-5.1	TEMPORARY FACILITIES, BARRICADES, AND TRAFFIC CONTROL	LS	1	$ 5,502.16	$ 5,502.16
3	P-150-5.1	PCC PAVEMENT DEMOLITION	SY	1,100	$ 6.50	$ 7,150.00
4	P-501-5.1	PORTLAND CEMENT CONCRETE PAVEMENT, 10-INCH THICKNESS	SY	1,100	$ 125.00	$ 137,500.00
5	P-605-5.1	JOINT SEALING FILLER	LF	9,660	$ 3.50	$ 33,810.00
6	P-620-5.1	RUNWAY AND TAXIWAY PAINTING, YELLOW REFECTIVE	SF	480	$ 2.50	$ 1,200.00
7	P-620-5.1	RUNWAY AND TAXIWAY PAINTING, BLACK NON-REFECTIVE	SF	960	$ 2.00	$ 1,920.00
8	P-634-5.2	CONCRETE PAVEMENT SPALL REPAIR	SF	200	$ 110.00	$ 22,000.00

Construction Cost:	$ 220,086.49
Design Cost (15%):	$ 33,012.97
Inspection and Acceptance Testing (15%):	$ 33,012.97
Contingencies (20%):	$ 57,222.49
Total Project Cost:	$ 343,334.92

PRELIMINARY OPINION OF PROBABLE COST
WICHITA FALL MUNICIPAL AIRPORT
Reconstruct Existing General Aviation Aircraft Parking Apron

ITEM NO.	SPEC.	DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL
1	G-140-5.1	MOBILIZATION	LS	1	$ 79,538.59	$ 79,538.59
2	G-145-5.1	TEMPORARY FACILITIES, BARRICADES, AND TRAFFIC CONTROL	LS	1	$ 39,769.30	$ 39,769.30
3	P-150-5.1	PCC PAVEMENT DEMOLITION	SY	14,000	$ 6.50	$ 91,000.00
4	P-152-5.1	UNCLASSIFIED EXCAVATION	CY	2,333	$ 8.00	$ 18,664.00
5	P-152-5.2	CHANNEL EXCAVATION	CY	355	$ 10.00	$ 3,550.00
6	P-155-5.1	LIME TREATED SUBGRADE, 8-INCH THICKNESS	SY	14,000	$ 6.00	$ 84,000.00
7	P-155-5.2	LIME	TON	350	$ 200.00	$ 70,000.00
8	P-156-5.1	TEMPORARY POLLUTION, EROSION AND SILTATION CONTROL	LS	1	$ 7,500.00	$ 7,500.00
9	P-156-5.2	EROSION CONTROL MATTING	SY	1,200	$ 2.50	$ 3,000.00
10	P-209-5.1	CRUSHED AGGREGATE BASE COURSE, 6-INCH THICKNESS	CY	2,333	$ 100.00	$ 233,300.00
11	P-501-5.1	PORTLAND CEMENT CONCRETE PAVEMENT, 6-INCH THICKNESS	SY	14,000	$ 60.00	$ 840,000.00
12	P-620-5.1	RUNWAY AND TAXIWAY PAINTING, YELLOW REFECTIVE	SF	550	$ 2.50	$ 1,375.00
13	P-620-5.1	RUNWAY AND TAXIWAY PAINTING, BLACK NON-REFECTIVE	SF	1,100	$ 2.00	$ 2,200.00
14	D-701-5.1	24-INCH DIAMETER CLASS III RCP	LF	165	$ 100.00	$ 16,500.00
15	D-705-5.1	4-INCH CORRUGATED POLYETHYLENE UNDERDRAIN, COMPLETE	LF	990	$ 25.00	$ 24,750.00
16	D-705-5.2	6-INCH CORRUGATED POLYETHYLENE PIPE, NON-PERFORATED	LF	80	$ 15.00	$ 1,200.00
17	D-705-5.3	UNDERDRAIN CLEANOUTS	EA	4	$ 300.00	$ 1,200.00
18	D-751-5.1	TRENCH DRAIN	LF	285	$ 200.00	$ 57,000.00
19	D-751-5.2	STORM SEWER MANHOLE	EA	1	$ 5,000.00	$ 5,000.00
20	D-751-5.1	SLOPING INLET, TXDOT TYPE S, FOR 24-INCH RCP	EA	1	$ 4,000.00	$ 4,000.00
21	T-901-5.1	SEEDING	SY	2,900	$ 1.00	$ 2,900.00
22	T-905-5.1	TOPSOILING (OBTAINED ON-SITE)	CY	240	$ 15.00	$ 3,600.00
23	T-908-5.1	MULCHING	SY	2,900	$ 0.25	$ 725.00

Construction Cost:	$ 1,590,771.89
Design Cost (7.5%):	$ 119,307.89
Inspection and Acceptance Testing (7.5%):	$ 119,307.89
Contingencies (20%):	$ 365,877.54
Total Project Cost:	$ 2,195,265.21

PRELIMINARY OPINION OF PROBABLE COST
WICHITA FALL MUNICIPAL AIRPORT
Security Improvements (Extend Access Road and Fencing)

ITEM NO.	SPEC.	DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL
1	G-140-5.1	MOBILIZATION	LS	1	$ 19,841.05	$ 19,841.05
2	G-145-5.1	TEMPORARY FACILITIES, BARRICADES, AND TRAFFIC CONTROL	LS	1	$ 5,000.00	$ 5,000.00
3	P-152-4.1	UNCLASSIFIED EXCAVATION	CY	2,100	$ 8.00	$ 16,800.00
4	P-152-4.2	UNSUITABLE EXCAVATION	CY	500	$ 20.00	$ 10,000.00
5	P-155-5.1	LIME TREATED SUBGRADE, 6-INCH THICKNESS	SY	6,355	$ 6.00	$ 38,130.00
6	P-155-5.2	LIME	TON	120	$ 200.00	$ 24,000.00
7	P-156-5.1	TEMPORARY POLLUTION, EROSION AND SILTATION CONTROL	LS	1	$ 10,000.00	$ 10,000.00
8	P-209-5.1	CRUSHED AGGREGATE BASE COURSE, 8-INCH THICKNESS	CY	1,400	$ 66.00	$ 92,400.00
9	P-403-8.1	BITUMINOUS SURFACE COURSE, 2-INCH THICKNESS	TON	660	$ 80.00	$ 52,800.00
10	D-701-5.1	24-INCH DIAMETER CLASS III RCP	LF	36	$ 100.00	$ 3,600.00
11	D-751-5.1	SLOPING INLET, TXDOT TYPE S, FOR 24-INCH RCP	EA	2	$ 4,000.00	$ 8,000.00
12	F-162-5.1	CHAIN-LINK FENCE	LF	3,000	$ 30.00	$ 90,000.00
13	D-901-5.1	SEEDING	SY	15,000	$ 1.00	$ 15,000.00
14	T-905-5.1	TOPSOILING (OBTAINED ON-SITE)	CY	500	$ 15.00	$ 7,500.00
15	T-908-5.1	MULCHING	SY	15,000	$ 0.25	$ 3,750.00

Construction Cost:	$ 396,821.05
Design Cost (15%):	$ 59,523.16
Inspection and Acceptance Testing (15%):	$ 59,523.16
Contingencies (20%):	$ 103,173.47
Total Project Cost:	$ 619,040.84

PRELIMINARY OPINION OF PROBABLE COST
WICHITA FALL MUNICIPAL AIRPORT
Rehabilitate Runway 17/35

ITEM NO.	SPEC.	DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL
1	M-101-3.1	MOBILIZATION	LS	1	$ 23,276.32	$ 23,276.32
2	G-145-5.1	TEMPORARY FACILITIES, BARRICADES, AND TRAFFIC CONTROL	LS	1	$ 10,000.00	$ 10,000.00
3	P-150-4.2	REMOVAL OF EXISTING PAVEMENT MARKINGS	SF	110,000	$ 0.75	$ 82,500.00
4	EB-44B -5.1	COAL TAR SEALER/REJUVENATOR	SY	117,000	$ 1.00	$ 117,000.00
5	EB-44B -5.2	ASPHALT CRACK SEALING	LF	98,200	$ 1.25	$ 122,750.00
6	P-620-5.2	RUNWAY AND TAXIWAY PAINTING, WHITE REFLECTIVE	SF	110,000	$ 1.00	$ 110,000.00

Construction Cost:	$ 465,526.32
Design Cost (7.5%):	$ 34,914.47
Inspection and Acceptance Testing (7.5%):	$ 34,914.47
Contingencies (20%):	$ 107,071.05
Total Project Cost:	$ 642,426.32

PRELIMINARY OPINION OF PROBABLE COST
WICHITA FALL MUNICIPAL AIRPORT
Widen and Strengthen Taxiway "C"

ITEM NO.	SPEC.	DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL
1	G-140-5.1	MOBILIZATION	LS	1	$ 147,071.76	$ 147,071.76
2	G-145-5.1	TEMPORARY FACILITIES, BARRICADES, AND TRAFFIC CONTROL	LS	1	$ 73,535.88	$ 73,535.88
3	P-150-5.1	PCC PAVEMENT DEMOLITION	SY	5,615	$ 6.50	$ 36,497.50
4	P-152-5.1	UNCLASSIFIED EXCAVATION	CY	4,600	$ 8.00	$ 36,800.00
5	P-155-5.1	LIME TREATED SUBGRADE, 12-INCH THICKNESS	SY	10,020	$ 6.00	$ 60,120.00
6	P-155-5.2	LIME	TON	380	$ 200.00	$ 76,000.00
7	P-156-5.1	TEMPORARY POLLUTION, EROSION AND SILTATION CONTROL	LS	1	$ 7,500.00	$ 7,500.00
8	P-209-5.1	CRUSHED AGGREGATE BASE COURSE, 6-INCH THICKNESS	CY	1,670	$ 100.00	$ 167,000.00
9	P-501-5.1	PORTLAND CEMENT CONCRETE PAVEMENT, 16-INCH THICKNESS	SY	10,020	$ 100.00	$ 1,002,000.00
10	P-501-5.2	BONDED PCC OVERLAY, 6-INCH THICKNESS	SY	18,200	$ 60.00	$ 1,092,000.00
11	P-620-5.1	RUNWAY AND TAXIWAY PAINTING, YELLOW REFECTIVE	SF	2,440	$ 2.50	$ 6,100.00
12	P-620-5.1	RUNWAY AND TAXIWAY PAINTING, BLACK NON-REFECTIVE	SF	4,880	$ 2.00	$ 9,760.00
13	D-705-5.1	4-INCH CORRUGATED POLYETHYLENE UNDERDRAIN, COMPLETE	LF	7,200	$ 25.00	$ 180,000.00
14	D-705-5.2	6-INCH CORRUGATED POLYETHYLENE PIPE, NON-PERFORATED	LF	200	$ 15.00	$ 3,000.00
15	D-705-5.3	UNDERDRAIN CLEANOUTS	EA	8	$ 300.00	$ 2,400.00
16	T-901-5.1	SEEDING AND MULCHING	SY	20,000	$ 1.00	$ 20,000.00
17	T-905-5.1	TOPSOILING (OBTAINED ON-SITE)	CY	1,110	$ 15.00	$ 16,650.00
18	T-908-5.1	MULCHING	SY	20,000	$ 0.25	$ 5,000.00

Construction Cost:	$ 2,941,435.14
Design Cost (7.5%):	$ 220,607.64
Inspection and Acceptance Testing (7.5%):	$ 220,607.64
Contingencies (20%):	$ 676,530.08
Total Project Cost:	$ 4,059,180.49

Wichita Falls Master Plan Update -Terminal Demolition
Wichita Falls Municipal Airport
Preliminary Construction Cost Estimate

Project name	Terminal Demolition
Engineer	URS Corp Southern
Estimator	wws
Labor rate table	BCCD2009
Equipment rate table	BCCD2009
Report format	Sorted by 'Uniformat3' 'Detail' summary

URS CORPORATION DETAIL REPORT

Phase	Spreadsheet Level	Takeoff Quantity	Total Cost/Unit	Total Amount
F2010 Building Element Demolition				
02-41-16.17	Bldg footings and foundations demolition,floors,concrete slab grade,concrete,wire mesh reinforced,6"thick,excludes disposal costs and dump fees	30,000.00 sf	4.33 /sf	129,833
02-41-16.17	Bldg. footings and foundations demolition, remove concrete footing, 1' - 6" thick, 2' wide, excludes disposal costs and dump fees	1,700.00 lf	12.49 /lf	21,236
02-41-16.17	Bldg. footings and foundations demolition, remove concrete walls, block, 8" thick, excludes disposal costs and dump fees	27,200.00 sf	1.69 /sf	45,838
02-41-16.17	Bldg. dump materials, excludes disposal costs and dump fees	57,200.00 sf	1.69 /sf	96,395
02-41-19.18	Selective demolition, disposal only, urban buildings with salvage value allowed, masonry construction, includes loading and 5 mile haul to dump	2,000.00 cy	8.25 /cy	16,505
02-41-19.19	Selective demolition, dump charges, typical urban city, building construction materials, includes tipping fees only	100.00 ton	100.00 /ton	10,000

Estimate Totals

Description	Amount	Totals	Rate
Labor	275,645		
Material	10,000		
Subcontract			
Equipment	34,162		
Other			
	319,807	319,807	
Taxes & Ins On Labor	104,745		38.000 %
Sales Taxes on Materials	700		7.000 %
Taxes on Rental Equipment	2,391		7.000 %
	107,836	427,643	
Jobsite Supervision	8,269		3.000 %
Small Tools & Supplies	200		2.000 %
Contractors Quality Control	2,756		1.000 %
	11,225	438,868	
Home Office Overhead	21,943		5.000 %
Contractor Fee	23,041		5.000 %
Bonds & Insurance	7,258		1.500 %
	52,242	491,110	
Contingency	86,667		15.000 %
	86,667	577,777	
Design Fee			
		577,777	
Total		***577,777***	

PRELIMINARY OPINION OF PROBABLE COST
WICHITA FALL MUNICIPAL AIRPORT
Overlay Runway 17/35

ITEM NO.	SPEC.	DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL
1	G-140-5.1	MOBILIZATION	LS	1	$ 152,037.84	$ 152,037.84
2	G-145-5.1	TEMPORARY FACILITIES, BARRICADES, AND TRAFFIC CONTROL	LS	1	$ 76,018.92	$ 76,018.92
3	P-101-5.1	MILLING	SY	117,000	$ 5.00	$ 585,000.00
4	P-401-8.1	BITUMINOUS SURFACE COURSE	TON	26,325	$ 80.00	$ 2,106,000.00
5	P-603-5.1	BITUMINOUS TACK COAT	GAL	11,700	$ 1.00	$ 11,700.00
6	P-620-5.2	RUNWAY AND TAXIWAY PAINTING, WHITE REFLECTIVE	SF	110,000	$ 1.00	$ 110,000.00

Construction Cost:	$ 3,040,756.76
Design Cost (7.5%):	$ 228,056.76
Inspection and Acceptance Testing (7.5%):	$ 228,056.76
Contingencies (20%):	$ 699,374.05
Total Project Cost:	$ 4,196,244.32

APPENDIX E

Stakeholder Participation

APPENDIX E STAKEHOLDER PARTICIPATION

Stakeholder participation was achieved during the master plan update through two methods. The first method consisted of the formation of an Advisory Committee that met at key points during the study. The Advisory Committee consisted of representatives from American Eagle, rental car companies, Sheppard Air Force Base, Landmark Aviation (the airport's fixed-base operator), airport tenants, the City of Wichita Falls Planning Department, the Federal Aviation Administration, the Transportation Security Agency, the Wichita Falls Metropolitan Planning Organization, airport management, members of the Airport's Advisory Board and URS Corporation (the study consultant). The Advisory Committee enabled an exchange of information between the various parties regarding data collected by the master plan update. Copies of Working Papers that contained sections of the master plan update were provided to members of the committee for their review and comment. Formal briefings consisting of Powerpoint presentations and handouts were provided at each meeting.

Meetings were held on the following dates and addressed the following topics:

Date	Topics Discussed
August 5, 2009	Study Goals and Objectives, Inventory and Forecasts
October 15, 2009	Facility Requirements, Terminal Program and Terminal Alternatives
December 15, 2009	Preferred Terminal Concept
April 1, 2010	Airport Plans, Facility Implementation Plan and Financial Plan

Copies of the sign-in sheets from each Advisory Committee meeting are provided on the following pages.

The second method of stakeholder participation was Public Information Workshops that were held at key points in the study. These workshops were advertised locally and enabled members of the general public to view the study's findings on a variety of display boards and to provide comments on the study's recommendations to airport management and the study consultant. The workshops were held in the City of Wichita Falls Public Library during afternoon and evening hours.

Notification of these workshops was provided to the public through advertisements in the Wichita Falls Times/Record News, the City's website, the Wichita Falls Metropolitan Planning Organization website, and the local community television channel. Copies of the newspaper advertisements are provided on the following pages.

The first workshop was held on December 15, 2009. That workshop presented data from the Inventory section through the Preferred Terminal Development Concept. Nineteen persons attended the workshop.

The second workshop was held on March 31, 2010. That workshop presented the master plan update's capital improvement program and proposed financial plan. Copies of the sign-in sheets and handouts from both Public Information Workshops are provided on the following pages. Five persons attended the workshop.

WICHITA FALLS MUNICIPAL AIRPORT
MASTER PLAN UPDATE
ADVISORY COMMITEE MEETING
August 5, 2009

SIGN IN SHEET
(Please Print)

Name	Representing	Phone
SID Gills	Advisory board member	Phone numbers on file.
Gibby Gibson	LANDMARK AVIATION	
DAN DEKLER	AERO MAINTENANCE INC	
Samuel Williams	American Eagle	
ERIC RODRIGUEZ	AMERICAN EAGLE	
Glenn Beavers	City Aviation Advisory Board	
John Ireland	Budget	
DAVE CLARK	CWF	
KIM GILKERSON	SHEPPARD AFB	
Monica Morris	City of WF	
John Burnes	City of WF	

WICHITA FALLS MUNICIPAL AIRPORT
MASTER PLAN UPDATE
ADVISORY COMMITEE MEETING #2
October 15, 2009

SIGN IN SHEET
(Please Print)

Name	Representing	Phone
Gibby Gibson	Landmark Aviation	Phone numbers on file.
Glenn Beavers	Aviation Advisory Board	
DAVE CLARK	CWF	
GLENN BARHAM	CWF City Council	
SID Gills	WWF	
Samuel Williams	American Eagle	
GUILLERMO Y. VILLALOBOS	FAA / TEX ADO	
Ron Chapman	Hertz	
John Burnes	CWF	
Monica Morris	CWF	
Jeff Schmidt	URS	
Howard KLEIN	URS	
Nabil JAMMAL	URS	

WICHITA FALLS MUNICIPAL AIRPORT
MASTER PLAN UPDATE
ADVISORY COMMITEE MEETING #3
December 16, 2009

SIGN IN SHEET
(Please Print)

Name	Representing	Phone
Glenn Beavers	Aviation Advisory Board	Phone numbers on file.
Dave Clark	CWF	
Mark McBurnett	SAFB Civil Engineer	
KIM GILKERSON	SAFB DS2 / COMMUNITY PLANNING	
Melissa Guillory	SAFB DS2 / Programmer	
JOHN BURRUS	WICHITA FALLS - AT&T	
JAY GILMORE	SAFB CIVIL ENGINEERING	
SID Gills	Advisory Committee	
Gibby Gibson	LANDMARK AVIATION	
Lin Barnett	Wichita Falls MPO	
GLENN BARHAM	WICHITA FALLS City Council	
William Rigden	TSA	
John Ireland	Budget Rent a Car	
Tex Schmidt	URS Corporation	
NABIL JAMMAL	URS	

WICHITA FALLS MUNICIPAL AIRPORT
MASTER PLAN UPDATE
ADVISORY COMMITEE MEETING #4
April 1, 2010

SIGN IN SHEET
(Please Print)

Name	Representing	Phone
Sid Gills	Aviation Adv. Council	Phone numbers on file.
William Rigden	TSA	
KIM GILKERSON	SAFB, 82CES, DS2	
Melissa Guillory	SAFB, 82 CES, DS2	
GUILLERMO Y. VILLALOBOS	FAA / Airports Division Tex ADO	
Monica Morris	CWF	
Glenn Beavers	Aviation Advisory Board	
Gibby Gibson	Landmark Aviation	
John Burrus	CWF	
John Ireland	Budget	
DAVE CLARK	CWF	
Samuel Williams	American Eagle	
Howard Klein	URS Corporation	
Tex Schmidt	URS Corporation	

Affidavit of Publication

THE STATE OF TEXAS #245824
COUNTY OF WICHITA

On this 10th day of December 2009 A D... personally appeared before me, the undersigned authority Kathy Salan, Sales Assistant for the Times Publishing Company of Wichita Falls, publishers of the Wichita Falls Times/Record News, a newspaper published at Wichita Falls in Wichita County, Texas, and upon being duly sworn by me, on oath states that the attached advertisement is a true and correct copy of advertising published in Two (2) issues hereof on the following date:

December 3 and 10, 2009

Kathy Salan

Sales Assistant for Times Publishing Company of Wichita Falls

Subscribed and sworn to before me this the day and year first above written:

Norine S. Lewis

NORINE S. LEWIS NOTARY PUBLIC STATE OF TEXAS EXPIRES 05-17-2012

WICHITA FALLS MUNICIPAL AIRPORT MASTER PLAN UPDATE PUBLIC INFORMATION WORKSHOP

The City of Wichita Falls, Texas is conducting a Master Plan Update for the Wichita Falls Municipal Airport. The master plan update will identify required capital improvements at the Airport during the next twenty years and is examining the feasibility of constructing a new passenger terminal. The study is being sponsored by the Federal Aviation Administration and the City of Wichita Falls, Texas.

Notice is hereby given that a public information workshop will be held on Tuesday, December 15, 2009 between the hours of 4pm and 7pm in Meeting Room 205 of the Wichita Falls Public Library located at 600 11th Street, Wichita Falls, TX. The purpose of the workshop is to provide an opportunity for the public to be briefed on the initial findings of the master plan update and preliminary options for a new passenger terminal. Representatives of the Airport and the study consultant will be available to brief you on the master plan update and to listen to any public comments.

Wheelchair or handicapped accessibility to the meeting is possible through the main entrance at 600 11th Street. Spanish language interpreters, deaf interpreters, Braille copies or any other special needs will be provided to any person requesting a special service with at least 24 hours notice. Please call the City Clerk's office at 940-761-7409.

Affidavit of Publication

THE STATE OF TEXAS #249833
COUNTY OF WICHITA

On this 30th day of March 2010 A D... onally appeared before me, the undersigned authority hy Salan, Sales Assistant for the Times Publishing npany of Wichita Falls, publishers of the Wichita Falls es/Record News, a newspaper published at Wichita Falls in hita County, Texas, and upon being duly sworn by me, on n states that the attached advertisement is a true and ect copy of advertising published in One (1) issues hereof he following date:

March 28, 2010

Kathy Salan

Sales Assistant for Times Publishing Company of Wichita Falls

Subscribed and sworn to before me this the day and year first above written:

Norine S. Lewis

NORINE S. LEWIS NOTARY PUBLIC STATE OF TEXAS EXPIRES 05-17-2012

WICHITA FALLS MUNICIPAL AIRPORT MASTER PLAN UPDATE PUBLIC INFORMATION WORKSHOP

The City of Wichita Falls, Texas is conducting a Master Plan Update for the Wichita Falls Municipal Airport. The master plan update will identify required capital improvements at the Airport during the next twenty years and is examining the feasibility of constructing a new passenger terminal. The study is being sponsored by the Federal Aviation Administration and the City of Wichita Falls, Texas.

Notice is hereby given that a public information workshop will be held on Wednesday, March 31, 2010 between the hours of 4pm and 6pm in Meeting Room 205 of the Wichita Falls Public Library located at 600 11th Street, Wichita Falls, TX. The purpose of the workshop is to provide an opportunity for the public to be briefed on the findings of the master plan update and the proposed capital improvement program. Representatives of the Airport and the study consultant will be available to brief you on the master plan update and to listen to any public comments.

Wheelchair or handicapped accessibility to the meeting is possible through the main entrance at 600 11th Street. Spanish language interpreters, deaf interpreters, Braille copies or any other special needs will be provided to any person requesting a special service with at least 24 hours notice. Please call the City Clerk's office at 940-761-7409.

WICHITA FALLS MUNICIPAL AIRPORT MASTER PLAN UPDATE

PUBLIC INFORMATION WORKSHOP

DECEMBER 15, 2009..... 4:00 – 7:00 P.M.

Introduction

Welcome to today's Public Information Workshop regarding the Master Plan Update for Wichita Falls Municipal Airport. We encourage you to read this pamphlet and to sign the attendance sheet at the meeting room entrance.

The purpose of today's workshop is to listen to your comments regarding the Master Plan Update and to brief you on the study's preliminary findings. Representatives of airport management and the study consultant (URS Corporation) are present today to speak with you and answer any questions.

The presentation boards assembled in this meeting room present information from the master planning process and present preliminary study findings. We encourage you to review them at your leisure.

Study Overview

The Master Plan Update for Wichita Falls Municipal Airport began in June of 2009 and is scheduled for completion in April of 2010. The purpose of the master plan is to evaluate existing airport facilities, then project the demand for airport facilities during the next 20 years and finally to identify the capital improvements needed to meet projected levels of demand. The focus of this master plan is the terminal area and specifically the passenger terminal.

The master planning process will result in a master plan report and an airport layout plan drawing set. The drawing set will depict proposed development at the airport. The airport layout plan must be approved by the Federal Aviation Administration to receive Federal funding.

Common Questions

The following are some common questions and their answers. We hope these are of assistance to you.

1) Why is the City conducting this Master Plan Update?

The last master plan for Wichita Falls Municipal airport was conducted in the 1960's and the last airport layout plan was completed in 1997. Updates of both items are warranted given their age.

2) Who pays for this plan?

This Master Plan Update is being funded through a grant issued by the Federal Aviation Administration (95 percent) with a match by the City of Wichita Falls (5 percent).

3) Will there be another opportunity to comment on the findings of the Master Plan Update?

Yes. An additional public information workshop will be held when the draft master plan report has been completed. This workshop is expected to occur in March or April of 2010.

4) Who can I write to regarding my comments on this plan?

A comment sheet is provided on the following page. Please mail this sheet to the address indicated. Your comments will be reviewed by airport management and the study consultant.

COMMENTS

Please use this form to express your comments or suggestions

Please mail this form to:

Wichita Falls Municipal Airport
4000 Armstrong Drive, Suite 8
Wichita Falls, Texas 76305

WICHITA FALLS MUNICIPAL AIRPORT
MASTER PLAN UPDATE

PUBLIC INFORMATION WORKSHOP

March 31, 2010..... 4:00 – 6:00 P.M.

Introduction

Welcome to today's Public Information Workshop regarding the Master Plan Update for Wichita Falls Municipal Airport. We encourage you to read this pamphlet and to sign the attendance sheet at the meeting room entrance.

The purpose of today's workshop is to present the findings of the Master Plan Update and to listen to your comments. Representatives of airport management and the study consultant (URS Corporation) are present today to speak with you and answer any questions.

The presentation boards assembled in this meeting room present information from the master planning process and the study's findings. We encourage you to review them at your leisure.

Study Overview

The Master Plan Update for Wichita Falls Municipal Airport began in June 2009 and is currently being completed. The purpose of the master plan is to evaluate existing airport facilities, then project the demand for airport facilities during the next 20 years, and finally to identify the capital improvements needed to meet projected levels of demand. The focus of this master plan is the terminal area and, specifically, the passenger terminal.

The master planning process will result in a Master Plan Report and an Airport Layout Plan drawing set. The drawing set will depict proposed development at the airport. The Airport Layout Plan must be approved by the Federal Aviation Administration to receive Federal funding.

Study Findings

The Master Plan Update concluded that a new passenger terminal building is needed to serve existing and future level of passengers. The existing passenger terminal which was constructed in the 1950's consists of 17,500 square feet of space and suffers from a number of deficiencies including roof leaks, inefficient heating and air conditioning, inefficient passenger flows, and insufficient space.

The proposed passenger terminal would provide approximately 37,500 square feet of space and would include space for airline needs, security screening, and a passenger departure lounge. Additional space would be provided for a USO and meditation room. A new access roadway and automobile parking lot would be provided as part of the project.

In addition to the proposed passenger terminal, the Master Plan Update recommends a series of capital improvement projects to maintain existing airfield and terminal area pavements in good, functional condition and to provide other needed facilities such as a rental car wash facility and a secure access road to the north side of the aircraft parking apron. The cost of all proposed capital improvement is approximately $54 million in 2010 dollars. Proposed funding for these improvements would consist of a combination of Federal and local dollars.

Who can I write to regarding my comments on the master plan update?

A comment sheet is provided on the back of this page. Please mail this sheet to the address indicated. Your comments will be reviewed by airport management and the study consultant.

COMMENTS

Please use this form to express your comments or suggestions

Please mail this form to:

Wichita Falls Municipal Airport
4000 Armstrong Drive, Suite 8
Wichita Falls, Texas 76305

WICHITA FALLS MUNICIPAL AIRPORT
MASTER PLAN UPDATE
PUBLIC INFORMATION WORKSHOP
December 15, 2009

SIGN IN SHEET
(Please Print)

Name	Address
Michael Smith	CWF
Linda Tingle	1415 N. 10th St W.F. TX 76306
Ken Van Loh	2400 Rose Lawn WF 76308
Chad Pennel	15950 N Dallas Parkway Dallas TX
SID GILLS	AVIATION ADVISORY BOARD
DAVID POTTER	1005 9th ST. WF TX 76301
DOROTHY ROBERTS-BURNS	WF CITY COUNCIL
GLENN BARHAM	WF CITY COUNCIL
LIN BARNETT	WF MPO
MARTIN LITTEKEN, JR.	CORNERSTONE ENGINEERING
April Bevington	2306 Doris WF TX 76306
Jim Gimmings	City Council WF.

WICHITA FALLS MUNICIPAL AIRPORT
MASTER PLAN UPDATE
PUBLIC INFORMATION WORKSHOP
December 15, 2009

SIGN IN SHEET
(Please Print)

Name	Address
MONTY MONSON	4309 JACKSBOROHWY SUITE D-5 WF TX 76302
Rodger Clements	4502 Hollandale WF 76302
Gene Barry	777 Main St., Ft. Worth, TX 76116
Harry Sigley	" " "
Jack Murphy	CWF
Amy Bobrowitz	2306 Doris WF TX 76306
CHARLES ELMORE	CWF

WICHITA FALLS MUNICIPAL AIRPORT
MASTER PLAN UPDATE
PUBLIC INFORMATION WORKSHOP
March 31, 2010 (4pm to 6pm)

SIGN IN SHEET
(Please Print)

Name	Address
Ripley Tate - Web Fire	3406 McNiel WF TX 76308
Jack Murphy	CWF
DAVID POTTER	BUNDY YOUNG SIMS & POTTER 1005 9th WF TX 76301
ALAN DAWES	6872 St Hwy 79S WICHITA FALLS 76310
Glenn Beaver	2321 Brook Hollow WF 76308