Airport pavement
improvement

ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST
ADDISON AIRPORT PAVEMENT REPLACEMENT

Job No.: 41308
Job Length (ft): 4536
By: Michael A. Hutchison, P.E.
Date: 08/22/05

ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY	ENGINEER'S ESTIMATE UNIT PRICE	ENGINEER'S ESTIMATE AMOUNT
	PAVING ITEMS: SEE "PAVEMENT ITEM QUANTITIES" ON PAGE 2 FOR DETAIL				
Richard Byrd North	5" HMAC, 9" FLEX BASE				$274,221.00
	MOBILIZATION (10% OF CONSTRUCTION)				$27,422.10
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$13,711.05
Omni Flight Area	10" PCC, 6" LIME				$142,351.75
	MOBILIZATION (10% OF CONSTRUCTION)				$14,235.18
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$7,117.59
TAXIWAY P	2" HMAC, 10" CEMENT STABILIZED RECYCLED ASPHALT				$138,026.00
	MOBILIZATION (10% OF CONSTRUCTION)				$13,802.60
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$6,901.30
TAXIWAY Q	2" HMAC OVERLAY w/5% FULL DEPTH REPAIR				$61,405.30
	MOBILIZATION (10% OF CONSTRUCTION)				$6,140.53
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$3,070.27
TAXIWAY R	2" HMAC OVERLAY w/15% FULL DEPTH REPAIR				$108,001.10
	MOBILIZATION (10% OF CONSTRUCTION)				$10,800.11
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$5,400.06
TAXIWAY U	10" PCC, 6" LIME				$46,808.25
	MOBILIZATION (10% OF CONSTRUCTION)				$4,680.83
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$2,340.41
	MISCELLANEOUS ITEMS				
M1	6" YELLOW TAXIWAY CENTERLINE MARKING	LF	9,119	$0.30	$2,735.70
M2	6" NON-MOVEMENT AREA MARKING	LF	2,447	$0.60	$1,468.20
M3	SILT FENCE	LF	226	$2.50	$565.00
M4	SW3P - INLET PROTECTION	EA	9	$20.00	$180.00
M5	ADJUST INLET	EA	3	$300.00	$900.00
M6	ADJUST STORM SEWER IN OMNI FLIGHT AREA	LF	100	$80.00	$8,000.00
	SUBTOTAL				$900,284.31
	10% CONTINGENCY				$90,028.43
	TOTAL				**$990,312.74**
	SAY				**$990,000.00**

Print Date: 9/8/2005

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AGENDA

41308 – Addison Airport Pavement Replacement
Cost Estimate/Bidding sequence discussion
September 8, 2005, 9:30 a.m.

- Cost Estimate Review
- Bidding Alternatives – Additive or Deductive Alternates
- Decide on A+B/Incentive or Disincentives
- Discuss Geogrid Alternative for Richard Byrd
- Comments to Frond End Specifications
- Submittal for September 12

ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST
ADDISON AIRPORT PAVEMENT REPLACEMENT

Job No.: 41306
Job Length (ft): 4536
By: Michael A. Hutchison, P.E.
Date: 08/22/05

ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY	ENGINEER'S ESTIMATE	
				UNIT PRICE	AMOUNT
	PAVING ITEMS SEE PAVEMENT QUANTITY SHEET FOR DETAILS				
Richard Byrd North	5" HMAC, 9" FLEX BASE				$274,221.00
	MOBILIZATION (10% OF CONSTRUCTION)				$27,422.10
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$13,711.05
Omni Flight Area	10" PCC, 6" LIME				$142,351.75
	MOBILIZATION (10% OF CONSTRUCTION)				$14,235.18
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$7,117.59
TAXIWAY P	2" HMAC, 10" CEMENT STABILIZED RECYCLED ASPHALT				$138,026.00
	MOBILIZATION (10% OF CONSTRUCTION)				$13,802.60
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$6,901.30
TAXIWAY Q	2" HMAC OVERLAY w/5% FULL DEPTH REPAIR				$61,405.30
	MOBILIZATION (10% OF CONSTRUCTION)				$6,140.53
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$3,070.27
TAXIWAY R	2" HMAC OVERLAY w/15% FULL DEPTH REPAIR				$108,001.10
	MOBILIZATION (10% OF CONSTRUCTION)				$10,800.11
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$5,400.06
TAXIWAY U	10" PCC, 6" LIME				$47,480.25
	MOBILIZATION (10% OF CONSTRUCTION)				$4,748.03
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$2,374.01
	MISCELLANEOUS ITEMS				
M1	6" YELLOW TAXIWAY CENTERLINE MARKING	LF	9,119	$0.30	$2,735.70
M2	6" NON-MOVEMENT AREA MARKING	LF	2,447	$0.60	$1,468.20
M3	SILT FENCE	LF	226	$2.50	$565.00
M4	SW3P - INLET PROTECTION	EA	9	$20.00	$180.00
M5	ADJUST INLET	EA	3	$300.00	$900.00
M6	ADJUST STORM SEWER IN OMNI FLIGHT AREA	LF	100	$80.00	$8,000.00
M7	BLACK BORDER FOR MARKINGS	LF	1,295	$0.30	$388.50
	SUBTOTAL				$901,445.61
	10% CONTINGENCY				$90,144.56
	TOTAL				**$991,590.17**
	SAY				**$990,000.00**

ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST
ADDISON AIRPORT CONCRETE PAVEMENT REPLACEMENT

Job No.: 41308
By: Michael A. Hutchison, P.E.
Date: 09/08/05

ITEM NUMBER	DESCRIPTION	UNIT		ENGINEER'S ESTIMATE	
			QTY	UNIT PRICE	AMOUNT
	PAVING ITEMS - SEE PAVEMENT ITEM QUANTITIES ON PAGE 3 FOR DETAIL				
Omni Flight Area	10" PCC, 6" LIME				$142,351.75
	MOBILIZATION (10% OF CONSTRUCTION)				$14,235.18
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$7,117.59
TAXIWAY U	10" PCC, 6" LIME				$47,480.25
	MOBILIZATION (10% OF CONSTRUCTION)				$4,748.03
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$2,374.01
	MISCELLANEOUS ITEMS				
M1	6" YELLOW TAXIWAY CENTERLINE MARKING	LF	314	$0.30	$94.20
M2	DASHED TAXIWAY EDGE LINE	LF	118	$0.60	$70.80
M3	SW3P - INLET PROTECTION	EA	3	$20.00	$60.00
M4	ADJUST INLET	EA	1	$300.00	$300.00
M5	ADJUST STORM SEWER IN OMNI FLIGHT AREA	LF	100	$80.00	$8,000.00
M6	BLACK BORDER FOR MARKINGS	LF	1295	$0.30	$388.50
	SUBTOTAL				$227,220.30
	10% CONTINGENCY				$22,722.03
	TOTAL				**$249,942.33**
	SAY				**$250,000.00**

ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST
ADDISON AIRPORT ASPHALT PAVEMENT REPLACEMENT

Job No.: 41308
By: Michael A. Hutchison, P.E.
Date: 09/08/05

ITEM NUMBER	DESCRIPTION	UNIT		ENGINEER'S ESTIMATE	
			QTY	UNIT PRICE	AMOUNT
	PAVING ITEMS - SEE PAVEMENT DEMO PLAN TITLES ON PAGE 2 FOR DETAIL				
Richard Byrd North	5" HMAC, 9" FLEX BASE				$274,221.00
	MOBILIZATION (10% OF CONSTRUCTION)				$27,422.10
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$13,711.05
TAXIWAY P	2" HMAC, 10" CEMENT STABILIZED RECY. ASPHALT				$138,026.00
	MOBILIZATION (10% OF CONSTRUCTION)				$13,802.60
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$6,901.30
TAXIWAY Q	2" HMAC OVERLAY w/5% FULL DEPTH REPAIR				$61,405.30
	MOBILIZATION (10% OF CONSTRUCTION)				$6,140.53
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$3,070.27
TAXIWAY R	2" HMAC OVERLAY w/15% FULL DEPTH REPAIR				$108,001.10
	MOBILIZATION (10% OF CONSTRUCTION)				$10,800.11
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$5,400.06
	MISCELLANEOUS ITEMS				
M1	6" YELLOW TAXIWAY CENTERLINE MARKING	LF	8,805	$0.30	$2,641.50
M2	6" NON-MOVEMENT AREA MARKING	LF	2,329	$0.60	$1,397.40
M3	SILT FENCE	LF	226	$2.50	$565.00
M4	SW3P - INLET PROTECTION	EA	6	$20.00	$120.00
M5	ADJUST INLET	EA	2	$300.00	$600.00
	SUBTOTAL				$674,225.31
	10% CONTINGENCY				$67,422.53
	TOTAL				**$741,647.84**
	SAY				**$740,000.00**

ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST
ADDISON AIRPORT PAVEMENT REPLACEMENT
PAVEMENT ITEM QUANTITIES

	QUANTITY		ASPHALT PCF			UNIT COST		TOTAL COST
AREA=	8186	SY						
SCENARIO 1								
3" TYPE D HMAC	682	CY	145	1335	TON	$74.00		$98,790.00
12" FLEX BASE	2729	CY				$40.00		$109,160.00
6" LIME STABILIZATION	8186	SY				$1.25		$10,232.50
HYDRATED LIME SLURRY(36#/SY)	147	TON				$150.00		$22,050.00
TACK COAT	1228	GAL				$1.75		$2,149.00
EXCAVATION (ASPHALT APPROX 4")	8186	SY				$2.00		$16,372.00
EXCAVATION (EARTH APPROX 11")	2501	CY				$4.00		$10,004.00
							TOTAL	$268,757.50
SCENARIO #2								
AREA=	8186	SY						
3" TYPE D HMAC	682	CY	145	1335	TON	$74.00		$98,790.00
15" FLEX BASE	3410	CY				$40.00		$136,400.00
TACK COAT	1228	GAL				$1.75		$2,149.00
EXCAVATION (ASPHALT APPROX 4")	8186	SY				$2.00		$16,372.00
EXCAVATION (EARTH APPROX 14")	3183	CY				$4.00		$12,732.00
							TOTAL	$266,443.00
SCENARIO #3								
AREA=	8186	SY						
4" TYPE D HMAC	910	CY	145	1781	TON	$74.00		$131,794.00
12" FLEX BASE	2729	CY				$40.00		$109,160.00
TACK COAT	1228	GAL				$1.75		$2,149.00
EXCAVATION (ASPHALT APPROX 4")	8186	SY				$2.00		$16,372.00
EXCAVATION (EARTH APPROX 12")	2729	CY				$4.00		$10,916.00
							TOTAL	$270,391.00
SCENARIO #4								
AREA=	8186	SY						
5" TYPE D HMAC	1137	CY	145	2226	TON	$74.00		$164,724.00
9" FLEX BASE	2047	CY				$40.00		$81,880.00
TACK COAT	1228	GAL				$1.75		$2,149.00
EXCAVATION (ASPHALT APPROX 4")	8186	SY				$2.00		$16,372.00
EXCAVATION (EARTH APPROX 10")	2274	CY				$4.00		$9,096.00
							TOTAL	$274,221.00
SCENARIO #5								
AREA=	8186	SY						
5" TYPE D HMAC	1137	CY	145	2226	TON	$74.00		$164,724.00
6" FLEX BASE	1364	CY				$40.00		$54,560.00
TENSAR BX100	8186	SY				$2.25		$18,418.50
TACK COAT	1228	GAL				$1.75		$2,149.00
EXCAVATION (ASPHALT APPROX 4")	8186	SY				$2.00		$16,372.00
EXCAVATION (EARTH APPROX 7")	1591	CY				$4.00		$6,364.00

	QUANTITY		ASPHALT PCF			UNIT COST		TOTAL COST
AREA=	5334	SY						
SCENARIO 1								
AREA=	5334	SY						
10" JOINTED PCC	5334	SY				$37.00		$197,358.00
6" LIME STABILIZATION	5334	SY				$1.25		$6,667.50
HYDRATED LIME SLURRY(36#/SY)	96	TON				$150.00		$14,400.00
EXCAVATION (ASPHALT APPROX 4")	5334	SY				$2.00		$10,668.00
EXCAVATION (EARTH APPROX 6")	889	CY				$4.00		$3,556.00
							TOTAL	$232,649.50
SCENARIO 2								
AREA=	5334	SY						
10" JOINTED PCC	5334	SY				$37.00		$197,358.00
6" LIME STABILIZATION	5334	SY				$1.25		$6,667.50
HYDRATED LIME SLURRY(36#/SY)	96	TON				$150.00		$14,400.00
EXCAVATION (ASPHALT APPROX 4")	5334	SY				$2.00		$10,668.00
EXCAVATION (EARTH APPROX 6")	889	CY				$4.00		$3,556.00
							TOTAL	$232,649.50
SCENARIO 3								
AREA=	5334	SY						
2" TYPE D OVERLAY	296	CY	145	579	TON	$74.00		$42,846.00
5% FULL DEPTH 10" HMAC	74	CY	145	145	TON	$65.00		$9,425.00
TACK COAT	800	GAL				$1.75		$1,400.00
PETROMAT	5334	SY				$1.45		$7,734.30

	QUANTITY		ASPHALT PCF			UNIT COST		TOTAL COST
AREA=	7975	SY						
SCENARIO 1								
2" TYPE D HMAC OVERLAY	443	CY	145	867	TON	$74.00		$64,158.00
10" CEMENT RECYCLED ASPHALT	7975	SY				$9.00		$71,775.00
TACK COAT	1196	GAL				$1.75		$2,093.00

	QUANTITY		ASPHALT PCF			UNIT COST		TOTAL COST
AREA=	1113	SY						
SCENARIO 1								
10" JOINTED PCC	1113	SY				$37.00		$41,181.00
6" LIME STABILIZATION	1113	SY				$1.25		$1,391.25
HYDRATED LIME SLURRY(36#/SY)	20	TON				$150.00		$3,000.00
EXCAVATION (EARTH)	309	CY				$4.00		$1,236.00
							TOTAL	$46,808.25
SCENARIO 2								
10" JOINTED PCC	1113	SY				$37.00		$41,181.00
6" LIME STABILIZATION	1113	SY				$1.25		$1,391.25
HYDRATED LIME SLURRY(36#/SY)	20	TON				$150.00		$3,000.00
EXCAVATION (EARTH)	261	CY				$4.00		$1,044.00
EXCAVATION (ASPHALT APPROX 4")	432	SY				$2.00		$864.00

	QUANTITY		ASPHALT PCF			UNIT COST		TOTAL COST	
AREA=	6918	SY							
SCENARIO 1									
2" TYPE D OVERLAY	384	CY	145	752	TON	$74.00		$55,648.00	
15% FULL DEPTH 10" HMAC	290	CY	145	570	TON	$65.00		$37,050.00	
TACK COAT	1038	GAL				$1.75		$1,816.50	
MILLING	250	LF				$2.75		$687.50	
PETROMAT	6918	SY				$1.45		$10,031.10	
EXCAVATION (ASPHALT APPROX 4")	1038	SY				$2.00		$2,076.00	
EXCAVATION (EARTH APPROX 6")	173	CY				$4.00		$692.00	
SCENARIO 2									
2" TYPE D HMAC OVERLAY	384	CY	145	752	TON	$74.00		$55,648.00	
10" CEMENT RECYCLED ASP. BASE	6918	SY				$9.00		$62,262.00	
TACK COAT	1038	GAL				$1.75		$1,816.50	
							TOTAL	$119,726.50	

	QUANTITY		ASPHALT PCF			UNIT COST		TOTAL COST	
AREA=	3319	SY							
SCENARIO 1									
10" JOINTED PCC	3319	SY				$37.00		$122,803.00	
6" LIME STABILIZATION	3319	SY				$1.25		$4,148.75	
HYDRATED LIME SLURRY(36#/SY)	60	TON				$150.00		$9,000.00	
EXCAVATION (EARTH APPROX 6")	330	CY				$4.00		$1,320.00	
EXCAVATION (CONCRETE APPROX 10")	802	SY				$5.00		$4,010.00	
EXCAVATION (ASPHALT APPROX 4")	535	SY				$2.00		$1,070.00	
							TOTAL	$142,351.75	
SCENARIO 2									
10" JOINTED PCC	3319	SY				$37.00		$122,803.00	
6" LIME STABILIZATION	3319	SY				$1.25		$4,148.75	
HYDRATED LIME SLURRY(36#/SY)	60	TON				$150.00		$9,000.00	
EXCAVATION (EARTH APPROX 6")	330	CY				$4.00		$1,320.00	
EXCAVATION (CONCRETE APPROX 10")	802	SY				$5.00		$4,010.00	
EXCAVATION (ASPHALT APPROX 4")	535	SY				$2.00		$1,070.00	

10" JOINTED PCC		SY	$37.00
11" JOINTED PCC		SY	$45.00
6" LIME STABILIZATION		SY	$1.25
2" TYPE "D" OVERLAY		TON	$74.00
FULL DEPTH REPAIR 10" HMAC		TON	$65.00
10" CEMENT RECYCLED ASP. BASE			$9.00
12" FLEXBASE	247-0504		$40.00
10" TYPE "B" HMAC OVERLAY		TON	$65.00
HYDRATED LIME SLURRY		TON	$150.00
TACK COAT		GAL	$1.75
EXCAVATION (EARTH)		CY	$4.00
EXCAVATION (CONCRETE)		SY	$5.00
EXCAVATION (ASPHALT)		SY	$2.00
TENSAR BX1100		SY	$2.25

ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST
ADDISON AIRPORT PAVEMENT REPLACEMENT

Job No.: 41308
Job Length (ft): 4536
By: Michael A. Hutchison, P.E.
Date: 08/22/05

ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY	ENGINEER'S ESTIMATE	
				UNIT PRICE	AMOUNT
	PAVING ITEMS - ASPHALT QUANTITIES FROM HNTB				
Richard Byrd North	5" HMAC, 9" FLEX BASE				$274,221.00
	MOBILIZATION (10% OF CONSTRUCTION)				$27,422.10
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$13,711.05
TAXIWAY P	2" HMAC, 10" CEMENT STABILIZED RECYCLED ASPHALT				$138,026.00
	MOBILIZATION (10% OF CONSTRUCTION)				$13,802.60
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$6,901.30
TAXIWAY Q	2" HMAC OVERLAY w/5% FULL DEPTH REPAIR				$61,405.30
	MOBILIZATION (10% OF CONSTRUCTION)				$6,140.53
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$3,070.27
TAXIWAY R	2" HMAC OVERLAY w/15% FULL DEPTH REPAIR				$108,001.10
	MOBILIZATION (10% OF CONSTRUCTION)				$10,800.11
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$5,400.06
	MISCELLANEOUS ITEMS				
M1	6" YELLOW TAXIWAY CENTERLINE MARKING	LF	9,119	$0.30	$2,735.70
M2	6" NON-MOVEMENT AREA MARKING	LF	2,447	$0.60	$1,468.20
M3	SILT FENCE	LF	226	$2.50	$565.00
M4	SW3P - INLET PROTECTION	EA	9	$20.00	$180.00
M5	ADJUST INLET	EA	3	$300.00	$900.00
	SUBTOTAL				$674,750.31
	10% CONTINGENCY				$67,475.03
	TOTAL				**$742,225.34**
	SAY				**$740,000.00**

	PAVING ITEMS - CONCRETE QUANTITIES FROM HNTB				
TAXIWAY U	10" PCC, 6" LIME				$46,808.25
	MOBILIZATION (10% OF CONSTRUCTION)				$4,680.83
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$2,340.41
Omni Flight Area	10" PCC, 6" LIME				$142,351.75
	MOBILIZATION (10% OF CONSTRUCTION)				$14,235.18
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$7,117.59

	SUBTOTAL				$217,534.00
	10% CONTINGENCY				$21,753.40
	TOTAL				**$239,287.40**
	SAY				**$240,000.00**

Print Date: 9/8/2005

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AGENDA

41308 – Addison Airport Pavement Replacement
65% Comment Review Meeting
August 24, 2005, 2:00 p.m.

- **Cost Estimate Review** — **Mike H.**
  - Asphalt prices (!)
  - Pavement sections for each area
  - Priority of each pavement section
- **Discuss Comments to 65% Plans** — **Group**
- **Job progress & status/submittal schedule** — **Mike H.**
  - 95% Plans & Specifications ~ Sept 8th. ~ one week Time Frame
  - First bid date

ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST
ADDISON AIRPORT PAVEMENT REPLACEMENT
SCENARIO 1 - BASE CASE - USING LIME STABILIZED SUBGRADE ON RB DRIVE/ ASPHALT OVERLAY ON TAXIWAY ROMEO PATIO HANGARS

Job No.: 41308
Job Length (ft): 4536
By: Michael A. Hutchison, P.E.
Date: 08/22/05

ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY	ENGINEER'S ESTIMATE UNIT PRICE	ENGINEER'S ESTIMATE AMOUNT
	PAVING ITEMS - SEE PAVEMENT ITEM ADDENDUM PAGES FOR DETAILS				
Richard Byrd North	2" HMAC, 12" FLEX BASE, 6" LIME				$267,849.50
	MOBILIZATION (10% OF CONSTRUCTION)				$26,784.95
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$13,392.48
Omni Flight Area	10" PCC, 6" LIME				$142,351.75
	MOBILIZATION (10% OF CONSTRUCTION)				$14,235.18
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$7,117.59
TAXIWAY P	2" HMAC, 10" CEMENT STABILIZED RECYCLED ASPHALT				$138,026.00
	MOBILIZATION (10% OF CONSTRUCTION)				$13,802.60
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$6,901.30
TAXIWAY Q	10" PCC, 6" LIME				$232,649.50
	MOBILIZATION (10% OF CONSTRUCTION)				$23,264.95
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$11,632.48
TAXIWAY R	2" HMAC OVERLAY w/15% FULL DEPTH REPAIR				$108,001.10
	MOBILIZATION (10% OF CONSTRUCTION)				$10,800.11
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$5,400.06
TAXIWAY U	10" PCC, 6" LIME				$46,808.25
	MOBILIZATION (10% OF CONSTRUCTION)				$4,680.83
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$2,340.41
	MISCELLANEOUS ITEMS				
M1	6" YELLOW TAXIWAY CENTERLINE STRIPE	LF	9,119	$0.30	$2,735.70
M2	6" DOUBLE SOLID YELLOW STRIPE	LF	2,447	$0.60	$1,468.20
M3	SILT FENCE	LF	226	$2.50	$565.00
M4	SW3P - INLET PROTECTION	EA	10	$20.00	$200.00
M5	4" REFLECTIVE PAVEMENT MARKING	EA	42	$3.00	$126.00
M6	ADJUST INLET	EA	3	$300.00	$900.00
M7	GATE LOOP SENSOR ADJUST/REPLACEMT.	EA	1	$200.00	$200.00
M8	ADJUST STORM SEWER IN OMNI FLIGHT AREA	LF	100	$80.00	$8,000.00
	SUBTOTAL				$1,090,233.92
	10% CONTINGENCY				$109,023.39
	TOTAL				**$1,199,257.31**
	SAY				**$1,200,000.00**

Print Date: 8/24/2005

ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST
ADDISON AIRPORT PAVEMENT REPLACEMENT
SCENARIO 2 - ALTERNATIVE ELIMINATING LIME STABILIZED SUBGRADE ON RB DRIVE/ RECYCLING ON TAXIWAY ROMEO PATIO HANGAR

Job No.: 41308
Job Length (ft): 4536
By: Michael A. Hutchison, P.E.
Date: 08/22/05

ITEM NUMBER	DESCRIPTION	UNIT		ENGINEER'S ESTIMATE	
			QUANTITY	UNIT PRICE	AMOUNT
	PAVING ITEMS (SEE PAVEMENT DETAILS FOR QUANTITIES ON PAGES 3 OF DETAILS)				
Richard Byrd North	3" HMAC, 15" FLEX BASE				$266,443.00
	MOBILIZATION (10% OF CONSTRUCTION)				$26,644.30
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$13,322.15
Omni Flight Area	10" PCC, 6" LIME				$142,351.75
	MOBILIZATION (10% OF CONSTRUCTION)				$14,235.18
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$7,117.59
TAXIWAY P	2" HMAC, 10" CEMENT STABILIZED RECYCLED ASPHALT				$138,026.00
	MOBILIZATION (10% OF CONSTRUCTION)				$13,802.60
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$6,901.30
TAXIWAY Q	10" PCC, 6" LIME				$232,649.50
	MOBILIZATION (10% OF CONSTRUCTION)				$23,264.95
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$11,632.48
TAXIWAY R	2" HMAC, 10" CEMENT STABILIZED RECYCLED ASPHALT				$119,726.50
	MOBILIZATION (10% OF CONSTRUCTION)				$11,972.65
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$5,986.33
TAXIWAY U	10" PCC, 6" LIME				$46,808.25
	MOBILIZATION (10% OF CONSTRUCTION)				$4,680.83
	TRAFFIC CONTROL (5% OF CONSTRUCTION)				$2,340.41
	MISCELLANEOUS ITEMS				
M1	6" YELLOW TAXIWAY CENTERLINE STRIPE	LF	9,119	$0.30	$2,735.70
M2	6" DOUBLE SOLID YELLOW STRIPE	LF	2,447	$0.60	$1,468.20
M3	SILT FENCE	LF	226	$2.50	$565.00
M4	SW3P - INLET PROTECTION	EA	10	$20.00	$200.00
M5	4" REFLECTIVE PAVEMENT MARKING	EA	42	$3.00	$126.00
M6	ADJUST INLET	EA	3	$300.00	$900.00
M7	GATE LOOP SENSOR ADJUST/REPLACEMT.	EA	1	$200.00	$200.00
M8	ADJUST STORM SEWER IN OMNI FLIGHT AREA	LF	100	$80.00	$8,000.00
	SUBTOTAL				$1,102,100.65
	10% CONTINGENCY				$110,210.07
	TOTAL				**$1,212,310.72**
	SAY				**$1,212,000.00**

ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST
ADDISON AIRPORT PAVEMENT REPLACEMENT
PAVEMENT ITEM QUANTITIES

	QUANTITY		ASPHALT PCF			UNIT COST		TOTAL COST
RICHARD BYRD NORTH								
AREA=	8186	SY						
OPTION 1								
3" TYPE D HMAC	682	CY	145	1335	TON	$74.00		$98,790.00
12" FLEX BASE	2729	CY				$40.00		$109,160.00
6" LIME STABILIZATION	8186	SY				$1.25		$10,232.50
HYDRATED LIME SLURRY(36#/SY)	147	TON				$150.00		$22,050.00
TACK COAT	1228	GAL				$1.75		$2,149.00
EXCAVATION (ASPHALT APPROX 4")	8186	SY				$2.00		$16,372.00
EXCAVATION (EARTH APPROX 10")	2274	CY				$4.00		$9,096.00
							TOTAL=	$267,849.50
OPTION 2								
AREA=	8186	SY						
3" TYPE D HMAC	682	CY	145	1335	TON	$74.00		$98,790.00
15" FLEX BASE	3410	CY				$40.00		$136,400.00
TACK COAT	1228	GAL				$1.75		$2,149.00
EXCAVATION (ASPHALT APPROX 4")	8186	SY				$2.00		$16,372.00
EXCAVATION (EARTH APPROX 14")	3183	CY				$4.00		$12,732.00
							TOTAL=	$286,443.00

TAXIWAY QUEBEC	QUANTITY		ASPHALT PCF			UNIT COST		TOTAL COST
AREA=	5334	SY						
OPTION 1								
10" JOINTED PCC	5334	SY				$37.00		$197,358.00
6" LIME STABILIZATION	5334	SY				$1.25		$6,667.50
HYDRATED LIME SLURRY(36#/SY)	96	TON				$150.00		$14,400.00
EXCAVATION (ASPHALT APPROX 4")	5334	SY				$2.00		$10,668.00
EXCAVATION (EARTH APPROX 6")	889	CY				$4.00		$3,556.00
							TOTAL=	$232,649.50
OPTION 2								
10" JOINTED PCC	5334	SY				$37.00		$197,358.00
6" LIME STABILIZATION	5334	SY				$1.25		$6,667.50
HYDRATED LIME SLURRY(36#/SY)	96	TON				$150.00		$14,400.00
EXCAVATION (ASPHALT APPROX 4")	5334	SY				$2.00		$10,668.00
EXCAVATION (EARTH APPROX 6")	889	CY				$4.00		$3,556.00
							TOTAL=	$232,649.50

TAXIWAY PAPA	QUANTITY		ASPHALT PCF			UNIT COST		TOTAL COST
AREA=	7975	SY						
OVERLAY								
2" TYPE D HMAC OVERLAY	443	CY	145	867	TON	$74.00		$64,158.00
10" CEMENT RECYCLED ASPHALT	7975	SY				$9.00		$71,775.00
TACK COAT	1196	GAL				$1.75		$2,093.00
							TOTAL=	$138,026.00

TAXIWAY UNIFORM	QUANTITY		ASPHALT PCF			UNIT COST		TOTAL COST
AREA=	1113	SY						
OPTION 1								
10" JOINTED PCC	1113	SY				$37.00		$41,181.00
6" LIME STABILIZATION	1113	SY				$1.25		$1,391.25
HYDRATED LIME SLURRY(36#/SY)	20	TON				$150.00		$3,000.00
EXCAVATION (EARTH)	309	CY				$4.00		$1,236.00
							TOTAL=	$46,808.25
OPTION 2								
10" JOINTED PCC	1113	SY				$37.00		$41,181.00
6" LIME STABILIZATION	1113	SY				$1.25		$1,391.25
HYDRATED LIME SLURRY(36#/SY)	20	TON				$150.00		$3,000.00
EXCAVATION (EARTH)	309	CY				$4.00		$1,236.00
							TOTAL=	$46,808.25

[redacted]	QUANTITY		ASPHALT PCF			UNIT COST		TOTAL COST
AREA=	6918	SY						
[redacted]								
2" TYPE D OVERLAY	384	CY	145	752	TON	$74.00		$55,648.00
15% FULL DEPTH-10" HMAC	290	CY	145	570	TON	$65.00		$37,050.00
TACK COAT	1038	GAL				$1.75		$1,816.50
MILLING	250	LF				$2.75		$687.50
PETROMAT	6918	SY				$1.45		$10,031.10
EXCAVATION (ASPHALT APPROX 4")	1038	SY				$2.00		$2,076.00
EXCAVATION (EARTH APPROX 6")	173	CY				$4.00		$692.00
[redacted]								
2" TYPE D HMAC OVERLAY	384	CY	145	752	TON	$74.00		$55,648.00
10" CEMENT RECYCLED ASP. BASE	6918	SY				$9.00		$62,262.00
TACK COAT	1038	GAL				$1.75		$1,816.50
[redacted]								

[redacted]	QUANTITY		ASPHALT PCF			UNIT COST		TOTAL COST
AREA=	3319	SY						
[redacted]								
10" JOINTED PCC	3319	SY				$37.00		$122,803.00
6" LIME STABILIZATION	3319	SY				$1.25		$4,148.75
HYDRATED LIME SLURRY(36#/SY)	60	TON				$150.00		$9,000.00
EXCAVATION (EARTH APPROX 6")	330	CY				$4.00		$1,320.00
EXCAVATION (CONCRETE APPROX 10")	802	SY				$5.00		$4,010.00
EXCAVATION (ASPHALT APPROX 4")	535	SY				$2.00		$1,070.00
[redacted]								
10" JOINTED PCC	3319	SY				$37.00		$122,803.00
6" LIME STABILIZATION	3319	SY				$1.25		$4,148.75
HYDRATED LIME SLURRY(36#/SY)	60	TON				$150.00		$9,000.00
EXCAVATION (EARTH APPROX 6")	330	CY				$4.00		$1,320.00
EXCAVATION (CONCRETE APPROX 10")	802	SY				$5.00		$4,010.00
EXCAVATION (ASPHALT APPROX 4")	535	SY				$2.00		$1,070.00

[redacted]			
10" JOINTED PCC		SY	$37.00
11" JOINTED PCC		SY	$45.00
6" LIME STABILIZATION		SY	$1.25
2" TYPE "D" OVERLAY		TON	$74.00
FULL DEPTH REPAIR 10" HMAC		TON	$65.00
10" CEMENT RECYCLED ASP. BASE			$9.00
12" FLEXBASE	247-0504		$40.00
10" TYPE "B" HMAC OVERLAY		TON	$65.00
HYDRATED LIME SLURRY		TON	$150.00
TACK COAT		GAL	$1.75
EXCAVATION (EARTH)		CY	$4.00
EXCAVATION (CONCRETE)		SY	$5.00
EXCAVATION (ASPHALT)		SY	$2.00

ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST
ADDISON AIRPORT PAVEMENT REPLACEMENT

ASPHALT VS CONCRETE

Job No.: 41308
By: Michael A. Hutchison, P.E.
Date: 08/23/05

ITEM NUMBER	DESCRIPTION	UNIT	QTY	UNIT PRICE/ SY
CONCRETE	10" PORTLAND CEMENT CONCRETE	SY	6918	$37.00
	6" LIME STABILIZED SUBGRADE SOIL	SY	6918	$1.25
	EXCAVATION (16")	SY	6918	$1.78
	TOTAL			**$40.03**
ASPHALT	12" ASPHALTIC CONCRETE*	SY	6918	$42.41
	6" LIME STABILIZED SUBGRADE SOIL	SY	6918	$1.25
	TACK COAT (.15 GAL / SY)	SY	6918	$0.27
	EXCAVATION (18")	SY	6918	$2.00
	TOTAL			**$45.93**
*Based upon tonnage price of $65.00/Ton				

AGREEMENT

THIS AGREEMENT is made by and between HNTB Corporation, hereinafter called "ENGINEER", and the Town of Addison, Texas, hereinafter called "OWNER."

WHEREAS, Owner desires Engineer to perform certain work set forth in Section 2, Scope of Services.

WHEREAS, the Engineer has expressed a willingness to perform said services, hereinafter referred to only as "services", specified in said Scope of Services, and enumerated under Section 2 of this Agreement.

NOW, THEREFORE, all parties agree as follows:

SECTION 2. SCOPE OF SERVICES

The following Basic and Additional Services, when authorized in writing by a notice-to-proceed, shall be performed by the Engineer in accordance with the Owner's requirements for design of the apron north of the existing hangars located on Richard Byrd Drive.

I. Project Definition

This project consists of the preparation of plans and specifications for bidding and construction of Addison Airport Pavement Improvements (the "Project"). Paving improvements at the following locations:

1. An asphalt apron north of the existing hangars located on Richard Byrd Drive (Westside T-Hangar)
2. Taxiway Romeo Patio Hangar overlay
3. Omni Flight Access Road concrete
4. Omni Flight Romeo concrete
5. Taxiway Quebec overlay
6. Taxiway Papa overlay
7. Grass inland/Romeo concrete
8. Taxiway Uniform triangle fill in
9. Taxiway Papa T-Hangar overlay

Services will generally include topographical survey, geotechnical investigation and pavement design, construction plans for the project areas including grading, construction phasing, striping, specifications, preparation of bid document originals and record drawings, and coordination with the Town of Addison and Addison Airport personnel.

II. Detailed Scope of Basic Services

A detailed list of the basic scope of services for this project is as follows:

A. Geotechnical Engineering and Pavement Design

See Exhibit "A" for a detailed proposal for Geotechnical services.

B. Surveying

See Exhibit "B" for a detailed proposal for Surveying services.

C. Final Design – Paving and Drainage

1. Prepare final construction drawings. (Scale 1" = 40' Horizontal and 1" = 5' Vertical except as noted.) The following sheets shall be included:

    a. Cover Sheet
    b. General Notes
    c. Quantity Sheets
    d. Project Layout/Survey Control
    e. Construction Phasing
    f. Removal Plan
    g. Paving Plan
    h. Joint Layout Sheet for concrete pavement areas
    i. Paving Details / Striping Plans / Typical Sections
    j. Grading Plan
    k. Erosion Control Plan
    l. Miscellaneous Details

2. Prepare Specifications and Contract Documents

3. Prepare Estimate of Final Construction Cost

4. Produce and Submit four (4) sets of half-size plans for review to the Owner for 65% review and 95% (final).

5. Incorporate Owner's review comments into plans after each submittal.

D. Bidding and Contract Award

1. Prepare two (2) Advertisements for Bidders .

2. Provide 15 half-size sets of plans and bid documents for two bid packages.

3. Conduct two (2) pre-bid meetings.

4. Prepare necessary addenda and respond to bidder's questions.

5. Prepare two (2) bid tabulations.

6. Recommend a bidder for the award of the construction contract after performing reference checks for two (2) bid packages.

E. Construction Administration

1. Provide three (3) half-size sets of plans and specifications for the Owner for each bid package.

2. Provide three (3) half-size sets of plans and specifications for the Contractor for each pid package.

3. Conduct two pre-construction meetings.

4. Respond to Requests for Information.

5. Review submittals, as required by the contract documents.

6. Attend final inspection and prepare punch list.

7. Prepare as-built plans.

III. Detailed Scope of Additional Services

A. None.

SECTION 3. PAYMENT

Owner shall pay Engineer for services authorized in writing as properly performed by Engineer on the basis herein described, subject to additions or deletions for changes or extras agreed upon in writing.

Basis of Compensation
Owner shall make payment monthly to Engineer based upon statements submitted by the Engineer for work performed.

Compensation for performing Basic and Additional Services shall be as shown in Exhibit "C" on a Cost Plus Basis amount of $109,493. The total compensation, which includes subconsultant costs, if any, will not exceed $109,493 unless mutually agreed to and authorized in writing by the Town of Addison.

SECTION 4. RESPONSIBILITIES

Engineer shall be responsible for the professional quality, technical accuracy, and the coordination of the design, drawings, plans, specifications, estimates, and other services furnished by Engineer under this Agreement. Engineer shall, without additional

compensation, correct or review any errors or deficiencies that are attributable to the Engineer in such design, drawings, plans, specifications, estimates, and other services.

Neither Owner's review, approval or acceptance of, nor payment for, any of the services required under this Agreement shall be construed to operate as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement, and Engineer shall be and remain liable to Owner in accordance with applicable law for all damages to Owner caused by Engineer's negligent performance of any of the services furnished under this Agreement.

The rights and remedies of Owner and Engineer under this Agreement are as provided by law. Engineer shall not be responsible for construction means, methods, techniques, sequences, procedures, or safety precautions and programs in connection with the Project.

SECTION 5. TIME FOR PERFORMANCE

Engineer shall perform all services as provided for under this Agreement in a proper, efficient and professional manner in accordance with the terms of this Agreement. The services to complete construction documents shall be completed within 3 months of Notice-to-Proceed.

In the event Engineer's performance of this Agreement is delayed or interfered with by acts of the Owner or others, Engineer may request an extension of time for the performance of same as hereinafter provided. If such delay is in excess of 60 days on any one occurrence or a cumulative delay of over 180 days, Engineer shall have the right to renegotiate the remainder of this contract. A delay shall be defined as any event caused by others that substantially inhibits the Engineer from proceeding with its services on the project. This shall include, but is not limited to, Owner reviews, right-of-way negotiations and awaiting critical information to be supplied by Town or franchised utility companies.

No allowance of any extension of time, for any cause whatever, shall be claimed or made by the Engineer, unless Engineer shall have made written request upon Owner for such extension within 14 calendar days after the cause for such extension occurred, and unless Owner and Engineer have agreed in writing upon the allowance of additional time to be made. Provided, however, Engineer shall not be considered in default hereunder in delays are caused by reasons beyond its reasonable control.

SECTION 6. DOCUMENTS

All instruments of service (including plans, specifications, drawings, reports, designs, computations, computer files, estimates, surveys, other data or work items, etc.) prepared under this Agreement shall be submitted for approval of the Owner. All completed instruments of service shall be professionally sealed as may be required by law or by Owner.

Such instruments of service, together with necessary supporting documents, shall be delivered to Owner, and Owner shall have unlimited rights, for the benefit of Owner, in all instruments of service, including the right to use same on any other work of Owner without additional cost to Owner. If, in the event, Owner uses such instruments of

service on any work of Owner other than that intended in the Scope of Services, defined in Section 2, under those circumstances Owner hereby agrees to protect, defend, indemnify and hold harmless the Engineer, their officers, agents, servants and employees (hereinafter individually and collectively referred to as "Indemnities"), from and against suits, actions, claims, losses, liability or damage of any character, and from and against costs and expenses, including, in part, attorney fees incidental to the defense of such suits, actions, claims, losses, damages or liability on account of injury, disease, sickness, including death, to any person or damage to property including, in part, the loss of use resulting therefrom, arising from any inaccuracy, such use of such instruments of service with respect to such other work except where Engineer is hired to modify such instrument for such other work.

Engineer agrees to and does hereby grant to Owner a royalty-free license to such instruments of service which Engineer may cover by copyright and to designs as to which Engineer may cover by copyright and to designs as to which Engineer may assert any rights or establish any claim under the design patent or copyright laws. Engineer, after completion of the services, agrees to furnish the originals of such instruments of service to the Owner. Engineer may, however, retain copies of any and all documents produced. The license granted herein by Engineer shall survive termination of this Agreement for any reason.

SECTION 7. TERMINATION

Owner may suspend or terminate this Agreement for cause or without cause at any time by giving five (5) days written notice to the Engineer. In the event termination is for cause however, such shall be in accordance with section 14 hereof. In the event suspension or termination is without cause, payment to Engineer, in accordance with the terms of this Agreement, will be made on the basis of services reasonably determined by Owner to be satisfactorily performed to date of suspension or termination. Such payment will be due upon delivery of all instruments of service to Owner.

Should the Owner require a material modification of this Agreement, and in the event Owner and Engineer fail to agree upon such modification to this Agreement, Owner shall have the option of terminating this Agreement and the Engineer's services hereunder at no additional cost other than the payment to Engineer, in accordance with the terms of this Agreement, for the services reasonably determined by Owner to be properly performed by the Engineer prior to such termination date.

Engineer may terminate this Agreement upon written notice to Owner in the event of substantial failure by the Owner to perform in accordance with the terms of this Agreement. Owner shall have 14 calendar days from the receipt of the termination notice to cure or to submit a plan for cure acceptable to the Engineer. In the event the parties cannot agree upon an acceptable cure within a reasonable period of time from the date of notice, Engineer may terminate this Agreement.

SECTION 8. INSURANCE

Engineer shall provide and maintain Worker's Compensation and Employer's Liability Insurance for the protection of Engineer's employees, as required by law. Engineer shall also provide and maintain in full force and effect during the term of this Agreement,

insurance (including insurance covering the operation of automobiles, trucks and other vehicles) protecting Engineer and Owner against liability from damages because of injuries, including death, suffered by any person or persons other than employees of Engineer, and liability for damages to property, arising from or growing out of Engineer's operations in connection with the performance of this Agreement.

Such insurance covering personal and bodily injuries or death shall be in the sum of not less than Two Hundred Fifty Thousand Dollars ($250,000.00) for one (1) person, and not less than Three Hundred Thousand Dollars ($300,000.00) for any one (1) occurrence. Insurance covering damages to property shall be in the sum of not less Three Hundred Thousand Dollars ($300,000.00) aggregate.

Engineer shall also provide and maintain Professional Liability Insurance coverage to protect Engineer from liability arising out of the performance of professional services under this Agreement. Such coverage shall be in the sum of not less than $1,000,000.00.

A signed Certificate of Insurance, showing compliance with the requirements of this Section, shall be furnished to Owner before any services are performed under this Agreement. Such Certificate of Insurance shall provide for ten (10) days written notice to Owner prior to the cancellation or modification of any insurance referred to therein. Such Certificates shall terminate after completion of the project.

Owner shall be named as an "additional insured" party on all insurance policies, except for Worker's Compensation and Professional Liability policies.

SECTION 9. INDEMNIFICATION FOR INJURY AND PERFORMANCE

Engineer further specifically obligates itself to Owner in the following respects, to wit:

The Engineer hereby agrees to protect, indemnify and hold harmless the Owner, their officers, agents, servants and employees (hereinafter individually and collectively referred to as "Indemnities"), from and against losses, liability or damage of any character, including defense costs, expenses and reasonable attorney fees incidental to the defense of such losses, damages or liability on account of injury, disease, sickness, including death, to any person or damage to property including the loss of use resulting therefrom, caused by any negligent act, error, or omission of the Engineer, its officers, employees, or subcontractors, or anyone else for whom Engineer is legally liable which are resulting from or caused by the performance of any services called for by this Agreement. In the event the parties are found to be jointly or derivatively negligent or liable for such damage or injury, the indemnification shall be assessed on a proportionate basis in accordance with the final judgment, after all appeals are exhausted, determining such joint or derivative negligence or liability.

The Engineer is not responsible for the actions of the Owner's contractor or any other party contracting with Owner to perform the construction of the improvements covered under this Agreement.

Acceptance and approval of the final plans by the Owner shall not constitute nor be deemed a release of the responsibility and liability of Engineer, its employees, associates,

agents and subconsultants for the accuracy or competency of their designs, working drawings and specifications, or other documents and services provided by Engineer hereunder; nor shall such approval be deemed to be an assumption of such responsibility by the Owner for any defect in the designs, working drawings and specifications, or other documents and services provided by Engineer hereunder; or other documents prepared by Engineer, its employees, and subconsultants.

SECTION 10. INDEMNIFICATION FOR UNEMPLOYMENT COMPENSATION

Engineer agrees that it is an independent contractor and not an agent of the Owner, and that Engineer is subject, as an employer, to all applicable Unemployment Compensation Statutes, so as to relieve Owner of any responsibility or liability from treating Engineer's employees as employees of Owner for the purpose of keeping records, making reports or payments of Unemployment Compensation taxes or contributions. Engineer further agrees to indemnify and hold Owner harmless and reimburse it for any expenses or liability incurred under said Statutes in connection with employees of Engineer.

SECTION 11. INDEMNIFICATION FOR NON-PAYMENT

To the extent Owner has paid Engineer in full hereunder for same, Engineer shall defend and indemnify Owner against and hold Owner and the premises harmless from any and all claims, suits or liens based upon or alleged to be based upon the non-payment of labor, tools, materials, equipment, supplies, transportation and management costs incurred by Engineer in performing this Agreement.

SECTION 12. ASSIGNMENT

Neither party shall assign or sublet this Agreement or any part thereof, without the prior written consent of the other party.

SECTION 13. APPLICABLE LAWS

Engineer shall comply with all federal, state, county and municipal laws, ordinances, regulations, safety orders, resolutions and building codes applicable to services to be performed under this Agreement.

SECTION 14. DEFAULT OF ENGINEER

In the event Engineer fails to comply or is unable to comply with the provisions of this Agreement as to the quality or character of the service or time of performance, and the failure is not corrected within fourteen (14) days after written notice by Owner to Engineer, Owner may, at its sole discretion without prejudice to any other right or remedy:

- Terminate this Agreement and be relieved of the payment of any further consideration to Engineer except for all services determined by Owner to be satisfactorily completed prior to termination. Payment for work satisfactorily completed shall be for percentage of completion by Engineer through such date of termination. In the event of, of such termination, Owner may proceed to complete the services in any manner deemed proper by Owner, either by

the use of its own forces or by resubletting to others. In either event, the Engineer shall be liable for all reasonable, unmitigatable costs in excess of the total contract price under this Agreement incurred to complete the services herein provided for and the costs so incurred may be due or that may thereafter become due to Engineer under and by virtue of this Agreement.

- Owner may, without terminating this Agreement or taking over the services, furnish the necessary materials, equipment, supplies and/or help necessary to remedy the situation. The reasonable expense for same may be offset against amounts due the Engineer. In such case, Engineer shall not be liable with respect to indemnity or otherwise for any such services performed, arranged, or furnished by Owner. Engineer shall not be considered in default of this Agreement for delays in performance caused by acts of the Owner or other circumstances beyond the reasonable control of the Engineer.

SECTION 15. ADJUSTMENTS IN SERVICES

No claims for extra services, additional services or change in the services will be made by Engineer without a written agreement with Owner prior to the performance of such services.

SECTION 16. EXECUTION BECOMES EFFECTIVE

This Agreement will be effective upon execution by and between Engineer and Owner.

SECTION 17. VENUE LOCATION

In the event of any dispute or action under this Contract, venue for any and all disputes or actions shall be instituted and maintained in Dallas County, Texas. The parties agree that the laws of the State of Texas shall apply to the interpretation, validity and enforcement of this Contract; and, with respect to any conflict of law provisions, the parties agree that such conflict of law provisions shall not affect the application of the law of Texas (without reference to its conflict of law provisions) to the interpretation, validity and enforcement of this Agreement.

SECTION 18. AGREEMENT AMENDMENTS

This Agreement contains the entire understanding of the parties with respect to the subject matter hereof and there are no oral understandings, statements, or stipulation bearing upon the meaning or effect of this Agreement, which have not been incorporated herein. This Agreement may only be modified, amended, supplemented or waived by a written instrument executed by the parties except as may be otherwise provided therein.

SECTION 19. WRITTEN NOTICES

All notices, demands and communications hereunder shall be in writing and may be served or delivered personally upon the party for whom intended, or mailed to the party to whom intended at the address set forth on the signature page of this Agreement. The address of a party may be changed by notice given pursuant to this Section.

SECTION 20. GENDER AND NUMBER

The use of any gender in this Agreement shall be applicable to all genders, and the use of singular numbers shall include the plural conversely.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on this the _____ day of _____, 2005.

OWNER:
TOWN OF ADDISON, TEXAS

By: _____

Ron Whitehead, City Manager
5300 Beltline Road
P.O. Box 9010
Addison, Texas 75001-9010

Witness:

_____

ENGINEER:
HNTB CORPORATION

By: _____

Jerry D. Holder, Jr., P.E.
Associate Vice President
5910 Plano Parkway, Suite 200
Plano, Texas 75093

Witness:

_____

Exhibit A
Geotechnical Services

PROPOSAL FOR
SUBSURFACE EXPLORATION AND GEOTECHNICAL ENGINEERING SERVICES

ADDISON AIRPORT IMPROVEMENTS
ADDISON, TEXAS

ECS PROPOSAL NO. 19-2772-GP

FOR

HNTB

JUNE 21, 2005

GEOTECHNICAL • CONSTRUCTION MATERIALS • ENVIRONMENTAL

June 21, 2005

Mr. Michael A. Hutchinson, P.E.
HNTB
5910 West Plano Parkway
Suite 210
Plano, Texas 75093

Reference: Proposal for Subsurface Exploration and Geotechnical Engineering Services
Addison Airport Improvements
Addison, Texas
ECS Proposal No. 19-2772-GP

Dear Mr. Hutchinson:

As requested, ECS – Texas, LLP (ECS) is pleased to present the following proposal for providing subsurface exploration services and geotechnical engineering analysis of the proposed site for the above referenced project in Addison, Texas. We understand the project consists of reconstructing the pavements in six different areas identified in our site visit as: North side of the Airplane Hangars located south of Richard Byrd Drive; Uniform Taxiway; Addison Hanger; Addison Apron Area; Addison T-Hangers; and Addison Taxiway Quebec. Preliminary details are as follows:

- North side of the Airplane Hangars located south of Richard Byrd Drive – the existing hot mix asphaltic concrete (HMAC) pavement in this area is distressed and in need of replacement. Light single engine aircraft (approximately 12.5 kip total load) will traverse this section. Preliminary plans are to remove the HMAC and replace with full depth asphalt or a combination of asphaltic concrete and base materials. Surface drainage in this area is to the north.

- Uniform Taxiway – this triangular area is a grass and HMAC paved area. It is positioned in the vicinity of two larger aviation operators. Larger planes, up to 737 class, will traverse this area. Plans are to pave this area with Portland cement concrete (PCC). Surface drainage is to east toward an existing inlet.

- Addison Hanger – this area is currently a HMAC paved area that has been overlaid and has some alligator cracking. The pavement under the open-air hanger is distressed due to fuel spills and concentrated wheel loads. Plans are to overlay this area with HMAC. Light single engine aircraft (approximately 12.5 kip total load) will traverse this section. Surface drainage is toward the south, and east and west away from the hanger.

- Addison Apron Area – this area is comprised of four different surfaces including light duty HMAC, 4-inch PCC, grass, and heavy duty HMAC. This area is next to the main north-south taxiway. Surface drainage is toward several surface drains parallel to the taxiway. These areas are planned for replacement with heavy duty PCC for 737 class aircraft; although the grass covered area may be paved with HMAC.

- Addison T-Hangers – the area around these hangers is currently HMAC that has been overlaid and seal coated. Drainage in this area is to the south. Plans are to perform a cold-mix recycle of the existing pavement and place a new HMAC surface for light-duty aircraft traffic. A portion of the taxiway running east-west will experience fuel truck traffic. Individual driveways leading into these hangers will be included.

- Addison Taxiway Quebec – this area is currently a HMAC pavement (possible concrete underneath ?) that will be replaced with PCC. Large aircraft, 737 class, as well as fuel trucks will traverse this section.

Scope of Services

We understand that construction for all of these areas may not occur at this time. Therefore, we have provided a separate fee for each area. If authorized, our integrated services will include drilling of soil borings by drill crews under our direct supervision, laboratory testing of representative soil samples for pertinent engineering properties, and preparation of an engineering report.

All borings will be drilled to a depth of about 5 feet below existing grade within the proposed pavement reconstruction areas. These borings will be advanced through holes cored/cut through the existing pavement. Bulk soil samples will also be obtained to perform CBR tests. The holes will be backfilled with cuttings and the pavement surface patched with cold-mix asphalt or ready-mix concrete.

The subsurface investigation program will include the following borings at each location:

- North side of the Airplane Hangars located south of Richard Byrd Drive - 8
- Uniform Taxiway - 3
- Addison Hanger - 8
- Addison Apron Area - 8
- Addison T-Hangers – 10
- Addison Taxiway Quebec - 4

Upon completion of drilling operations, the samples will be subjected to laboratory tests (that can include moisture content, Atterberg limits, lime series, soil cement content, and CBR tests) followed by the preparation of a written report.

The engineering report will include the following items:

a. Information on site conditions and special site features.

b. Description of the field exploration and laboratory tests performed.

c. Final logs of the soil borings and records of the field exploration in accordance with the standard practice of geotechnical engineers. A boring location plan will be included, and results of the laboratory tests will be noted on the final boring logs or included on a separate test report sheet.

d. Results of CBR tests.

e. Results of lime series and soil cement tests.

f. Recommendations for subgrade preparation and pavement design options.

Fees and Schedule

The lump sum cost of the services outlined above in each of the areas will be as follows:

- North side of the Airplane Hangars located south of Richard Byrd Drive - $3,280.00.
- Uniform Taxiway - $1,455.00
- Addison Hanger - $ 2,225.00
- Addison Apron Area - $3,710.00
- Addison T-Hangers - $ 3,985.00
- Addison Taxiway Quebec - $ 1,985.00

Total Fee: $16,640.00

This lump sum cost includes 3 copies of the written report and one preliminary design meeting prior to issuing the final report.

We are prepared to mobilize onto the site within 4 to 5 working days after authorization to proceed. We anticipate that fieldwork will require approximately three working days, and that laboratory testing after drilling is completed will require approximately 15 working days. Therefore, for time budget purposes, the total scope of work could require as much as 5 weeks from initial authorization through final report submission. We anticipate a meeting with the design team upon completion of the laboratory testing and prior to the final report.

If other items are required because of unexpected field conditions (i.e. site clearing, wet site conditions, etc.) encountered in our field exploration program, or because of a request for additional services, they would be invoiced in accordance with our current Fee Schedule. Before

modifying or expanding the extent of our exploration program, you would be informed of our intentions for both your review and authorization.

If requested, we can review plans and specifications for the referenced project to determine general compliance with the geotechnical engineer's recommendations. We can also provide additional consultation and engineering analysis for you on other problems related to performance of the structure and subsurface conditions. These services can be provided at the unit rates outlined in the attached fee schedule, and would be in addition to the fee outlined above.

Closing

Attached to this letter, and an integral part of our proposal, are our "General Conditions of Service". These conditions represent the current recommendations of the Association of Soil and Foundation Engineers, the Consulting Engineers' Council, and the Geotechnical Division of the American Society of Civil Engineers.

Our insurance carrier requires that we receive written authorization prior to initiation of work, and a signed contract prior to the release of any work product. This letter is the agreement for our services. Your acceptance of this proposal may be indicated by signing and returning the enclosed copy to us. We are pleased to have this opportunity to offer our services and look forward to working with you on the project.

Respectfully,

ECS-TEXAS, LLP

David A. Lewis, P.E.
Senior Geotechnical Engineer

Daniel L. Franklin, Jr., P.E.
President/Principal Engineer

Enclosures: General Conditions of Service

Exhibit B
Surveying Services

MORI'S ENGINEERING, INC.
Engineering • Surveying • Subsurface Utility
2616 Pickwick Lane, Plano, Texas 75093
Ph. 972-816-2626, Fax 972-758-1838
mori@nce-us.com

Date: June 21, 2005

Mr. Michael A. Hutchison, P.E.
Project Manager
HNTB Corporation
5910 W. Plano Parkway, Suite 200
Plano, Texas 75093

RE: Addison Airport – Miscellaneous
Pavement Replacement
Addison, Texas
Surveying Services Fee Proposal

Dear Mike:
I am very pleased to submit a fee proposal to provide Surveying services for the subject project as follows:

A. SURVEY

1. FIELD: A topography survey of the subject areas will be provided at 50' interval cross sections, including the finished floor elevations of all buildings at the door steps, when applicable. All the features within the project area will be collected, including pavement, pavement marking, joints, fences, buildings, walls, trees, bushes, meters, valves, fire hydrants, manholes, inlets, poles, posts, property corners, etc. All break lines including, retaining walls, curbs, edge of pavements, gravel lines, ditches with top, toe and centerlines, swales, etc. will be surveyed. Flow lines of all manholes and inlets within the project limits will be measured.

2. SURVEY FILES: All above information will be used to prepare the survey files in Microstation format using HNTB provided Seed File. The files will be an ASCII file with all points, a 3D file with all break lines, and a file with all points and point descriptions. All elements will be in 3D format, all elements will be in separate levels, colors and style and Symbols will be shown for all features. Contours at one foot interval will be provided in a separate file. The previous boundary survey will be utilized to show the Property lines, where survey area is close to the Boundary.

FEES:

RICHARD BYRD	$2,950
APRON ARES	$2,250
HANGAR C	$2,450
TW QUEBEC	$2,250
TW UNIFORM	NO SURVEY
T HANGARS	NO SURVEY

B. CONTROLS

Construction Control points will be set before the construction starts. There will be 2-4 points set at locations where they will not be disturbed with construction activities, depending on the survey area size. Coordinates and description of these points will be provided.

FEES:

RICHARD BYRD	$430
APRON ARES	$350
HANGAR C	$430
TW QUEBEC	$350
TW UNIFORM	$490
T HANGARS	NO SURVEY

TOTAL ESTIMATED FEE.....$11,950

All survey task will be completed 3 weeks from the notice to proceed date.

Please review this proposal and do not hesitate to contact me with any question.
I am anxiously looking forward in working with you toward a successful and complete project.

Sincerely,

Mori Akhavan, P.E.

EXHIBIT "C"

ADDISON AIRPORT
TAXIWAY/APRON PAVEMENT REPLACEMENT - TOTAL ALL PAVEMENT AREAS
ESTIMATE OF MAN-HOURS
DESIGN - PAVING AND DRAINAGE

	Tasks	Principal	Project Manager	Project Engineer	CADD/ Tech	Clerical
Section I: Basic Services						
Task C: Final Design - Paving and Drainage						
1.	Prepare final construction drawings.	26	92	90	216	0
2.	Prepare Specifications and Contract Documents	0	24	0	0	0
3.	Prepare Estimate of Final Construction Cost	0	6	6	0	0
4.	Produce and Submit four (4) sets of prints	0	3	0	12	6
5.	Incorporate Owner's review comments into plans after each submittal	0	30	24	54	0
	Subtotal	26	155	120	282	6
	Rate	$ 65.00	$ 41.00	$ 35.00	$ 28.00	$ 18.00
		$ 1,690.00	$ 6,355.00	$ 4,200.00	$ 7,896.00	$ 108.00
Task D: Bidding and Contract Award						
1.	Prepare Advertisement for Bidders	0	4	0	0	0
2.	Provide 15 half-size set os plans and bid documents	0	4	0	8	4
3.	Conduct pre-bid meeting	4	4	0	0	0
4.	Prepare necessary addenda and respond to bidder's questions	0	8	8	8	0
5.	Prepare bid tabulation	2	4	8	0	2
6.	Recommend a bidder for the award of the construction contract. . .	0	4	0	0	4
	Subtotal	6	28	16	16	10
	Rate	$ 65.00	$ 41.00	$ 35.00	$ 28.00	$ 18.00
		$ 390.00	$ 1,148.00	$ 560.00	$ 448.00	$ 180.00
Task E: Construction Administration						
1.	Provide three (3) half-size sets of plans and specifications for the Owne	0	0	0	4	0
2.	Provide three (3) half-size sets of plans and specifications for the Contr	0	0	0	2	0
3.	Conduct pre-construction meeting	4	4	0	0	0
4.	Respond to requests for information	0	16	0	0	0
5.	Review submittals, as required by the contract documents	0	24	0	0	0
6.	Attend final inspection and prepare punch list/As built preparation	0	8	0	16	4
	Subtotal	4	52	0	22	4
	Rate	$ 65.00	$ 41.00	$ 35.00	$ 28.00	$ 18.00
		$ 260.00	$ 2,132.00	$ -	$ 616.00	$ 72.00
Total Hours		36	235	136	320	20
Hourly Rate		$ 65.00	$ 41.00	$ 35.00	$ 28.00	$ 18.00
Direct Labor Cost		$ 2,340.00	$ 9,635.00	$ 4,760.00	$ 8,960.00	$ 360.00

HNTB Final Design-Pavement, and Utilities **$ 26,055**

M:\JOBS\41308-Richard Byrd North\SCOPEDEV\[Pvmnt Rplcmnt FeeEst 06-22-05 CONTRACTED.xls]Scoped Fee-Grand Total

Direct Labor Cost:	$ 26,055
Indirect Labor, Overhead:	$ 42,991
HNTB Engineering Subtotal:	$ 69,046
Profit	$ 10,357
Out-of-Pocket Expense:	$ 1,500
HNTB Subtotal Fee, Basic Services:	$ 80,903

Subconsultant Services

Geotechnical Engineering (Engineering Consulting Services, Ltd.) - Exhibit A:	$ 16,640
Design Surveying (Mori's Engineering) - Exhibit B:	$ 9,900
Construction Control Survey (Mori's Engineering) - Exhibit B:	$ 2,050
	$ 28,590

TOTAL FEE FOR SERVICES: $ 109,493

PAVEMENT REPLACEMENT - TOTAL ALL PAVEMENT AREAS

ESTIMATE OF MAN-HOURS
TASK C1-PREPARE FINAL CONSTRUCTION DRAWINGS

Sheets	Scale	No. of Sheets	Principal	Project Manager	Project Engineer	CADD/ Tech	Clerical
Cover Sheet	-	2	0	0	0	4	0
General Notes Sheet	-	6	0	2	2	4	0
Quantity Summary Sheet	-	2	0	4	8	8	0
Project Layout Control Sheet	600	5	0	2	0	8	0
Construction Phasing/Traffic Control Sheets	100	7	8	16	16	26	0
Removal Plan Sheets	40	8	0	6	6	22	0
Paving Plan Sheets	40	14	8	14	18	38	0
Joint Layout	40	1	0	8	8	4	0
Paving Details/Striping Plans/Typical Sections Sheet	-	4	0	16	20	30	0
Grading Plan	40	14	6	10	22	34	0
SWPPP/Erosion Control Plan Sheets	40	14	0	6	6	16	0
Miscellaneous Details Sheet	-	2	0	4	4	12	0
Total		89	26	92	90	216	0

HNTB Corporation	5910 West Plano Parkway	Telephone (972) 661-5626
Engineers Architects Planners	Suite 200	Facsimile (972) 661-5614
	Plano, Texas 75093	www.hntb.com

Letter of Transmittal

HNTB Job # 41308
VIA Hand Delivered
Date: August 17, 2005

HNTB

To: Mr. Steve Chutchian, P.E.
16801 Westgrove Drive
Addison, Texas
75001

Regarding: Addison Airport pavement replacement

We are forwarding to you:

____	Estimates	X	Plans	____	Prints
____	Reports	____	Shop Drawings	____	Samples
____	Change Order	____	Disk	____	Copy of Letter
____	Book	____	Other		

# of Copies	Drawing #	Last Dated	Code	Description
5		08/17/05		65% review set for Addison Airport Pavement Replacement Project.

These are transmitted:

____	For approval	____	As requested	____	Copies for distribution
____	For your use	____	Resubmit	X	For Review & comment
____	Return	____	Copies for review	____	No exception taken
____	Corrected prints	____	Submit	____	Amend and resubmit
				____	Make corrections noted

Please note: Please review and provide any comments you have. We will deliver a cost estimate to you Monday, August 22, and look forward to meeting with you on Wednesday, August 24 to review the comments.

Thanks, MAH

By: Michael A. Hutchison, P.E.

Copy to: Project File

HNTB Corporation
Engineers Architects Planners
HNTB

5910 West Plano Parkway
Suite 200
Plano, Texas 75093

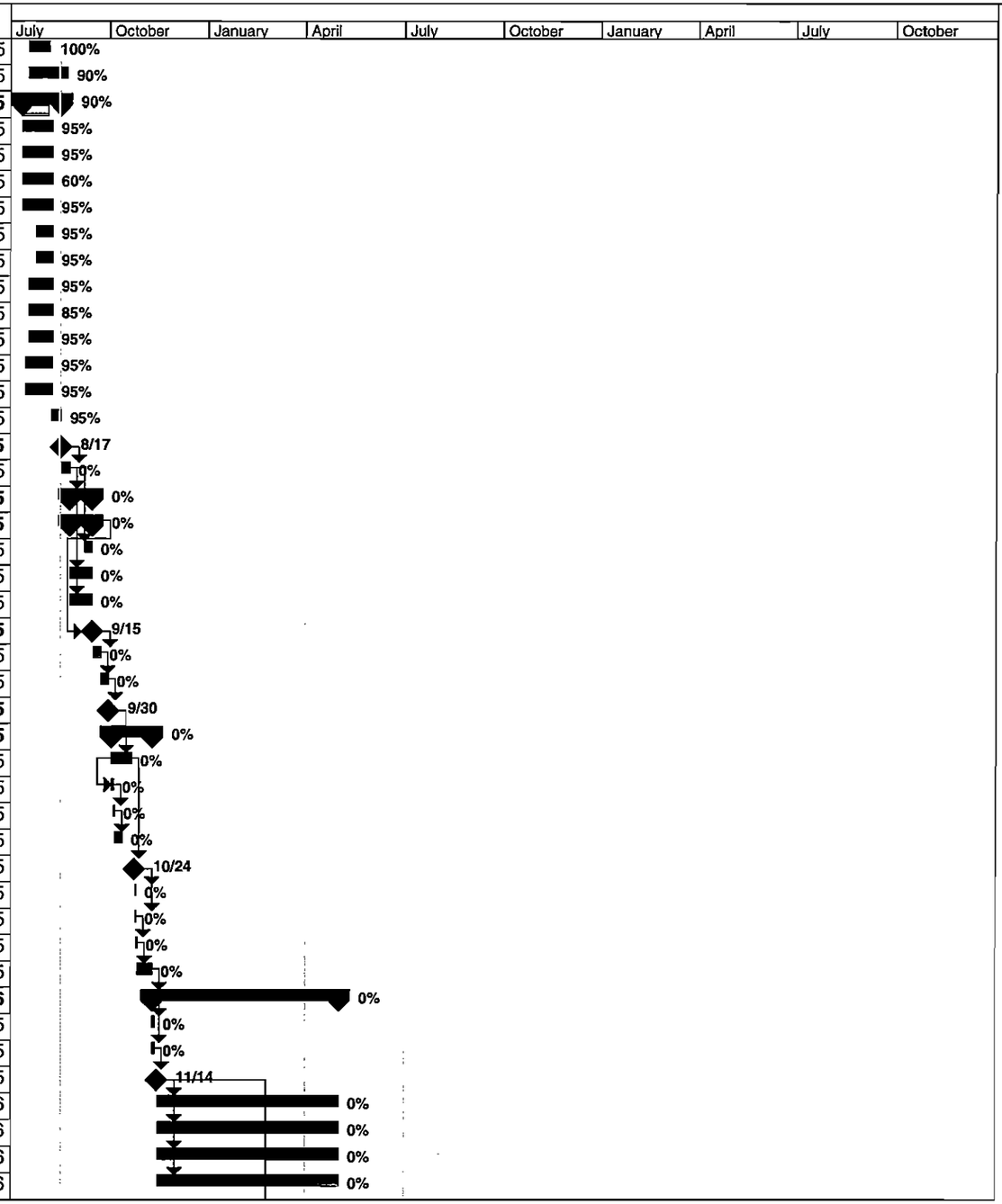
Telephone (972) 661-5626
Facsimile (972) 661-5614
www.hntb.com

AGENDA

41308 – Addison Airport Pavement Replacement
Design Kick-off Meeting
August 15, 2005, 2:00 p.m.

- **Introduction** — **Group**
- **Contract status**
- **Job progress & status/submittal schedule** — **Mike Hutchison**
  - Submittal schedule
  - Geotechnical report
- **PS&E issues/questions** — **Mike Hutchison**
  - Taxiway "Quebec" – do half of road at a time!
    - Fuel farm area limits, design criteria
    - Construction phasing – two phases, half at a time
    - Limits of concrete replacement-north lease line vs. edge stripe
  - Taxiway "Romeo" area – do all at once
    - Pavement Failures & repair strategy
    - Possible Tenant Participation in overlay
    - Airport property line location SE corner (Dal Tech)?
  - Taxiway "Papa" area –
    - Construction Phasing/Asphalt Transition
  - Staging area
  - Displacement of tenants/phasing of entire project
- **Other issues/questions** — **Group**
- **Final Comments** — **Group**

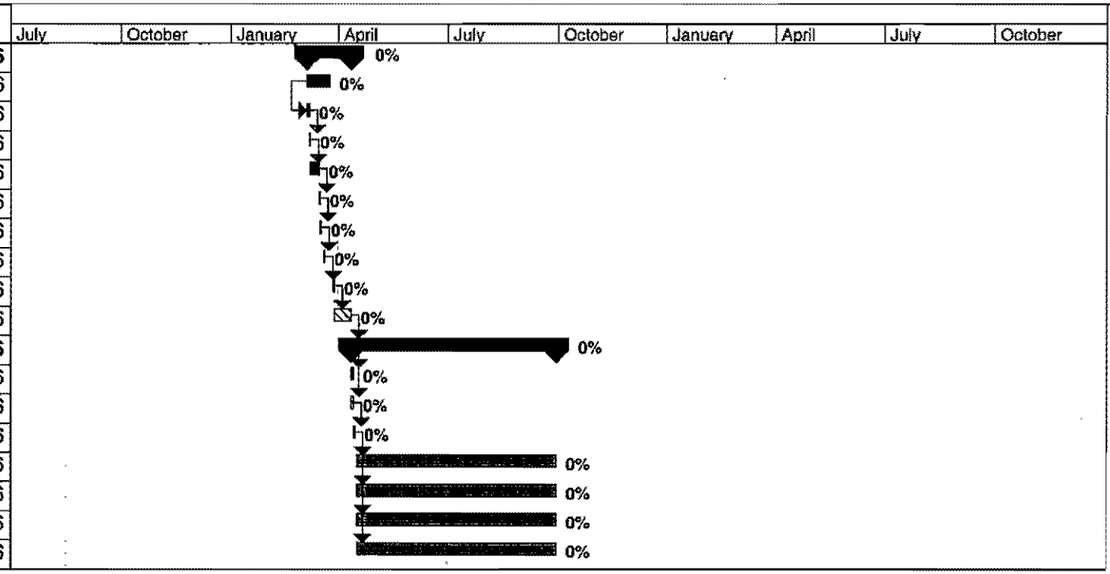
ID	Task Name	Duration	Start	Finish
1	Topographical Survey	15 days	Mon 7/18/05	Fri 8/5/05
2	Geotechnical Survey	26 days	Mon 7/18/05	Mon 8/22/05
3	**Prepare 65% construction drawings.**	**26 days**	**Tue 7/12/05**	**Tue 8/16/05**
4	Cover Sheet	20 days	Tue 7/12/05	Mon 8/8/05
5	General Notes Sheet	20 days	Tue 7/12/05	Mon 8/8/05
6	Quantity sheet	20 days	Tue 7/12/05	Mon 8/8/05
7	Project Layout Control Sheet	20 days	Tue 7/12/05	Mon 8/8/05
8	Removal Plan Sheets	11 days	Mon 7/25/05	Mon 8/8/05
9	Paving Plan Sheets	11 days	Mon 7/25/05	Mon 8/8/05
10	Grading Plan	16 days	Mon 7/18/05	Mon 8/8/05
11	Joint Layout Sheets	16 days	Mon 7/18/05	Mon 8/8/05
12	Construction Phasing/Traffic Control Sheets	16 days	Mon 7/18/05	Mon 8/8/05
13	SWPPP/Erosion Control Plan Sheets	17 days	Fri 7/15/05	Mon 8/8/05
14	Miscellaneous Details Sheet	17 days	Fri 7/15/05	Mon 8/8/05
15	QA/QC 65% construction drawings	7 days	Mon 8/8/05	Tue 8/16/05
16	**Produce and submit 65% construction drawings**	**1 day**	**Wed 8/17/05**	**Wed 8/17/05**
17	Owner's review of 65% construction Drawings	5 days	Thu 8/18/05	Wed 8/24/05
18	**Prepare 95% construction drawings.**	**15 days**	**Thu 8/25/05**	**Wed 9/14/05**
19	**Incorportate Owner's 65% review comments**	**15 days**	**Thu 8/25/05**	**Wed 9/14/05**
31	QA/QC 95% construction drawings	5 days	Thu 9/8/05	Wed 9/14/05
32	Prepare Specifications and Contract Documents	15 days	Thu 8/25/05	Wed 9/14/05
33	Prepare Estimate of Final Construction Cost	15 days	Thu 8/25/05	Wed 9/14/05
34	**Produce and submit four (4) sets of 95% construction drawings**	**1 day**	**Thu 9/15/05**	**Thu 9/15/05**
35	Owner's review of 95% construction Drawings	5 days	Fri 9/16/05	Thu 9/22/05
36	Incorporate Owner's 95% review comments	5 days	Fri 9/23/05	Thu 9/29/05
37	**Submit 100% construction drawings**	**1 day**	**Fri 9/30/05**	**Fri 9/30/05**
38	**Task D: Bidding and Contract Award Fall Letting**	**28 days**	**Mon 10/3/05**	**Wed 11/9/05**
39	Prepare Advertisement for Bidders/Advertise project	15 days	Mon 10/3/05	Fri 10/21/05
40	Provide 15 half-size set of plans and bid documents	2 days	Mon 10/3/05	Tue 10/4/05
41	Conduct pre-bid meeting	1 day	Wed 10/5/05	Wed 10/5/05
42	Prepare necessary addenda and respond to bidder's questions	5 days	Thu 10/6/05	Wed 10/12/05
43	Bid Opening	1 day	Mon 10/24/05	Mon 10/24/05
44	Prepare bid tabulation	1 day	Tue 10/25/05	Tue 10/25/05
45	Recommend a bidder for the award of the construction contract. . .	1 day	Tue 10/25/05	Tue 10/25/05
46	Council Award	1 day	Wed 10/26/05	Wed 10/26/05
47	Sign Contracts	10 days	Thu 10/27/05	Wed 11/9/05
48	**Task E: Construction Administration**	**123 days**	**Thu 11/10/05**	**Mon 5/1/06**
49	Provide three (3) half-size sets of plans and specifications for the Owner	2 days	Thu 11/10/05	Fri 11/11/05
50	Provide three (3) half-size sets of plans and specifications for the Contractor	2 days	Thu 11/10/05	Fri 11/11/05
51	Conduct pre-construction meeting	1 day	Mon 11/14/05	Mon 11/14/05
52	Respond to requests for information	120 days	Tue 11/15/05	Mon 5/1/06
53	Review submittals, as required by the contract documents	120 days	Tue 11/15/05	Mon 5/1/06
54	Attend final inspection and prepare punch list/As built preparation	120 days	Tue 11/15/05	Mon 5/1/06
55	Construction	120 days	Tue 11/15/05	Mon 5/1/06



Project: Richard Byrd North Workflow
Date: Mon 8/15/05

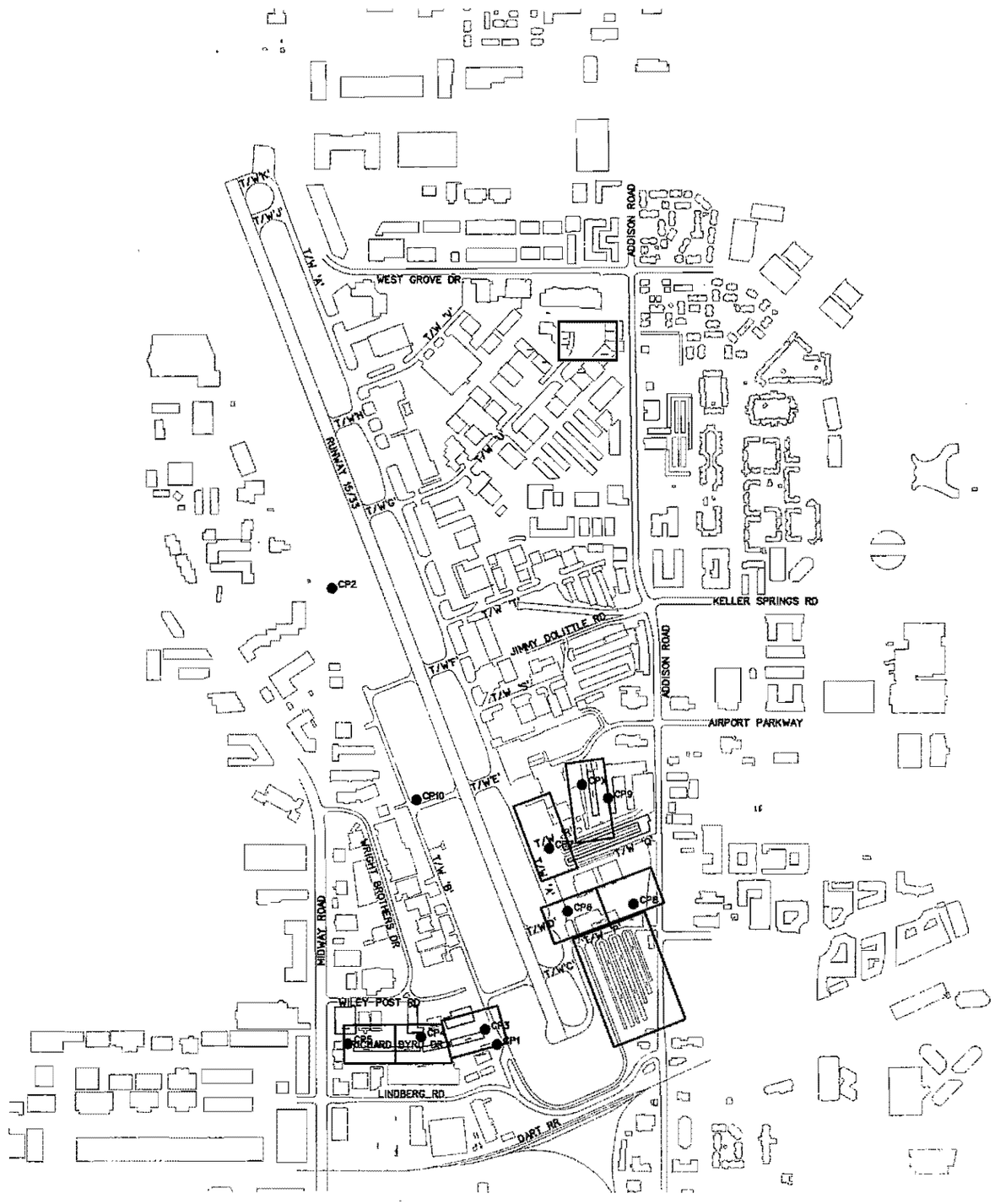
Critical — Task — Baseline — Milestone — Project Summary — Deadline
Critical Split — Split — Baseline Split — Summary Progress — External Tasks
Critical Progress — Task Progress — Baseline Milestone — Summary — External Milestone

ID	Task Name	Duration	Start	Finish
56	**Task F: Bidding and Contract Award Spring Letting**	**27 days**	**Mon 3/6/06**	**Tue 4/11/06**
57	Prepare Advertisement for Bidders/Advertise project	15 days	Mon 3/6/06	Fri 3/24/06
58	Provide 15 half-size set os plans and bid documents	2 days	Mon 3/6/06	Tue 3/7/06
59	Conduct pre-bid meeting	1 day	Wed 3/8/06	Wed 3/8/06
60	Prepare necessary addenda and respond to bidder's questions	5 days	Thu 3/9/06	Wed 3/15/06
61	Bid Opening	1 day	Thu 3/16/06	Thu 3/16/06
62	Prepare bid tabulation	1 day	Fri 3/17/06	Fri 3/17/06
63	Recommend a bidder for the award of the construction contract. . .	1 day	Mon 3/20/06	Mon 3/20/06
64	Council Award	1 day	Tue 3/28/06	Tue 3/28/06
65	Sign Contracts	10 days	Wed 3/29/06	Tue 4/11/06
66	**Task G: Construction Administration**	**123 days**	**Wed 4/12/06**	**Fri 9/29/06**
67	Provide three (3) half-size sets of plans and specifications for the Owner	2 days	Wed 4/12/06	Thu 4/13/06
68	Provide three (3) half-size sets of plans and specifications for the Contractor	2 days	Wed 4/12/06	Thu 4/13/06
69	Conduct pre-construction meeting	1 day	Fri 4/14/06	Fri 4/14/06
70	Respond to requests for information	120 days	Mon 4/17/06	Fri 9/29/06
71	Review submittals, as required by the contract documents	120 days	Mon 4/17/06	Fri 9/29/06
72	Attend final inspection and prepare punch list/As built preparation	120 days	Mon 4/17/06	Fri 9/29/06
73	Construction	120 days	Mon 4/17/06	Fri 9/29/06



Project: Richard Byrd North Workflow-
Date: Mon 8/15/05

Critical
Critical Split
Critical Progress
Task
Split
Task Progress
Baseline
Baseline Split
Baseline Milestone
Milestone
Summary Progress
Summary
Project Summary
External Tasks
External Milestone
Deadline



0 500 1000 1500 2000

SCALE IN FEET

N

LEGEND

CP# ● CONTROL POINT (SEE GENERAL NOTES FOR DETAILS)

▭ WORKING AREA

NOTES:

1. THE CONTRACTOR WILL NEED TO COORDINATE WITH ADDISON AIRPORT OPERATIONS THROUGHOUT THE CONSTRUCTION PROCESS. THE CONTRACTOR IS TO KEEP AIRPORT OPERATIONS UPDATED REGARDING THE SCHEDULE ON A WEEKLY BASIS. THE AIRPORT OPERATIONS WILL NEED 14 DAYS NOTICE BEFORE WORK CAN BEGIN ON THE NEXT PHASE OF THE PROJECT.
2. CONTRACTOR TO VERIFY THE LIMITS OF THE STAGING AREA WITH THE ADDISON AIRPORT AND PUBLIC WORKS INSPECTION PERSONNEL PRIOR TO BEGINNING WORK.
3. CONTROL MONUMENTS (NAD83, TEXAS NORTH CENTRAL - 4202)

HORIZONTAL AND VERTICAL CONTROL MONUMENTATION IS BASED ON SURVEY PROVIDED BY MORI ENGINEERING

CP#	NORTH	EAST	ELEV	DESC.
1	7,035957.986	2,479444.822	632.41	TP- AA-4
2	7,039506.860	2,478102.160	637.40	TP- AA-5
3	7,036071.187	2,479350.630	633.99	TP-SPK
4	7,036017.349	2,478846.050	633.07	TP-SPK
5	7,035965.251	2,478276.722	631.37	TP-SPK
6	7,036991.957	2,479987.891	636.58	TP-SPK-415
7	7,037491.871	2,479842.184	638.53	TP-SPK-416
8	7,037055.622	2,480504.406	637.49	TP-SPK
9	7,037887.924	2,480304.682	640.52	TP-SPK
10	7,037869.778	2,478804.837	645.90	TP-SHUB

NO.	DATE	REVISION	APPROV.	NO.	DATE	REVISION	APPROV.

FOR INTERIM REVIEW ONLY

By Michael A. Hutchison, P.E. # 89329

HNTB CORPORATION

Date 15-AUG-2005

NOT FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES

HNTB Corporation
The HNTB Companies
Engineers Architects Planners

DESIGN	DEC	PROJECT NO. 41308
CHECK	MAH	
DRAWN	CCH	
CHECK	DEC	
DATE	JULY 2005	
SCALE		

TOWN OF ADDISON

TOWN OF ADDISON	SHEET
ADDISON AIRPORT PAVEMENT REPLACEMENT	1 OF 1
PROJECT LAYOUT	
TOWN OF ADDISON, TEXAS	PL-1

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DATE SUBMITTED: July 1, 2005
FOR COUNCIL MEETING: July 12, 2005

Council Agenda Item:_____

SUMMARY:

This item is to receive authorization for the City Manager to enter into a Contract Agreement with HNTB Corporation, in the amount of $109,493.00, for the design of the Addison Airport Pavement Improvements Project.

FINANCIAL IMPACT:

Funding Source: 2005 Addison Airport Operating Budget

BACKGROUND:

Airport Management previously determined that the pavement on both the south and north segments of Richard Byrd Drive were severely deteriorated and in need of total pavement reconstruction. Improvements to the southern portion of the roadway were completed in December 2003. The northern portion of Richard Byrd Drive is also deteriorated and has become difficult to maintain and repair. In addition, staff has identified several additional repair and maintenance needs throughout the airport site. The attached proposal for engineering services was negotiated with the firm of HNTB Corporation, in the total amount not to exceed $109,493.00, for the design of the following improvements:

- Richard Byrd Drive reconstruction
- Taxiway Romeo Patio Hangar overlay
- Omni Flight Access Road concrete
- Omni Flight Romeo concrete
- Taxiway Quebec overlay
- Taxiway Papa overlay
- Grass inland/Romeo concrete
- Taxiway Uniform triangle fill in
- Taxiway Papa T-Hangar overlay

It is anticipated that the construction cost for the Addison Airport Improvements Project will be approximately $700,000.

A breakdown of the total fee proposal is as follows:

Engineering	$80,903
Geotechnical	16,640
Surveying	11,950
	$109,493

The fee for engineering is 11.6% of the total cost of construction and is considered to be in-line with the scope of work for this project. In addition, surveying and geotechnical fees are 1.7% and 2.4%, respectively, of the total construction cost and are well within typical fee limits for this type of project.

RECOMMENDATION:

Staff recommends that the Council authorize the City Manager to enter into an agreement with HNTB Corporation, in the amount not to exceed $109,493.00, for the design of the Addison Airport Pavement Improvements Project.

AGREEMENT

THIS AGREEMENT is made by and between HNTB Corporation, hereinafter called "ENGINEER", and the Town of Addison, Texas, hereinafter called "OWNER."

WHEREAS, Owner desires Engineer to perform certain work set forth in Section 2, Scope of Services.

WHEREAS, the Engineer has expressed a willingness to perform said services, hereinafter referred to only as "services", specified in said Scope of Services, and enumerated under Section 2 of this Agreement.

NOW, THEREFORE, all parties agree as follows:

SECTION 2. SCOPE OF SERVICES

The following Basic and Additional Services, when authorized in writing by a notice-to-proceed, shall be performed by the Engineer in accordance with the Owner's requirements for design of the apron north of the existing hangars located on Richard Byrd Drive.

I. Project Definition

This project consists of the preparation of plans and specifications for bidding and construction of Addison Airport Pavement Improvements (the "Project"). Paving improvements at the following locations:

1. An asphalt apron north of the existing hangars located on Richard Byrd Drive (Westside T-Hangar)
2. Taxiway Romeo Patio Hangar overlay
3. Omni Flight Access Road concrete
4. Omni Flight Romeo concrete
5. Taxiway Quebec overlay
6. Taxiway Papa overlay
7. Grass inland/Romeo concrete
8. Taxiway Uniform triangle fill in
9. Taxiway Papa T-Hangar overlay

Services will generally include topographical survey, geotechnical investigation and pavement design, construction plans for the project areas including grading, construction phasing, striping, specifications, preparation of bid document originals and record drawings, and coordination with the Town of Addison and Addison Airport personnel.

II. Detailed Scope of Basic Services

A detailed list of the basic scope of services for this project is as follows:

A. Geotechnical Engineering and Pavement Design

See Exhibit "A" for a detailed proposal for Geotechnical services.

B. Surveying

See Exhibit "B" for a detailed proposal for Surveying services.

C. Final Design – Paving and Drainage

1. Prepare final construction drawings. (Scale 1" = 40' Horizontal and 1" = 5' Vertical except as noted.) The following sheets shall be included:

   a. Cover Sheet
   b. General Notes
   c. Quantity Sheets
   d. Project Layout/Survey Control
   e. Construction Phasing
   f. Removal Plan
   g. Paving Plan
   h. Joint Layout Sheet for concrete pavement areas
   i. Paving Details / Striping Plans / Typical Sections
   j. Grading Plan
   k. Erosion Control Plan
   l. Miscellaneous Details

2. Prepare Specifications and Contract Documents

3. Prepare Estimate of Final Construction Cost

4. Produce and Submit four (4) sets of half-size plans for review to the Owner for 65% review and 95% (final).

5. Incorporate Owner's review comments into plans after each submittal.

D. Bidding and Contract Award

1. Prepare two (2) Advertisements for Bidders .

2. Provide 15 half-size sets of plans and bid documents for two bid packages.

3. Conduct two (2) pre-bid meetings.

4. Prepare necessary addenda and respond to bidder's questions.

5. Prepare two (2) bid tabulations.

6. Recommend a bidder for the award of the construction contract after performing reference checks for two (2) bid packages.

E. Construction Administration

1. Provide three (3) half-size sets of plans and specifications for the Owner for each bid package.

2. Provide three (3) half-size sets of plans and specifications for the Contractor for each pid package.

3. Conduct two pre-construction meetings.

4. Respond to Requests for Information.

5. Review submittals, as required by the contract documents.

6. Attend final inspection and prepare punch list.

7. Prepare as-built plans.

III. Detailed Scope of Additional Services

A. None.

SECTION 3. PAYMENT

Owner shall pay Engineer for services authorized in writing as properly performed by Engineer on the basis herein described, subject to additions or deletions for changes or extras agreed upon in writing.

Basis of Compensation
Owner shall make payment monthly to Engineer based upon statements submitted by the Engineer for work performed.

Compensation for performing Basic and Additional Services shall be as shown in Exhibit "C" on a Cost Plus Basis amount of $109,493. The total compensation, which includes subconsultant costs, if any, will not exceed $109,493 unless mutually agreed to and authorized in writing by the Town of Addison.

SECTION 4. RESPONSIBILITIES
Engineer shall be responsible for the professional quality, technical accuracy, and the coordination of the design, drawings, plans, specifications, estimates, and other services furnished by Engineer under this Agreement. Engineer shall, without additional

compensation, correct or review any errors or deficiencies that are attributable to the Engineer in such design, drawings, plans, specifications, estimates, and other services.

Neither Owner's review, approval or acceptance of, nor payment for, any of the services required under this Agreement shall be construed to operate as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement, and Engineer shall be and remain liable to Owner in accordance with applicable law for all damages to Owner caused by Engineer's negligent performance of any of the services furnished under this Agreement.

The rights and remedies of Owner and Engineer under this Agreement are as provided by law. Engineer shall not be responsible for construction means, methods, techniques, sequences, procedures, or safety precautions and programs in connection with the Project.

SECTION 5. TIME FOR PERFORMANCE

Engineer shall perform all services as provided for under this Agreement in a proper, efficient and professional manner in accordance with the terms of this Agreement. The services to complete construction documents shall be completed within 3 months of Notice-to-Proceed.

In the event Engineer's performance of this Agreement is delayed or interfered with by acts of the Owner or others, Engineer may request an extension of time for the performance of same as hereinafter provided. If such delay is in excess of 60 days on any one occurrence or a cumulative delay of over 180 days, Engineer shall have the right to renegotiate the remainder of this contract. A delay shall be defined as any event caused by others that substantially inhibits the Engineer from proceeding with its services on the project. This shall include, but is not limited to, Owner reviews, right-of-way negotiations and awaiting critical information to be supplied by Town or franchised utility companies.

No allowance of any extension of time, for any cause whatever, shall be claimed or made by the Engineer, unless Engineer shall have made written request upon Owner for such extension within 14 calendar days after the cause for such extension occurred, and unless Owner and Engineer have agreed in writing upon the allowance of additional time to be made. Provided, however, Engineer shall not be considered in default hereunder in delays are caused by reasons beyond its reasonable control.

SECTION 6. DOCUMENTS

All instruments of service (including plans, specifications, drawings, reports, designs, computations, computer files, estimates, surveys, other data or work items, etc.) prepared under this Agreement shall be submitted for approval of the Owner. All completed instruments of service shall be professionally sealed as may be required by law or by Owner.

Such instruments of service, together with necessary supporting documents, shall be delivered to Owner, and Owner shall have unlimited rights, for the benefit of Owner, in all instruments of service, including the right to use same on any other work of Owner without additional cost to Owner. If, in the event, Owner uses such instruments of

service on any work of Owner other than that intended in the Scope of Services, defined in Section 2, under those circumstances Owner hereby agrees to protect, defend, indemnify and hold harmless the Engineer, their officers, agents, servants and employees (hereinafter individually and collectively referred to as "Indemnities"), from and against suits, actions, claims, losses, liability or damage of any character, and from and against costs and expenses, including, in part, attorney fees incidental to the defense of such suits, actions, claims, losses, damages or liability on account of injury, disease, sickness, including death, to any person or damage to property including, in part, the loss of use resulting therefrom, arising from any inaccuracy, such use of such instruments of service with respect to such other work except where Engineer is hired to modify such instrument for such other work.

Engineer agrees to and does hereby grant to Owner a royalty-free license to such instruments of service which Engineer may cover by copyright and to designs as to which Engineer may cover by copyright and to designs as to which Engineer may assert any rights or establish any claim under the design patent or copyright laws. Engineer, after completion of the services, agrees to furnish the originals of such instruments of service to the Owner. Engineer may, however, retain copies of any and all documents produced. The license granted herein by Engineer shall survive termination of this Agreement for any reason.

SECTION 7. TERMINATION

Owner may suspend or terminate this Agreement for cause or without cause at any time by giving five (5) days written notice to the Engineer. In the event termination is for cause however, such shall be in accordance with section 14 hereof. In the event suspension or termination is without cause, payment to Engineer, in accordance with the terms of this Agreement, will be made on the basis of services reasonably determined by Owner to be satisfactorily performed to date of suspension or termination. Such payment will be due upon delivery of all instruments of service to Owner.

Should the Owner require a material modification of this Agreement, and in the event Owner and Engineer fail to agree upon such modification to this Agreement, Owner shall have the option of terminating this Agreement and the Engineer's services hereunder at no additional cost other than the payment to Engineer, in accordance with the terms of this Agreement, for the services reasonably determined by Owner to be properly performed by the Engineer prior to such termination date.

Engineer may terminate this Agreement upon written notice to Owner in the event of substantial failure by the Owner to perform in accordance with the terms of this Agreement. Owner shall have 14 calendar days from the receipt of the termination notice to cure or to submit a plan for cure acceptable to the Engineer. In the event the parties cannot agree upon an acceptable cure within a reasonable period of time from the date of notice, Engineer may terminate this Agreement.

SECTION 8. INSURANCE

Engineer shall provide and maintain Worker's Compensation and Employer's Liability Insurance for the protection of Engineer's employees, as required by law. Engineer shall also provide and maintain in full force and effect during the term of this Agreement,

insurance (including insurance covering the operation of automobiles, trucks and other vehicles) protecting Engineer and Owner against liability from damages because of injuries, including death, suffered by any person or persons other than employees of Engineer, and liability for damages to property, arising from or growing out of Engineer's operations in connection with the performance of this Agreement.

Such insurance covering personal and bodily injuries or death shall be in the sum of not less than Two Hundred Fifty Thousand Dollars ($250,000.00) for one (1) person, and not less than Three Hundred Thousand Dollars ($300,000.00) for any one (1) occurrence. Insurance covering damages to property shall be in the sum of not less Three Hundred Thousand Dollars ($300,000.00) aggregate.

Engineer shall also provide and maintain Professional Liability Insurance coverage to protect Engineer from liability arising out of the performance of professional services under this Agreement. Such coverage shall be in the sum of not less than $1,000,000.00.

A signed Certificate of Insurance, showing compliance with the requirements of this Section, shall be furnished to Owner before any services are performed under this Agreement. Such Certificate of Insurance shall provide for ten (10) days written notice to Owner prior to the cancellation or modification of any insurance referred to therein. Such Certificates shall terminate after completion of the project.

Owner shall be named as an "additional insured" party on all insurance policies, except for Worker's Compensation and Professional Liability policies.

SECTION 9. INDEMNIFICATION FOR INJURY AND PERFORMANCE

Engineer further specifically obligates itself to Owner in the following respects, to wit:

The Engineer hereby agrees to protect, indemnify and hold harmless the Owner, their officers, agents, servants and employees (hereinafter individually and collectively referred to as "Indemnities"), from and against losses, liability or damage of any character, including defense costs, expenses and reasonable attorney fees incidental to the defense of such losses, damages or liability on account of injury, disease, sickness, including death, to any person or damage to property including the loss of use resulting therefrom, caused by any negligent act, error, or omission of the Engineer, its officers, employees, or subcontractors, or anyone else for whom Engineer is legally liable which are resulting from or caused by the performance of any services called for by this Agreement. In the event the parties are found to be jointly or derivatively negligent or liable for such damage or injury, the indemnification shall be assessed on a proportionate basis in accordance with the final judgment, after all appeals are exhausted, determining such joint or derivative negligence or liability.

The Engineer is not responsible for the actions of the Owner's contractor or any other party contracting with Owner to perform the construction of the improvements covered under this Agreement.

Acceptance and approval of the final plans by the Owner shall not constitute nor be deemed a release of the responsibility and liability of Engineer, its employees, associates,

agents and subconsultants for the accuracy or competency of their designs, working drawings and specifications, or other documents and services provided by Engineer hereunder; nor shall such approval be deemed to be an assumption of such responsibility by the Owner for any defect in the designs, working drawings and specifications, or other documents and services provided by Engineer hereunder; or other documents prepared by Engineer, its employees, and subconsultants.

SECTION 10. INDEMNIFICATION FOR UNEMPLOYMENT COMPENSATION

Engineer agrees that it is an independent contractor and not an agent of the Owner, and that Engineer is subject, as an employer, to all applicable Unemployment Compensation Statutes, so as to relieve Owner of any responsibility or liability from treating Engineer's employees as employees of Owner for the purpose of keeping records, making reports or payments of Unemployment Compensation taxes or contributions. Engineer further agrees to indemnify and hold Owner harmless and reimburse it for any expenses or liability incurred under said Statutes in connection with employees of Engineer.

SECTION 11. INDEMNIFICATION FOR NON-PAYMENT

To the extent Owner has paid Engineer in full hereunder for same, Engineer shall defend and indemnify Owner against and hold Owner and the premises harmless from any and all claims, suits or liens based upon or alleged to be based upon the non-payment of labor, tools, materials, equipment, supplies, transportation and management costs incurred by Engineer in performing this Agreement.

SECTION 12. ASSIGNMENT

Neither party shall assign or sublet this Agreement or any part thereof, without the prior written consent of the other party.

SECTION 13. APPLICABLE LAWS

Engineer shall comply with all federal, state, county and municipal laws, ordinances, regulations, safety orders, resolutions and building codes applicable to services to be performed under this Agreement.

SECTION 14. DEFAULT OF ENGINEER

In the event Engineer fails to comply or is unable to comply with the provisions of this Agreement as to the quality or character of the service or time of performance, and the failure is not corrected within fourteen (14) days after written notice by Owner to Engineer, Owner may, at its sole discretion without prejudice to any other right or remedy:

- Terminate this Agreement and be relieved of the payment of any further consideration to Engineer except for all services determined by Owner to be satisfactorily completed prior to termination. Payment for work satisfactorily completed shall be for percentage of completion by Engineer through such date of termination. In the event of, of such termination, Owner may proceed to complete the services in any manner deemed proper by Owner, either by

the use of its own forces or by resubletting to others. In either event, the Engineer shall be liable for all reasonable, unmitigatable costs in excess of the total contract price under this Agreement incurred to complete the services herein provided for and the costs so incurred may be due or that may thereafter become due to Engineer under and by virtue of this Agreement.

- Owner may, without terminating this Agreement or taking over the services, furnish the necessary materials, equipment, supplies and/or help necessary to remedy the situation. The reasonable expense for same may be offset against amounts due the Engineer. In such case, Engineer shall not be liable with respect to indemnity or otherwise for any such services performed, arranged, or furnished by Owner. Engineer shall not be considered in default of this Agreement for delays in performance caused by acts of the Owner or other circumstances beyond the reasonable control of the Engineer.

SECTION 15. ADJUSTMENTS IN SERVICES

No claims for extra services, additional services or change in the services will be made by Engineer without a written agreement with Owner prior to the performance of such services.

SECTION 16. EXECUTION BECOMES EFFECTIVE

This Agreement will be effective upon execution by and between Engineer and Owner.

SECTION 17. VENUE LOCATION

In the event of any dispute or action under this Contract, venue for any and all disputes or actions shall be instituted and maintained in Dallas County, Texas. The parties agree that the laws of the State of Texas shall apply to the interpretation, validity and enforcement of this Contract; and, with respect to any conflict of law provisions, the parties agree that such conflict of law provisions shall not affect the application of the law of Texas (without reference to its conflict of law provisions) to the interpretation, validity and enforcement of this Agreement.

SECTION 18. AGREEMENT AMENDMENTS

This Agreement contains the entire understanding of the parties with respect to the subject matter hereof and there are no oral understandings, statements, or stipulation bearing upon the meaning or effect of this Agreement, which have not been incorporated herein. This Agreement may only be modified, amended, supplemented or waived by a written instrument executed by the parties except as may be otherwise provided therein.

SECTION 19. WRITTEN NOTICES

All notices, demands and communications hereunder shall be in writing and may be served or delivered personally upon the party for whom intended, or mailed to the party to whom intended at the address set forth on the signature page of this Agreement. The address of a party may be changed by notice given pursuant to this Section.

SECTION 20. GENDER AND NUMBER

The use of any gender in this Agreement shall be applicable to all genders, and the use of singular numbers shall include the plural conversely.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on this the _____ day of _____, 2005.

OWNER: TOWN OF ADDISON, TEXAS	ENGINEER: HNTB CORPORATION
By: _____	By: _____
Ron Whitehead, City Manager 5300 Beltline Road P.O. Box 9010 Addison, Texas 75001-9010	Benjamin J. Biller, P.E. Vice President, Central Division 5910 Plano Parkway, Suite 200 Plano, Texas 75093
Witness: _____	Witness: _____

Exhibit A
Geotechnical Services

Exhibit B
Surveying Services