

ENGINEERS/SURVEYORS/LANDSCAPE ARCHITECTS TRANSPORTATION and COMMUNITY PLANNING

September 3, 1996

Mr. Gary Gustavson Heritage Land Bank Municipality of Anchorage P.O. Box 196650 Anchorage, AK 99519-6650

Dear Gus:

REF: Soil Testing and Ground Water Monitoring Services on Section 36 of the Hillside Area RFP #26-96 - Professional Services Fee Proposal

Per our conversation on Friday, August 30, we have modified our fee proposal as requested. The following is a recap of the fee proposal and the prices for the additional services. Please note the prices quoted are for pre-winter (freezing) conditions therefore an expedited Notice To Proceed is becoming critically important.

1. Survey - \$5,000

Establish horizontal control for the 10 test pits using hand held G.P.S. at 2 known corners, (no vertical control will be established), supervision of survey crews, coordination with Tom Knox, file research into previous survey work and plats that will influence project, computer entry and file processing of data, computations, basemap preparation. MOA to provide digitized aerial base map to Terrasat for EM/R work. Survey stake 10 test pit locations using only hand held G.P.S. receivers (no vertical), enter data into base map.

MOA to provide the following:

- a) Certified boundary survey of this section and right-of-way showing set and found monuments.
- b) Digitized slope maps (contours) and digitized aerial base map.
- c) Monumentation of road right-of-way in accordance with MOA, DPW, PM&E Survey Specifications.
- d) AutoCAD drawings on 3" floppy disk of the proposed Section 36 plat, including all tracts.(by DOWL dated 12/30/91 or most recent).
- e) ASCII point file of the survey points from 6/93, and MOA field book 27-43.
- f) Base map with the above information (items a & b) in an AutoCAD/Softdesk compatible file.

TRYCK NYMAN HAYES,INC.

2 Took mile	¢1(174
2. Test pits-I) Soils Data Review - Review existing soils logs, reports, and other	\$16,174
applicable soils data. (1774)	
II) Excavation - One each mob/demob at site, transporting equipment	3
to each test pit with minimum disturbance to ground, excavating tempit hole to 16 feet, supplying monitoring tubes, fabric and cap	1
placement of monitoring tube, establishing a maximum of tw	
percolation benches per hole, and returning to site at later date after	1
completion of the percolation test to backfill the hole and neatl	
regrade surface. (8000)	,
III) Percolation Tests - Supervising the excavation and logging of 10 test	
pits, identifying percolation layers, construction of percolation holes (maximum 2 per pit), hauling water to site, presoaking holes	
conducting percolation tests, analyzing the results and transfer of	
data to DHHS soils percolation test forms. Transferring data t	
Terrasat for model input. (3000)	
Note: All sails works to be supervised by a registered professions	,
Note: All soils work to be supervised by a registered professional engineer. Verification of soils visuals will not take place. No	
laboratory analysis of soils types or moisture content shall b	
performed in conjunction with this work, including soils report.	
IV) Water monitoring - individual test pit monitoring on 10 holes on the	
following dates: 10/1/96, 10/15/96, 10/29/96, 4/29/97, 5/6/97 5/20/97, 6/3/97 (3400)	'
0/20/5//0/0/5/	
Note: dates maybe changed as directed by the MOA with 48 hours notice	ā.
to assist in measuring high water. Maximum number of readings is	3
7. No data recorders are to be incorporated with this project.	610.045
3. Terrain Unit Evaluation -	\$10,045
Includes air photos, importing base maps, air photo interpretation terrain analysis, slope maps, soils maps, water levels from existing	
sources, inputting and transfer of data to report, field verify	?
information, transfer data to MOA.	
4. EM/R Low Confidence -	\$15,000
Providing horizontal control and assumed vertical control, locating	
positions in the field, brushing 2 foot wide lines for equipment	
staking points every 25 to 50 feet, conducting field resistivity and	
electromagnetic, evaluating field data and providing brief report.	



-		
5.	Project Management -	\$2,700
	Provide for minimum coordination by the project manager with HLB	
1	and ACE. Not to exceed 30 hours over life of the project.	
	• ,	
	Note: All coordination with public and interested stakeholders to be	
1	handled by HLB.	
1		# (20
6.	Agency Coordination -	\$630
1	Provide for minimum coordination between team members and other	
	interested agencies. Specifically DCPD, COE, DHHS, ADEC. Time	
1	not to exceed 7 hours.	
7.	Draft/Final Report -	\$9,000
	Provides organizing the information from various project activities	
1	into a cohesive and easily understood report in draft format.	
1	Development and placement of applicable graphics. Pages not to	
1		
	exceed 20 typewritten. Appendix will be utilized for placement of	8
1	soils logs and percolation testing. At a minimum an overall site map	
1	shall be included identifying the developable and undevelopable	
	areas to the accuracy approved. See notes.	
8.	Reimbursable -	\$1,000
1	Copying, base map reproduction and printing	
	Total	\$59,549
No	otes:	
1.	Hand held GPS units will be utilized in accordance with	
	manufactures specifications to obtain survey data to the best of our	
	ability and not to exceed the degree and accuracy warranted by the	
]		ļ
	manufacture. Hand held GPS units can only achieve minimum	
_	accuracy which may vary significantly with time.	
2.	As stated in the RFP, we are required to delineate developable and	
	undevelopable areas utilizing stated RFP criteria. Under this fee	
l	option there is insufficient survey incorporated to provide accurate	į
	delineation of these areas.	1
3.	HLB shall provide and certify the locations of the boundaries for	
-	wetland and wildlife corridors to be incorporated into the base map.	1
1		
	liald transferation trill not be accommissed and an thin for and	
	Field verification will not be accomplished under this fee option.	

page 4 of 4

REF:

TRYCK NYMAN HAYES,INC.

ADDITIONAL SERVICES	
After completion of terrain unit analysis, additional test pits maybe	\$2,150
recommended for placement. If the Municipality determines it is in its	
best interest to increase the number of test pits for the project it may do	
so at the following agreed upon rate. A separate notice to proceed	
identifying the specific number of test pits will be issued for this work.	
Additional Test Pit Costs -	v
Includes excavation, soils logs, percolation test(s), water monitoring,	
data transfer, management and analysis of data. Survey stake test pit	
location and as-built. Price per each additional test pit.	

If you have any additional questions or if there is anything else that I can assist you with, please contact me at your convenience.

Respectfully,

Tryck Nyman Hayes, Inc.

Kenneth M. Duffus, P.E.

TNH Project Manager

cc: Ted Trueblood

Dan Young, Terrasat, Inc.