



Landmark

ENGINEERING Ltd.

*Craig
fy info*

August 24, 1988
Project No. 2908-HE6F-03-471

MSP Companies
650 S. Cherry St.
Suite 1050
Denver, CO 80222

ATTN: Mac McIntire

RE: **Pavement Design/Brittany Knolls**

Dear Mac:

Enclosed is the Supplemental Pavement Design letter prepared for this project on February 13, 1984. It was based on the existing Ft. Collins requirements at that time. As you are aware, however, the minimum pavement thickness for the City of Ft. Collins has been revised. As of July, 1986 the minimum allowable thickness of asphaltic concrete for residential streets is 3". At the present time, all of the streets being developed in Brittany Knolls which include Compton, an unnamed cul-de-sac, and Edgeware qualify as residential streets. However, Mr. David Klockeman of the City of Ft. Collins has provided us with EDLA values for these various streets which have been used in the redesign presented below. **The 18^k EDLA for the cul-de-sac is 5, for Compton is 10, and for Edgeware is 15.**

Given those values and the minimum pavement thickness recommendation, we now furnish the following thickness recommendations:

1. Residential cul-de-sac with design traffic number of 5, **3" of asphaltic concrete, 7-1/2" of aggregate base course.**
2. Local residential streets with design traffic number 10, **3" of asphaltic concrete, 9" of aggregate base course.**
3. Local residential street with design traffic number 15, **3" of asphaltic concrete, 10" of aggregate base course.**

*Cul-de-Sac
Compton
Edgeware*

Main Office
2300 West Eisenhower Blvd.
Loveland, Colorado 80537

Dale D. Olhausen, P.E. & L.S.
President

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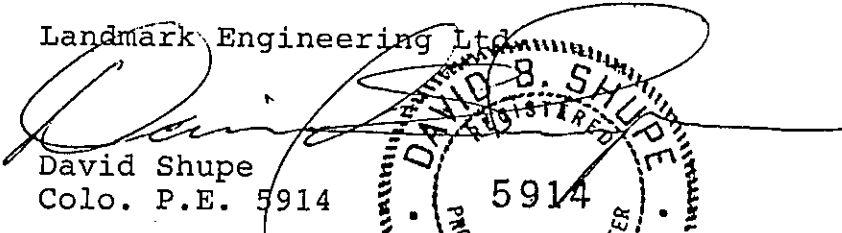


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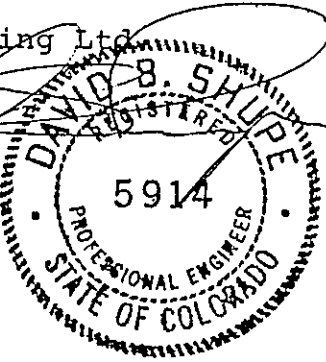
The above structural sections are equal in strength to those given in the February 13, 1984 letter, but are now in keeping with the minimum requirements for asphaltic concrete thickness required by the City of Ft. Collins. We trust these factors will be of assistance to you in pursuing this project. If you have any questions regarding this design, please call our office.

Very truly yours,

Landmark Engineering Ltd


David Shupe
Colo. P.E. 5914

DBS/ej



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 Typed By: LO
 Date: 8-17-88

COMPACTION TEST RESULTS

Client: MSP Project: BRITTANY KNOLLS
 Job No.: 3986-DE6H-15-152 Test For: SEWER - 'POTHOLED' TESTS
 Date: 8-16-88 Technician: Tom Finley

Curve No.	Max. Dry Density	Opt. Moisture	Soil Type
1	106.0	15.5	
3	110.2	16.0	

Test No.		Test Method	Elevation	Curve No.	Wet Density	Dry Density	Moisture Content	% Compaction	Required	Accepted	Remarks
1	S.W. of Pan - small court - sewer	10	-5 1/2'	1	112.7	99.2	13.6	93.6			
2	15' E. of M.H. Compton Rd. & Court	10	-5 1/2'	1	111.9	98.5	13.7	92.9			
3	20' E. of M.H. BKCR7	10	-5 1/2'	1	108.3	95.2	13.8	89.7			
4	60' E. of M.H. BKCR7	8"	-6 1/2'	3	122.4	104.6	17.0	94.9			
5	90' E. of M.H. # BKCR7	8"	-3 1/2'	1	111.8	95.3	17.2	89.9			
6	18' E. of M.H. #BKCR 6	8"	-6'	1	107.0	92.0	16.3	86.7			
7	16' E. of J.H. #BKCR 5	8"	-6'	1	114.1	98.3	16.0	92.7			
8	60' E. of J.H. #BKCR 5	8"	-4'	1	104.2	92.6	12.5	87.3			
9	40' S. of M.H. #BKCR 4	6"	6 1/2'	1	107.4	93.1	15.5	87.7			
10	100' S. of M.H. #BKCR 4	8"	7'	1	101.6	87.3	16.5	82.3			
11	50' S. of M.H. #BKCR 3	8"	6 1/2'	1	108.0	90.9	18.7	85.8			
12	100' S. of M.H. #BKCR 3	8"	7 1/2'	1	105.2	89.5	17.5	84.5			