

CESP, INC.

CONSTRUCTION ADMINISTRATION ·
ENGINEERING · SURVEYING · PLANNING
2146 BELCOURT AVENUE · NASHVILLE, TN 37212
(615) 292-0808

WESLEY MEDICAL
CENTER ADDITION

December 18, 1987

Ms. Vicki Huang
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
City Hall - Seventh Floor
455 North Main Street
Wichita, KS 67202

RE: Wesley Medical Center
Wichita, Kansas
CESP # 86201, 87250

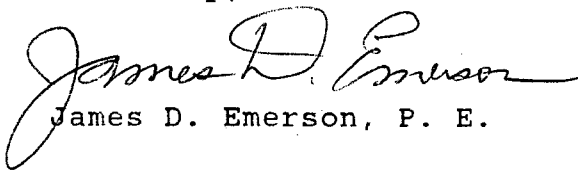
Dear Ms. Huang:

Please find attached one set of plans and drainage calculations for the above referenced project. I am requesting your office to review the storm drainage system and the relocated sanitary sewer.

The proposed development will reduce the runoff from the site because of the increased amount of pervious area over existing conditions. Also, the internal storm drainage system will not directly connect into the City's storm drainage system, but will discharge into the street gutter of Lorraine Avenue.

Please review these drawings at your earliest convenience and if you have any questions, please call me at (615) 292-0808.

Sincerely,



James D. Emerson, P. E.

JDE/tk

Enclosures

DRAINAGE CALCULATIONS

WESLEY MEDICAL CENTER
WICHITA, KANSAS

PREPARED BY:

CESP, INC.
2146 Belcourt Avenue
Nashville, Tennessee 37212
(615) 292-0808



James D. Emerson 12/18/87
James D. Emerson, P. E.
Kansas Registration
Number 10864

WESLEY
 CESP # 86201

I. PRE-DEVELOPMENT CONDITIONS

Drainage Area: 4.509 Acres
 Impervious: 4.140 Acres
 Pervious: 0.369 Acres

$$\text{wt "c"} = [(4.140)(.95) + (0.369)(0.30)]/4.509 = 0.90$$

Discharge

Freq.	I	Q
2-yr.	3.8	15.4
5-yr.	4.6	18.7
10-yr.	5.2	21.1
100-yr.	7.4	30.0

II. POST-DEVELOPMENT CONDITIONS

Drainage Areas

Sub-basins	Total D.A.	Impervious	Pervious	wt "c"
1	.996	.809	.187	0.83
2	.095	.092	.003	0.93
3	.030	0	.030	0.30
4	.176	.166	.010	0.91
5	.044	.011	.033	0.46
6	.026	.000	.026	0.30
7a	.096	.065	.031	0.74
7b	.216	.159	.057	0.78
8	.217	.101	.116	0.60
9	.026	0	.026	0.30
10	.075	.067	.008	0.88
11	.165	.143	.022	0.86
12	.437	0	.437	0.30
13	.336	0	.336	0.30
MOB	.794	.794	0	0.95
GARAGE	.780	.780	0	0.95

Discharge

Sub-basin	2-yr.	5-yr.	50-yr.	100-yr.
1	3.14	3.80	4.30	6.12
2	0.34	0.41	0.46	0.65
3	0.03	0.04	0.05	0.07
4	0.61	0.74	0.83	1.19
5	0.08	0.09	0.11	0.15
6	0.03	0.04	0.04	0.06
7a	0.27	0.33	0.37	0.52
7b	0.64	0.78	0.88	1.25
8	0.49	0.60	0.68	0.96
9	0.03	0.04	0.04	0.06
10	0.25	0.30	0.34	0.49
11	0.54	0.65	0.74	1.05
12	0.50	0.60	0.68	0.97
13	0.38	0.46	0.52	0.74
MOB	2.87	3.47	3.92	5.58
GARAGE	2.82	3.41	3.85	5.48
TOTAL	13.02	15.76	17.81	25.34

PIPE	SUB-BASIN(S)	FLOW	SIZE	TYPE	LENGTH	SLOPE	Ocap	FLOW
		10-YR.						100-YR.
1	1/2 8	0.34	15"	RCP	10'	2.0%	9.2	0.48
2	1/2 8, 7a	0.71	15"	RCP	150'	1.0%	6.5	1.00
3	1/2 8	0.34	15"	RCP	10'	1.0%	6.5	0.48
4	7a, b, 8, 9	1.97	15"	RCP	92'	1.0%	6.5	2.79
5	7a, b, 8, 9, 10	2.22	15"	RCP	36'	1.0%	6.5	3.28
6	7a, b, 8, 9, 10	2.22	18"	RCP	164'	1.0%	10.5	3.28
7	6	0.04	15"	RCP	56'	1.0%	6.5	0.06
8	5, 6	0.15	15"	RCP	54'	1.0%	6.5	0.21
9	4, 5, 6	0.98	15"	RCP	41'	1.0%	6.5	1.40
10	2, 4, 5, 6	1.44	15"	RCP	31'	1.0%	6.5	2.05
11	3	0.05	15"	RCP	46'	2.5%	10.2	0.07
12	2, 3, 4, 5, 6	1.49	18"	RCP	69'	1.0%	10.5	2.12
13	2, 3, 4, 5, 6	1.49	18"	RCP	57'	1.5%	12.9	2.12
14	1	4.30	18"	RCP	145'	1.0%	10.5	6.12
15	1	4.30	24"	RCP	184'	1.5%	27.7	6.12

GOULD TURNER GROUP, P.C.

TELEPHONE CONVERSATION/MEETING RECORD

Project: WESLEY MEDICAL CENTER/FITNESS CTR. & M.O.B.
Job No. 86059.1
Date: July 31, 1987
Subject: Pedestrian Bridge Connector Over Hillside
Participants: Randall Dover (GTG) & Vicki Huang (Eng/City of Wichita)

Summary of Discussion:

by GTG Questions were raised concerning the minimum height of clearance which would be required for the bridge connector over hillside from the New Fitness Ctr./M.O.B. to the Wesley Medical Center

Summary of Discussion:

by Others Vicki Huang (Engineer's Office - City of Wichita)
* 13'-6" is the minimum clearance required for the Pedestrian Connector (based on Fire Dept. concerns) over Hillside Avenue.
* Central Inspection Division must approve plans and a minor street permit will be required.

Action to be taken and deadline(s):

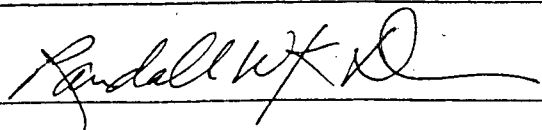
by GTG Verify design compliance with requirements given. Allow C.I.D. of Wichita to begin reviewing drawings as soon as possible.

Action to be taken and deadline(s):

by Others _____

Copies to:
Mike Gould
Steve Delaney

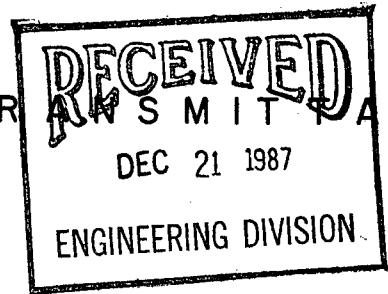
Signed



CESP, INC.

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T R A N S M I T T A L



TO: Vicki Huang Wichita, Kansas Public Works Dep't.

ADDRESS: City Hall - Seventh Floor 455 North Main Street, Wichita, KS 67202

PROJECT: Wesley Medical Center # 86201, 87250

DATE: December 18, 1987

No. of Copies	Item	Status
1	Letter dated 12/18/87	
1	Drainage Calculations	
1	Set of Plans	

Remarks:

RECEIVED BY: _____

Copies of This Transmittal
Have Been Sent To:

Your Messenger
Our Messenger
1st Class Mail
Overnight Mail
Other

By: James D. Emerson