

STAFF REPORT
(One-Step Final Plat)

CASE NUMBER: SUB 2007-77 – WEBB BUSINESS PARK ADDITION

OWNER/APPLICANT: Webb Business Park, LLC, 4603 S. Seneca, Wichita, KS 67217

SURVEYOR/AGENT: PEC, Attn: Rob Hartman, 303 S. Topeka, Wichita, KS 67202

LOCATION: North of 37th St. North, West side of Webb Road

SITE SIZE: 80 acres

NUMBER OF LOTS

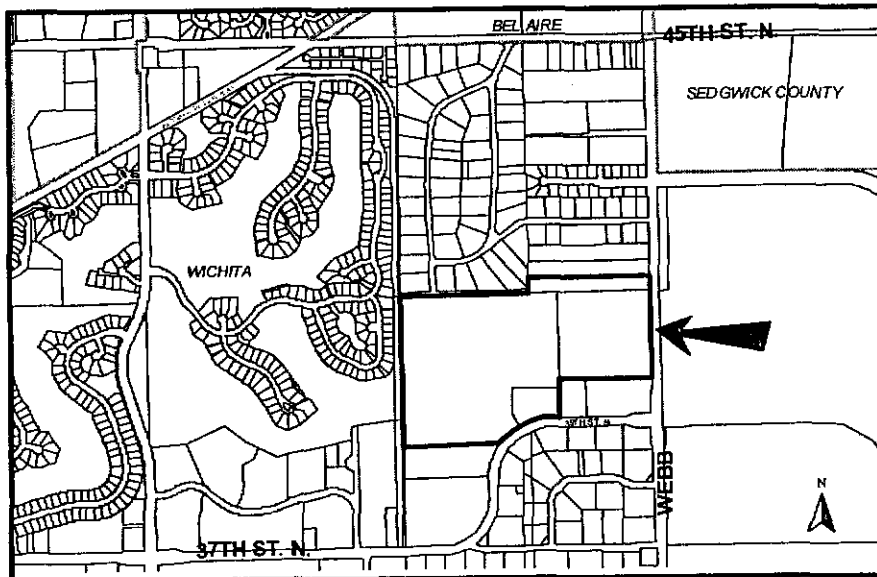
Residential:	
Office:	
Commercial:	
Industrial:	7
Total:	7

MINIMUM LOT AREA: 5.14 acres

CURRENT ZONING: LI, Limited Industrial

PROPOSED ZONING: Same

VICINITY MAP



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NOTE: This is a replat of the Toben Addition and the Toben 4th Addition in addition to unplatted land.

STAFF COMMENTS:

- A. This property has not participated in a sewer main benefit district and in-lieu-of-assessment fees are needed. Public sewers need extended to serve Lot 3, Block 2, and Lot 4, Block 1 and such public laterals need to extend to the Webb Rd right-of-way. The applicant shall guarantee the extension of public water to serve all the lots.
- B. If improvements are guaranteed by petition, a notarized certificate listing the petitions shall be submitted to the Planning Department for recording.
- C. City Engineering needs to comment on the status of the applicant's drainage plan.
- D. The plat needs to denote complete access control along Webb Road except for one street opening. The final plat shall reference the dedication of access controls in the plat's text.
- E. The Applicant shall guarantee the paving of the proposed street to the business/industrial street standard.
- F. In accordance with the KS Wetland Mapping Conventions under the Memorandum of Understanding between the USDA-NRCS; USEPA; USACE; and USF&WS, this site has been identified as one with potential wetland hydrology. The US Army Corps of Engineers (USACE) should be contacted (316-322-8247) to have a wetland determination completed.
- G. Provisions shall be made for ownership and maintenance of the proposed reserves. The applicant shall either form a lot owners' association prior to recording the plat or shall submit a covenant stating when the association will be formed, when the reserves will be deeded to the association and who is to own and maintain the reserves prior to the association taking over those responsibilities.
- H. For those reserves being platted for drainage purposes, the required covenant that provides for ownership and maintenance of the reserves, shall grant to the appropriate governing body the authority to maintain the drainage reserves in the event the owner(s) fail to do so. The covenant shall provide for the cost of such maintenance to be charged back to the owner(s) by the governing body.
- I. The applicant shall submit an avigational easement covering all of the subject plat and a restrictive covenant assuring that adequate construction methods will be used to minimize the effects of noise pollution in the habitable structures constructed on subject property.
- J. "Lots, Blocks, Reserves and a Street" shall be referenced in the plat's text.
- K. GIS has requested abbreviations for the street types and directionals.
- L. According to the platting binder, a pipeline easement has been granted over this plat. The applicant shall either obtain a release of the easement or provide proof that the easement has been confined. If confined, any portion of this easement if on this plat shall be shown and the pipeline's name and recording information shown.
- M. The platting binder indicates a party holding a mortgage on the site. This party's name must be included as a signatory on the plat, or else documentation provided indicating that such mortgage has been released.
- N. The plat's text shall include language that a drainage plan has been developed for the plat and that all drainage easements, rights-of-way, or reserves shall remain at established grades or as modified with the approval of the applicable City or County Engineer, and unobstructed to allow for the conveyance of stormwater.
- O. The applicant shall install or guarantee the installation of all utilities and facilities that are applicable and described in Article 8 of the MAPC Subdivision Regulations. (Water service and fire hydrants required by Article 8 for fire protection shall be as per the direction and approval of the Chief of the Fire Department.)
- P. The Register of Deeds requires all names to be printed beneath the signatures on the plat and any associated documents.
- Q. To receive mail delivery without delay, and to avoid unnecessary expense, the applicant is advised of the necessity to meet with the U.S. Postal Service Growth Management Coordinator (Phone: 316-946-4556) prior to development of the plat so that the type of delivery, and the tentative mailbox locations can be determined.

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- R. The applicant is advised that various State and Federal requirements (specifically but not limited to the Army Corps of Engineers, Kanopolis Project Office, Rt. 1, Box 317, Valley Center, KS 67147) for the control of soil and wind erosion and the protection of wetlands may impact how this site can be developed. It is the applicant's responsibility to contact all appropriate agencies to determine any such requirements.
- S. The owner of the subdivision should note that any construction that results in earthwork activities that will disturb one (1) acre or more of ground cover requires a Federal/State NPDES Storm Water Discharge Permit from the Kansas Department of Health and Environment in Topeka. Also, for projects located within the City of Wichita, erosion and sediment control devices must be used on ALL projects. For projects outside of the City of Wichita, but within the Wichita Metropolitan area, the owner should contact the appropriate governmental jurisdiction concerning erosion and sediment control device requirements.
- T. Perimeter closure computations shall be submitted with the final plat tracing.
- U. The representatives from the utility companies should be prepared to comment on the need for any additional utility easements to be platted on this property.
- V. A compact disc (CD), which will be used by the City and County GIS Departments, detailing the final plat in digital format in AutoCAD. If a disc is not provided, please send via e-mail to Cheryl Holloway (E-Mail address: cholloway@wichita.gov). Please include the name of the plat on the disc.



LETTER OF TRANSMITTAL

Professional Engineering Consultants, PA.
303 S. TOPEKA - WICHITA, KANSAS 67202 - 316-262-2691 - FAX 316-262-3003
www.pec1.com - designers@pec1.com

REC
DEC 28 2007
CITY - ENGINEERING

TO: City of Wichita
Storm Water Management
7th Floor - City Hall
455 N. Main
Wichita, KS 67202

DATE: December 27, 2007
PROJECT NO.: 36-07307-6291
PROJECT: Webb Business Park Drainage Update

ATTENTION: Vicki Huang, P.E.
FROM: Shawn Bryan

REFERENCE: Updated Drainage Plan & Calculations

WE ARE SENDING YOU: Attached Under separate cover via _____ the following items:
 Shop drawings Prints Plans Samples Specifications
 Copy of letter Change order _____

COPIES	DATE	NO.	DESCRIPTION
1	12/27/2007	1	Updated Drainage Plan
1	12/27/2007	1	Trapezoidal Weir Rating Curve
1	12/27/2007	21	Updated HEC-1 Printout

THESE ARE TRANSMITTED as checked below:

For approval Approved as submitted Resubmit _____ copies for approval
 For your use Approved as noted Submit _____ copies for distribution
 As requested Returned for corrections Return _____ corrected prints
 For review and comment _____
 FOR BIDS DUE _____ PRINTS RETURNED AFTER LOAN TO US

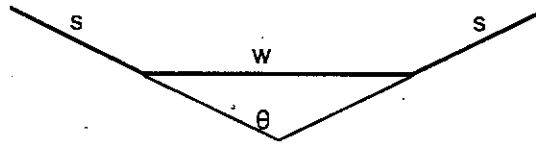
REMARKS: Vicki,
Here is an updated HEC-1 printout, Drainage Plan and Rating Curve for Webb Business Park Addition. If you have any questions please feel free to contact me.

Thanks.

COPIES TO: File **By:** Shawn R. Bryan

If enclosures are not as noted, kindly notify us at once.

500.0 Maximum Q (cfs)
12.000 Weir Width (feet)
4.000 Side Slope (feet/foot)
208.00 Weir Elevation (feet)
2.90 Weir Coefficient (Cw)



<u>Water Surface Elevation</u>	<u>Energy Head (feet)</u>	<u>θ (radians)</u>	<u>tan(θ/2)</u>	<u>Q (cfs)</u>
208.00	0.00	2.652	4.00	0.0
208.25	0.25	2.652	4.00	4.6
208.50	0.50	2.652	4.00	13.9
208.75	0.75	2.652	4.00	27.1
209.00	1.00	2.652	4.00	44.1
209.25	1.25	2.652	4.00	64.8
209.50	1.50	2.652	4.00	89.5
209.75	1.75	2.652	4.00	118.2
210.00	2.00	2.652	4.00	150.9
210.25	2.25	2.652	4.00	187.9
210.50	2.50	2.652	4.00	229.3
210.75	2.75	2.652	4.00	275.1
211.00	3.00	2.652	4.00	325.5
211.25	3.25	2.652	4.00	380.6
211.50	3.50	2.652	4.00	440.5
211.75	3.75	2.652	4.00	505.4

$$\theta = \arctan(S)$$

$$Q = Cw \cdot (W + 0.8 \cdot H \cdot \tan(\theta/2)) \cdot H^{1.5}$$

1 *****

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* * * * *
* * * * *

FLOOD HYDROGRAPH PACKAGE (HEC-1) * * * * * U.S. ARMY CORPS OF ENGINEERS
 JUN 1998 * * * * * HYDROLOGIC ENGINEERING CENTER
 VERSION 4.1 * * * * * 609 SECOND STREET
 * * * * * DAVIS, CALIFORNIA 95616
 RUN DATE 27DEC07 TIME 14:45:48 * * * * * (916) 756-1104
 * * * * *


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X X X XXXXXXXX XXXXX X
X X X X X XX
X X X X X X
XXXXXXXX XXXX XXXXX X
X X X X X X
X X X X XXXXXX XXXX
X X X XXXXXXXX XXXXX

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THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.
 THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
 THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
 NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE, SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
 DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPPT INFILTRATION
 KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

HEC-1 INPUT

PAGE 1

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

1 ID HEC-1 ANALYSIS FOR WEBB BUSINESS PARK ADDITION
 2 ID PROPOSED CONDITIONS - DETENTION BASIN ONLY
 3 ID 100-YEAR STORM - POST DEVELOPMENT

*DIAGRAM
 TT 15 16AUG07 1200 0 17AUG07 2000
 IN 15 16AUG07 1200
 IO 0 5
 JR PREC 3.5 4.5 5.3 6.1 7.0 7.8

*** LIST ***
*** FREE ***

ID	1	2	3	4	5	6	7	8	9	10	
8	KK	PRE	0.003	0.006	0.008	0.011	0.014	0.017	0.019	0.022	0.025
9	KO	5	0.032	0.035	0.038	0.042	0.045	0.048	0.052	0.056	0.060
10	BA	0.1247	0.068	0.072	0.076	0.080	0.085	0.090	0.095	0.100	0.105
11	PB	1.00	0.115	0.120	0.127	0.134	0.140	0.147	0.155	0.163	0.172
12	PC	0.000	0.193	0.204	0.220	0.235	0.259	0.283	0.387	0.663	0.699
13	PC	0.029	0.754	0.772	0.786	0.799	0.810	0.820	0.828	0.835	0.843
14	PC	0.064	0.858	0.865	0.873	0.880	0.885	0.889	0.894	0.898	0.903
15	PC	0.110	0.912	0.916	0.921	0.925	0.929	0.934	0.938	0.943	0.947
16	PC	0.181	0.955	0.958	0.961	0.964	0.967	0.970	0.973	0.976	0.979
17	PC	0.735	0.985	0.988	0.991	0.994	0.997	1.000			
18	PC	0.850	80	0							
19	PC	0.907									
20	PC	0.952									
21	PC	0.982									
22	LS	0									
23	UD	0.340									
*	*	*									
*	*	*									
*	*	*									
24	KK	A	0.003	0.006	0.008	0.011	0.014	0.017	0.019	0.022	0.025
25	KO	5	0.032	0.035	0.038	0.042	0.045	0.048	0.052	0.056	0.060
26	BA	0.0443	0.068	0.072	0.076	0.080	0.085	0.090	0.095	0.100	0.105
27	PB	1.00	0.115	0.120	0.127	0.134	0.140	0.147	0.155	0.163	0.172
28	PC	0.000	0.193	0.204	0.220	0.235	0.259	0.283	0.387	0.663	0.699
29	PC	0.029	0.754	0.772	0.786	0.799	0.810	0.820	0.828	0.835	0.843
30	PC	0.064	0.858	0.865	0.873	0.880	0.885	0.889	0.894	0.898	0.903
31	PC	0.110	0.912	0.916	0.921	0.925	0.929	0.934	0.938	0.943	0.947
32	PC	0.181	0.955	0.958	0.961	0.964	0.967	0.970	0.973	0.976	0.979
33	PC	0.735	0.985	0.988	0.991	0.994	0.997	1.000			
34	PC	0.850	80	80							
35	PC	0.850									
36	PC	0.907									
37	PC	0.952									
38	LS	0.982									
39	UD	0.150									

HEC-1 INPUT

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

40	KK	B	0.003	0.006	0.008	0.011	0.014	0.017	0.019	0.022	0.025
41	KO	5	0.032	0.035	0.038	0.042	0.045	0.048	0.052	0.056	0.060
42	BA	0.0173	0.068	0.072	0.076	0.080	0.085	0.090	0.095	0.100	0.105
43	PB	1.00	0.115	0.120	0.127	0.134	0.140	0.147	0.155	0.163	0.172
44	PC	0.000	0.193	0.204	0.220	0.235	0.259	0.283	0.387	0.663	0.699
45	PC	0.029	0.754	0.772	0.786	0.799	0.810	0.820	0.828	0.835	0.843
46	PC	0.064	0.858	0.865	0.873	0.880	0.885	0.889	0.894	0.898	0.903
47	PC	0.110	0.912	0.916	0.921	0.925	0.929	0.934	0.938	0.943	0.947

LINE	ID	1	2	3	4	5	6	7	8	9	10
48	PC	0.181	0.193	0.204	0.220	0.235	0.259	0.283	0.387	0.663	0.699
49	PC	0.735	0.754	0.772	0.786	0.799	0.810	0.820	0.828	0.835	0.843
50	PC	0.850	0.858	0.865	0.873	0.880	0.885	0.889	0.894	0.898	0.903
51	PC	0.907	0.912	0.916	0.921	0.925	0.929	0.934	0.938	0.943	0.947
52	PC	0.952	0.955	0.958	0.961	0.964	0.967	0.970	0.973	0.976	0.979
53	PC	0.982	0.985	0.988	0.991	0.994	0.997	1.000			
54	LS	0	80	70							
55	UD	0.200									

webbout.txt

56	KK	C									
57	KO	5									
58	BA	0.0088									
59	PB	1.00									
60	PC	0.000	0.003	0.006	0.008	0.011	0.014	0.017	0.019	0.022	0.025
61	PC	0.029	0.032	0.035	0.038	0.042	0.045	0.048	0.052	0.056	0.060
62	PC	0.064	0.068	0.072	0.076	0.080	0.085	0.090	0.095	0.100	0.105
63	PC	0.110	0.115	0.120	0.127	0.134	0.140	0.147	0.155	0.163	0.172
64	PC	0.181	0.193	0.204	0.220	0.235	0.259	0.283	0.387	0.663	0.699
65	PC	0.735	0.754	0.772	0.786	0.799	0.810	0.820	0.828	0.835	0.843
66	PC	0.850	0.858	0.865	0.873	0.880	0.885	0.889	0.894	0.898	0.903
67	PC	0.907	0.912	0.916	0.921	0.925	0.929	0.934	0.938	0.943	0.947
68	PC	0.952	0.955	0.958	0.961	0.964	0.967	0.970	0.973	0.976	0.979
69	PC	0.982	0.985	0.988	0.991	0.994	0.997	1.000			
70	LS	0	80	70							
71	UD	0.25									

PAGE 3

HEC-1 INPUT

72	KK	D									
73	KK	5									
74	BA	0.0094									
75	PB	1.00									
76	PC	0.000	0.003	0.006	0.008	0.011	0.014	0.017	0.019	0.022	0.025
77	PC	0.029	0.032	0.035	0.038	0.042	0.045	0.048	0.052	0.056	0.060
78	PC	0.064	0.068	0.072	0.076	0.080	0.085	0.090	0.095	0.100	0.105
79	PC	0.110	0.115	0.120	0.127	0.134	0.140	0.147	0.155	0.163	0.172
80	PC	0.181	0.193	0.204	0.220	0.235	0.259	0.283	0.387	0.663	0.699
81	PC	0.735	0.754	0.772	0.786	0.799	0.810	0.820	0.828	0.835	0.843
82	PC	0.850	0.858	0.865	0.873	0.880	0.885	0.889	0.894	0.898	0.903
83	PC	0.907	0.912	0.916	0.921	0.925	0.929	0.934	0.938	0.943	0.947
84	PC	0.952	0.955	0.958	0.961	0.964	0.967	0.970	0.973	0.976	0.979
85	PC	0.982	0.985	0.988	0.991	0.994	0.997	1.000			
86	LS	0	80	70							

87	UD	0.300									
88	KK	E									

LINE	ID	1	2	3	4	5	6	7	8	9	10
89	KO	0.0094									
90	BA	1.00									
91	PB	0.000	0.003	0.006	0.008	0.011	0.014	0.017	0.019	0.022	0.025
92	PC	0.029	0.032	0.035	0.038	0.042	0.045	0.048	0.052	0.056	0.060
93	PC	0.064	0.068	0.072	0.076	0.080	0.085	0.090	0.095	0.100	0.105
94	PC	0.110	0.115	0.120	0.127	0.134	0.140	0.147	0.155	0.163	0.172
95	PC	0.181	0.193	0.204	0.220	0.235	0.259	0.283	0.387	0.663	0.699
96	PC	0.735	0.754	0.772	0.786	0.799	0.810	0.820	0.828	0.835	0.843
97	PC	0.850	0.858	0.865	0.873	0.880	0.885	0.889	0.894	0.898	0.903
98	PC	0.907	0.912	0.916	0.921	0.925	0.929	0.934	0.938	0.943	0.947
99	PC	0.952	0.955	0.958	0.961	0.964	0.967	0.970	0.973	0.976	0.979
100	PC	0.982	0.985	0.988	0.991	0.994	0.997	1.000			
101	LS	0	80	70							
102	UD	0.300									
103	*										
104	KK	0.0088									
105	KO	5									
106	BA	1.00									
107	PB	0.000	0.003	0.006	0.008	0.011	0.014	0.017	0.019	0.022	0.025
108	PC	0.029	0.032	0.035	0.038	0.042	0.045	0.048	0.052	0.056	0.060
109	PC	0.064	0.068	0.072	0.076	0.080	0.085	0.090	0.095	0.100	0.105
110	PC	0.110	0.115	0.120	0.127	0.134	0.140	0.147	0.155	0.163	0.172
111	PC	0.181	0.193	0.204	0.220	0.235	0.259	0.283	0.387	0.663	0.699
112	PC	0.735	0.754	0.772	0.786	0.799	0.810	0.820	0.828	0.835	0.843
113	PC	0.850	0.858	0.865	0.873	0.880	0.885	0.889	0.894	0.898	0.903
114	PC	0.907	0.912	0.916	0.921	0.925	0.929	0.934	0.938	0.943	0.947
115	PC	0.952	0.955	0.958	0.961	0.964	0.967	0.970	0.973	0.976	0.979
116	PC	0.982	0.985	0.988	0.991	0.994	0.997	1.000			
117	LS	0	80	70							
118	UD	0.250									
119	*										
	*										
	*										
	*										

HEC-1 INPUT

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

120	KK	5									
121	KO	5									
122	BA	0.0108									
123	PB	1.00									
124	PC	0.000	0.003	0.006	0.008	0.011	0.014	0.017	0.019	0.022	0.025
125	PC	0.029	0.032	0.035	0.038	0.042	0.045	0.048	0.052	0.056	0.060
126	PC	0.064	0.068	0.072	0.076	0.080	0.085	0.090	0.095	0.100	0.105
127	PC	0.110	0.115	0.120	0.127	0.134	0.140	0.147	0.155	0.163	0.172
128	PC	0.181	0.193	0.204	0.220	0.235	0.259	0.283	0.387	0.663	0.699
129	PC	0.735	0.754	0.772	0.786	0.799	0.810	0.820	0.828	0.835	0.843

130	PC	0.850	0.858	0.865	0.873	0.880	0.885	0.889	0.894	0.898	0.903
131	PC	0.907	0.912	0.916	0.921	0.925	0.929	0.934	0.938	0.943	0.947
132	PC	0.952	0.955	0.958	0.961	0.964	0.967	0.970	0.973	0.976	0.979
133	PC	0.982	0.985	0.988	0.991	0.994	0.997	1.000			
134	LS	0	80	70							
135	UD	0.200									

136	KK	H									
137	KO	5									
138	BA	0.0158									
139	PB	1.00									
140	PC	0.000	0.003	0.006	0.008	0.011	0.014	0.017	0.019	0.022	0.025
141	PC	0.029	0.032	0.035	0.038	0.042	0.045	0.048	0.052	0.056	0.060
142	PC	0.064	0.068	0.072	0.076	0.080	0.085	0.090	0.095	0.100	0.105
143	PC	0.110	0.115	0.120	0.127	0.134	0.140	0.147	0.155	0.163	0.172
144	PC	0.181	0.193	0.204	0.220	0.235	0.259	0.283	0.387	0.663	0.699
145	PC	0.735	0.754	0.772	0.786	0.799	0.810	0.820	0.828	0.835	0.843
146	PC	0.850	0.858	0.865	0.873	0.880	0.885	0.889	0.894	0.898	0.903
147	PC	0.907	0.912	0.916	0.921	0.925	0.929	0.934	0.938	0.943	0.947
148	PC	0.952	0.955	0.958	0.961	0.964	0.967	0.970	0.973	0.976	0.979
149	PC	0.982	0.985	0.988	0.991	0.994	0.997	1.000			
150	LS	0	80	50							
151	UD	0.10									

152	KK	TOTAL	0								
153	HC	8									

154	KK	PONDA									
155	KO	5									
156	RS	1	ELEV	208.0	5.77	150.9	187.9	229.3	275.1	325.5	380.6
157	SA	4.98	5.24	5.51	212.0						
158	SE	208.0	209.0	210.0	118.2						
159	SQ	0	4.6	64.8							
160	SQ	440.5									
161	SE	208.0	208.25	209.25	209.75	210.00	210.25	210.50	210.75	211.00	211.25
162	SE	211.5									

HEC-1 INPUT

LINE	ID	1	2	3	4	5	6	7	8	9	10
------	----	---	---	---	---	---	---	---	---	---	----

163 ZZ

SCHEMATIC DIAGRAM OF STREAM NETWORK

INPUT LINE (V) ROUTING (--->) DIVERSION OR PUMP FLOW

NO.	CONNECTOR	A	B	C	D	E	F	G	H
8	PRE	.	.	.	.	.	.	.	.
24	.	.	.	.	.	.	.	.	.
40	.	.	.	.	.	.	.	.	.
56	.	.	.	.	.	.	.	.	.
72	.	.	.	.	.	.	.	.	.
88	.	.	.	.	.	.	.	.	.
104	.	.	.	.	.	.	.	.	.
120	.	.	.	.	.	.	.	.	.
136	.	.	.	.	.	.	.	.	.
152	.	.	.	.	.	.	.	.	.
154	PONDA	.	.	.	.	.	.	.	.
	TOTAL	.....	.....	.....	.....	.....	.....	.....	.....
	V	.....	.....	.....	.....	.....	.....	.....	.....
	V	.....	.....	.....	.....	.....	.....	.....	.....

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION
 [*****]

* FLOOD HYDROGRAPH PACKAGE (HEC-1) * U.S. ARMY CORPS OF ENGINEERS
 * JUN 1998 * HYDROLOGIC ENGINEERING CENTER
 * VERSION 4.1 * 609 SECOND STREET
 * * DAVIS, CALIFORNIA 95616
 * RUN DATE 27DEC07 TIME 14:45:48 * (916) 756-1104
 * *

HEC-1 ANALYSIS FOR WEBB BUSINESS PARK ADDITION
 PROPOSED CONDITIONS - DETENTION BASIN ONLY
 100-YEAR STORM - POST DEVELOPMENT

6 IO OUTPUT CONTROL VARIABLES

IPRINT 0 PRINT CONTROL
 IPLOT 5 PLOT CONTROL
 QSCAL 0. HYDROGRAPH PLOT SCALE

IT HYDROGRAPH TIME DATA

NMIN 15 MINUTES IN COMPUTATION INTERVAL
 IDATE 16AUG 7 STARTING DATE
 ITIME 1200 STARTING TIME
 NQ 129 NUMBER OF HYDROGRAPH ORDINATES
 NDATE 17AUG 7 ENDING DATE
 NDTIME 2000 ENDING TIME
 ICENT 19 CENTURY MARK

COMPUTATION INTERVAL .25 HOURS

TOTAL TIME BASE 32.00 HOURS

ENGLISH UNITS

DRAINAGE AREA	SQUARE MILES
PRECIPITATION DEPTH	INCHES
LENGTH, ELEVATION	FEET
FLOW	CUBIC FEET PER SECOND
STORAGE VOLUME	ACRE-FEET
SURFACE AREA	ACRES
TEMPERATURE	DEGREES FAHRENHEIT

JP MULTI-PLAN OPTION 1 NUMBER OF PLANS
 NPLAN

JR MULTI-RATIO OPTION
 RATIOS OF PRECIPITATION

3.50	4.50	5.30	6.10	7.00	7.80
------	------	------	------	------	------

*
 *
 * PRE *
 *

9 KO OUTPUT CONTROL VARIABLES

IPRINT 5 PRINT CONTROL
 IPLOT 5 PLOT CONTROL
 QSCAL 0. HYDROGRAPH PLOT SCALE

24 KK

*
* A *
*

25 KO
OUTPUT CONTROL VARIABLES
IPRINT 5 PRINT CONTROL
IPLOT 5 PLOT CONTROL
QSCAL 0. HYDROGRAPH PLOT SCALE

40 KK

*
* B *
*

41 KO
OUTPUT CONTROL VARIABLES
IPRINT 5 PRINT CONTROL
IPLOT 5 PLOT CONTROL
QSCAL 0. HYDROGRAPH PLOT SCALE

56 KK

*
* C *
*

57 KO
OUTPUT CONTROL VARIABLES
IPRINT 5 PRINT CONTROL
IPLOT 5 PLOT CONTROL
QSCAL 0. HYDROGRAPH PLOT SCALE

72 KK * D *
* *

73 K0 OUTPUT CONTROL VARIABLES
IPRNT 5 PRINT CONTROL
IPLOT 5 PLOT CONTROL
QSCAL 0. HYDROGRAPH PLOT SCALE

88 KK * *
* *
* E * *
* *

89 K0 OUTPUT CONTROL VARIABLES
IPRNT 5 PRINT CONTROL
IPLOT 5 PLOT CONTROL
QSCAL 0. HYDROGRAPH PLOT SCALE

104 KK * *
* *
* F * *
* *

105 K0 OUTPUT CONTROL VARIABLES
IPRNT 5 PRINT CONTROL
IPLOT 5 PLOT CONTROL
QSCAL 0. HYDROGRAPH PLOT SCALE

120 KK * *
* *
* G * *
* *

121 K0 OUTPUT CONTROL VARIABLES
IPRNT 5 PRINT CONTROL

webbout.txt
 IPLOT 5 PLOT CONTROL
 QSCAL 0. HYDROGRAPH PLOT SCALE

 *
 *
 * H *
 *

137 KO OUTPUT CONTROL VARIABLES
 IPRT 5 PRINT CONTROL
 IPLOT 5 PLOT CONTROL
 QSCAL 0. HYDROGRAPH PLOT SCALE

 *
 *
 * TOTAL *
 *

153 HC HYDROGRAPH COMBINATION
 ICOMP 8 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION TOTAL
 SUM OF 8 HYDROGRAPHS
 PLAN 1, RATIO = 3.50

DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD
16	AUG	1200	1	0.	16	AUG	2015	34	5.	17	AUG	0430	67	5.	17	AUG	1245	100
16	AUG	1215	2	1.	16	AUG	2030	35	5.	17	AUG	0445	68	5.	17	AUG	1300	101
16	AUG	1230	3	2.	16	AUG	2045	36	5.	17	AUG	0500	69	5.	17	AUG	1315	102

0.	16 AUG 1245	4	2.	*	16 AUG 2100	37	5.	*	17 AUG 0515	70	5.	*	17 AUG 1330	103
0.	16 AUG 1300	5	2.	*	16 AUG 2115	38	6.	*	17 AUG 0530	71	5.	*	17 AUG 1345	104
0.	16 AUG 1315	6	2.	*	16 AUG 2130	39	6.	*	17 AUG 0545	72	5.	*	17 AUG 1400	105
0.	16 AUG 1330	7	2.	*	16 AUG 2145	40	7.	*	17 AUG 0600	73	5.	*	17 AUG 1415	106
0.	16 AUG 1345	8	2.	*	16 AUG 2200	41	7.	*	17 AUG 0615	74	5.	*	17 AUG 1430	107
0.	16 AUG 1400	9	2.	*	16 AUG 2215	42	9.	*	17 AUG 0630	75	5.	*	17 AUG 1445	108
0.	16 AUG 1415	10	2.	*	16 AUG 2230	43	9.	*	17 AUG 0645	76	4.	*	17 AUG 1500	109
0.	16 AUG 1430	11	3.	*	16 AUG 2245	44	12.	*	17 AUG 0700	77	5.	*	17 AUG 1515	110
0.	16 AUG 1445	12	3.	*	16 AUG 2300	45	13.	*	17 AUG 0715	78	5.	*	17 AUG 1530	111
0.	16 AUG 1500	13	2.	*	16 AUG 2315	46	17.	*	17 AUG 0730	79	5.	*	17 AUG 1545	112
0.	16 AUG 1515	14	2.	*	16 AUG 2330	47	20.	*	17 AUG 0745	80	5.	*	17 AUG 1600	113
0.	16 AUG 1530	15	3.	*	16 AUG 2345	48	61.	*	17 AUG 0800	81	5.	*	17 AUG 1615	114
0.	16 AUG 1545	16	3.	*	17 AUG 0000	49	181.	*	17 AUG 0815	82	4.	*	17 AUG 1630	115
0.	16 AUG 1600	17	2.	*	17 AUG 0015	50	117.	*	17 AUG 0830	83	3.	*	17 AUG 1645	116
0.	16 AUG 1615	18	3.	*	17 AUG 0030	51	61.	*	17 AUG 0845	84	3.	*	17 AUG 1700	117
0.	16 AUG 1630	19	3.	*	17 AUG 0045	52	35.	*	17 AUG 0900	85	3.	*	17 AUG 1715	118
0.	16 AUG 1645	20	3.	*	17 AUG 0100	53	24.	*	17 AUG 0915	86	3.	*	17 AUG 1730	119
0.	16 AUG 1700	21	3.	*	17 AUG 0115	54	18.	*	17 AUG 0930	87	3.	*	17 AUG 1745	120
0.	16 AUG 1715	22	3.	*	17 AUG 0130	55	15.	*	17 AUG 0945	88	3.	*	17 AUG 1800	121
0.	16 AUG 1730	23	3.	*	17 AUG 0145	56	13.	*	17 AUG 1000	89	3.	*	17 AUG 1815	122
0.	16 AUG 1745	24	3.	*	17 AUG 0200	57	11.	*	17 AUG 1015	90	3.	*	17 AUG 1830	123
0.	16 AUG 1800	25	3.	*	17 AUG 0215	58	10.	*	17 AUG 1030	91	3.	*	17 AUG 1845	124
0.	16 AUG 1815	26	4.	*	17 AUG 0230	59	8.	*	17 AUG 1045	92	3.	*	17 AUG 1900	125
0.	16 AUG 1830	27	4.	*	17 AUG 0245	60	8.	*	17 AUG 1100	93	3.	*	17 AUG 1915	126
0.	16 AUG 1845	28	4.	*	17 AUG 0300	61	8.	*	17 AUG 1115	94	3.	*	17 AUG 1930	127
0.	16 AUG 1900	29	4.	*	17 AUG 0315	62	8.	*	17 AUG 1130	95	3.	*	17 AUG 1945	128
0.	16 AUG 1915	30	4.	*	17 AUG 0330	63	8.	*	17 AUG 1145	96	3.	*	17 AUG 2000	129
0.	16 AUG 1930	31	4.	*	17 AUG 0345	64	8.	*	17 AUG 1200	97	3.	*		
0.	16 AUG 1945	32	4.	*	17 AUG 0400	65	8.	*	17 AUG 1215	98	1.	*		

PEAK FLOW	TIME	6-HR	MAXIMUM AVERAGE FLOW	32.00-HR
+	(CFS)	(HR)	24-HR	72-HR
181.	12.00	28.	10.	7.
		(INCHES)	2.954	2.960
		(AC-FT)	14.	20.
CUMULATIVE AREA = .12 SQ MI				

HYDROGRAPH AT STATION TOTAL
 SUM OF 8 HYDROGRAPHS
 PLAN 1, RATIO = 4.50

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD
16 AUG 1200	1	0.	16 AUG 2015	34	6.	17 AUG 0430	67	7.	17 AUG 1245	100
16 AUG 1215	2	2.	16 AUG 2030	35	7.	17 AUG 0445	68	7.	17 AUG 1300	101
16 AUG 1230	3	3.	16 AUG 2045	36	7.	17 AUG 0500	69	6.	17 AUG 1315	102
16 AUG 1245	4	2.	16 AUG 2100	37	7.	17 AUG 0515	70	6.	17 AUG 1330	103
16 AUG 1300	5	3.	16 AUG 2115	38	8.	17 AUG 0530	71	6.	17 AUG 1345	104
16 AUG 1315	6	3.	16 AUG 2130	39	9.	17 AUG 0545	72	6.	17 AUG 1400	105
16 AUG 1330	7	3.	16 AUG 2145	40	9.	17 AUG 0600	73	6.	17 AUG 1415	106
16 AUG 1345	8	3.	16 AUG 2200	41	10.	17 AUG 0615	74	6.	17 AUG 1430	107
16 AUG 1400	9	3.	16 AUG 2215	42	12.	17 AUG 0630	75	6.	17 AUG 1445	108
16 AUG 1415	10	3.	16 AUG 2230	43	12.	17 AUG 0645	76	6.	17 AUG 1500	109
16 AUG 1430	11	4.	16 AUG 2245	44	16.	17 AUG 0700	77	6.	17 AUG 1515	110
16 AUG 1445	12	3.	16 AUG 2300	45	17.	17 AUG 0715	78	6.	17 AUG 1530	111
16 AUG 1500	13	3.	16 AUG 2315	46	23.	17 AUG 0730	79	6.	17 AUG 1545	112

0.	16 AUG 1515	14	3.	*	16 AUG 2330	47	27.	*	17 AUG 0745	80	6.	*	17 AUG 1600	113
0.	16 AUG 1530	15	4.	*	16 AUG 2345	48	82.	*	17 AUG 0800	81	6.	*	17 AUG 1615	114
0.	16 AUG 1545	16	3.	*	17 AUG 0000	49	240.	*	17 AUG 0815	82	5.	*	17 AUG 1630	115
0.	16 AUG 1600	17	3.	*	17 AUG 0015	50	155.	*	17 AUG 0830	83	4.	*	17 AUG 1645	116
0.	16 AUG 1615	18	4.	*	17 AUG 0030	51	81.	*	17 AUG 0845	84	4.	*	17 AUG 1700	117
0.	16 AUG 1630	19	4.	*	17 AUG 0045	52	46.	*	17 AUG 0900	85	4.	*	17 AUG 1715	118
0.	16 AUG 1645	20	4.	*	17 AUG 0100	53	31.	*	17 AUG 0915	86	4.	*	17 AUG 1730	119
0.	16 AUG 1700	21	4.	*	17 AUG 0115	54	24.	*	17 AUG 0930	87	4.	*	17 AUG 1745	120
0.	16 AUG 1715	22	4.	*	17 AUG 0130	55	20.	*	17 AUG 0945	88	4.	*	17 AUG 1800	121
0.	16 AUG 1730	23	4.	*	17 AUG 0145	56	17.	*	17 AUG 1000	89	4.	*	17 AUG 1815	122
0.	16 AUG 1745	24	4.	*	17 AUG 0200	57	15.	*	17 AUG 1015	90	4.	*	17 AUG 1830	123
0.	16 AUG 1800	25	4.	*	17 AUG 0215	58	13.	*	17 AUG 1030	91	4.	*	17 AUG 1845	124
0.	16 AUG 1815	26	5.	*	17 AUG 0230	59	11.	*	17 AUG 1045	92	4.	*	17 AUG 1900	125
0.	16 AUG 1830	27	5.	*	17 AUG 0245	60	11.	*	17 AUG 1100	93	4.	*	17 AUG 1915	126
0.	16 AUG 1845	28	5.	*	17 AUG 0300	61	10.	*	17 AUG 1115	94	4.	*	17 AUG 1930	127
0.	16 AUG 1900	29	5.	*	17 AUG 0315	62	10.	*	17 AUG 1130	95	4.	*	17 AUG 1945	128
0.	16 AUG 1915	30	5.	*	17 AUG 0330	63	10.	*	17 AUG 1145	96	4.	*	17 AUG 2000	129
0.	16 AUG 1930	31	5.	*	17 AUG 0345	64	10.	*	17 AUG 1200	97	4.	*		
0.	16 AUG 1945	32	5.	*	17 AUG 0400	65	10.	*	17 AUG 1215	98	2.	*		
0.	16 AUG 2000	33	5.	*	17 AUG 0415	66	8.	*	17 AUG 1230	99	1.	*		

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW					
(CFS)	(HR)	6-HR	24-HR	72-HR	32.00-HR		
+	240.	12.00	(CFS)	38.	13.	10.	10.
			(INCHES)	2.805	3.901	3.909	3.909
			(AC-FT)	19.	26.	26.	26.
			CUMULATIVE AREA =	.12 SQ MI			

HYDROGRAPH AT STATION TOTAL
 SUM OF 8 HYDROGRAPHS
 PLAN 1, RATIO = 5.30

DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD
16	AUG	1200	1	0.	16	AUG	2015	34	8.	17	AUG	0430	67	8.	17	AUG	1245	100
16	AUG	1215	2	2.	16	AUG	2030	35	9.	17	AUG	0445	68	8.	17	AUG	1300	101
16	AUG	1230	3	3.	16	AUG	2045	36	8.	17	AUG	0500	69	7.	17	AUG	1315	102
16	AUG	1245	4	3.	16	AUG	2100	37	9.	17	AUG	0515	70	8.	17	AUG	1330	103
16	AUG	1300	5	3.	16	AUG	2115	38	10.	17	AUG	0530	71	7.	17	AUG	1345	104
16	AUG	1315	6	4.	16	AUG	2130	39	10.	17	AUG	0545	72	8.	17	AUG	1400	105
16	AUG	1330	7	4.	16	AUG	2145	40	11.	17	AUG	0600	73	7.	17	AUG	1415	106
16	AUG	1345	8	3.	16	AUG	2200	41	12.	17	AUG	0615	74	8.	17	AUG	1430	107
16	AUG	1400	9	3.	16	AUG	2215	42	14.	17	AUG	0630	75	7.	17	AUG	1445	108
16	AUG	1415	10	4.	16	AUG	2230	43	15.	17	AUG	0645	76	7.	17	AUG	1500	109
16	AUG	1430	11	4.	16	AUG	2245	44	19.	17	AUG	0700	77	8.	17	AUG	1515	110
16	AUG	1445	12	4.	16	AUG	2300	45	21.	17	AUG	0715	78	7.	17	AUG	1530	111
16	AUG	1500	13	4.	16	AUG	2315	46	28.	17	AUG	0730	79	8.	17	AUG	1545	112
16	AUG	1515	14	4.	16	AUG	2330	47	33.	17	AUG	0745	80	7.	17	AUG	1600	113
16	AUG	1530	15	4.	16	AUG	2345	48	99.	17	AUG	0800	81	8.	17	AUG	1615	114
16	AUG	1545	16	4.	17	AUG	0000	49	288.	17	AUG	0815	82	6.	17	AUG	1630	115
16	AUG	1600	17	4.	17	AUG	0015	50	186.	17	AUG	0830	83	5.	17	AUG	1645	116
16	AUG	1615	18	4.	17	AUG	0030	51	96.	17	AUG	0845	84	5.	17	AUG	1700	117
16	AUG	1630	19	5.	17	AUG	0045	52	55.	17	AUG	0900	85	5.	17	AUG	1715	118
16	AUG	1645	20	5.	17	AUG	0100	53	37.	17	AUG	0915	86	5.	17	AUG	1730	119
16	AUG	1700	21	5.	17	AUG	0115	54	28.	17	AUG	0930	87	5.	17	AUG	1745	120
16	AUG	1715	22	5.	17	AUG	0130	55	24.	17	AUG	0945	88	5.	17	AUG	1800	121
16	AUG	1730	23	5.	17	AUG	0145	56	20.	17	AUG	1000	89	5.	17	AUG	1815	122

0.	16 AUG 1745	24	5.	*	17 AUG 0200	57	18.	*	17 AUG 1015	90	5.	*	17 AUG 1830	123
0.	16 AUG 1800	25	5.	*	17 AUG 0215	58	15.	*	17 AUG 1030	91	5.	*	17 AUG 1845	124
0.	16 AUG 1815	26	5.	*	17 AUG 0230	59	13.	*	17 AUG 1045	92	5.	*	17 AUG 1900	125
0.	16 AUG 1830	27	6.	*	17 AUG 0245	60	13.	*	17 AUG 1100	93	5.	*	17 AUG 1915	126
0.	16 AUG 1845	28	6.	*	17 AUG 0300	61	12.	*	17 AUG 1115	94	5.	*	17 AUG 1930	127
0.	16 AUG 1900	29	6.	*	17 AUG 0315	62	12.	*	17 AUG 1130	95	5.	*	17 AUG 1945	128
0.	16 AUG 1915	30	6.	*	17 AUG 0330	63	12.	*	17 AUG 1145	96	5.	*	17 AUG 2000	129
0.	16 AUG 1930	31	6.	*	17 AUG 0345	64	12.	*	17 AUG 1200	97	5.	*		
0.	16 AUG 1945	32	6.	*	17 AUG 0400	65	12.	*	17 AUG 1215	98	2.	*		
0.	16 AUG 2000	33	6.	*	17 AUG 0415	66	10.	*	17 AUG 1230	99	1.	*		

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW
(CFS)	(HR)	6-HR 24-HR 72-HR 32.00-HR
+ 288.	12.00	45. 16. 12. 4.679 4.679 31.
		(INCHES) 3.364 4.669 4.679 4.679 31.
		(AC-FT) 22. 31. 31. 31.
		CUMULATIVE AREA = .12 SQ MI

HYDROGRAPH AT STATION TOTAL
SUM OF 8 HYDROGRAPHS
PLAN 1, RATIO = 6.10

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD
16 AUG 1200	1	0.	16 AUG 2015	34	9.	17 AUG 0430	67	9.	17 AUG 1245	100
16 AUG 1215	2	2.	16 AUG 2030	35	10.	17 AUG 0445	68	9.	17 AUG 1300	101
16 AUG 1230	3	4.	16 AUG 2045	36	10.	17 AUG 0500	69	8.	17 AUG 1315	102
16 AUG 1245	4	3.	16 AUG 2100	37	10.	17 AUG 0515	70	9.	17 AUG 1330	103

0.	16 AUG 1300	5	4.	*	16 AUG 2115	38	11.	*	17 AUG 0530	71	8.	*	17 AUG 1345	104
0.	16 AUG 1315	6	4.	*	16 AUG 2130	39	12.	*	17 AUG 0545	72	9.	*	17 AUG 1400	105
0.	16 AUG 1330	7	4.	*	16 AUG 2145	40	13.	*	17 AUG 0600	73	8.	*	17 AUG 1415	106
0.	16 AUG 1345	8	3.	*	16 AUG 2200	41	14.	*	17 AUG 0615	74	9.	*	17 AUG 1430	107
0.	16 AUG 1400	9	4.	*	16 AUG 2215	42	17.	*	17 AUG 0630	75	8.	*	17 AUG 1445	108
0.	16 AUG 1415	10	4.	*	16 AUG 2230	43	18.	*	17 AUG 0645	76	8.	*	17 AUG 1500	109
0.	16 AUG 1430	11	5.	*	16 AUG 2245	44	22.	*	17 AUG 0700	77	9.	*	17 AUG 1515	110
0.	16 AUG 1445	12	5.	*	16 AUG 2300	45	24.	*	17 AUG 0715	78	8.	*	17 AUG 1530	111
0.	16 AUG 1500	13	4.	*	16 AUG 2315	46	33.	*	17 AUG 0730	79	9.	*	17 AUG 1545	112
0.	16 AUG 1515	14	4.	*	16 AUG 2330	47	38.	*	17 AUG 0745	80	8.	*	17 AUG 1600	113
0.	16 AUG 1530	15	5.	*	16 AUG 2345	48	116.	*	17 AUG 0800	81	9.	*	17 AUG 1615	114
0.	16 AUG 1545	16	5.	*	17 AUG 0000	49	337.	*	17 AUG 0815	82	7.	*	17 AUG 1630	115
0.	16 AUG 1600	17	4.	*	17 AUG 0015	50	217.	*	17 AUG 0830	83	6.	*	17 AUG 1645	116
0.	16 AUG 1615	18	5.	*	17 AUG 0030	51	112.	*	17 AUG 0845	84	6.	*	17 AUG 1700	117
0.	16 AUG 1630	19	5.	*	17 AUG 0045	52	64.	*	17 AUG 0900	85	6.	*	17 AUG 1715	118
0.	16 AUG 1645	20	6.	*	17 AUG 0100	53	43.	*	17 AUG 0915	86	6.	*	17 AUG 1730	119
0.	16 AUG 1700	21	6.	*	17 AUG 0115	54	33.	*	17 AUG 0930	87	6.	*	17 AUG 1745	120
0.	16 AUG 1715	22	6.	*	17 AUG 0130	55	27.	*	17 AUG 0945	88	6.	*	17 AUG 1800	121
0.	16 AUG 1730	23	6.	*	17 AUG 0145	56	23.	*	17 AUG 1000	89	6.	*	17 AUG 1815	122
0.	16 AUG 1745	24	6.	*	17 AUG 0200	57	20.	*	17 AUG 1015	90	6.	*	17 AUG 1830	123
0.	16 AUG 1800	25	6.	*	17 AUG 0215	58	17.	*	17 AUG 1030	91	6.	*	17 AUG 1845	124
0.	16 AUG 1815	26	6.	*	17 AUG 0230	59	15.	*	17 AUG 1045	92	6.	*	17 AUG 1900	125
0.	16 AUG 1830	27	7.	*	17 AUG 0245	60	15.	*	17 AUG 1100	93	6.	*	17 AUG 1915	126
0.	16 AUG 1845	28	7.	*	17 AUG 0300	61	14.	*	17 AUG 1115	94	6.	*	17 AUG 1930	127
0.	16 AUG 1900	29	7.	*	17 AUG 0315	62	15.	*	17 AUG 1130	95	6.	*	17 AUG 1945	128
0.	16 AUG 1915	30	7.	*	17 AUG 0330	63	14.	*	17 AUG 1145	96	6.	*	17 AUG 2000	129
0.	16 AUG 1930	31	7.	*	17 AUG 0345	64	14.	*	17 AUG 1200	97	6.	*		
0.	16 AUG 1945	32	7.	*	17 AUG 0400	65	14.	*	17 AUG 1215	98	3.	*		
0.	16 AUG 2000	33	7.	*	17 AUG 0415	66	11.	*	17 AUG 1230	99	1.	*		

webbout.txt

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW
(CFS)	(HR)	6-HR 24-HR 72-HR 32.00-HR

+	337.	12.00	(CFS)	53.	18.	14.	14.
			(INCHES)	3.927	5.443	5.454	5.454
			(AC-FT)	26.	36.	36.	36.

CUMULATIVE AREA = .12 SQ MI

HYDROGRAPH AT STATION TOTAL
SUM OF 8 HYDROGRAPHS
PLAN 1, RATIO = 7.00

FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD
0.	16	AUG	1200	1	0.	16	AUG	2015	34	11.	17	AUG	0430	67	10.	17	AUG	1245	100
0.	16	AUG	1215	2	3.	16	AUG	2030	35	12.	17	AUG	0445	68	10.	17	AUG	1300	101
0.	16	AUG	1230	3	4.	16	AUG	2045	36	11.	17	AUG	0500	69	10.	17	AUG	1315	102
0.	16	AUG	1245	4	4.	16	AUG	2100	37	12.	17	AUG	0515	70	10.	17	AUG	1330	103
0.	16	AUG	1300	5	4.	16	AUG	2115	38	13.	17	AUG	0530	71	10.	17	AUG	1345	104
0.	16	AUG	1315	6	5.	16	AUG	2130	39	14.	17	AUG	0545	72	10.	17	AUG	1400	105
0.	16	AUG	1330	7	5.	16	AUG	2145	40	16.	17	AUG	0600	73	10.	17	AUG	1415	106
0.	16	AUG	1345	8	4.	16	AUG	2200	41	16.	17	AUG	0615	74	10.	17	AUG	1430	107
0.	16	AUG	1400	9	4.	16	AUG	2215	42	20.	17	AUG	0630	75	10.	17	AUG	1445	108
0.	16	AUG	1415	10	5.	16	AUG	2230	43	21.	17	AUG	0645	76	9.	17	AUG	1500	109
0.	16	AUG	1430	11	6.	16	AUG	2245	44	26.	17	AUG	0700	77	10.	17	AUG	1515	110
0.	16	AUG	1445	12	5.	16	AUG	2300	45	28.	17	AUG	0715	78	10.	17	AUG	1530	111
0.	16	AUG	1500	13	5.	16	AUG	2315	46	39.	17	AUG	0730	79	10.	17	AUG	1545	112
0.	16	AUG	1515	14	5.	16	AUG	2330	47	45.	17	AUG	0745	80	10.	17	AUG	1600	113

PEAK FLOW	TIME	(CFS)	(HR)	(INCHES)	(AC-FT)	CUMULATIVE AREA =	6-HR	MAXIMUM AVERAGE FLOW	24-HR	72-HR	32.00-HR	
16 AUG 1530	15	6.	*	16 AUG 2345	48	webbout.txt	17 AUG 0800	81	10.	*	17 AUG 1615	114
16 AUG 1545	16	5.	*	17 AUG 0000	49	136.	17 AUG 0815	82	8.	*	17 AUG 1630	115
16 AUG 1600	17	5.	*	17 AUG 0015	50	391.	17 AUG 0830	83	7.	*	17 AUG 1645	116
16 AUG 1615	18	6.	*	17 AUG 0030	51	251.	17 AUG 0845	84	7.	*	17 AUG 1700	117
16 AUG 1630	19	6.	*	17 AUG 0045	52	130.	17 AUG 0900	85	7.	*	17 AUG 1715	118
16 AUG 1645	20	6.	*	17 AUG 0100	53	74.	17 AUG 0915	86	7.	*	17 AUG 1730	119
16 AUG 1700	21	6.	*	17 AUG 0115	54	50.	17 AUG 0930	87	7.	*	17 AUG 1745	120
16 AUG 1715	22	6.	*	17 AUG 0130	55	38.	17 AUG 0945	88	7.	*	17 AUG 17745	121
16 AUG 1730	23	6.	*	17 AUG 0145	56	32.	17 AUG 1000	89	7.	*	17 AUG 1800	122
16 AUG 1745	24	6.	*	17 AUG 0200	57	27.	17 AUG 1015	90	7.	*	17 AUG 1815	123
16 AUG 1800	25	6.	*	17 AUG 0215	58	24.	17 AUG 1030	91	7.	*	17 AUG 1830	124
16 AUG 1815	26	7.	*	17 AUG 0230	59	20.	17 AUG 1045	92	7.	*	17 AUG 1845	125
16 AUG 1830	27	8.	*	17 AUG 0245	60	17.	17 AUG 1100	93	7.	*	17 AUG 1900	126
16 AUG 1845	28	8.	*	17 AUG 0300	61	17.	17 AUG 1115	94	7.	*	17 AUG 1915	127
16 AUG 1900	29	8.	*	17 AUG 0315	62	16.	17 AUG 1130	95	7.	*	17 AUG 1930	128
16 AUG 1915	30	8.	*	17 AUG 0330	63	17.	17 AUG 1145	96	7.	*	17 AUG 1945	129
16 AUG 1930	31	9.	*	17 AUG 0345	64	16.	17 AUG 1160	97	7.	*	17 AUG 2000	129
16 AUG 1945	32	9.	*	17 AUG 0400	65	17.	17 AUG 1175	98	7.	*		
16 AUG 2000	33	9.	*	17 AUG 0415	66	16.	17 AUG 1190	99	7.	*		

CUMULATIVE AREA = .12 SQ MI

(CFS) 61. 21. 16. 16.
 (INCHES) 4.562 6.319 6.332 6.332
 (AC-FT) 30. 42. 42. 42.

FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD
0.	16	AUG	1200	1	0.	16	AUG	2015	34	12.	17	AUG	0430	67	12.	17	AUG	1245	100
0.	16	AUG	1215	2	3.	16	AUG	2030	35	13.	17	AUG	0445	68	12.	17	AUG	1300	101
0.	16	AUG	1230	3	5.	16	AUG	2045	36	13.	17	AUG	0500	69	11.	17	AUG	1315	102
0.	16	AUG	1245	4	4.	16	AUG	2100	37	14.	17	AUG	0515	70	11.	17	AUG	1330	103
0.	16	AUG	1300	5	5.	16	AUG	2115	38	15.	17	AUG	0530	71	11.	17	AUG	1345	104
0.	16	AUG	1315	6	5.	16	AUG	2130	39	16.	17	AUG	0545	72	11.	17	AUG	1400	105
0.	16	AUG	1330	7	5.	16	AUG	2145	40	18.	17	AUG	0600	73	11.	17	AUG	1415	106
0.	16	AUG	1345	8	4.	16	AUG	2200	41	19.	17	AUG	0615	74	11.	17	AUG	1430	107
0.	16	AUG	1400	9	5.	16	AUG	2215	42	22.	17	AUG	0630	75	11.	17	AUG	1445	108
0.	16	AUG	1415	10	5.	16	AUG	2230	43	24.	17	AUG	0645	76	10.	17	AUG	1500	109
0.	16	AUG	1430	11	6.	16	AUG	2245	44	30.	17	AUG	0700	77	11.	17	AUG	1515	110
0.	16	AUG	1445	12	6.	16	AUG	2300	45	32.	17	AUG	0715	78	11.	17	AUG	1530	111
0.	16	AUG	1500	13	6.	16	AUG	2315	46	44.	17	AUG	0730	79	11.	17	AUG	1545	112
0.	16	AUG	1515	14	5.	16	AUG	2330	47	51.	17	AUG	0745	80	11.	17	AUG	1600	113
0.	16	AUG	1530	15	6.	16	AUG	2345	48	153.	17	AUG	0800	81	11.	17	AUG	1615	114
0.	16	AUG	1545	16	6.	17	AUG	0000	49	440.	17	AUG	0815	82	9.	17	AUG	1630	115
0.	16	AUG	1600	17	6.	17	AUG	0015	50	282.	17	AUG	0830	83	8.	17	AUG	1645	116
0.	16	AUG	1615	18	6.	17	AUG	0030	51	146.	17	AUG	0845	84	8.	17	AUG	1700	117
0.	16	AUG	1630	19	7.	17	AUG	0045	52	83.	17	AUG	0900	85	7.	17	AUG	1715	118
0.	16	AUG	1645	20	7.	17	AUG	0100	53	56.	17	AUG	0915	86	7.	17	AUG	1730	119
0.	16	AUG	1700	21	7.	17	AUG	0115	54	42.	17	AUG	0930	87	7.	17	AUG	1745	120
0.	16	AUG	1715	22	7.	17	AUG	0130	55	35.	17	AUG	0945	88	7.	17	AUG	1800	121
0.	16	AUG	1730	23	7.	17	AUG	0145	56	30.	17	AUG	1000	89	7.	17	AUG	1815	122
0.	16	AUG	1745	24	7.	17	AUG	0200	57	27.	17	AUG	1015	90	7.	17	AUG	1830	123

HYDROGRAPH AT	PRE	.12	1	FLOW TIME	88.	134.	172.	211.	255.	294.
+					12.25	12.25	12.25	12.25	12.25	12.25
HYDROGRAPH AT	A	.04	1	FLOW TIME	77.	102.	121.	141.	163.	183.
+					12.00	12.00	12.00	12.00	12.00	12.00
HYDROGRAPH AT	B	.02	1	FLOW TIME	24.	32.	39.	45.	52.	59.
+					12.00	12.00	12.00	12.00	12.00	12.00
HYDROGRAPH AT	C	.01	1	FLOW TIME	10.	14.	16.	19.	22.	25.
+					12.00	12.00	12.00	12.00	12.00	12.00
HYDROGRAPH AT	D	.01	1	FLOW TIME	11.	14.	17.	20.	23.	26.
+					12.25	12.25	12.25	12.25	12.25	12.25
HYDROGRAPH AT	E	.01	1	FLOW TIME	11.	14.	17.	20.	23.	26.
+					12.25	12.25	12.25	12.25	12.25	12.25
HYDROGRAPH AT	F	.01	1	FLOW TIME	10.	14.	16.	19.	22.	25.
+					12.00	12.00	12.00	12.00	12.00	12.00
HYDROGRAPH AT	G	.01	1	FLOW TIME	15.	20.	24.	28.	33.	37.
+					12.00	12.00	12.00	12.00	12.00	12.00
HYDROGRAPH AT	H	.02	1	FLOW TIME	25.	34.	42.	50.	58.	66.
+					12.00	12.00	12.00	12.00	12.00	12.00
8 COMBINED AT	TOTAL	.12	1	FLOW TIME	181.	240.	288.	337.	391.	440.
+					12.00	12.00	12.00	12.00	12.00	12.00
ROUTED TO	PONDA	.12	1	FLOW TIME	71.	103.	131.	158.	190.	224.
+					12.50	12.50	12.50	12.50	12.50	12.25

*** NORMAL END OF HEC-1 ***

STAGE	IN FEET	STAGE	IN FEET	STAGE	IN FEET	STAGE	IN FEET	STAGE	IN FEET	STAGE	IN FEET
1	209.31	1	209.61	1	209.84	1	210.05	1	210.26	1	210.47
	12.50		12.50		12.50		12.50		12.50		12.25

Mike Green

FINAL BOUNDARY CLOSURE FOR WEBB BUSINESS PARK

PNT.#

6	North: 10159.6914 Line Course: S01°12'14"E	East: 9936.4475 Length: 161.1937
68	North: 9998.5333 Line Course: S00°50'50"E	East: 9939.8342 Length: 319.3944
29	North: 9679.1738 Line Course: S00°50'50"E	East: 9944.5569 Length: 100.0000
28	North: 9579.1847 Line Course: S00°50'50"E	East: 9946.0355 Length: 480.5846
27	North: 9098.6526 Line Course: S88°59'40"W	East: 9953.1416 Length: 957.9998
24	North: 9081.8404 Line Course: S00°50'50"E	East: 8995.2893 Length: 388.8600
22	North: 8693.0229 Line Course: S89°07'32"W	East: 9001.0391 Length: 88.2500
	North: 8691.6761 Curve Length: 258.5018 Delta: 25°56'41" Chord: 256.2989 Course In: S00°52'28"E	East: 8912.7994 Radius: 570.8700 Tangent: 131.5057 Course: S76°09'12"W Course Out: N26°49'09"W
	RP North: 8120.8725	East: 8921.5116
20	End North: 8630.3369 Line Course: S63°10'51"W	East: 8663.9487 Length: 52.9267
19	North: 8606.4576 Line Course: S63°10'51"W	East: 8616.7151 Length: 61.0533
72	North: 8578.9118 Curve Length: 38.9769 Delta: 3°54'43" Chord: 38.9694 Course In: S26°49'09"E	East: 8562.2290 Radius: 570.8700 Tangent: 19.4960 Course: S61°13'29"W Course Out: N30°43'52"W
	RP North: 8069.4475	East: 8819.7919
18	End North: 8560.1530 Curve Length: 225.1654 Delta: 22°35'56" Chord: 223.7086 Course In: S30°43'52"E	East: 8528.0718 Radius: 570.8700 Tangent: 114.0653 Course: S47°58'10"W Course Out: N53°19'48"W
	RP North: 8069.4475	East: 8819.7919
17	End North: 8410.3741 Line Course: S89°07'32"W	East: 8361.9037 Length: 982.9000
15	North: 8395.3737	East: 7379.1181

Line Course: N00°49'19"W Length: 1558.0028

13 North: 9953.2162 East: 7356.7684
 Line Course: N88°59'40"E Length: 1321.8301

11 North: 9976.4134 East: 8678.3949
 Line Course: N01°03'44"W Length: 165.2024

10 North: 10141.5874 East: 8675.3323
 Line Course: N89°10'39"E Length: 1261.2453

6 North: 10159.6924 East: 9936.4477

Perimeter: 8422.0872 Area: 3,477,588 Sq Ft 79.83 Ac.

Mapcheck Closure - (Uses listed courses, radii, and deltas)

Error Closure: 0.0011 Course: N08°44'15"E

Error North: 0.00105 East : 0.00016

Precision 1: 7,656,442.9091