



LEE'S SUMMIT MISSOURI

DESIGN & CONSTRUCTION MANUAL DESIGN CRITERIA MODIFICATION REQUEST

PROJECT NAME: Newberry Lot 294

ADDRESS: 1460 SE Broadway Drive

PERMIT NUMBER: TBD

OWNER'S NAME: Choyce LLC

TO: Deputy Director of Public Works / City Engineer

In accordance with the City of Lee's Summit's Design and Construction Manual (DCM), I wish to apply for a modification to one or more provisions of the code as I feel that the spirit and intent of the DCM is observed and the public health, welfare and safety are assured. The following articulates my request for your review and action. (NOTE: Cite specific code sections, justification and all appropriate supporting documents.)

We are requesting a waiver of Stormwater Management Facilities as identified in KC Metro APWA Section 5608. The construction of an onsite attenuation system was determined to create higher peak discharge rates downstream during lower return event storms, i.e. flood producing storms. See attachment A for additional information which supports the requested waiver. The macro/micro storm drainage study may be referenced for additional details. A hydrodynamic separator will be added on site for BMP mitigation purposes.

SUBMITTED BY:

NAME: Engineering Solutions
ADDRESS: 50 SE 30th Street
CITY, STATE, ZIP: Lee's Summit, MO 64082
Email: mschlicht@es-kc.com

() OWNER (X) OWNER'S AGENT
PHONE #: 816-623-9888
SIGNATURE: [Signature]

SUE PYLES, P.E.
DEVELOPMENT ENGINEERING MANAGER
SIGNATURE: _____

() APPROVAL () DENIAL
DATE: _____

JEFF THORN, P.E.
DEPUTY DIRECTOR OF WATER UTILITIES
SIGNATURE: _____

() APPROVED () DENIAL
DATE: _____

GEORGE M. BINGER III, P.E.
DEPUTY DIRECTOR OF PUBLIC WORKS / CITY ENGINEER
SIGNATURE: _____

() APPROVED () DENIAL
DATE: _____

COMMENTS: _____

Attachment A

Based on SCS Methodology as outlined in APWA 5600 the proposed site will reduce peak discharge rates downstream during low return period storms. Onsite attenuation would create higher peak discharge rates downstream during low return period storms as outlined in Table 8-1 below which was taken from the macro/micro stormwater report. Please refer to the complete report if additional/complimentary information is desired.

Table 8-1 Proposed Peak Discharge Rates

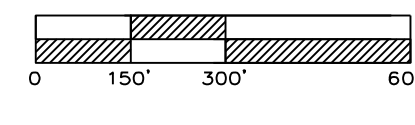
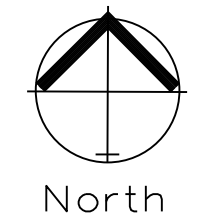
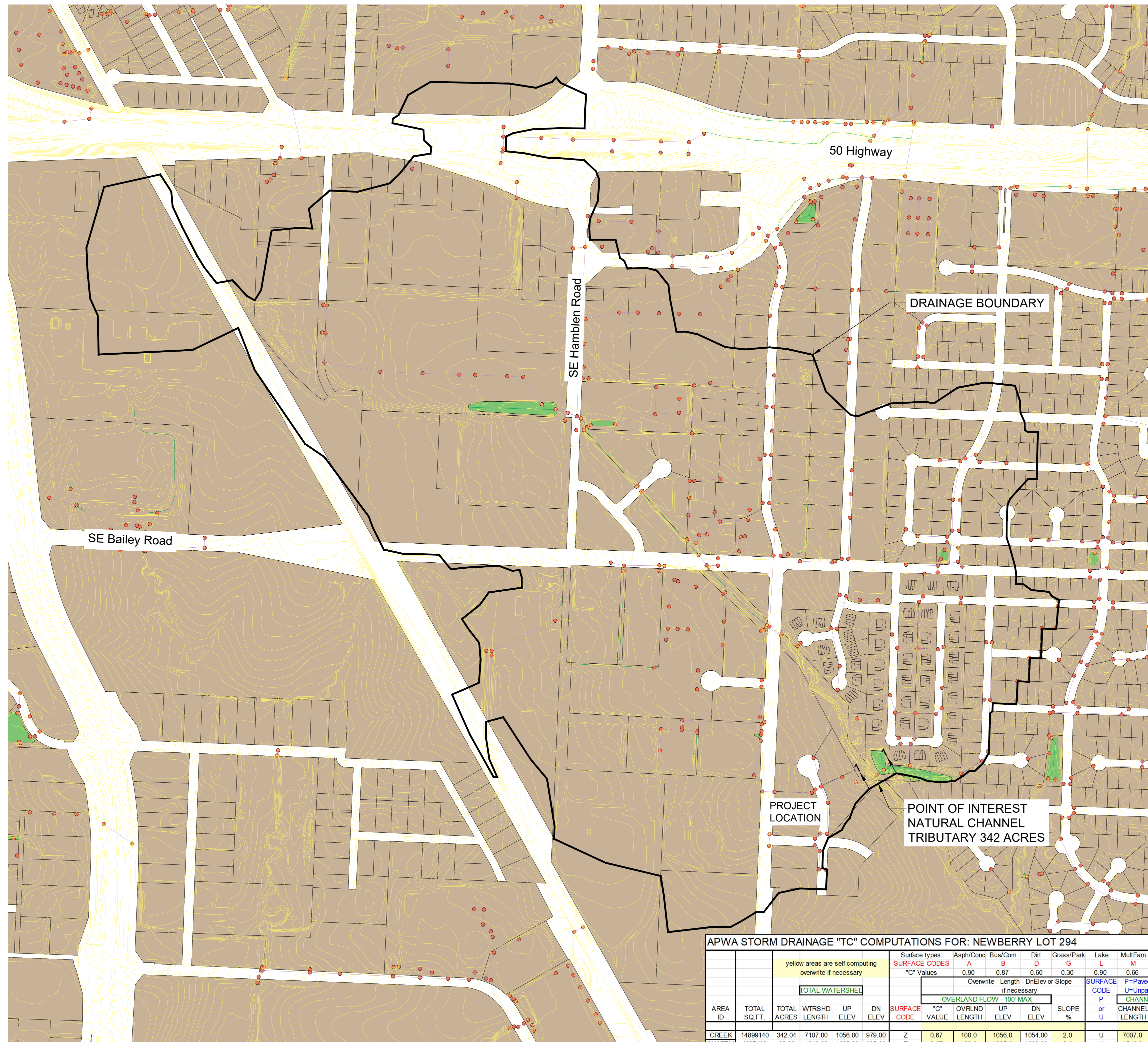
Hydrograph Desc.	Q2 (cfs)	Q10 (cfs)	Q100 (cfs)
Combined Undetained*	384.14	638.91	1012.39
Combined Detained**	383.82	639.46	1013.87

* Combined Undetained = Prop West + Prop East + Prop East 1 + (Watershed – Lot 294)

** Combined Detained = Prop West + Prop East + Detained East 1 + (Watershed – Lot 294)

See Drainage Map attached on next Sheet.





OVERALL WATERSHED MAP
SCALE: 1" = 300'

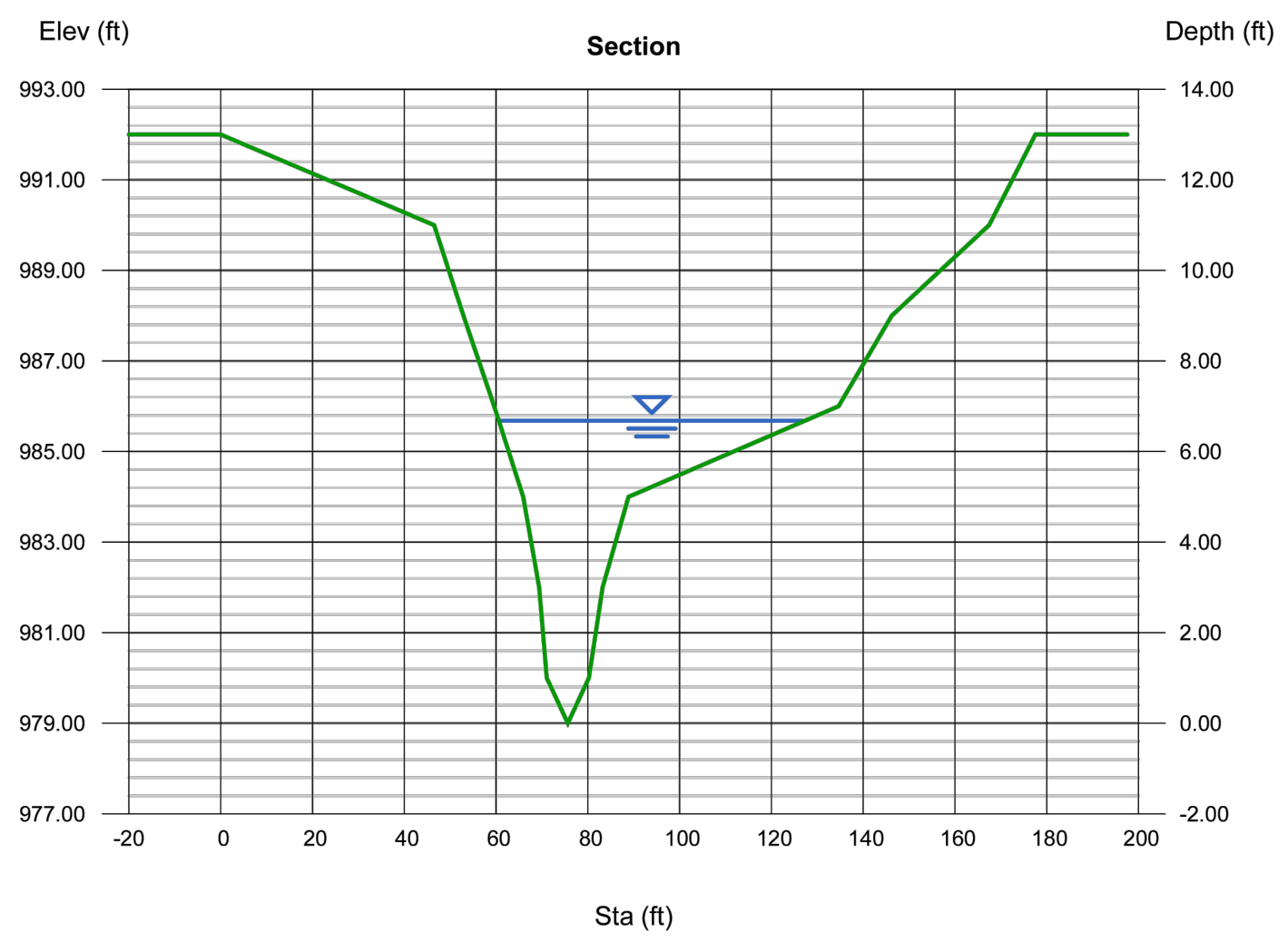
Channel Report

Hydrflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Thursday, Feb 15 2024

Creek Cross Section 1-1

User-defined	=	979.00	Highlighted	=	6.68
Invert Elev (ft)	=	1.07	Depth (ft)	=	1.017
Slope (%)	=	0.034	Q (cfs)	=	139.66
N-Value	=		Area (sqft)	=	7.28
			Velocity (ft/s)	=	69.65
Calculations			Wetted Perim (ft)	=	6.45
Compute by:	Known Q		Crit Depth, Yc (ft)	=	66.72
Known Q (cfs)	=	1016.59	Top Width (ft)	=	7.50
			EGL (ft)	=	

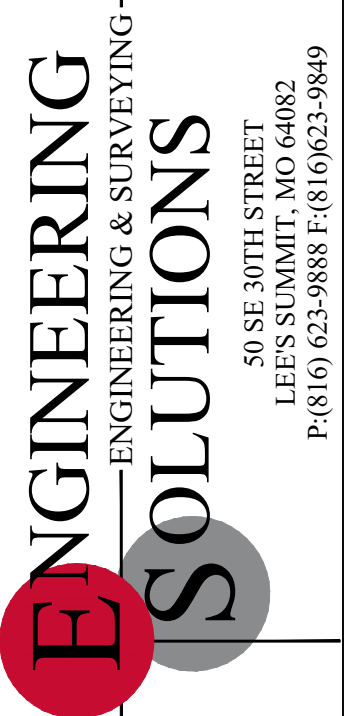
(Sta, El, n)-(Sta, El, n)...
(0.00, 992.00)-(46.52, 990.00, 0.035)-(52.90, 988.00, 0.035)-(59.58, 986.00, 0.035)-(65.92, 984.00, 0.035)-(69.39, 982.00, 0.030)-(71.06, 980.00, 0.030)
-175.54, 979.00, 0.030)-(80.22, 980.00, 0.030)-(83.22, 982.00, 0.030)-(88.86, 984.00, 0.035)-(134.64, 986.00, 0.035)-(145.23, 988.00, 0.035)-(167.45, 990.00, 0.035)
-177.53, 992.00, 0.035)



* NO ATTENUATION WAS ACCOUNTED FOR IN THE WATERSHED.
** 100-YR PEAK DISCHARGE RATE CALCULATED BY SCS METHODS.

APWA STORM DRAINAGE "TC" COMPUTATIONS FOR: NEWBERRY LOT 294

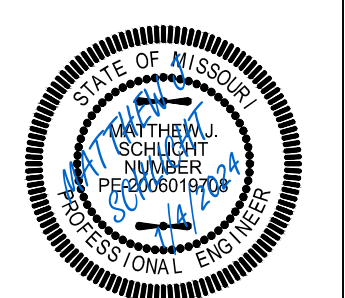
AREA ID	TOTAL SQ.FT.	TOTAL ACRES	WTRSHD LENGTH	UP ELEV	DN ELEV	SURFACE CODE	SURFACE TYPES										TC COMPUTATION									
							A	B	D	G	L	M	S	U	Z	Other	Cal	Used	Cal	Total	Intensity	Intensity	CFS	CFS	AREA	
CREEK SYSTEM	14899140	342.04	7107.00	1056.00	979.00	Z	0.67	100.0	1056.0	1054.00	2.0	U	7007.0	1054.0	979.0	1.07	1.7	6.1	6.1	70.0	76.1	2.1	3.1	485.05	893.61	CREEK SYSTEM
	1397198	32.08	1640.00	1035.60	995.00	Z	0.67	100.0	1035.6	1033.60	2.0	U	1540.0	1033.6	995.0	2.51	2.6	6.1	6.1	10.0	16.2	5.2	7.2	111.65	192.50	



Professional Registration
Missouri
Engineering 200502186-D
Surveying 200500319-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Project:
NEWBERRY
LANDINGS,LS1MO
Issue Date:
January 4, 2024

OVERALL WATERSHED MAP
Construction Plans for:
Lot 294, Newberry Landings First Plat
Lee's Summit, Jackson County, Missouri



Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226

REVISIONS

EXHIBIT