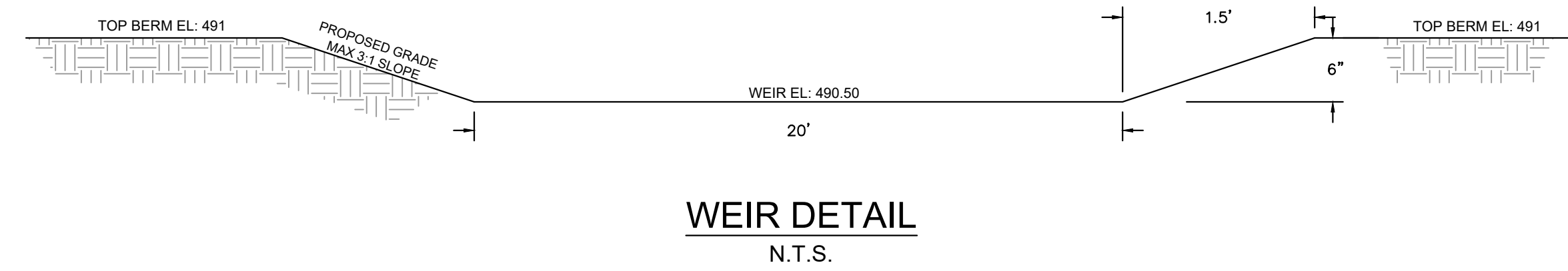


**SANITARY SEWER PROFILE**

SCALE: HORIZ.: 1" = 50'  
VERT.: 1" = 10'

**15YR.-20MIN. HYDRAULICS**

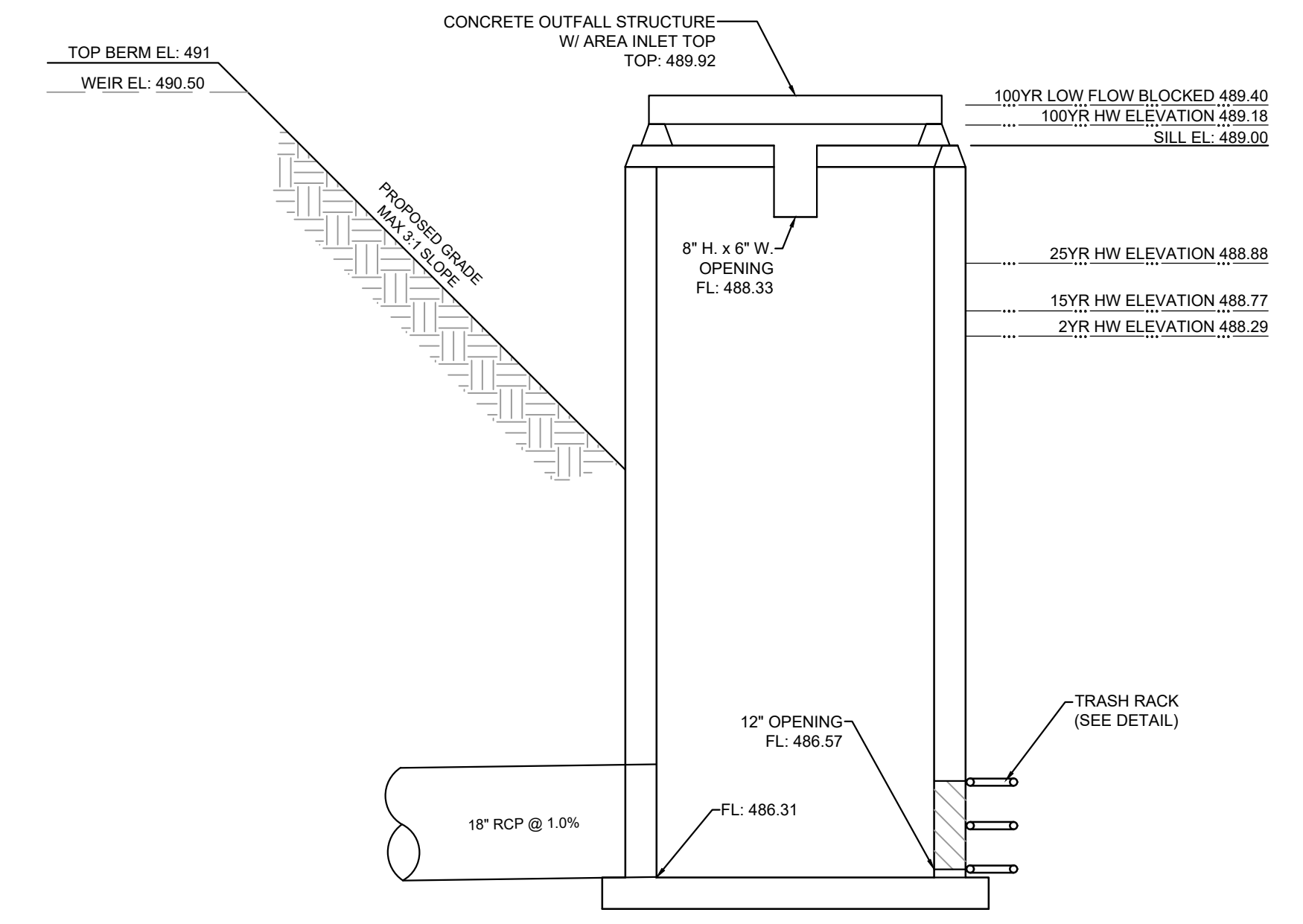
Line No.	Line ID	DnStm Ln No	Invert Dn (ft)	Gnd/Rim El Dn (ft)	Invert Up (ft)	Gnd/Rim El Up (ft)	Line Length (ft)	Line Slope (%)	Line Size (in)	n-val Pipe	Known Q (cfs)	Capac Full (cfs)	Flow Rate (cfs)	Vel Ave (ft/s)	Energy Loss (ft)	Minor Loss (ft)	HGL Dn (ft)	HGL Up (ft)	Rim-Hw (ft)
1	1-2	Outfall	485.98	488.95	486.31	489.92	33.136	1.00	24	0.013	13.02	22.57	13.02	4.33	0.106	0.32	487.98	488.04	1.57
2	3-4	Outfall	487.00	489.21	487.27	490.98	22.825	1.18	18	0.013	4.04	11.42	9.07	5.29	0.161	0.50	488.50	488.61	1.87
3	4-5	2	487.27	490.98	488.22	491.42	94.506	1.01	15	0.013	2.48	6.47	5.03	4.10	0.574	0.13	489.11	489.69	1.60
4	5-6	3	488.22	491.42	489.13	492.32	91.000	1.00	12	0.013	2.55	3.56	2.55	3.25	0.467	0.16	489.82	490.28	1.87
5	7-8	Outfall	489.00	491.21	489.15	492.07	29.991	0.50	18	0.013	3.22	7.43	3.22	1.86	0.026	0.06	490.50	490.52	1.49



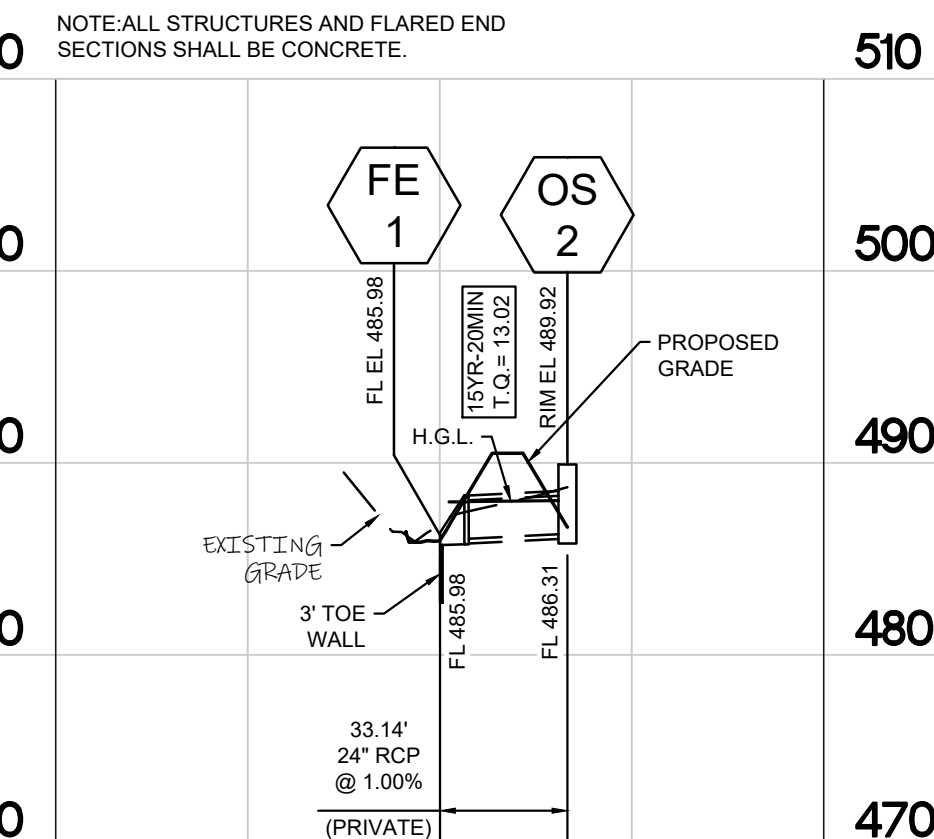
**WEIR DETAIL**  
N.T.S.

**STORM SEWER PIPES**

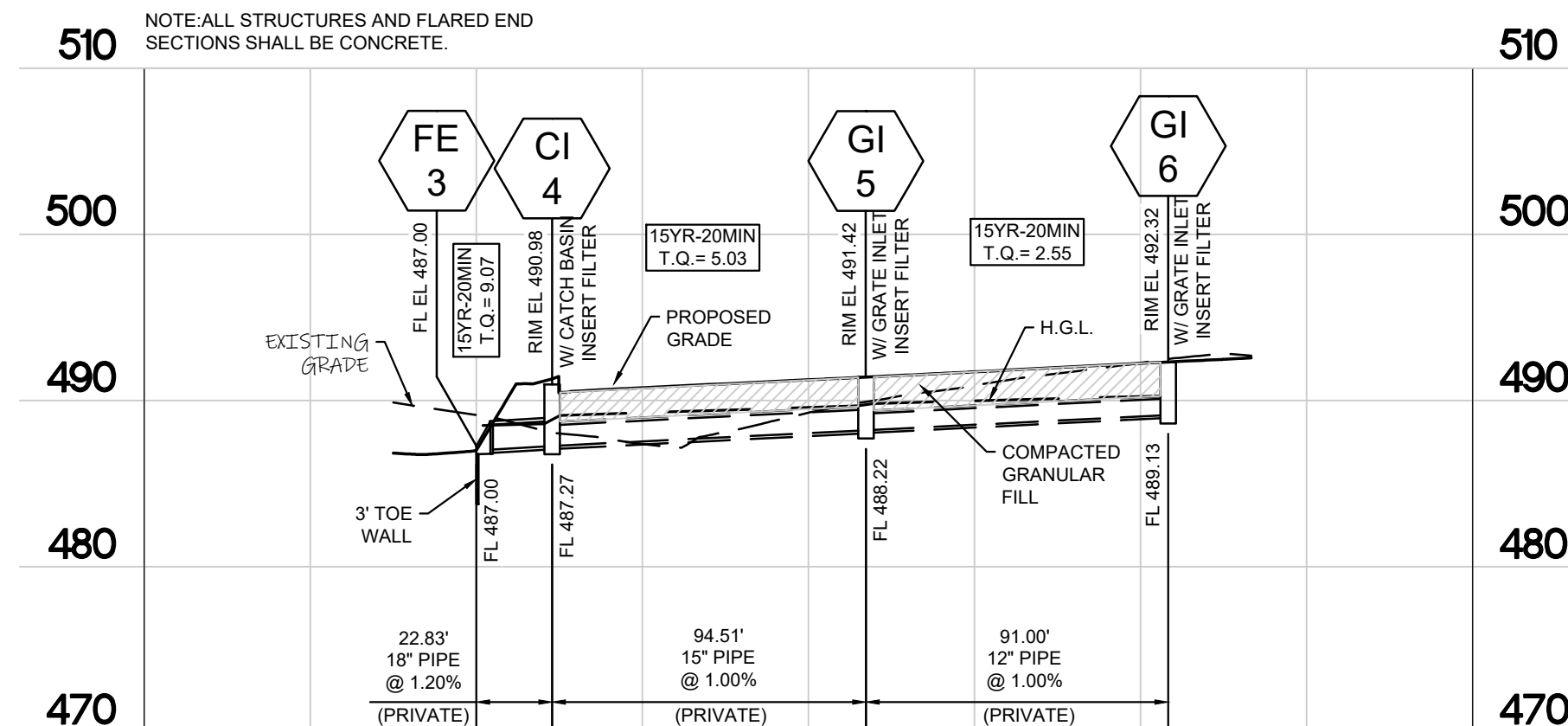
- A. Reinforced Class III Concrete Culvert Pipe.
- B. Dual wall and triple wall polypropylene pipe and fittings 12-inch through 60-inch diameter shall conform to ASTM F2764, except as otherwise specified herein. Dual wall polypropylene pipe (12-30") shall have a smooth interior and annular exterior corrugations. Triple wall polypropylene pipe (30" - 60") shall have a smooth interior and exterior with annular inner corrugations. Pipe shall have a minimum pipe stiffness of 46 psi when tested in accordance with ASTM D2412. Pipe shall be joined with an integral bell and spigot joint on all sizes. The joints shall be watertight in accordance with ASTM D3212. The spigot shall have two gaskets meeting the requirements of ASTM F477. The gaskets shall be installed by the pipe manufacturer and shall be covered with a removable, protective wrap to ensure the gaskets are free from debris. A joint lubricant shall be used on the gasket and pipe bell during assembly. Pipe shall have a reinforced bell with a polymer composite band installed by the manufacturer.



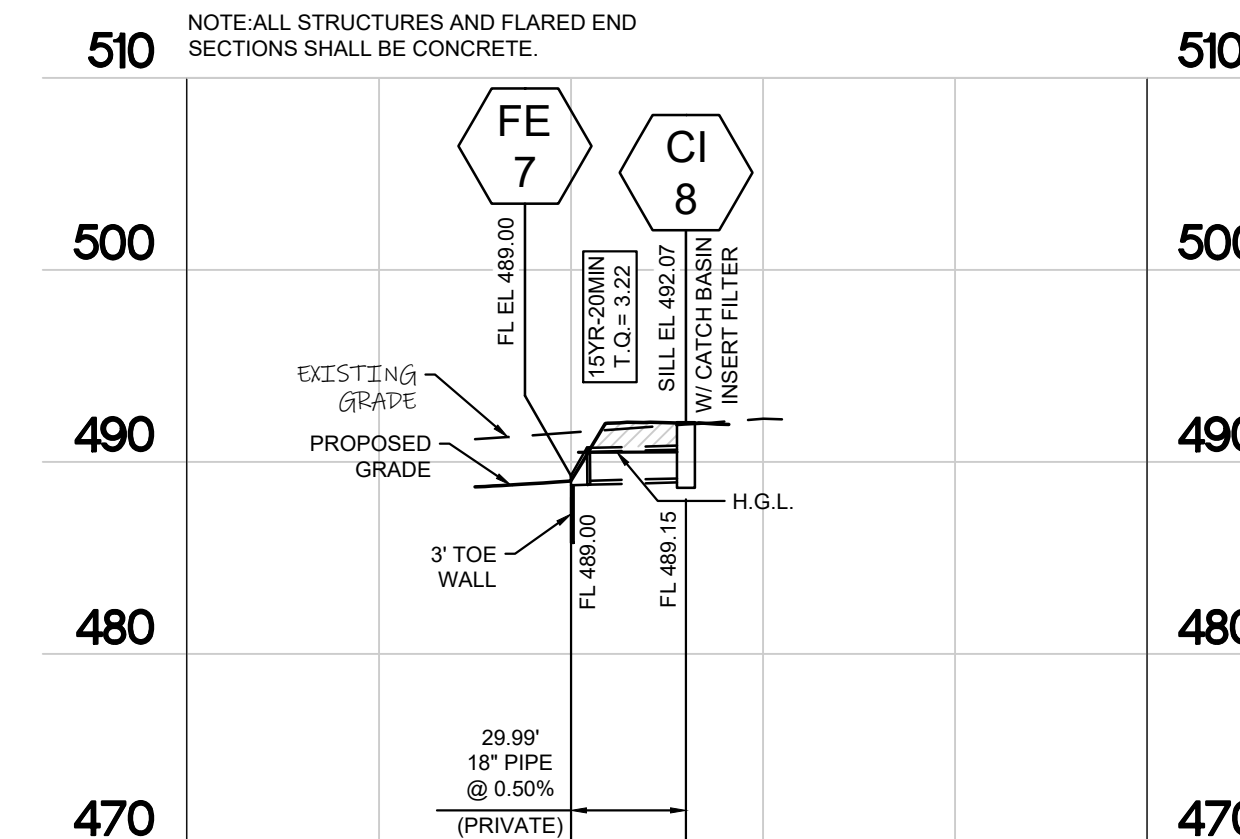
**OUTFALL STRUCTURE DIMENSIONAL DETAIL**  
N.T.S.



**BASIN SECTION A-A**



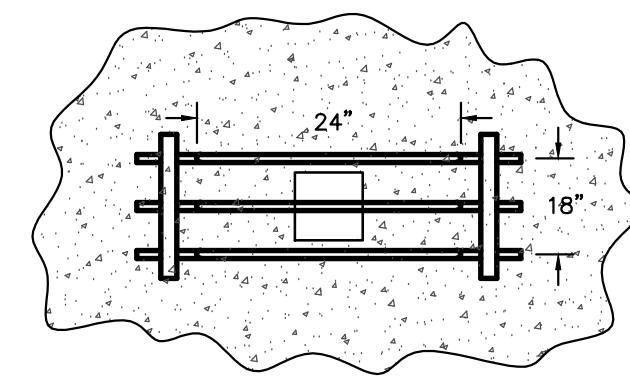
**BASIN SECTION B-B**



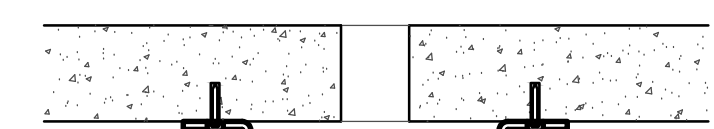
**BASIN SECTION C-C**

**STORM SEWER PROFILES**

SCALE: HORIZ.: 1" = 50'  
VERT.: 1" = 10'



**HORIZONTAL VIEW**



**TOP VIEW**

**TRASH RACK DETAIL**  
N.T.S.

**BASIN FLOOD ELEVATIONS:**

2 YR. - 20 MIN.	= 488.29
15 YR. - 20 MIN.	= 488.77
25 YR. - 20 MIN.	= 488.88
100YR. - 20 MIN.	= 489.18

**BASIN SECTIONS**

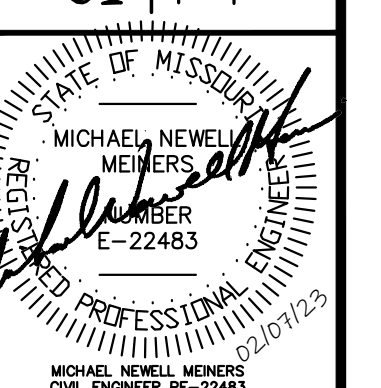
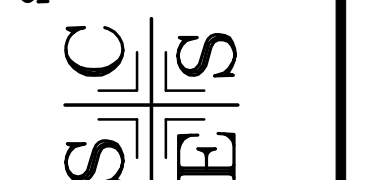
SCALE: HORIZ.: 1" = 50'  
VERT.: 1" = 10'

PLANNING & DEVELOPMENT DIVISION FILE NUMBER: 22-003084  
SITE PLAN APPROVAL: MAY 5, 2022  
CONDITIONAL USE PERMIT APPROVAL: MAY 12, 2022

PROPERTY OWNER: MW REAL ESTATE HOLDINGS LLC  
1601 W. OLD RTE 66  
STAFFORD MO, 65757

**CONSTRUCTION PLANS**  
**TRANSLAND TRUCKING**  
3480 E. TERRA LANE  
O'FALLON MO, 63366  
PROFILES

**ST. CHARLES ENGINEERING & SURVEYING, INC.**  
801 S. FIFTH STREET, SUITE 202  
ST. CHARLES, MO 63301  
TEL: (636) 947-0607 FAX: (636) 947-2448  
ST. CHARLES ENGINEERING AND SURVEYING, INC.  
CONSTRUCTION ENGINEERING AND SURVEYING  
MISSOURI STATE CERTIFICATES OF AUTHORITY - 001647 & 000379



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**DATE**  
02/07/2023  
**5**

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UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THEREFORE THEIR LOCATIONS SHALL BE CONSIDERED APPROXIMATE ONLY. THE VERIFICATION OF THE LOCATION OF ALL UNDERGROUND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND SHALL BE LOCATED PRIOR TO ANY GRADING AND/OR CONSTRUCTION OF IMPROVEMENTS.