EARTHWORK SUMMARY

INTERSTATE 17
E DUGAS ROAD TO MP 275
CORDES JUNCTION - FLAGSTAFF HIGHWAY
PROJECT NO.017 YV 269 F0616 01C
FEDERAL AID NO. 017-B(239)T

PREPARED BY
STANLEY CONSULTANTS INC.
September 2, 2026

EARTHWORK FACTORS

I-17, E Dugas Rd to MP 275

Station	Shrink
OVERALL PROJECT	10%

Note: No field investigation nor geotechnical report for this project; 10% shrink is assumed for calculations.

For this "Earthwork Package", shrinkage of all the excavated quantities will be in accordance with the above table.

EXCAVATION

I-17, E Dugas Rd to MP 275

Roadway Excavation

	Excavation (End Areas)	Total	
>	Detours & I-17 NB*	**794 CY**	*See Exhibit A*
>	I-17 SB Cst CL	**9,535 CY**	*See Exhibit A*
	Detours Removal (Included in Item 2020152)	**9,770 CY**	*See Embankment Volumes placed for North and South Detours included in Exhibit A*

*Quantity includes excavation for I-17 SB North and South Detours construction.

ASPHALT CONCRETE REMOVAL

ASPHALT CONCRETE REMOVAL	**0 CY**	**-**

The AC removal is paid under Item No. 2020029, and falls outside limits of SB I-17 construction. AC removal is only for installation of the temporary crossovers. Therefore, no adjustment is needed for AC removal.

EXCAVATION SUMMARY

>	Total Roadway Excavation	**10,329 CY**

EMBANKMENT

I-17, E Dugas Rd to MP 275

Total Embankment

Detours & I-17 NB*	**10,553 CY**	*See Exhibit A*
I-17 SB Cst CL	**707 CY**	
Detours Removal (Included in Item 2020152)	**0 CY**	

*Quantity includes embankment for I-17 SB North and South Detours construction and I-17 NB TCB locations.

I-17 SB Detours Total Embankment

I-17 SB Detours & I-17 NB (TCB Locations)	**10,553 CY**	*See Exhibit A*
Gound Compaction (0 Ft)		

Subtotal Embankment	**10,553 CY**
Total Shrinkage (10%)	**79 CY**
Total Embankment & Shrink	**10,632 CY**

I-17 SB Total Embankment

I-17 SB	**707 CY**	*See Exhibit A*
Gound Compaction (0 Ft)		

Subtotal Embankment	**707 CY**
Total Shrinkage (10%)	**79 CY**
Total Embankment & Shrink	**786 CY**

EXCESS MATERIAL / WASTE

I-17, E Dugas Rd to MP 275

EXCESS MATERIAL / WASTE

I-17 SB	**8,749 CY**
I-17 SB Detour Removal	**9,770 CY**

Excess Material / Waste	**18,519 CY**

Earthwork Table as Shown on the Design Data Sheet of the Final Plans

Description	EARTHWORK QUANTITIES			
	Detours & I-17 NB	I-17 SB Cst CL	Detours Removal	Total
Roadway Excavation	794	9,535	-	10,329 CY
Total Shrinkage (10%)	79	79	-	158 CY
Excavation for Detour Removal *		-	9,770	9,770 CY
Pipe Excavation	132	-	-	132 CY
Total Shrinkage (10%)	13		-	13 CY
Embankment	-	707	-	707 CY
Embankment for I-17 NB (TCB Locations)	783	-	-	783 CY
Embankment for Detour Construction	9,770	-	-	9,770 CY
Trench Backfill	23			23 CY
Pipe Backfill (Imported Material)	43	-	-	43 CY
Pipe Bedding (Imported Material)	28	-	-	28 CY
Total Embankment Needed	10,576	707	-	11,283 CY
Total Borrow (In Place)	9,742	-	-	9,742 CY
Waste	-	8,749	9,770	18,519 CY

NOTES:

> Pay Item

* Detour Excavation paid for under Bid Item 2020152 - Remove Detour

Ground Compaction Calculation

Ground Compaction			
Loction	**Area**	**Depth**	**Volume**
Detours & I-17 NB	0	0.0 Ft	0 CF
I-17 SB Cst CL	0	0.0 Ft	0 CF
Detours Removal	0	0.0 Ft	0 CF
Total	**0 SF**		**0 CF**

0 CY

Note:
All fill embankments are within existing roadway prism (except Detours); ground compaction is not expected.

EXHIBIT A

COMMON EXCAVATION
&
COMMON EMBANKMENT

Description: The "Common Excavation" and "Common Embankment" quantities are derived from the roadway cross-sections using the average end area method. The "Common Excavation" quantity is included in the "Total Excavation". The "Common Embankment" quantity is included in the "Total Embankment".

Baseline Station	Station Quantities								
	Cut				Fill				Mass
	Factor	Area	Volume	Adjusted	Factor	Area	Volume	Adjusted	Ordinate
3579+00.00	1	1.881	0	0	1	0.215	0	0	0
3580+00.00	1	1.335	5.954	5.954	1	0.015	0.426	0.426	5.528
3581+00.00	1	1.556	5.354	5.354	1	0	0.029	0.029	10.854
3582+00.00	1	2.165	6.892	6.892	1	0	0	0	17.746
3583+00.00	1	1.473	6.737	6.737	1	0.093	0.172	0.172	24.311
3584+00.00	1	1.662	5.805	5.805	1	0.176	0.499	0.499	29.616
3585+00.00	1	1.757	6.331	6.331	1	1.057	2.284	2.284	33.664
3586+00.00	1	1.82	6.625	6.625	1	0.466	2.819	2.819	37.47
3587+00.00	1	1.751	6.613	6.613	1	0.404	1.61	1.61	42.473
3588+00.00	1	1.759	6.499	6.499	1	0.109	0.949	0.949	48.024
3589+00.00	1	2.046	7.046	7.046	1	0	0.201	0.201	54.869
3590+00.00	1	1.542	6.644	6.644	1	0.133	0.246	0.246	61.268
3591+00.00	1	1.288	5.24	5.24	1	0.094	0.42	0.42	66.088
3592+00.00	1	1.524	5.206	5.206	1	0.191	0.528	0.528	70.766
3593+00.00	1	1.466	5.536	5.536	1	0.982	2.172	2.172	74.13
3594+00.00	1	1.435	5.372	5.372	1	0	1.818	1.818	77.683
3595+00.00	1	1.11	4.713	4.713	1	0.188	0.348	0.348	82.048
3596+00.00	1	1.625	5.065	5.065	1	1.597	3.305	3.305	83.808
3597+00.00	1	1.952	6.624	6.624	1	0.463	3.815	3.815	86.618
3598+00.00	1	2.278	7.834	7.834	1	0.2	1.228	1.228	93.224
3599+00.00	1	36.061	70.999	70.999	1	0.332	0.986	0.986	163.237
3600+00.00	1	29.845	122.048	122.048	1	0.891	2.265	2.265	283.02
3601+00.00	1	13.066	79.465	79.465	1	1.039	3.575	3.575	358.911
3602+00.00	1	0.385	24.911	24.911	1	0.23	2.35	2.35	381.471
3603+00.00	1	0.325	1.316	1.316	1	0.786	1.882	1.882	380.906
3604+00.00	1	1.229	2.879	2.879	1	0.66	2.678	2.678	381.107
3605+00.00	1	2.6	7.092	7.092	1	0.546	2.234	2.234	385.965
3606+00.00	1	2.538	9.517	9.517	1	0.498	1.933	1.933	393.548
3607+00.00	1	1.285	7.08	7.08	1	0.562	1.963	1.963	398.666
3608+00.00	1	1.828	5.764	5.764	1	1.165	3.2	3.2	401.23
3609+00.00	1	1.659	6.458	6.458	1	1.465	4.872	4.872	402.816
3610+00.00	1	2.251	7.241	7.241	1	1.033	4.627	4.627	405.431
3611+00.00	1	1.769	7.444	7.444	1	0.501	2.84	2.84	410.034
3612+00.00	1	1.786	6.583	6.583	1	0.71	2.241	2.241	414.376
3613+00.00	1	2.823	8.536	8.536	1	0.822	2.836	2.836	420.077
3614+00.00	1	2.952	10.695	10.695	1	0.775	2.956	2.956	427.815
3615+00.00	1	1.938	9.054	9.054	1	2.278	5.654	5.654	431.216
3616+00.00	1	1.708	6.752	6.752	1	1.162	6.371	6.371	431.596
3617+00.00	1	1.77	6.441	6.441	1	1.073	4.14	4.14	433.898
3618+00.00	1	3.21	9.222	9.222	1	0.787	3.446	3.446	439.674
3619+00.00	1	1.909	9.479	9.479	1	0.869	3.066	3.066	446.086
3620+00.00	1	1.339	6.015	6.015	1	0.704	2.912	2.912	449.19
3621+00.00	1	65.428	123.644	123.644	1	0.078	1.447	1.447	571.387
3622+00.00	1	0.949	122.92	122.92	1	0.04	0.217	0.217	694.09
3623+00.00	1	1.288	4.142	4.142	1	0	0.073	0.073	698.158
3624+00.00	1	0	2.385	2.385	1	1.017	1.884	1.884	698.659
3625+00.00	1	1.645	3.046	3.046	1	0	1.884	1.884	699.821
3626+00.00	1	1.864	6.499	6.499	1	0	0	0	706.32
3627+00.00	1	1.402	6.049	6.049	1	0.142	0.262	0.262	712.107
3628+00.00	1	1.267	4.943	4.943	1	0.2	0.633	0.633	716.416
3629+00.00	1	0.783	3.797	3.797	1	0.511	1.318	1.318	718.895
3630+00.00	1	1.054	3.401	3.401	1	0.186	1.291	1.291	721.005
3631+00.00	1	1.133	4.05	4.05	1	0.277	0.857	0.857	724.198

3632+00.00	1	1.37	4.635	4.635	1	0.457	1.359	1.359	727.474
3633+00.00	1	1.019	4.424	4.424	1	0.415	1.614	1.614	730.284
3634+00.00	1	0.23	2.313	2.313	1	0.479	1.655	1.655	730.942
3635+00.00	1	46.166	85.919	85.919	1	0.822	2.409	2.409	814.452
3636+00.00	1	57.819	192.566	192.566	1	0.113	1.731	1.731	1005.29
3637+00.00	1	54.229	207.497	207.497	1	1.331	2.674	2.674	1210.11
3638+00.00	1	70.715	231.378	231.378	1	0.214	2.861	2.861	1438.63
3639+00.00	1	51.436	226.207	226.207	1	0.147	0.668	0.668	1664.17
3640+00.00	1	1.94	98.846	98.846	1	0	0.272	0.272	1762.74
3641+00.00	1	1.289	5.98	5.98	1	0	0	0	1768.72
3642+00.00	1	0.925	4.1	4.1	1	0.099	0.183	0.183	1772.64
3643+00.00	1	0.499	2.638	2.638	1	0	0.183	0.183	1775.09
EQN: 3643+06.30 (BK) = 3643+37.17(AH)									
3644+00.00	1	2.202	3.459	3.459	1	0.06	0.077	0.077	1778.47
3645+00.00	1	1.182	6.267	6.267	1	0.826	1.641	1.641	1783.1
3646+00.00	1	1.047	4.129	4.129	1	1.394	4.111	4.111	1783.12
3647+00.00	1	2.327	6.249	6.249	1	1.264	4.923	4.923	1784.44
3648+00.00	1	2.203	8.389	8.389	1	1.785	5.647	5.647	1787.19
3649+00.00	1	1.897	7.593	7.593	1	2.576	8.076	8.076	1786.7
3650+00.00	1	2.596	8.32	8.32	1	1.089	6.788	6.788	1788.23
3651+00.00	1	1.791	8.124	8.124	1	1.369	4.553	4.553	1791.81
3652+00.00	1	1.93	6.891	6.891	1	0.989	4.367	4.367	1794.33
3653+00.00	1	2.048	7.366	7.366	1	1.235	4.118	4.118	1797.58
3654+00.00	1	0.876	5.414	5.414	1	0.241	2.734	2.734	1800.26
3655+00.00	1	0.905	3.298	3.298	1	0.212	0.839	0.839	1802.72
3656+00.00	1	1.103	3.718	3.718	1	0.385	1.105	1.105	1805.33
3657+00.00	1	1.76	5.301	5.301	1	0.622	1.865	1.865	1808.77
3658+00.00	1	2.148	7.237	7.237	1	1.033	3.066	3.066	1812.94
3659+00.00	1	1.432	6.63	6.63	1	1.305	4.331	4.331	1815.24
3660+00.00	1	35.023	67.509	67.509	1	1.62	5.417	5.417	1877.33
3661+00.00	1	43.158	144.78	144.78	1	2.863	8.302	8.302	2013.81
3662+00.00	1	52.439	177.032	177.032	1	1.855	8.738	8.738	2182.1
3663+00.00	1	53.149	195.534	195.534	1	1.001	5.289	5.289	2372.34
3664+00.00	1	48.753	188.708	188.708	1	1.473	4.582	4.582	2556.47
3665+00.00	1	50.493	183.789	183.789	1	3.049	8.374	8.374	2731.88
3666+00.00	1	93.507	266.667	266.667	1	1.006	7.51	7.51	2991.04
3667+00.00	1	1.766	176.43	176.43	1	0.986	3.69	3.69	3163.78
3668+00.00	1	1.767	6.542	6.542	1	2.654	6.742	6.742	3163.58
3669+00.00	1	2.916	8.673	8.673	1	0.871	6.529	6.529	3165.73
3670+00.00	1	2.784	10.557	10.557	1	3.059	7.279	7.279	3169
3671+00.00	1	1.661	8.231	8.231	1	1.021	7.556	7.556	3169.68
3672+00.00	1	1.574	5.99	5.99	1	1.225	4.159	4.159	3171.51
3673+00.00	1	1.903	6.44	6.44	1	2.023	6.014	6.014	3171.94
3674+00.00	1	15.09	31.47	31.47	1	5.132	13.25	13.25	3190.16
3675+00.00	1	12.834	51.712	51.712	1	4.304	17.474	17.474	3224.39
3676+00.00	1	11.771	45.566	45.566	1	1.744	11.2	11.2	3258.76
3677+00.00	1	14.765	49.142	49.142	1	0.44	4.045	4.045	3303.86
3678+00.00	1	13.982	53.236	53.236	1	0.682	2.077	2.077	3355.02
3679+00.00	1	16.309	56.096	56.096	1	3.416	7.589	7.589	3403.52
3680+00.00	1	24.099	74.83	74.83	1	0.363	6.999	6.999	3471.35
3681+00.00	1	38.831	116.536	116.536	1	1.293	3.068	3.068	3584.82
3682+00.00	1	42.844	151.249	151.249	1	0.272	2.899	2.899	3733.17
3683+00.00	1	45.459	163.523	163.523	1	1.54	3.356	3.356	3893.34
3684+00.00	1	1.6	87.145	87.145	1	2.522	7.523	7.523	3972.96
3685+00.00	1	2.401	7.409	7.409	1	0.707	5.98	5.98	3974.39
3686+00.00	1	1.509	7.242	7.242	1	0	1.31	1.31	3980.32

3687+00.00	1	1.205	5.027	5.027	1	0	0	0	3985.35
3688+00.00	1	2.29	6.473	6.473	1	0	0	0	3991.82
3689+00.00	1	2.516	8.899	8.899	1	0.017	0.032	0.032	4000.69
3690+00.00	1	2.752	9.755	9.755	1	0	0.032	0.032	4010.41
3691+00.00	1	2.286	9.33	9.33	1	0	0	0	4019.74
3692+00.00	1	3.176	10.114	10.114	1	0.001	0.001	0.001	4029.86
3693+00.00	1	1.719	9.064	9.064	1	0.023	0.044	0.044	4038.88
3694+00.00	1	1.665	6.266	6.266	1	0.434	0.847	0.847	4044.3
3695+00.00	1	2.737	8.152	8.152	1	0	0.804	0.804	4051.64
3696+00.00	1	2.413	9.538	9.538	1	0.056	0.103	0.103	4061.08
3697+00.00	1	2.371	8.86	8.86	1	0.023	0.146	0.146	4069.79
3698+00.00	1	2.501	9.023	9.023	1	0.055	0.145	0.145	4078.67
3699+00.00	1	1.912	8.172	8.172	1	0.555	1.13	1.13	4085.71
3700+00.00	1	1.488	6.297	6.297	1	0.042	1.106	1.106	4090.9
3701+00.00	1	0.746	4.139	4.139	1	1.268	2.426	2.426	4092.62
3702+00.00	1	0.357	2.043	2.043	1	1.095	4.377	4.377	4090.28
3703+00.00	1	1.596	3.617	3.617	1	0.626	3.187	3.187	4090.71
3704+00.00	1	1.299	5.361	5.361	1	0.671	2.402	2.402	4093.67
3705+00.00	1	1.805	5.748	5.748	1	0	1.244	1.244	4098.18
3706+00.00	1	2.513	7.997	7.997	1	0.01	0.019	0.019	4106.15
3707+00.00	1	2.878	9.984	9.984	1	0	0.018	0.018	4116.12
3708+00.00	1	2.521	9.998	9.998	1	0.03	0.056	0.056	4126.06
3709+00.00	1	52.588	102.054	102.054	1	0	0.056	0.056	4228.06
3710+00.00	1	47.689	185.697	185.697	1	0	0	0	4413.76
3711+00.00	1	41.196	164.602	164.602	1	0	0	0	4578.36
3712+00.00	1	42.008	154.082	154.082	1	0	0	0	4732.44
3713+00.00	1	68.212	204.112	204.112	1	0	0	0	4936.55
3714+00.00	1	2.627	131.184	131.184	1	0	0	0	5067.74
3715+00.00	1	2.422	9.351	9.351	1	0.003	0.005	0.005	5077.08
3716+00.00	1	2.922	9.897	9.897	1	0	0.005	0.005	5086.97
3717+00.00	1	2.827	10.646	10.646	1	0	0	0	5097.62
3718+00.00	1	2.9	10.605	10.605	1	0.006	0.011	0.011	5108.22
3719+00.00	1	2.548	10.088	10.088	1	0.055	0.112	0.112	5118.19
3720+00.00	1	2.449	9.252	9.252	1	0	0.101	0.101	5127.34
3721+00.00	1	2.635	9.415	9.415	1	0	0	0	5136.76
3722+00.00	1	2.728	9.933	9.933	1	0	0	0	5146.69
3723+00.00	1	2.677	10.009	10.009	1	0	0	0	5156.7
3724+00.00	1	2.169	8.974	8.974	1	0.005	0.01	0.01	5165.66
3725+00.00	1	2.446	8.547	8.547	1	0	0.01	0.01	5174.2
3726+00.00	1	2.057	8.34	8.34	1	0.002	0.003	0.003	5182.54
3727+00.00	1	2.773	8.945	8.945	1	0	0.003	0.003	5191.48
3728+00.00	1	2.684	10.105	10.105	1	0	0	0	5201.58
3729+00.00	1	2.513	9.623	9.623	1	0	0	0	5211.21
3730+00.00	1	2.205	8.737	8.737	1	0	0	0	5219.94
3731+00.00	1	2.035	7.852	7.852	1	0	0	0	5227.8
3732+00.00	1	2.296	8.021	8.021	1	0	0.001	0.001	5235.82
3733+00.00	1	1.797	7.58	7.58	1	0	0.001	0.001	5243.39
3734+00.00	1	1.328	5.787	5.787	1	0.375	0.695	0.695	5248.49
3735+00.00	1	2.39	6.886	6.886	1	0.391	1.42	1.42	5253.95
3736+00.00	1	2.418	8.904	8.904	1	2.635	5.605	5.605	5257.25
3737+00.00	1	2.055	8.282	8.282	1	0.575	5.944	5.944	5259.59
3738+00.00	1	1.746	7.038	7.038	1	0.472	1.938	1.938	5264.69
3739+00.00	1	55.627	106.246	106.246	1	0.413	1.639	1.639	5369.3
3740+00.00	1	0	103.012	103.012	1	0.756	2.166	2.166	5470.14
3741+00.00	1	1.566	2.901	2.901	1	0.315	1.984	1.984	5471.06
3742+00.00	1	2.247	7.062	7.062	1	0.193	0.94	0.94	5477.18

3743+00.00	1	2.841	9.423	9.423	1	0.259	0.836	0.836	5485.77
3744+00.00	1	2.343	9.601	9.601	1	0.212	0.871	0.871	5494.5
3745+00.00	1	2.233	8.474	8.474	1	0.181	0.728	0.728	5502.25
3746+00.00	1	2.456	8.684	8.684	1	0.335	0.956	0.956	5509.97
3747+00.00	1	1.972	8.2	8.2	1	0.366	1.298	1.298	5516.87
3748+00.00	1	1.582	6.581	6.581	1	0.69	1.956	1.956	5521.5
3749+00.00	1	1.175	5.106	5.106	1	0.923	2.987	2.987	5523.62
3750+00.00	1	2.257	6.356	6.356	1	0.277	2.222	2.222	5527.75
3751+00.00	1	2.546	8.894	8.894	1	0.62	1.662	1.662	5534.98
3752+00.00	1	3.4	11.01	11.01	1	0.903	2.822	2.822	5543.17
3753+00.00	1	2.827	11.531	11.531	1	0.539	2.671	2.671	5552.03
3754+00.00	1	3.114	11.002	11.002	1	2.466	5.565	5.565	5557.47
3755+00.00	1	3.179	11.653	11.653	1	2.053	8.369	8.369	5560.75
3756+00.00	1	2.609	10.718	10.718	1	2.004	7.512	7.512	5563.96
3757+00.00	1	3.857	11.974	11.974	1	0	3.711	3.711	5572.22
3758+00.00	1	1.834	10.538	10.538	1	0.84	1.555	1.555	5581.21
3759+00.00	1	2.758	8.503	8.503	1	1.267	3.902	3.902	5585.81
3760+00.00	1	33.47	67.089	67.089	1	1.034	4.262	4.262	5648.63
3761+00.00	1	2.434	66.489	66.489	1	2.528	6.597	6.597	5708.53
3762+00.00	1	2.532	9.197	9.197	1	3.155	10.525	10.525	5707.2
3763+00.00	1	1.939	8.279	8.279	1	1.909	9.379	9.379	5706.1
3764+00.00	1	0	3.59	3.59	1	0.721	4.87	4.87	5704.82
3765+00.00	1	2.186	4.049	4.049	1	1.235	3.621	3.621	5705.25
3766+00.00	1	1.976	7.709	7.709	1	1.144	4.405	4.405	5708.55
3767+00.00	1	1.601	6.625	6.625	1	0.778	3.558	3.558	5711.62
3768+00.00	1	2.508	7.609	7.609	1	0.978	3.25	3.25	5715.98
3769+00.00	1	2.331	8.961	8.961	1	0.804	3.299	3.299	5721.64
3770+00.00	1	3.093	10.044	10.044	1	1.64	4.526	4.526	5727.16
3771+00.00	1	3.177	11.611	11.611	1	1.456	5.734	5.734	5733.03
3772+00.00	1	1.949	9.493	9.493	1	0.905	4.373	4.373	5738.15
3773+00.00	1	2.95	9.072	9.072	1	1.568	4.58	4.58	5742.65
3774+00.00	1	1.243	7.763	7.763	1	0.91	4.589	4.589	5745.82
3775+00.00	1	1.645	5.347	5.347	1	0.509	2.627	2.627	5748.54
3776+00.00	1	1.883	6.533	6.533	1	0	0.942	0.942	5754.13
3777+00.00	1	1.539	6.337	6.337	1	1.608	2.978	2.978	5757.49
3778+00.00	1	2.344	7.192	7.192	1	0.735	4.34	4.34	5760.34
3779+00.00	1	1.624	7.35	7.35	1	0	1.362	1.362	5766.33
3780+00.00	1	1.39	5.582	5.582	1	0	0	0	5771.91
3781+00.00	1	0.846	4.14	4.14	1	0.553	1.025	1.025	5775.03
3782+00.00	1	17.553	34.072	34.072	1	0.153	1.307	1.307	5807.79
3783+00.00	1	0.057	32.613	32.613	1	0.785	1.735	1.735	5838.67
3784+00.00	1	0.389	0.826	0.826	1	0.233	1.884	1.884	5837.61
3785+00.00	1	0.589	1.811	1.811	1	0.841	1.989	1.989	5837.43
3786+00.00	1	1.064	3.06	3.06	1	0.173	1.878	1.878	5838.62
3787+00.00	1	1.474	4.699	4.699	1	1.032	2.231	2.231	5841.08
3788+00.00	1	1.417	5.354	5.354	1	0.919	3.613	3.613	5842.83
3789+00.00	1	0.73	3.977	3.977	1	0.204	2.08	2.08	5844.72
3790+00.00	1	0.979	3.166	3.166	1	0	0.377	0.377	5847.51
3791+00.00	1	1.2	4.035	4.035	1	0	0	0	5851.55
3792+00.00	1	1.339	4.7	4.7	1	0	0	0	5856.25
3793+00.00	1	1.155	4.618	4.618	1	0	0	0	5860.86
3794+00.00	1	1.025	4.038	4.038	1	0.213	0.394	0.394	5864.51
3795+00.00	1	1.711	5.068	5.068	1	0.982	2.213	2.213	5867.36
3796+00.00	1	1.11	5.225	5.225	1	0.179	2.151	2.151	5870.44
3797+00.00	1	0.789	3.518	3.518	1	0.191	0.685	0.685	5873.27
3798+00.00	1	0.766	2.88	2.88	1	0.213	0.748	0.748	5875.4

3799+00.00	1	0.864	3.018	3.018	1	0.197	0.759	0.759	5877.66
3800+00.00	1	1.134	3.699	3.699	1	0.381	1.07	1.07	5880.29
3801+00.00	1	1.28	4.47	4.47	1	0.463	1.562	1.562	5883.2
3802+00.00	1	1.998	6.069	6.069	1	0.356	1.517	1.517	5887.75
3803+00.00	1	1.465	6.412	6.412	1	0	0.659	0.659	5893.5
3804+00.00	1	1.018	4.598	4.598	1	0.23	0.426	0.426	5897.68
3805+00.00	1	1.2	4.107	4.107	1	0.207	0.81	0.81	5900.97
3806+00.00	1	1.463	4.932	4.932	1	0.242	0.831	0.831	5905.07
3807+00.00	1	1.175	4.886	4.886	1	1.16	2.596	2.596	5907.36
3808+00.00	1	1.125	4.26	4.26	1	0.2	2.519	2.519	5909.1
3809+00.00	1	1.318	4.525	4.525	1	0.242	0.819	0.819	5912.81
3810+00.00	1	1.11	4.496	4.496	1	0.031	0.506	0.506	5916.8
3811+00.00	1	1.389	4.628	4.628	1	0	0.057	0.057	5921.37
3812+00.00	1	31.944	61.728	61.728	1	0.271	0.501	0.501	5982.6
3813+00.00	1	24.927	105.316	105.316	1	0.298	1.054	1.054	6086.86
3814+00.00	1	23.078	88.898	88.898	1	0.893	2.206	2.206	6173.55
3815+00.00	1	16.386	73.082	73.082	1	9.439	19.132	19.132	6227.5
3816+00.00	1	18.081	63.826	63.826	1	0	17.479	17.479	6273.85
3817+00.00	1	16.397	63.848	63.848	1	0.235	0.436	0.436	6337.26
3818+00.00	1	37.624	100.038	100.038	1	0.264	0.924	0.924	6436.37
3819+00.00	1	38.609	141.172	141.172	1	0.053	0.586	0.586	6576.96
3820+00.00	1	36.873	139.783	139.783	1	0.132	0.342	0.342	6716.4
3821+00.00	1	1.683	71.4	71.4	1	1.043	2.175	2.175	6785.63
3822+00.00	1	2.801	8.303	8.303	1	0.96	3.709	3.709	6790.22
3823+00.00	1	2.503	9.821	9.821	1	0.68	3.037	3.037	6797
3824+00.00	1	2.125	8.569	8.569	1	0	1.26	1.26	6804.31
3825+00.00	1	2.615	8.778	8.778	1	0	0.001	0.001	6813.09
3826+00.00	1	2.209	8.934	8.934	1	0.216	0.4	0.4	6821.62
3827+00.00	1	1.902	7.613	7.613	1	0.085	0.557	0.557	6828.68
3828+00.00	1	3.594	10.177	10.177	1	0.223	0.569	0.569	6838.29
3829+00.00	1	2.006	10.371	10.371	1	0.004	0.42	0.42	6848.24
3830+00.00	1	1.788	7.025	7.025	1	0.107	0.206	0.206	6855.06
3831+00.00	1	2.459	7.863	7.863	1	0	0.198	0.198	6862.72
3832+00.00	1	1.87	8.016	8.016	1	0.108	0.201	0.201	6870.54
3833+00.00	1	1.954	7.082	7.082	1	0.041	0.277	0.277	6877.34
3834+00.00	1	102.328	193.116	193.116	1	0.021	0.116	0.116	7070.34
3835+00.00	1	62.542	305.315	305.315	1	0.04	0.115	0.115	7375.54
3836+00.00	1	3.378	122.074	122.074	1	0.832	1.615	1.615	7496
3837+00.00	1	1.959	9.883	9.883	1	0.06	1.651	1.651	7504.23
3838+00.00	1	3.916	10.88	10.88	1	0.375	0.805	0.805	7514.31
3839+00.00	1	4.551	15.68	15.68	1	0	0.694	0.694	7529.29
3840+00.00	1	2.147	12.403	12.403	1	0.417	0.772	0.772	7540.93
3841+00.00	1	3.766	10.951	10.951	1	0	0.772	0.772	7551.1
3842+00.00	1	3.01	12.548	12.548	1	0.001	0.002	0.002	7563.65
3843+00.00	1	2.024	9.323	9.323	1	0	0.002	0.002	7572.97
3844+00.00	1	3.069	9.432	9.432	1	0.12	0.221	0.221	7582.18
3845+00.00	1	29.892	61.038	61.038	1	0.122	0.447	0.447	7642.77
3846+00.00	1	26.431	104.302	104.302	1	0.252	0.693	0.693	7746.38
3847+00.00	1	30.308	105.072	105.072	1	0	0.467	0.467	7850.99
3848+00.00	1	26.167	104.583	104.583	1	0	0	0	7955.57
3849+00.00	1	26.844	98.169	98.169	1	0	0	0	8053.74
3850+00.00	1	32.403	109.716	109.716	1	0	0	0	8163.46
3851+00.00	1	0.223	60.418	60.418	1	0	0	0	8223.87
3852+00.00	1	1.338	2.89	2.89	1	0.014	0.026	0.026	8226.74
3853+00.00	1	3.018	8.067	8.067	1	0	0.026	0.026	8234.78
3854+00.00	1	3.335	11.765	11.765	1	0	0	0	8246.54

3855+00.00	1	3.622	12.884	12.884	1	0	0	0	8259.43
3856+00.00	1	3.09	12.431	12.431	1	0	0	0	8271.86
3857+00.00	1	2.934	11.156	11.156	1	0	0	0	8283.01
3858+00.00	1	2.46	9.989	9.989	1	0	0	0	8293
3859+00.00	1	1.391	7.132	7.132	1	0.031	0.058	0.058	8300.08
3860+00.00	1	1.858	6.017	6.017	1	0.335	0.677	0.677	8305.42
3861+00.00	1	1.702	6.592	6.592	1	0.84	2.176	2.176	8309.83
3862+00.00	1	1.288	5.536	5.536	1	0.922	3.264	3.264	8312.11
3863+00.00	1	2.008	6.103	6.103	1	0.767	3.128	3.128	8315.08
3864+00.00	1	2.053	7.52	7.52	1	0.308	1.989	1.989	8320.61
3865+00.00	1	2.173	7.827	7.827	1	0.205	0.949	0.949	8327.49
3866+00.00	1	1.348	6.521	6.521	1	0	0.38	0.38	8333.63
3867+00.00	1	1.49	5.256	5.256	1	0	0	0	8338.89
3868+00.00	1	1.154	4.897	4.897	1	0.344	0.637	0.637	8343.15
3869+00.00	1	1.21	4.378	4.378	1	0.542	1.64	1.64	8345.88
3870+00.00	1	1.591	5.187	5.187	1	0.606	2.126	2.126	8348.94
3871+00.00	1	1.052	4.894	4.894	1	0.326	1.726	1.726	8352.11
3872+00.00	1	1.246	4.256	4.256	1	0.374	1.295	1.295	8355.07
3873+00.00	1	1.551	5.181	5.181	1	0.365	1.367	1.367	8358.89
3874+00.00	1	0.991	4.708	4.708	1	0.379	1.378	1.378	8362.22
3875+00.00	1	0.802	3.319	3.319	1	0.161	1.001	1.001	8364.54
3876+00.00	1	1.24	3.78	3.78	1	0.449	1.129	1.129	8367.19
3877+00.00	1	1.92	5.852	5.852	1	0	0.831	0.831	8372.21
3878+00.00	1	1.633	6.58	6.58	1	0	0	0	8378.79
3879+00.00	1	1.597	5.982	5.982	1	0	0	0	8384.77
3880+00.00	1	2.234	7.094	7.094	1	0	0	0	8391.86
3881+00.00	1	3	9.692	9.692	1	0	0	0	8401.56
3882+00.00	1	1.65	8.611	8.611	1	0	0	0	8410.17
3883+00.00	1	1.216	5.307	5.307	1	0.254	0.471	0.471	8415
3884+00.00	1	2.257	6.431	6.431	1	0	0.471	0.471	8420.96
3885+00.00	1	3.157	10.026	10.026	1	0	0	0	8430.99
3886+00.00	1	1.165	8.005	8.005	1	0.357	0.661	0.661	8438.33
3887+00.00	1	1.502	4.939	4.939	1	0.341	1.293	1.293	8441.98
3888+00.00	1	1.565	5.68	5.68	1	0.611	1.764	1.764	8445.89
3889+00.00	1	1.672	5.994	5.994	1	0.551	2.153	2.153	8449.73
3890+00.00	1	1.217	5.349	5.349	1	0.197	1.385	1.385	8453.7
3891+00.00	1	63.995	120.763	120.763	1	0.482	1.256	1.256	8573.2
3892+00.00	1	1.385	121.074	121.074	1	0.143	1.157	1.157	8693.12
3893+00.00	1	1.397	5.152	5.152	1	0.197	0.63	0.63	8697.64
3894+00.00	1	1.927	6.157	6.157	1	0.199	0.734	0.734	8703.07
3895+00.00	1	2.087	7.434	7.434	1	0.235	0.804	0.804	8709.7
3896+00.00	1	1.773	7.148	7.148	1	0.198	0.802	0.802	8716.04
3897+00.00	1	2.23	7.413	7.413	1	0.388	1.085	1.085	8722.37
3898+00.00	1	1.701	7.28	7.28	1	0.125	0.95	0.95	8728.7
3899+00.00	1	1.957	6.775	6.775	1	0.393	0.96	0.96	8734.52
3900+00.00	1	2.313	7.909	7.909	1	0.393	1.456	1.456	8740.97
3901+00.00	1	2.14	8.248	8.248	1	0.598	1.836	1.836	8747.38
3902+00.00	1	2.559	8.702	8.702	1	0	1.108	1.108	8754.97
3903+00.00	1	2.352	9.094	9.094	1	0.297	0.55	0.55	8763.52
3904+00.00	1	2.656	9.275	9.275	1	0	0.55	0.55	8772.24
3905+00.00	1	2.326	9.226	9.226	1	0.137	0.254	0.254	8781.22
3906+00.00	1	2.161	8.31	8.31	1	0.122	0.479	0.479	8789.05
3907+00.00	1	2.222	8.117	8.117	1	1.988	3.907	3.907	8793.26
3908+00.00	1	1.996	7.811	7.811	1	0.27	4.182	4.182	8796.88
3909+00.00	1	2.239	7.842	7.842	1	0.95	2.26	2.26	8802.47
3910+00.00	1	1.028	6.049	6.049	1	2.168	5.774	5.774	8802.74

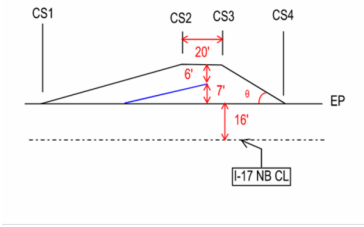
3911+00.00	1	0	1.903	1.903	1	0.789	5.476	5.476	8799.17
3912+00.00	1	1.533	2.839	2.839	1	0	1.461	1.461	8800.55
3913+00.00	1	2.098	6.724	6.724	1	0	0	0	8807.27
3914+00.00	1	2.605	8.708	8.708	1	0	0	0	8815.98
3915+00.00	1	3.742	11.753	11.753	1	0	0	0	8827.73
Grand Total:			9534.66	9534.658			706.928	706.928	

Baseline Station	Station Quantities								
	Cut				Fill				Mass
	Factor	Area	Volume	Adjusted	Factor	Area	Volume	Adjusted	Ordinate
20+32.00	1	4.27	0	0	1	0	0	0	0
21+00.00	1	5.973	12.899	12.899	1	0	0	0	12.892
22+00.00	1	5.301	20.878	20.878	1	0.673	1.246	1.246	32.523
23+00.00	1	4.243	17.674	17.674	1	5.081	10.656	10.656	39.54
24+00.00	1	8.559	23.707	23.707	1	7.213	22.767	22.767	40.483
25+00.00	1	15.376	44.324	44.324	1	6.5	25.394	25.394	59.415
26+00.00	1	17.306	60.522	60.522	1	1.667	15.124	15.124	104.814
27+00.00	1	1.809	35.398	35.398	1	27.407	53.841	53.841	86.371
28+00.00	1	0.336	3.972	3.972	1	93.709	224.289	224.289	-133.95
29+00.00	1	0	0.622	0.622	1	169.24	486.943	486.943	-620.26
30+00.00	1	0	0	0	1	271.304	815.822	815.822	-1436.1
31+00.00	1	0	0	0	1	583.893	1583.698	1583.698	-3019.8
32+00.00	1	0	0	0	1	357.41	1743.154	1743.154	-4762.9
33+00.00	1	0.438	0.811	0.811	1	371.667	1350.143	1350.143	-6112.3
34+00.00	1	18.324	34.744	34.744	1	240.009	1132.733	1132.733	-7210.3
35+00.00	1	10.622	53.604	53.604	1	140.109	703.922	703.922	-7860.6
36+00.00	1	11.385	40.754	40.754	1	30.601	316.130	316.130	-8136
37+00.00	1	11.139	41.711	41.711	1	2.299	60.926	60.926	-8155.2
38+00.00	1	13.964	46.487	46.487	1	0	4.257	4.257	-8112.9
39+00.00	1	10.8	45.859	45.859	1	0	0	0	-8067.1
39+10.98	1	0	2.195	2.195	1	0	0	0	-8064.9
Grand Total:			486.163	486.163			8551.044	8551.044	

Baseline Station	Station Quantities								
	Cut				Fill				Mass
	Factor	Area	Volume	Adjusted	Factor	Area	Volume	Adjusted	Ordinate
20+97.40	1	0.74	0	0	1	0	0	0	0
21+00.00	1	12.926	0.658	0.658	1	0	0	0	0.652
22+00.00	1	12.853	47.739	47.739	1	0	0	0	48.39
23+00.00	1	25.648	71.298	71.298	1	0	0	0	119.688
24+00.00	1	1.553	50.372	50.372	1	21.66	40.111	40.111	129.949
25+00.00	1	0	2.876	2.876	1	101.085	227.306	227.306	-94.48
26+00.00	1	11.002	20.374	20.374	1	125.907	420.356	420.356	-494.46
27+00.00	1	10.416	39.663	39.663	1	70.009	362.807	362.807	-817.61
28+00.00	1	10.187	38.154	38.154	1	11.092	150.187	150.187	-929.64
28+87.57	1	12.485	36.766	36.766	1	0	17.988	17.988	-910.89
Grand Total:			307.900	307.900			1218.754	1218.754	

TCB No. 1	Station	CS Area (SF)	Length (Ft)	Fill Volume (CF)
	3936+55	0	203	1725.5
	3938+58	17	20	300.0
	3938+78	13	48	312.0
	3939+26	0		0.0

TCB Subtotal Fill Volume (CF):	**2,337.50**	
TCB Subtotal Fill Volume (CY):	87	**(for each location)**
Total Fill Volume (CY):	**783**	**(Total 9 locations)**



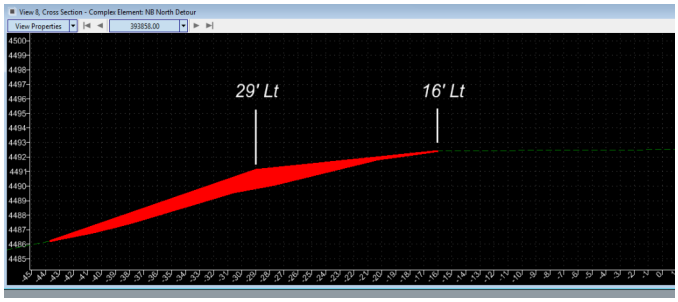
Notes:

Terminal Pad standard C - 10.23 dimensions were used for reference.

TFB grading must be 10:1 or flatter made of compacted dirt.

Theta is 15°

See the Traffic Control and Key Map Sheet (T-02.02)



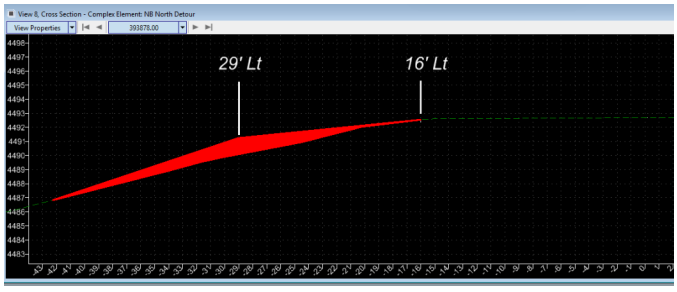


EXHIBIT B

DRAINAGE EXCAVATION
PIPE EXCAVATION
PIPE BACKFILL
PIPE BEDDING
TRENCH BACKFILL

Upstream Pipe Station	Ref. No.	Length	ID (in)	H1 (ft)	H2 (ft)	Havg (ft)	Pipe OD (ft)	Pipe OD Area (sf)	Trench Width (ft)	Pipe Void (cy)	Pipe Excavation (cy)	Pipe Backfill (cy)	Pipe Bedding (cy)	Trench Backfill (cy)	Comment
17 Detour North Sta 25+36.7	119	12	36	0.00	0.00	0.00	3.67	10.55	4.67	5	9	3	2	0	Trench
Exst SB I-17 Sta 3952+00	120	11	24	0.00	0.00	0.00	2.50	4.91	3.50	2	4	2	1	0	Trench
17 Detour South Sta 25+70.5	122	8	30	0.00	0.00	0.00	3.08	7.46	4.08	2	4	2	1	0	Trench
									TOTAL	9	17	7	4	0	

Stanley Consultants

Design: RRV Date: 09/23/2025
Check: JPM Date: 09/23/2025

Upstream Pipe Station	Ref. No.	Length	ID (in)	H1 (ft)	H2 (ft)	Havg (ft)	Pipe OD (ft)	Pipe OD Area (sf)	Trench Width (ft)	Pipe Void (cy)	Pipe Excavation (cy)	Pipe Backfill (cy)	Pipe Bedding (cy)	Trench Backfill (cy)	Comment
I-17 Detour North Sta 31+06.39	118	178	24	2.00	2.00	2.00	2.50	4.91	3.50	32	115	36	24	23	Trench
									TOTAL	32	115	36	24	23	