





These plans are conditionally approved as submitted or noted during plan review and are subject to field inspection. Approved plans must be kept on site and are needed for all inspections. No changes or modifications to these plans or changes require a revision permit with the revised plans. Trade permits are required for trade work e.g. Electrical or Plumbing

HPRB Review - Timothy Denney - 04-09-24  
Zoning Review - Ernesto Warren - 04-09-24  
Structural Review - Tong Li - 04-09-2024  
DOE SE-SW Review - Saba Garavari - 04-09-24

**VKA CAPITOL**  
ENGINEERS \* PLANNERS \* LANDSCAPE ARCHITECTS \* SURVEYORS \* GEOMATICS

BRIAN RUHL  
ruhl@vkapitol.com

PROJECT COORDINATOR:  
VKA CAPITOL, LLC 4910 MASSACHUSETTS AVENUE, NW, SUITE 100  
WASHINGTON, DC 20016 \* PHONE: 202.244.4140  
\* WWW.VKACAPITOL.COM

MARET SCHOOL  
PROPOSED ATHLETIC FIELDS  
SQUARE 2319, LOT B32  
5901 UTAH AVE NW  
WASHINGTON, D.C. 20015

SITE DETAILS

VKA CAPITOL REVISIONS

#	DATE	DESCRIPTION

DATE: 23-FEB-2023

DES: KUO DWN: BUR

SCALE: AS SHOWN

PROJECT/FILE NO: VC0626D

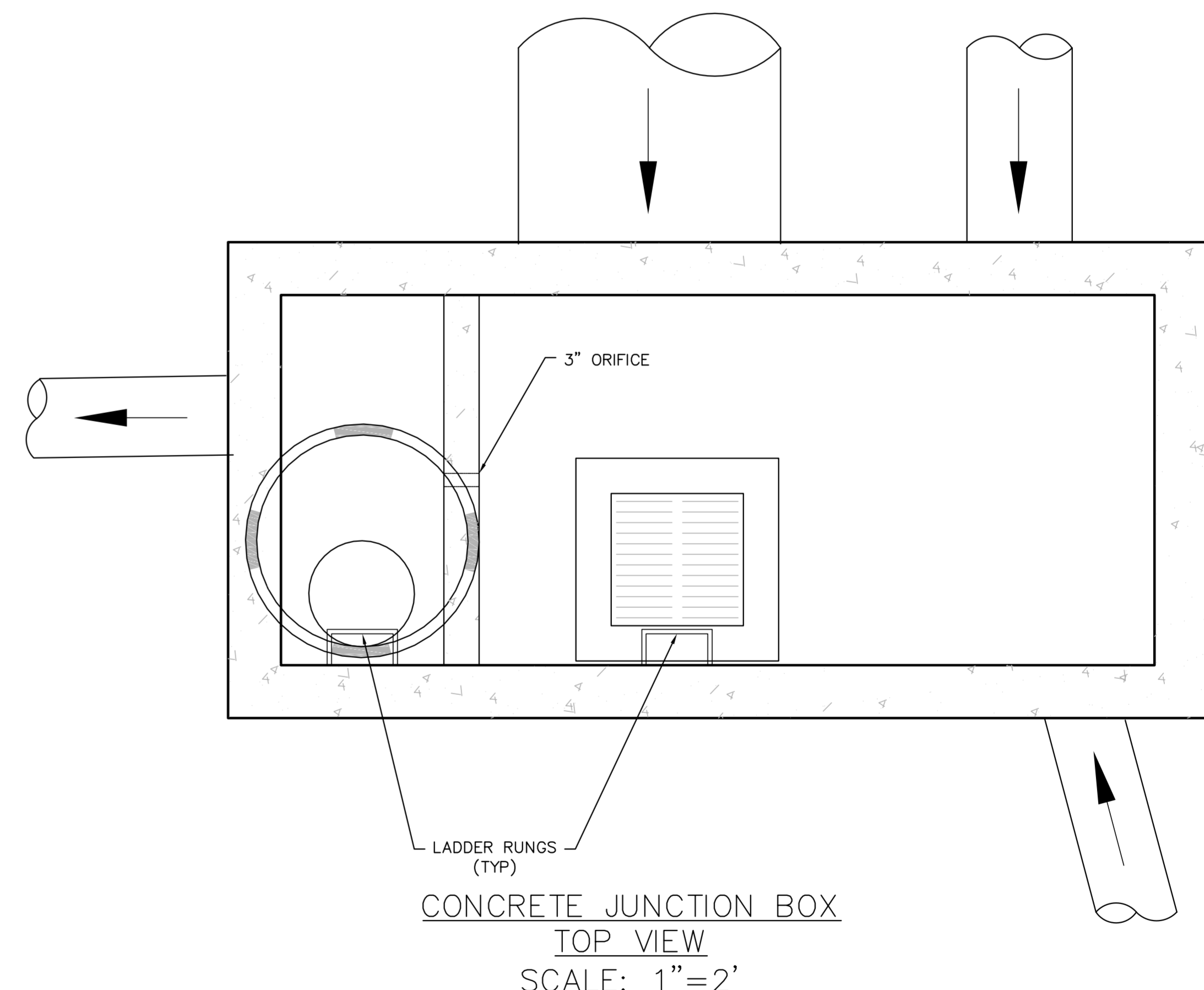
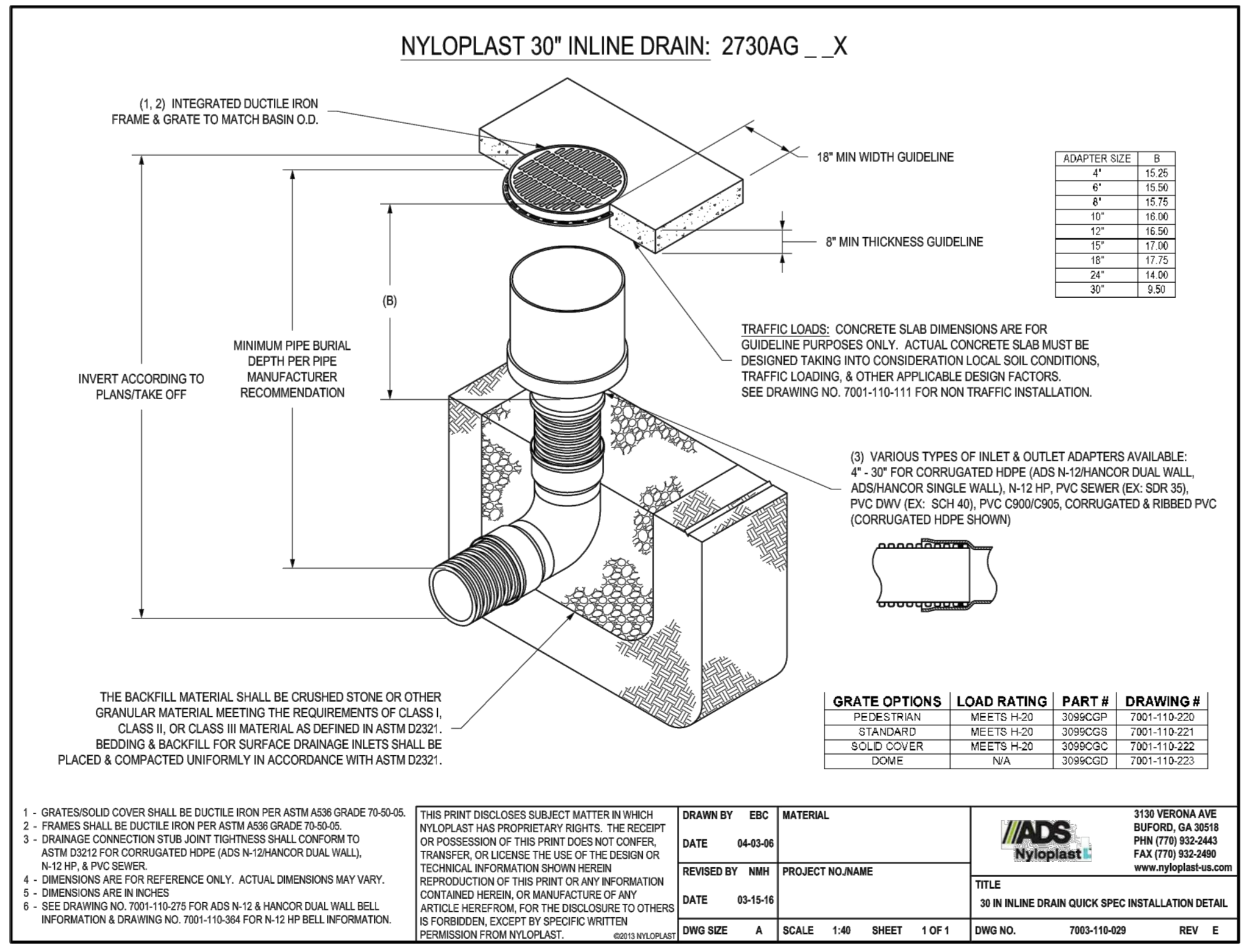
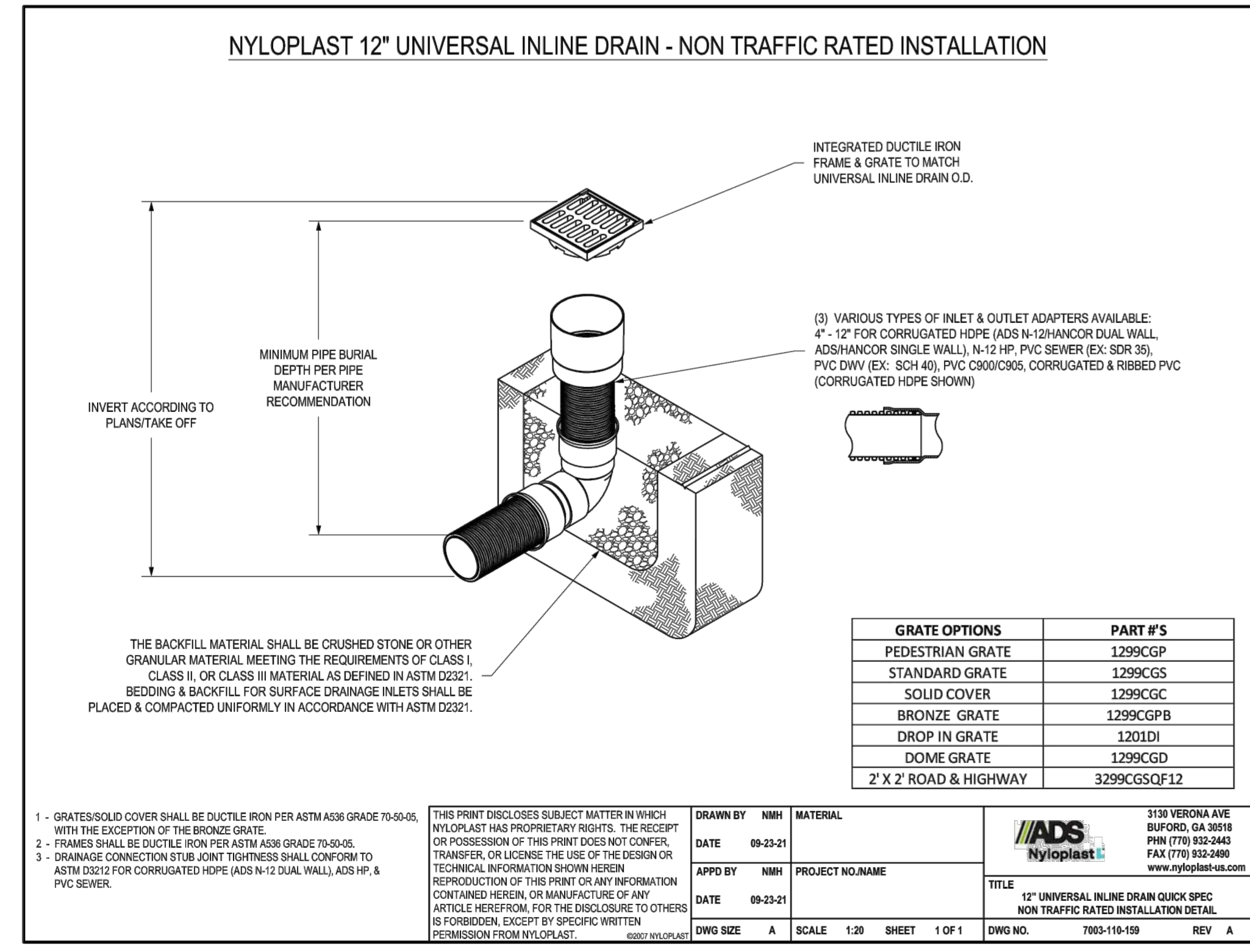
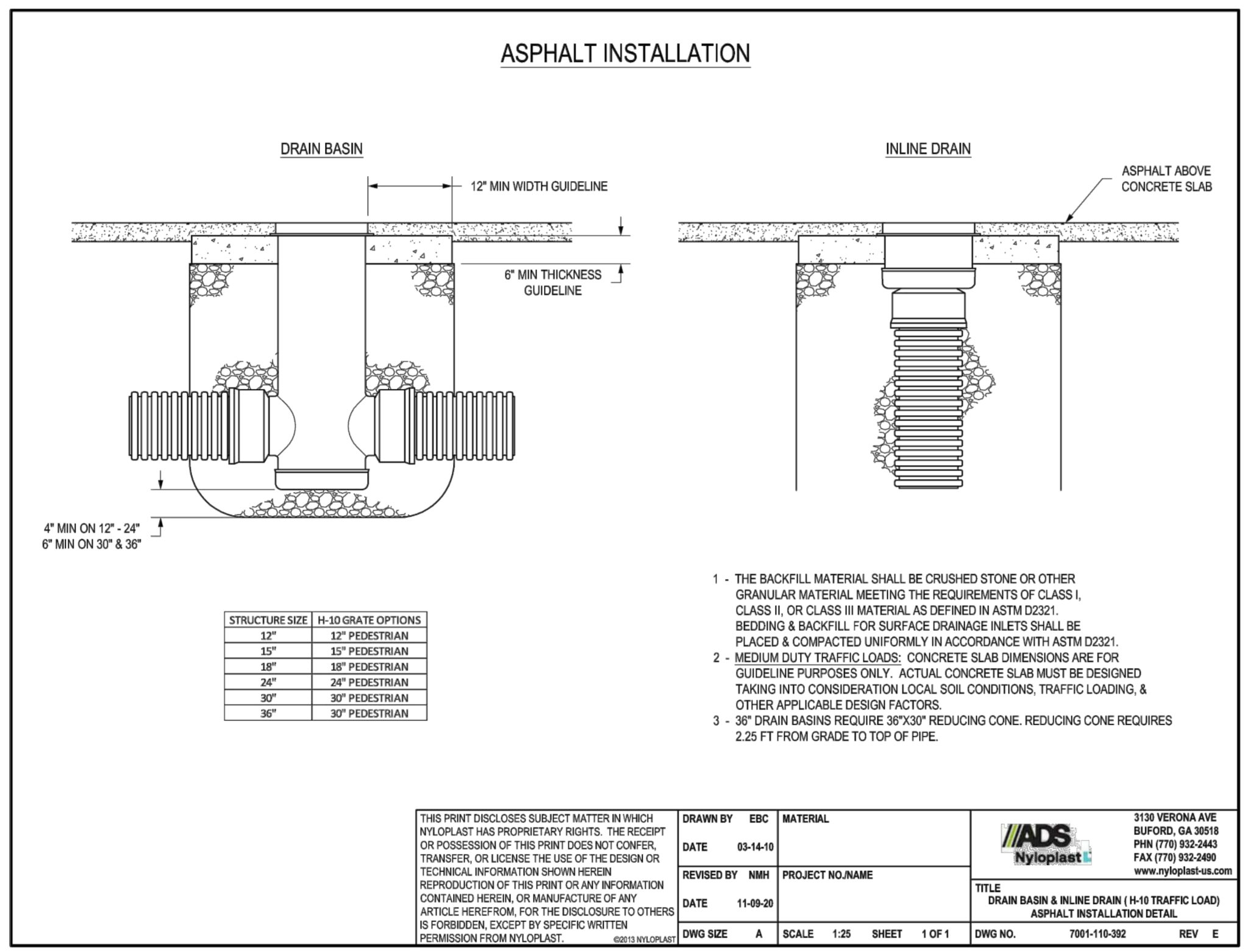
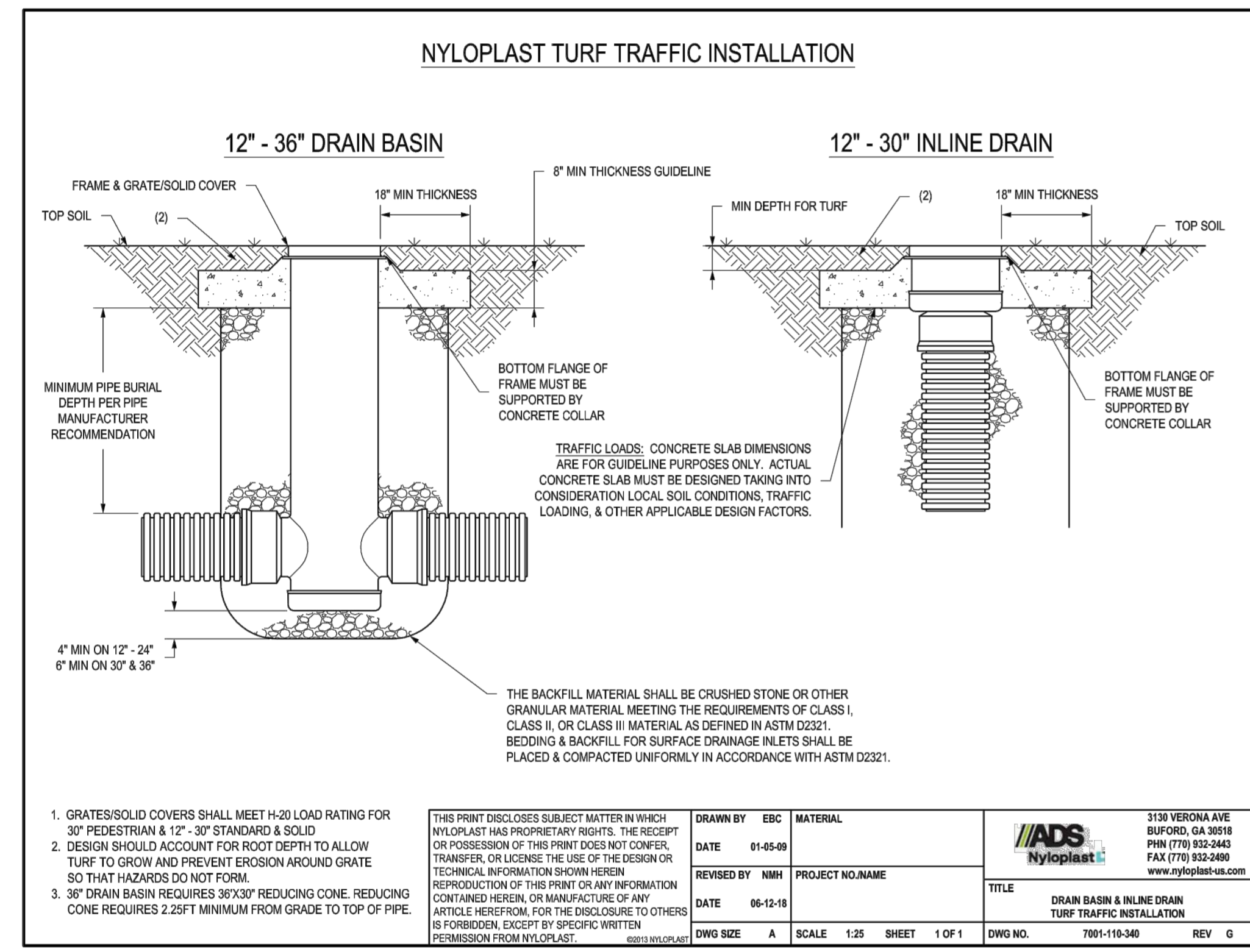
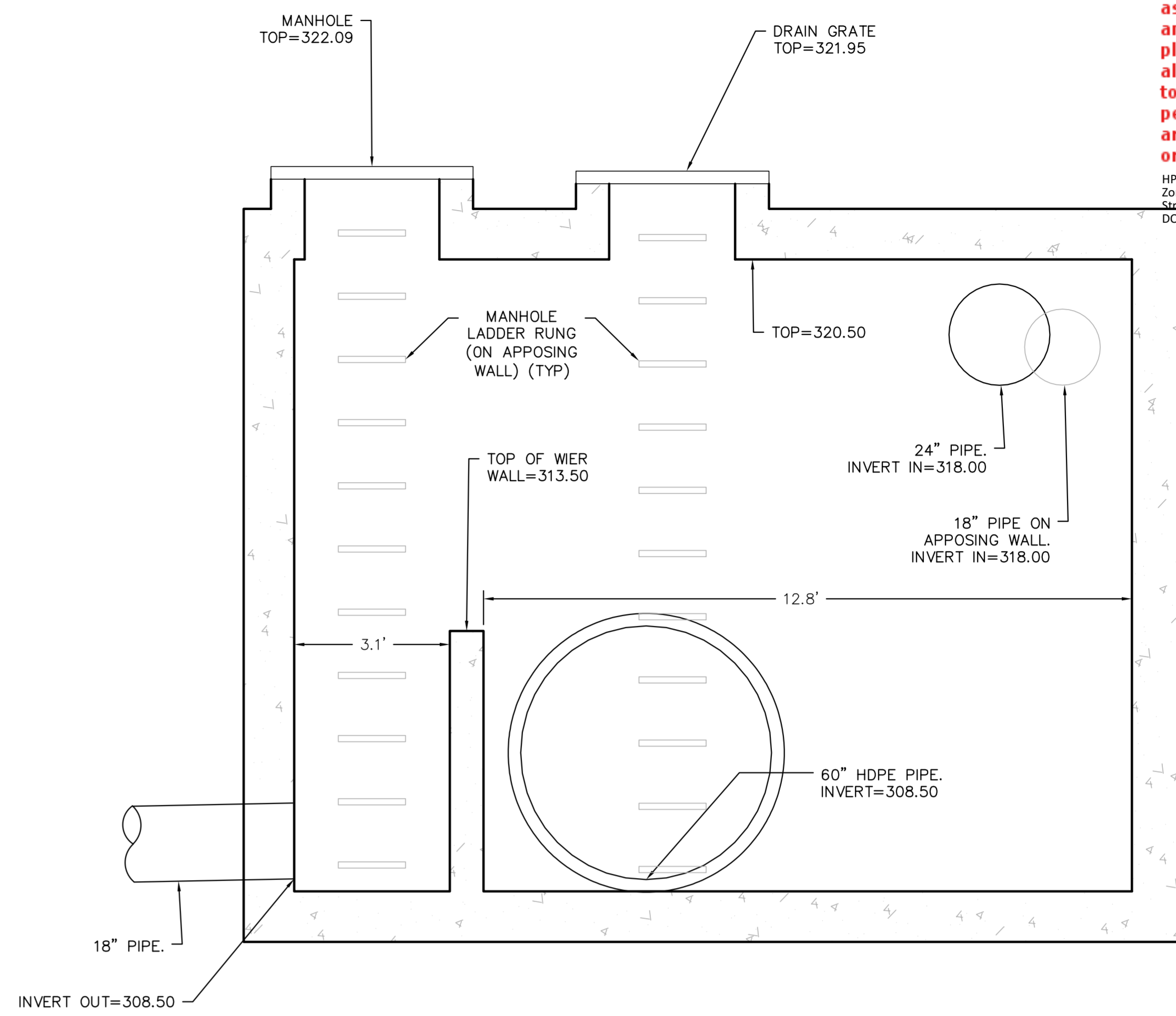
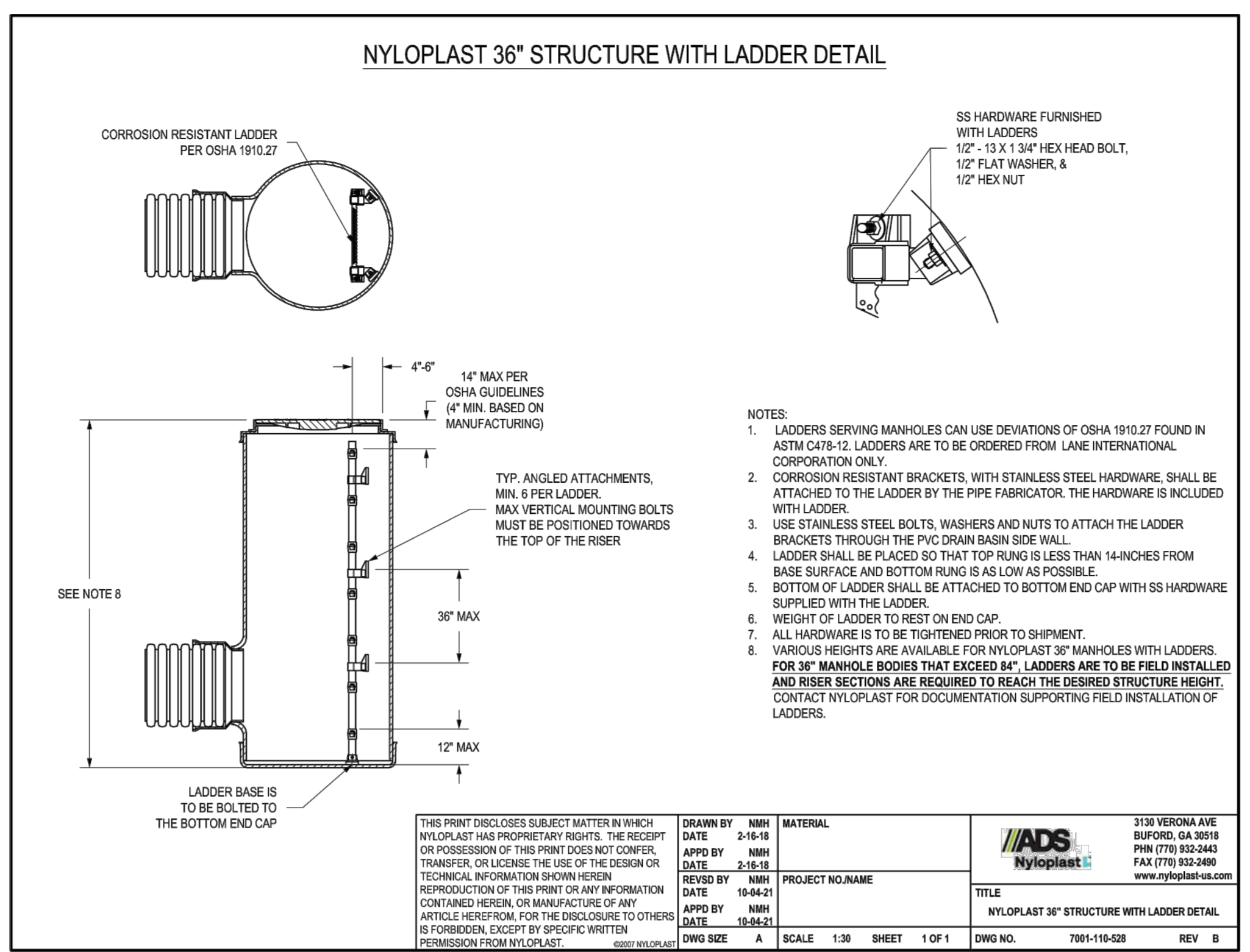
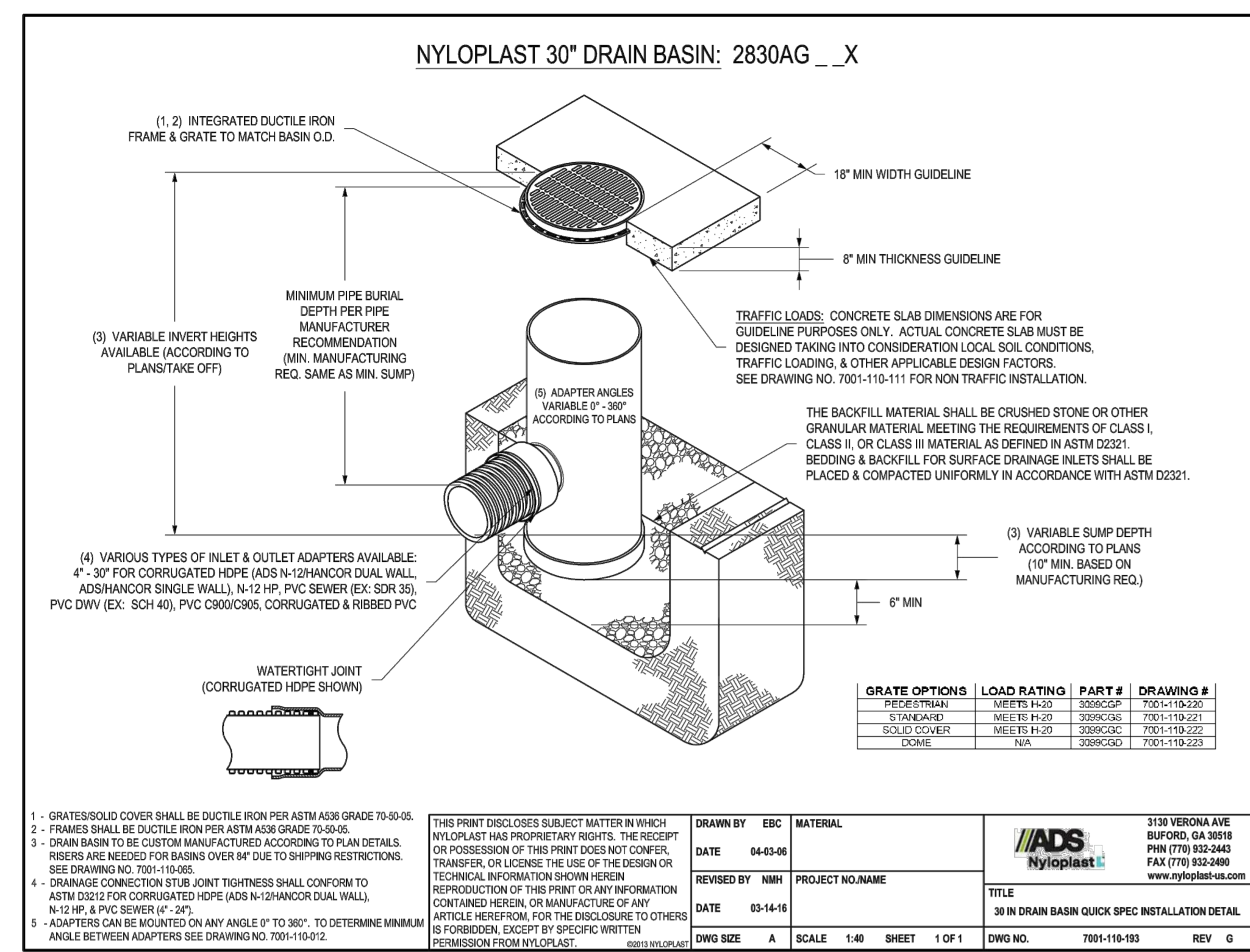
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DATE: 23-FEB-2023

SCALE: AS SHOWN

PROJECT/FILE NO: VC0626D

SHEET NO. CIV0950

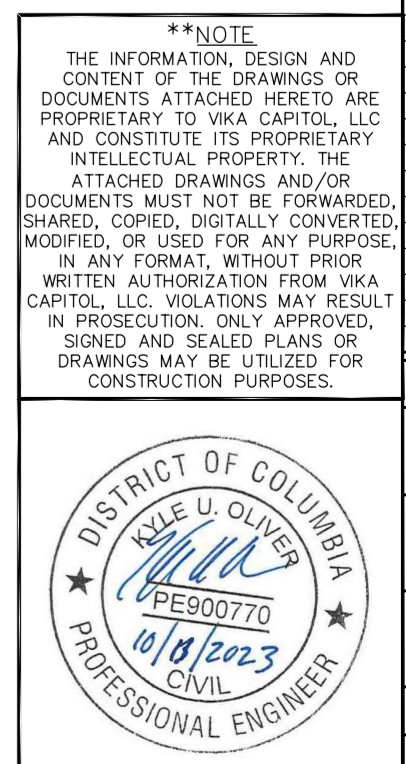


NOTES  
CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR BOX FOR REVIEW AND APPROVAL BY CLIENT, CIVIL ENGINEER, AND STRUCTURAL ENGINEER PRIOR TO ORDERING, OR INSTALLATION

2 CIV0955

CONCRETE JUNCTION BOX SCHEMATIC DESIGN

1 NYLOPLAST DRAIN DETAILS (OR APPROVED EQUAL. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL). NOT TO SCALE



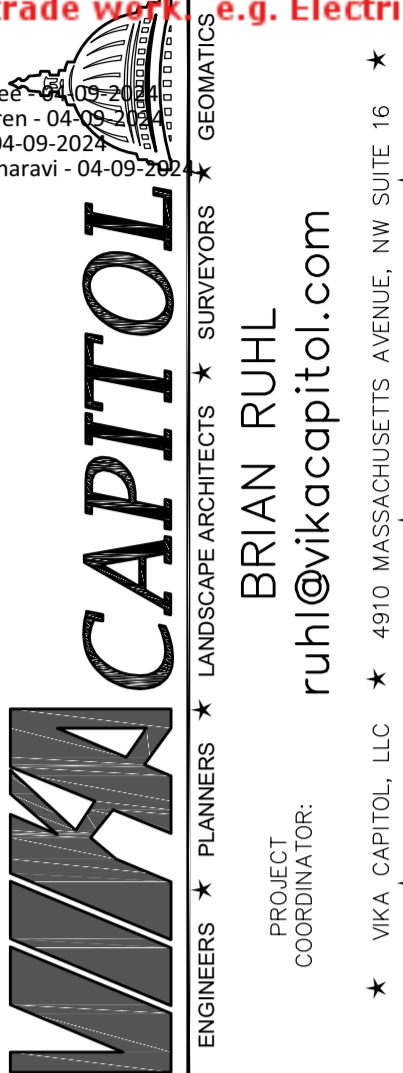






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HPRB Review - Timothy Deneen - 04-09-2024  
Zoning Review - Ernesto Watten - 04-09-2024  
Structural Review - Tong Li - 04-09-2024  
DOEE SE-SW Review - Saba Ghaharvi - 04-09-2024



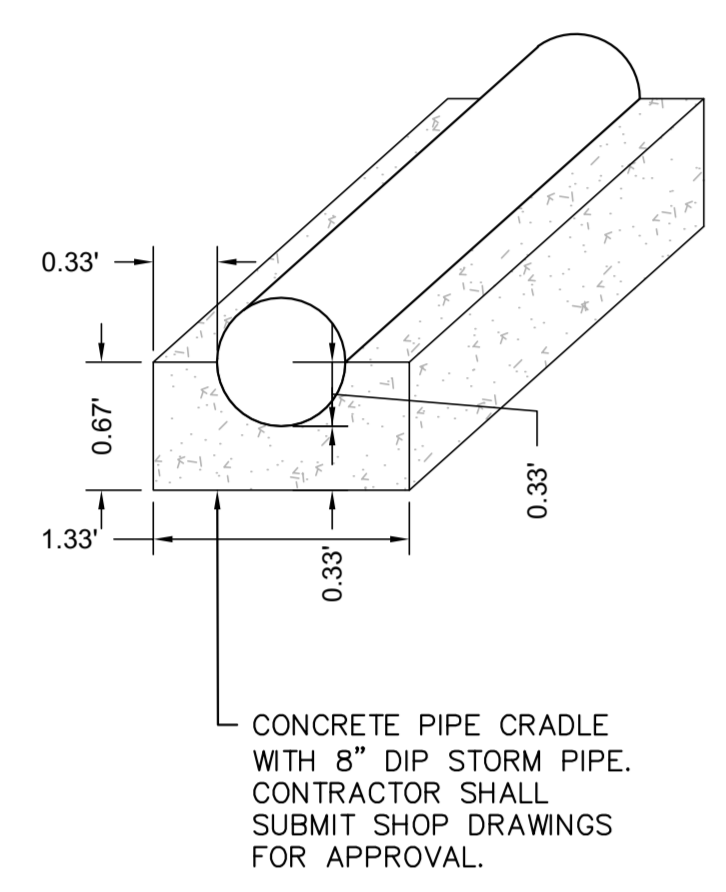
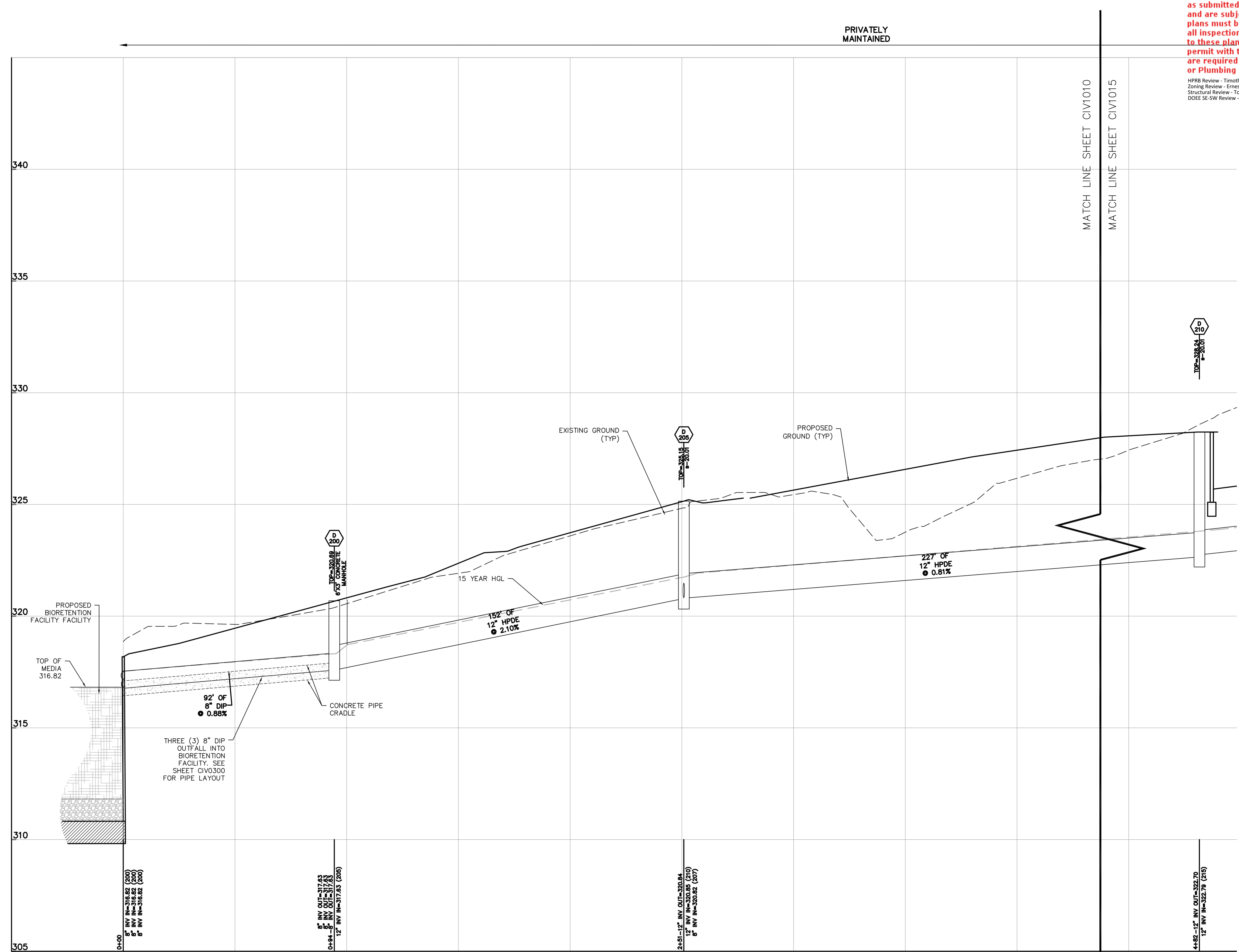
MARET SCHOOL  
PROPOSED ATHLETIC FIELDS  
SQUARE 2319, LOT 832  
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WASHINGTON, D.C. 20015

UTILITY PROFILES

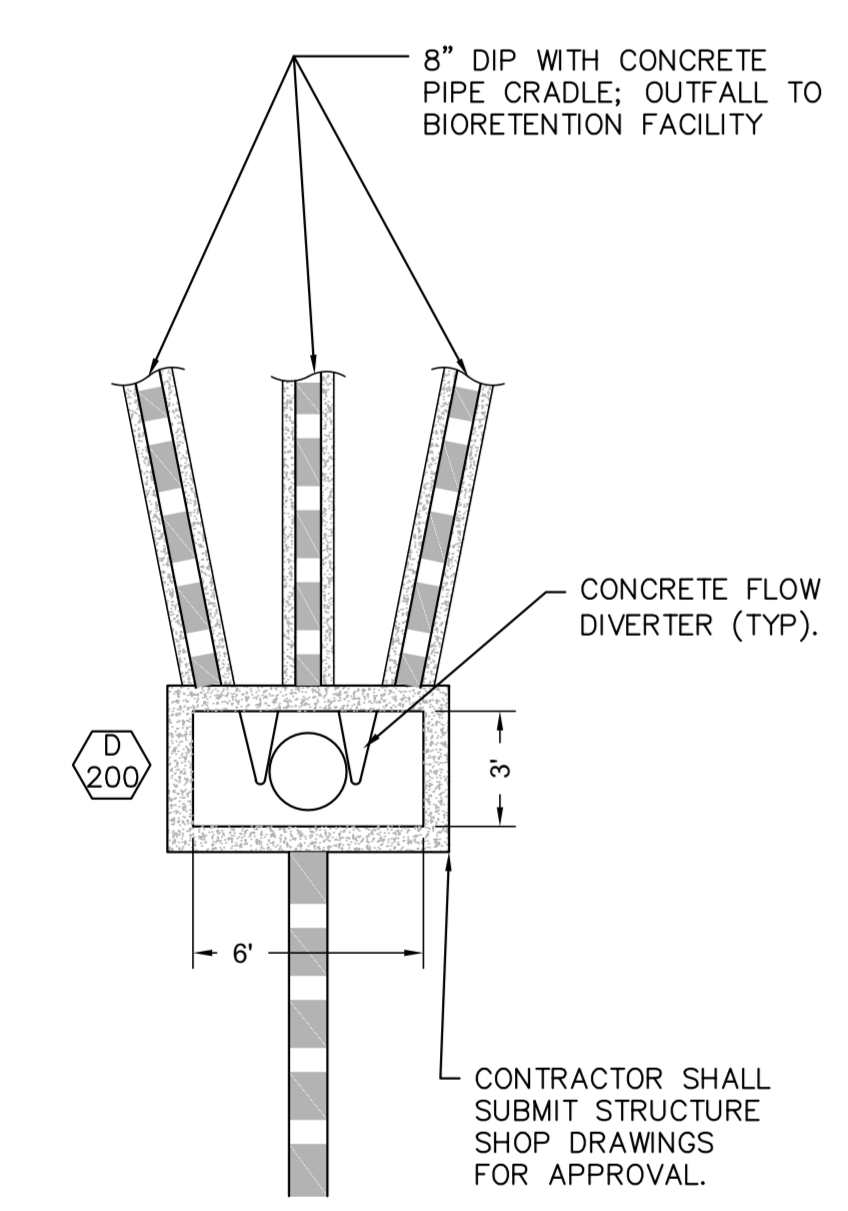
#	DATE	DESCRIPTION
1	23-FEB-2023	16-6-23 DD07/DOEE RESUB

DES. KUO DWN. BJR  
SCALE: AS SHOWN  
PROJECT/FILE NO. VC0626D  
SHEET NO. CIV1010

PRIVATELY MAINTAINED



CONCRETE PIPE CRADLE DETAIL  
SCALE: 1"=1"

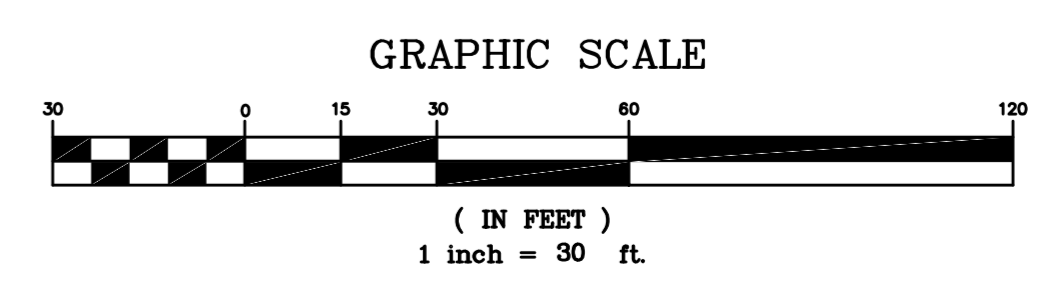


STRUCTURE D200 DETAIL  
SCALE: 1"=5"

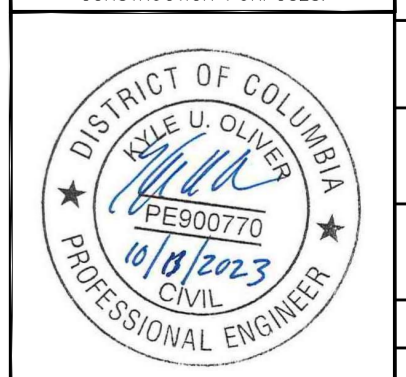
BIORETENTION TO D235  
HORIZ. 1"=20  
VERT. 1"=2  
(ON SITE)

TEST PIT  
TEST PIT NOTE:  
INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION, ELEVATIONS, AND SIZES OF EX. UTILITIES BY DIGGING TESTS PITS BY HAND AT ALL POINTS OF CONNECTION AND AT CROSSINGS. RESULTS FROM THESE TEST PITS SHALL BE SUBMITTED TO THE ARCHITECT FIVE (5) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION AND/OR ORDERING MATERIALS.

"FOR LOCATION OF UTILITIES CALL 8-1-1 or 1-800-257-7777 OR LOG ON TO or 48 HOURS IN ADVANCE OF ANY WORK IN THIS VICINITY"



\*\*NOTE  
THE INFORMATION, DESIGN AND CONTENT OF THE DRAWINGS OR DOCUMENTS ATTACHED HEREIN ARE PROPRIETARY TO VIKA CAPITOL, LLC AND CONSTITUTE ITS PROPRIETARY INTELLECTUAL PROPERTY. THE ATTACHED DRAWINGS AND/OR DOCUMENTS MUST NOT BE FORWARDED, SHARED, COPIED, DIGITALLY CONVERTED, MODIFIED, OR USED FOR ANY PURPOSE, IN ANY FORMAT, WITHOUT PRIOR WRITTEN AUTHORIZATION FROM VIKA CAPITOL, LLC. VIOLATIONS MAY RESULT IN PROSECUTION. ONLY APPROVED, SIGNED AND SEALED PLANS OR DRAWINGS MAY BE UTILIZED FOR CONSTRUCTION PURPOSES.



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HPRB Review - Timothy Demas - 04-09-2024  
Zoning Review - Ernesto Warren - 04-09-2024  
Structural Review - Tong Li - 04-09-2024  
DOEE SE-SW Review - Sabu Gararavi - 04-09-2024

**VKA CAPITOL**  
ENGINEERS \* PLANNERS \* LANDSCAPE ARCHITECTS \* SURVEYORS \* GEOMATICS  
CORPORATOR:  
BRIAN RUHL  
ruhl@vkapitol.com  
VKA CAPITOL, LLC \* 4910 MASSACHUSETTS AVENUE, NW, SUITE 16  
WASHINGTON, DC 20016 \* PHONE: 202.244.4140  
\* W.W.W. V.K.A.C.A.P.I.T.O.L.C.O.M.

MARET SCHOOL  
PROPOSED ATHLETIC FIELDS  
SQUARE 2319, LOT B32  
5901 UTAH AVE. NW  
WASHINGTON, D.C. 20015

UTILITY PROFILES

#	DATE	DESCRIPTION
1	23-FEB-2023	DD01/DOEE RESUB

DATE: 23-FEB-2023  
DES. KUO DWN. BJR  
SCALE: AS SHOWN  
PROJECT/FILE NO. VC0626D  
SHEET NO. CIV1015

**DISTRICT OF COLUMBIA**  
VKA CAPITOL  
PROFESSIONAL ENGINEERS  
1/18/2023

**\*\*NOTE\*\***  
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Storm Drainage Computations																				
Structure		Local Flow				Cumulative Flow				Pipe Information				Profile		Top				
From	To	Area (Ac)	Runoff C Value	CA	Tc (min)	Intensity (I)	Qnew (CFS)	Total Area (Ac)	Total CA	Diameter (in)	Slope (%)	Length (ft)	Material	n Factor	Qmax (CFS)	V (FPS)	Upper Invert	Lower Invert	(ft)	
D235	D230	0.09	0.35	0.03	5.00	7.56	0.23	0.09	0.03	0.23	8	1.93%	52	HDPE	0.012	1.62	2.83	335.55	335.55	335.52
D230	D225	0.00	0.35	0.00	5.31	7.46	0.00	0.09	0.03	0.22	8	1.66%	53	HDPE	0.012	1.69	2.66	335.55	334.68	335.52
D227	D225	0.09	0.35	0.03	5.00	7.56	0.23	0.09	0.03	0.23	8	4.55%	13	HDPE	0.012	2.80	4.02	335.55	335.00	337.53
D225	D220	0.00	0.35	0.00	5.63	7.37	0.00	0.17	0.06	0.44	12	1.06%	39	HDPE	0.012	3.99	2.68	334.36	333.95	338.39
D220	D215	0.00	0.00	0.00	5.87	7.30	0.00	0.17	0.06	0.44	12	1.56%	76	HDPE	0.012	4.88	3.16	327.85	326.95	337.11
D215	D210	0.00	0.00	0.00	6.27	7.18	0.00	0.17	0.06	0.43	12	1.17%	69	HDPE	0.012	4.19	2.78	323.60	322.79	330.60
D210	D205	0.00	0.00	0.00	6.68	7.07	0.00	0.17	0.06	0.43	12	0.82%	227	HDPE	0.012	3.50	2.40	322.70	320.85	328.24
D207	D205	2223.00	1.00	0.05	5.00	7.56	0.35	0.05	0.05	0.35	8	1.84%	84	HDPE	0.012	1.52	2.88	321.94	320.82	324.64
D205	D200	14383.00	0.42	0.19	8.26	6.68	1.28	0.55	0.30	1.99	12	2.08%	155	HDPE	0.012	5.58	5.56	320.84	317.63	325.15
D200	B3	0.00	0.00	0.00	8.72	6.57	0.00	0.55	0.30	1.96	8	0.86%	94	GFP	0.012	1.22	0.22	317.63	316.82	320.60
D125	D120	13826.75	0.80	0.25	5.00	7.56	1.90	0.32	0.25	1.90	12	0.03%	30	PVC	0.010	0.77	0.06	310.82	310.81	308.53
D134	D133	13821.00	0.80	0.25	5.00	7.56	1.89	0.32	0.25	1.89	6	0.03%	33	PVC	0.010	0.13	0.04	313.90	313.89	310.63
D133	D132	0.00	0.00	0.00	38.55	4.98	0.00	0.32	0.25	1.25	6	0.03%	33	PVC	0.010	0.13	0.04	312.97	312.96	319.71
D132	D131	0.00	0.00	0.00	31.83	3.83	0.00	0.32	0.25	0.96	6	0.01%	33	PVC	0.010	0.07	0.02	312.06	312.06	318.79
D131	D130	0.00	0.00	0.00	95.70	2.78	0.00	0.32	0.25	0.70	6	0.01%	22	PVC	0.010	0.07	0.02	311.09	311.09	317.82
D130	D120	0.00	0.00	0.00	72.09	2.17	0.00	0.32	0.25	0.59	8	0.00%	60	PVC	0.010	0.09	0.02	310.97	310.97	317.82
D120	D115	27647.75	0.00	0.22	12.99	5.75	1.28	1.27	0.72	4.16	12	3.56%	3	PVC	0.010	8.76	9.54	310.83	310.73	317.82
D162	D1C72	13270.50	1.00	0.27	5.00	7.56	2.07	0.30	0.27	2.07	60	0.01%	147	HDPE	0.012	23.35	0.60	308.50	308.49	322.44
D164	D163	74624.50	0.00	0.60	5.00	7.56	4.53	1.71	0.60	4.53	24	0.03%	78	HDPE	0.012	3.96	0.08	318.00	317.98	323.29
D163	KT4	0.00	0.00	0.00	21.33	4.68	0.00	1.71	0.60	2.80	24	0.01%	141	HDPE	0.012	2.93	0.98	318.00	317.98	323.24
D180	D175	74624.50	0.00	0.60	5.00	7.56	4.53	1.71	0.60	4.53	12	1.27%	8	HDPE	0.012	4.37	0.35	319.69	319.60	322.98
D175	D170	0.00	0.00	0.00	5.38	7.45	0.00	1.71	0.60	4.47	12	1.25%	58	HDPE	0.012	4.34	0.34	319.57	318.85	323.11
D170	D1C75	0.00	0.00	0.00	8.11	6.71	0.00	1.71	0.60	4.03	18	0.02%	86	HDPE	0.012	1.75	0.06	318.00	317.98	322.55
D160	D155	3214.00	0.00	0.03	5.00	7.56	0.20	0.07	0.03	0.20	12	72.95%	5	HDPE	0.012	33.06	24.56	305.71	302.50	303.86
D155	D145	0.00	0.00	0.00	5.00	7.56	0.00	0.07	0.03	0.20	18	2.76%	90	HDPE	0.012	18.97	4.03	305.61	304.25	309.35
D150	D145	4909.00	0.00	0.04	5.00	7.56	0.30	0.11	0.04	0.30	12	52.95%	5	HDPE	0.012	28.16	16.63	304.93	302.00	303.86
D145	D110	0.00	0.00	0.00	5.17	7.51	0.00	0.19	0.07	0.49	18	2.37%	68	HDPE	0.012	17.56	3.71	304.63	302.62	308.03
D1C71	D115	140006.00	1.00	2.89	5.00	7.56	21.86	3.21	2.89	0.85	18	2.11%	98	HDPE	0.012	16.57	4.14	308.50	306.43	311.21
D115	D110	0.00	0.00	0.00	12.89	5.75	0.00	4.46	3.60	5.93	12	5.00%	17	HDPE	0.012	25.51	0.61	306.17	305.52	315.60
D110	D100	0.00	0.00	0.00	5.47	7.41	0.00	4.67	3.68	6.90	18	0.59%	49	RCP	0.015	7.02	4.16	300.61	300.32	311.40
D100	EX50	0.00	0.00	0.00	5.67	7.36	0.00	4.67	3.68	6.90	18	5.48%	147	RCP	0.015	21.37	9.11	300.14	292.08	307.59

Hydraulic Grade Line Computations																									
Structures		Friction Loss				Junction Loss				Results															
Structure	Downstream	WSE	DO (in)	QD	LO	n	RF	HF	Vo	HO	QI	di	Vi	QI <sup>2</sup> /VI	V12/Zg	HI	Angle	HA	Qsf	Ht	Hing	Final H	Inlet WSE	Rim Elevation	
D235	D230	335	8	0.225	53	0.012	0.11	0.86%	0.46	0.64	0.00	0.23	8	0.65	0.15	0.007	0.002	0	0.00	0	0.00	0.00	0.23	334.98	338.39
D227	D225	335	12	0.444	39	0.012	0.15	0.57%	0.22	0.57	0.00	0.23	8	0.65	0.15	0.007	0.002	0	0.00	0	0.00	0.00	0.23	334.98	338.39
D225	D220	327	12	0.44	76	0.011	0.14	0.91%	0.69	0.56	0.00	0.44	12	0.57	0.25	0.005	0.002	90	0.00	0	0.01	0.01	0.70	327.85	337.11
D220	D215	324	12	0.833	60	0.011	0.15	0.65%	0.45	0.55	0.00	0.44	12	0.56	0.23	0.005	0.002	0	0.00	0	0.00	0.00	0.45	324.04	330.60
D215	D210	322	12	0.426	227	0.012	0.16	0.43%	0.98	0.54	0.00	0.43	12	0.55	0.24	0.005	0.002	0	0.00	0	0.00	0.00	0.98	322.63	328.24
D207	D205	318	12	1.991	155	0.012	0.24	1.36%	2.11	2.53	0.02	0.35	8	0.99	0.35	0.035	0.005	0	0.00	1.2814	0.63	0.04	2.15	320.58	325.15
D205	D200	317	8	1.959	94	0.012	0.17	1.24%	2.11	5.61	0.12	1.99	12	2.53	5.05	0.100	0.005	0	0.00	0	0.16	0.16	2.26	319.62	320.60
D200	B3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
D134	D133	313	6	1.248	33	0.010	0.13	2.93%	0.97	6.36	0.16	1.89	6	9.65	18.28	1.446	0.506	0	0.00	0	0.66	0.86	1.83	315.19	319.71
D133	D132	312	6	0.96	33	0.010	0.13	1.73%	0.57	4.89	0.09	1.25	6	6.36	7.93	0.628	0.220	0	0.00	0	0.31	0.41	0.98	313.44	318.79
D132	D131	311	6	0.698	22	0.010	0.13	0.92%	0.20	3.55	0.05	0.96	6	4.89	4.70	0.371	0.130	0	0.00	0	0.18	0.23	0.43	311.92	317.82
D131	D130	312	8	0.595	60	0.010	0.17	0.49%	0.09	1.70	0.01	0.70	6	3.55	2.48	0.196	0.069	0	0.00	0	0.08	0.08	0.17	311.67	317.82
D130	D120	312	12	4.162	3	0.010	0.26	1.44%	0.07	5.30	0.11	0.59	8	1.70	1.01	0.045	0.016	0	0.00	1.2779	0.12	0.16	0.24	311.77	317.82
D164	D163	320	24	2.803	141	0.012	0.61	0.01%	0.02	0.89	0.00	4.53	24	1.44	6.54	0.632	0.011	0	0.00	0	0.01	0.01	0.03	319.61	323.24
D180	D175	320	12	4.47	58	0.012	0.25	1.34%	0.78	5.69	0.13	4.53	12	5.77	26.15	0.517	0.181	0	0.00	0	0.31	0.31	1.08	320.73	323.11
D175	D170	319	18	4.026	86	0.012	0.38	0.13%	0.11	2.28	0.02</														



