

T:\2020\Facilities\20106400 MD Zoo Parking\Civil\CADD\Drawings\Construction\20106400 (C-04) Site and Utility Plan 2.dwg Jul 18, 2022 1:21pm delaharian

STORM DRAIN NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE CITY OF BALTIMORE DEPARTMENT OF PUBLIC WORKS "SPECIFICATIONS FOR MATERIALS, HIGHWAYS, BRIDGES, UTILITIES AND INCIDENTAL STRUCTURES" AND CITY OF BALTIMORE DEPARTMENT OF PUBLIC WORKS STANDARD DETAILS.
2. EXISTING UTILITIES AND OBSTRUCTIONS SHOWN ARE FOR THE CONVENIENCE OF THE CONTRACTOR AND ARE NOT WARRANTED OR GUARANTEED BY THE CITY OR THE ENGINEER TO BE COMPLETE OR CORRECT. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS OWN SATISFACTION.
3. BEFORE DOING ANY DIGGINGS, NOTIFY THE FOLLOWING:
 - "MISS UTILITY" AT 800-251-1111 (NOTIFY 3 DAYS PRIOR TO WORK).
 - DEPT. OF TRANSPORTATION STREET LIGHTING SECTION AT 410-346-4444 (NOTIFY 2 WEEKS PRIOR TO WORK).
 - DEPT. OF TRANSPORTATION CONDUIT SECTION AT 410-346-1515 (NOTIFY 15 DAYS PRIOR TO WORK).
 - VERIZON AT 800-537-4866 (NOTIFY 3 DAYS PRIOR TO WORK).
4. TYPE OF JOINT FOR PIPE:

TYPE OF PIPE	TYPE OF JOINT
REINFORCED CONCRETE PIPE: DRAIN	12" RING RUBBER GASKET
REINFORCED CONCRETE PIPE: INLET CONNECTION	CEMENT MORTAR OR 12" RING RUBBER GASKET
5. ALL CHANNELS IN MANHOLES MUST BE CONSTRUCTED TO CONFORM AS CLOSE AS POSSIBLE TO THE STANDARD CHANNEL CALLED FOR IN THE PROFILES.
6. GRAVEL CRADLE IS REQUIRED UNDER ALL PIPES EXCEPT INLET CONNECTIONS. TRENCHING AND BACKFILL SHALL BE DONE IN ACCORDANCE WITH CITY SPECIFICATION SECTION 51.23.3.3.
7. ALL BACKFILL SHALL BE MECHANICALLY TAMPED.
8. ROADWAY PAVING REPLACEMENT SHALL BE DONE IN ACCORDANCE WITH CITY STANDARD SPECIFICATION SECTION 52.01.30.10.
9. THE CONTRACTOR SHALL VIDEO INSPECT THE NEW STORM DRAINS AND SUBMIT A DVD/CD OF THE VIDEO INSPECTION TO THE STORM DRAIN ENGINEERING OFFICE.
10. PROVIDE AS-BUILT DRAWINGS IN ACCORDANCE TO THE PROCEDURES PROVIDED BY THE STORM DRAIN ENGINEERING OFFICE.
11. THE CONTRACTOR IS RESPONSIBLE TO LOCATE AND PROTECT ALL UTILITIES WITHIN AND ADJACENT TO THE AREA OF WORK. ANY DAMAGE CAUSED DURING CONSTRUCTION SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR.
12. CONTRACTOR SHALL ADJUST EXISTING MANHOLE FRAMES AND COVERS TO MEET PROPOSED GRADES, UNLESS INDICATED OTHERWISE ON PLANS.
13. PAVEMENT REPAIR TO BE DONE IN ACCORDANCE WITH B.C. STD. 516.20-1 AND BC-516.20-2 MATCH EXISTING PAVEMENT SECTION IF IT IS DIFFERENT THEN THE ONE DESCRIBED BEFORE AND SHALL BE COORDINATED WITH TRANSPORTATION MAINTENANCE DIVISION. TRENCH REPAIRS TO BE MADE IN ACCORDANCE WITH B.C. STD. 516.14-1. ROADWAY, CURBS, AND/OR SIDEWALKS SHALL BE REPAIRED "IN KIND" WHERE DISTURBED BY UTILITY CONSTRUCTION. SIDEWALKS SHALL BE REPAIRED JOINT TO JOINT WITH 8 INCHES OF MIX NO. 2 CONCRETE OR 3 INCHES OF CR-6. CURBS SHALL BE REPLACED TO NEAREST EXISTING JOINT AND PLACED ON NO LESS THAN 4" OF CRUSHER RUN AGGREGATE (CR-4).
14. EXISTING DUCT BANKS SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION. THE DUCT BANK SHALL BE SUPPORTED IF THE PROPOSED UTILITY IS BELOW THE DUCT BANK.

PLAN

SCALE: 1"=30'

LEGEND

NOTE: DUE TO THE VARIED NATURE OF EACH PLAN ALL SYMBOLS SHOWN ON LEGEND MAY NOT BE PRESENT ON ALL PLAN SHEETS.

- | | | |
|-----|------------|---|
| --- | 676 | Existing Minor Contour |
| --- | 670 | Existing Major Contour |
| --- | | Existing Edge of Road |
| --- | | Existing Soils |
| --- | 18UC (B) | Existing Storm Drain |
| --- | 17B (B) | Existing Water |
| --- | EX. 12" D. | Existing Sewer |
| --- | EX. 8" S. | Existing Gas Line |
| --- | EX. 6" G. | Existing Underground Electric Line |
| --- | | Existing Curb and Gutter |
| --- | | Existing Retaining Wall |
| --- | | Existing Edge of Paving |
| --- | | Existing Sidewalk |
| --- | | Existing Tree Line |
| --- | | Existing Building/Structure |
| --- | | Water Edge or Stream Centerline |
| --- | | Existing Fence |
| --- | | Existing Pavement |
| --- | | Existing Sign |
| --- | | Existing Light |
| --- | | Existing Bollard |
| --- | 660 | Proposed Major Contour |
| --- | 650 | Proposed Minor Contour |
| --- | | Proposed Inlet |
| --- | | Proposed Curb and Gutter |
| --- | | Proposed Retaining Wall |
| --- | | Proposed Edge of Pavement |
| --- | | Proposed Guardrail |
| --- | | Proposed Concrete Sidewalk |
| --- | | Proposed Fence |
| --- | | Proposed Tree Line |
| --- | | Proposed Underground SSM Facility |
| --- | | Proposed Underground Sand Filter |
| --- | TPF | Tree Protection Fence |
| --- | TPF | Proposed ADA Route |
| --- | | Proposed ADA Parking Sign |
| --- | | Proposed ADA Parking Space |
| --- | | Proposed Bollards |
| --- | | Proposed Guard Shack |
| --- | | Proposed Pedestrian "Acorn" Type Light |
| --- | | Proposed Parking Lot "Cobra" Type Light |
| --- | | Proposed Fence |
| --- | | Proposed Crosswalk |

NOTES:

1. THERE ARE NO WETLANDS OR OTHER ENVIRONMENTALLY SENSITIVE AREAS OR THEIR REQUIRED BUFFERS ON SITE.
2. THERE ARE NO STREAMS, RIVERS, CREEKS, BROOKS, PONDS, DETENTION BASINS, OR DRAINAGE WAYS ON SITE.
3. THERE ARE NO HIGHLY ERODIBLE SOILS, ROCK OUTCROPS OR STEEP SLOPES ON SITE.
4. THE SITE IS NOT LOCATED WITHIN THE CHESAPEAKE BAY CRITICAL AREA (CBCA).
5. THERE ARE NO FORESTED AREAS ON SITE.

DATA SOURCES

1. Existing topography and structures shown hereon outside of the limits of field run topography are from the Baltimore City Office of Technology - GIS Lab.
2. Existing topography from field run survey by Century Engineering Inc. dated Aug-Sept. 2020
3. Elevations 4 elevations are referred to the Baltimore City Survey Control System and are tied to the following control stations:

35000	N 1963.520	E -9323.550	Elev. 301.060
35001	N 8240.190	E -9800.600	Elev. 324.640
4. Public utilities shown hereon are from public drawings, field location and other sources.

DATE	BY	REVISIONS

CENTURY
ENGINEERING

A Kleinfelder Company

10710 Gilroy Road, Hunt Valley, MD 21031
Phone: 443.589.2400 www.centuryeng.com

SITE AND UTILITY PLAN 2

THE MARYLAND ZOO
IN BALTIMORE
PARKING LOT REHABILITATION

BALTIMORE, MARYLAND
WARD 13 SECTION 5 BLOCK 3499 LOT 001

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE No.: 32574
EXPIRATION DATE: 1/16/2024



OWNER:
Mayor & City Council of Baltimore
One Calvert Plaza
201 E. Baltimore Street
Baltimore MD 21202
(410)-675-3651

DEVELOPER:
The Maryland Zoo in Baltimore
1876 Mansion House Drive
Baltimore MD 21211
C/O Karl Kranz
(410)-346-1102

DRAWN BY: AA
DESIGN BY: DRS/KRB

REVIEW BY: AJD
REVIEW DATE: 7/15/2022

SCALE: 1"=30'
PROJECT No.: 201069.00

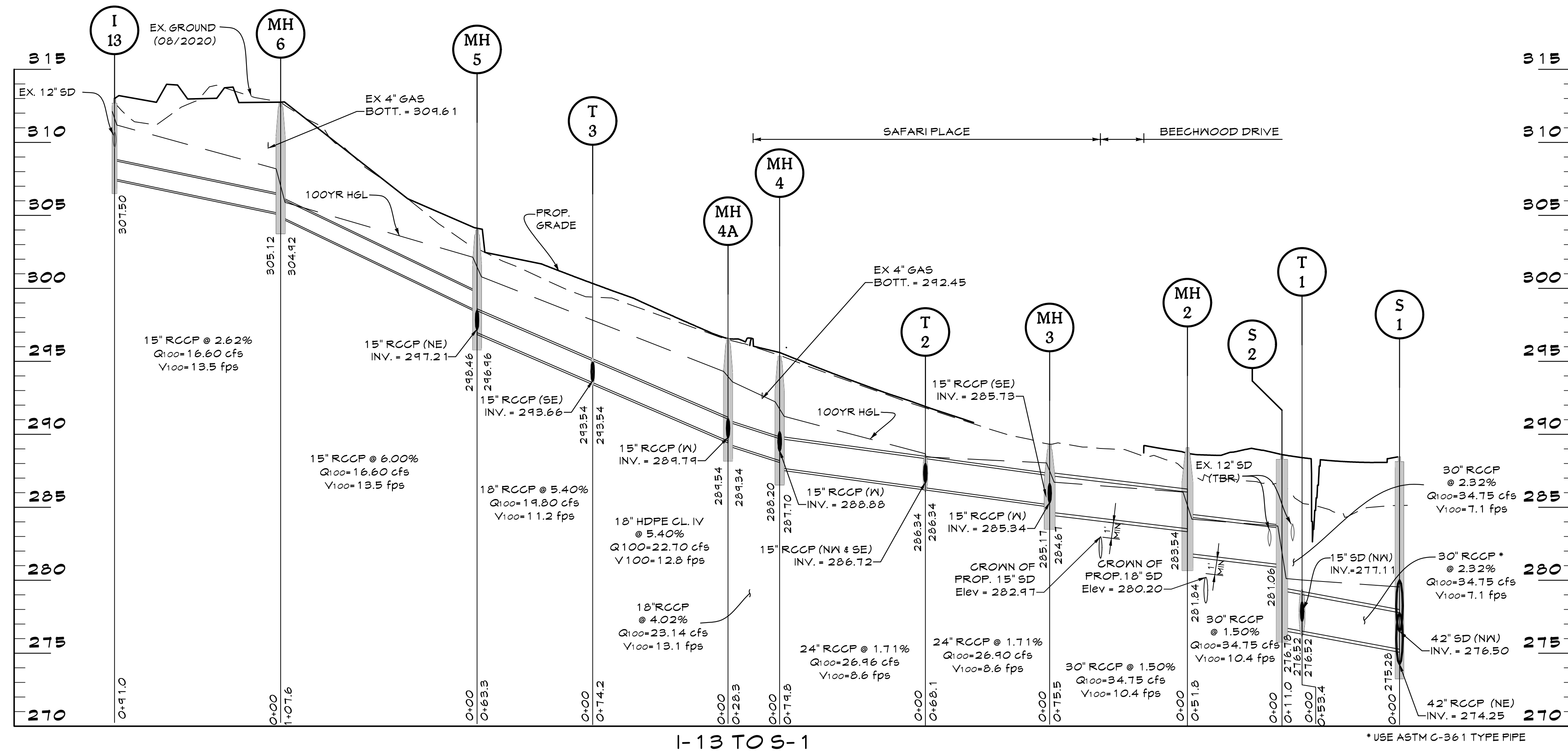
C-041

ESD # 7969

NOT FOR CONSTRUCTION

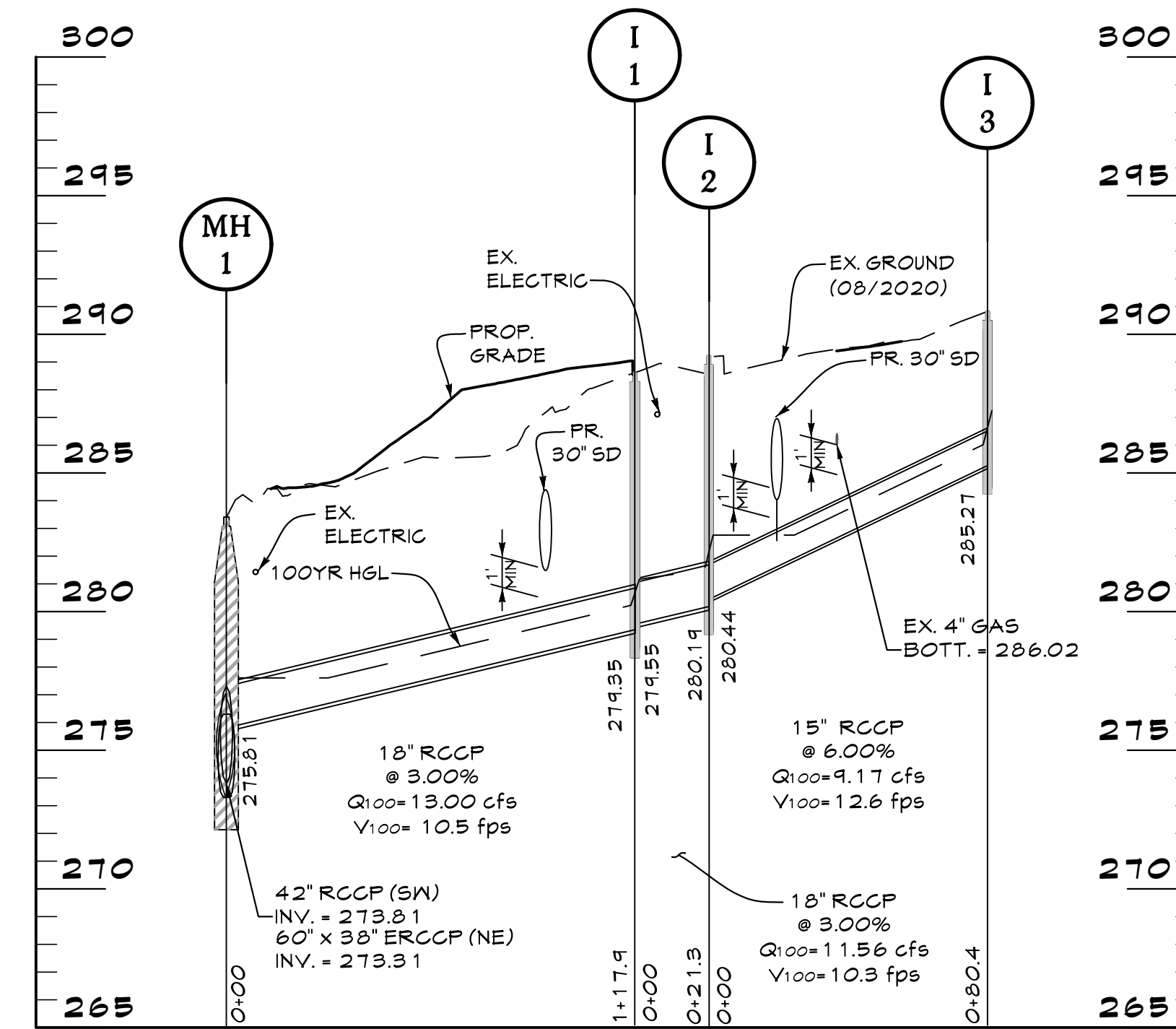
MATCHLINE - SEE SHEET C-040

T:\2020\Facilities\20106400 MD Zoo Parking\Construction\20106400 (C-044) Utility Profiles 1.dwg Jul 18, 2022 1:21pm dslanahan

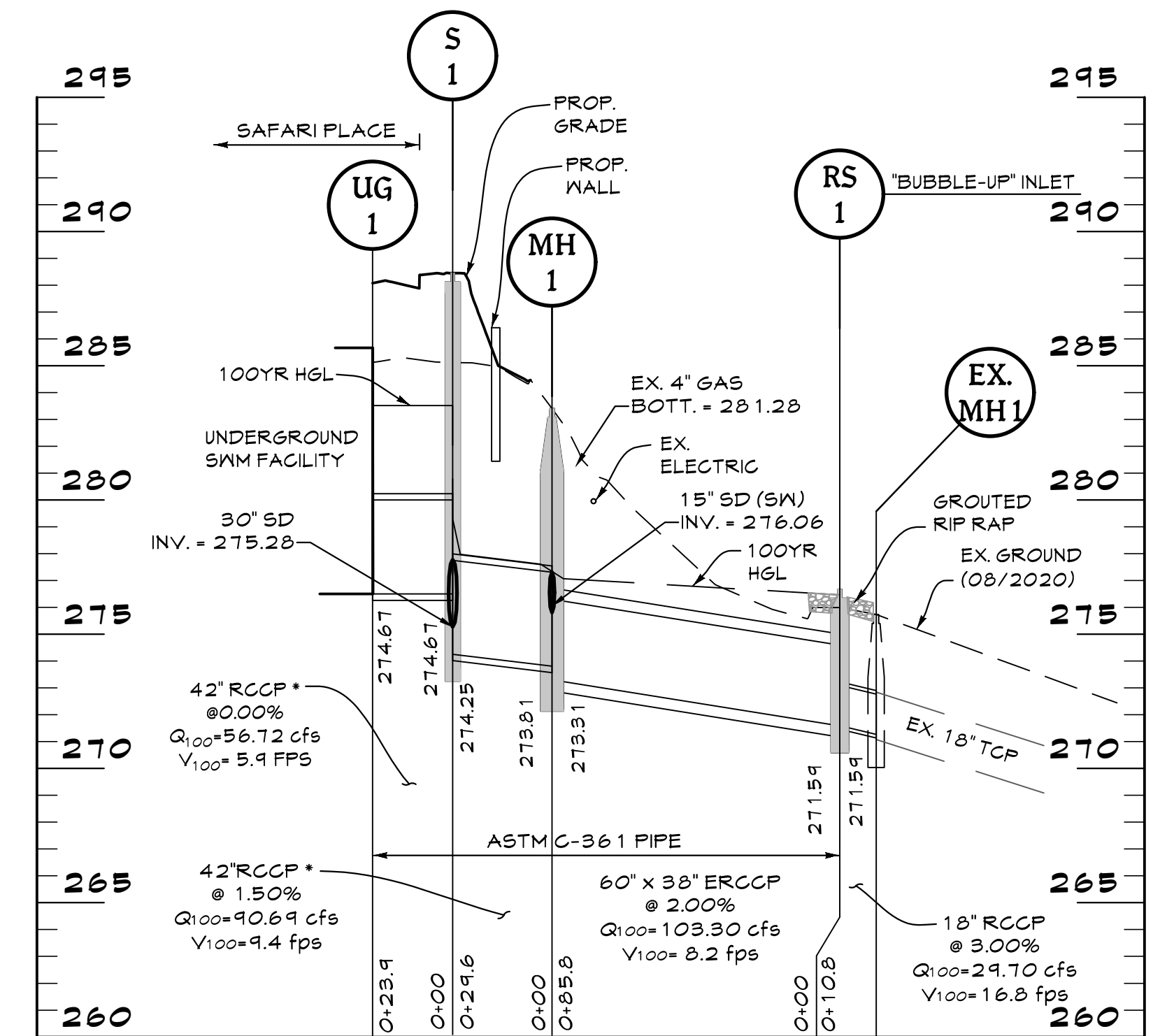


I-13 TO S-1

*USE ASTM C-361 TYPE PIPE

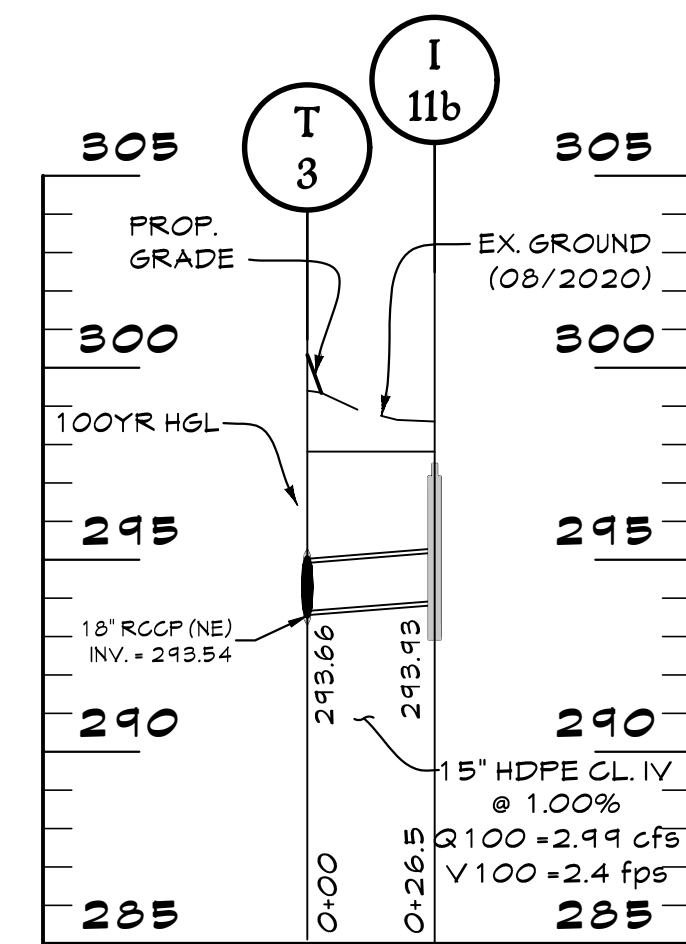


MH-1 TO I-3

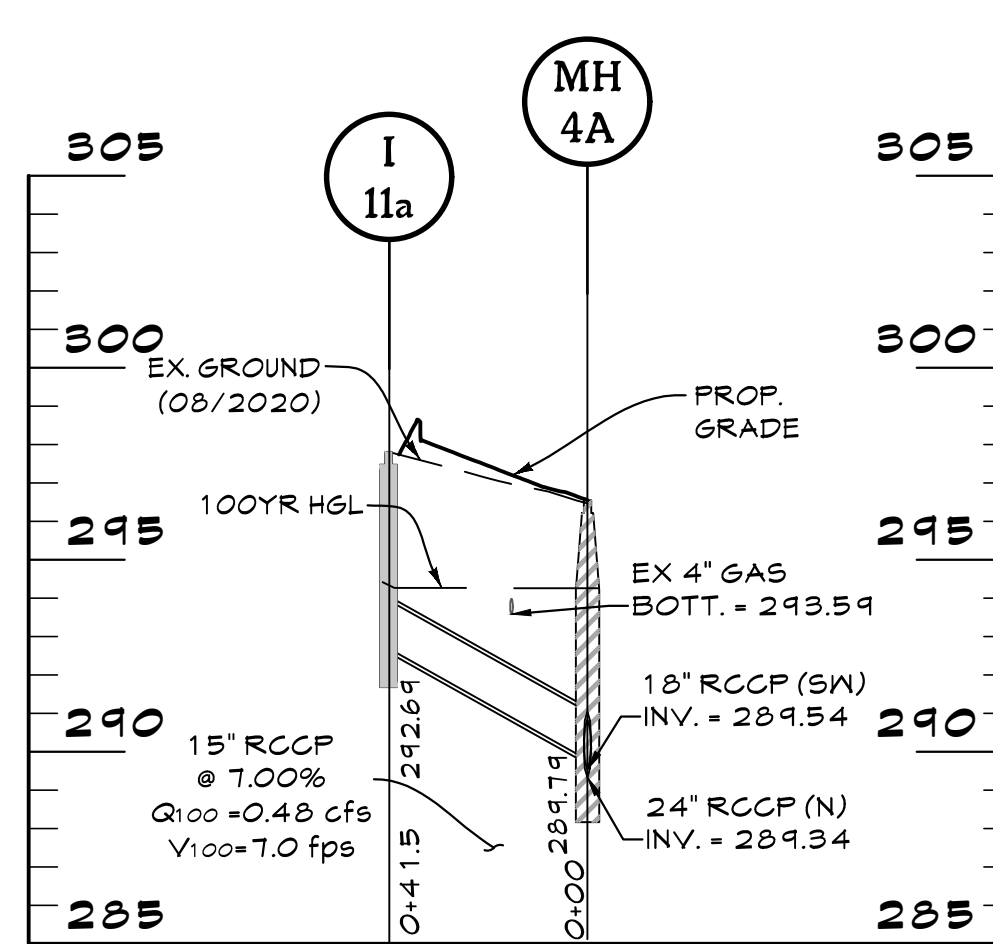


*USE ASTM C-361 TYPE PIPE

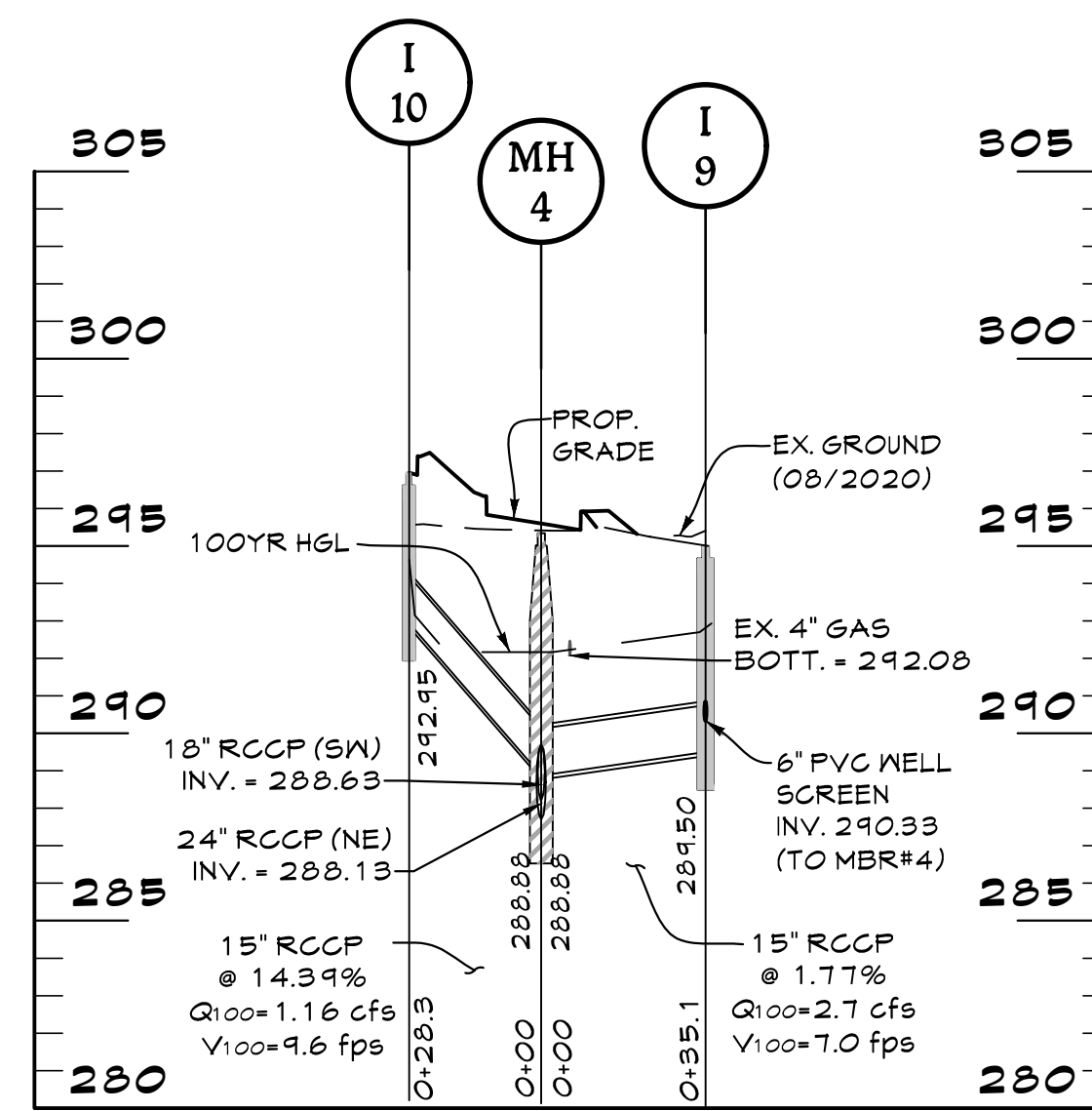
I-16 TO S-44



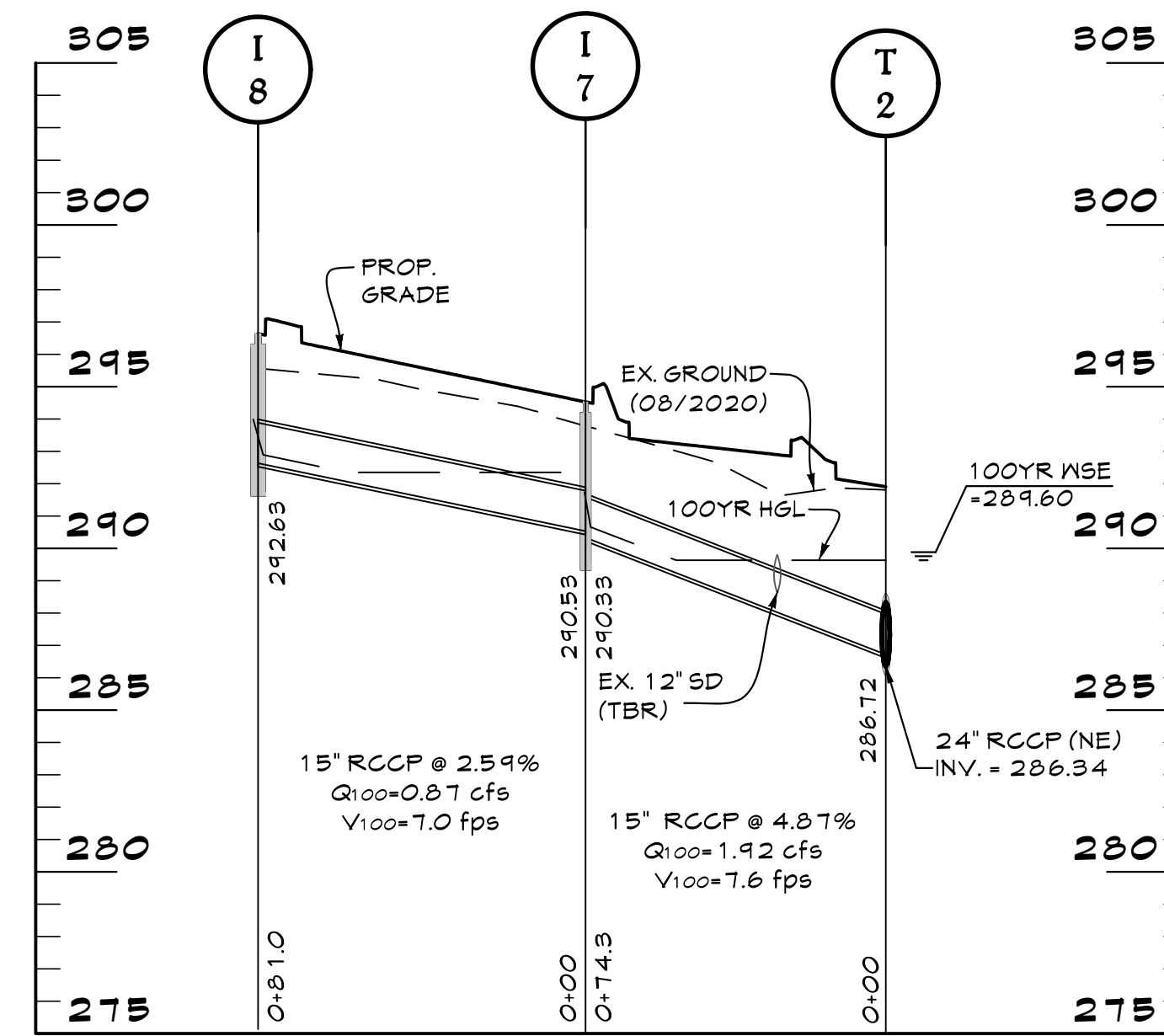
T-3 TO I-11b



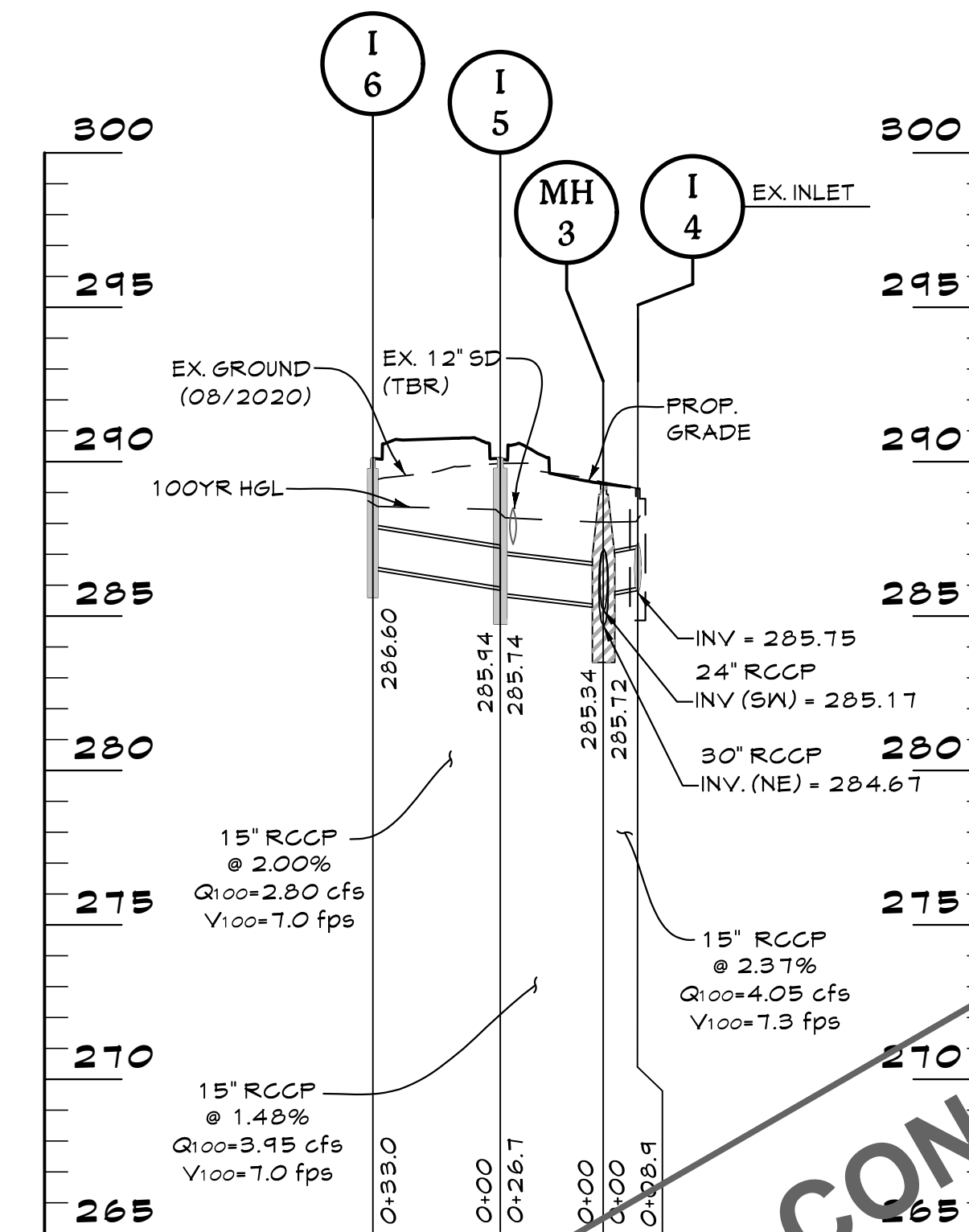
I-11 TO MH-4A



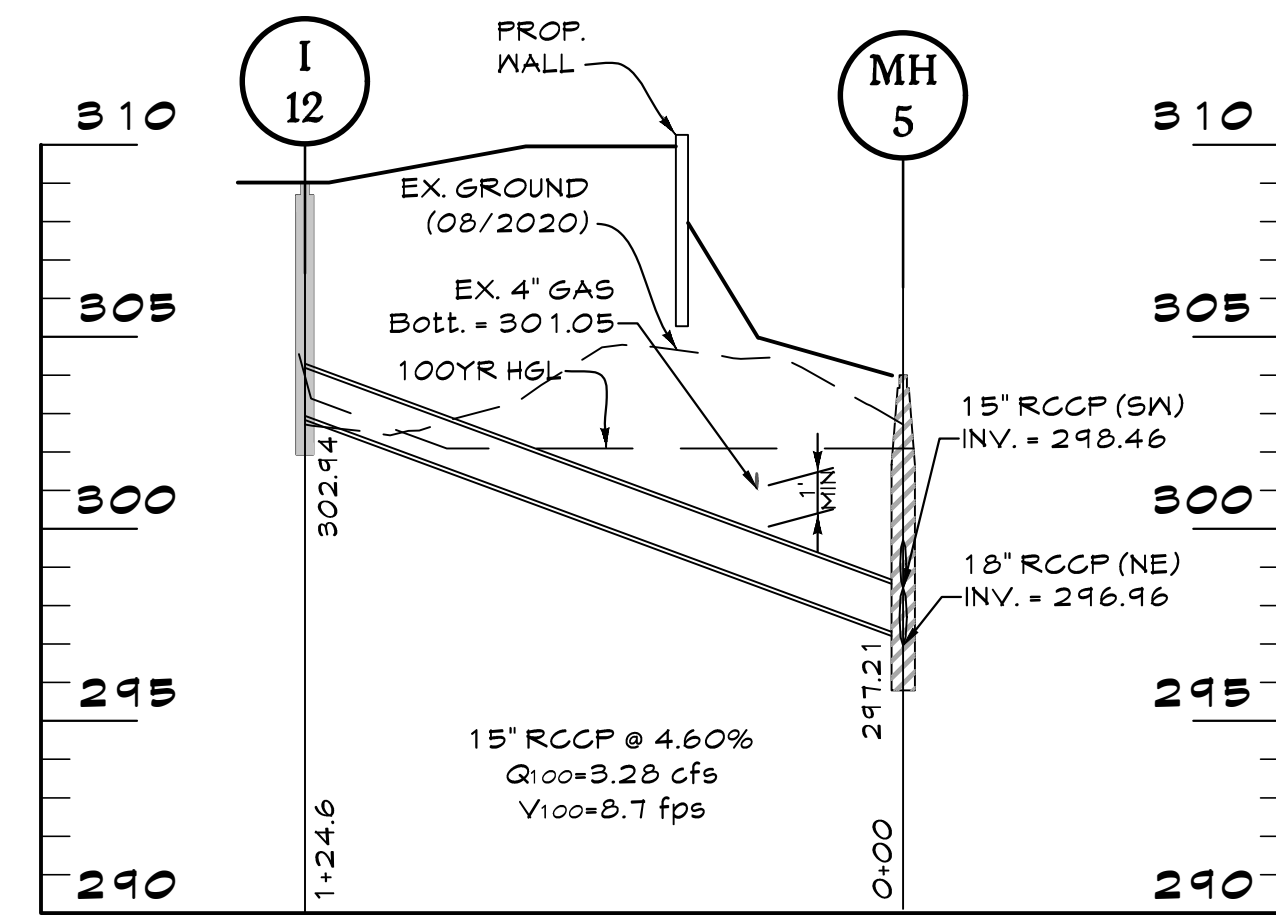
I-10 TO I-9



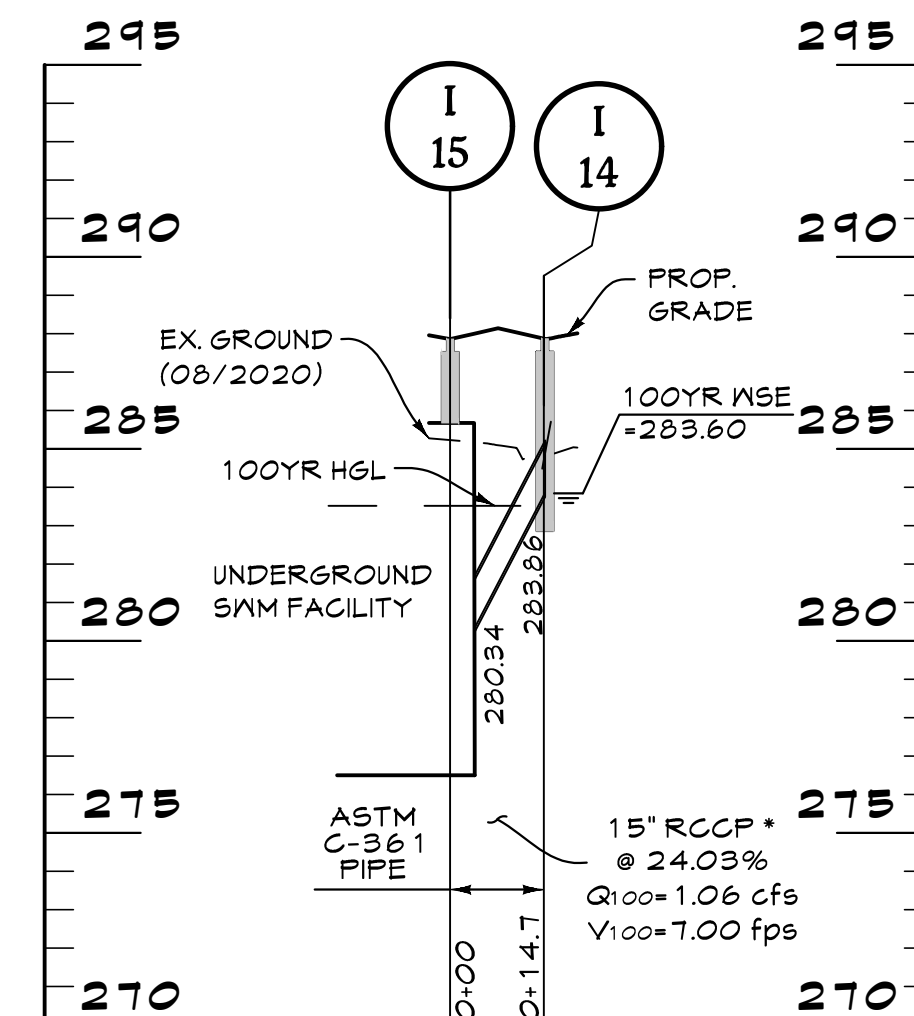
I-8 TO Y-2



I-6 TO I-4

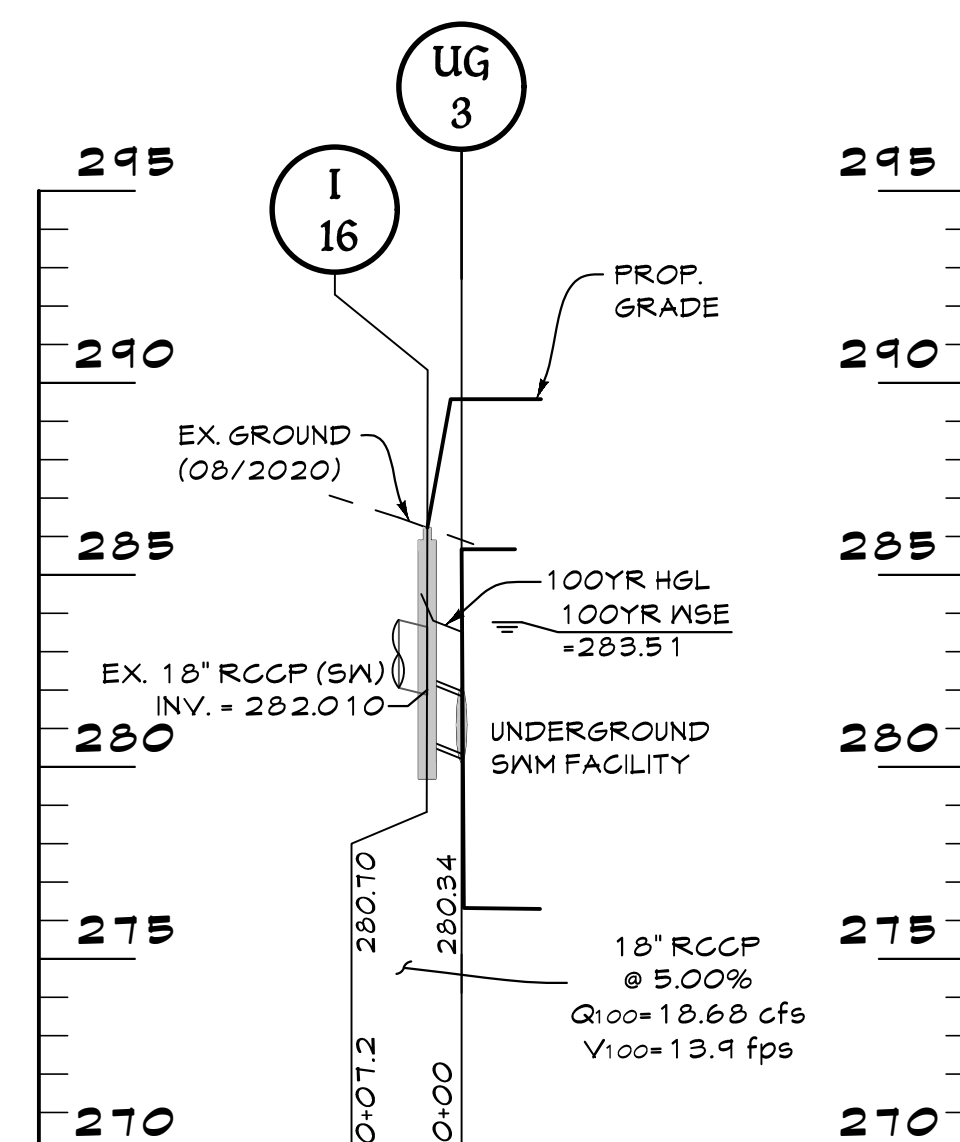


I-12 TO MH-5

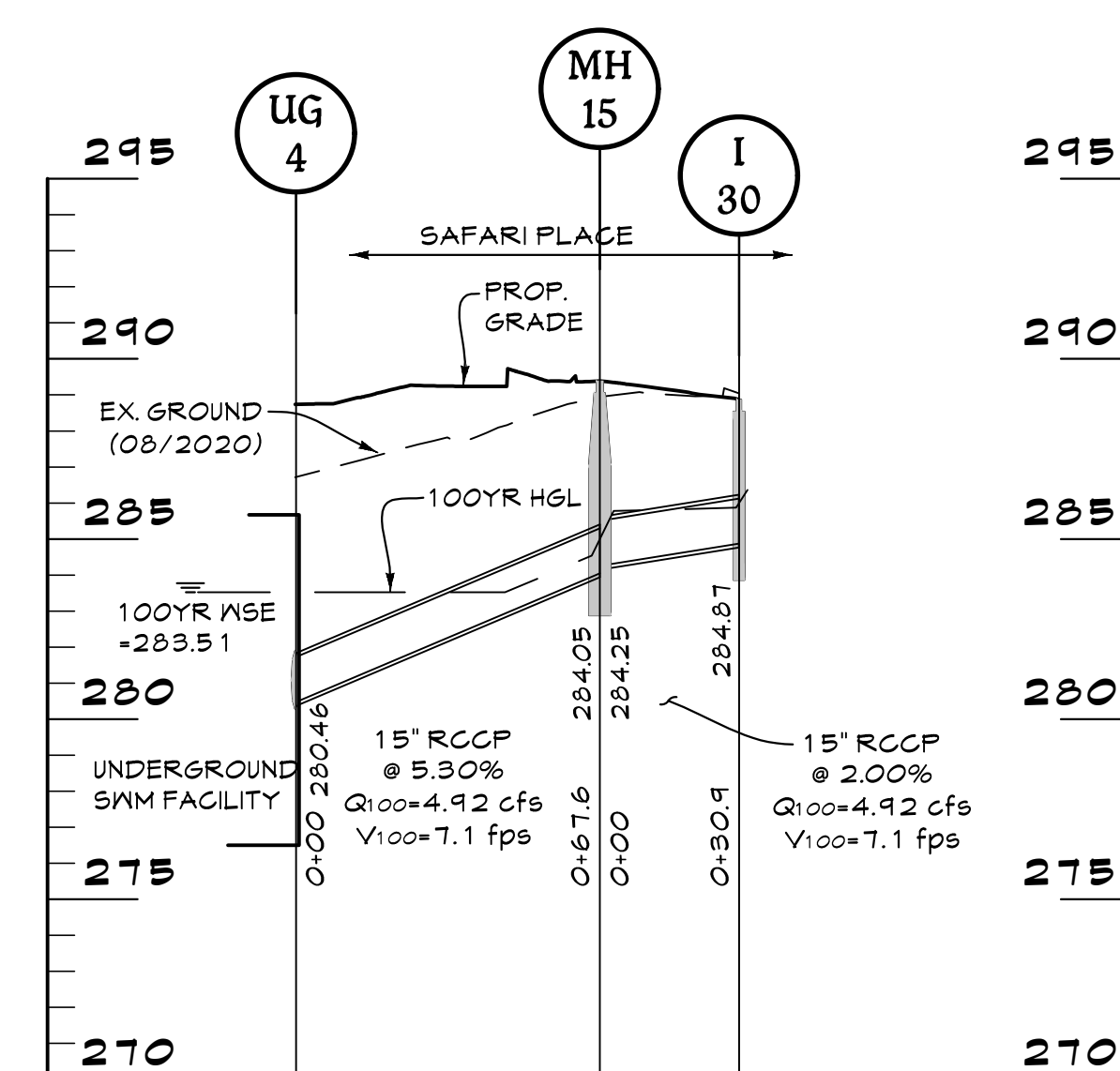


*USE ASTM C-361 TYPE PIPE

I-15 TO I-14



I-16 TO UG-3



UG-4 TO I-30

NOTES:

- ALL STORM DRAIN PIPES TO BE ASTM C-14 PIPE EXCEPT WHERE NOTED
- STORM DRAIN SYSTEM DESIGNED TO CONVEY THE 100 YEAR STORM
- VELOCITIES NOTED ARE PARTIAL FLOW VELOCITIES
- REFER TO SHEET C-044 FOR FLOW TABULATIONS AND STRUCTURE SCHEDULE

0 40' 80'

OWNER:
Mayor & City Council of Baltimore
One Calvert Plaza
201 E. Baltimore Street
Baltimore MD 21202
(410)-675-3651

DEVELOPER:
The Maryland Zoo in Baltimore
1876 Mansion House Drive
Baltimore MD 21211
C/O Karl Kranz
(410)-396-7102

DATE	BY	REVISIONS

CENTURY
ENGINEERING

A Kleinfelder Company
10710 Gilroy Road, Hunt Valley, MD 21031
Phone: 443.589.2400 www.centuryeng.com

UTILITY PROFILES 1

THE MARYLAND ZOO IN BALTIMORE PARKING LOT REHABILITATION

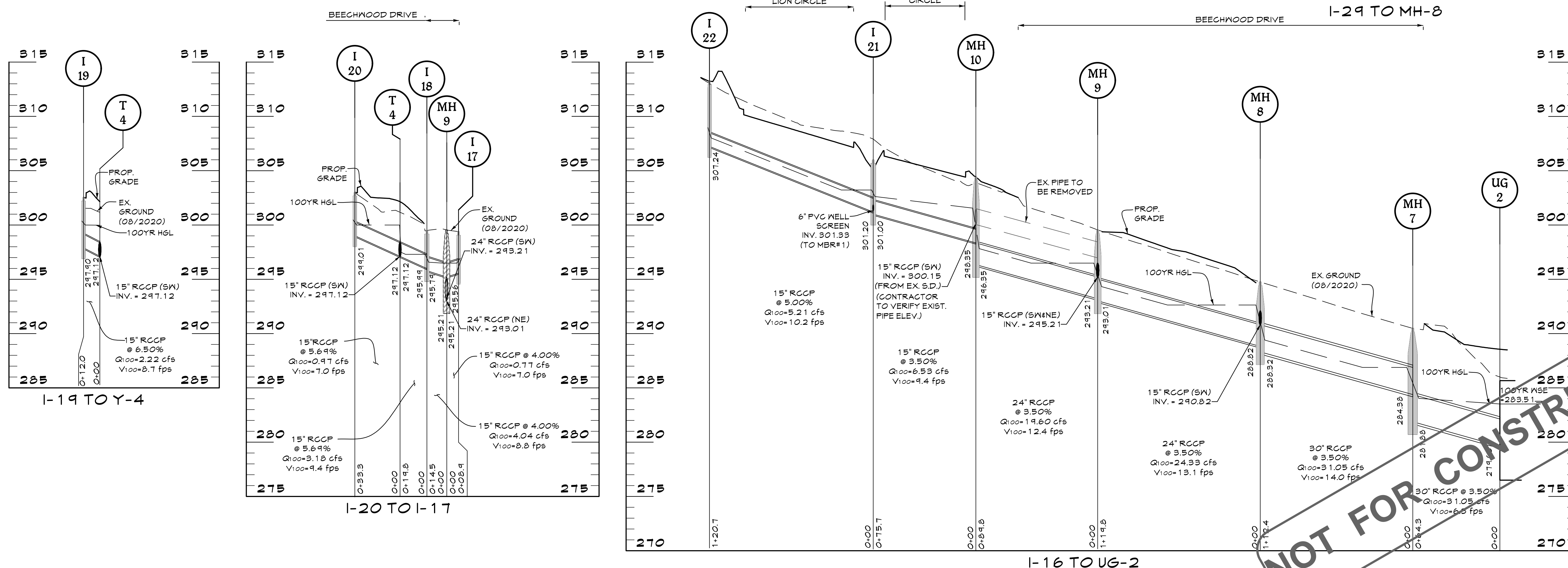
BALTIMORE, MARYLAND
WARD 13 SECTION 5 BLOCK 3499 LOT 001

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE
DOCUMENTS WERE PREPARED OR
APPROVED BY ME, AND THAT I AM
A DULY LICENSED PROFESSIONAL
ENGINEER UNDER THE LAWS OF
THE STATE OF MARYLAND.
LICENSE NO.: 32574
EXPIRATION DATE: 1/16/2024



DRAWN BY: AA	REVIEW BY: AJD
DESIGN BY: DRS/KRB	REVIEW DATE: 7/15/2022
SCALE: AS SHOWN	DRAWING: C-042
PROJECT No: 201069.00	



SCALE: HORIZ: 1"=40'
VERT: 1"=5'

1. ALL STORM DRAIN PIPES TO BE ASTM C-74 PIPE EXCEPT WHERE NOTED
2. STORM DRAIN SYSTEM DESIGNED TO CONVEY THE 100 YEAR STORM
3. VELOCITIES NOTED ARE PARTIAL FLOW VELOCITIES
4. REFER TO SHEET C-044 FOR FLOW TABULATIONS AND STRUCTURE SCHEDULE

DEVELOPER:
The Maryland Zoo in Baltimore
1876 Mansion House Drive
Baltimore MD 21217
C/O Karl Kranz
(410)-396-7102

A Kleinfelder Company
10710 Gilroy Road, Hunt Valley, MD 21031
Phone: 443.589.2400 www.centuryeng.com

THE MARYLAND ZOO
IN BALTIMORE
PARKING LOT REHABILITATION

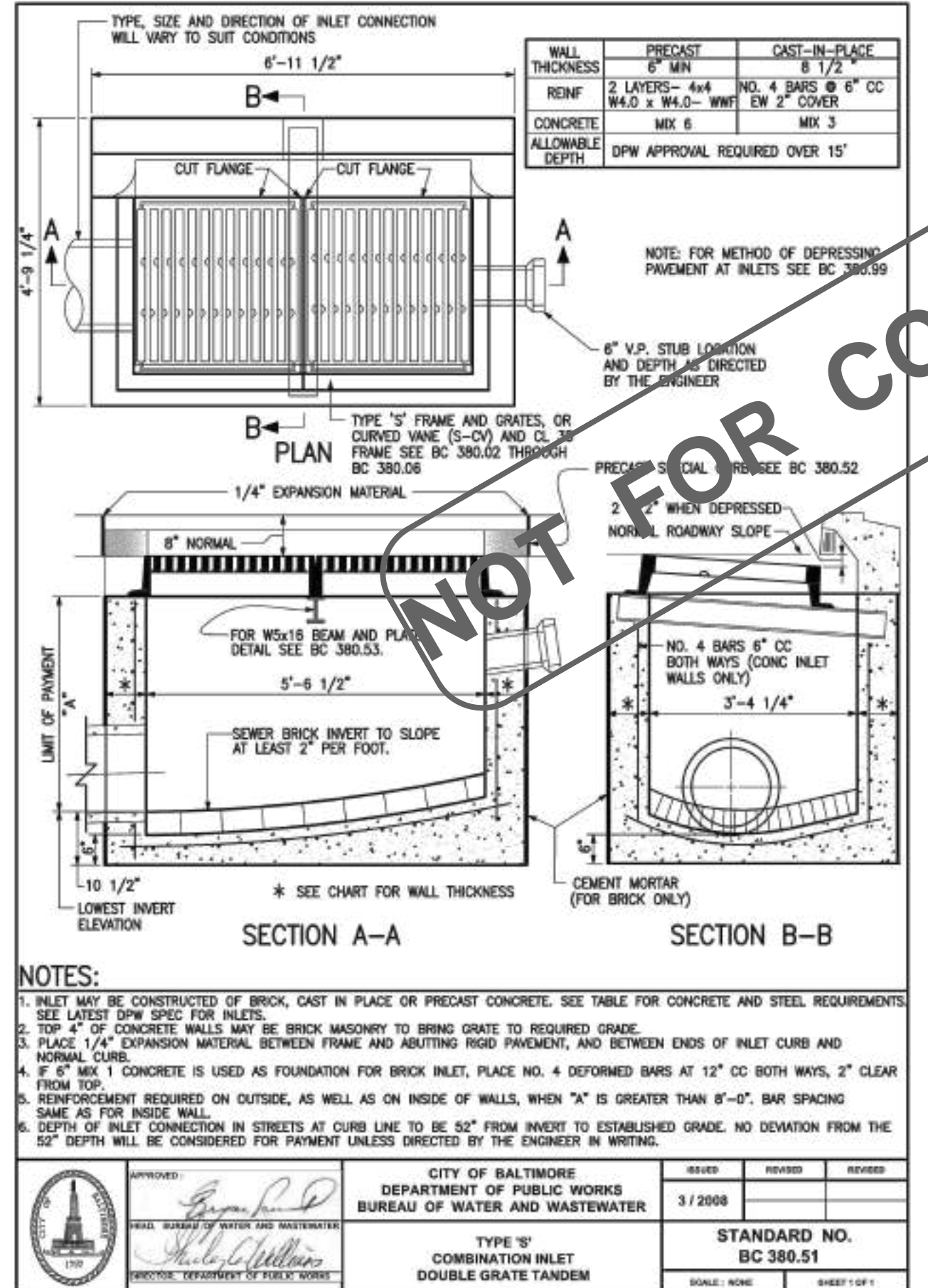
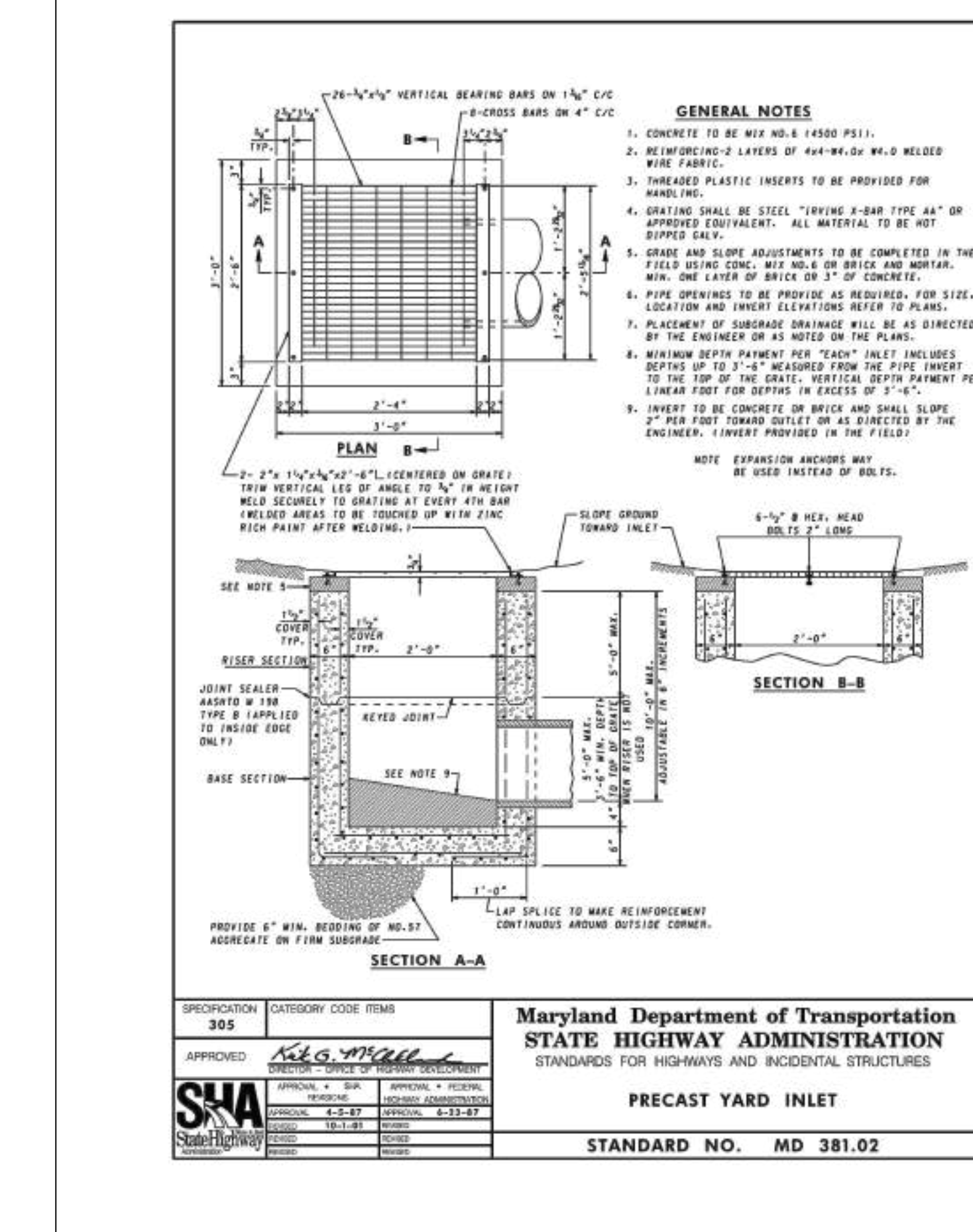
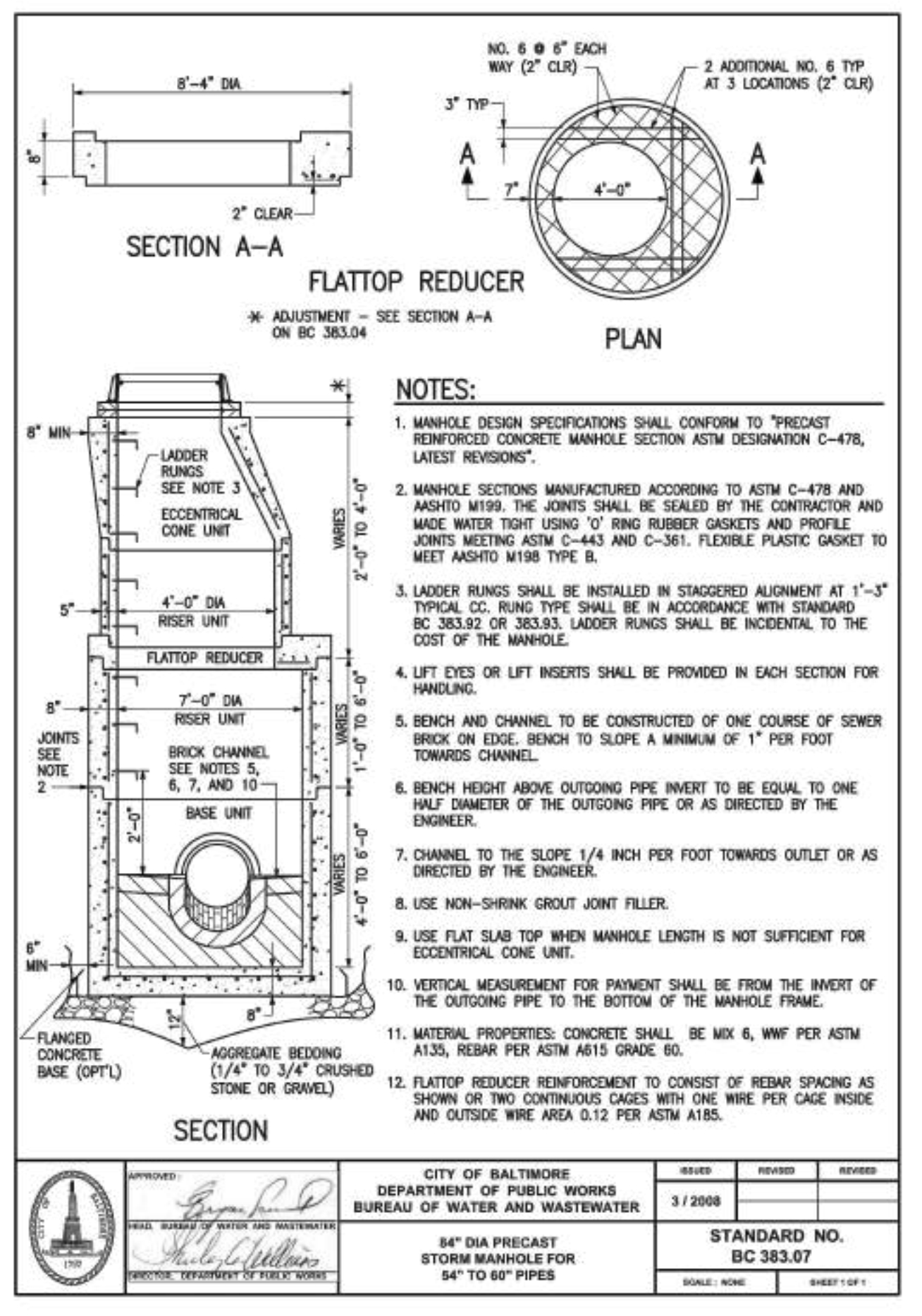
PROFESSIONAL CERTIFICATION

REVIEW BY:	AJD
REVIEW DATE:	7/15/2022

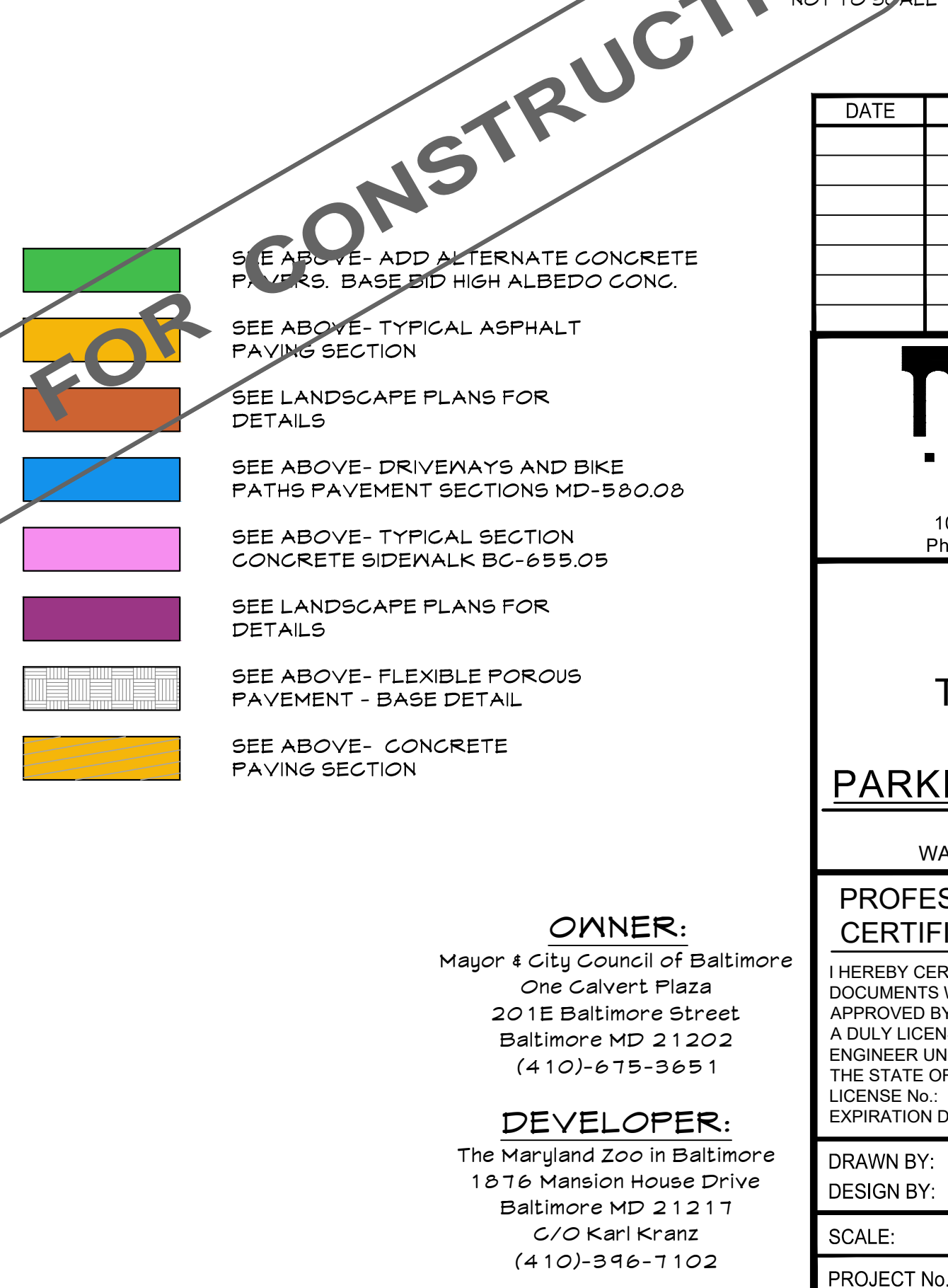
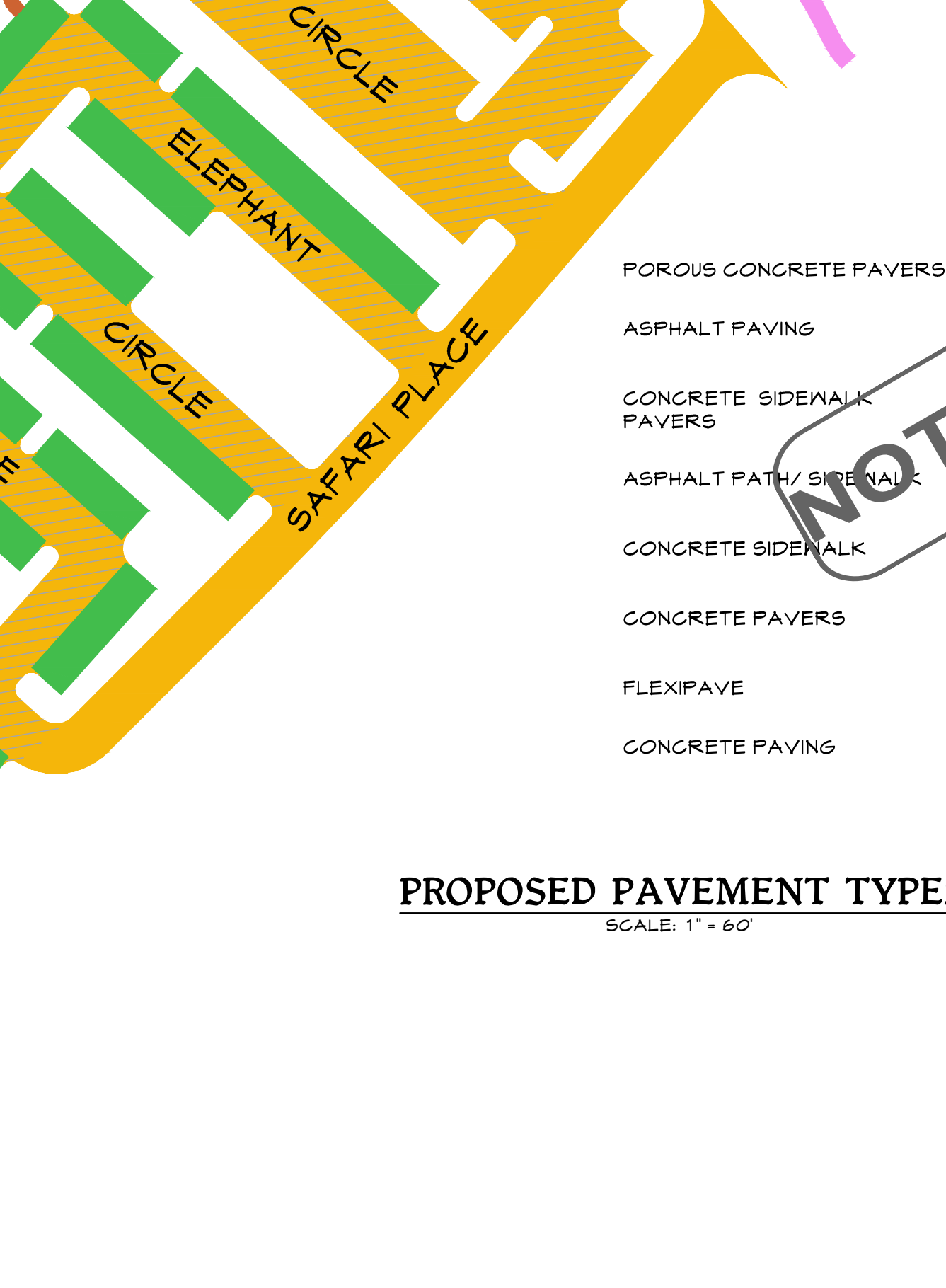
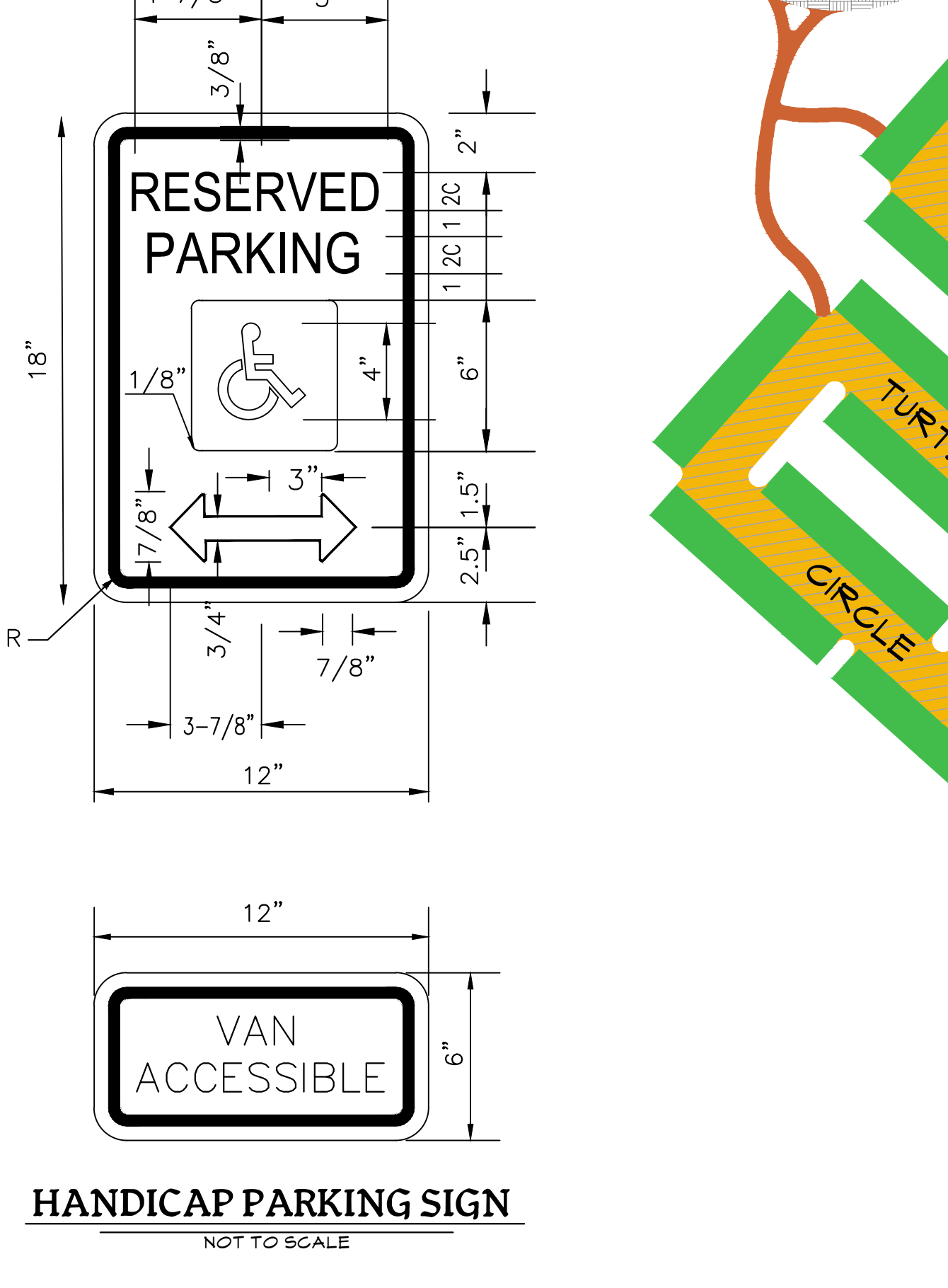
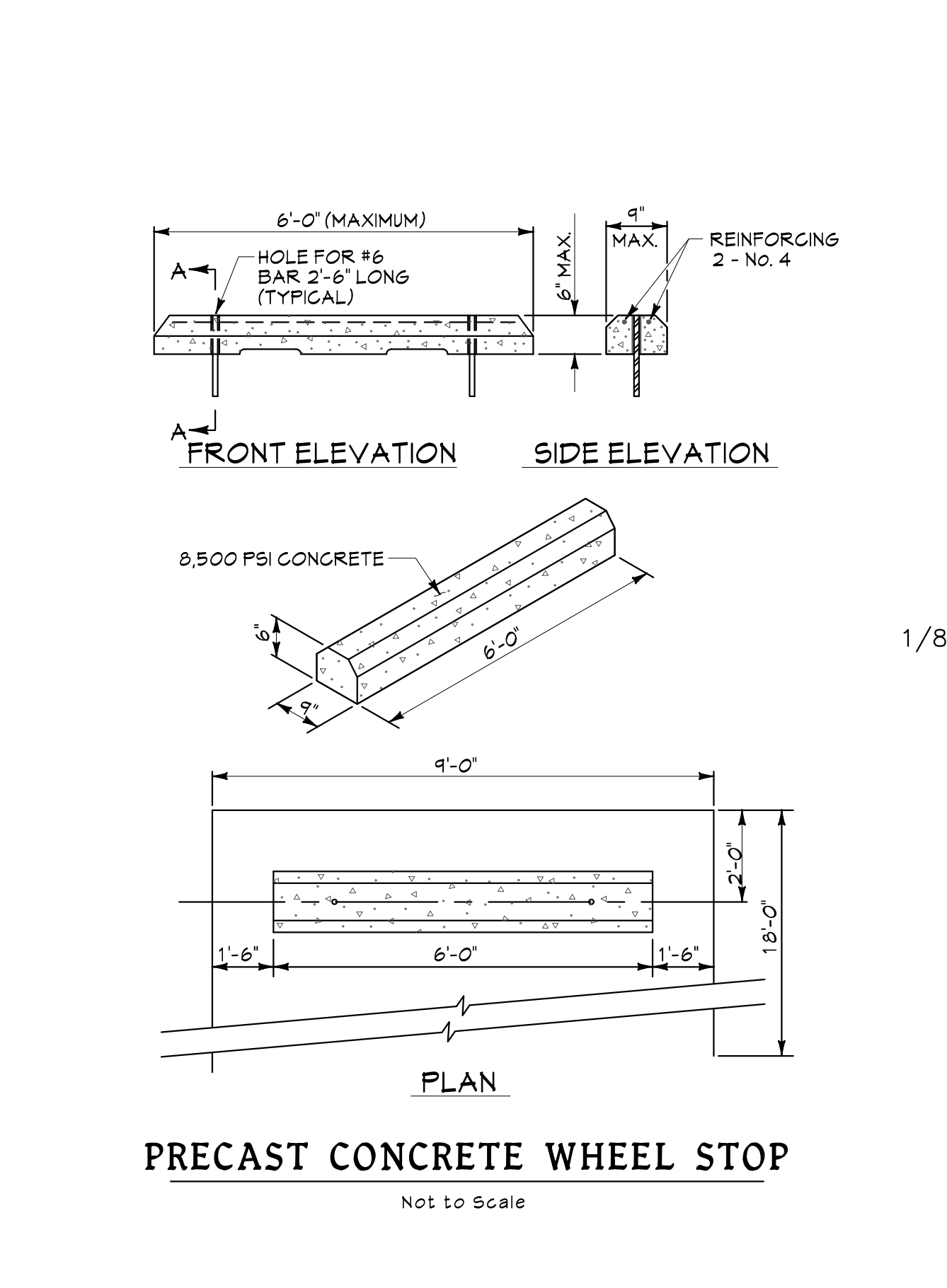
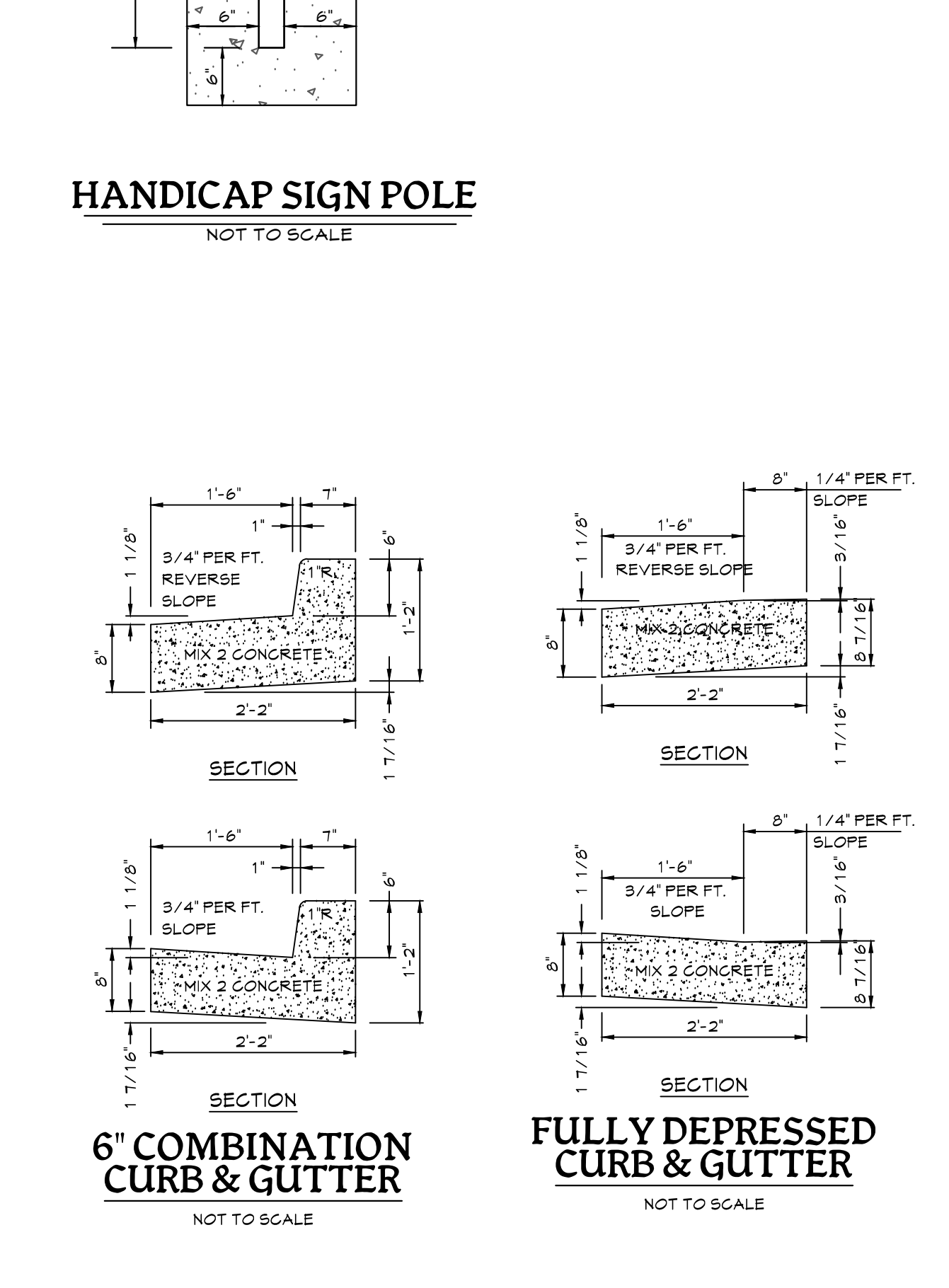
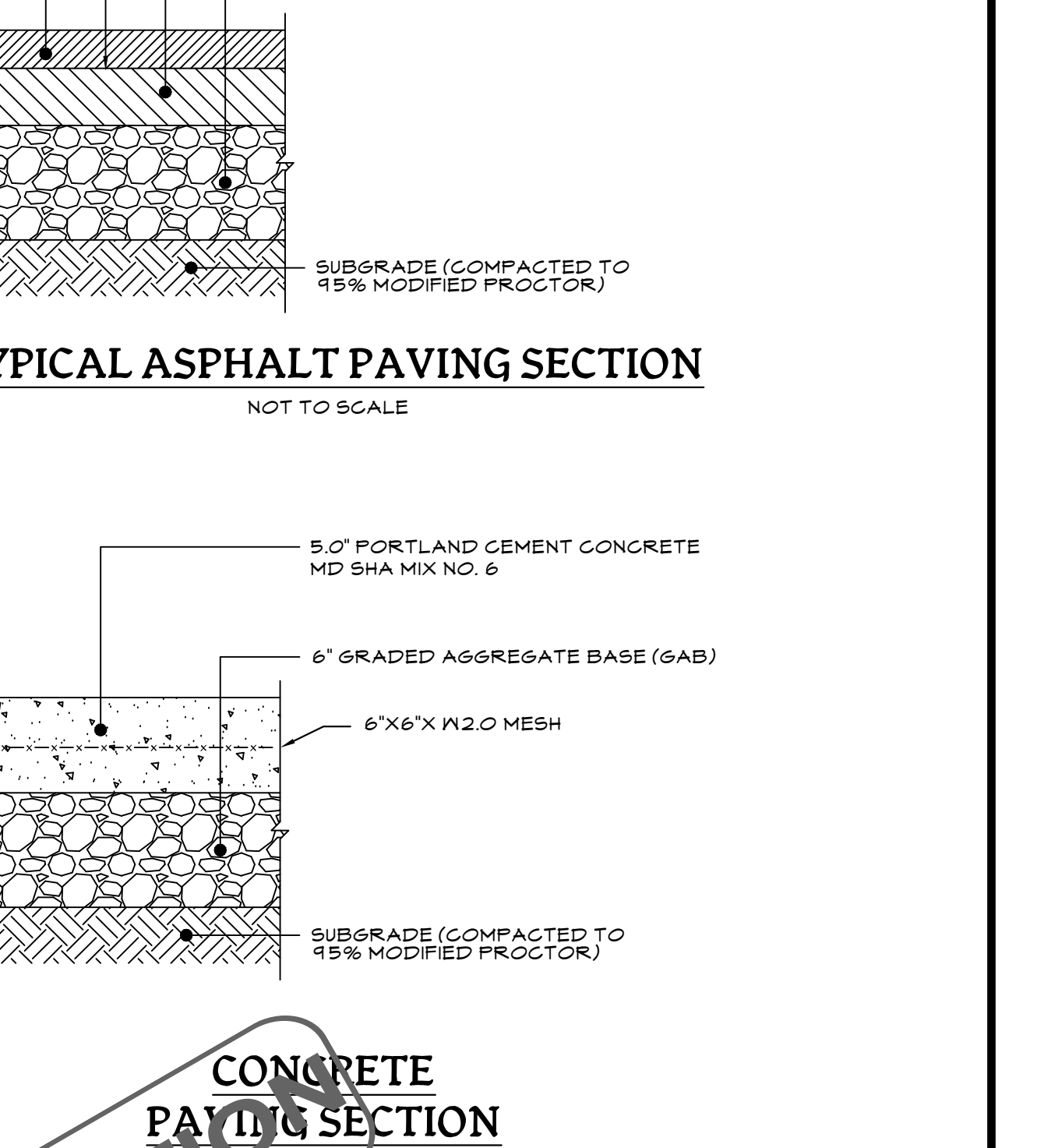
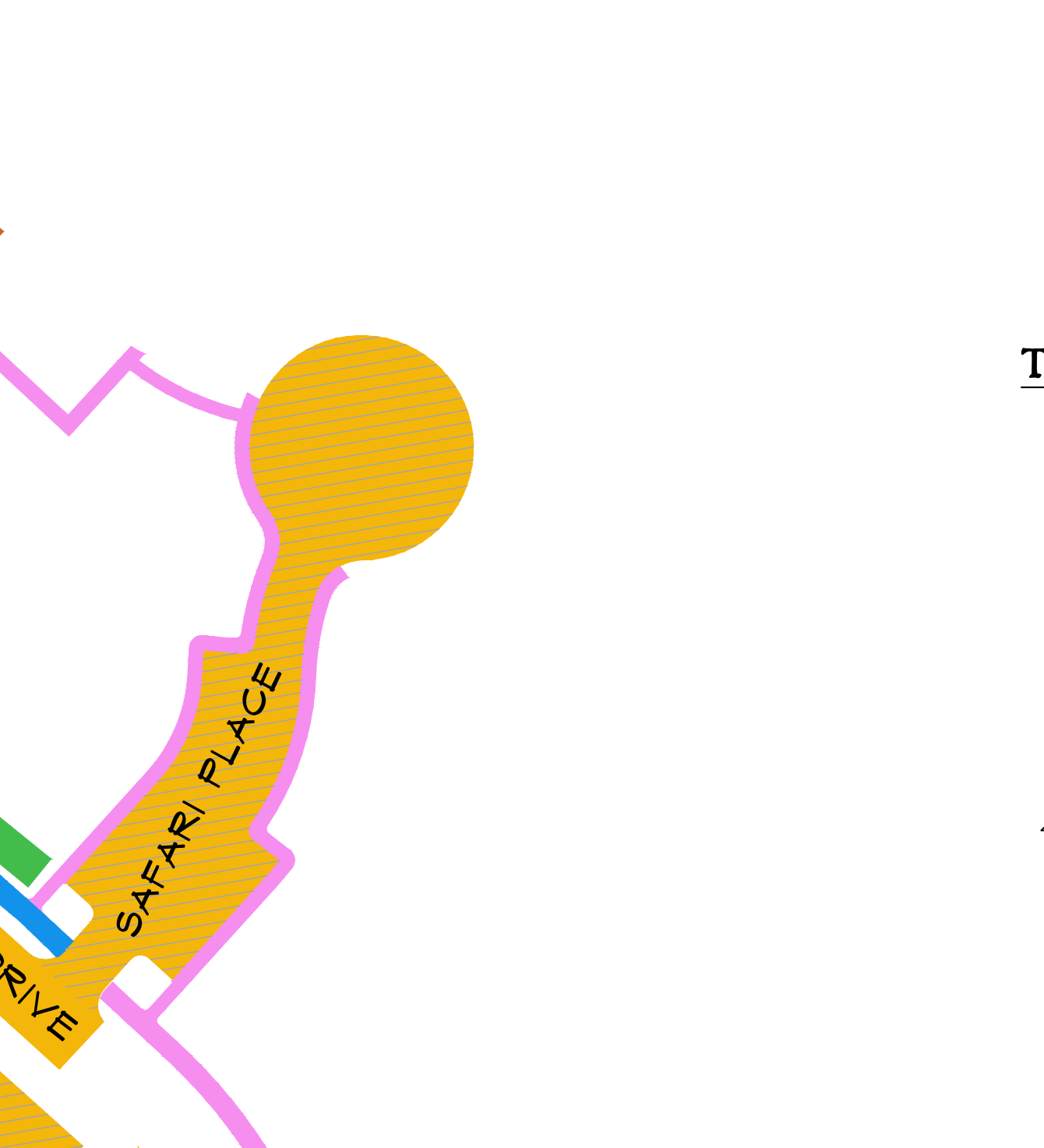
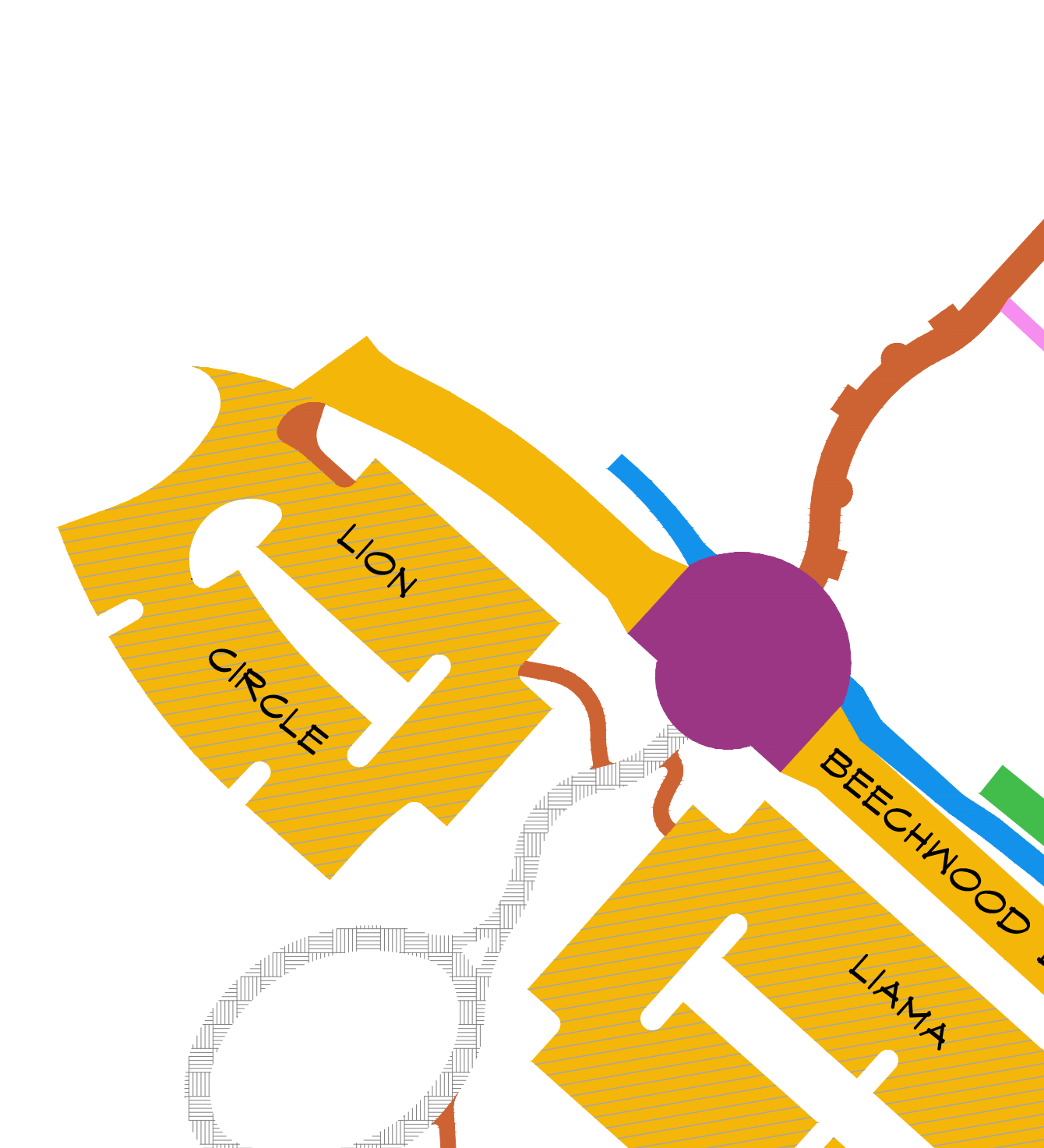
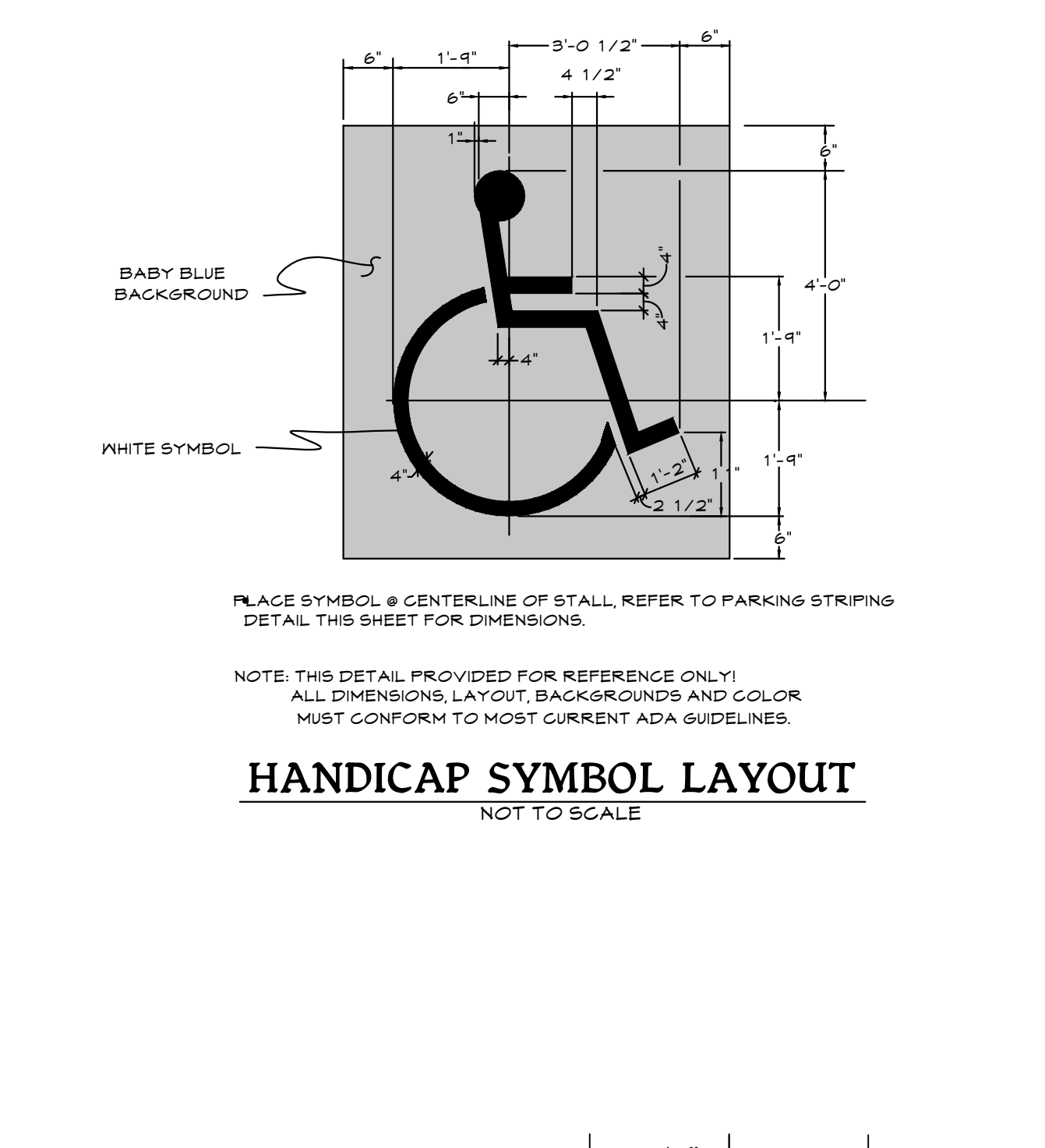
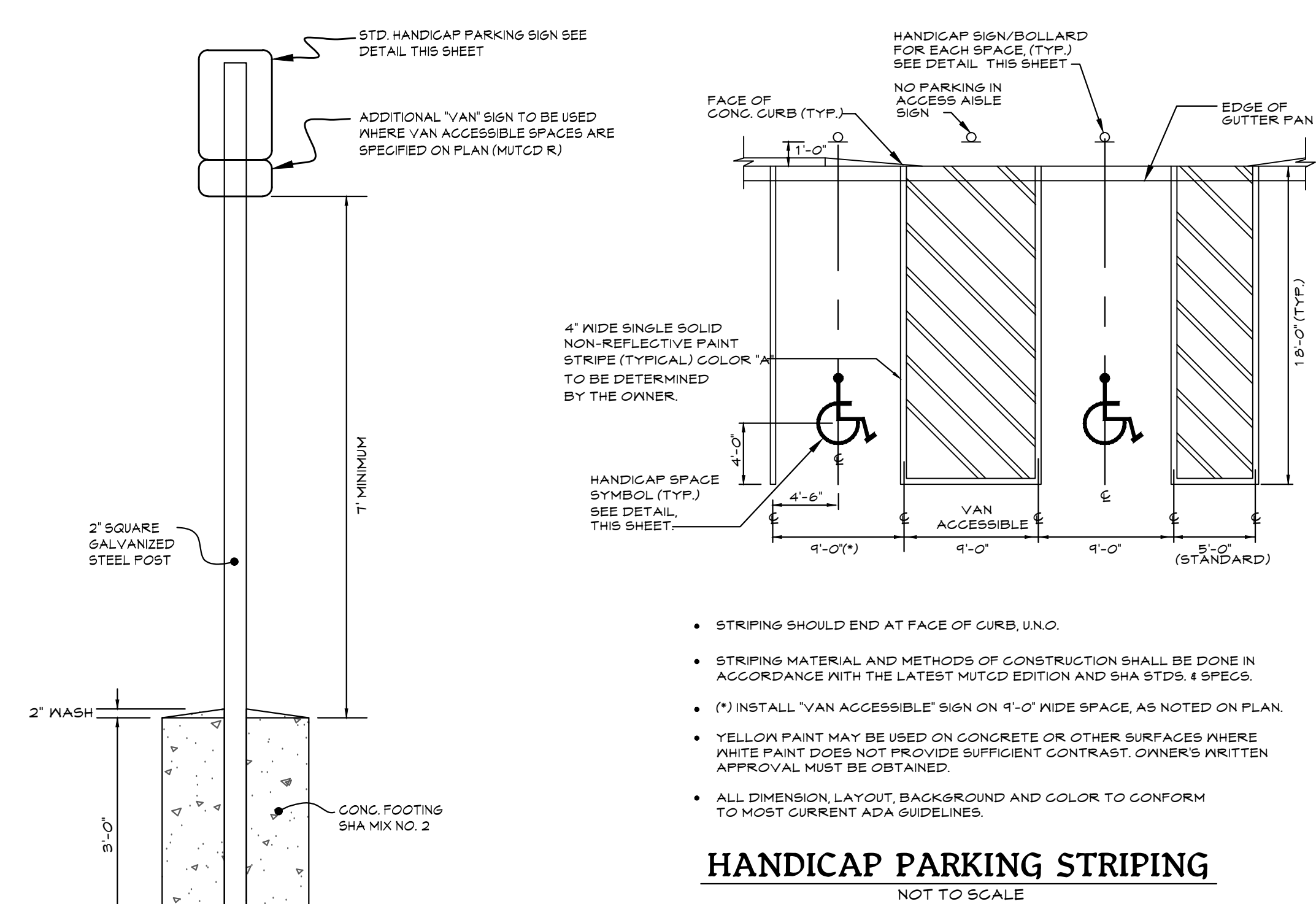
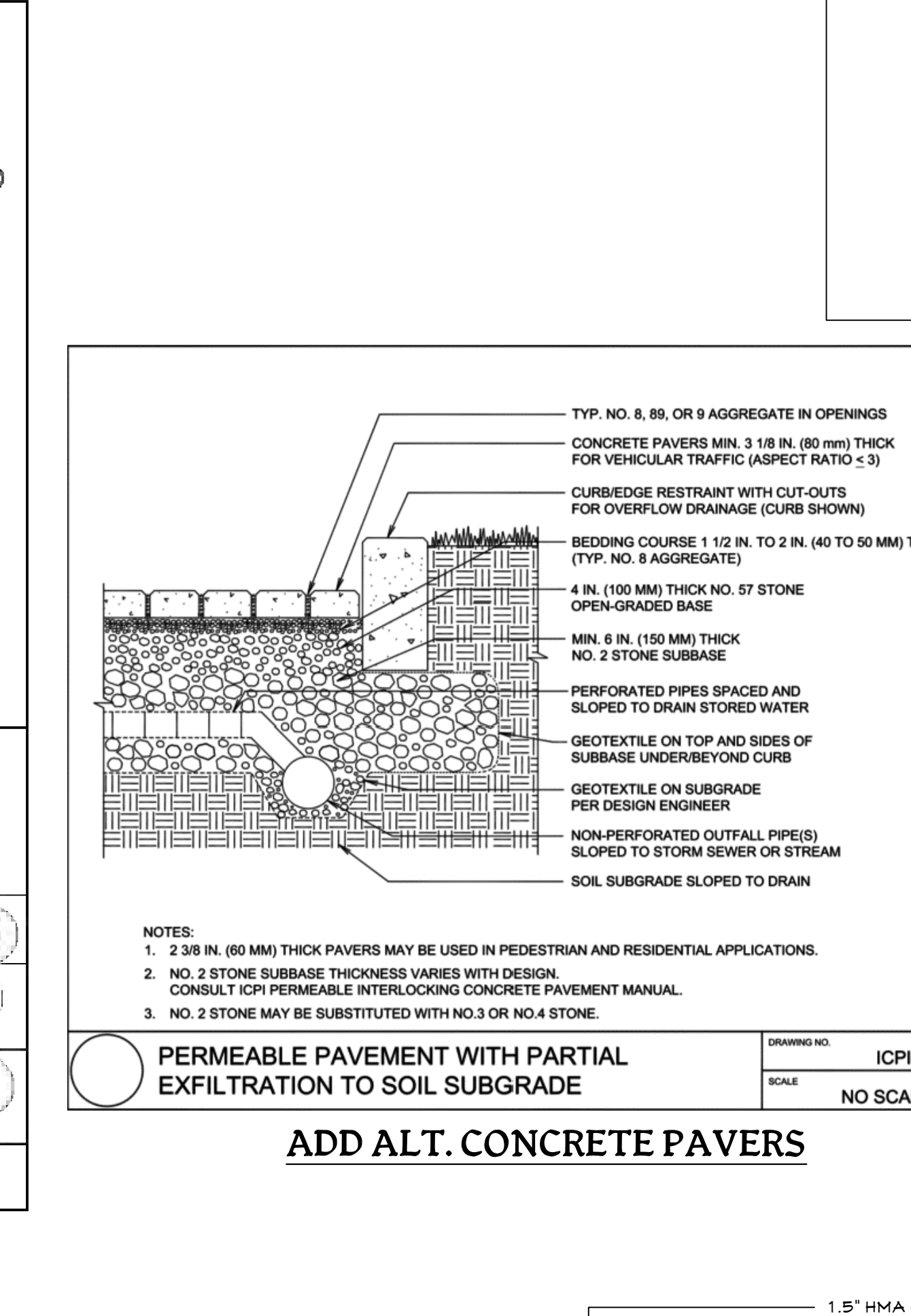
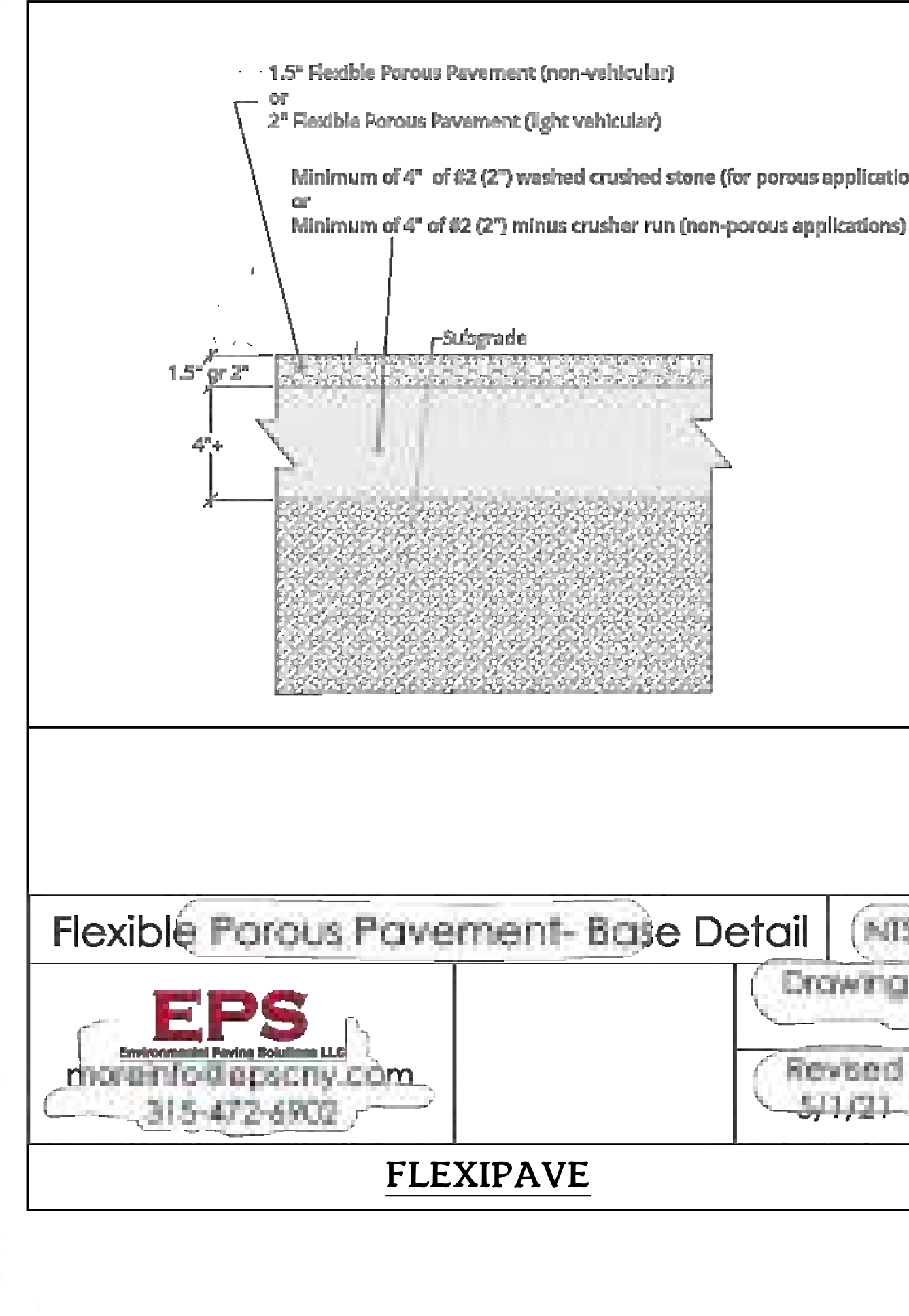
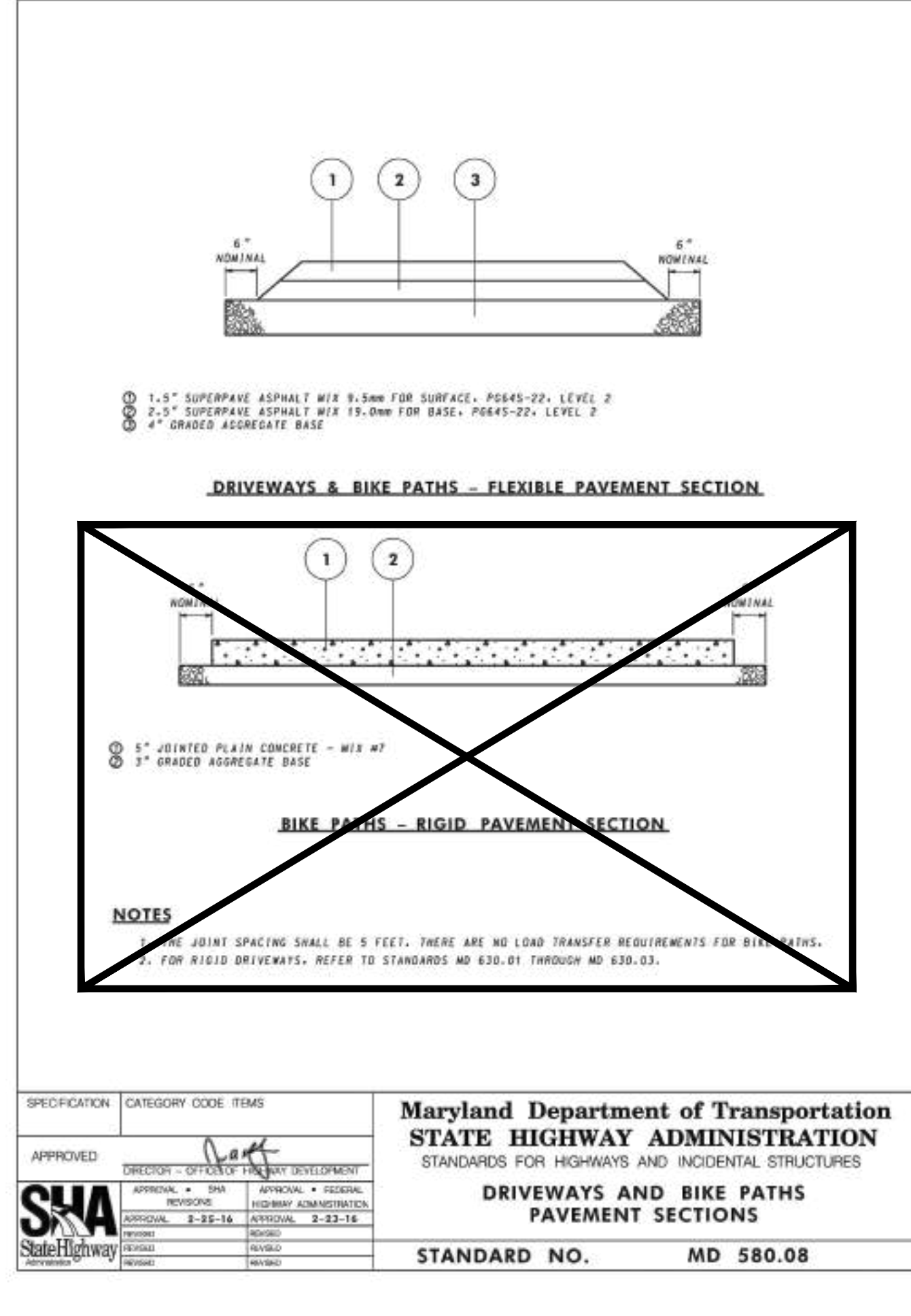
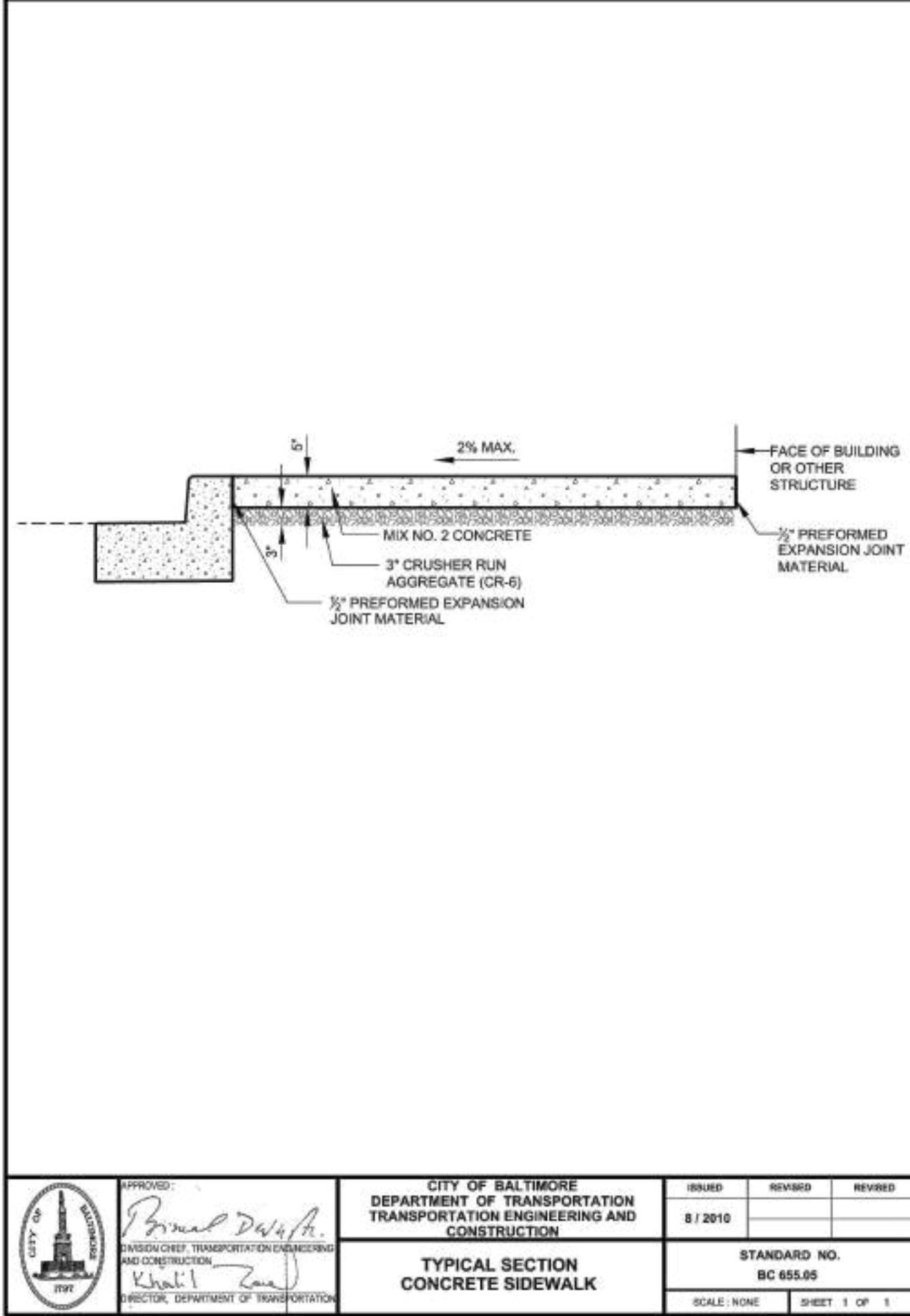
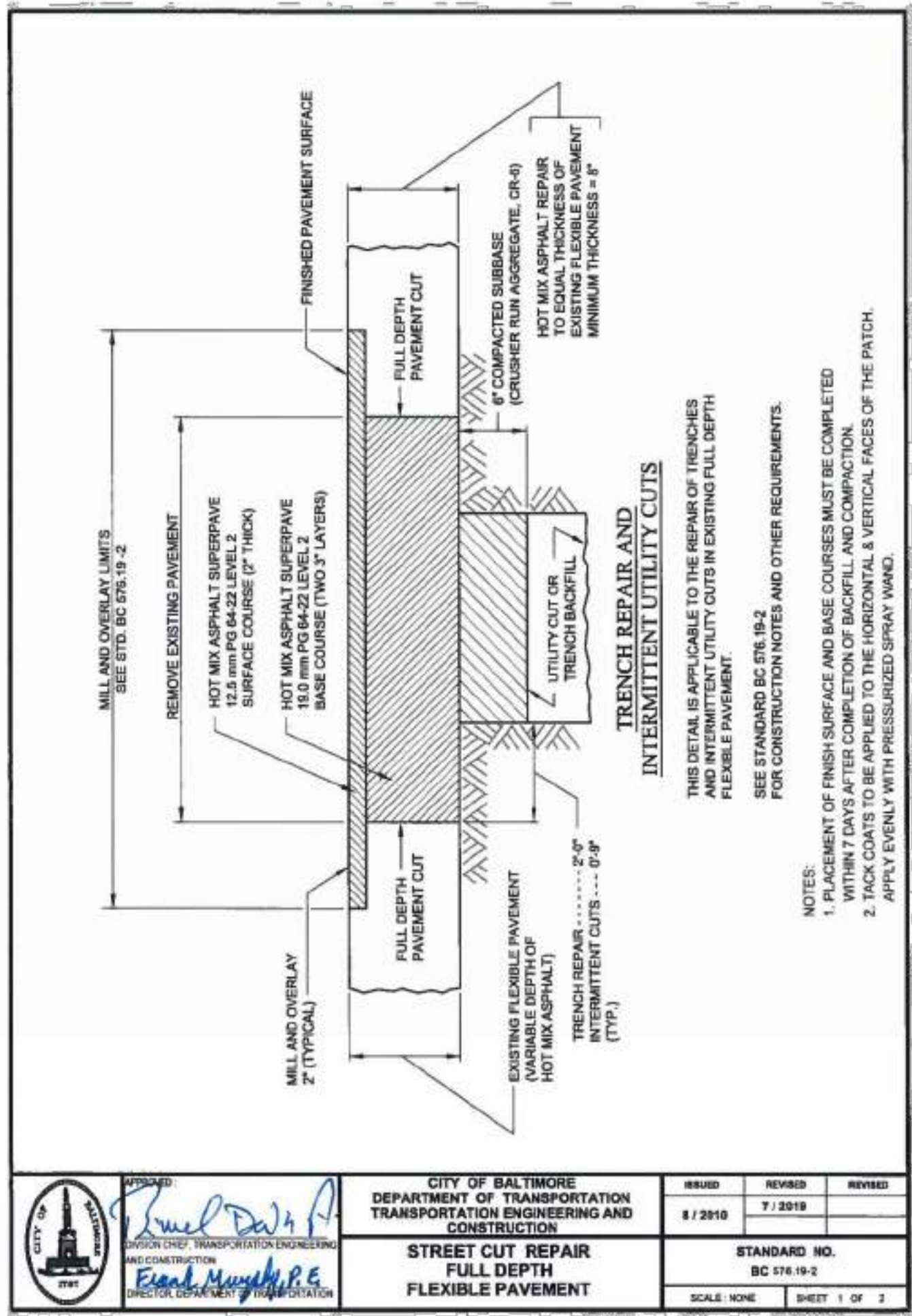
DRAWING:	C-043
----------	-------

MANHOLE SCHEDULE						
NO.	TYPE	SIZE	INV.	OUT	TOPELEV.	DETAIL
MH-1	84" DIA PRECAST	72"	273.31	283.41	BC 393.07	
MH-2	60" DIA PRECAST	60"	281.84	284.08	BC 393.05	
MH-3	60" DIA PRECAST	60"	284.67	284.28	BC 393.05	
MH-4	48" DIA PRECAST	48"	287.70	285.23	BC 393.04	
MH-4A	48" DIA PRECAST	48"	289.34	246.55	BC 393.04	
MH-5	48" DIA PRECAST	48"	286.86	304.00	BC 393.04	
MH-6	48" DIA PRECAST	48"	304.42	312.75	BC 393.04	
MH-7	72" DIA PRECAST	72"	281.88	240.48	BC 393.06	
MH-8	60" DIA PRECAST	60"	288.32	244.76	BC 393.05	
MH-9	48" DIA PRECAST	48"	243.01	244.54	BC 393.04	
MH-10	48" DIA PRECAST	48"	286.35	304.42	BC 393.04	
MH-11	48" DIA PRECAST	48"	293.46	244.03	BC 393.05	
MH-12	48" DIA PRECAST	48"	295.07	302.61	BC 393.04	
MH-13	48" DIA PRECAST	48"	296.45	304.15	BC 393.04	
MH-14	48" DIA PRECAST	48"	294.20	305.98	BC 393.04	
MH-15	48" DIA PRECAST	48"	284.05	284.39	BC 393.04	

STORM DRAIN FLOW TABS																			
LOCATION		AREA	ACRES		COEFF.	CA	SUMP	Z	TIME CONC-MIN.	INTEN.	ONCL.	PIPE	W	Partial Flow	Leq.	REMARKS			
From	To		Sub	Total	Yr		Ch		Inlet	Denin	Vel	Size	(Sec)	(Ft/Sec)	(Ft/Sec)				
1-20	1-21	C	2.26		20	0.54	0.00		5.60	5.6	945	1.35	15	3.06	0.79%	102	4.3	123	
1-21		D	22		40	0.74	0.00		5.60	5.6	945	1.35	15	3.06	0.79%	102	4.3	123	
1-20	MH10	C-D		240		0.42	0.00	0.68	5.60	6.2	941	4.33	15	3.36	0.49%	94	5.3	30	
EX17	EX16	A	200		30	0.72	0.00		5.60	5.6	945	1.35	15	3.06	0.79%	77	5.7	22	
EX16		B	178		30	0.65	0.00		5.60	5.6	945	4.27							
EX16	MH10	A-B		378				1.37	5.6	6.0	5.6	945	13.22	18	4.76	1.24%	178	7.5	235
MH10	MH9	A-D		627		222	5.2	6.2	5.4	9.56	9.56	200	24	3.59	0.63%	124	6.2	90	
1-20	T4	E	16		30	0.10	0.00		5.60	5.6	945	1.35	15	3.06	0.79%	78	4	35	
1-27	T4	F	17		30	0.21	0.00		5.60	5.6	945	1.35	15	3.06	0.79%	78	4	35	
T4	1-18	E-F		37				0.33	5.6	6.1	5.3	943	3.18	15	3.69	0.38%	64	26	30
148		G	14		30	0.09	0.00		5.60	5.6	945	8.7							
148	MH9	H-G		71		61	0.1	5.1	945	6.0	5.1	945	40.4	15	4.00	0.40%	68	33	14
1-17	MH9	I	12		69	0.08	0.00		5.60	5.6	945	1.35	15	3.06	0.79%	78	4	35	
MH9	MH4	A-H		718		255	5.4	6.1	5.5	9.59	9.45	38	33	3.26	1.26%	133	7.5	130	
1-29	1-3	I	38		26	0.10	0.00		5.60	5.6	945	8.7	15	1.99	0.03%	78	8	65	
1-28	I	J	87		26	0.02	0.00		5.60	5.6	945	35							
1-28	T4	I-J		48				0.42	5.6	6.2	5.2	941	1.15	15	3.67	0.03%	71	9	63
1-27	T3	K	39		42	0.19	0.00		5.60	5.6	945	1.35	15	3.06	0.79%	78	4.5	71	
T3	MH14	K-X		37		0.31	0.1	6.2	5.3	9.58	9.58	17	15	3.07	0.25%	41	24	80	
1-26	MH14	L	47		23	0.11	0.00		5.60	5.6	945	1.06	15	3.00	0.07%	78	9	53	
MH14	MH1	L-H		122		0.42	5.3	6.2	5.5	9.4	9.41	15	3.00	0.45%	78	3.3	69		
1-25	MH13	M	16		43	0.00	0.00		5.60	5.6	945	1.35	15	3.06	0.03%	78	8	17	
MH13	MH12	L-M		118		0.52	5.3	6.1	5.6	9.52	9.48	15	3.07	0.47%	71	40	40		
1-24	MH12	N			40	0.00	0.00		5.60	5.6	945	37	15	3.03%	70	6	30		
1-23	MH12	O	47		31	0.15	0.00		5.60	5.6	945	1.35	15	3.06	0.03%	76	1.2	44	
MH12	MH8	I-N		281		0.75	5.6	6.1	5.7	9.50	7.13	15	3.06%	1.40%	77	5.8	200		
EX14	EX3	A-O		911		4.7	6.4	6.1	6.0	30.56	30.56	9.7	3.36	0.66%	149	63	176		
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.30	0.52%	70	11.2	16	
EX14	EX4	A-D		336		42	1.42	0.20	5.60	5.6	945	13.70	15	3.3					

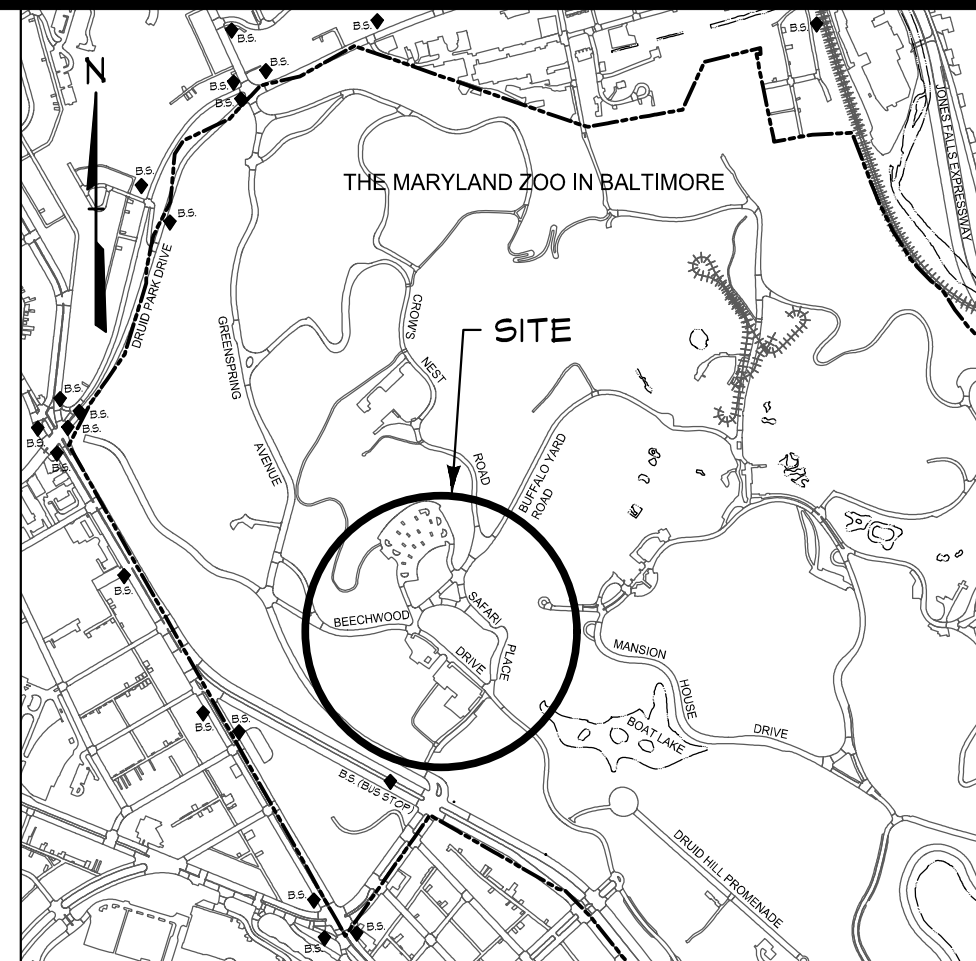
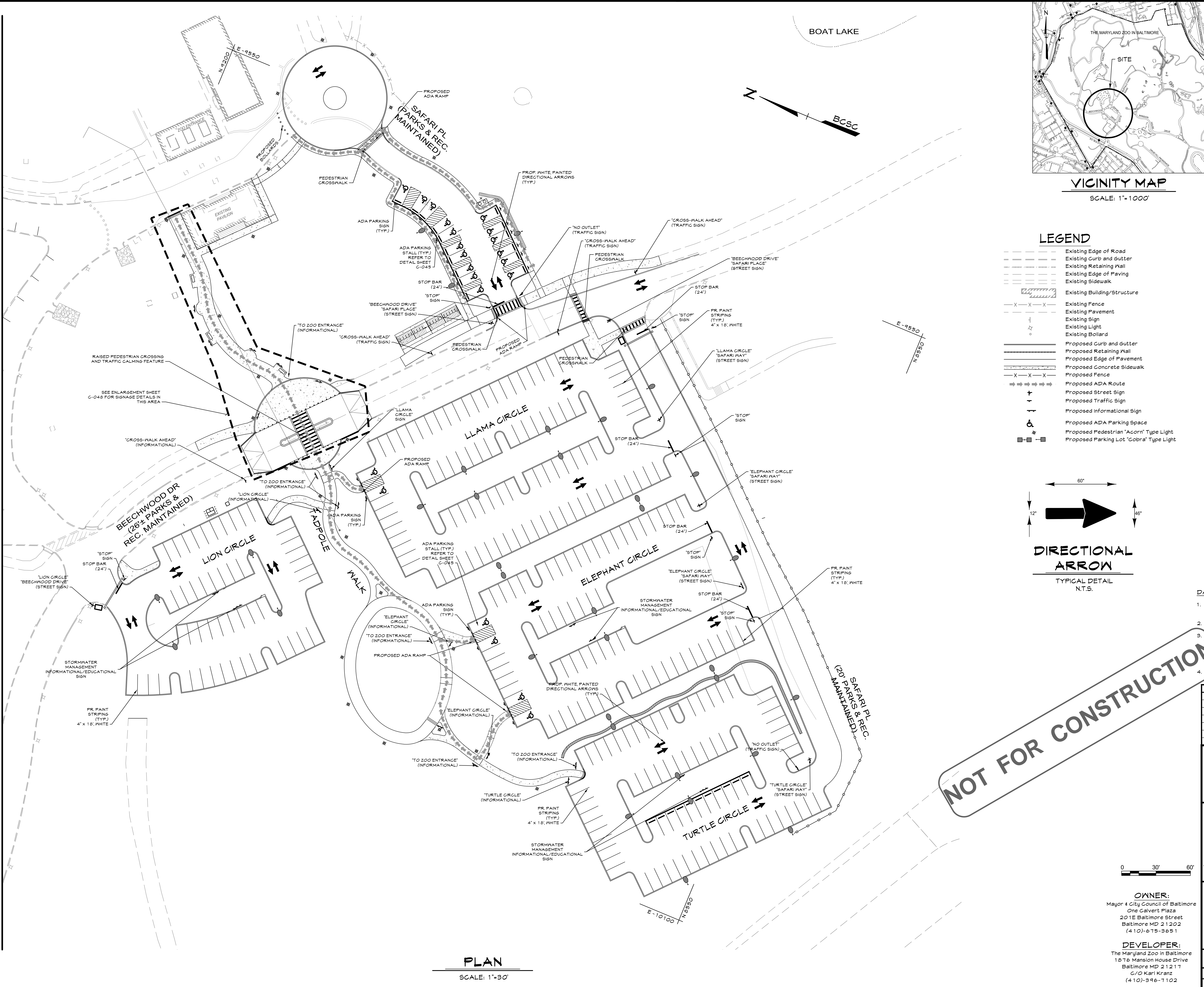


ESD # 7969



T:\2020\Facilities\20106400 MD Zoo Parking\Drawings\Construction\20106400 (C-047) Signage Plan 1.dwg Jul 18, 2022 1:23pm delanian

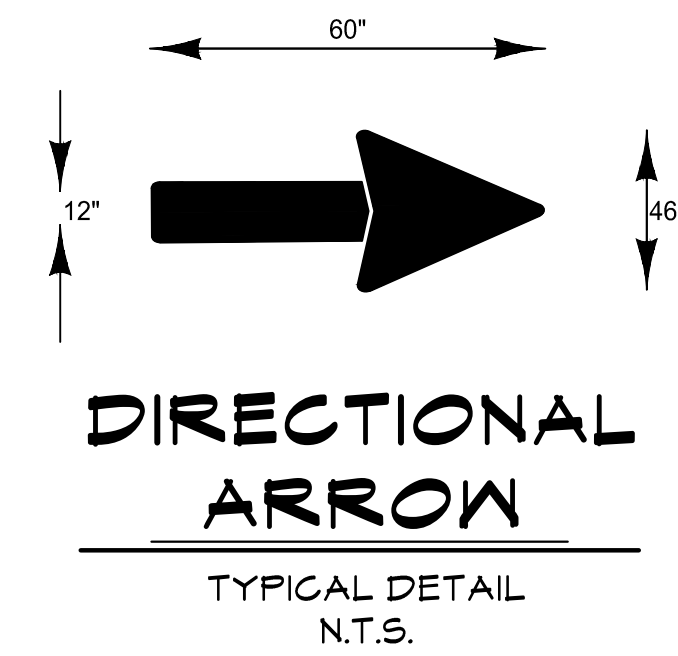
MATCHLINE - SEE SHEET C-048



VICINITY MAP
SCALE: 1"=1000'

LEGEND

- Existing Edge of Road
- Existing Curb and Gutter
- Existing Retaining Wall
- Existing Edge of Paving
- Existing Sidewalk
- Existing Building/Structure
- Existing Fence
- Existing Pavement
- Existing Sign
- Existing Light
- Existing Bollard
- Proposed Curb and Gutter
- Proposed Retaining Wall
- Proposed Edge of Pavement
- Proposed Concrete Sidewalk
- Proposed Fence
- Proposed ADA Route
- Proposed Street Sign
- Proposed Traffic Sign
- Proposed Informational Sign
- Proposed ADA Parking Space
- Proposed Pedestrian "Acorn" Type Light
- Proposed Parking Lot "Cobra" Type Light



DATA SOURCES

- Existing topography and structures shown hereon outside of the limits of field run topography are from the Baltimore City Office of Technology - GIS Lab.
- Existing topography from field run survey by Century Engineering Inc. dated Aug-Sept. 2020
- Coordinates & elevations are referred to the Baltimore City Survey Control System and are tied to the following control stations:
35300 N 1969.820 E -9323.550 Elev. 301.060
35301 N 8240.140 E -9800.600 Elev. 324.640
- Public utilities shown hereon are from public drawings, field location and other sources.

DATE	BY	REVISIONS



A Kleinfelder Company
10710 Gilroy Road, Hunt Valley, MD 21031
Phone: 443.589.2400 www.centuryeng.com

SIGNAGE PLAN 1

THE MARYLAND ZOO IN BALTIMORE PARKING LOT REHABILITATION

BALTIMORE, MARYLAND
WARD 13 SECTION 5 BLOCK 3499 LOT 001

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE No.: 32574
EXPIRATION DATE: 1/16/2024



DRAWN BY: AA
DESIGN BY: DRS/KRB

REVIEW BY: AJD
REVIEW DATE: 7/15/2022

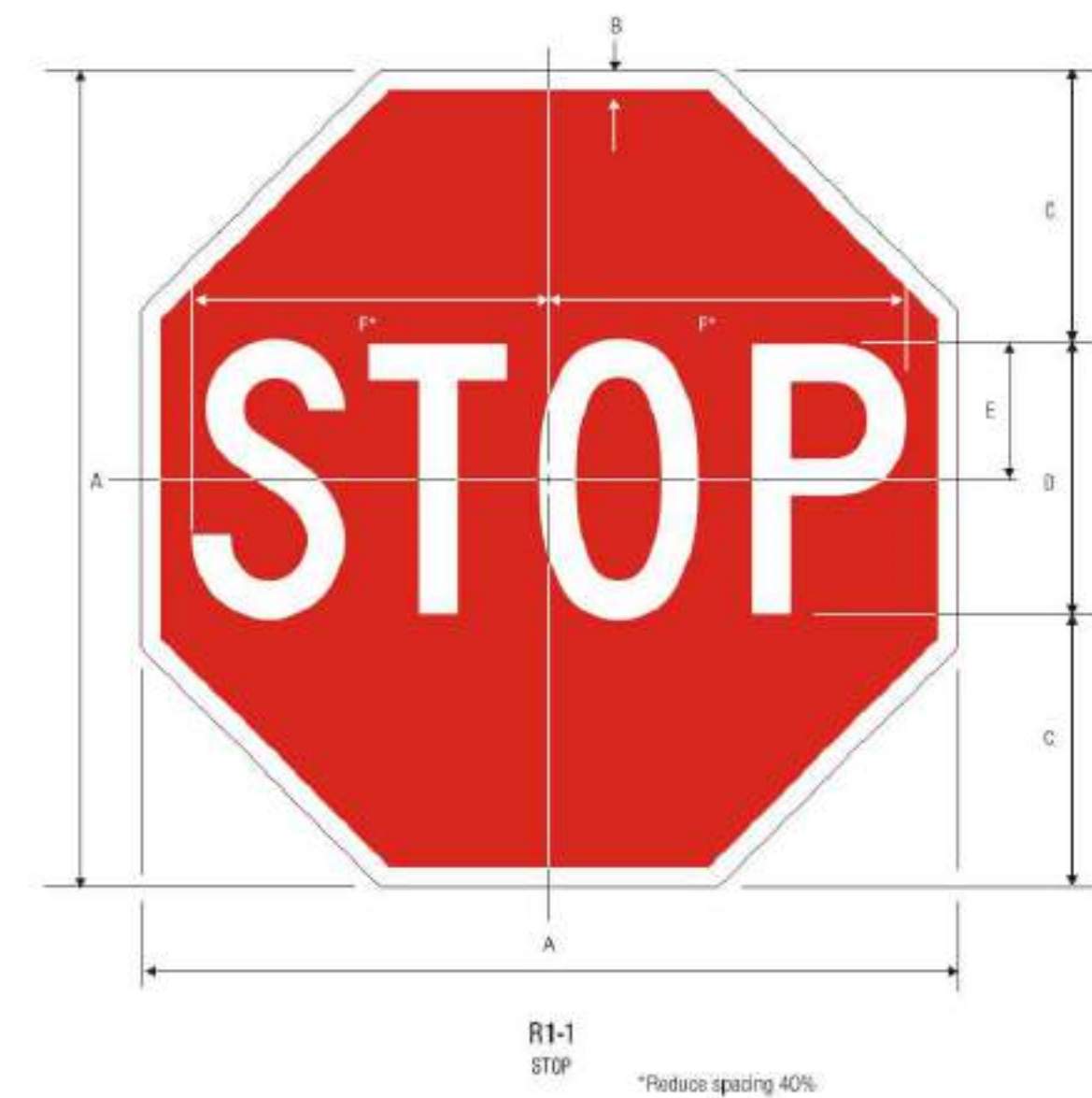
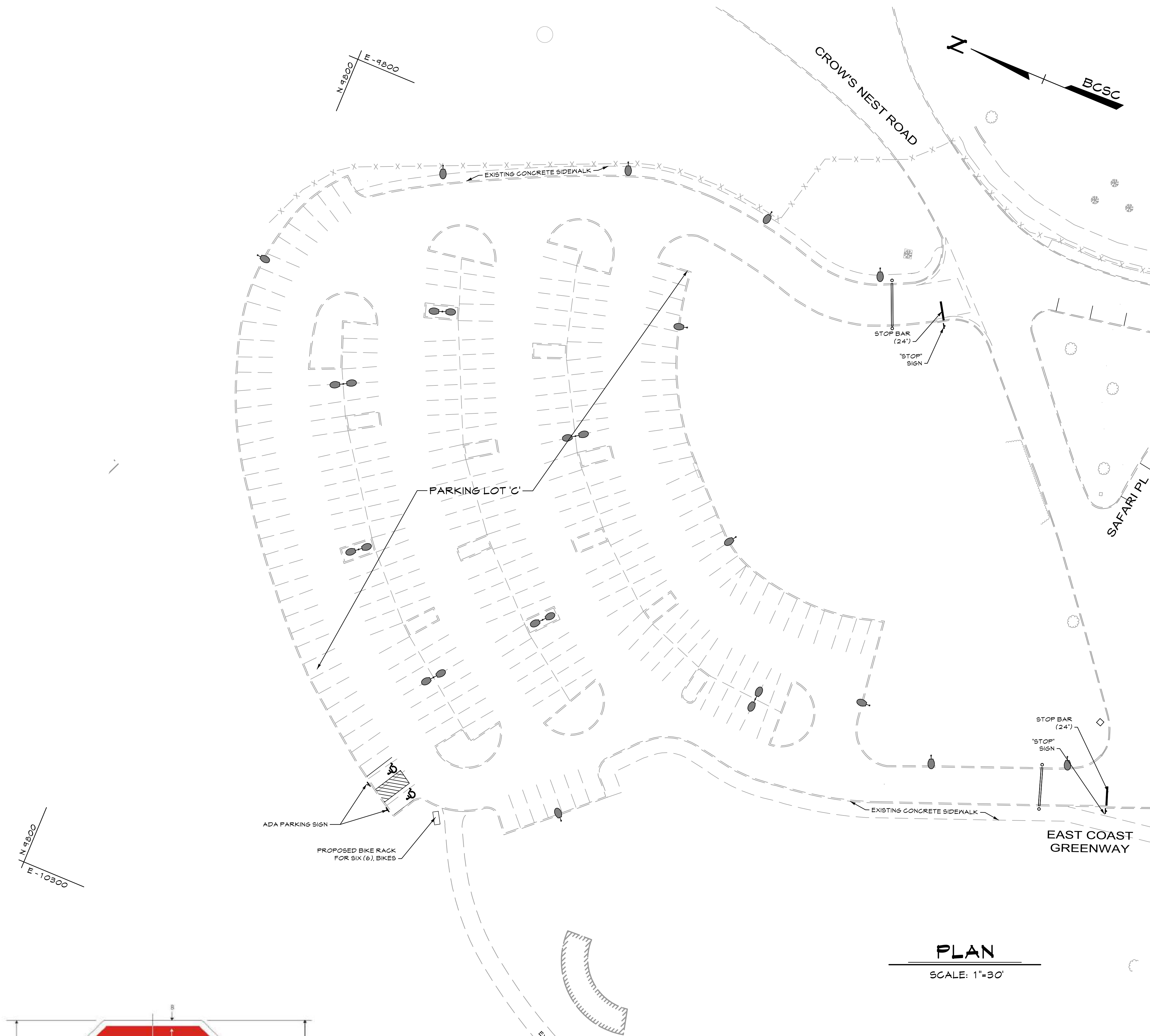
SCALE: 1"=30'
PROJECT No.: 201069.00

DRAWING: C-047
ESD # 7969

PLAN

SCALE: 1"=30'

T:\2020\Facilities\20106400 MD Zoo Parking\Drawings\Construction\20106400 (C-046) Signage Plan 2.dwg Jul 18, 2022 1:29pm delanahan



A	B	C	D	E	F
18	375	8	6 C	3	7.75
24	625	8	8 C	4	10
30	75	10	10 C	5	12.5
36	875	12	12 C	6	15
48	1.25	16	16 C	8	20

COLORS: LEGEND - WHITE (RETROREFLECTIVE)
BACKGROUND - RED (RETROREFLECTIVE)

1-1



D-3
STREET NAME



D-3
STREET NAME



TYPICAL
INFORMATIONAL SIGN

("TO ZOO ENTRANCE"; "LLAMA CIRCLE";
"LION CIRCLE"; "ELEPHANT CIRCLE";
"TURTLE CIRCLE"; ETC. FINAL
MATERIALS, COLORS, FONTS, AND THE
LIKE TO BE DETERMINED.)



A	B	C	D	E	F	G	H	J	K	L
24	375	625	5.0	3	75	4.125	4.5	11.625	12.863	1.5
30	3	75	6.0	4	88.8	5	5.375	13.838	14.5	1.875
36	625	875	7.0	5	1.125	5.875	6.25	16.25	16.938	2.25
48	75	1.25	10.0	6	1.5	8.25	9	23.25	24.126	3

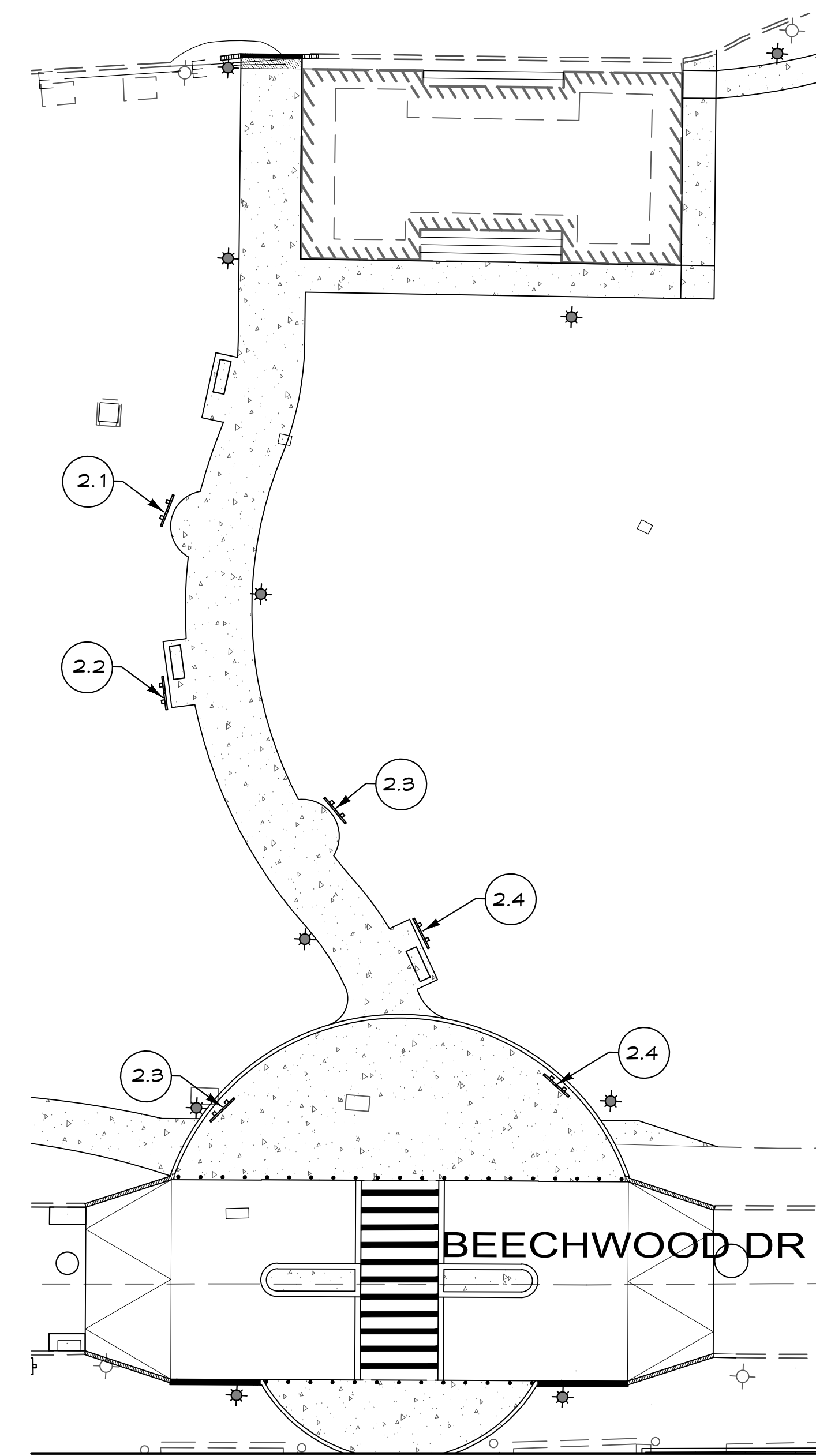
COLORS: SYMBOL - BLACK
BACKGROUND - YELLOW (RETROREFLECTIVE)



A	B	C	D	E
18	375	625	8	1.5
24	375	625	11	1.5
30	5	75	13.5	1.875
36	625	875	16	2.25
48	75	1.25	22	3

COLORS: SYMBOL - BLACK
BACKGROUND - YELLOW (RETROREFLECTIVE)

2-2



MAIN ENTRY SIGNAGE
ENLARGEMENT

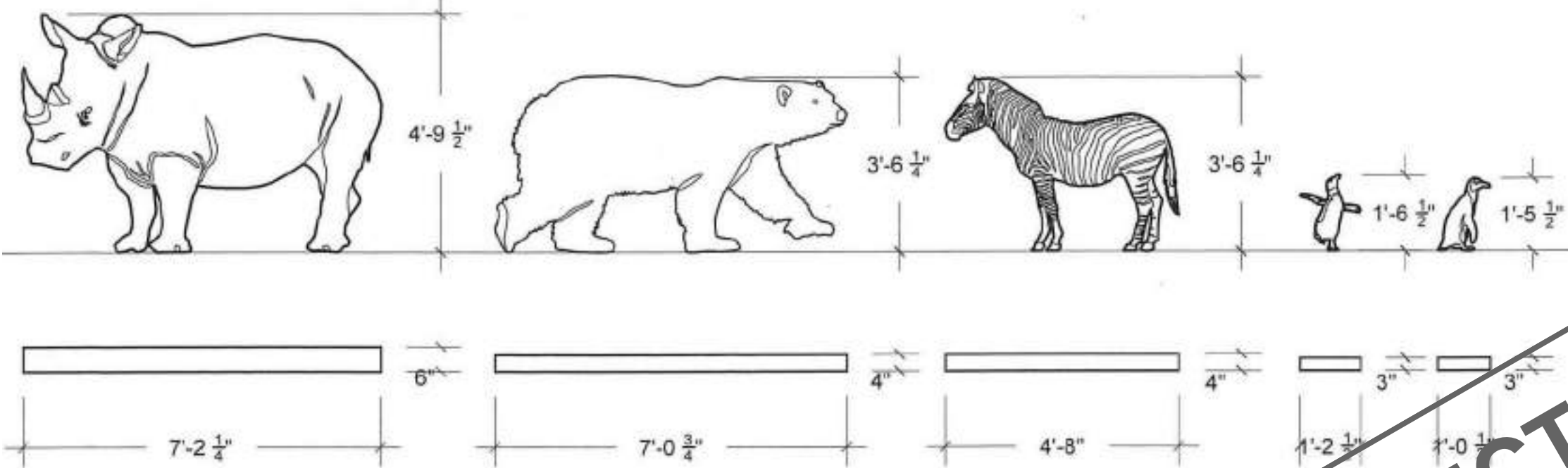
SCALE: 1"=20'

2.1: SOUTHERN WHITE
RHINO

2.2: POLAR BEAR

2.3: ZEBRA

2.4: AFRICAN
PENGUIN



DATA SOURCES

- Existing topography and structures shown hereon outside of the limits of field run topography are from the Baltimore City Office of Technology - GIS Lab.
- Existing topography from field run survey by Century Engineering Inc. dated Aug-Sept. 2020
- Coordinates & elevations are referred to the Baltimore City Survey Control System and are tied to the following stations:
35500 N 7463.820 E -9323.550 Elev. 301.060
35501 N 8240.140 E -9800.600 Elev. 324.640
- Public utilities shown hereon are from public drawings, field location and other sources.

DATE	BY	REVISIONS

**CENTURY
ENGINEERING**

A Kleinfelder Company
10710 Gilroy Road, Hunt Valley, MD 21031
Phone: 443.589.2400 www.centuryeng.com

SIGNAGE PLAN 2

THE MARYLAND ZOO
IN BALTIMORE
PARKING LOT REHABILITATION

BALTIMORE, MARYLAND
WARD 13 SECTION 5 BLOCK 3499 LOT 001

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE
DOCUMENTS WERE PREPARED OR
APPROVED BY ME, AND THAT I AM
A DULY LICENSED PROFESSIONAL
ENGINEER UNDER THE LAWS OF
THE STATE OF MARYLAND.
LICENSE No.: 32574
EXPIRATION DATE: 1/16/2024



OWNER:
Mayor & City Council of Baltimore
One Calvert Plaza
201 E. Baltimore Street
Baltimore MD 21202
(410)-675-3651

DEVELOPER:
The Maryland Zoo in Baltimore
1876 Mansion House Drive
Baltimore MD 21211
C/O Karl Kranz
(410)-346-7102

DRAWN BY: AA
DESIGN BY: DRS/KRB

REVIEW BY: AJD
REVIEW DATE: 7/15/2022

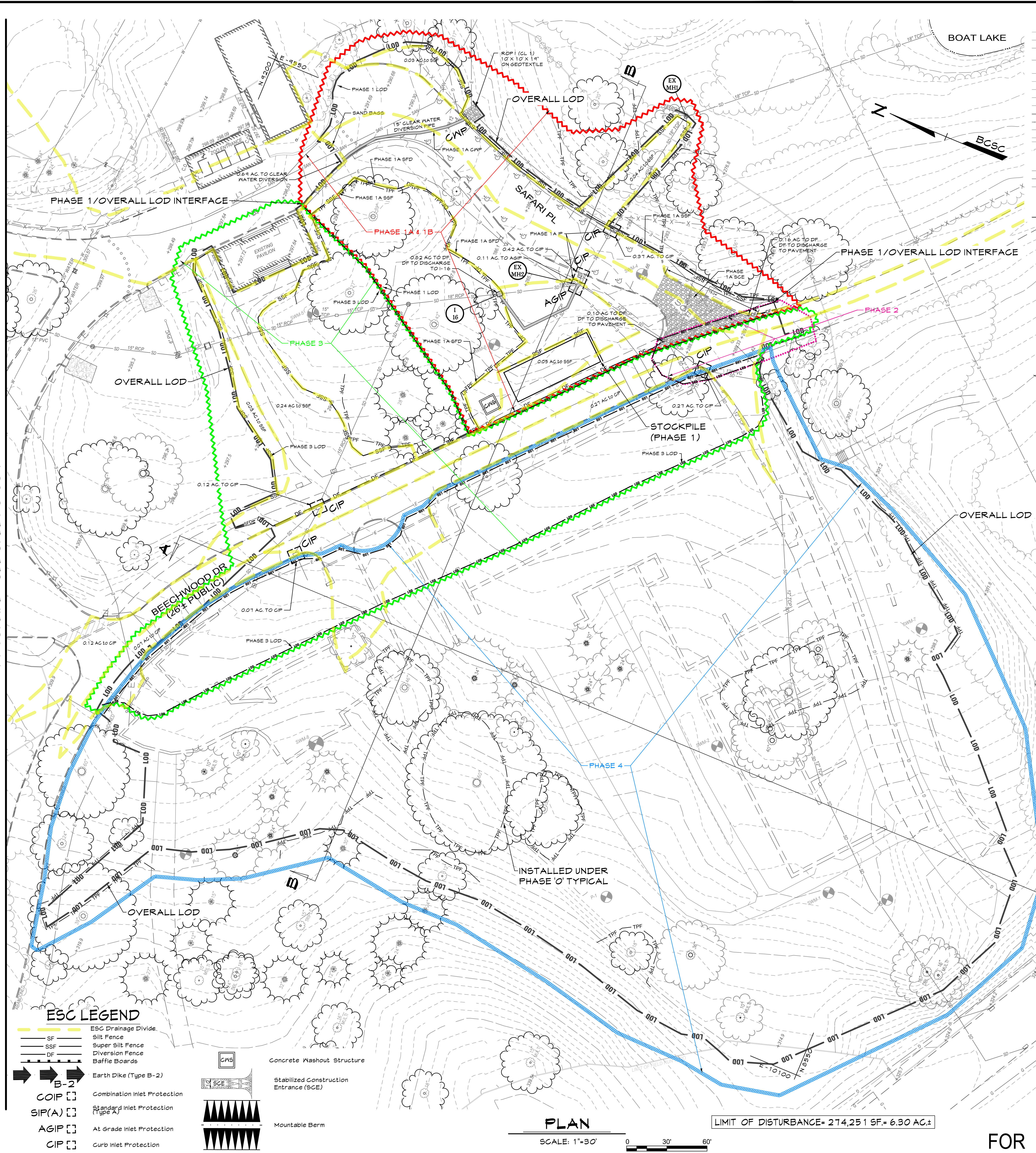
SCALE: 1"=30'
PROJECT No.: 201069.00

DRAWING: C-048

ESD # 7969

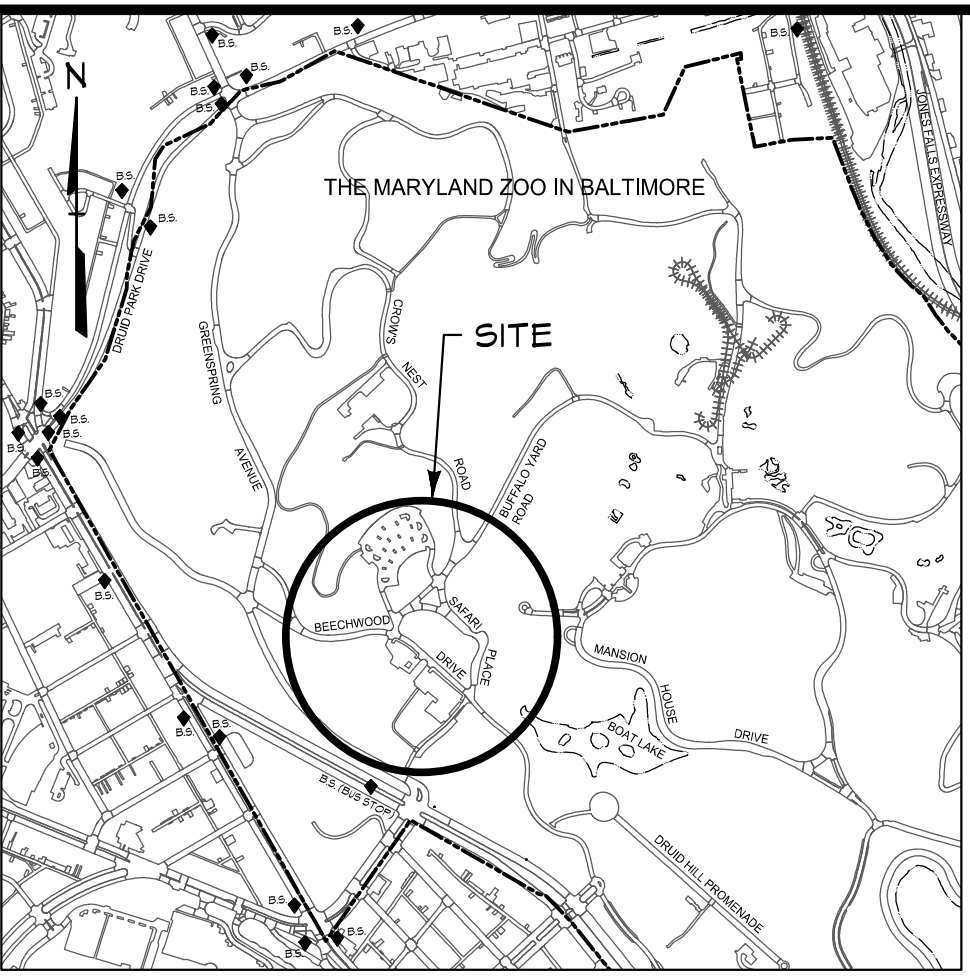
MATCHLINE - SEE SHEET C-051

T:\2020\Facilities\20106400 MD Zoo Parking\Civil\CADD\Drawings\Construction\20106400 (C-050) Existing ESC Plan 1.dwg Jul 18, 2022 1:23pm dsanahan



LEGEND

- Existing Minor Contour
- Existing Major Contour
- Existing Edge of Road
- Existing Soils
- Existing Storm Drain
- Existing Water
- Existing Sewer
- Existing Gas Line
- Existing Underground Electric Line
- Existing Curb and Gutter
- Existing Retaining Wall
- Existing Edge of Paving
- Existing Sidewalk
- Existing Tree Line
- Existing Building/Structure
- Water Edge or Stream Centerline
- Existing Fence
- Existing Pavement
- Existing Sign
- Existing Light
- Existing Bollard
- Tree Protection Fence



VICINITY MAP

NOTE:

- THERE ARE NO WETLANDS OR OTHER ENVIRONMENTALLY SENSITIVE AREAS OR THEIR REQUIRED BUFFERS ON SITE.
- THERE ARE NO STREAMS, RIVERS, CREEKS, BROOKS, PONDS, DETENTION BASINS, OR DRAINAGEWAYS ON SITE.
- THERE ARE NO HIGHLY ERODIBLE SOILS, ROCK OUTCROPS OR STEEP SLOPES ON SITE.
- THE SITE IS NOT LOCATED WITHIN THE CHESAPEAKE BAY CRITICAL AREA (CBCA).
- THERE ARE NO FORESTED AREAS ON SITE.

STABILIZATION SCHEDULE SCALE: 1"=1000'

AREA	SQ.FT.	STABILIZATION TYPE	SEQUENCE #
UTILITY WORK	0	SEEDING/STONE (TEMPORARY)	---
		SEED/SOD PAVING (PERMANENT)	---
CURBS, SIDEWALKS, FOUNDATIONS	123,570	SEEDING/STONE (TEMPORARY)	#7,8,9
		CONCRETE CURBS/WALKS (PERMANENT) & PAVING	#12
PERVIOUS AREAS	119,708	SEEDING/STONE (TEMPORARY)	#7,8,9
		SEED/SOD/STYNTURF (PERMANENT)	#11
SEDIMENT CONTROLS	9,211	SEEDING/STONE (TEMPORARY)	#3,4,5
		SEED/SOD (PERMANENT)	#13

AREAS ARE TO BE VEGETATIVELY STABILIZED TO SATISFY THE 3/1 DAY REQUIREMENT AS PER THE BALTIMORE CITY STANDARD EROSION AND SEDIMENT CONTROL NOTES.

UTILITY CONSTRUCTION NOTE

SEDIMENT CONTROL FOR UTILITY CONSTRUCTION FOR AREAS OUTSIDE OF DESIGNED CONTROLS OR AS DIRECTED BY ENGINEER OR CITY INSPECTOR:

- CALL "MISS UTILITY" AT 1-800-251-7171 48 HOURS PRIOR TO THE START OF ANY WORK.
- EXCAVATED TRENCH MATERIAL SHALL BE PLACED ON THE HIGH SIDE OF THE TRENCH.
- TRENCHES FOR UTILITY INSTALLATION SHALL BE BACKFILLED, COMPACTED, AND STABILIZED AT THE END OF EACH WORKING DAY. NO MORE TRENCH SHALL BE OPENED THAN CAN BE COMPLETED THE SAME DAY.
- ANY SEDIMENT CONTROLS DISTURBED DURING UTILITY CONSTRUCTION ARE TO BE REPAIRED IMMEDIATELY.

EROSION CONTROL NOTE FOR WORK TO BE PERFORMED OUTSIDE OF SEDIMENT CONTROL PRACTICES

CONTRACTOR TO PROVIDE TEMPORARY STABILIZATION OF ANY PROPOSED SEDIMENT, ISLAND, AND REMOVAL CURB REPAIR AND/OR REPLACEMENT THAT IS NOT COMPLETED AND PERMANENTLY STABILIZED AT THE END OF EACH WORK DAY USING STONE STABILIZATION.

MAINTENANCE OF SEDIMENT CONTROL

CONTRACTOR SHALL, WITHOUT EXTRA COST TO THE PROJECT, REPAIR AND MAINTAIN EXISTING SEDIMENT CONTROL DEVICES UNTIL ALL AREAS WITHIN LIMITS OF CONSTRUCTION ARE STABILIZED. ALL SEDIMENT CONTROL MEASURES REFERRED TO ON THESE PLANS SHALL BE IN ACCORDANCE WITH THE PUBLICATION ENTITLED "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL."

STANDARD STABILIZATION NOTE:

"FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1), AND SEVEN (7) DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE."

LOCATION OF UNDERGROUND UTILITIES AND OBSTRUCTIONS SHOWN ON THIS PLAN ARE FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. THE CORRECTNESS OF THE INFORMATION GIVEN IS NOT WARRANTED OR GUARANTEED. CONTRACTOR SHALL VERIFY ALL SUCH INFORMATION TO HIS OWN SATISFACTION PRIOR TO CONSTRUCTION.

DEVELOPERS / LANDOWNER'S CERTIFICATION

I/WE DO HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED PLAN AND ALL RESPONSIBLE PERSONNEL INVOLVED IN THIS PROJECT WILL HAVE CERTIFICATION OF ATTENDANCE AT AN APPROVED MARYLAND DEPARTMENT OF THE ENVIRONMENTAL SEDIMENT AND EROSION CONTROL TRAINING PROGRAM PRIOR TO THE BEGINNING OF WORK. THE CITY'S DPM AND DDCD AND I/WE WILL BE ALLOWED RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION.

PRINT NAME SIGNATURE DATE
ADDRESS TELEPHONE NUMBER

ENGINEER'S CERTIFICATION

I DO HEREBY CERTIFY THAT THIS PLAN FOR EROSION SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED UPON PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE BALTIMORE CITY OFFICE OF COMPLIANCE AND LABORATORIES.

Anthony J. Dietz SIGNATURE 7/15/2020 DATE
10710 Gilroy Rd, Hunt Valley, MD 21031 443-589-2400 ADDRESS TELEPHONE NUMBER

NOTES:

- THIS PLAN REFLECTS FULL BUILD OUT OF ALL PROPOSED PARKING LOTS, CONSTRUCTION WILL PROCEED IN PHASES DEPENDENT UPON FUNDING.
- REFER TO LANDSCAPE PLANS ON SHEETS C-070 TO C-073 FOR PROPOSED TREES AND PLANTINGS.
- REFER TO GRADING PLAN FOR ADDITIONAL DETAILS AND SPOT ELEVATIONS.
- CONTRACTOR TO MAINTAIN POSITIVE DRAINAGE TO CURB/GUTTER FROM BOTTOM OF ADA RAMP.

OWNER:
Mayor & City Council of Baltimore
One Calvert Plaza
201 E. Baltimore Street
Baltimore MD 21202
(410)-675-3651

DEVELOPER:
The Maryland Zoo in Baltimore
1876 Mansion House Drive
Baltimore MD 21217
C/O Karl Kranz
(410)-346-7102

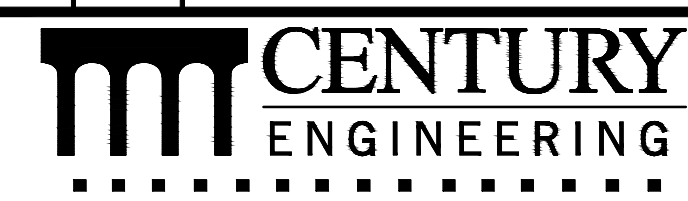
PHASE LINE LEGEND

NOT TO SCALE

DATA SOURCES

- Existing topography and structures shown hereon outside of the limits of field run topography are from the Baltimore City Office of Technology - GIS Lab.
- Existing topography from field run survey by Century Engineering Inc. dated Aug-Sept. 2020
- Coordinates & elevations are referenced to the Baltimore City Survey Control System and are tied to the following elevations:
5500 N 7463.820 E -9323.550 Elev. 301.060
3500 N 8240.140 E -9800.600 Elev. 324.640
- Public utilities shown hereon are from public drawings, field location and other sources.

DATE	BY	REVISIONS



A Kleinfelder Company
10710 Gilroy Road, Hunt Valley, MD 21031
Phone: 443.589.2400 www.centuryeng.com

EXISTING EROSION SEDIMENT CONTROL PLAN 1 (PHASES 0, 1A) THE MARYLAND ZOO IN BALTIMORE PARKING LOT REHABILITATION

BALTIMORE, MARYLAND
WARD 13 SECTION 5 BLOCK 3499 LOT 001

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE No.: 32574
EXPIRATION DATE: 1/16/2024



DRAWN BY: AA
DESIGN BY: DRS/KRB
SCALE: 1"=30'
PROJECT No.: 201069.00

REVIEW BY: AJD
REVIEW DATE: 7/15/2022
DRAWING: C-050

ESD # 7969

FOR SEDIMENT CONTROL ONLY

PLAN

SCALE: 1"=30' 0 30' 60'

LIMIT OF DISTURBANCE= 274,251 SF= 6.30 AC±

