

UTILITY NOTES:

1. PRIMARY AND SECONDARY ELECTRIC SERVICE SHALL BE IN ACCORDANCE WITH AMEREN MISSOURI STANDARDS AND SPECIFICATIONS.
2. PRIMARY ELECTRIC ROUTE TO BE ONE 4" CONDUIT; SECONDARY ELECTRIC ROUTE TO BE THREE 4" CONDUITS FROM TRANSFORMER TO METER CENTER.
3. ELECTRIC VAULTS TO BE 3'x5' CONCRETE BY CHAMPION PRECAST.
4. ALL WATER MAINS, VALVES, FITTINGS, HYDRANTS AND RELATED ITEMS ARE TO BE INSTALLED IN ACCORDANCE WITH THE CURRENT PROVISIONS OF ST. CHARLES COUNTY GUIDELINES AND SPECIFICATIONS.
5. PUBLIC WATER SUPPLY DISTRICT NO. 2 REQUIRES ONE (1) WEEK NOTICE BEFORE CONSTRUCTION BEGINS.
6. SOD WILL BE REQUIRED FOR ANY OFFSITE RESTORATION UNLESS OTHERWISE SPECIFIED BY THE PROPERTY OWNER.
7. ALL PRIVATE FIRE HYDRANTS ARE REQUIRED TO BE PAINTED RED PER THE WATER DISTRICTS SPECIFICATIONS.
8. THE PRIVATE WATER SYSTEM WILL NEED TO BE TEST PER THE WATER DISTRICTS SPECIFICATIONS BEFORE IT IS ALLOWED INTO SERVICE.
9. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL MOOD AND CITY PERMITS FOR ANY WORK ALONG THE ROADWAYS. COPIES OF THESE PERMITS MUST BE RECEIVED BY THE WATER DISTRICT PRIOR TO CONSTRUCTION.

AS-BUILT

SANITARY / STORM SEWER AND STORMWATER MEASUREMENTS
The existing sewer lengths, sizes, flowlines, depths of structures and sewers locations with respect to existing or proposed easements have been measured. Retention Basins have been measured. The results of those measurements are shown on this set of Final Measurement plans. Since the wye locations have been plotted from information provided by the sewer contractor or other sources, I disclaim any responsibility for that specific information. Water lines are shown per staked location. Hydrants and Valve have been surveyed and are shown.



Randall S. Rosson 4/13/23
Randall S. Rosson, P.L.S. NO. 2006-000171 Date

NOTE: STORM SEWERS ARE PRIVATE. ESMT'S SHOWN ARE TO BE GRANTED TO ADJACENT PROPERTIES FOR CONVEYANCE OF STORM WATER TO THE DETENTION BASIN.

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LEGEND

- EXISTING CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- PROPOSED SPOT ELEVATION (CURB)
- PROPOSED SPOT ELEVATION (F.F. @ ENTRY)
- PROPOSED SPOT ELEVATION (GRADE @ BLDG.)
- PROPOSED SPOT ELEVATION (WALLS)
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- PROPOSED SANITARY SEWER
- FIRE HYDRANT
- PROPOSED LIGHT STANDARD
- PROPOSED FENCE
- TRANSFORMER
- UNDERGROUND ELECTRIC
- WATER MAIN
- GAS MAIN
- TELEPHONE

ABBREVIATIONS

- W - WATER
- E - ELECTRIC
- OE - OVERHEAD ELECTRIC
- UE - UNDERGROUND ELECTRIC
- G - GAS
- T - TELEPHONE
- TBR - TO BE REMOVED
- TBR & R - TO BE REMOVED AND REPLACED
- UIP - USE IN PLACE
- ATG - ADJUST TO GRADE
- BC - BACK OF CURB
- FC - FACE OF CURB
- TW - TOP OF WALL
- BW - BOTTOM OF WALL
- PWT - PAVEMENT
- ASPH - ASPHALT
- CONC - CONCRETE
- GRND - GROUND
- FF - FINISHED FLOOR
- TC - TOP OF CURB
- BC - BOTTOM OF CURB
- FT - FEET
- CO - CLEANDOUT
- MH - MANHOLE
- AI - AREA INLET
- CI - CURB INLET
- GI - GRATE INLET
- YD - YARD DRAIN
- PVC - POLYVINYL CHLORIDE PIPE
- RCP - REINFORCED CONCRETE PIPE
- CMP - CORRUGATED METAL PIPE
- HDPE - HIGH DENSITY POLYETHYLENE
- DS - DOWN SPOUT
- FL - FLOWLINE
- ELEV. EL - ELEVATION
- PROFD - PROPOSED
- EXIST, EX - EXISTING
- TYP - TYPICAL

DCSD NOTES:

1. EXISTING SANITARY SEWER SERVICE SHALL NOT BE INTERRUPTED.
2. INSTALLATION OF SANITARY SEWERS TO BE DEDICATED TO DCSD REQUIRE DCSD INSPECTION. 48 HOUR ADVANCE NOTICE IS REQUIRED.
3. CONNECTION OF PROPOSED LOT 1 TO SANITARY SEWERS REQUIRES DCSD PLAN REVIEW, APPROVAL AND INSPECTION.

WATERMARK APARTMENTS AT O'FALLON

CRUSHER ROAD & WELDON SPRING ROAD
CITY OF O'FALLON, ST. CHARLES COUNTY, MISSOURI 63366

PREPARED BY:
STOCK & ASSOCIATES
Consulting Engineers, Inc.
257 Chesterfield Business Parkway
St. Louis, MO 63105 PH: (636) 530-9300
5301-9301 FAX: (636) 530-9300
e-mail: general@stockassoc.com
Web: www.stockassoc.com

REVISIONS:

NO.	DATE	DESCRIPTION

DRAWN BY: J.S.J.M.B. CHECKED BY: G.M.S.
DATE: JOB NO: 219-6494.3

SHEET TITLE: **SITE UTILITY PLAN BUILDING 1**
SHEET NO.: **C6.1**

PREPARED BY:

SITE IMPROVEMENT PLANS FOR:

WATERMARK APARTMENTS AT O'FALLON

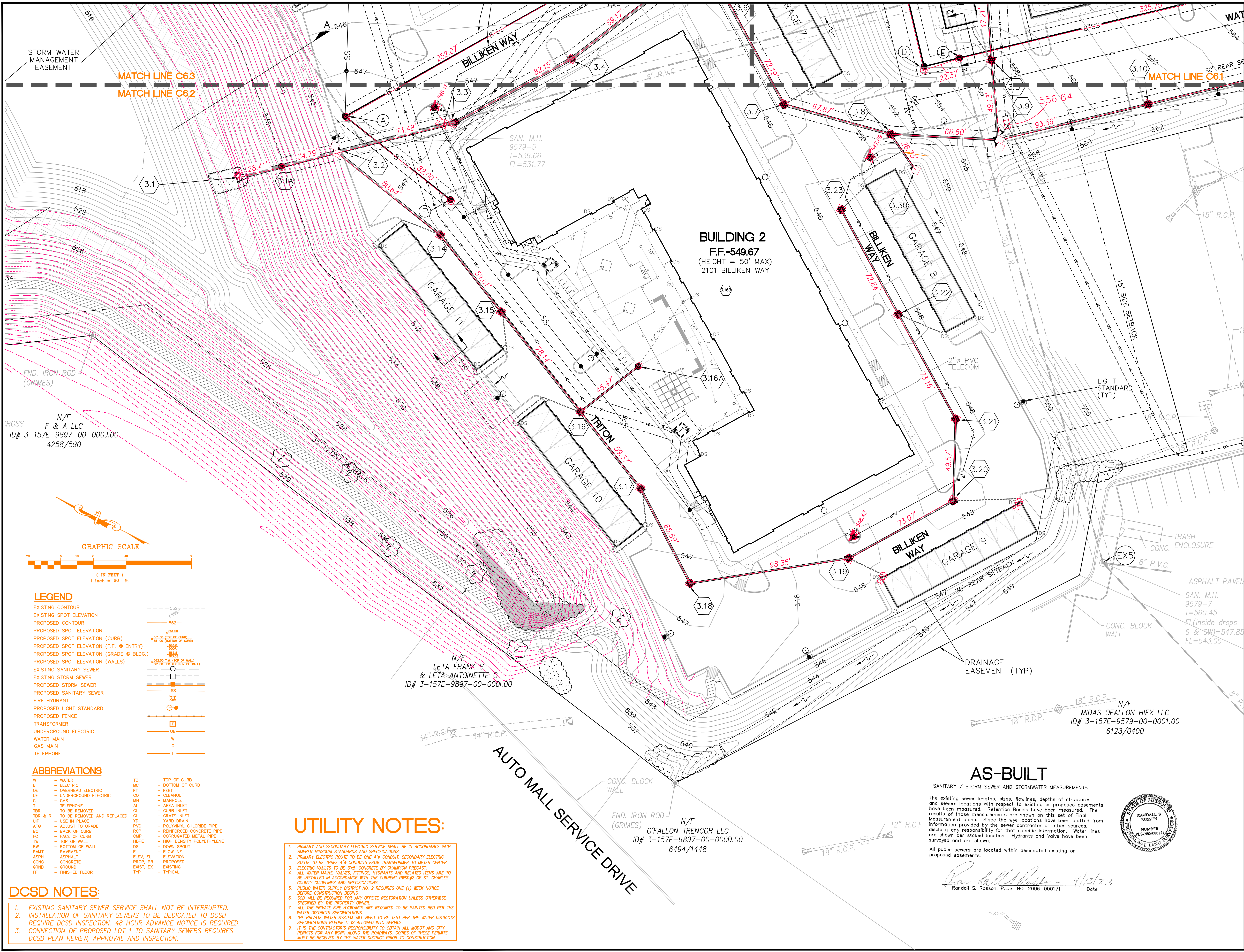
CRUSHER ROAD & WELDON SPRING ROAD
 CITY OF O'FALLON, ST. CHARLES COUNTY, MISSOURI 63366

GEORGE M. STOKES
 CIVIL ENGINEER
 CERTIFICATE OF AUTHORITY
 NUMBER: 000981

REVISIONS:

DRAWN BY: T.S.J.M.B. CHECKED BY: G.M.S.
 DATE: JOB NO: 219-6494.3

SHEET TITLE: **SITE UTILITY PLAN BUILDING 2**
 SHEET NO.: **C6.2**



BUILDING 2
 F.F.=549.67
 (HEIGHT = 50' MAX)
 2101 BILLIKEN WAY

LEGEND

EXISTING CONTOUR	---
EXISTING SPOT ELEVATION	○
PROPOSED CONTOUR	---
PROPOSED SPOT ELEVATION	○
PROPOSED SPOT ELEVATION (CURB)	○
PROPOSED SPOT ELEVATION (F.F. @ ENTRY)	○
PROPOSED SPOT ELEVATION (GRADE @ BLDG.)	○
PROPOSED SPOT ELEVATION (WALLS)	○
EXISTING SANITARY SEWER	---
EXISTING STORM SEWER	---
PROPOSED STORM SEWER	---
PROPOSED SANITARY SEWER	---
FIRE HYDRANT	○
PROPOSED LIGHT STANDARD	○
PROPOSED FENCE	---
TRANSFORMER	□
UNDERGROUND ELECTRIC	---
WATER MAIN	---
GAS MAIN	---
TELEPHONE	---

ABBREVIATIONS

W	WATER	TC	TOP OF CURB
E	ELECTRIC	BC	BOTTOM OF CURB
OE	OVERHEAD ELECTRIC	FT	FEET
UE	UNDERGROUND ELECTRIC	CO	CLEANOUT
G	GAS	MH	MANHOLE
T	TELEPHONE	AI	AREA INLET
TBR	TO BE REMOVED	CI	CURB INLET
TBR & R	TO BE REMOVED AND REPLACED	GI	GRATE INLET
UIP	USE IN PLACE	YD	YARD DRAIN
ATO	ADJUST TO GRADE	PVC	POLYVINYL CHLORIDE PIPE
BC	BACK OF CURB	RC	REINFORCED CONCRETE PIPE
FC	FACE OF CURB	CMP	CORRUGATED METAL PIPE
TW	TOP OF WALL	HDPE	HIGH DENSITY POLYETHYLENE
EW	EDGE OF WALL	DS	DOWN SPOUT
PVMT	PAVEMENT	FL	FLOWLINE
ASPH	ASPHALT	ELEV. EL	ELEVATION
CONC	CONCRETE	PROP. PH	PROPOSED
GRND	GROUND	EXIST. EX	EXISTING
FF	FINISHED FLOOR	TYP	TYPICAL

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- IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL WOOD AND CITY PERMITS FOR ANY WORK ALONG THE ROADWAYS. COPIES OF THESE PERMITS MUST BE RECEIVED BY THE WATER DISTRICT PRIOR TO CONSTRUCTION.

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- CONNECTION OF PROPOSED LOT 1 TO SANITARY SEWERS REQUIRES DCSD PLAN REVIEW, APPROVAL AND INSPECTION.

AS-BUILT

SANITARY / STORM SEWER AND STORMWATER MEASUREMENTS

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All public sewers are located within designated existing or proposed easements.



Randall S. Rosson 4/13/23
 Randall S. Rosson, P.L.S. NO. 2006-000171 Date

CROSS N/F
 F & A LLC
 ID# 3-157E-9897-00-000J.00
 4258/590

N/F
 LETA FRANK S
 & LETA ANTOINETTE G
 ID# 3-157E-9897-00-000I.00

N/F
 O'FALLON TRENOR LLC
 ID# 3-157E-9897-00-000D.00
 6494/1448

SAN. M.H.
 9579-7
 T=560.45
 FL (inside drops
 S & SW)=547.85
 FL=543.05

WELDON SPRING ROAD (30')

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

PREPARED BY:
STOCK & ASSOCIATES
Consulting Engineers, Inc.

SITE IMPROVEMENT PLANS FOR:
WATERMARK APARTMENTS AT O'FALLON
CRUSHER ROAD & WELDON SPRING ROAD
CITY OF O'FALLON, ST. CHARLES COUNTY, MISSOURI 63366

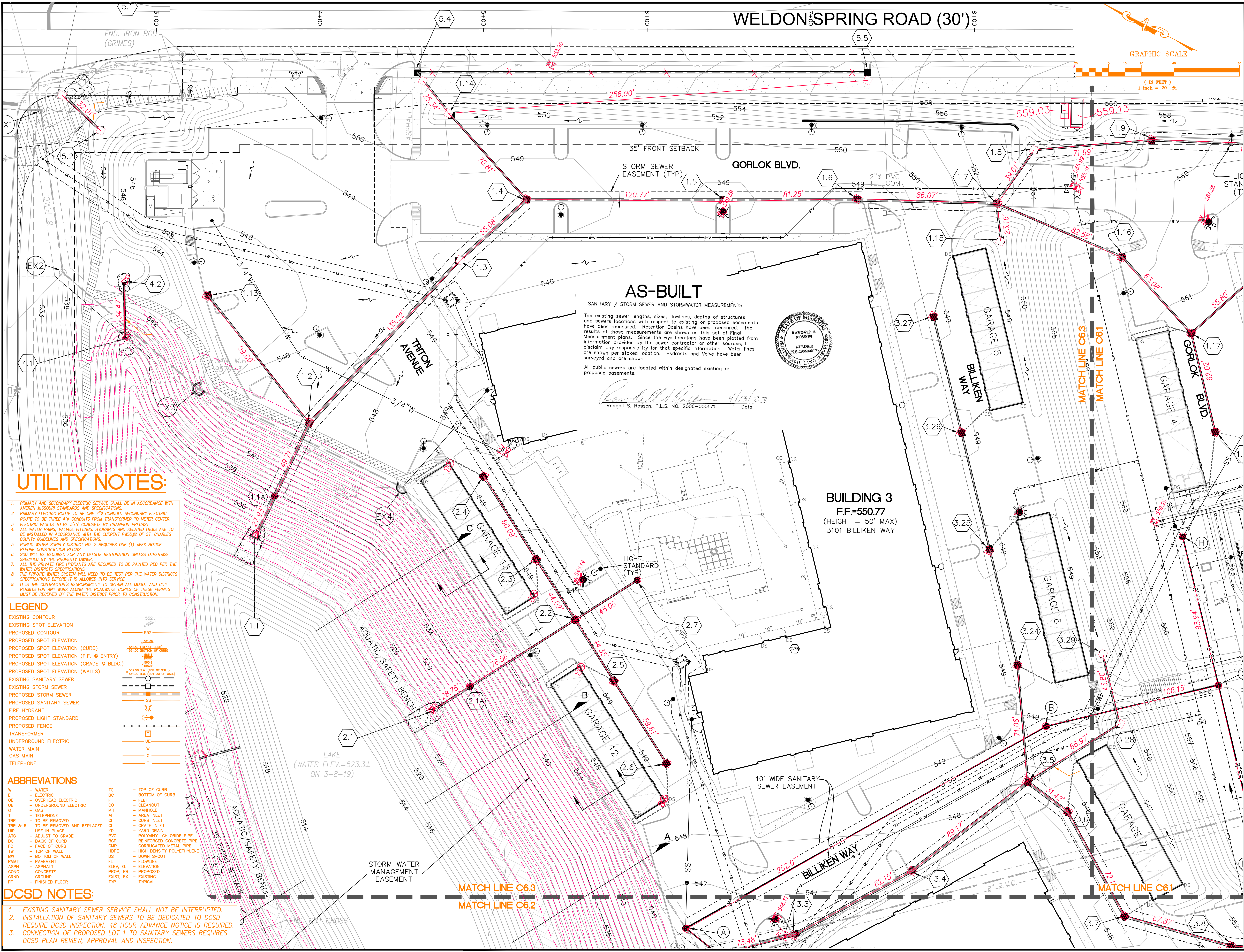
GEORGE M. STOCK E-29116
CIVIL ENGINEER
CERTIFICATE OF AUTHORITY
NUMBER: 000991

REVISIONS:

DRAWN BY: C.S./J.M.B. CHECKED BY: G.M.S.
DATE: 4/13/23 JOB NO: 219-6494.3

SHEET TITLE:
**SITE UTILITY PLAN
BUILDING 3**

SHEET NO.:
C6.3



AS-BUILT

SANITARY / STORM SEWER AND STORMWATER MEASUREMENTS

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Randall S. Rosson 4/13/23
Randall S. Rosson, P.L.S. NO. 2006-000171 Date

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LEGEND

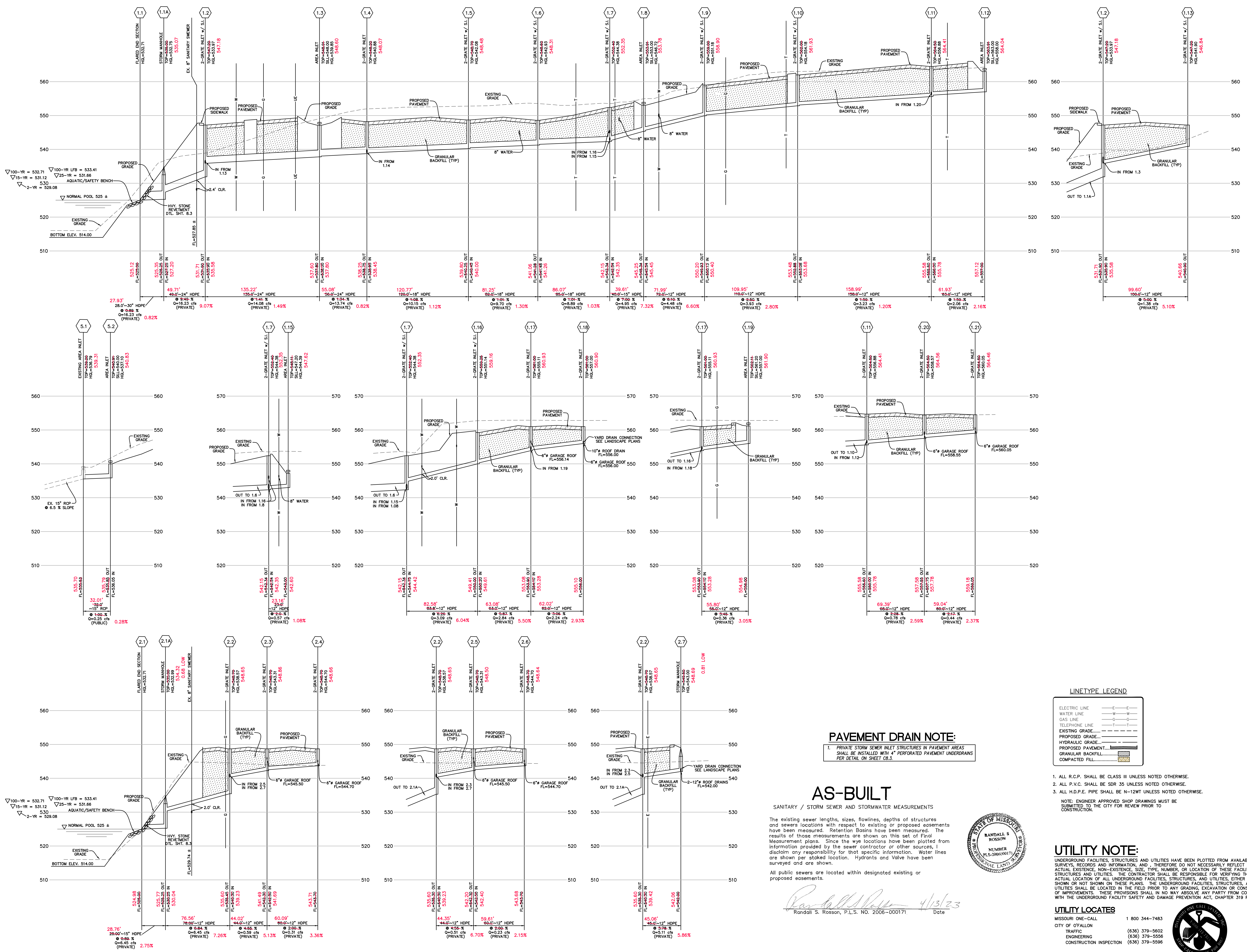
EXISTING CONTOUR	--- 552.0
EXISTING SPOT ELEVATION	552.0
PROPOSED CONTOUR	--- 552.0
PROPOSED SPOT ELEVATION	552.0
PROPOSED SPOT ELEVATION (CURB)	552.0 (TOP OF CURB)
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PROPOSED SPOT ELEVATION (GRADE @ BLDG.)	552.0 (FINISHED FLOOR)
PROPOSED SPOT ELEVATION (WALLS)	552.0 (FINISHED FLOOR)
EXISTING SANITARY SEWER	--- SS
EXISTING STORM SEWER	--- DS
PROPOSED STORM SEWER	--- DS
PROPOSED SANITARY SEWER	--- SS
FIRE HYDRANT	--- FH
PROPOSED LIGHT STANDARD	--- LS
PROPOSED FENCE	--- F
TRANSFORMER	--- T
UNDERGROUND ELECTRIC	--- UE
WATER MAIN	--- W
GAS MAIN	--- G
TELEPHONE	--- T

ABBREVIATIONS

W	= WATER	TC	= TOP OF CURB
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G	= GAS	MH	= MANHOLE
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TBR	= TO BE REMOVED	CI	= CURB INLET
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UP	= USE IN PLACE	YD	= YARD DRAIN
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ASPH	= ASPHALT	ELEV. EL	= ELEVATION
CONC	= CONCRETE	PROP. PR	= PROPOSED
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PREPARED BY:
STOCK & ASSOCIATES
 Consulting Engineers, Inc.
 257 Chesterfield Business Parkway
 St. Louis, MO 63105 PH: (636) 530-1000
 5301-1001 FAX: (636) 530-9300
 e-mail: general@stockinc.com
 Web: www.stockinc.com

SITE IMPROVEMENT PLANS FOR:
WATERMARK APARTMENTS AT O'FALLON
 CRUSHER ROAD & WELDON SPRING ROAD
 CITY OF O'FALLON, ST. CHARLES COUNTY, MISSOURI 63366

GEORGE M. STOKO E-29116
 CIVIL ENGINEER
 CERTIFICATE OF AUTHORITY
 NUMBER: 02099

REVISIONS:

NOTE: ENGINEER APPROVED SHOP DRAWINGS MUST BE SUBMITTED TO THE CITY FOR REVIEW PRIOR TO CONSTRUCTION.

UTILITY LOCATES
 MISSOURI ONE-CALL 1 800 344-7483
 CITY OF O'FALLON
 TRAFFIC (636) 379-5602
 ENGINEERING (636) 379-5556
 CONSTRUCTION INSPECTION (636) 379-5596

UTILITY NOTE:
 UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS, RECORDS AND INFORMATION, AND, THEREFORE DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, NON-EXISTENCE, SIZE, TYPE, NUMBER, OR LOCATION OF THESE FACILITIES, STRUCTURES AND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS. THE UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO ANY GRADING, EXCAVATION OR CONSTRUCTION OF IMPROVEMENTS. THESE PROVISIONS SHALL IN NO WAY ABSOLVE ANY PARTY FROM COMPLYING WITH THE UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION ACT, CHAPTER 319 RSMo.

PAVEMENT DRAIN NOTE:
 1. PRIVATE STORM SEWER INLET STRUCTURES IN PAVEMENT AREAS SHALL BE INSTALLED WITH 4" PERFORATED SEWER UNDERDRAINS PER DETAIL ON SHEET C8.3.

AS-BUILT
 SANITARY / STORM SEWER AND STORMWATER MEASUREMENTS
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Randall S. Rosson 4/13/23
 Randall S. Rosson, P.L.S. NO. 2006-000171 Date

STATE OF MISSOURI
 RANDALL S. ROSSON
 LICENSE NUMBER
 P.L.S. 2006(000171)
 MISSOURI LAND SURVEYING

SCALE: 1"=40' HORIZ.
 1"=10' VERT.

LINETYPE LEGEND

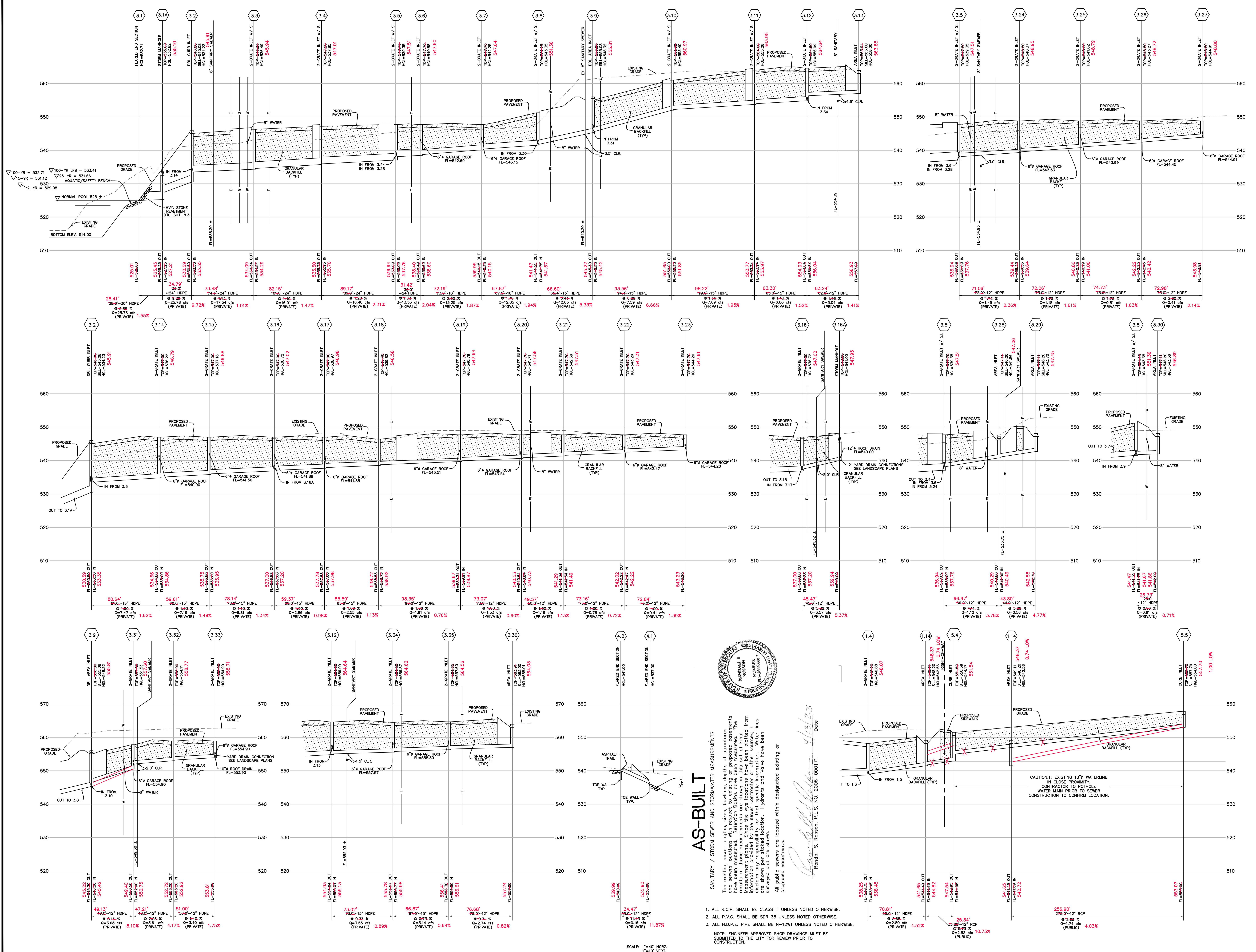
- ELECTRIC LINE
- WATER LINE
- GAS LINE
- TELEPHONE LINE
- EXISTING GRADE
- PROPOSED GRADE
- HYDRAULIC GRADE
- PROPOSED PAVEMENT
- GRANULAR BACKFILL
- COMPACTED FILL

1. ALL R.C.P. SHALL BE CLASS III UNLESS NOTED OTHERWISE.
2. ALL P.V.C. SHALL BE SDR 35 UNLESS NOTED OTHERWISE.
3. ALL H.D.P.E. PIPE SHALL BE N-12WT UNLESS NOTED OTHERWISE.

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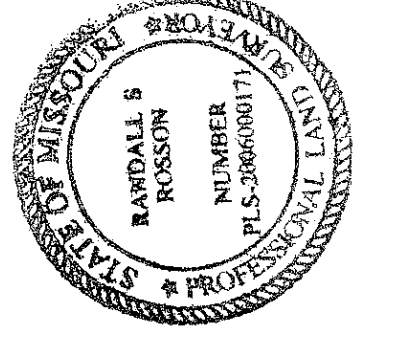
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SHEET NO.:
C8.0



AS-BUILT

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Randall S. Reason
 Randall S. Reason, P.L.S. NO. 2006-00071 Date 4/13/23

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SCALE: 1"=40' HORIZ.
 1"=10' VERT.

WATERMARK APARTMENTS AT O'FALLON

CRUSHER ROAD & WELDON SPRING ROAD
 CITY OF O'FALLON, ST. CHARLES COUNTY, MISSOURI 63366

PREPARED BY:
STOCK & ASSOCIATES
 Consulting Engineers, Inc.
 257 Chesterfield Business Parkway
 St. Louis, MO 63105 PH: (636) 530-9300
 5301 South Park Blvd. (636) 530-9300
 e-mail: general@stockinc.com
 Web: www.stockinc.com

SITE IMPROVEMENT PLANS FOR:

GEORGE M. STOK
 CIVIL ENGINEER
 CERTIFICATE OF AUTHORITY
 NUMBER: 02099

REVISIONS:

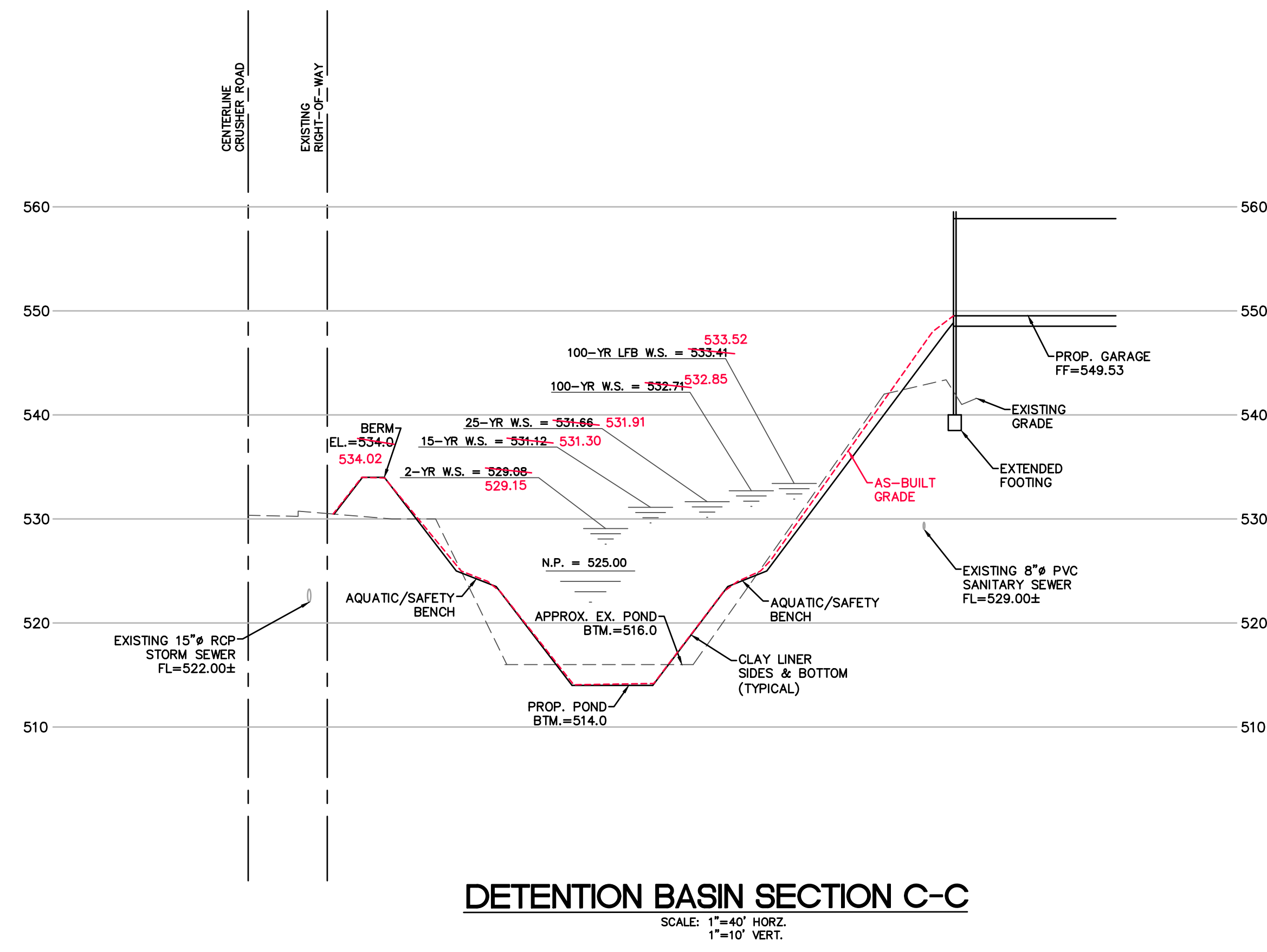
DATE:	1.5.11 M.B.	CHECKED BY:	G.M.S.
DATE:		JOB NO.:	219-6494.3

SHEET TITLE:
STORM SEWER PROFILES

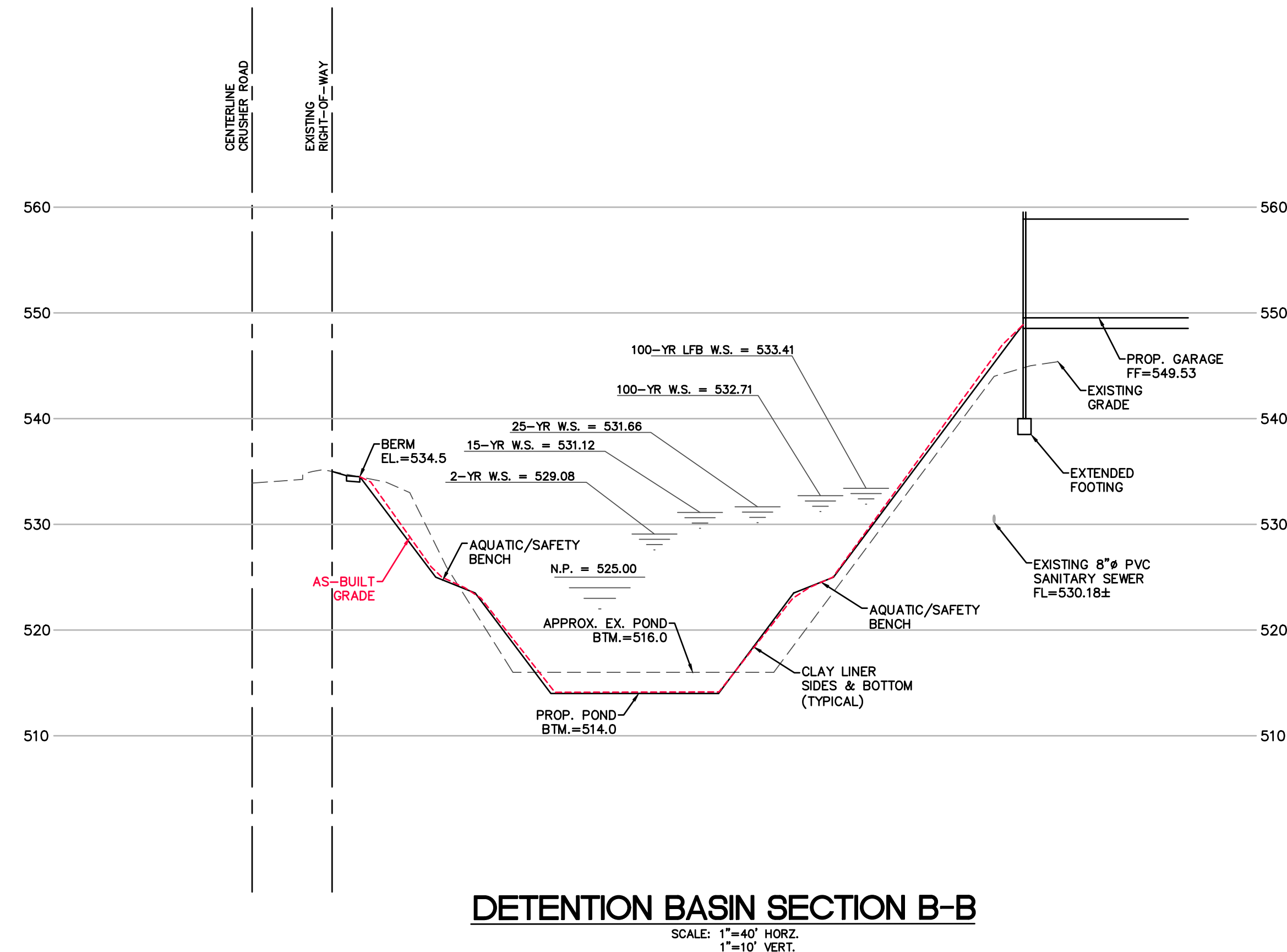
SHEET NO.:
C81

STORM SEWER HYDRAULICS - 100-YEAR/20-MINUTE

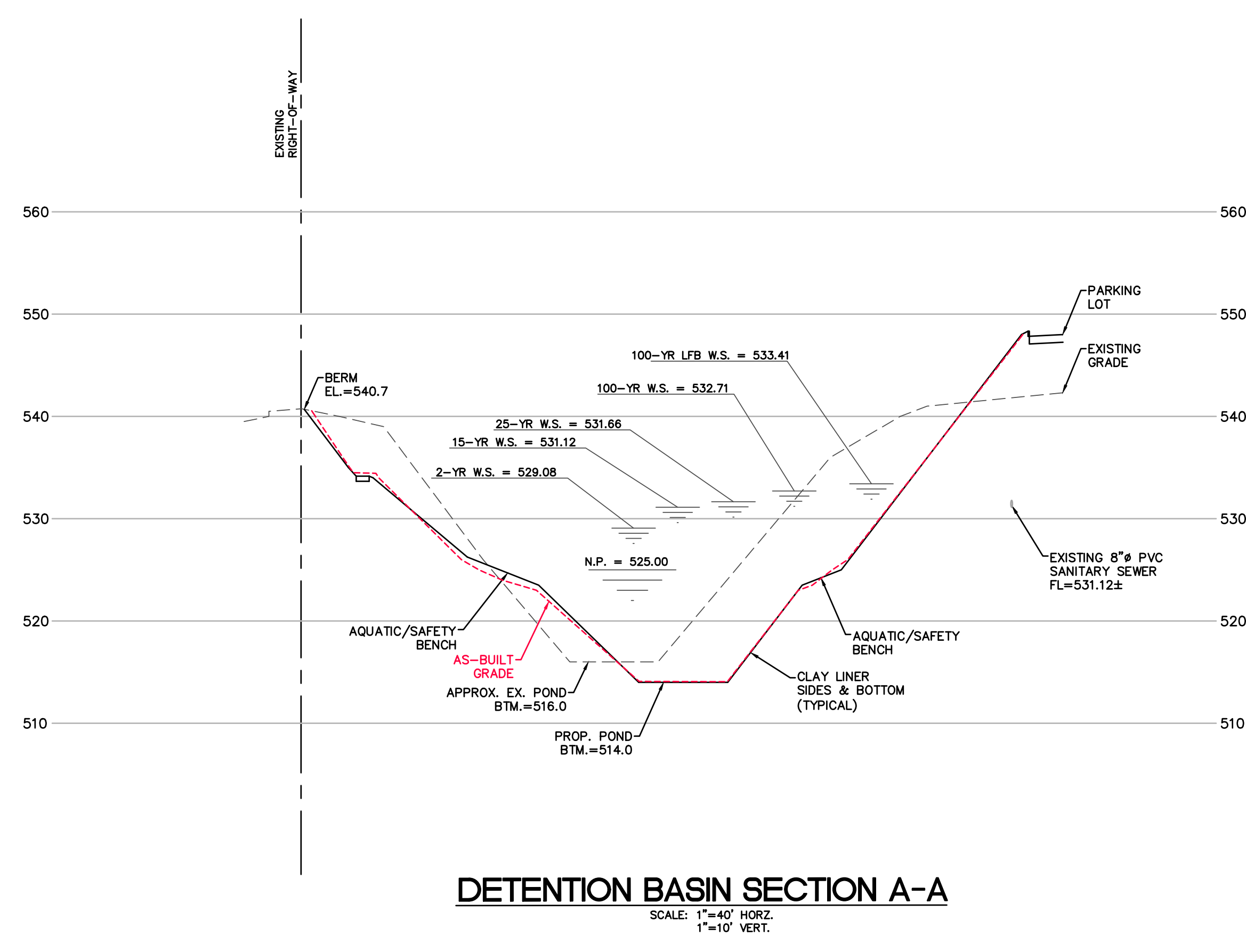
Project name: Watermark Residential		Calculated by: J.M.R.		15-Year / 20-Minute Hydraulics										Revisions: March 15, 2020 AS-BUILT 2022-05-17																	
Project number: 6494		Checked by: G.M.A.		Head Coefficients										April 16, 2020																	
Project location: O'Fallon, Missouri		Date: 2/14/2020		Head Loss										Hydraulic Elevations																	
Project ID:		ELEVATIONS		Friction Loss										Structure																	
LINE	Structure	Upper structure	Lower structure	Length (ft)	Flowline Grade (ft)	Pipe Size (in.)	Full Flow Cap. (cfs)	Total (Q) (cfs)	Mean Full Flow Vel. (ft/s)	Bend Coef.	Curve Coef.	Velocity Head (ft)	Q ₁₀ (ft ³ /s)	Pipe Corf. (n)	H _f (ft)	Junction (ft)	Bend (ft)	Curve (ft)	Total H _f (ft)	Upper H.E. (ft)	Lower H.E. (ft)	Structure H.E. (ft)	Free Board	Structure Number	Remarks						
1.12	1.12	1.11	557.12	555.78	61.93	0.0216	12	5.25	2.06	2.62	0.00	0.00	0.11	0.22	0.013	0.21	0.00	0.00	0.00	558.12	557.07	556.86	558.12	564.04	5.92	1.12	Area Inlet				
1.11	1.11	1.10	555.58	553.68	158.99	0.0120	12	3.91	3.24	4.13	0.07	0.00	0.26	0.86	0.013	0.31	0.26	0.02	0.00	0.28	556.58	556.09	554.78	556.86	564.41	7.55	1.11	Crane Inlet			
1.10	1.10	1.09	553.48	550.60	109.95	0.0280	12	5.98	3.93	5.00	0.18	0.00	0.51	1.53	0.013	0.34	0.23	0.07	0.00	0.30	554.48	553.78	551.45	554.78	561.93	7.15	1.10	Crane Inlet			
1.9	1.9	1.8	550.20	545.45	71.99	0.0660	12	9.18	4.48	5.70	0.06	0.00	0.51	2.26	0.013	0.14	0.22	0.03	0.00	0.23	547.20	547.76	546.63	551.45	558.00	6.45	1.9	Crane Inlet			
1.8	1.8	1.7	545.25	542.35	39.61	0.0732	15	17.53	4.95	4.03	0.50	0.00	0.23	1.25	0.013	0.23	0.00	0.13	0.00	0.13	546.50	544.42	544.19	546.63	553.78	7.15	1.8	Area Inlet			
1.7	1.7	1.6	542.15	541.26	86.07	0.0103	18	10.71	8.89	5.08	0.52	0.00	0.59	3.49	0.013	0.62	0.34	0.20	0.00	0.54	543.65	543.38	541.76	544.19	552.35	8.16	1.7	Crane Inlet			
1.6	1.6	1.5	541.96	540.00	81.32	0.0130	18	12.03	9.70	5.49	0.00	0.00	0.47	4.54	0.013	0.69	0.14	0.00	0.00	0.14	542.56	541.99	542.70	548.31	551.01	5.61	1.6	Area Inlet			
1.5	1.5	1.4	539.80	538.45	120.77	0.0112	18	11.14	10.15	5.00	0.00	0.00	0.51	5.20	0.013	1.13	0.09	0.00	0.00	0.09	541.30	541.50	540.38	541.59	548.48	6.89	1.5	Crane Inlet			
1.4	1.4	1.3	538.25	537.80	53.08	0.0082	24	20.50	13.74	4.37	0.43	0.00	0.40	4.08	0.013	0.20	0.00	0.13	0.00	0.13	540.25	540.00	539.80	540.38	548.07	7.69	1.4	Crane Inlet			
1.3	1.3	1.2	537.60	535.58	135.22	0.0149	24	23.72	14.08	4.48	0.06	0.00	0.31	4.39	0.013	0.52	0.03	0.02	0.00	0.03	539.60	538.10	537.58	539.65	548.60	8.95	1.3	Area Inlet			
1.2	1.2	1.1a	531.71	527.20	49.71	0.0907	24	68.32	16.23	5.17	0.18	0.00	0.41	6.73	0.013	0.26	0.00	0.07	0.00	0.07	533.71	533.01	532.75	533.78	547.18	13.40	1.2	Crane Inlet			
1.1a	1.1a	1.1	525.35	525.12	27.93	0.0082	30	37.32	16.23	3.31	0.00	0.00	0.17	2.76	0.013	0.04	0.00	0.00	0.00	0.00	527.85	527.28	527.11	532.75	535.07	2.32	1.1a	Manhole			
1.1	1.1		514.00																		100-yr W.S. Elev.	532.71							Flared End Section		
1.13	1.13	1.2	510.66	505.58	99.60	0.0510	12	8.07	1.88	1.76	0.00	0.00	0.05	0.07	0.013	0.15	0.00	0.00	0.00	0.00	541.66	536.73	536.58	541.66	546.84	5.18	1.13	Crane Inlet			
1.2	1.2																					HGL Structure #1.2	533.78								
5.5	5.5	5.4	553.07	542.72	256.90	0.0403	12	7.17	1.74	2.22	0.00	0.00	0.08	0.13	0.013	0.41	0.00	0.00	0.00	0.00	554.07	549.37	548.76	554.07	557.00	3.63	5.5	Crane Inlet			
5.4	5.4	1.14	547.54	544.82	25.34	0.1073	12	11.70	2.53	3.22	0.48	0.00	0.16	0.41	0.013	0.13	0.14	0.08	0.00	0.22	548.54	545.95	545.82	548.76	551.51	2.78	5.4	Crane Inlet			
1.4	1.4	1.4	541.65	538.45	70.81	0.0452	12	7.59	2.80	3.57	0.00	0.00	0.20	0.55	0.013	0.44	0.07	0.00	0.00	0.07	542.65	540.81	540.38	542.72	548.37	5.65	1.4	Area Inlet			
1.4	1.4		538.25																			HGL Structure #1.4	540.38								
1.15	1.15	1.7	542.60	542.35	23.16	0.0108	12	3.71	0.57	0.73	0.00	0.00	0.01	0.00	0.013	0.01	0.00	0.00	0.00	0.00	543.60	544.20	544.19	544.20	547.62	3.42	1.15	Area Inlet			
1.7	1.7		542.15																			HGL Structure #1.7	544.19								
1.18	1.18	1.17	555.10	553.28	62.02	0.0293	12	6.12	2.24	2.85	0.00	0.00	0.13	0.28	0.013	0.24	0.00	0.00	0.00	0.00	556.10	554.53	554.29	556.10	560.90	4.80	1.18	Crane Inlet			
1.17	1.17	1.16	553.08	549.61	63.08	0.0550	12	8.38	2.84	3.62	0.34	0.00	0.20	0.58	0.013	0.40	0.14	0.07	0.00	0.21	554.08	551.01	550.61	554.29	560.93	6.64	1.17	Crane Inlet			
1.16	1.16	1.7	549.41	544.22	82.58	0.0604	12	8.78	3.09	3.93	0.36	0.00	0.24	0.74	0.013	0.62	0.07	0.00	0.00	0.14	550.41	546.41	545.82	550.61	559.16	8.61	1.16	Crane Inlet			
1.7	1.7		542.15																			HGL Structure #1.7	544.19								
1.19	1.19	1.17	554.98	553.28	55.80	0.0305	12	6.24	0.36	0.46	0.00	0.00	0.00	0.00	0.013	0.01	0.00	0.00	0.00	0.00	555.98	554.29	554.29	555.98	561.90	5.92	1.19	Area Inlet			
1.17	1.17		553.08																			HGL Structure #1.17	554.29								
1.21	1.21	1.20	559.18	557.78	59.04	0.0237	12	5.50	0.44	0.56	0.00	0.00	0.00	0.00	0.013	0.01	0.00	0.00	0.00	0.00	560.18	558.79	558.78	560.18	564.46	4.28	1.21	Crane Inlet			
1.20	1.20	1.11	557.58	555.78	69.39	0.0259	12	5.75	0.78	0.99	0.00	0.00	0.02	0.01	0.013	0.03	0.02	0.00	0.00	0.02	558.58	556.89	556.86	558.60	564.56	5.96	1.20	Crane Inlet			
1.11	1.11		555.58																			HGL Structure #1.11	556.86								
2.4	2.4	2.3	543.71	541.69	60.09	0.0336	12	6.55	0.31	0.39	0.00	0.00	0.00	0.00	0.013	0.00	0.00	0.00	0.00	0.00	544.71	542.69	542.69	544.71	548.66	3.95	2.4	Crane Inlet			
2.3	2.3	2.2	541.49	539.23	44.02	0.0512	12	8.09	0.59	0.75	0.00	0.00	0.01	0.01	0.013	0.01	0.01	0.00	0.00	0.01	542.49	540.24	540.23	542.50	548.86	6.36	2.3	Crane Inlet			
2.2	2.2	2.1a	536.60	530.04	76.56	0.0726	12	6.35	0.45	0.21	0.00	0.00	1.05	6.75	0.013	1.39	0.71	0.00	0.00	2.12	536.60	535.00	535.00	538.72	548.65	9.93	2.2	Crane Inlet			
2.1a	2.1a	2.1	525.77	524.98	28.76	0.0275	15	10.74	6.45	3.26	0.00	0.00	0.43	2.07	0.013	0.29	0.00	0.00	0.00	0.00	527.02	523.00	523.71	523.00	534.32	1.32	2.1a	Manhole			
2.1	2.1		514.00																			100-yr W.S. Elev.	532.71								Flared End Section
2.6	2.6	2.5	543.68	542.40	59.61	0.0215	12	5.23	0.23	0.29	0.00	0.00	0.00	0.00	0.013	0.00	0.00	0.00	0.00	0.00	544.68	543.40	543.40	544.68	548.64	3.96	2.6	Crane Inlet			
2.5	2.5	2.2	542.20	539.23	44.35	0.0670	12	9.24	0.51	0.65	0.00	0.00	0.01	0.00	0.013	0.01	0.01	0.00	0.00	0.01	543.20	540.23	540.23	543.20	548.20	5.29	2.5	Crane Inlet			
2.2	2.2		536.60																			HGL Structure #2.2	538.72								
2.7	2.7	2.2	542.06	539.42	45.06	0.0586	12	8.65	5.11	6.51	0.00	0.00	0.66	3.46	0.013	0.93	0.00	0.00	0.00	0.00	543.06	541.38	541.42	543.06	548.69	5.63	2.7	Manhole			
2.2	2.2		536.60																			HGL Structure #2.2	538.72								
3.13	3.13	3.12	556.09	555.04	63.24	0.0141	12	4.24	3.04	3.87	0.00	0.00	0.23	0.71	0.013	0.46	0.00	0.00	0.00	0.00	557.93	557.50	557.04	557.93	563.85	5.92	3.13	Crane Inlet			
3.12	3.12	3.11	554.93	553.97	63.30	0.0152	12	4.98	2.86	3.59	0.00	0.00	0.49	3.33	0.013	0.71	0.00	0.00	0.00	0.00	556.18	556.01	555.29	556.18	564.61	8.46	3.12	Crane Inlet			
3.11	3.11	3.10	553.77	551.35	98.72	0.0195	15	9.06	7.09	3.78	0.40	0.00	0.52	3.67	0.013	1.18	0.06	0.21	0.00	0.27	555.02	554.28	553.10	555.29	563.95	8.66	3.11	Crane Inlet			
3.10	3.10	3.09	551.65	548.52	66.56	0.0666	15	16.71	7.59	6.18	0.00	0.00	0.59	4.51	0.013	1.29	0.15	0.00	0.14	552.90	549.23	548.24	553.05	560.97	7.92	3.10	Crane Inlet				
3.9	3.9	3.8	549.21	541.07	66.60	0.0533	15	14.95	12.03	9.80	0.19	0.00	1.49	17.95	0.013	2.31	1.49	0.28	0.00	1.37	546.47	545.56	545.23	548.24	555.81	7.57	3.9	Double Area Inlet			
3.8	3.8	3.7	541.47	540.15	67.87	0.0194	18	14.69	12.85	7.27	0.11	0.00	0.82	10.55	0.013	1.02	0.00	0.00	0.00	0.09	542.97	543.16	542.15	543.25	551.36	8.11	3.8	Crane Inlet			
3.7	3.7	3.6																													



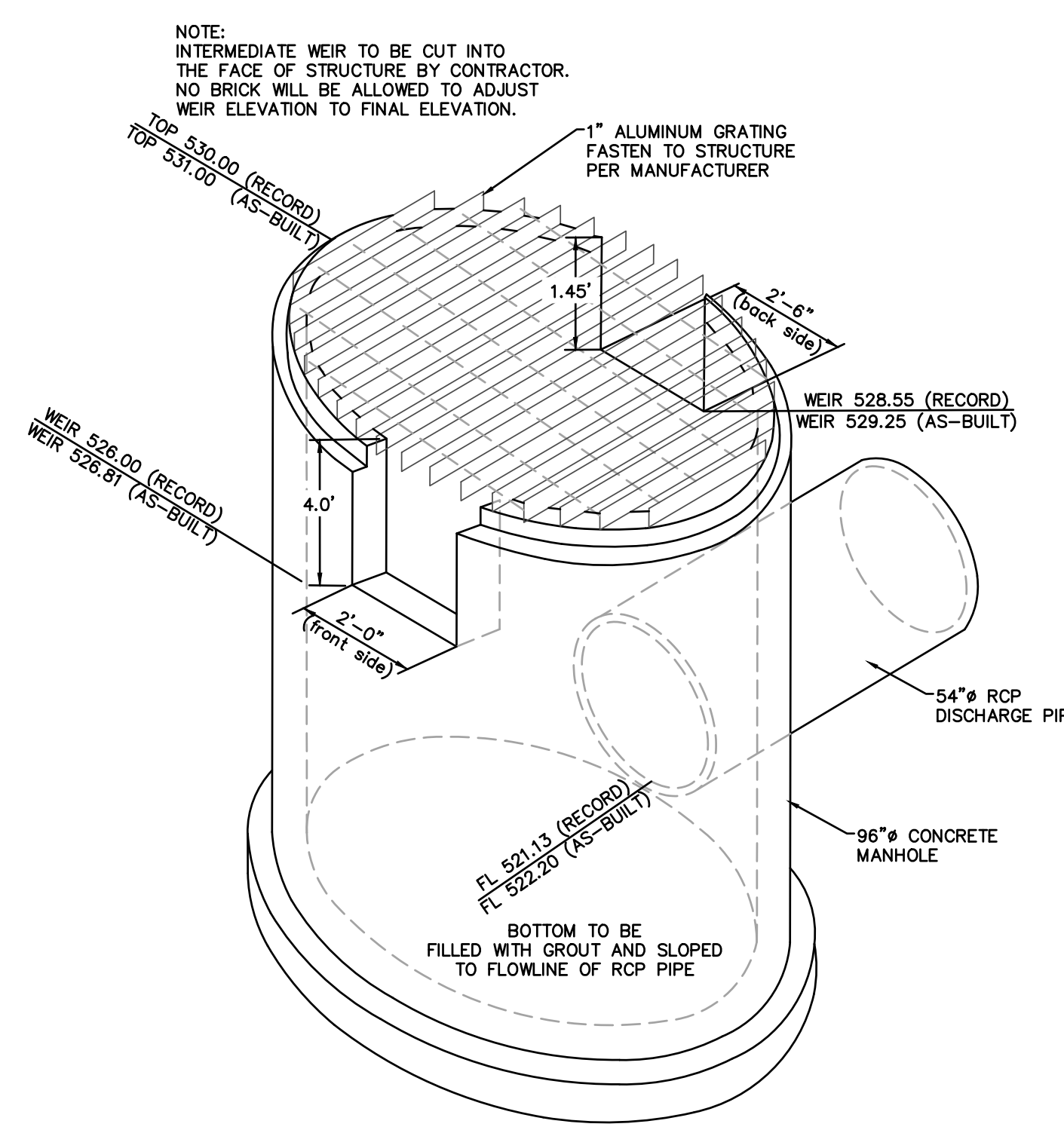
DETENTION BASIN SECTION C-C
SCALE: 1"=40' HORIZ.
1"=10' VERT.



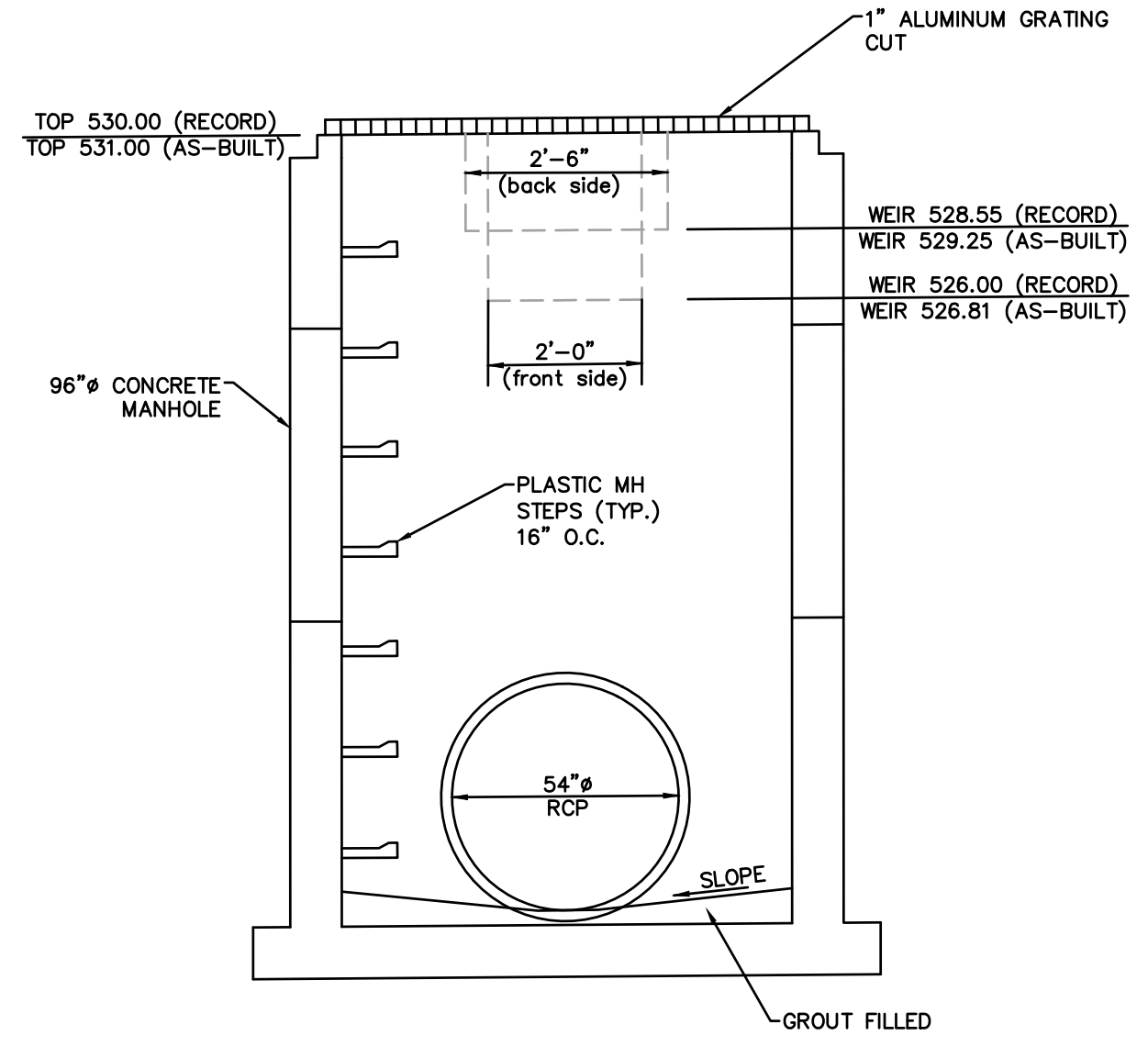
DETENTION BASIN SECTION B-B
SCALE: 1"=40' HORIZ.
1"=10' VERT.



DETENTION BASIN SECTION A-A
SCALE: 1"=40' HORIZ.
1"=10' VERT.

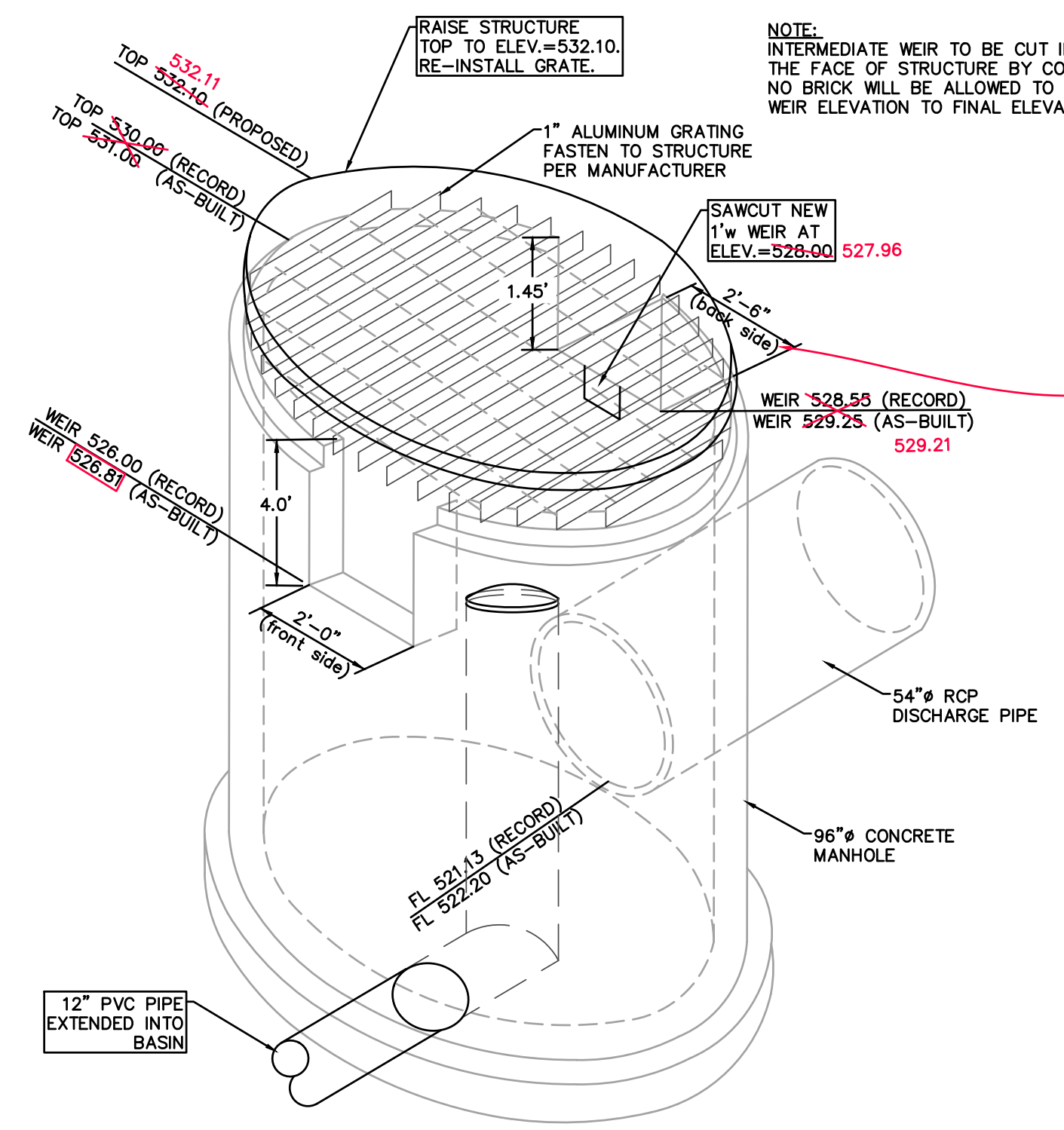


ISOMETRIC VIEW
N.T.S.

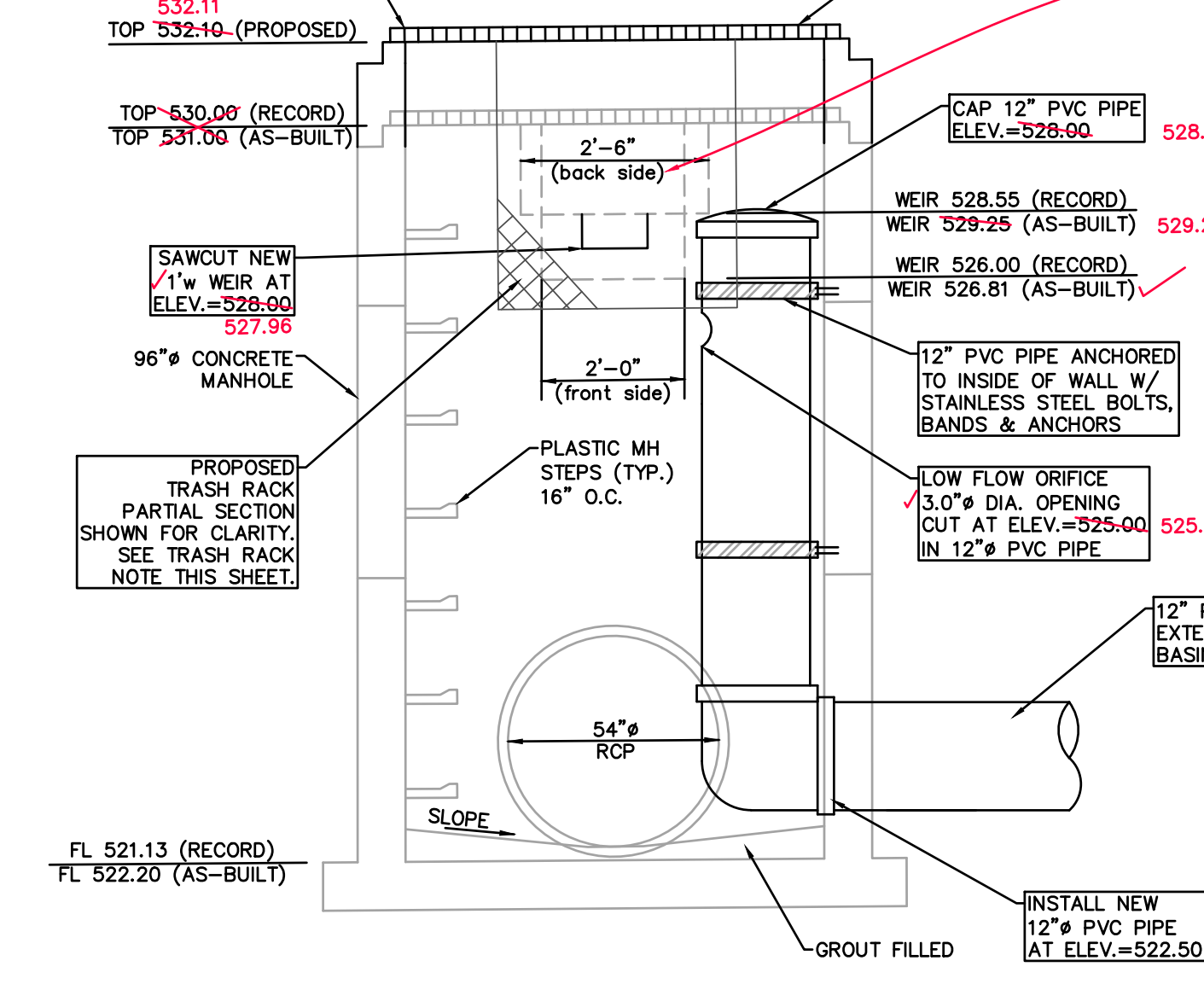


SECTION VIEW
N.T.S.

EXISTING DETENTION OUTFALL STRUCTURE (RECORD + AS-BUILT)
SCALE: 1"=40' HORIZ.
1"=10' VERT.



ISOMETRIC VIEW
N.T.S.



SECTION VIEW
N.T.S.

EXISTING DETENTION OUTFALL STRUCTURE - MODIFICATIONS
SCALE: 1"=40' HORIZ.
1"=10' VERT.

STRUCTURE MODIFICATION NOTE

OUTFALL STRUCTURE MODIFICATIONS SUBJECT TO CONTRACTOR AND STRUCTURAL ENGINEER ASSESSMENT. COMPLETE REMOVAL AND REPLACEMENT OF STRUCTURE MAY BE REQUIRED.

TRASH RACK NOTE

ALL WEIR OPENINGS TO BE PROTECTED WITH A TRASH RACK. CONTRACTOR TO INSTALL CUSTOM TRASH RACK BY PLASTIC-SOLUTIONS, INC. OR APPROVED EQUAL. www.plastic-solution.com.

POND LINER NOTE:

RETENTION POND LINER SHALL BE EITHER:

- A) 24" MINIMUM CLAY SOIL (MINIMUM 15% PASSING THE #200 SIEVE AND A MAXIMUM PERMEABILITY OF 1x10⁻⁵ CM/SEC.
- B) A 30 MIL POLY LINER OR
- C) BENTONITE

CONTRACTOR SHALL REFER TO MANUFACTURER RECOMMENDATIONS FOR INSTALLATION OF SYNTHETIC POND LINER.

POND LINERS SHALL EXTEND TO THE NORMAL POOL ELEVATION OF THE POND.

CONTRACTOR SHALL CONSULT PROJECT GEOTECHNICAL ENGINEER TO CONFIRM EXTENT OF CLAY LINER FOLLOWING REMOVAL OF EXISTING SEWERS LOCATED WITHIN DETENTION POND LIMITS.

AS-BUILT

SANITARY / STORM SEWER AND STORMWATER MEASUREMENTS

The existing sewer lengths, sizes, flowlines, depths of structures and sewers locations with respect to existing or proposed easements have been measured. Retention Basins have been measured. The results of those measurements are shown on this set of Final Measurement plans. Since the weir locations have been plotted from information provided by the sewer contractor or other sources, I disclaim any responsibility for that specific information. Water lines are shown per staked location. Hydrants and Valve have been surveyed and are shown.

All public sewers are located within designated existing or proposed easements.



Randall S. Rosson 4/13/23
Randall S. Rosson, P.L.S. NO. 2006-000171 Date

GEORGE M. STOKO E-29116
CIVIL ENGINEER
CERTIFICATE OF AUTHORITY
NUMBER: 020991

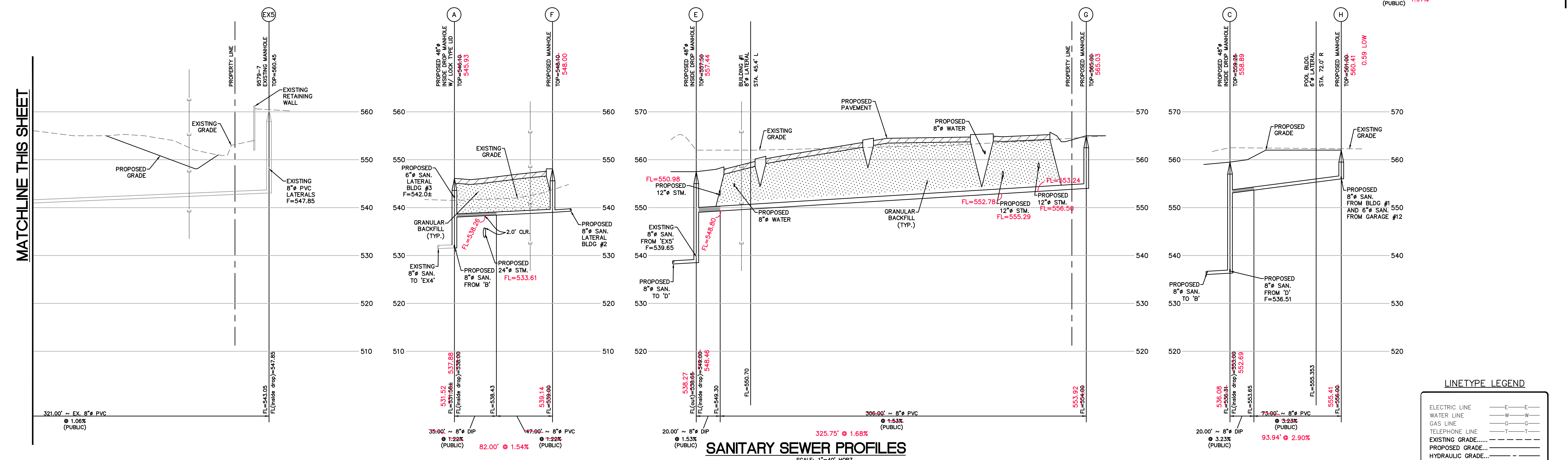
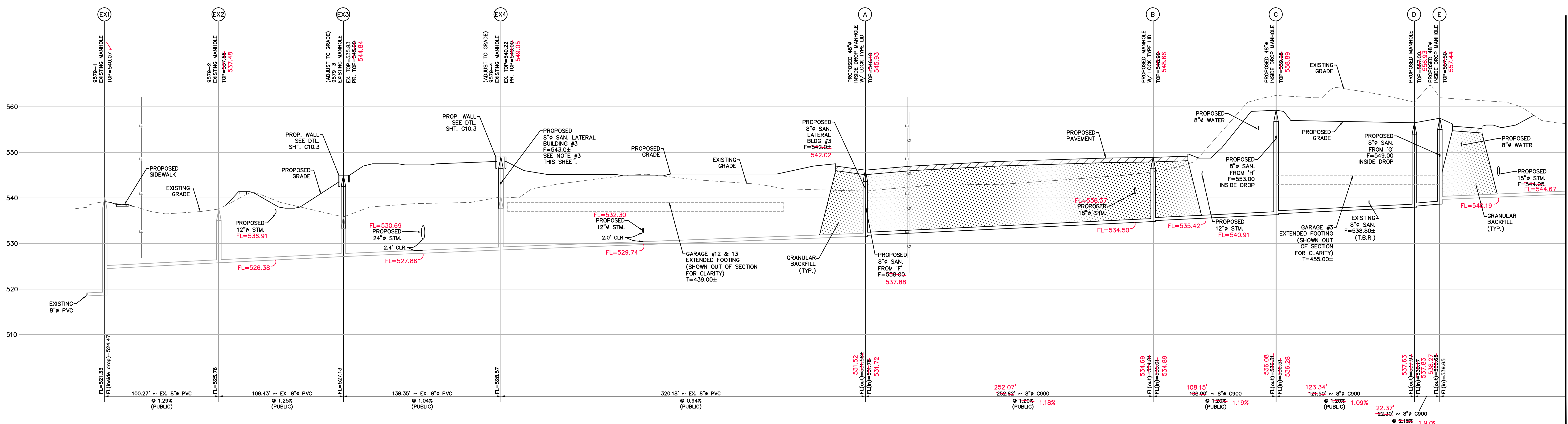
REVISIONS:

NO.	DATE	DESCRIPTION

DRAWN BY: T.S.J.M.B. CHECKED BY: G.M.S.
DATE: JOB NO: 219-6494.3

SHEET TITLE:
DETENTION OUTFALL DETAILS AND BASIN SECTIONS

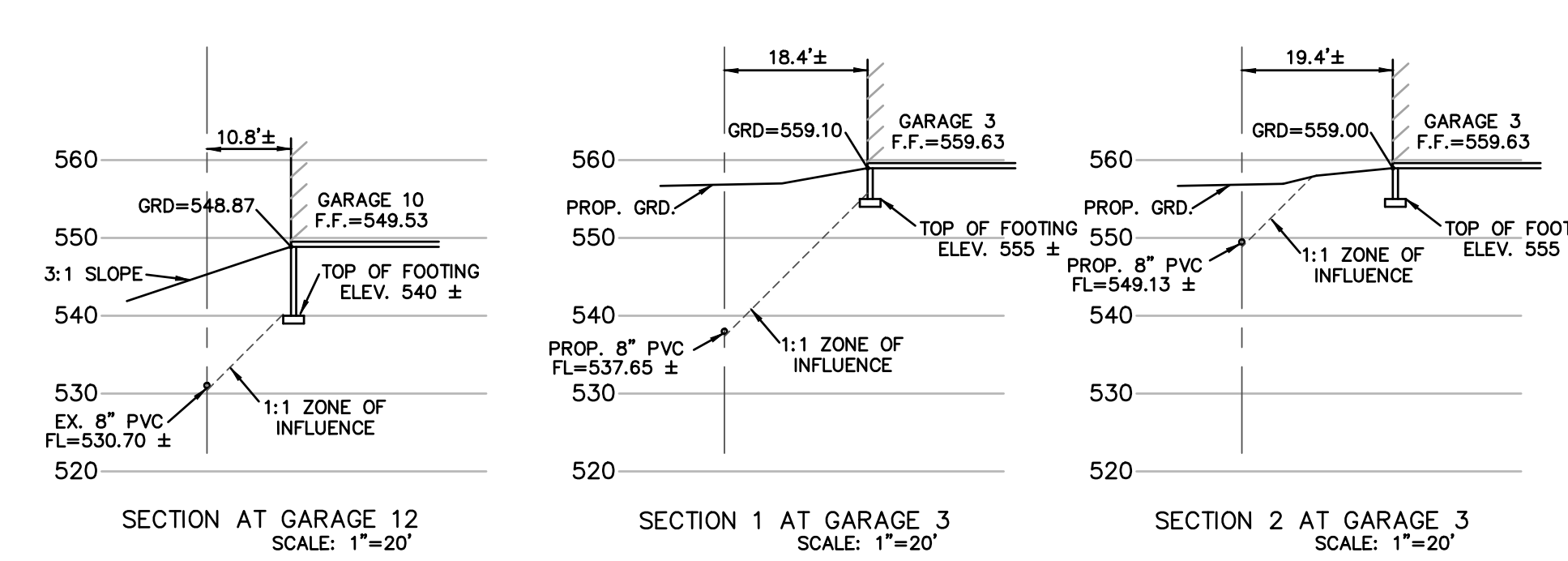
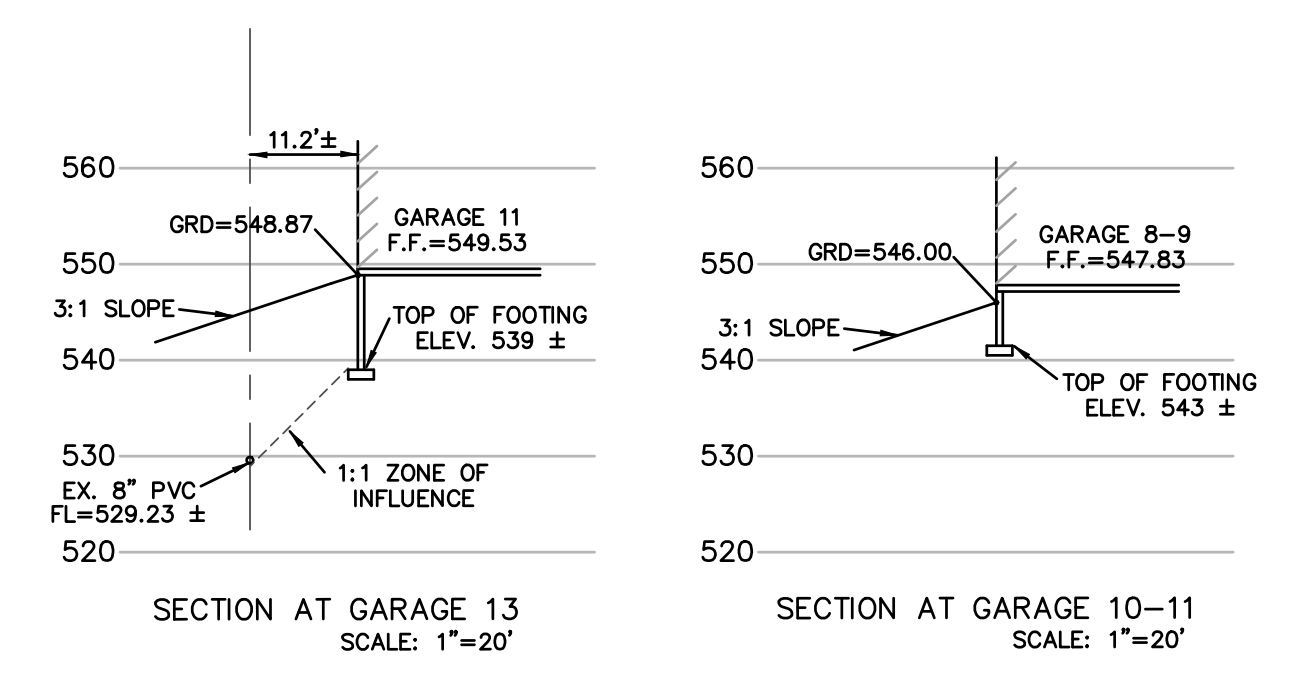
SHEET NO.: **C8.2**



LINETYPE LEGEND

ELECTRIC LINE	---
GAS LINE	---
TELEPHONE LINE	---
EXISTING GRADE	---
PROPOSED GRADE	---
HYDRAULIC GRADE	---
PROPOSED PAVEMENT	---
GRANULAR BACKFILL	---
COMPACTED FILL	---

1. ALL R.C.P. SHALL BE CLASS III UNLESS NOTED OTHERWISE.
 2. ALL P.V.C. SHALL BE SDR 35 UNLESS NOTED OTHERWISE.
 3. ALL H.D.P.E. PIPE SHALL BE N-12WT UNLESS NOTED OTHERWISE.
- NOTE: ENGINEER APPROVED SHOP DRAWINGS MUST BE SUBMITTED TO THE CITY FOR REVIEW PRIOR TO CONSTRUCTION.



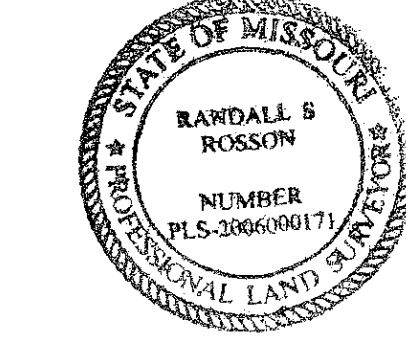
AS-BUILT

SANITARY / STORM SEWER AND STORMWATER MEASUREMENTS

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All public sewers are located within designated existing or proposed easements.

Randall S. Rosson 4/13/23
Randall S. Rosson, P.L.S. NO. 2006-000171 Date



DCSD NOTES:

1. EXISTING SANITARY SEWER SERVICE SHALL NOT BE INTERRUPTED.
2. INSTALLATION OF SANITARY SEWERS TO BE DEDICATED TO DCSD REQUIRE DCSD INSPECTION. CONTACT THE DCSD INSPECTION DEPARTMENT AT 636.441.1244 TO SCHEDULE INSPECTION. 48 HOUR ADVANCE NOTICE IS REQUIRED.
3. PROPOSED 8-INCH LATERAL CONNECTION FROM BUILDING #3 SHALL BE CORE DRILLED AND USE LINE-SEAL MODULAR SEAL. GROUT AROUND CONNECTION TO SEAL TIGHT. CONNECTION WILL REQUIRE AN INSIDE DROP. MODIFY INVERT TO DRAIN PROPERLY. SEE DETAIL SHEET C9.6.

UTILITY LOCATES

MISSOURI ONE-CALL 1 800 344-7483
CITY OF O'FALLON
TRAFFIC (636) 379-5602
ENGINEERING (636) 379-5556
CONSTRUCTION INSPECTION (636) 379-5596

