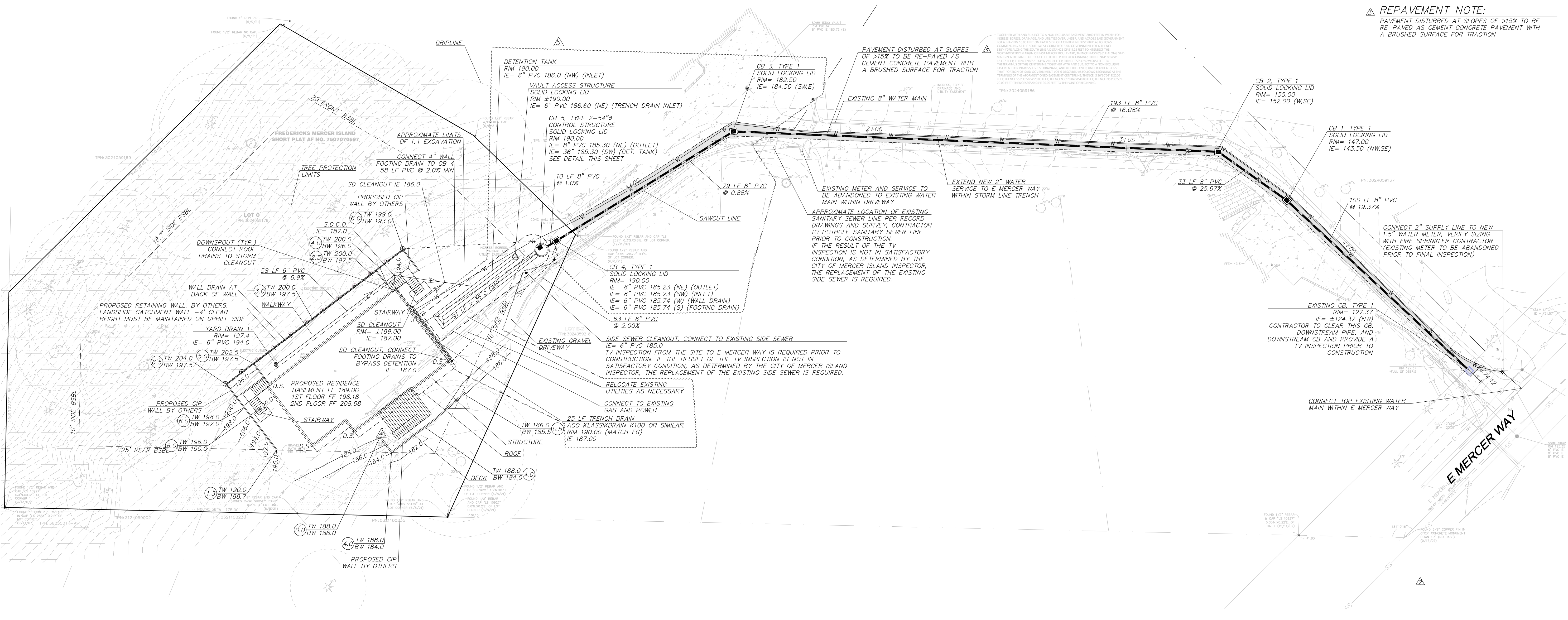


SW 1/4 SECTION 30, TOWNSHIP 24 N, RANGE 4 E, W.M.
7929 E. MERCER WAY



**7929 EAST MERCER WAY
 MERCER ISLAND RESIDENCE**
 STORM DRAINAGE PLAN
 PARCEL NO. 3024059176
 7929 EAST MERCER WAY
 MERCER ISLAND, WA 98040

HOA HOANG
 7929 E MERCER WAY
 MERCER ISLAND WA 98040



REPAVEMENT NOTE:
 PAVEMENT DISTURBED AT SLOPES OF >15% TO BE RE-PAVED AS CEMENT CONCRETE PAVEMENT WITH A BRUSHED SURFACE FOR TRACTION

- RESTRICTOR CATCH BASIN NOTES:**
- USE A MINIMUM OF A 72 IN. DIAM. TYPE 2 CATCH BASIN WHEN CONNECTING PIPE MATERIAL IS CONCRETE OR LCP. A 54 IN. DIAM. TYPE 2 CATCH BASIN MAY BE USED FOR OTHER CIRCULAR SINGLE WALL PIPE (SUCH AS CORRUGATED ALUMINUM PIPE).
 - OUTLET PIPE: MIN. 6 INCH.
 - METAL PARTS: CORROSION RESISTANT NON-GALVANIZED PARTS PREFERRED. GALVANIZED PIPE PARTS TO HAVE ASPHALT TREATMENT 1.
 - FRAME AND LADDER OR STEPS OFFSET 50.
 - CLEANOUT GATE IS VISIBLE FROM TOP.
 - CLIMB-DOWN SPACE IS CLEAR OF RISER AND CLEANOUT GATE;
 - FRAME IS CLEAR OF CURB.
 - IF METAL OUTLET PIPE CONNECTS TO CEMENT CONCRETE PIPE, OUTLET PIPE TO HAVE SMOOTH O.D. EQUAL TO CONCRETE PIPE I.D. LESS 1/4 IN.
 - PROVIDE AT LEAST ONE 3 X 0.090 GAUGE SUPPORT BRACKET ANCHORED TO CONCRETE WALL WITH 5/8 IN. STAINLESS STEEL EXPANSION BOLTS OR EMBEDDED SUPPORTS 2 IN. INTO CATCH BASIN WALL (MAXIMUM 3"-0" VERTICAL SPACING).
 - THE SHEAR GATE SHALL BE MADE OF ALUMINUM ALLOY IN ACCORDANCE WITH ASTM B 208 AND ASTM B 275, DESIGNATION 2032A, OR CAST IRON IN ACCORDANCE WITH ASTM A 48, CLASS 30B. THE LIFT HANDLE SHALL BE MADE OF SIMILAR METAL TO THE GATE (TO PREVENT GALVANIC CORROSION). IT MAY BE SOLID ROD OR HOLLOW TUBING, WITH ADJUSTABLE HOOK AS REQUIRED. A NEOPRENE RUBBER GASKET IS REQUIRED BETWEEN THE RISER MOUNTING FLANGE AND THE GATE FLANGE. INSTALL THE GATE SO THAT THE LEVEL-LINE MARK IS LEVEL WHEN THE GATE IS CLOSED. THE MATING SURFACES OF THE LID AND THE BODY SHALL BE MACHINED FOR PROPER FIT. ALL SHEAR GATE BOLTS SHALL BE STAINLESS STEEL.
 - THE UPPER CATCH BASIN IS REQUIRED IF THE LENGTH OF THE DETENTION PIPE IS GREATER THAN 50 FEET.

- STANDARD DETENTION SYSTEM NOTES:**
- CALL DEVELOPMENT SERVICES (206-275-7605) 24 HOURS IN ADVANCE FOR A DETENTION SYSTEM INSPECTION BEFORE BACKFILLING AND FOR FINAL INSPECTIONS.
 - RESPONSIBILITY FOR OPERATION AND MAINTENANCE OF DRAINAGE SYSTEMS ON PRIVATE PROPERTY IS RESPONSIBILITY OF THE PROPERTY OWNER. MATERIAL ACCUMULATED IN THE STORAGE PIPE MUST BE REMOVED FROM CATCH BASIN TO ALLOW PROPER OPERATION. THE OUTLET CONTROL ORIFICE MUST BE KEPT OPEN AT ALL TIMES.
 - PIPE MATERIAL, JOINT, AND PROTECTIVE TREATMENT SHALL BE IN ACCORDANCE WITH SECTION 7.04 AND 9.05 OF THE WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, LATEST VERSION. SUCH MATERIALS INCLUDE THE FOLLOWING, LINED CORRUGATED POLYETHYLENE PIPE (LOPE), ALUMINIZED TYPE 2 CORRUGATED STEEL PIPE AND PIPE ARCH (MEETS AASHTO DESIGNATIONS M274 AND M36). CORRUGATED OR SPIRAL RIB ALUMINUM PIPE, OR REINFORCED CONCRETE PIPE, CORRUGATED STEEL PIPE IS NOT ALLOWED.
 - FOOTING DRAINS SHALL NOT BE CONNECTED TO THE DETENTION SYSTEM.

STORMWATER CALCULATION AREAS NOTE:

LOT AREA: 30,583 S.F. (±0.771 ACRES)
 PROJECT AREA: 10,673 S.F. (0.245 ACRES)

EX IMPERVIOUS AREAS ON LOT:

DRIVEWAY	3,226 S.F.
ROOF AREA	1,071 S.F.
COVERED PATIOS	72 S.F.
TOTAL EX.	4,369 S.F.

NEW & REPLACED IMPERVIOUS AREAS ON LOT:

DRIVEWAY	1,604 S.F.
WALKS	639 S.F.
ROOF AREA	2,609 S.F.
TOTAL PROP.	4,852 S.F.

NEW/REPLACED P.G.I.S. 1,604 S.F.

- GENERAL NOTES:**
- SITE PLAN AS PROVIDED BY ARCHITECT ON SEPTEMBER 13, 2022.
 - GRADING PLAN AS PROVIDED BY ARCHITECT AND SHOWN HERE FOR REFERENCE.
 - CONTRACTOR SHALL POT-HOLE LOCATION OF EXISTING UTILITIES TO BE RECONNECTED PRIOR TO BEGINNING OF CONSTRUCTION. NOTIFY ENGINEER OF ANY CONFLICTS.
 - EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES SHOWN, OR NOT SHOWN IN THEIR PROPER LOCATION.
 - ALWAYS CALL 811 BEFORE YOU DIG.

LAWN AND LANDSCAPE AREA NOTE:
 THE LAWN AND LANDSCAPE AREAS ARE REQUIRED TO PROVIDE POST-CONSTRUCTION SOIL QUALITY AND DEPTH IN ACCORDANCE WITH BMP 75.13. THE PROJECT CIVIL ENGINEER MUST PROVIDE A LETTER OF CERTIFICATION TO ENSURE THAT THE LAWN AND LANDSCAPE AREAS ARE MEETING THE POST-CONSTRUCTION SOIL QUALITY AND DEPTH REQUIREMENTS SPECIFIED ON THE APPROVED PLAN SET PRIOR TO FINAL INSPECTION OF THE PROJECT.

WALL LEGEND:
 TW TOP OF WALL
 BW BOTTOM OF WALL
 EP EDGE OF PAVEMENT
 (E) EXISTING
 (P) PROPOSED

BUILDING HEIGHT CALCS:

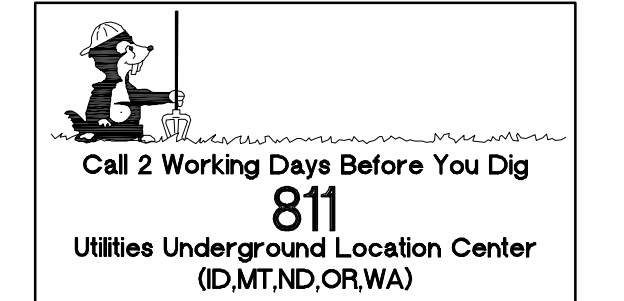
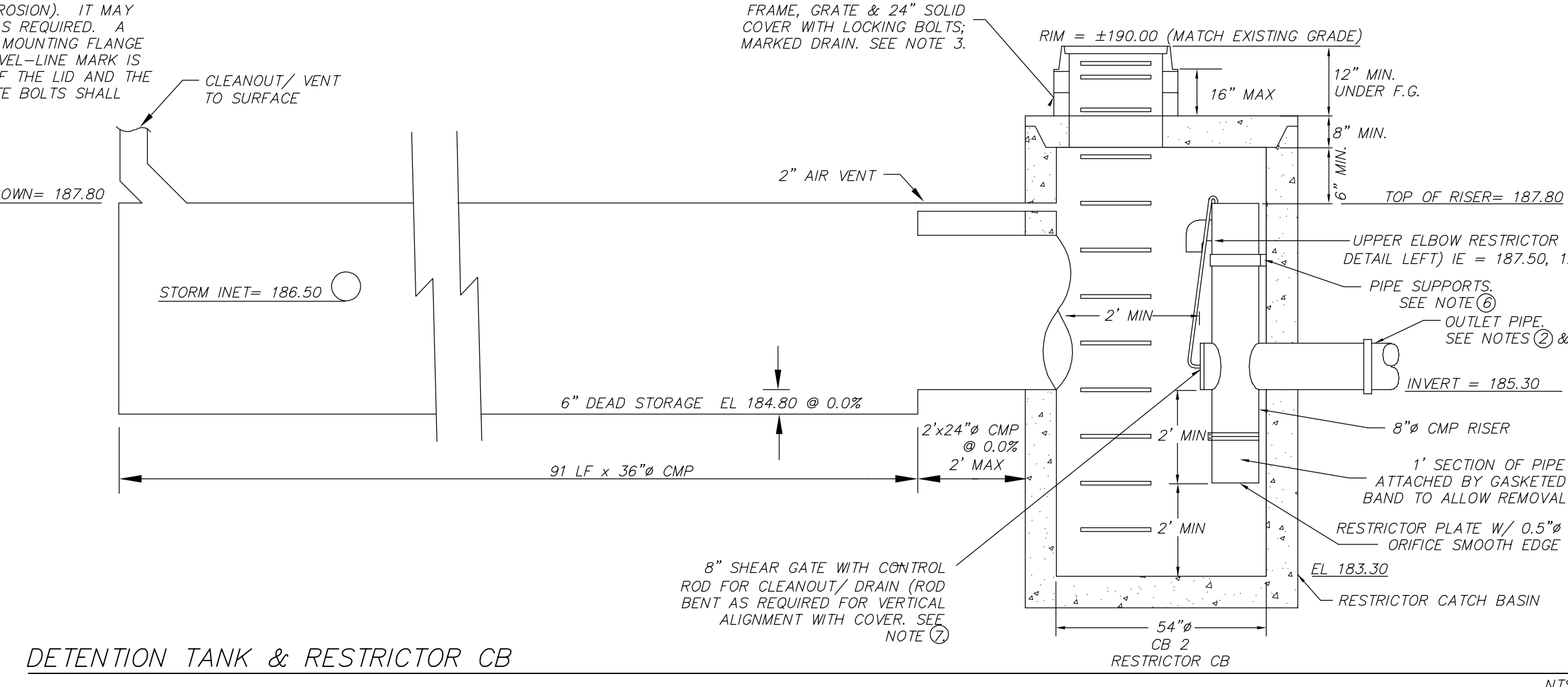
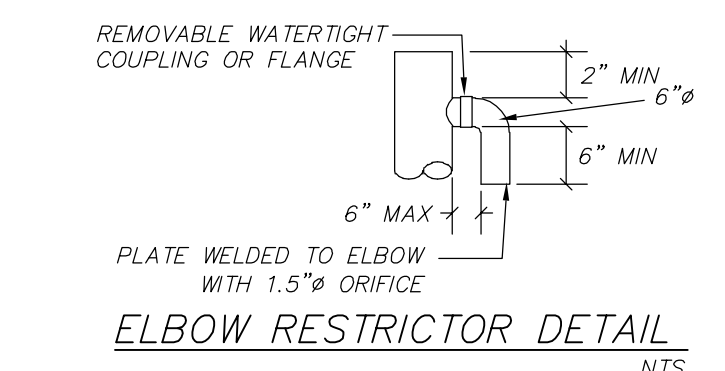
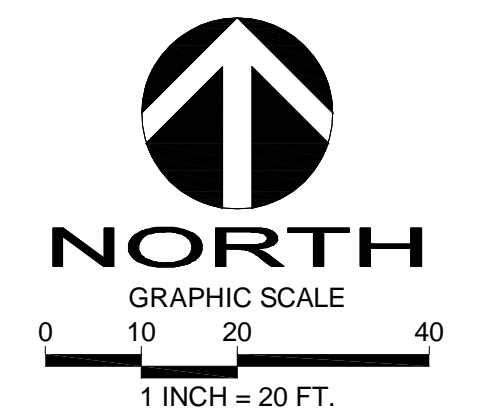
A. AVERAGE BUILDING ELEVATION (ABE) CALCULATIONS LOCATED ON SHEET:	#0000
B. ALLOWABLE BUILDING HEIGHT (ABE+30)	221.03 FT
C. PROPOSED BUILDING HEIGHT	220.13 FT
D. BENCHMARK ELEVATION	191.14 FT
E. DESCRIBE BENCHMARK LOCATION	TBM 'A'
F. SLOPING LOT-MAX HEIGHT OF TOP EXTERIOR WALL FACADE ABOVE LOWEST EXISTING GRADE (30'-FT MAX):	29'-8.75"

Table 1
 ON-SITE DETENTION DESIGN FOR PROJECTS BETWEEN 500 SF AND 9,500 SF NEW PLUS REPLACED IMPERVIOUS SURFACE AREA

New and Replaced Impervious Surface Area (sf)	Detention Pipe Diameter (in)	Detention Pipe Length (ft)		Lowest Orifice Diameter (in) ⁽¹⁾		Distance from Outlet Invert to Second Orifice (ft)		Second Orifice Diameter (in)	
		B soils	C soils	B soils	C soils	B soils	C soils	B soils	C soils
500 to 1,000 sf	36"	30	22	0.5	0.5	2.2	2.0	0.5	0.8
	48"	18	11	0.5	0.5	3.3	3.2	0.9	0.8
	60"	11	7	0.5	0.5	4.2	3.4	0.5	0.6
1,001 to 2,000 sf	36"	66	43	0.5	0.5	2.2	2.3	0.9	1.4
	48"	34	23	0.5	0.5	3.2	3.3	0.9	1.2
	60"	22	14	0.5	0.5	4.3	3.6	0.9	0.9
2,001 to 3,000 sf	36"	90	66	0.5	0.5	2.2	2.4	0.9	1.9
	48"	48	36	0.5	0.5	3.1	2.8	0.9	1.5
	60"	30	20	0.5	0.5	4.2	3.7	0.9	1.1
3,001 to 4,000 sf	36"	120	78	0.5	0.5	2.4	2.2	1.4	1.6
	48"	62	42	0.5	0.5	2.8	2.9	0.8	1.3
	60"	42	26	0.5	0.5	3.8	3.9	0.9	1.3
4,001 to 5,000 sf	36"	134	91	0.5	0.5	2.8	2.2	1.7	1.5

- STORM DRAINAGE NOTES:**
- ROOF DRAINS SHALL BE 6" PVC SDR 35 TIGHTLINE WITH A MINIMUM SLOPE OF 2.00%
 - FOOTING/WALL DRAINS SHALL BE 4" PERFORATED PVC WRAPPED IN FILTER FABRIC PER CITY STANDARDS.
 - FOOTING/WALL DRAINAGE SYSTEMS AND ROOF DOWNSPOUT SYSTEM SHALL NOT BE INTERCONNECTED UNLESS SUCH CONNECTION IS MADE AT LEAST ONE FOOT BELOW THE FOOTING/WALL DRAINAGE SYSTEM AND DOWN SLOPE OF THE BUILDING FOUNDATION.
 - USE SAND COLLARS AT CB CONNECTIONS TO PVC PIPE.
 - PROVIDE TRAFFIC RATED GRATES IN ALL PARKING AREAS.
 - PROVIDE SLEEVES THROUGH ALL WALLS/ROCKERIES.
 - SEE ARCHITECTURAL PLAN SET FOR VEGETATED ROOF SPECIFICATIONS.
 - ALL DRAIN LIDS SHALL HAVE DECORATIVE GRATE COVERS. IRON AGE OR EQUAL PER ARCHITECTURAL SPECIFICATION.

SHORING WALL NOTE:
 1. FOR THE LANDSLIDE CATCHMENT WALL - 4' CLEAR HEIGHT MUST BE MAINTAINED ON UPHILL SIDE



DATE	REVISION	BY	APP
11.20.23	CITY COMMENTS	YLP	YLP
3.28.24	CITY COMMENTS	YLP	YLP
8.12.24	CITY COMMENTS	YLP	YLP
10.6.25	SITE PLAN REVISION	YLP	YLP
1.21.26	SITE PLAN REVISION	YLP	YLP

DRAFTED BY: RMF
 DESIGNED BY: RMF
 PROJECT ENGINEER: YLP
 DATE: 12.29.22
 PROJECT NO.: 21125

DRAWING: C3
 SHEET: 3 OF 7