



SCALE 1"=20'  
 Note: Caution should be taken in comparing the written scale to the graphic scale to ascertain if this plan has been enlarged or reduced.

VETERANS MEMORIAL PARKWAY  
 (SOUTH OUTER ROAD INTERSTATE HWY. 70)

DISCHARGE POINT #1  
 A(total)=2.56 ACRES  
 Q(total)=7.70 CFS

DISCHARGE POINT #1 SUMMARY		DISCHARGE POINT #2 SUMMARY	
ORIGINAL EXISTING CONDITIONS	AREA = 2.56 AC PI = 1.70 CFS/AC Q = 4.33 CFS	ORIGINAL EXISTING CONDITIONS	AREA = 2.56 AC PI = 1.70 CFS/AC Q = 4.33 CFS
DESIGN CONDITIONS	AREA = 2.56 AC PI = 2.81 CFS/AC Q = 7.70 CFS	DESIGN CONDITIONS	AREA = 2.56 AC PI = 1.94 CFS/AC Q = 7.70 CFS

MSD(15-YR., 20-MIN.) STORM WATER ANALYSIS

EXISTING CONDITIONS		DEVELOPED CONDITIONS	
TOTAL ANALYSIS AREA = 2.92 AC	GREEN AREA = 2.92 AC	TOTAL ANALYSIS AREA = 2.92 AC	GREEN AREA = 1.17 AC
PAVEMENT AREA = 0.00 AC	ROOF AREA = 0.00 AC	PAVEMENT AREA = 1.41 AC	ROOF AREA(X2.2) = 0.34 AC
COMPOSITE PI = 1.70 CFS/AC	Q = 4.96 CFS	COMPOSITE PI = 2.88 CFS/AC	Q = 8.41 CFS

STORMWATER MANAGEMENT SUMMARY:  
 15-yr., 20-min. ONSITE DIFFERENTIAL ΔD = 3.45 CFS > 1 CFS  
 → FLOOD DETENTION IS REQUIRED →  
 AREA OF DISTURBANCE = 2.29 AC > 1 AC.  
 → WATER QUALITY IS REQUIRED →

ONSITE PROPOSED DRAINAGE AREAS (MSD)

I.D.	Total Area (ac.)	Grass (ac.)	Pavement (ac.)	Roof Piped (ac.)	Roof Surf. Disch. (ac.)	15-yr. Comp. PI	15-yr. Flow, Q (cfs)	to Structure
1A	0.25	0.25	0.00	0.00	0.00	1.70	0.43	Runoff to St. Charles Rock Road
1A	0.05	0.05	0.00	0.00	0.00	1.70	0.09	Runoff to Prop. SIGI 1-2
1B	0.15	0.06	0.09	0.00	0.00	2.80	0.42	Runoff to Prop. CI 1-3
2	0.19	0.14	0.05	0.00	0.00	2.18	0.42	Runoff to Prop. CI 1-4
2B	0.07	0.07	0.00	0.00	0.00	1.70	0.12	Runoff to Prop. Nested Bioretention
3	0.07	0.07	0.00	0.00	0.00	1.70	0.12	Runoff to Prop. CI 1-4
3B	0.03	0.03	0.00	0.00	0.00	1.70	0.05	Runoff to Prop. CI 1-4
4B	0.35	0.06	0.29	0.00	0.00	3.22	1.13	Runoff to Prop. CI 1-4
5	0.11	0.01	0.10	0.00	0.00	3.37	0.37	Runoff to Prop. CI 1-4
6	0.11	0.00	0.11	0.00	0.00	3.54	0.39	Runoff to Prop. CI 1-4
7	0.20	0.01	0.19	0.00	0.00	3.45	0.69	Runoff to Prop. CI 1-4
8	0.17	0.02	0.15	0.00	0.00	3.32	0.57	Runoff to Prop. CI 1-4
9	0.52	0.13	0.39	0.00	0.00	3.08	1.60	Runoff to Prop. CI 1-4
10	0.34	0.00	0.00	0.34	0.00	4.20	1.43	Runoff to Prop. CI 1-4
11	0.26	0.26	0.00	0.00	0.00	1.70	0.44	Runoff to I-70 ditch
12	0.05	0.01	0.04	0.00	0.00	3.17	0.16	Runoff to I-70 ditch
Area & Flow Totals	2.92	1.17	1.41	0.34	0.00	8.41		

DISCHARGE POINT #2  
 A(total)=0.36 ACRES  
 Q(total)=0.70 CFS

MSD DESIGN STORM:  
 15-yr., 20-min.  
 Roof (piped) PI=4.20; Roof (surface discharge) PI=3.54,  
 Pavement PI=3.54; Grass PI=1.70.

OFFSITE PROPOSED DRAINAGE AREAS (MSD)

I.D.	Total Area (ac.)	Grass (ac.)	Pavement (ac.)	Roof Piped (ac.)	Roof Surf. Disch. (ac.)	15-yr. Comp. PI	15-yr. Flow, Q (cfs)	to Structure
4	0.56	0.21	0.35	0.00	0.00	2.85	1.60	Runoff to Prop. SIGI 1-2
4A	0.11	0.02	0.09	0.00	0.00	3.21	0.35	Runoff to Prop. CI 1-3
Area & Flow Totals	0.67	0.23	0.44	0.00	0.00	1.95		

LAND DISTURBANCE NOTES  
 1. All storm and sanitary sewer structures and appurtenances are to conform to the Standard Details and Construction Specifications shown in the current Metropolitan St. Louis Sewer District, Standard Construction Specifications for Sewers and Drainage Facilities, 2009, except as modified by the City of O'Fallon Ordinances.  
 2. Limits of Disturbance - The Contractor shall stay within the limits of disturbance as shown on these plans and minimize disturbance within the work area wherever possible.  
 3. Stormwater Management Note - Land Area Disturbed = 2.29 acres (1.54 acres impervious). Any future land disturbance and/or increase in impervious area on this site may require additional storm water management per CITY Regulations in place at that time (including total land disturbance and/or imperviousness added on this plan).

THIS SHEET IS NOT FOR CONSTRUCTION. DRAINAGE EXHIBIT ONLY.

The original signed and sealed of this drawing is on file at the office of The Clayton Engineering Company. Any modifications to this drawing shall be made by the Engineer and/or Surveyor whose seal appears hereon from any liability resulting from said unauthorized modifications. The signed and sealed original is the official document and shall take precedence over any digital version.

The Contractor shall be responsible for verifying the actual location of all underground facilities, structures, & utilities, either shown or not shown on these plans. The underground facilities, structures, & 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.

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REVISIONS

No.	Date	By	Description
1	04-21-22	EAS	Minor building/parking lot revisions, address HDS info
2	04-25-22	EAS	City of O'Fallon comments
3	05-03-22	EAS	MSDOT comments
4	05-13-22	EAS	MSDOT comments
5	05-13-22	EAS	MSDOT comments
6	05-14-22	EAS	New water gate location

Prepared for:  
 PRIMAX PROPERTIES, LLC  
 1100 EAST MOREHEAD STREET  
 CHARLOTTE, NC 28204

PROJECT: PROPOSED FUTURE DRAINAGE AREA MAP - W/DEVELOPED LOT B RANGE USA INDOOR GUN RANGE

DESIGNED: EAS  
 DRAWN: EAS  
 CHECKED: EAS  
 DATE: March 19, 2022

PROJECT NUMBER: 21243  
 SHEET NUMBER: C9.2 of