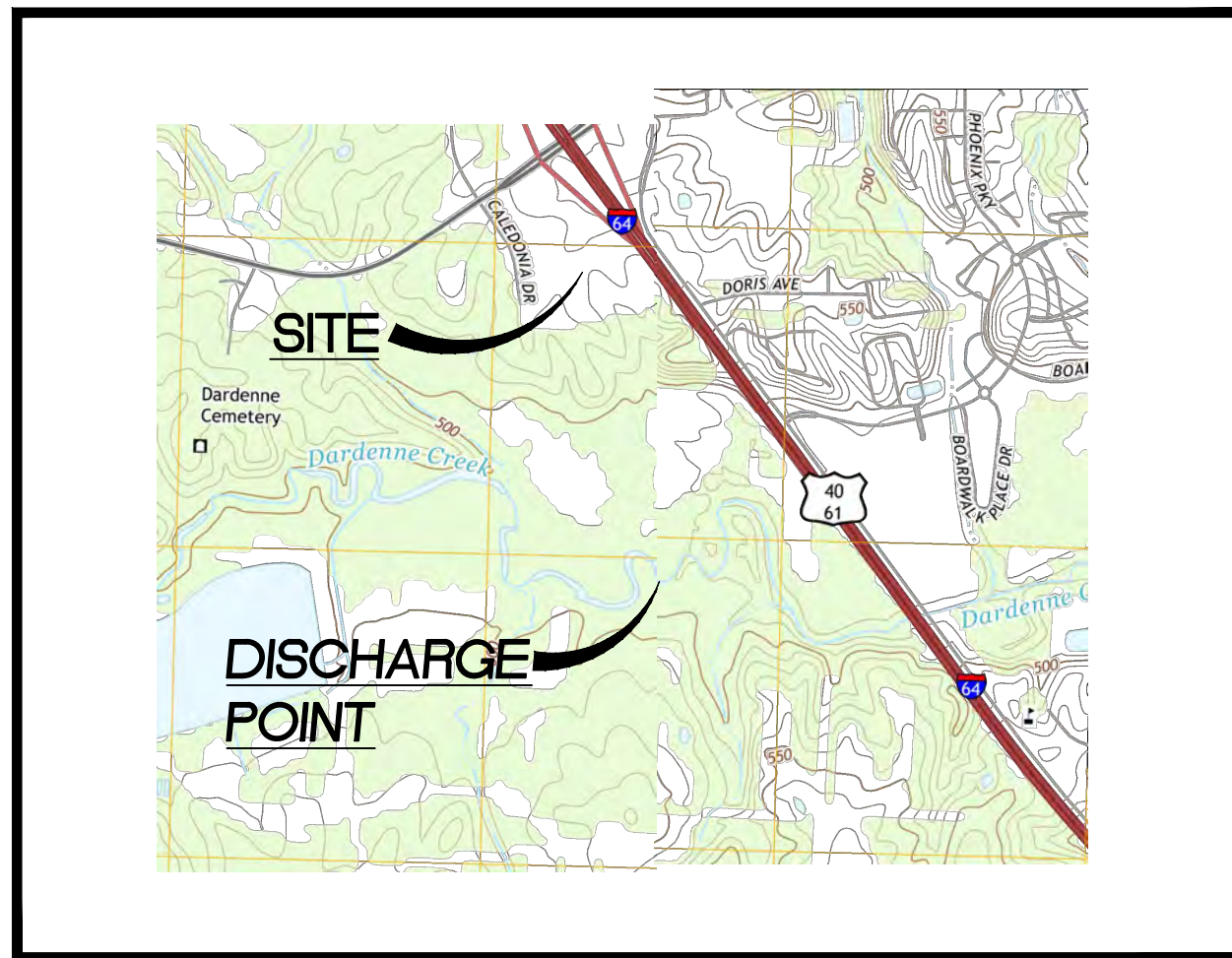


LOCATION MAP
(NOT TO SCALE)



USGS MAP
(NOT TO SCALE)



SOILS MAP
(NOT TO SCALE)

St. Charles County, Missouri (MO183)				
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI	Percent of AOI
50009	Keswick silt loam, 9 to 14 percent slopes, eroded	2.8	6.2%	6.2%
60086	Clider silt loam, 9 to 14 percent slopes, eroded	8.5	18.8%	18.8%
60124	Harvester-Urban land complex, 2 to 9 percent slopes	8.9	19.5%	19.5%
60234	Weller silt loam, 2 to 5 percent slopes	13.7	30.2%	30.2%
60260	Weller silt loam, 5 to 9 percent slopes	11.5	25.3%	25.3%
Totals for Area of Interest		45.4	100.0%	100.0%

SOILS MAP KEY
(NOT TO SCALE)

SWPPP CONTACT DATA

SITE ADDRESS: NOT YET ASSIGNED
 OWNER: 40 DD SPORTS, LLC, 4160 EHLMANN ROAD, ST. PETERS, MO 63376
 EMERGENCY CONTACT: MIKE SOOTS (636) 359-0521
 SITE OPERATOR: TO BE DETERMINED

SWPPP SITE DATA

TOTAL SITE AREA: 29.00 ACRES
 ON-SITE DISTURBED AREA: 21.25 ACRES
 OFF-SITE DISTURBED AREA: 0.00 ACRES
 TOTAL DISTURBED AREA: 21.25 ACRES

RUNOFF COEFFICIENT (IMPERVIOUS AREA): 0.90
 RUNOFF COEFFICIENT (PERVIOUS AREA): 0.25
 IMPERVIOUS AREA (PRE-DEVELOPED): 2.48 ACRES
 PERVIOUS AREA (PRE-DEVELOPED): 26.52 ACRES
 RUNOFF COEFFICIENT (PRE-DEVELOPED): 0.31
 IMPERVIOUS AREA (POST-DEVELOPED): 2.29 ACRES
 PERVIOUS AREA (POST-DEVELOPED): 26.71 ACRES
 RUNOFF COEFFICIENT (POST-DEVELOPED): 0.30

SWPPP SEQUENCE

- INSTALL STABILIZED CONSTRUCTION TRAFFIC WASH-OFF PADS AND SWPPP INFORMATION SIGN.
- INSTALL SILT FENCE(S) ON THE SITE (CLEAR ONLY THOSE AREAS NECESSARY TO INSTALL SILT FENCE).
- PREPARE STABILIZED STAGING AREA AS NECESSARY.
- HALT ALL ACTIVITIES AND OBTAIN ANY AND ALL REQUIRED INITIAL BMP INSPECTIONS BEFORE PROCEEDING WITH CONSTRUCTION.
- CONSTRUCT AND STABILIZE ANY SEDIMENT BASIN(S) AND SEDIMENT TRAP(S) WITH APPROPRIATE OUTFALL STRUCTURES (CLEAR ONLY THOSE AREAS NECESSARY TO INSTALL BASINS AND TRAPS).
- INSTALL AND STABILIZE ANY HYDRAULIC CONTROL STRUCTURES (DIKES, SWALES, CHECK DAMS, ETC.).
- BEGIN CLEARING AND GRUBBING THE SITE.
- BEGIN MASS GRADING THE SITE.
- TEMPORARILY MULCH, THROUGHOUT CONSTRUCTION, DENUDED AREAS THAT WILL BE INACTIVE FOR 14 DAYS OR MORE.
- COMPLETE MASS GRADING AND INSTALL TEMPORARY STABILIZATION OVER ALL AREAS AS NEEDED.
- OBTAIN CONCURRENCE FROM THE OWNER'S DESIGNATED REPRESENTATIVE THAT THE SITE HAS BEEN TEMPORARILY STABILIZED.

BMP MAINTENANCE NOTES

ALL MEASURES SHOWN IN THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

- INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.
- ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEED AS NEEDED.
- SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE.
- THE CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.
- THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AREA AS CONDITIONS DEMAND.
- OUTLET STRUCTURES IN THE SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASINS OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 50%.
- PRIOR TO LEAVING THE SITE, ALL VEHICLES SHALL BE CLEANED OF DEBRIS. ANY DEBRIS AND/OR SEDIMENT REACHING THE PUBLIC STREET SHALL BE CLEANED IMMEDIATELY BY A METHOD OTHER THAN FLUSHING.

DIVERSION BERM CALCULATIONS										
Diversion Berm	Runoff Coefficient	Storm Event	Intensity (in/hr)	Drainage Area (acres)	Design Runoff (cfs)	Channel Bottom Width (ft)	Channel Depth (ft)	Channel Slope (%)	Normal Depth (ft)	Velocity (ft/s)
1	0.50	6 month	2.86	4.55	6.51	5	1.50	1.70%	0.28	4.24
2	0.50	6 month	2.86	3.59	5.13	5	1.50	0.50%	0.84	2.62
3	0.50	6 month	2.86	7.51	10.74	5	1.50	0.50%	1.03	3.36

SWPPP SCHEDULE											
NOTE: GENERAL CONTRACTOR TO COMPLETE TABLE WITH THEIR SPECIFIC SCHEDULE											
CONSTRUCTION SEQUENCE											
CONSTRUCTION SEQUENCE	CONSTRUCTION ENTRANCES	TEMPORARY CONTROL MEASURES	SEDIMENT CONTROL BASINS	STRIP AND STOCKPILE TOPSOIL	ROUGH GRADE						

SWPPP NOTES

- THE STORMWATER POLLUTION PREVENTION PLAN IS COMPRISED OF THIS DRAWING ("SITE MAP"), THE STANDARD DETAILS, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
- ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
- THE GENERAL CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST TO OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
- BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. THE GENERAL CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
- SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
- THE GENERAL CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
- THE GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES. CONTRACTOR SHALL CONSTRUCT TEMPORARY BERM ON DOWN STREAM SIDES IN COMPLIANCE WITH THIS SWPPP.
- ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
- SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
- DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
- RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
- ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.
- ALL DENUDED AREAS THAT WILL BE INACTIVE FOR 14 DAYS OR MORE MUST BE STABILIZED TEMPORARILY WITH THE USE OF FAST-GERMINATING ANNUAL GRASS/GRAIN VARIETIES, STRAW/HAY MULCH, WOOD CELLULOSE FIBERS, TACKIFIERS, NETTING OR BLANKETS AS SHOWN ON SITE MAP.
- DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY STABILIZED AS SHOWN ON THE PLANS. THESE AREAS SHALL BE SEED, SODDED, AND/OR VEGETATED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.
- IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OF MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE. ONLY USE INGRESS/EGRESS LOCATIONS AS PROVIDED.
- ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
- THE GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
- ON-SITE & OFFSITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
- SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
- DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION AND SEDIMENT CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION AND POLLUTION DISCHARGE.
- SEE SITE PLAN FOR PERMANENT AND TEMPORARY SIGNAGE.
- GENERAL CONTRACTOR IS TO DESIGNATE/IDENTIFY AREAS ON THE SITE MAPS, INSIDE OF THE LIMITS OF DISTURBANCE, FOR WASTE DISPOSAL AND DELIVERY AND MATERIAL STORAGE.
- REFER TO THE APPLICABLE NPDES PERMIT FOR REPORTABLE SPILL QUANTITIES OF PETROLEUM PRODUCTS AND/OR HAZARDOUS WASTES.
- GENERAL CONTRACTOR TO LIMIT DISTURBANCE OF SITE IN STRICT ACCORDANCE WITH EROSION CONTROL SEQUENCING SHOWN ON THIS PLAN. NO UNNECESSARY OR IMPROPERLY SEQUENCED CLEARING AND/OR GRADING SHALL BE PERMITTED.
- ALL CONSTRUCTION VEHICLES SHALL ENTER AND EXIT THE CONSTRUCTION SITE BY USING THE DESIGNATED ENTRANCE OVERLAID WITH GRAVEL.
- NO CONSTRUCTION MATERIALS OR EQUIPMENT CAN BE STORED ON ADJACENT PROPERTIES.
- NO COMBUSTIBLE RUBBISH SHALL ACCUMULATE ON THE CONSTRUCTION SITE. ALL COMBUSTIBLE RUBBISH MUST BE REMOVED DAILY AND SHALL NOT BE DISPOSED OF BY BURNING.
- THE GENERAL CONTRACTOR SHALL MAINTAIN THE SILTATION CONTROL DEVICES SO AS TO PREVENT SILT FROM BYPASSING THEM AND DISTURBED AREAS SHALL BE ADEQUATELY RE-VEGETATED.
- ALL GRADED AREAS SHALL BE PROTECTED FROM EROSION BY EROSION CONTROL DEVICES AND/OR SEEDING AND MULCHING. EROSION CONTROL SHALL NOT BE LIMITED TO WHAT IS SHOWN ON THE PLAN. WHATEVER MEANS NECESSARY SHALL BE TAKEN TO PREVENT SILTATION AND EROSION FROM ENTERING NATURAL STREAMS AND ADJACENT ROADWAYS, PROPERTIES AND DITCHES.
- WHEN GRADING OPERATIONS ARE COMPLETED OR SUSPENDED FOR MORE THAN 30 DAYS, PERMANENT GRASS MUST BE ESTABLISHED AT SUFFICIENT DENSITY TO PROVIDE EROSION CONTROL ON THE SITE. BETWEEN PERMANENT GRASS SEEDING PERIODS, TEMPORARY COVER SHALL BE PROVIDED.
- NO CUT OR FILL SLOPE SHALL BE MADE STEEPER IN SLOPE THAN THREE (3) HORIZONTAL TO ONE (1) VERTICAL (33%) WITHOUT A GEOTECHNICAL REPORT.
- STOCKPILES SHALL BE LOCATED IN AREAS THAT WILL NOT ERODE, BLOCK DRAINAGE, OR INTERFERE WITH WORK ON THE SITE.

- SURFACE STABILIZATION SHALL BE SCHEDULED AS SHOWN ON THE SOIL STABILIZATION SCHEDULE ON SHEET C9.5.
- MULCH SHALL BE USED AS TEMPORARY COVER IN UNSEEDED AREAS TO PROTECT AGAINST EROSION UNTIL FINAL GRADING AND SHAPING CAN BE ACCOMPLISHED. APPLICATION RATES SHALL BE AS SHOWN ON THE MULCHING MATERIALS TABLE ON SHEET C9.5.

SWPPP LEGEND		
LABEL	SYMBOL	DESCRIPTION
CD		ROCK CHECK DAM (REFER TO DETAIL ON SHEET C9.4)
CE		CONSTRUCTION TRAFFIC WASH-OFF PAD (REFER TO DETAIL ON SHEET C9.5)
CT#		CULVERT INLET SEDIMENT TRAP (REFER TO DETAIL ON SHEET C9.5)
DB#		DIVERSION BERM (REFER TO CALCULATIONS ON THIS SHEET)
IP1		INLET PROTECTION - BIG RED (REFER TO DETAIL ON SHEET C9.5)
IP2		INLET PROTECTION - DANDY BAG (REFER TO DETAIL ON SHEET C9.5)
LD		LIMITS OF DISTURBANCE
PS		PERMANENT SEEDING
PSM		PERMANENT SLOPE MAT
SF		SILT FENCE (REFER TO DETAIL ON SHEET C9.4)
SS		SWPPP INFORMATION SIGN (REFER TO DETAIL ON SHEET C9.5)
SSA		STABILIZED STAGING AREA (EXISTING)
ST#		SWALE SEDIMENT TRAP WITH CHECK DAM (REFER TO DETAIL SHEET C9.5) (REFER TO CALCULATIONS ON THIS SHEET)
SW		STRAW WATTLE (REFER TO DETAIL ON SHEET C9.5)
TD		TEMPORARY SLOPE DRAIN (30" DIAMETER) (REFER TO DETAIL SHEET C9.4)
TM		TEMPORARY MULCHING (REFER TO TABLE SHEET C9.5)
TSM		TEMPORARY SLOPE MAT

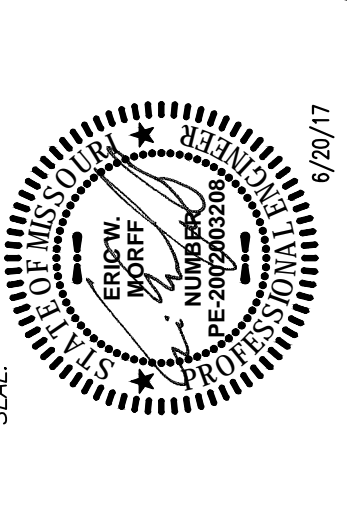
SWALE SEDIMENT TRAP DESIGN CALCULATIONS							
Trap Number	Tributary Area (acres)	Required Ratio (c.y. / acre)	Required Ratio (c.f. / acre)	Required Volume (c.f.)	Depth (ft)	Bottom Width (ft)	Provided Volume (c.f.)
1	0.28	67	1809	507	5	6	856
2	0.26	67	1809	470	5	6	856
3	0.26	67	1809	470	5	6	856
4	0.40	67	1809	724	5	6	856
5	0.40	67	1809	724	5	6	856
6	0.66	67	1809	1194	5	15	1284
7	0.73	67	1809	1321	5	20	1515
8	0.83	67	1809	1501	5	20	1515
9	0.97	67	1809	1755	5	30	1972
10	0.66	67	1809	1194	5	15	1284
11	0.82	67	1809	1483	5	20	1515
12	0.95	67	1809	1719	5	25	1744
13	0.98	67	1809	1773	5	30	1972
14	0.99	67	1809	1791	5	30	1972
15	0.98	67	1809	1773	5	30	1972
17	0.49	67	1809	486	5	10	1050
18	0.78	67	1809	1411	5	20	1515
19	0.41	67	1809	742	5	6	856
20	0.57	67	1809	1031	5	10	1050

CULVERT INLET SEDIMENT TRAP CALCULATIONS				
Trap Number	Tributary Area (acres)	Required Ratio (c.y. / acre)	Required Ratio (c.f. / acre)	Provided Volume (c.f.)
1	2.19	67	1809	10327

USER: Brian Johnson, TRB: SWPPP NOTES
 DATE: June 20, 2017 - 11:25:41 AM
 DRAWING: S:\WORK\Jobs\2016\16-0042\DWG\C-Plan\SWPPP NOTES_16-0042.dwg

CLIENT/CITY/AGENCY	COMMENTS	DATE	NO
4	REVISED SANITARY SEWER ALIGNMENT	6/20/17	1
2	REVISED SANITARY SEWER ALIGNMENT	6/08/17	2
1	CLIENT/CITY/AGENCY COMMENTS	6/02/17	1

DEVELOPER/OWNER:
40 DD SPORTS, LLC
4160 EHLMANN ROAD
ST. PETERS, MO 63376
636-359-0521



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DESIGN/CALC BY: BSJ
 DRAWN BY: BSJ
 CHECKED BY: EWM
 DRAWING SCALE: AS SHOWN
 DATE: 4/28/17
 Job Number: 16-0042-A
 Sheet Number: C9.3