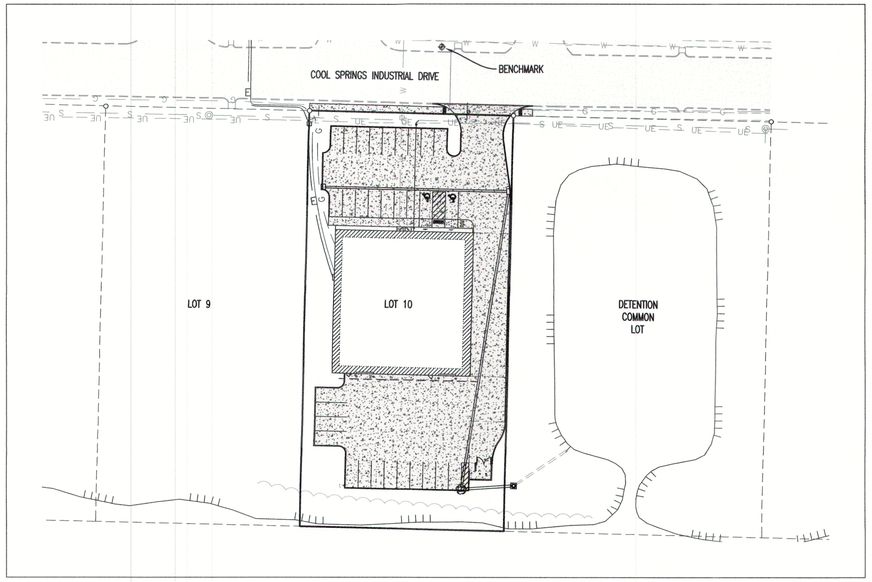
A SET OF AS BUILT PLANS FOR
Landmark Cool Springs LLC



Plan View

Locator Map

LEGAL DESCRIPTION:

A TRACT OF LAND LOCATED IN FRACTIONAL SECTION 22 AND U.S. SURVEY 63, ALL IN TOWNSHIP 47 NORTH, RANGE 3 EAST, O'FALLON, ST. CHARLES COUNTY, MISSOURI AND BEING ALL OF LOT 10 OF COOL SPRINGS INDUSTRIAL PARK, PLAT 2, RECORDED IN BOOK 42, PAGE 156 AND CONTAINING 0.95 ACRES

Drawing Index

Benchmarks

TBM #1 – FIRE HYDRANT TOP FLANGE BOLT ON FIRE HYDRANT ON NORTH SIDE OF COOL SPRINGS DRIVE, NORTH OF PROPOSED DRIVEWAY FOR THIS PROJECT: ELEVATION = 481.45

Legend

EXISTING CURB	FF=XXX.X — FINISH FLOOR OF STRUCTURE
PROPOSED CURB	XXX.XX TC — PROPOSED TOP OF CURB ELEVATION
RIP RAP	XXX.XX TP — PROPOSED TOP OF PAVEMENT ELEVATION
EXISTING STRUCTURE	XXX.XX FG — PROPOSED FINISH GRADE ELEVATION
EXISTING TREELINE	XXX.XX TW — PROPOSED TOP OF WALL
PROPOSED TREELINE	XX — LOT NUMBER
EDGE OF WATERWAY	X — STORM SEWER STRUCTURE LABEL
EXISTING WATERLINE	X — SANITARY SEWER STRUCTURE LABEL
PROPOSED WATERLINE	H.P. — HIGH POINT
EXISTING GAS LINE	L.P. — LOW POINT
PROPOSED GAS LINE	EXISTING SIGNS
EXISTING UNDERGROUND TELEPHONE	EXISTING POWER POLE
EXISTING UNDERGROUND CABLE TELEVISION	EXISTING GAS VALVE
EXISTING HIGH VOLTAGE ELECTRIC	EXISTING WATER VALVE
EXISTING OVERHEAD ELECTRIC	EXISTING GAS METER
EXISTING UNDERGROUND ELECTRIC	EXISTING WATER METER
EXISTING OVERHEAD ELEC. & TV	EXISTING FIRE HYDRANT
EXISTING OVERHEAD ELEC., TV & TELE.	MANHOLE
EXISTING SANITARY SEWER	EXISTING SANITARY SEWER LATERAL
PROPOSED SANITARY SEWER	PROPOSED SANITARY SEWER LATERAL
EXISTING MINOR CONTOUR	PROPOSED TRACER WIRE TEST STATION BOX
EXISTING MAJOR CONTOUR	EXISTING AIR CONDITIONER
PROPOSED MINOR CONTOUR	EXISTING TELEPHONE PEDESTAL
PROPOSED MAJOR CONTOUR	EXISTING ELECTRICAL TRANSFORMER
100 YEAR FLOOD PLAIN	EXISTING ELECTRIC METER
FLOODWAY	EXISTING LIGHT POLE
ORDINARY HIGH WATER MARK	EXISTING GUY WIRE
STREAM SIDE BUFFER	
OUTER STREAM BUFFER	

* City of O'Fallon Construction work hours per City Ordinance 3429 as shown in Section 500.420 of the Municipal Code of the City of O'Fallon are as follows:

October 1 through May 31
7:00 A.M. To 7:00 P.M. Monday Through Sunday
June 1 Through September 30
6:00 A.M. To 8:00 P.M. Monday Through Friday
7:00 A.M. to 8:00 P.M. Saturday and Sunday

* The area of this phase of development is 0.95 ACRES
The area of land disturbance is 0.95 ACRES
Number of proposed lots is 1 EXISTING
Building setback information. Front 30'
Side 20'–WEST/25'–EAST
Rear 35'

* The estimated sanitary flow in gallons per day is 500 GPD

* Tree preservation calculations:
Existing trees on–site = 2,670 square feet
Existing trees retained = 2,670 squqre feet.

Conditions of Approval From Planning and Zoning

1) WAVE STYLE BIKE RACK IS NOT PERMITTED
2) THE DUMPSTER ENCLOSURE SHALL NOT BE LOCATED WITHIN THE REAR YARD SETBACK

LOCATION OF IMPROVEMENTS AS-BUILT

METRON Surveying & Layout Co
313 Wood Street
O'Fallon, MO. 63366
Ph: 314-432-5400 Fx: 636-294-5851

John E. Winkler Jr. PLS-2006016644
Order No. 9981 Date: 7.14.21

STATE OF MISSOURI
JOHN E. WINKLER JR.
NUMBER PLS-2006016644
REGISTERED LAND SURVEYOR
7.14-2021

CITY OF O'FALLON
ENGINEERING DEPARTMENT
ACCEPTED FOR CONSTRUCTION
BY: _____ DATE 08/09/2021
PROFESSIONAL ENGINEER'S SEAL
INDICATES RESPONSIBILITY FOR DESIGN

City of O'Fallon Standard Notes and Details – July 2019

Utility Contacts

Sanitary Sewers

City of O'Fallon
100 N. Main St.
O'Fallon, MO. 63366
Contact: 636–240–2000

Duckett Creek Sanitary District
3550 Highway K
O'Fallon, MO. 63368
636–441–1244

Public Water Supply District No. 2
P.O. Box 967
O'Fallon, MO. 63366
636–561–3737

Water

City of O'Fallon
100 N. Main St.
O'Fallon, MO. 63366
Contact: 636–240–2000

Missouri American Water Co.
727 Craig Rd.
St. Louis, MO. 63141
1–866–430–0820

Public Water Supply District No. 2
P.O. Box 967
O'Fallon, MO. 63366
636–561–3737

Storm Sewer

City of O'Fallon
100 N. Main St.
O'Fallon, MO. 63366
636–240–2000

Electric

Curve River Electric Co.
P.O. Box 160
Troy, MO. 63379–0160
1–800–392–3709

Ameren Missouri
200 Callahan Road
Wentzville, MO. 63385
636–639–8312

Gas

Spire Gas
6400 Graham Road
St. Louis, MO. 63134
314–522–2297

Telephone

CenturyLink
1151 Century Tel Dr.
Wentzville, MO. 63385
636–332–7261

Fire District

O'Fallon Fire Protection District
111 Laura K Dr.
O'Fallon, MO. 63366
636–272–3493

Wentzville Fire District
209 West Pearce Blvd.
Wentzville, MO. 63385

Cottleville Fire Protection District
1385 Motherhead Rd.
St. Charles, MO. 63304
636–447–6655

PROJECT TITLE
LANDMARK COOL SPRINGS LLC
1024 COOL SPRINGS RD
O'FALLON, MO 63366

Developer / Owner Information
LANDMARK COOL SPRINGS LLC
114 STONE RIDGE MEADOWS
O'FALLON, MO 63366

City of O'Fallon Cover Sheet

P+Z No. - 20-007735
Approval Date: 10-2-2020

Permit No.

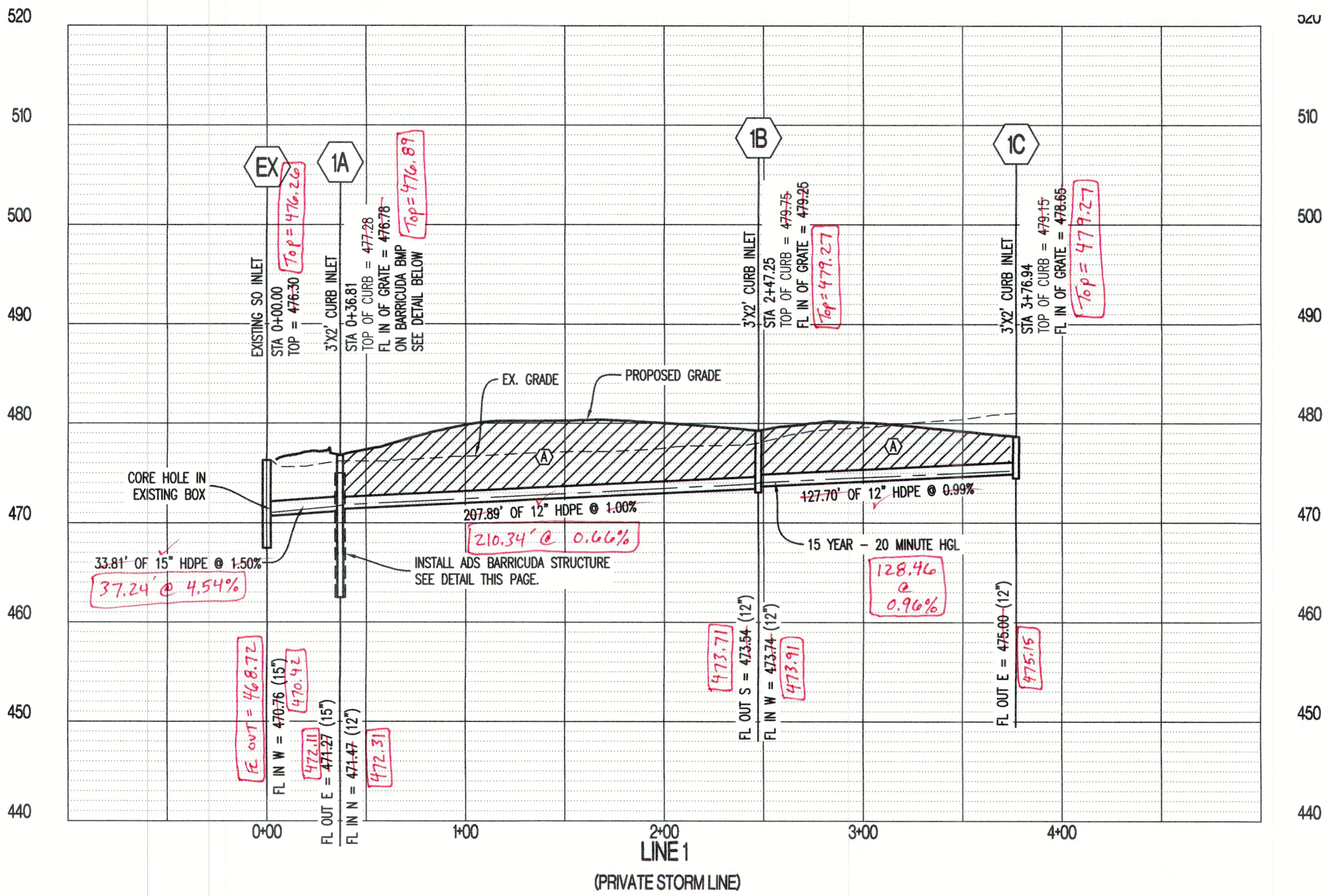
Page No.

COVER SHEET

AS BUILT

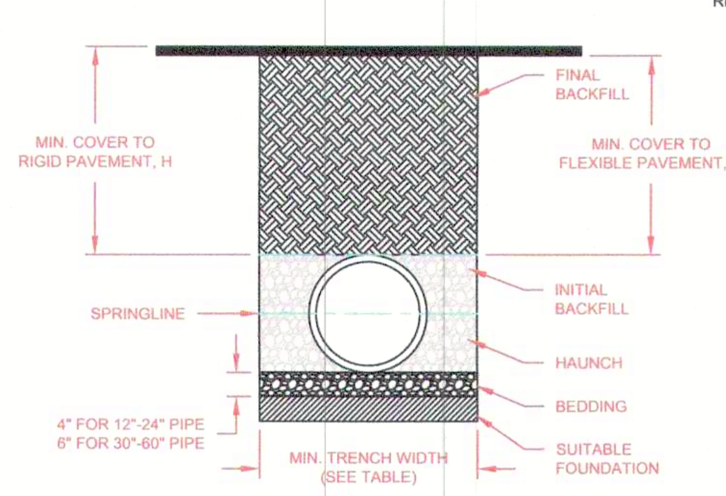
SCALE:
HORIZ 1" = 50'
VERT 1" = 10'

LEGEND OF LABELS:
(A) COMPACTED GRANULAR EMBEDMENT



EX
1A
1B
1C
EXISTING SQ INLET
STA 0+00.00
TOP = 476.30
Top = 476.20
3'X2' CURB INLET
STA 0+36.81
TOP OF CURB = 477.28
FL IN OF GRATE = 476.78
ON BARRACUDA SMP
SEE DETAIL BELOW
Top = 476.89
3'X2' CURB INLET
STA 2+47.25
TOP OF CURB = 479.75
FL IN OF GRATE = 479.25
Top = 479.27
3'X2' CURB INLET
STA 3+76.94
TOP OF CURB = 479.15
FL IN OF GRATE = 478.65
Top = 477.27
EX. GRADE
PROPOSED GRADE
CORE HOLE IN EXISTING BOX
33.81' OF 15" HDPE @ 1.50%
37.24' @ 4.54%
207.89' OF 12" HDPE @ 1.00%
210.34' @ 0.66%
INSTALL ADS BARRICUDA STRUCTURE
SEE DETAIL THIS PAGE.
127.70' OF 12" HDPE @ 0.99%
15 YEAR – 20 MINUTE HGL
128.46 @ 0.96%
FL IN W = 470.76 (15")
FL OUT E = 471.27 (15")
FL IN N = 471.47 (12")
472.11
470.42
472.31
FL OUT S = 473.54 (12")
FL IN W = 473.74 (12")
473.71
473.91
FL OUT E = 475.00 (12")
475.16
0+00
1+00
2+00
3+00
4+00
520
510
500
490
480
470
460
450
440

LINE 1
(PRIVATE STORM LINE)



RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIAM.	MIN. TRENCH WIDTH
4" (100mm)	21" (533mm)
6" (150mm)	23" (584mm)
8" (200mm)	26" (660mm)
10" (250mm)	28" (711mm)
12" (300mm)	30" (762mm)
15" (375mm)	34" (864mm)
18" (450mm)	39" (991mm)
24" (600mm)	48" (1219mm)
30" (750mm)	56" (1422mm)
36" (900mm)	64" (1626mm)
42" (1050mm)	72" (1829mm)
48" (1200mm)	80" (2032mm)
60" (1500mm)	96" (2438mm)

MINIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS**

PIPE DIAM.	SURFACE LIVE LOADING CONDITION	
	H-25	HEAVY CONSTRUCTION (75T AXLE LAOD) *
12" - 48" (300mm - 1200mm)	12" (305mm)	48" (1219mm)
60" (1500mm)	24" (610mm)	60" (1524mm)

* VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER
**SEE BACKFILL REQUIREMENTS IN NOTE 6.

MAXIMUM RECOMMENDED COVER BASED ON VECHICLE LOADING CONDITIONS

PIPE DIAM.	CLASS I		CLASS II		CLASS III
	COMPACTED	DUMPED	95%	90%	95%
4" (100mm)	37 (11.3m)	18 (5.5m)	25 (7.6m)	18 (5.5m)	18 (5.5m)
6" (150mm)	44 (13.4m)	20 (6.1m)	29 (8.8m)	20 (6.1m)	21 (6.4m)
8" (200mm)	32 (9.8m)	15 (4.6m)	22 (6.7m)	15 (4.6m)	16 (4.9m)
10" (250mm)	38 (11.6m)	18 (5.5m)	26 (7.9m)	18 (5.5m)	18 (5.5m)
12" (300mm)	35 (10.7m)	17 (5.2m)	24 (7.3m)	17 (5.2m)	17 (5.2m)
15" (375mm)	38 (11.6m)	17 (5.2m)	25 (7.6m)	17 (5.2m)	18 (5.5m)
18" (450mm)	36 (11.0m)	17 (5.2m)	24 (7.3m)	17 (5.2m)	17 (5.2m)
24" (600mm)	28 (8.5m)	13 (4.0m)	20 (6.1m)	13 (4.0m)	14 (4.3m)
30" (750mm)	28 (8.5m)	13 (4.0m)	20 (6.1m)	13 (4.0m)	14 (4.3m)
36" (900mm)	26 (7.9m)	12 (3.7m)	18 (5.5m)	13 (4.0m)	13 (4.0m)
42" (1050mm)	23 (7.0m)	11 (3.4m)	16 (4.9m)	11 (3.4m)	11 (3.4m)
48" (1200mm)	25 (7.6m)	11 (3.4m)	17 (5.2m)	11 (3.4m)	12 (3.7m)
60" (1500mm)	25 (7.6m)	11 (3.4m)	17 (5.2m)	11 (3.4m)	12 (3.7m)

FILL HEIGHT TABLE GENERATED USING AASHTO SECTION 12, LOAD RESISTANCE FACTOR DESIGN (LRFD) PROCEDURE WITH THE FOLLOWING ASSUMPTIONS:
NO HYDROSTATIC PRESSURE,
UNIT WEIGHT OF SOIL (Ys) = 120 PCF

NOTES:

1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST ADDITION

2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.

3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.

4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-1500mm).

5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING TO THE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.

6. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT. FOR TRAFFIC APPLICATIONS WITH LESS THAN FOUR FEET OF COVER, EMBEDMENT OF THE PIPE SHALL BE USING ONLY A CLASS I OR CLASS II BACKFILL.

REV.	DESCRIPTION	BY	MM/DD/YY	CHK'D
6	INITIAL BACKFILL	JAB	04/02/20	

TRENCH INSTALLATION DETAIL (N-12 PER AASHTO)
DRAWING NUMBER: STD-101

ADVANCED DRAINAGE SYSTEMS, INC.
4640 TRUEMAN BLVD
HILLIARD, OHIO 43026

TJR
12/29/16
NTS
1 OF 1

ADS N-12® PLAIN END PIPE (PER AASHTO) SPECIFICATION

Scope
This specification describes 4- through 60-inch (100 to 1500 mm) ADS N-12 plain end pipe (per AASHTO) for use in gravity-flow land drainage applications.

Pipe Requirements
ADS N-12 plain end pipe (per AASHTO) shall have a smooth interior and annular exterior corrugations.

- 4- through 10-inch (100 to 250 mm) pipe shall meet AASHTO M252, Type S or SP.
- 12- through 60-inch (300 to 1500 mm) pipe shall meet AASHTO M294, Type S or SP, or ASTM F2306.
- Manning's "n" value for use in design shall be 0.012.

Joint Performance
Pipe shall be joined with coupling bands covering at least two full corrugations on each end of the pipe. Standard connections shall meet or exceed the soil-tight requirements of AASHTO M252, AASHTO M294, or ASTM F2306.

Gasketed connections shall incorporate a closed-cell synthetic expanded rubber gasket meeting the requirements of ASTM D1056 Grade 2A2. Gaskets, when applicable, shall be installed by the pipe manufacturer.

Fittings
Fittings shall conform to AASHTO M252, AASHTO M294, or ASTM F2306.

Material Properties
Material for pipe and fitting production shall be high density polyethylene conforming with the minimum requirements of cell classification 424420C for 4- through 10-inch (100 to 250 mm) diameters, and 435400C for 12- through 60-inch (300 to 1500 mm) diameters, as defined and described in the latest version of ASTM D3350, except that carbon black content should not exceed 4%. The 12- through 60-inch (300 to 1500mm) pipe material shall comply with the notched constant ligament-stress (NCLS) test as specified in Sections 9.5 and 5.1 of AASHTO M294 and ASTM F2306 respectively.

Installation
Installation shall be in accordance with ASTM D2321 and ADS recommended installation guidelines, with the exception that minimum cover in trafficked areas for 4- through 48-inch (100 to 1200 mm) diameters shall be one foot. (0.3 m) and for 60-inch (1500 mm) diameter the minimum cover shall be 2 ft. (0.6 m) in single run applications. Backfill for minimum cover situations shall consist of Class 1 (compacted), Class 2 (minimum 90% SPD) or Class 3 (minimum 95%) material. Maximum fill heights depend on embedment material and compaction level; please refer to Technical Note 2.01. Contact your local ADS representative or visit our website at www.ads-pipe.com for a copy of the latest installation guidelines.

Pipe Dimensions

	Nominal Diameter, in (mm)												
Pipe I.D. in (mm)	4 (100)	6 (150)	8 (200)	10 (250)	12 (300)	15 (375)	18 (450)	24 (600)	30 (750)	36 (900)	42 (1050)	48 (1200)	60 (1500)
Pipe O.D.* in (mm)	4.8 (122)	6.9 (175)	9.1 (231)	11.4 (290)	14.5 (368)	18 (457)	22 (559)	28 (711)	36 (914)	42 (1067)	48 (1219)	54 (1372)	67 (1702)

*Pipe O.D. values are provided for reference purposes only, values stated for 12 through 60-inch are ±1 inch. Contact a sales representative for exact values
**All diameters available with or without perforations.

HDPE PIPE BEDDING AND SPECIFICATIONS

STORM AND SANITARY SEWER MEASUREMENTS

THE EXISTING SEWER LENGTHS, SIZES, FLOWLINES, DEPTHS OF STRUCTURES AND SEWERS AND LOCATIONS WITH RESPECT TO EXISTING OR PROPOSED EASEMENTS 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 OF OTHER SOURCES, I DISCLAIM ANY RESPONSIBILITY FOR THAT SPECIFIC INFORMATION.

ALL PUBLIC SEWERS ARE LOCATED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS EXCEPT AS FOLLOWS: ______

~~58.23'~~ [59.80] DENOTES AS-BUILT (TYP.)

METRON
Surveying & Layout Co
313 Wood Street
O'Fallon, MO, 63366
Ph: 314-432-5400 Fx: 636-294-5851

John E. Winkler Jr. PLS-2006016644
Order No. 9981 Date: 7-14-21

STATE OF MISSOURI
JOHN E. WINKLER JR.
NUMBER PLS-2006016644
REGISTERED LAND SURVEYOR
7-14-2021

PROJECT INFORMATION	
ENGINEERED PRODUCT MANAGER:	CRAIG DAHLGREN 314-296-1595 CRAIG DAHLGREN@ADS-PIPE.COM
ADS SALES REP:	BRIAN SNELSON 618-593-6135 BRIAN.SNELSON@ADS-PIPE.COM
PROJECT NO:	BRIAN.SNELSON@ADS-PIPE.COM

ADVANCED DRAINAGE SYSTEMS, INC.

SiteASSIST® for StormTech
FOR STORMTECH INSTRUCTIONS, DOWNLOAD THE INSTALLATION APP

LANDMARK COOL SPRINGS LLC

O'FALLON, MO

BAYSAVER BARRACUDA SPECIFICATIONS

MATERIALS AND DESIGN
CONCRETE STRUCTURES: DESIGNED FOR H-20 TRAFFIC LOADING AND APPLICABLE SOIL LOADS OR AS OTHERWISE DETERMINED BY A LICENSED PROFESSIONAL ENGINEER. THE MATERIALS AND STRUCTURAL DESIGN OF THE DEVICES SHALL BE PER ASTM C857 AND ASTM C858.

48" HP MANHOLE STRUCTURES: MADE FROM AN IMPACT MODIFIED COPOLYMER POLYPROPYLENE MEETING THE MATERIAL REQUIREMENTS OF ASTM F2764. THE ECCENTRIC CONE REDUCER SHALL BE MANUFACTURED FROM POLYETHYLENE MATERIAL MEETING ASTM D3350 CELL CLASS 213320C. GASKETS SHALL BE MADE OF MATERIAL MEETING THE REQUIREMENTS OF ASTM F477.

SEPARATOR INTERNALS SHALL BE SUBSTANTIALLY CONSTRUCTED OF STAINLESS STEEL, POLYETHYLENE, OR OTHER THERMOPLASTIC MATERIAL APPROVED BY THE MANUFACTURER.

PERFORMANCE
THE STORMWATER TREATMENT UNIT SHALL BE AN INLINE UNIT CAPABLE OF CONVEYING 100% OF THE DESIGN PEAK FLOW. IF PEAK FLOW RATES EXCEED MAXIMUM HYDRAULIC RATE, THE UNIT SHALL BE INSTALLED OFFLINE.

THE STORMWATER TREATMENT UNIT INTERNALS SHALL CONSIST OF(1)SEPARATOR CONE ASSEMBLY, AND (1)SUMP ASSEMBLY WHICH INCLUDES(4) LEGS WITH "TEETH".

THE BARRACUDA UNIT SHALL BE DESIGNED TO REMOVE AT LEAST 80% OF THE SUSPENDED SOLIDS ON AN ANNUAL AGGREGATE REMOVAL BASIS. SAID REMOVAL SHALL BE BASED ON FULL-SCALE THIRD PARTY TESTING USING OK-110 MEDIA GRADATION OR EQUIVALENT AND 300 mg/L INFLUENT CONCENTRATION. SAID FULL SCALE TESTING SHALL HAVE INCLUDED SEDIMENT CAPTURE BASED ON ACTUAL TOTAL MASS COLLECTED BY THE STORMWATER TREATMENT UNIT.

-OR -

THE BARRACUDA UNIT SHALL BE DESIGNED TO REMOVE AT LEAST 50% OF TSS USING A MEDIA MIX WITH d_{50}=75 MICRON AND 200 MG/L INFLUENT CONCENTRATION.

-OR -

THE BARRACUDA UNIT SHALL BE DESIGNED TO REMOVE AT LEAST 50% OF TSS PER CURRENT NJDEP/NJCAT HDS PROTOCOL .

MANUFACTURER
EACH STORMWATER TREATMENT SYSTEM SHALL BE A BARRACUDA SYSTEM AS MANUFACTURED BY BAYSAVER, LLC, 1030 DEER HOLLOW DR., MOUNT AIRY, MD 21771, PHONE (301) 829-6470, FAX (301) 829-3747, TOLL FREE 1-800-229-7283 (1-800-BAYSAVER), EMAIL INFO@BAYSAVER.COM

BARRACUDA MAINTENANCE

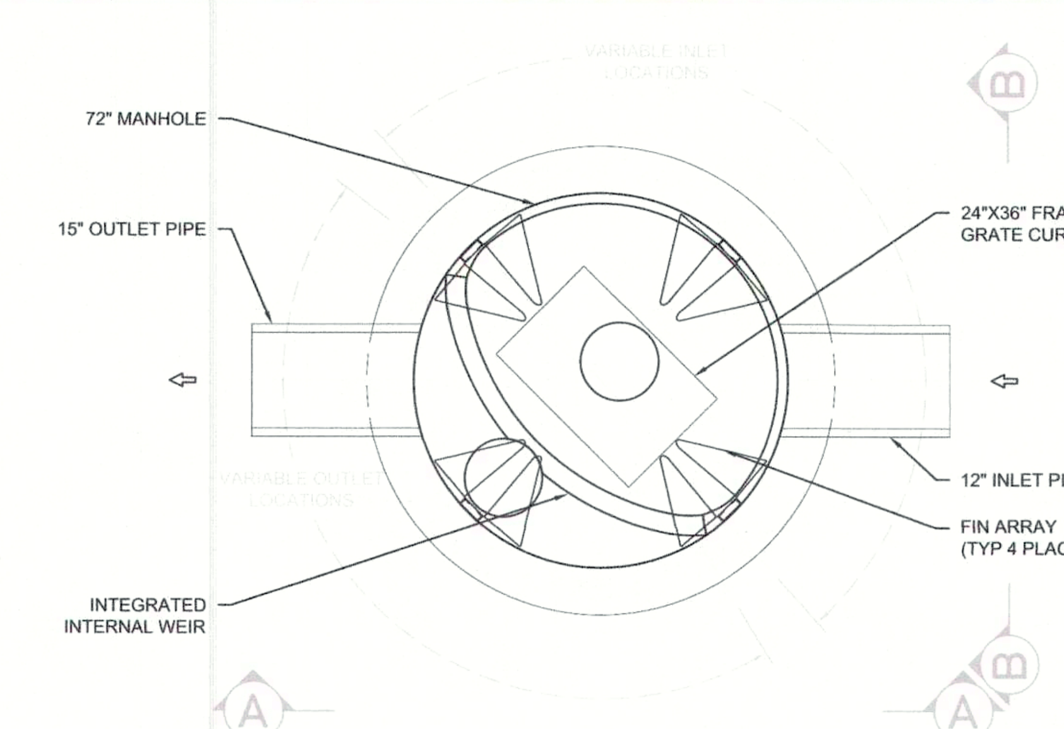
BARRACUDA SYSTEMS MUST BE INSPECTED AND MAINTAINED PERIODICALLY. INSPECTION IS MADE BY CHECKING THE DEPTH OF SEDIMENT IN EACH MANHOLE WITH A GRADE STICK OR SIMILAR DEVICE. MAINTENANCE IS REQUIRED WHEN THE SEDIMENT DEPTH IN EXCEEDS 20 INCHES. MINIMUM INSPECTION IS RECOMMENDED TWICE A YEAR TO MAINTAIN OPERATION AND FUNCTION OF THE UNIT.

MAINTENANCE INSTRUCTIONS

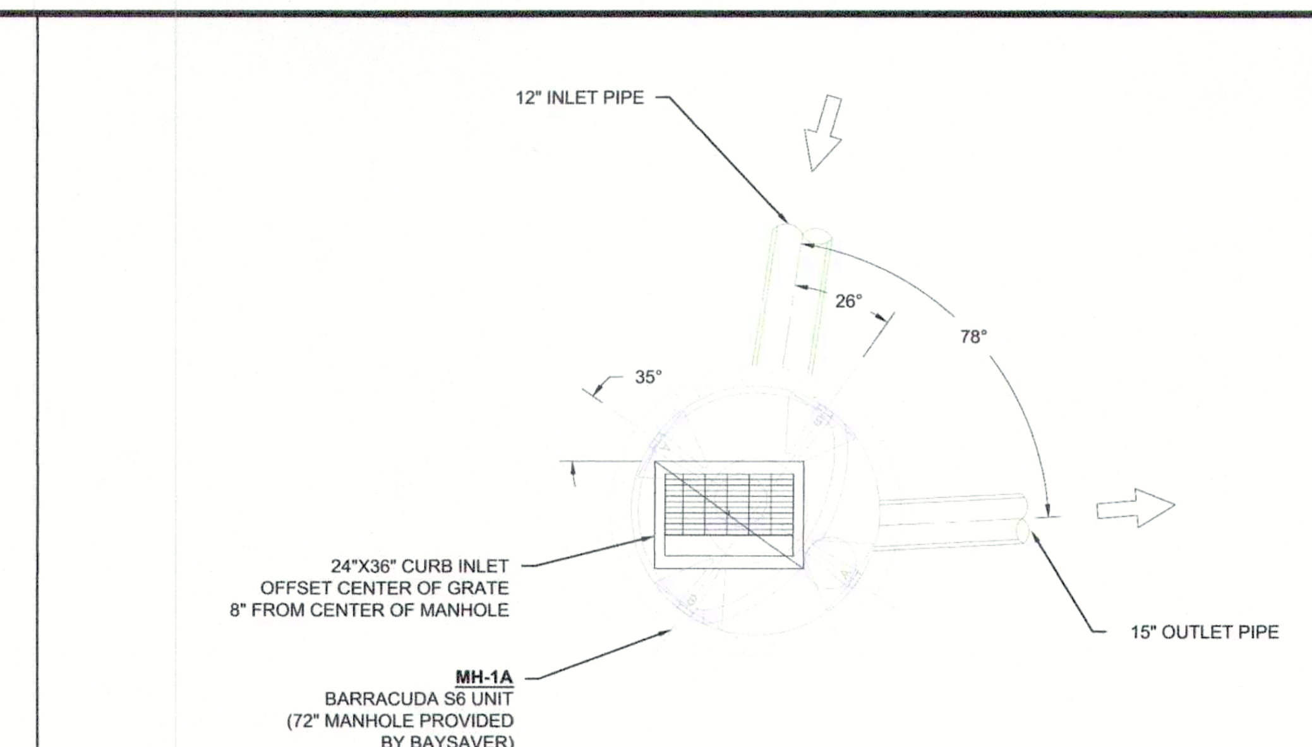
1. REMOVE THE MANHOLE COVER TO PROVIDE ACCESS TO THE POLLUTANT STORAGE. POLLUTANTS ARE STORED IN THE SUMP, BELOW THE BOWL ASSEMBLY VISIBLE FROM THE SURFACE. YOU'LL ACCESS THIS AREA THROUGH THE 10" DIAMETER ACCESS CYLINDER.
2. USE A VACUUM TRUCK OR OTHER SIMILAR EQUIPMENT TO REMOVE ALL WATER, DEBRIS, OILS AND SEDIMENT.
3. USE A HIGH PRESSURE HOSE TO CLEAN THE MANHOLE OF ALL THE REMAINING SEDIMENT AND DEBRIS. THEN, USE THE VACUUM TRUCK TO REMOVE THE WATER.
4. FILL THE CLEANED MANHOLE WITH WATER UNTIL THE LEVEL REACHES THE INVERT OF THE OUTLET PIPE.
5. REPLACE THE MANHOLE COVER.
6. DISPOSE OF THE POLLUTED WATER, OILS, SEDIMENT AND TRASH AT AN APPROVED FACILITY.
   - LOCAL REGULATIONS PROHIBIT THE DISCHARGE OF SOLID MATERIAL INTO THE SANITARY SYSTEM. CHECK WITH THE LOCAL SEWER AUTHORITY FOR AUTHORITY TO DISCHARGE THE LIQUID.
   - SOME LOCALITIES TREAT THE POLLUTANTS AS LEACHATE. CHECK WITH LOCAL REGULATORS ABOUT DISPOSAL REQUIREMENTS.
   - ADDITIONAL LOCAL REGULATIONS MAY APPLY TO THE MAINTENANCE PROCEDURE.

BARRACUDA INSTALLATION NOTES

INSTALLATION OF THE STORMWATER TREATMENT UNIT(S) SHALL BE PERFORMED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. SUCH INSTRUCTIONS CAN BE OBTAINED BY CALLING ADVANCED DRAINAGE SYSTEMS AT (800) 821-6710 OR BY LOGGING ON TO WWW.ADS-PIPE.COM OR WWW.BAYSAVER.COM.

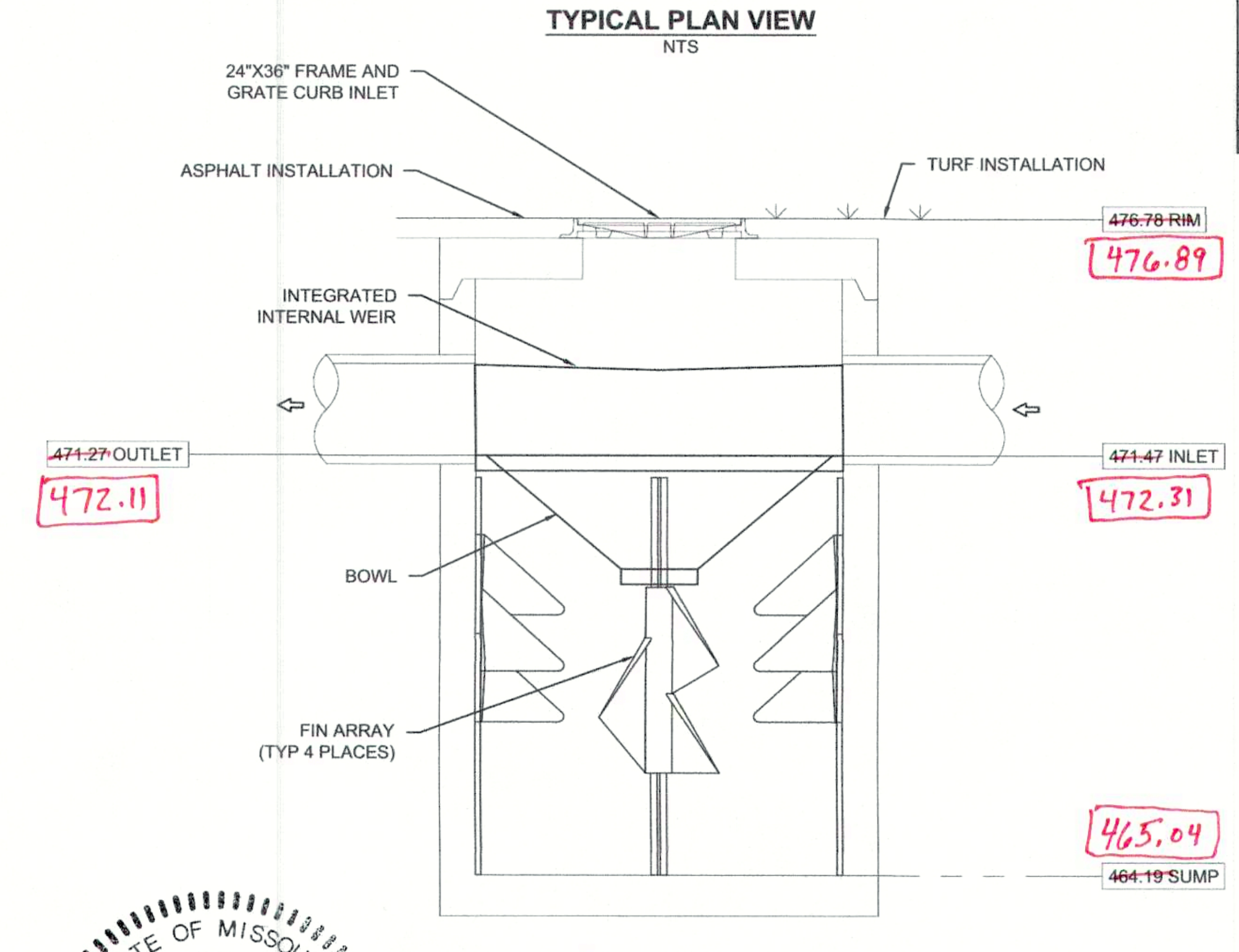


TYPICAL PLAN VIEW
NTS

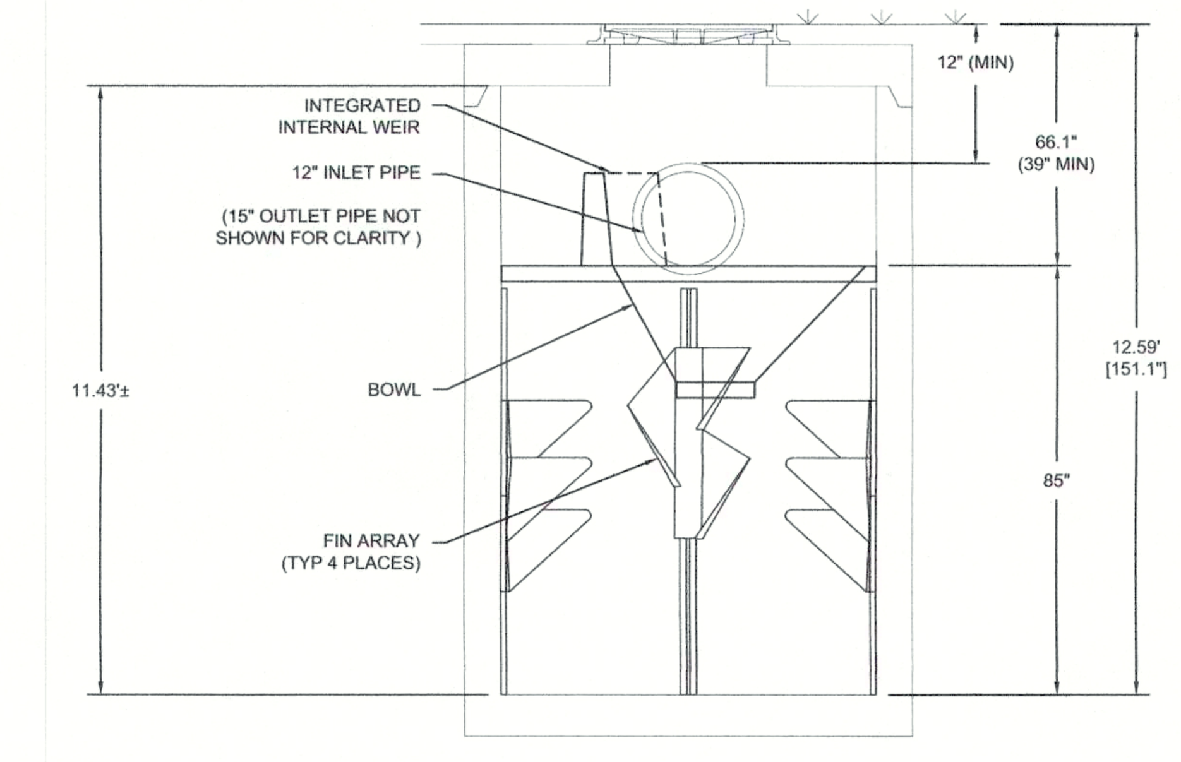


BARRACUDA S6	
UNIT ID	MH-1A
PEAK FLOW RATE (CFS)	3.77
TREATMENT FLOW RATE (CFS)	2.43

SITE SPECIFIC PLAN VIEW
NTS



SECTION VIEW A-A
NTS



SECTION VIEW B-B
NTS

LANDMARK COOL SPRINGS LLC
O'FALLON, MO
DATE: 1-15-21
DRAWN: MDG
PROJECT #:
BRIAN.SNELSON@ADS-PIPE.COM

barracuda
4640 TRUEMAN BLVD
HILLIARD, OH 43026

SHEET 2 OF 3

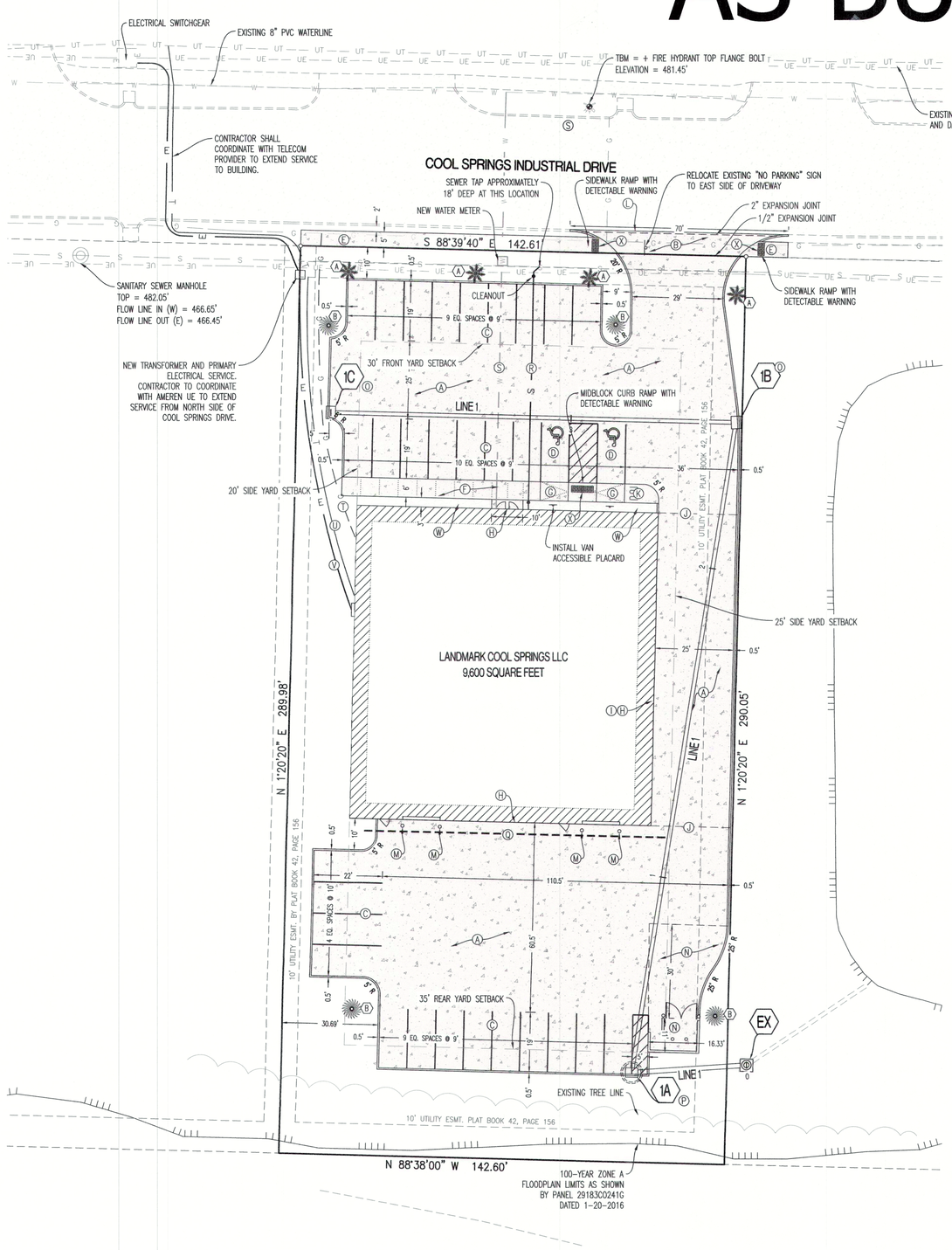
PROJECT TITLE:
LANDMARK COOL SPRINGS LLC
1024 COOL SPRINGS RD
O'FALLON, MO 63366

Developer / Owner Information
LANDMARK COOL SPRINGS LLC
114 STONE RIDGE MEADOWS
O'FALLON, MO 63366

City of O'Fallon Cover Sheet

P+Z No. - 20-007735
Approval Date: 10-2-2020
Permit No.
Page No.
CE 5 - STORM PROFILES & DETAILS

AS BUILT



SCALE: 1"=20'

0 10 20 40

GENERAL NOTES:

1) LIGHTING VALUES WILL BE REVIEWED ON-SITE PRIOR TO THE ISSUANCE OF A FINAL OCCUPANCY PERMIT. ALL VALUES SHALL COMPLY WITH THE CITY OF O'FALLON LIGHTING ORDINANCE.

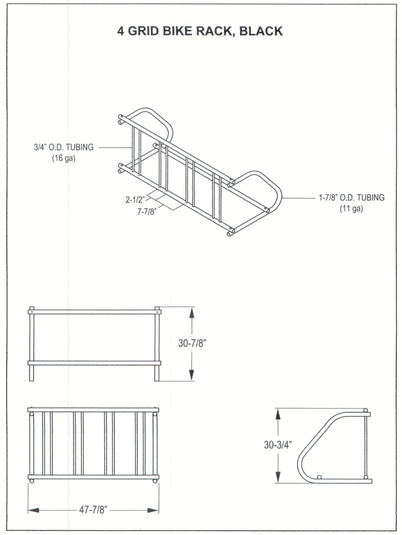
2) THE ESTIMATED SANITARY FLOW FROM THIS BUILDING IS ESTIMATED AT 20 EMPLOYEES, USING A MAXIMUM OF 25 GALLONS PER DAY, FOR AN AVERAGE DAILY FLOW OF 500 GALLONS PER DAY.

3) ALL STORM SEWER INLETS ARE REQUIRED TO HAVE SPECIAL "NO DUMPING" MARKINGS ON THE INLET FRAMES. THE MARKER MAY EITHER BE ACP INTERNATIONAL'S "CRYSTAL CAP MODEL SD-W-CC" WHICH READS "NO DUMPING DRAINS TO WATERWAYS." THIS IS 3-7/8" DIAMETER AND EPOXIES TO TOP OF INLET. SEE WWW.ACPINTERNATIONAL.COM. ALTERNATIVELY, THE CONTRACTOR MAY USE DAS MANUFACTURINGS "STANDARD STYLE MODED #SDS" WHICH READS "NO DUMPING DRAINS TO STREAM." THIS IS 4" DIAMETER AND EPOXIES TO THE TOP OF INLET. SEE WWW.DASMANUFACTURING.COM.

4) ALL UTILITIES SHOWN TO CROSS COOL SPRINGS DRIVE SHALL BE BORED. NO OPEN CUTTING OR LANE CLOSURES OF COOL SPRINGS DRIVE SHALL BE ALLOWED.

LEGEND OF LABELS

(A)	CONSTRUCT NORMAL DUTY CONCRETE W/ INTEGRAL CURB OR SEPERATE CURB AND GUTTER AS SHOWN. REFER TO PAVEMENT CROSS SECTION ON CE 7.
(B)	CONSTRUCT COMMERCIAL DRIVE APPROACH. REFER TO PAVEMENT CROSS SECTION ON CE 7. SAW CUT EXISTING CURB AS NEEDED. PROVIDE 2" EXPANSION JOINT BETWEEN STREET AND DRIVE APPROACH AND ½" EXPANSION JOINT BETWEEN SIDEWALK LOCATION AND PRIVATE DRIVE AS SHOWN.
(C)	PAINT 4" PARKING STALL STRIPES AS SHOWN, COLOR YELLOW. TYPICAL ALL STALLS EXCEPT ADA ACCESSIBLE STALLS. REFER TO PLAN FOR WIDTH AND DEPTH OF STALLS.
(D)	CONSTRUCT ADA ACCESSIBLE PARKING AREA WITH SIGNAGE AND ADA RAMPS. PAINT 4" STRIPE AND ACCESSIBLE SYMBOL, COLOR BLUE. PAINT HATCH AREA AS SHOWN, COLOR BLUE. SLOPE OF THE PAVEMENT AT ALL ACCESSIBLE STALLS SHALL NOT EXCEED 1:50. REFER TO DETAILS ON CE 7.
(E)	CONSTRUCT PUBLIC SIDEWALK. REFER TO DETAIL ON CE 7.
(F)	CONSTRUCT 6' WIDE PCC WALK AT BACK OF CURB AS SHOWN (MAXIMUM LONGITUDINAL SLOPE 1:20. MAXIMUM CROSS SLOPE AT 1:50). REFER TO CROSS-SECTIONS ON CE 7.
(G)	CONSTRUCT ADA ACCESSIBLE SIDEWALK RAMP AT BACK OF CURB. REFER TO DETAIL ON CE 7.
(H)	INSTALL 1/2" EXPANSION JOINT WITH REMOVABLE CAULK STRIP ADJACENT TO BUILDING.
(I)	INSTALL VERTICAL CURB ADJACENT TO THE EAST SIDE OF THE BUILDING.
(J)	INSTALL 3/4" EXPANSION JOINT IN PAVING WHERE SHOWN. REFER TO DETAIL ON CE 7.
(K)	BELSON VERTICAL BICYCLE RACK (OR APPROVED EQUAL). MODEL #CBBR-4SG FOR (4) BICYCLE SPACES. SEE DETAIL BELOW.
(L)	PERFORM HORIZONTAL SAWING OF CURB AS REQUIRED FOR NEW DRIVEWAY APPROACH. SAWCUTTING SHALL BE THE NEAREST EXISTING PANEL JOINT BEYOND THE MATCH POINT IN ALL DIRECTIONS.
(M)	INSTALL 6" BOLLARDS AS SHOWN. REFER TO DETAIL ON CE 7.
(N)	DUMPSTER PAD. REFER TO HEAVY DUTY PAVEMENT CROSS SECTION ON CE 7.
(O)	3'X2' CURB INLET. REFER TO PROFILE ON CE 5.
(P)	BARRICUDA 6' DIAMETER STORMWATER BMP. SEE DETAILS ON CE 5.
(Q)	6" SDR 35 PVC DOWNSPOUT COLLECOTR AT 1% MINIMUM SLOPE. PROVIDE INSERTA-TEE TAP INTO LINE 1.
(R)	INSTALL 6" SCHEDULE 40 PVC SEWER LATERAL AT 1% MINIMUM SLOPE PER BUILDING. PLACE CLEANOUTS WHERE SHOWN. PROVIDE 36" MINIMUM DEPTH. TAP EXISTING MAIN. NOTE EXISTING MAIN IS 18' DEEP AT TAP LOCATION. LATERAL BENEATH PAVEMENT SHALL BE BACKFILLED WITH 8" LIFTS OF COMPACTED AGGREGATE BASE.
(S)	INSTALL NEW 2" SDR 26 OR OR POLY WATER SERVICE. COORDINATE WITH WATER UTILITY TO TAP EXISTING MAIN AND BORE ACROSS COOL SPRINGS DRIVE AND SET METER WHERE SHOWN. INSTALL 2" LINE FROM METER TO BUILDING WATER SERVICE ENTRY LOCATION.
(T)	INSTALL NEW GAS SERVICE. COORDINATE WITH GAS PROVIDER.
(U)	INSTALL NEW ELECTRIC SERVICE. COORDINATE WITH ELECTRIC UTILITY PROVIDER.
(V)	INSTALL NEW DATA SERVICE. COORDINATE WITH DATA SERVICE PROVIDER.
(W)	INSTALL DECORATIVE LANDSCAPE ROCK BETWEEN SIDEWALK AND BUILDING.
(X)	INSTALL DETECTABLE WARNING IN SIDEWALK RAMP WHERE SHOWN. SEE DETAIL ON CE7.



BIKE RACK DETAIL

CALCULATIONS:

LAND AREA:

TOTAL LAND AREA:	0.949 AC

PARKING SUMMARY:

SPACES REQUIRED:	
OFFICE - 4,800 SQFT (1 SPACE PER 300 SQ FT):	16 SPACES
WAREHOUSE - 4,800 SQFT (1 SPACE PER EMPLOYEE + 2 GUEST SPACES):	4 SPACES
ADA ACCESSIBLE SPACES REQUIRED:	2 SPACES
SPACES PROVIDED:	31 SPACES
ADA ACCESSIBLE SPACES PROVIDED:	2 SPACES
BICYCLE SPACES REQUIRED:	1
BICYCLE SPACES PROVIDED:	4

LOT COVERAGES:	ACTUAL	
NET LAND AREA:	41,335 SQ.FT.	100%
TOTAL IMPERVIOUS SURFACE AREA:	29,900 SQ.FT.	72%
TOTAL OPEN SPACE:	11,435 SQ.FT.	28%

	LANDSCAPE COMPLIANCE:	
(A)	**STREET FRONTAGE LANDSCAPING:**	
	1 TREE PER 40' STREET FRONTAGE IN INDUSTRIAL ZONING: (143' STREET FRONTAGE)	4 TREES
(B)	**OPEN AREA LANDSCAPING**	
	1 TREE PER 4,000 SQUARE FEET OF OPEN SPACE (11,435)	3 TREES
(B)	**PARKING AREA LANDSCAPING:**	
	IF PARKING AREA CONTAINS MORE THAN 65' WIDE, INTERIOR LANDSCAPING MUST BE GREATER THAN 6% OF PARKING AREA WHERE AREA EQUALS NUMBER OF STALLS BY 270 SQUARE FEET REAR PARKING LOT GREATER THAN 65' WIDE AND CONTAINS 13 PARKING SPACES 6%*270*13 = 211 SQUARE FEET OF LANDSCAPING. PROVIDE A MEDIUM/LARGE TREE IN REAR YARD.	1 TREE

LOCATION OF IMPROVEMENTS AS-BUILT

METRON
Surveying & Layout Co
313 Wood Street
O'Fallon, MO, 63366
Ph: 314-432-5400 Fx: 636-294-5851

John E. Winkler Jr. PLS-2006010244
Order No. 9981 Date: 7-14-21

STATE OF MISSOURI
JOHN E. WINKLER JR.
NUMBER PLS-2006010244
REGISTERED LAND SURVEYOR

7-14-2021

PROJECT TITLE:
LANDMARK COOL SPRINGS LLC
1024 COOL SPRINGS RD
O'FALLON, MO 63366

Developer / Owner Information
LANDMARK COOL SPRINGS LLC
114 STONE RIDGE MEADOWS
O'FALLON, MO 63366

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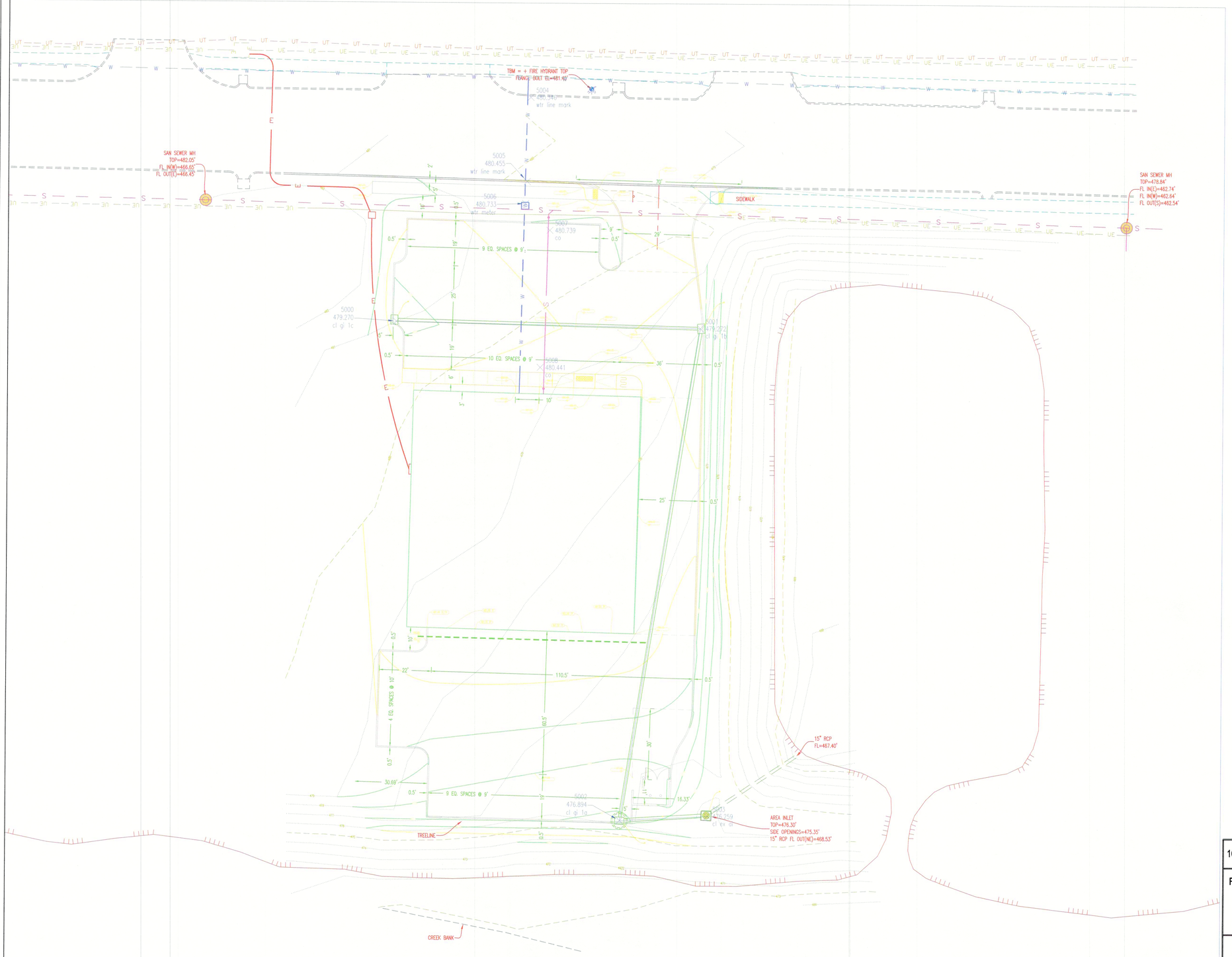
CE 2 - SITE PLAN

1024 COOL SPRINGS RD IMPROVEMENT AS BUILT



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Scale 1" = 20 ft

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313 Wood Street
O'Fallon, MO, 63366
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John E. Winkler Jr. PLS-2006016644

Order No. 9981 Date: 7-14-2021

STATE OF MISSOURI
JOHN E. WINKLER JR.
NUMBER PLS-2006016644
REGISTERED LAND SURVEYOR

7-14-2021

1024 COOL SPRINGS RD AS BUILT

FOR: CITY OF O'FALLON

REV.	DATE	DESCRIPTION	BY	CHK'D

METRON
Surveying & Layout Co.
314-432-5400 FAX: 636-294-5851

ORDER NO.	9981
DATE	7-14-2021
DRAWN	J.A.W.
CHECKED	J.E.W.