# PRIVATE MASS GRADING & STORM SEWER PLANS FOR LOTS 11 & 12 STREETS OF WEST PRYOR

UTILITIES
Electric Service
KCP&L
Nathan Michael
913-347-4310
Nathan.michael@kcpl.com

Gas Service
Spire
Katie Darnell
816-969-2247
Katie.darnell@spireenergy.com

Water/Sanitary Sewer
Water Utilities Department
1200 SE Hamblen Road
Lee's Summit, Mo 64081
Jeff Thorn
816-969-1900
jeff.thorn@cityofls.net

Communication Service AT&T Carrie Cilke 816-703-4386 cc3527@att.com

Time Warner Cable
Steve Baxter
913-643-1928
steve.baxter@charter.com

Comcast Ryan Alkire 816-795-2218 ryan.alkire@cable.comcast.com

Google Fiber
Becky Davis
913-725-8745
rebeccadavis@google.com



### **UTILITY STATEMENT:**

THE UNDERGROUND UTILITIES SHOWN HEREON ARE FROM FIELD SURVEY INFORMATION OF ONE-CALL LOCATED UTILITIES, FIELD SURVEY INFORMATION OF ABOVE GROUND OBSERVABLE EVIDENCE, AND/OR THE SCALING AND PLOTTING OF EXISTING UTILITY MAPS AND DRAWINGS AVAILABLE TO THE SURVEYOR AT THE TIME OF SURVEY. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. FURTHERMORE, THE SURVEYOR DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES BY EXCAVATION UNLESS OTHERWISE NOTED ON THIS SURVEY.

SAFETY NOTICE TO CONTRACTOR

IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICE, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

### WARRANTY/DISCLAIMER

THE DESIGNS REPRESENTED IN THESE PLANS ARE IN ACCORDANCE WITH ESTABLISHED PRACTICES OF CIVIL ENGINEERING FOR THE DESIGN FUNCTIONS AND USES INTENEDED BY THE OWNER AT THIS TIME. HOWEVER, NEITHER SM ENGINEERING NOR ITS PERSONNEL CAN OR DO WARRANTY THESE DESIGNS OR PLANS AS CONSTRUCTED, EXCEPT IN THE SPECIFIC CASES WHERE SM ENGINEERING PERSONNEL INSPECT AND CONTROL THE PHYSICAL CONSTRUCTION ON A CONTEMPORARY BASIS AT THE SITE.

### CAUTION- NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICTS PRIOR TO ANY CONSTRUCTION.



### LOCATION MAP

LEGAL DESCRIPTION:
LOT 10, STREETS OF WEST PRYOR, LEE'S SUMMIT, JACKSON COUNTY MISSOURI
LOT AREA 3.25 ACRES

ALL EXISTING TOPOGRAPHIC DATA AND INFRASTRUCTURE IMPROVEMENTS SHOWN BASED ON INFORMATION BY KAW VALLEY ENGINEERING

### **BENCHMARKS:**

#1 CHISELED "SQUARE" ON TOP OF CURB POINT OF INTERSECTION OF WEST PARK PARKING LOT AT EAST DRIVE ENTRANCE 4.975.05

#2 CHISELED "SQUARE" ON NORTHWEST CORNER AREA INLET, 25' EAST OF CURB LINE AND ON-LINE WITH SOUTH CURB OF LOWENSTEIN DRIVE AT 90° BEND IN ROAD ELEVATION 970.98

### NOTES

- 1. THERE ARE NO GAS / OIL WELLS PER MDNR DATABASE OF OIL AND GAS PERMITS
- 2. SITE IS LOCATED WITHIN FEMA ZONE X, AREAS OF MINIMAL FLOODING PER FEMA 29095C0416G DATED 1-20-17
- 3. THE CONTRACTOR SHALL CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTION TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH AN INSPECTOR PRIOR TO ANY LAND DISTURBANCE WORK AT 816-969-1200

## INDEX OF SHEETS

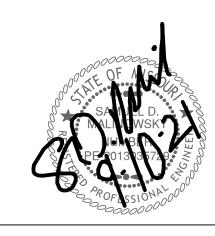
- C-1 COVER SHEET C-2 SITE PLAN
- C-3 GRADING PLAN
- C-4 EROSION CONTROL PLAN
- C-5 EROSION CONTROL DETAILS
- C-6 STORM LINE A PLAN AND PROFILE C-7 STORM LINE B PLAN AND PROFILE
- C-8 DETAILS

# DEVELOPER

STREETS OF WEST PRYOR, LLC DAVID N. OLSON 7200 W 133rd ST, SUITE 150 CELL: OVERLAND PARK, KS 66213 314-413-3598

### **ENGINEER**

SM ENGINEERING SAM MALINOWSKY 919 W STEWART RD COLUMBIA, MO. 65203 785-641-9747



SAMUEL D. MALINOWSKY PROFESSIONAL ENGINEEER

5507 High Meadow Circle Manhattan Kansas, 66503 smcivilengr@gmail.com 785.341.9747

**SM** Engineering

Drawings and/or Specifications are origina proprietary work and property of the Engineer and intended specifically for this project. Use of items contained herein without consent of the Engineeris prohibited. Drawings illustrate best information available to the Engineer. Fiel verification of actual elements, conditions and dimensions is required.

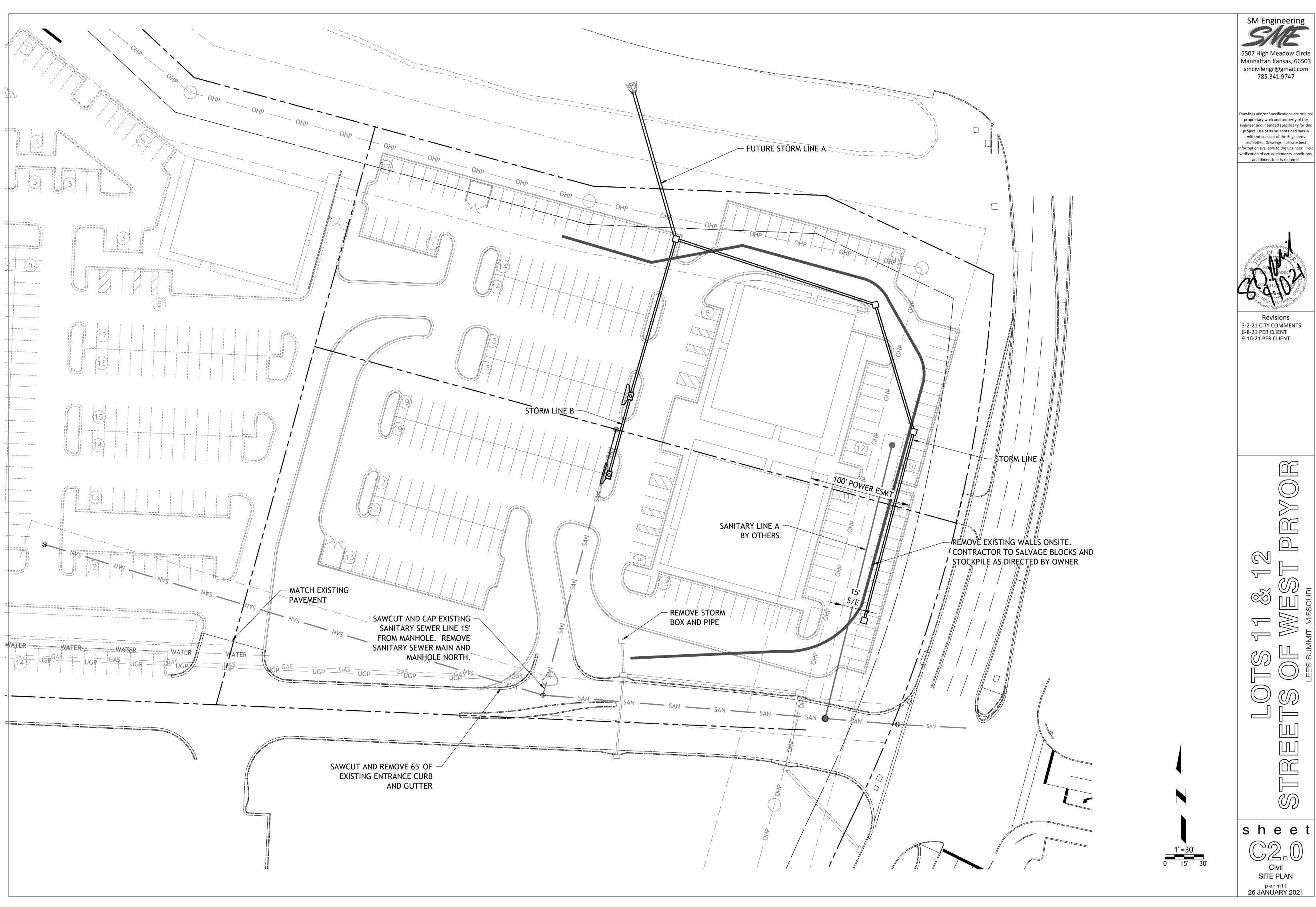
Revisions
3-2-21 CITY COMMENTS
6-8-21 PER CLIENT
9-10-21 PER CLIENT

015 11 & 12 S 0F WEST PRV0[ Summi, missouri

s h e e

COVER SHEET

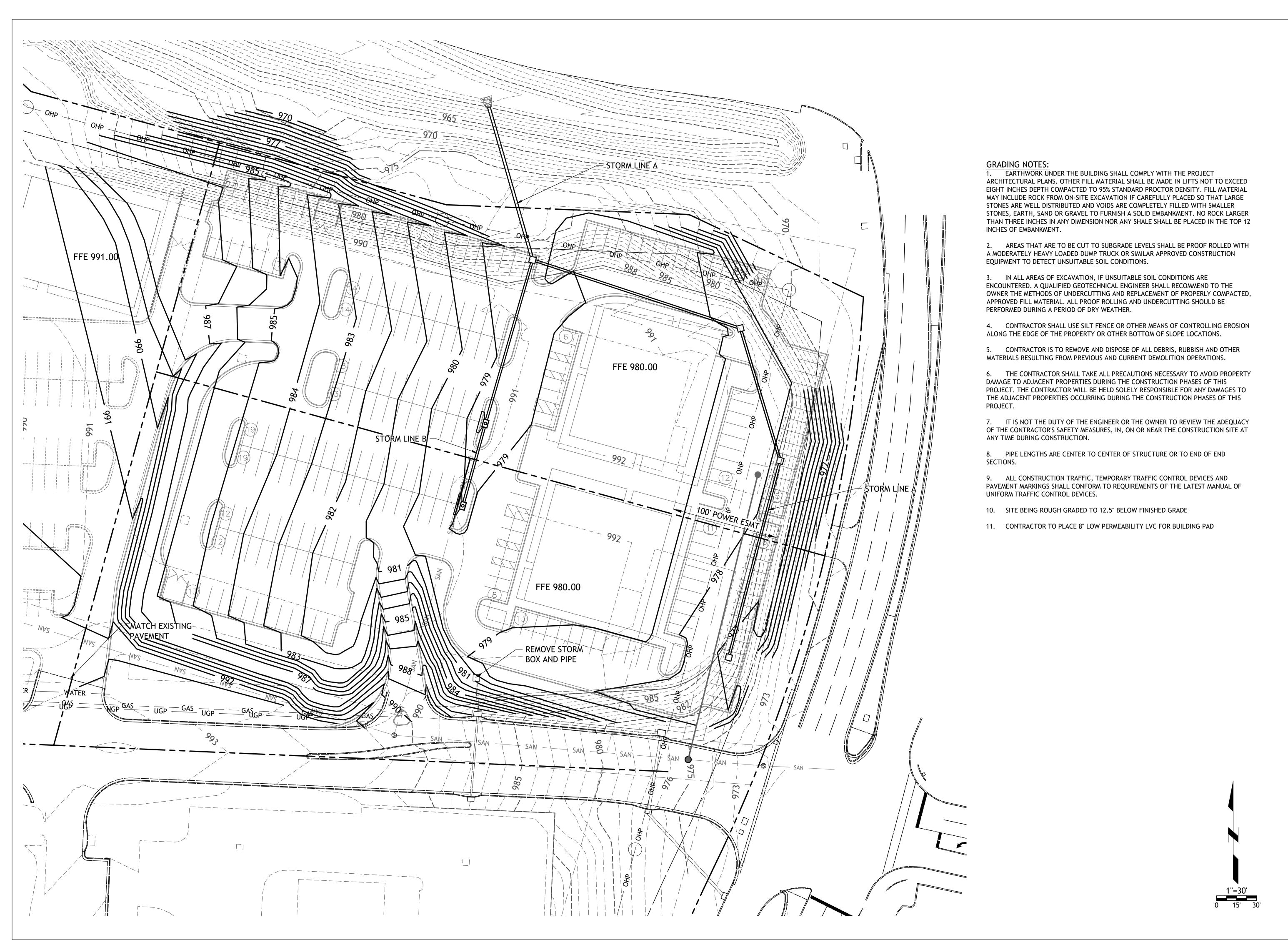
permit
26 JANUARY 2021



SM Engineering

Manhattan Kansas, 66503 smcivilengr@gmail.com 785.341.9747

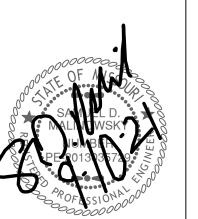




SM Engineering

5507 High Meadow Circle Manhattan Kansas, 66503 smcivilengr@gmail.com 785.341.9747

Drawings and/or Specifications are original proprietary work and property of the Engineer and intended specifically for this project. Use of items contained herein without consent of the Engineeris prohibited. Drawings illustrate best information available to the Engineer. Field verification of actual elements, conditions, and dimensions is required.



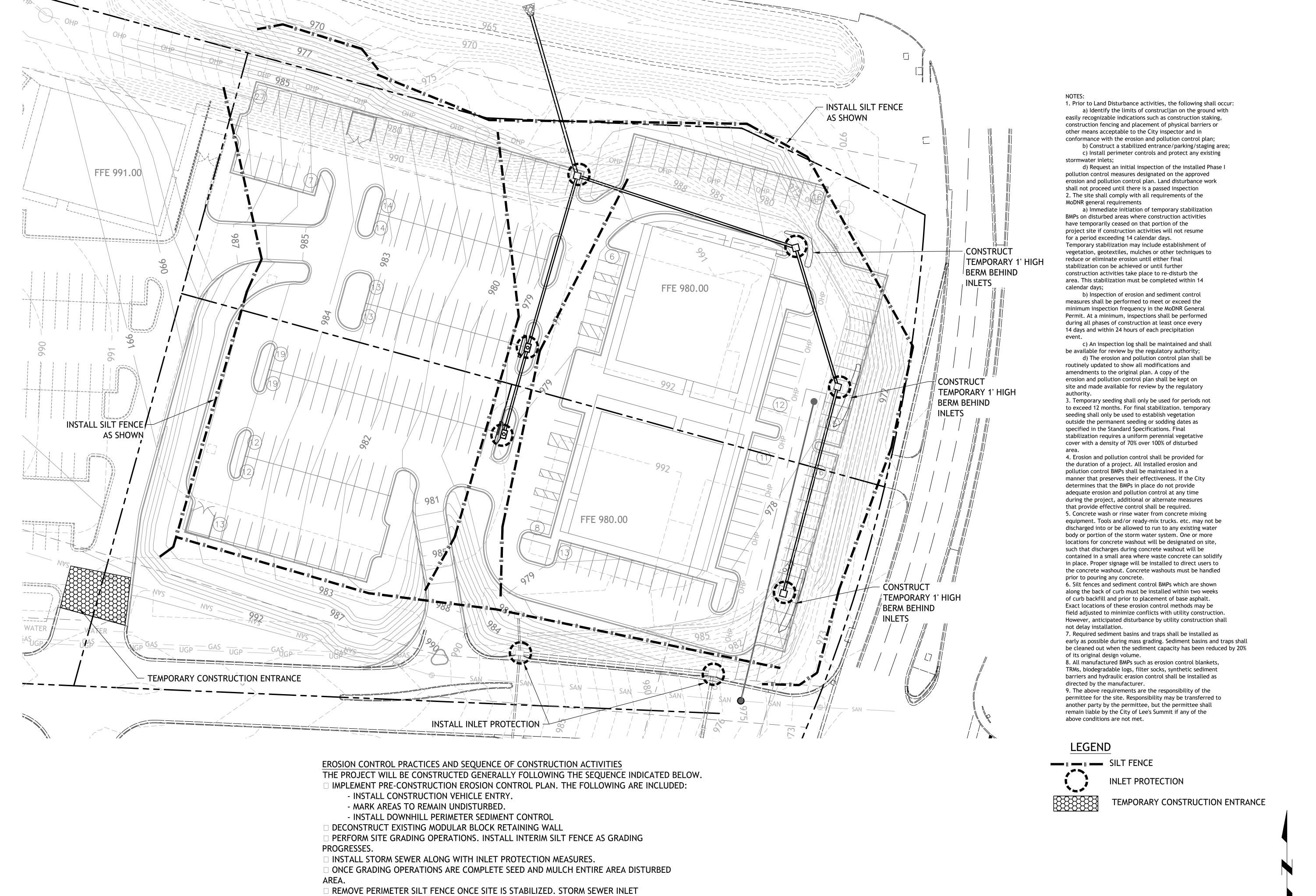
Revisions
3-2-21 CITY COMMENTS
6-8-21 PER CLIENT

6-8-21 PER CLIENT
9-10-21 PER CLIENT

LOTS 11 & 12 FTS OF WEST PRVOF

shee C3.0

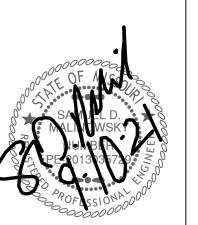
Civil GRADING PLAN permit 26 JANUARY 2021



PROTECTION MEASURES TO REMAIN IN PLACE UNTIL FINAL SITE CONSTRUCTION PHASE.

919 W. Stewart Road Columbia, Missouri 65203 smcivilengr@gmail.com 785.341.9747

Drawings and/or Specifications are original proprietary work and property of the Engineer and intended specifically for this project. Use of items contained herein without consent of the Engineeris prohibited. Drawings illustrate best information available to the Engineer. Field verification of actual elements, conditions, and dimensions is required.



Revisions 3-2-21 CITY COMMENTS 6-8-21 PER CLIENT

3-2-21 CITY COMMENTS 6-8-21 PER CLIENT 9-10-21 PER CLIENT

> 911 & 12 F WEST PRVOR

h e

s h e e

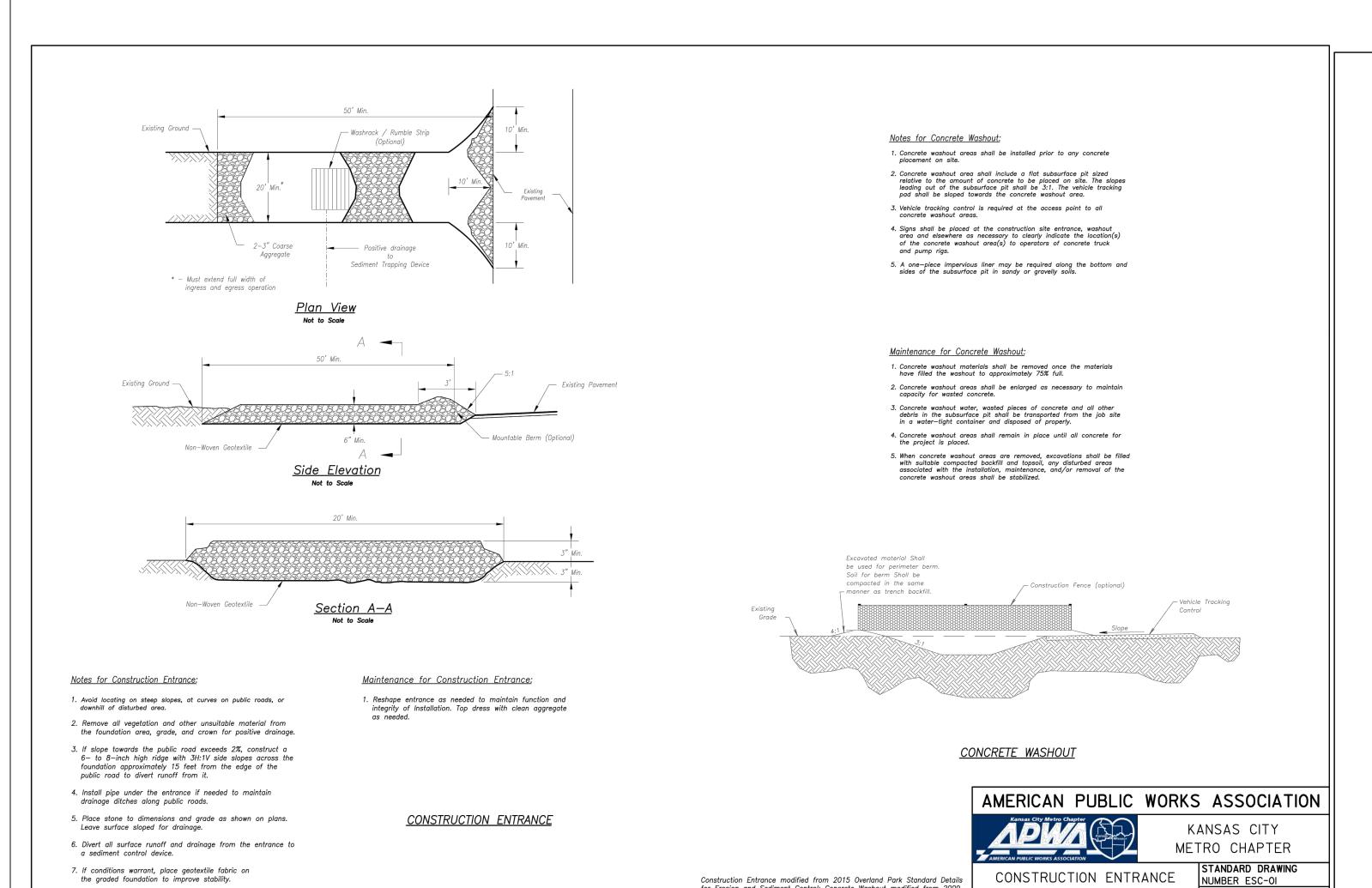
Civil

EBOSION CONTRO

1"=30'

0 15' 30

Civil
EROSION CONTROL
PLAN
permit
26 JANUARY 2021

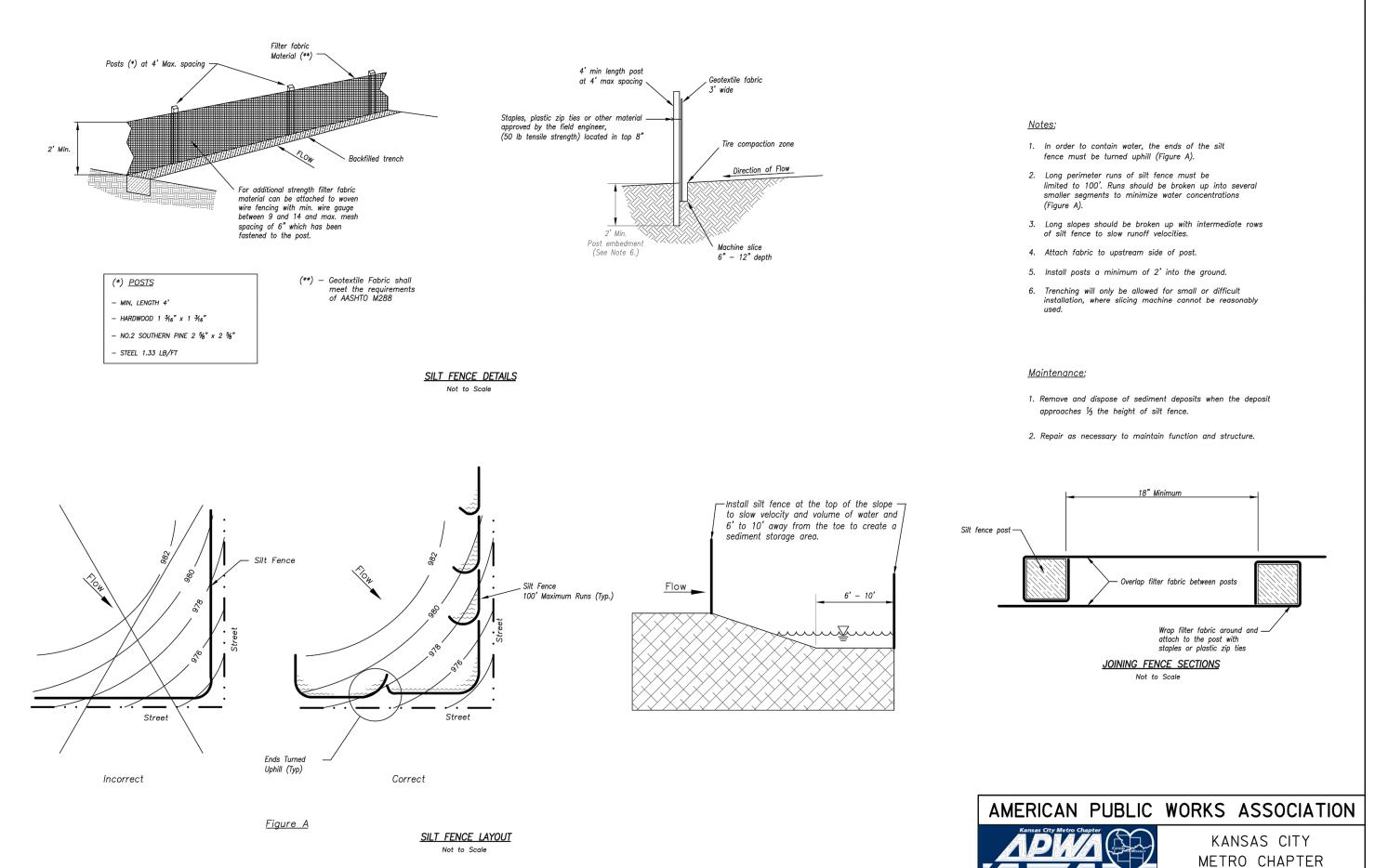


for Erosion and Sediment Control; Concrete Washout modified from 2009 City of Great Bend Standard Drawings.

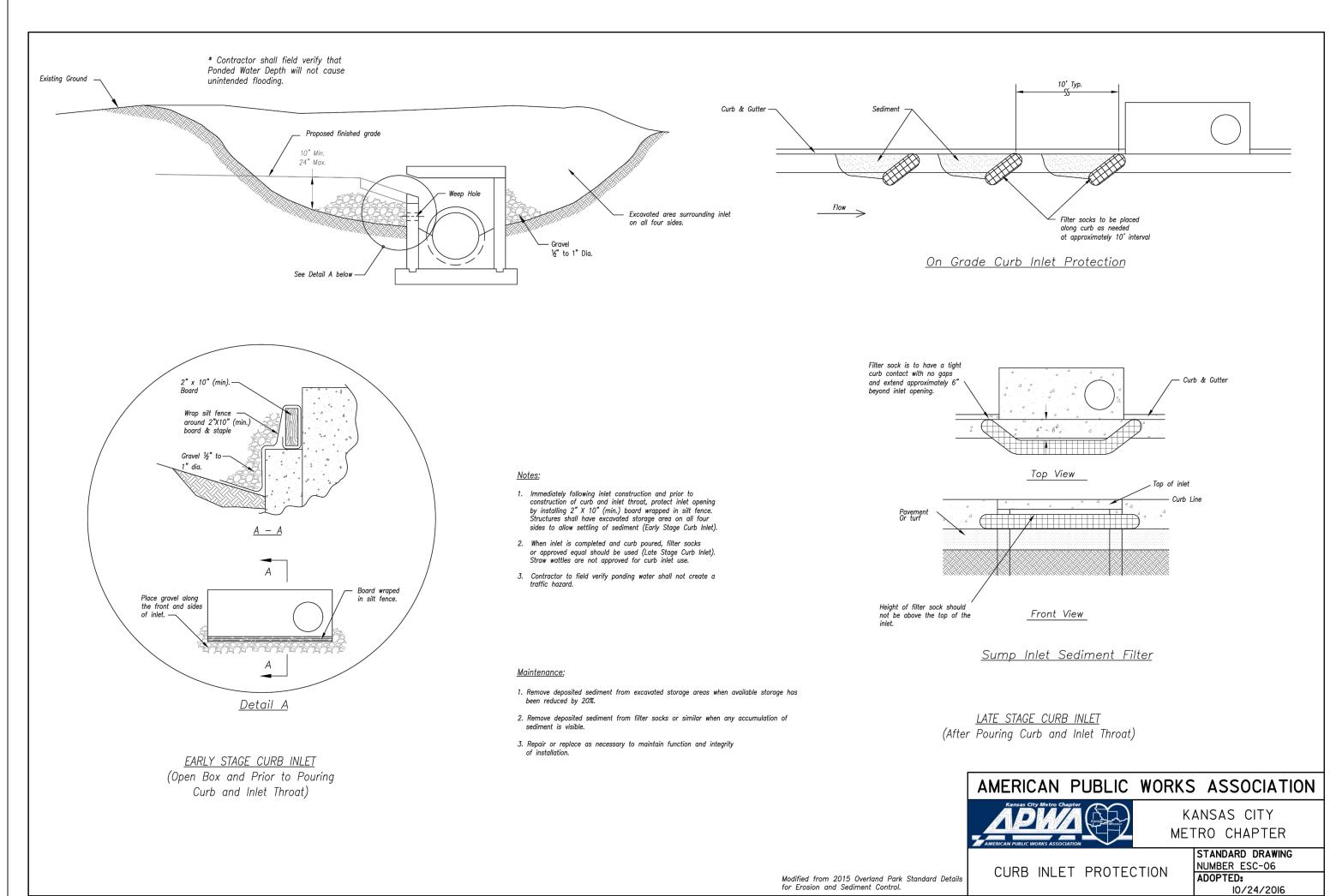
ADOPTED:

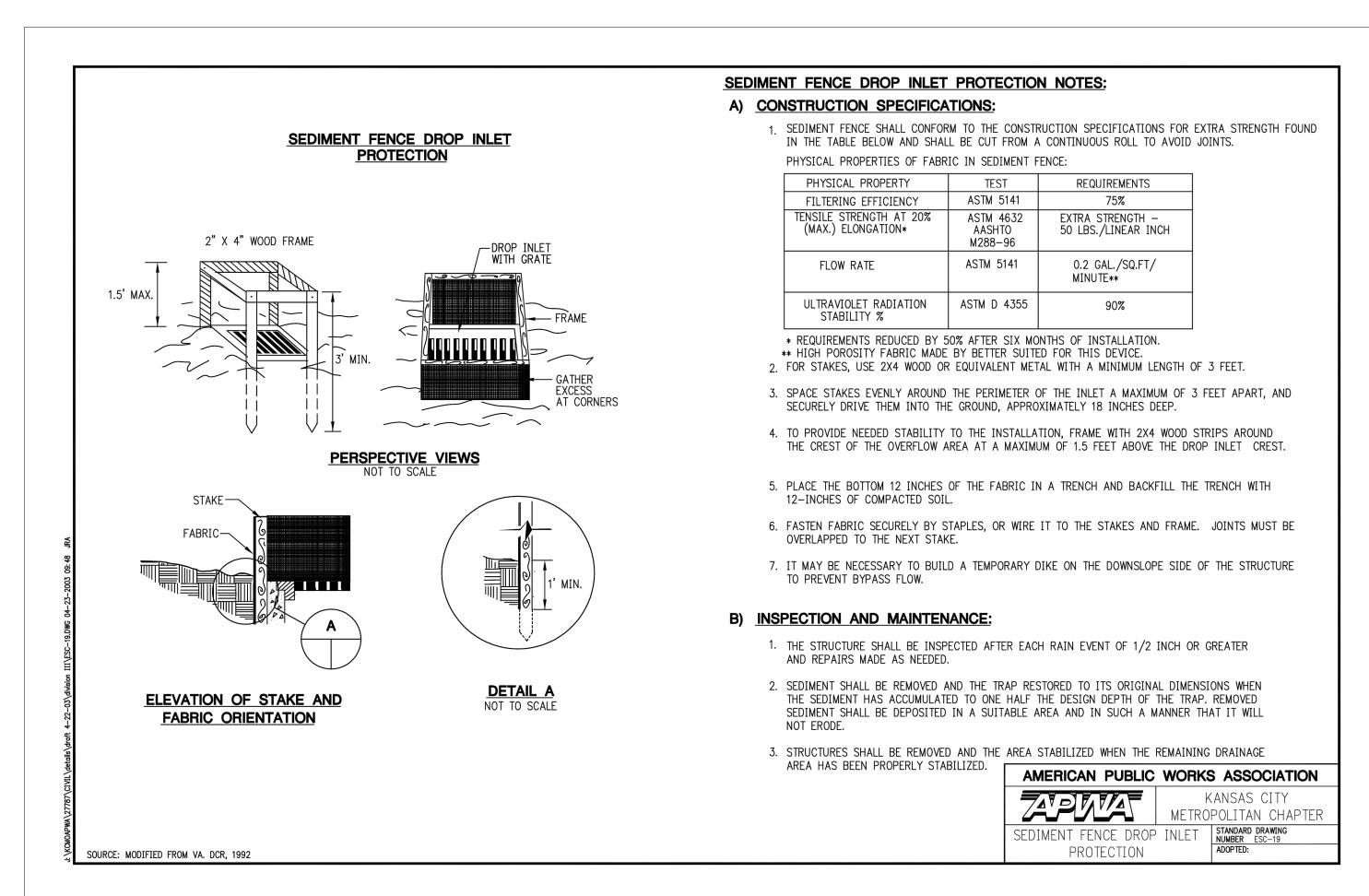
10/24/2016

AND CONCRETE WASHOUT



Modified from 2015 Overland Park Standard Details

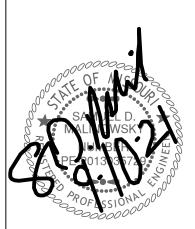




919 W. Stewart Road Columbia, Missouri 65203 smcivilengr@gmail.com 785.341.9747

SM Engineering

Drawings and/or Specifications are original proprietary work and property of the Engineer and intended specifically for this project. Use of items contained herein without consent of the Engineeris prohibited. Drawings illustrate best information available to the Engineer. Field verification of actual elements, conditions, and dimensions is required.



Revisions
3-2-21 CITY COMMENTS
6-8-21 PER CLIENT
9-10-21 PER CLIENT

STANDARD DRAWING

10/24/2016

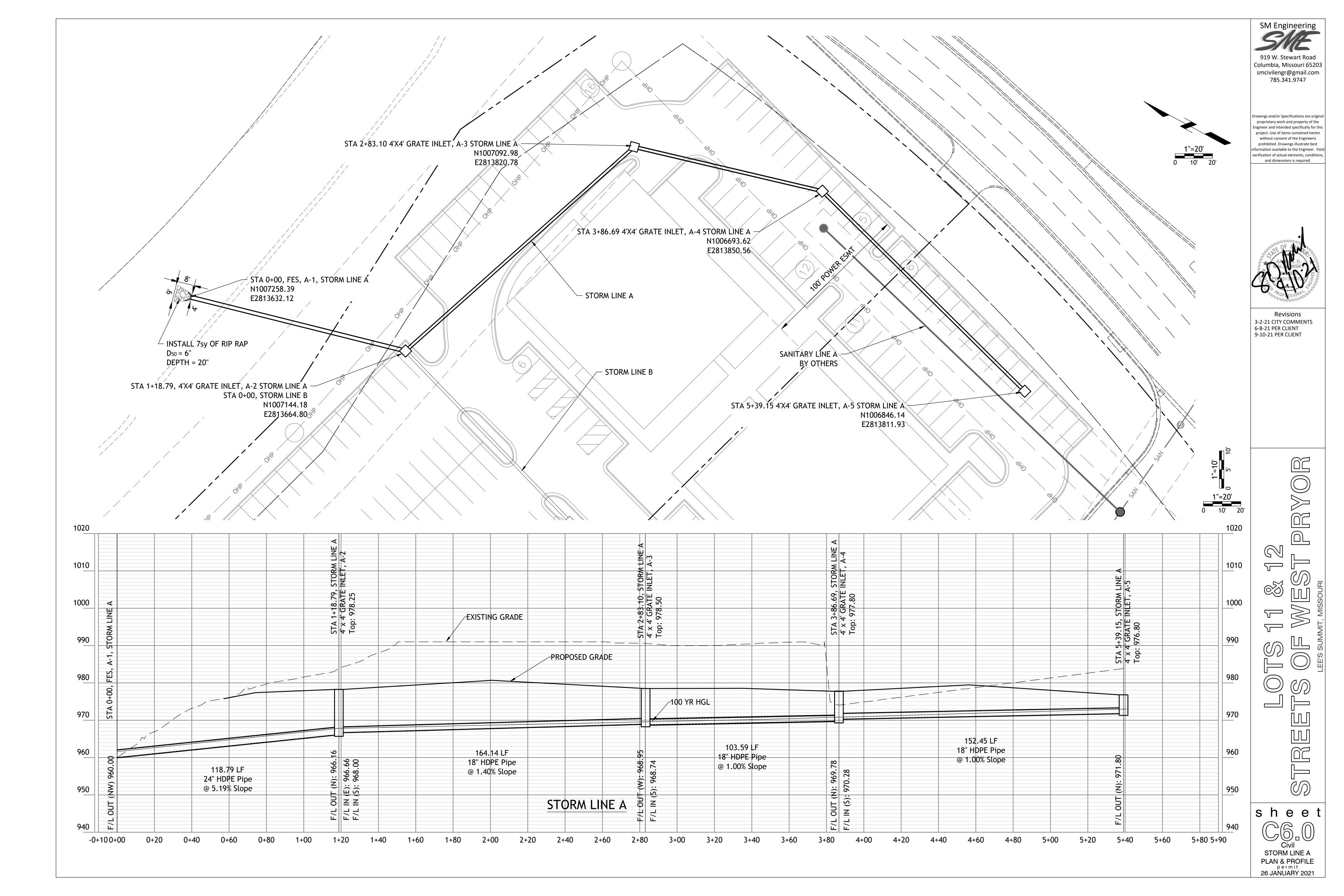
NUMBER ESC-03

LOTS 11 & 12 ITS OF WEST PRYOR

s h e e

Civil
EROSION CONTOL
DETAILS
permit

26 JANUARY 2021



100 Year Storm Drainage Calculations TcSystem TotalRunoff FlowRate LineSize n-valuePipe VelAve nd/RimElev RiprapD50 RiprapLength RiprapVel RiprapDepth LineLength | DrainArea | RunoffCoeff | IncrCxA Line ArealD Capac.Full InvertDn InvertUp HGLDn HGLUp ID (cfs) (cfs) (ft) (ft/s) (ac) (C) (min) (in/hr) (ft/s) (ft) (ft) (ft) (ft) (in) (ft) A2 -A1 A2 0.79 5.09 22.17 22.17 24 0.012 11.21 55.02 960 967.67 976.25 3.97 20 119 0.79 6.3 966.16 960.98 6 8 A3 -A2 Α3 229 0.61 0.61 5.7 5.22 7.36 7.36 18 0.012 4.91 11.38 966.66 968.95 968.48 969.99 974.5 A4 -A3 Α4 235 0.8 4.32 4.32 0.013 5.04 971.8 970.13 972.59 974.5 0.8 5.4 18 10.5 969.45 0.92 5.3 11.47 973.32 B1 - A2 B1 128 0.92 5.31 11.47 0.013 8.73 18.61 968 972.02 968.9 976.5 18 976.5 128 1.24 6.69 973.5 974.49 B2 - B1 1.24 5.4 6.69 18 0.013 4.61 10.5 972.22 973.96

- STORM LINE A

STA 1+18.79, 4'X4' GRATE INLET, A-2 STORM LINE A

STA 0+00, STORM LINE B

N1007144.18

E2813664.80

DO NOT INSTALL THROATS —

STA 1+27.67, 5'X3' CURB INLET, B-1 STORM LINE B

ON CURB INLETS

— STORM LINE B

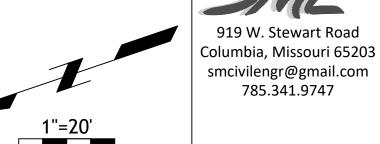
N1007021.50\_ E2813629.47

DO NOT INSTALL THROATS

- STA 1+91.67, 5'X3' CURB INLET, B-2 STORM LINE B

ON CURB INLETS

N1006959.79 E2813612.49



smcivilengr@gmail.com 785.341.9747 rawings and/or Specifications are original

SM Engineering

proprietary work and property of the Engineer and intended specifically for this project. Use of items contained herein without consent of the Engineeris prohibited. Drawings illustrate best rmation available to the Engineer. Field erification of actual elements, conditions, and dimensions is required.

Revisions 6-8-21 PER CLIENT

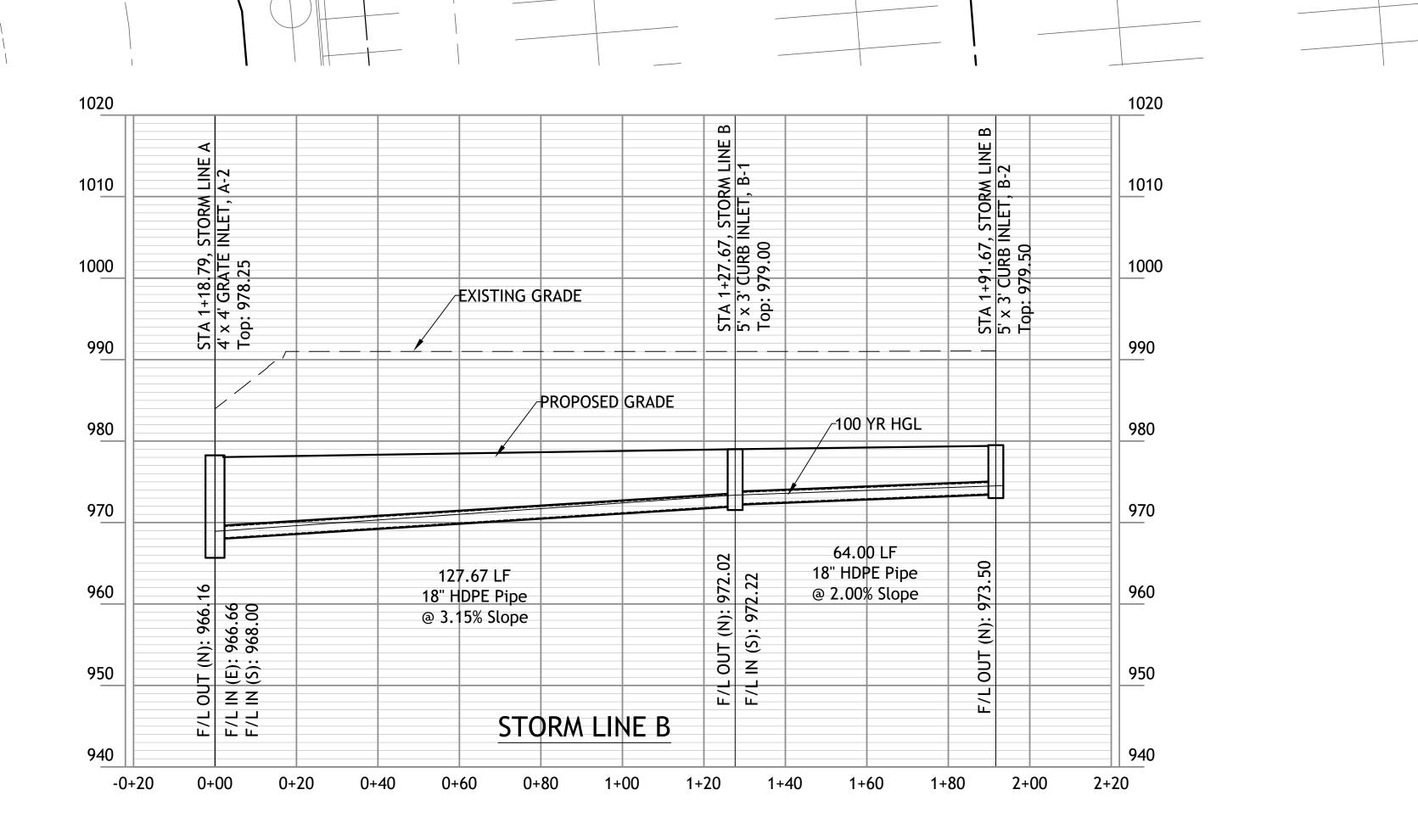
3-2-21 CITY COMMENTS 9-10-21 PER CLIENT

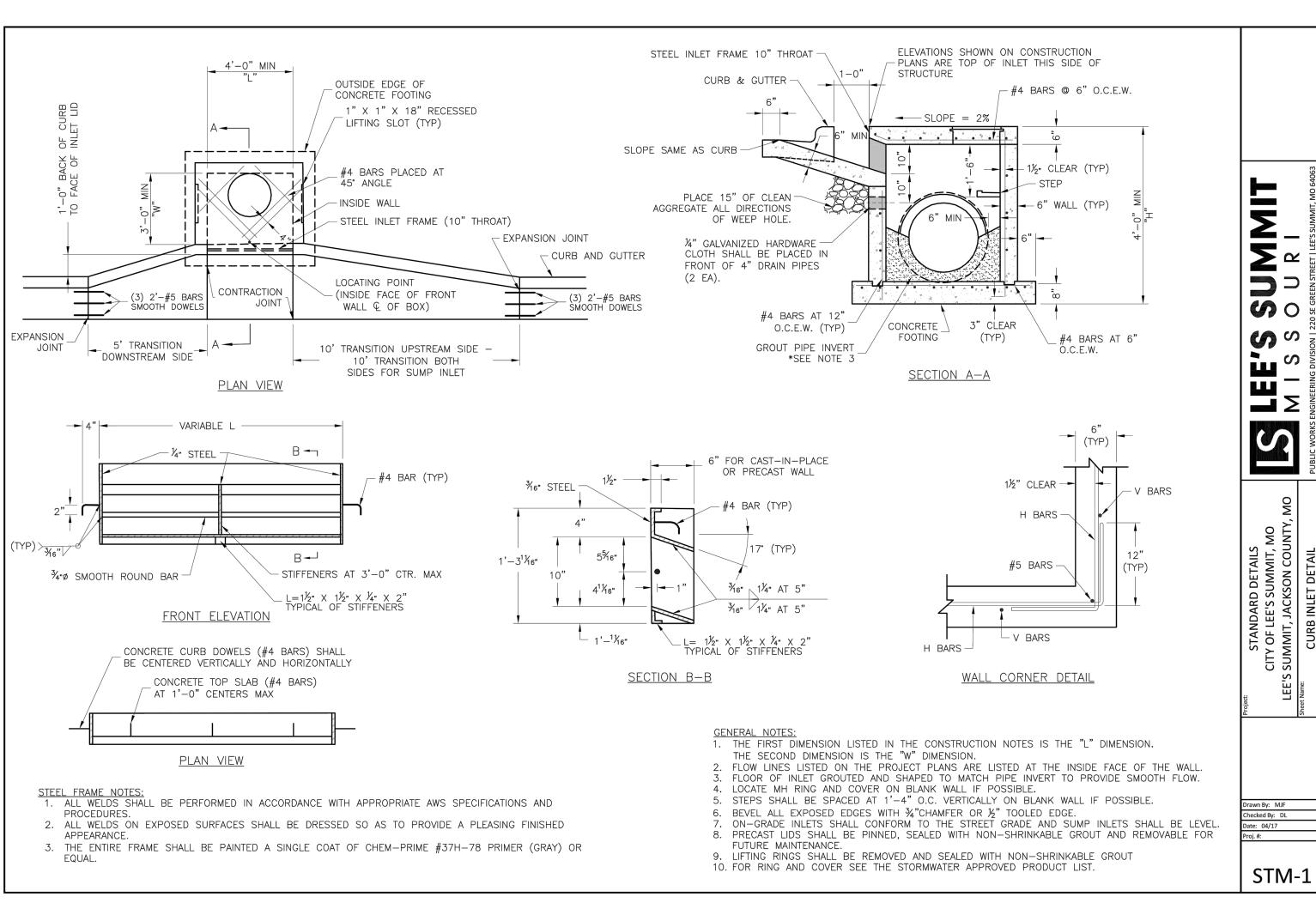
1"=20'

shee

Civil

STORM LINE B
PLAN & PROFILE
permit
26 JANUARY 2021





1/2"-3/4" CLEAN AGGREGATE, HAND TAMPED OR MECHANICALLY COMPACTED IN MAX. 4" LIFTS

INITIAL BACKFILL

-UNDER PAVED AREAS OR WITHIN 4" HORIZONTAL OF PAVED AREAS 1/2"-3/4" CLEAN AGGREGATE, HAND TAMPED OR MECHANICALLY COMPACTED IN MAX. 4" LIFTS

-UNDER OPEN AREAS

1/2"-3/4" CLEAN AGGREGATE, HAND TAMPED OR MECHANICALLY COMPACTED IN MAX. 4" LIFTS

FINAL BACKFILL

-UNDER PAVED AREAS OR WITHIN 4" HORIZONTAL OF PAVED AREAS ON-SITE OR IMPORTED MATERIAL FREE OF MUCK, FROZEN MATERIAL, EXCESS MOISTURE, ORGANICS, TOPSOIL, RUBBISH, CONSTRUCTION DEBRIS, ROCK OR BRICK LARGER THAN 8". COMPACTED TO 95% OF STANDARD DENSITY PER ASTM D-698

ON-SITE OR IMPORTED MATERIAL FREE OF MUCK, FROZEN MATERIAL, EXCESS MOISTURE, ORGANICS, TOPSOIL, RUBBISH, CONSTRUCTION DEBRIS, ROCK OR BRICK LARGER THAN 8". COMPACTED TO 90% OF STANDARD DENSITY PER ASTM D-698

	FINAL BACKFILL
12"	GRAVEL BACKFILL (1/2"-3/4" CLEAN)
0.0.	1

(1/2"-3/4" CLEAN)

WIDTH SHALL NOT

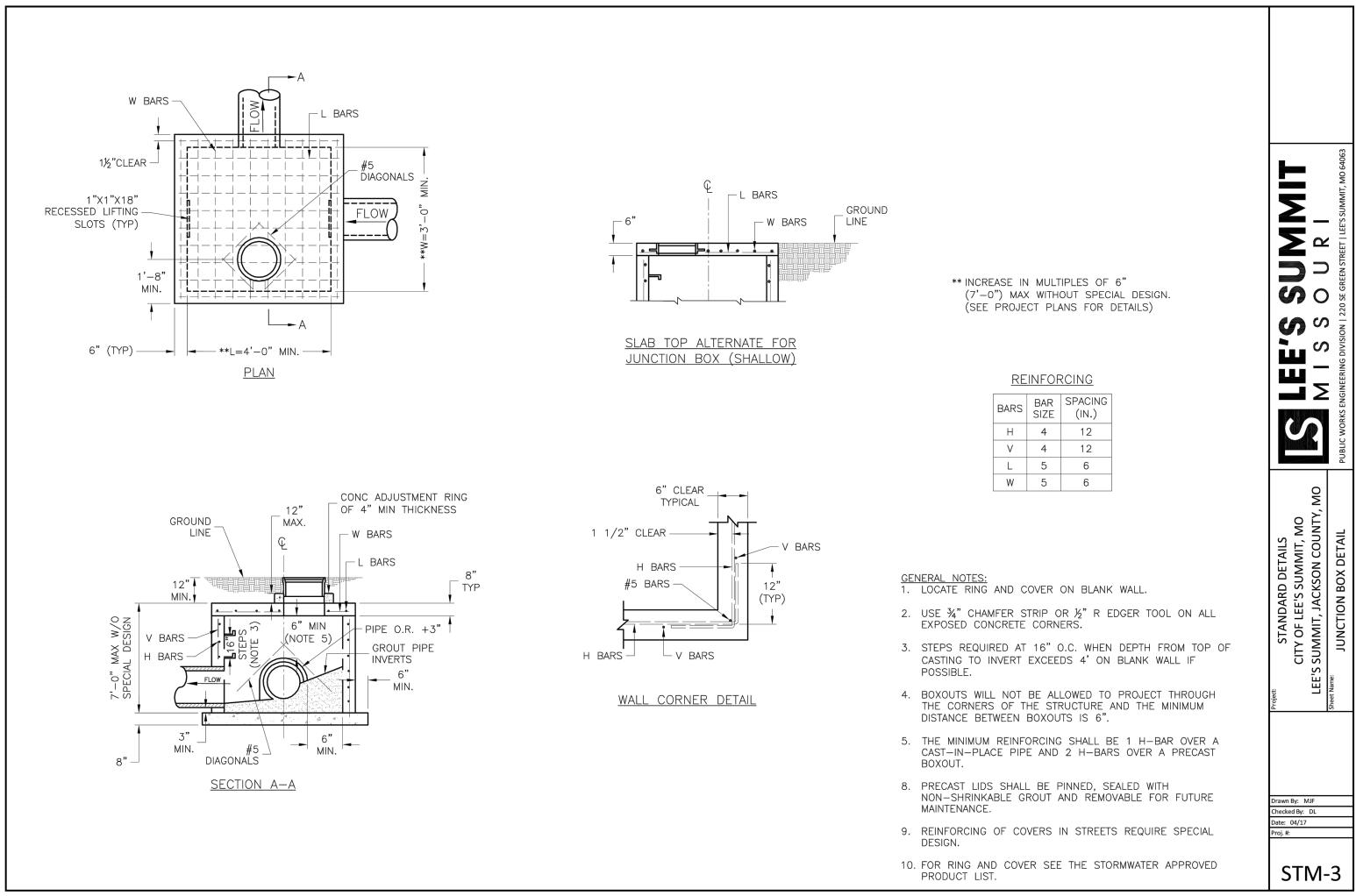
EXCEED 21/2 TIMES THE

OUTSIDE PIPE DIAMETER

BEDDING DEPTH BELOW PIPE PIPE DIAMETER IN SOIL IN ROCK 24" AND LESS 27" THRU 60"

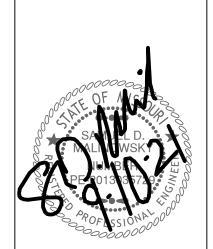
PIPE BEDDING DETAIL

NOT TO SCALE



SM Engineering 919 W. Stewart Road Columbia, Missouri 65203 smcivilengr@gmail.com 785.341.9747

Drawings and/or Specifications are original proprietary work and property of the Engineer and intended specifically for this project. Use of items contained herein without consent of the Engineeris prohibited. Drawings illustrate best ormation available to the Engineer. Field verification of actual elements, conditions, and dimensions is required.

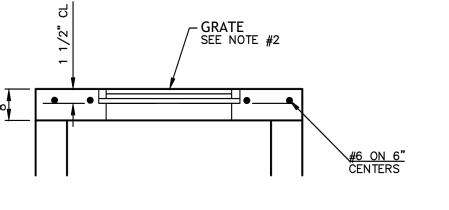


Revisions 3-2-21 CITY COMMENTS 6-8-21 PER CLIENT 9-10-21 PER CLIENT

s h e e

**DETAILS** permit

26 JANUARY 2021



W BARS #4@12" #5**@**8" 5–8' 8-12' MIN. BOX SIZE: 3.5' X 4.0' FOR SINGLE GRATE & 4.0' X 5.5' FOR DOUBLE GRATE

S BARS

#6**@**6"

L OR W

6–8'

ALL CONCRETE: F'C = 3500 P.S.I.1. L AND W BARS SHALL BE #6@6" CENTER 2. GRATE - NEENAH R-6673-J

ALTERNATE TOP TO STM-3
GRATE INLET