FINAL DEVELOPMENT PLANS
FOR
LOT 7A
STREETS OF WEST PRYOR

2100 NW LOWENSTIEN RD
LEE'S SUMMIT, MO

UTILITIES
Electric Service
Evergy
Nathan Michael
913-347-4310
Nathan.michael@evergy.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

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1-800-344-7483
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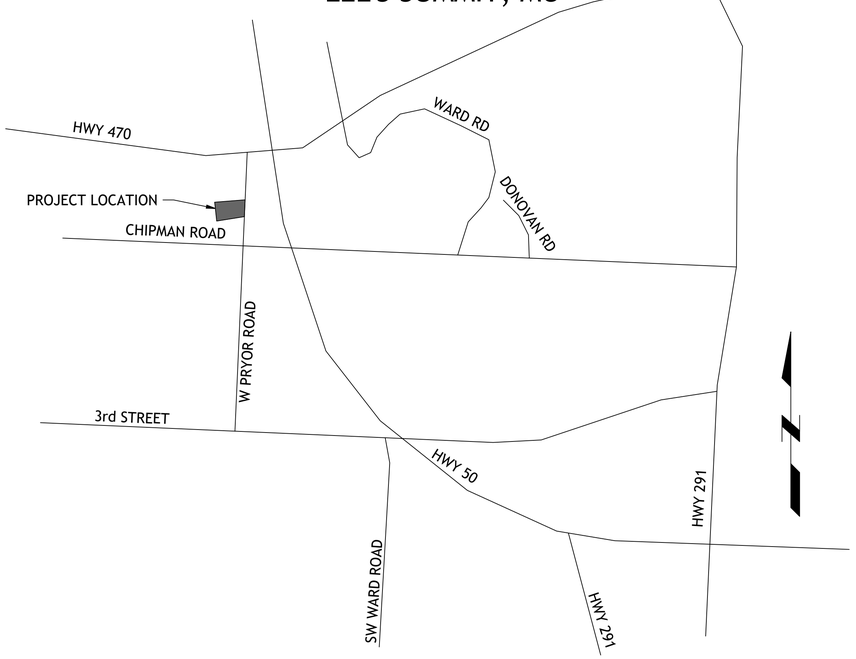

LOCATION MAP

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C/O DRAKE DEVELOPMENT, LLC
7200 W 132nd ST, SUITE 150
OVERLAND PARK, KS 66213
913-662-2630

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MANHATTAN KANSAS, 66503
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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.

LEGAL DESCRIPTION:
LOT 7 & TRACT C STREET OF WEST PRYOR
LOTS 1 THRU 14, TRACTS A, B, C, & D TO LEE'S SUMMIT, MO, JACKSON COUNTY MISSOURI

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
ELEVATION 985.05

#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 971.06

FLOODPLAIN NOTE:
SUBJECT PROPERTY IS SHOWN TO BE LOCATED IN "OTHER AREAS ZONE X" ON THE FLOOD INSURANCE RATE MAP FOR JACKSON COUNTY, MISSOURI AND INCORPORATED AREAS. COMMUNITY PANEL NO. 29095C0416G, REVISED JANUARY 20, 2017. "OTHER AREAS ZONE X" IS DEFINED AS "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUL CHANCE FLOODPLAIN". LOCATION DETERMINED BY A SCALED GRAPHICAL PLOT OF THE FLOOD INSURANCE RATE MAP.

NOTE
ALL CONSTRUCTION SHALL FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813. WHERE DISCREPANCIES EXIST BETWEEN THESE PLANS AND THE DESIGN AND CONSTRUCTION MANUAL, THE MORE STRINGENT SHALL PREVAIL.

STATE OF MISSOURI
SAMUEL D. MALINOWSKY
NUMBER
PROFESSIONAL ENGINEER
6-22-21

SAMUEL D. MALINOWSKY
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Revisions
6-4-21 CITY COMMENTS
6-22-21 CITY COMMENTS

STREETS OF W. PRYOR
LOT 7A
LEE'S SUMMITT, MO.

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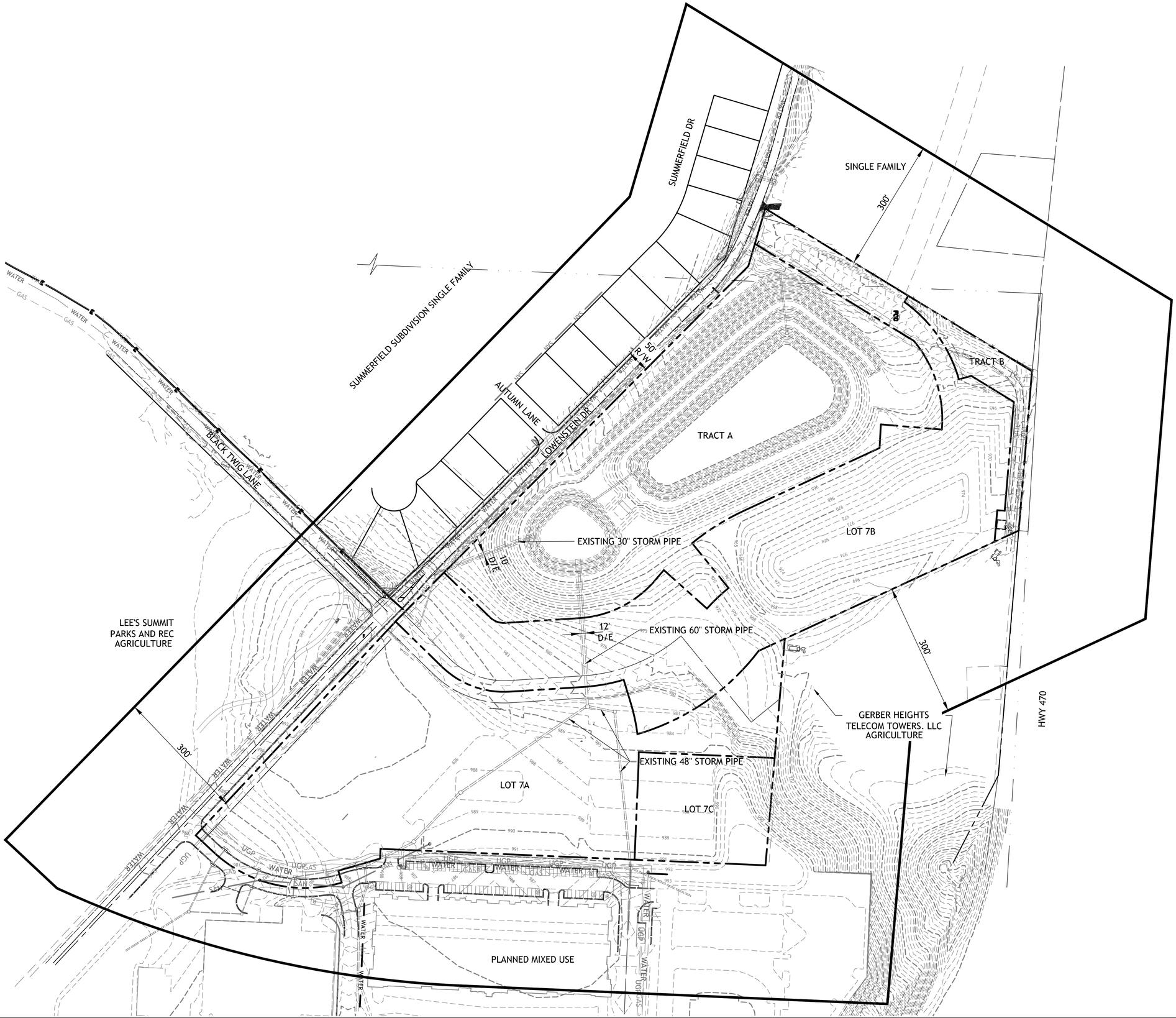
Site Improvement PLan
permit
5 MAY 2021



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STATE OF KANSAS
SCOTT D. WISKIRCHEN
NO. 20100
PROFESSIONAL ENGINEER
6-22-21

Revisions
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6-22-21 CITY COMMENTS

STREETS OF W. PRYOR
LOT 7A

LEE'S SUMMITT, MO.

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EXISTING CONDITIONS
permit
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CONSTRUCTION NOTES:

1. COORDINATE START-UP AND ALL CONSTRUCTION ACTIVITIES WITH OWNER.

2. CONSTRUCTION METHODS AND MATERIALS NOT SPECIFIED IN THESE PLANS ARE TO MEET OR EXCEED THE STANDARD SPECIFICATIONS.

3. ALL CONSTRUCTION WORK AND UTILITY WORK OUTSIDE OF PROPERTY BOUNDARIES SHALL BE PERFORMED IN COOPERATION WITH AND IN ACCORDANCE WITH REGULATIONS OF THE AUTHORITIES CONCERNED.

4. PUBLIC CONVENIENCE AND SAFETY: THE CONTRACTOR SHALL CONDUCT THE WORK IN A MANNER THAT WILL INSURE, AS FAR AS PRACTICABLE, THE LEAST OBSTRUCTION TO TRAFFIC, AND SHALL PROVIDE FOR THE CONVENIENCE AND SAFETY OF THE GENERAL PUBLIC AND RESIDENTS ALONG AND ADJACENT TO STREETS IN THE CONSTRUCTION AREA.

5. ALL DIMENSIONS SHOWN ARE TO THE BACK OF CURB UNLESS OTHERWISE NOTED.

6. ACCESSIBLE STALLS SHOWN WITH A "VAN" SHALL BE 16'-0" MIN. AND SHALL HAVE A SIGN DESIGNATING "VAN-ACCESSIBLE". SEE DETAIL102.

NOTE:

1. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRANCE. SLOPED PAVING, EXIT PORCHES AND RAMPS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.

2. THESE PLANS HAVE NOT BEEN VERIFIED WITH FINAL ARCHITECTURAL CONTRACT DRAWINGS. CONTRACTOR SHALL VERIFY AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES. CONTRACTOR IS FULLY RESPONSIBLE FOR REVIEW AND COORDINATION OF ALL DRAWINGS AND CONTRACTOR DOCUMENTS.

3. ALL DIMENSIONS ARE PERPENDICULAR TO PROPERTY LINE.

NOTE:

1. CONTRACTOR SHALL CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTION TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH A FIELD ENGINEERING INSPECTOR PRIOR TO ANY LAND DISTURBANCE WORK AT 816-969-1200

SITE DATA

TOTAL SITE	9.24ac (402,422sf)
TOTAL IMPERVIOUS AREA	238,400sf
OPEN SPACE	164,022sf
TOTAL BUILDING	83,700sf
FAR	0.21
TOTAL REQUIRED	341
PARKING PROVIDED	376

SEE DETAIL SHEET FOR THE FOLLOWING DETAILS:

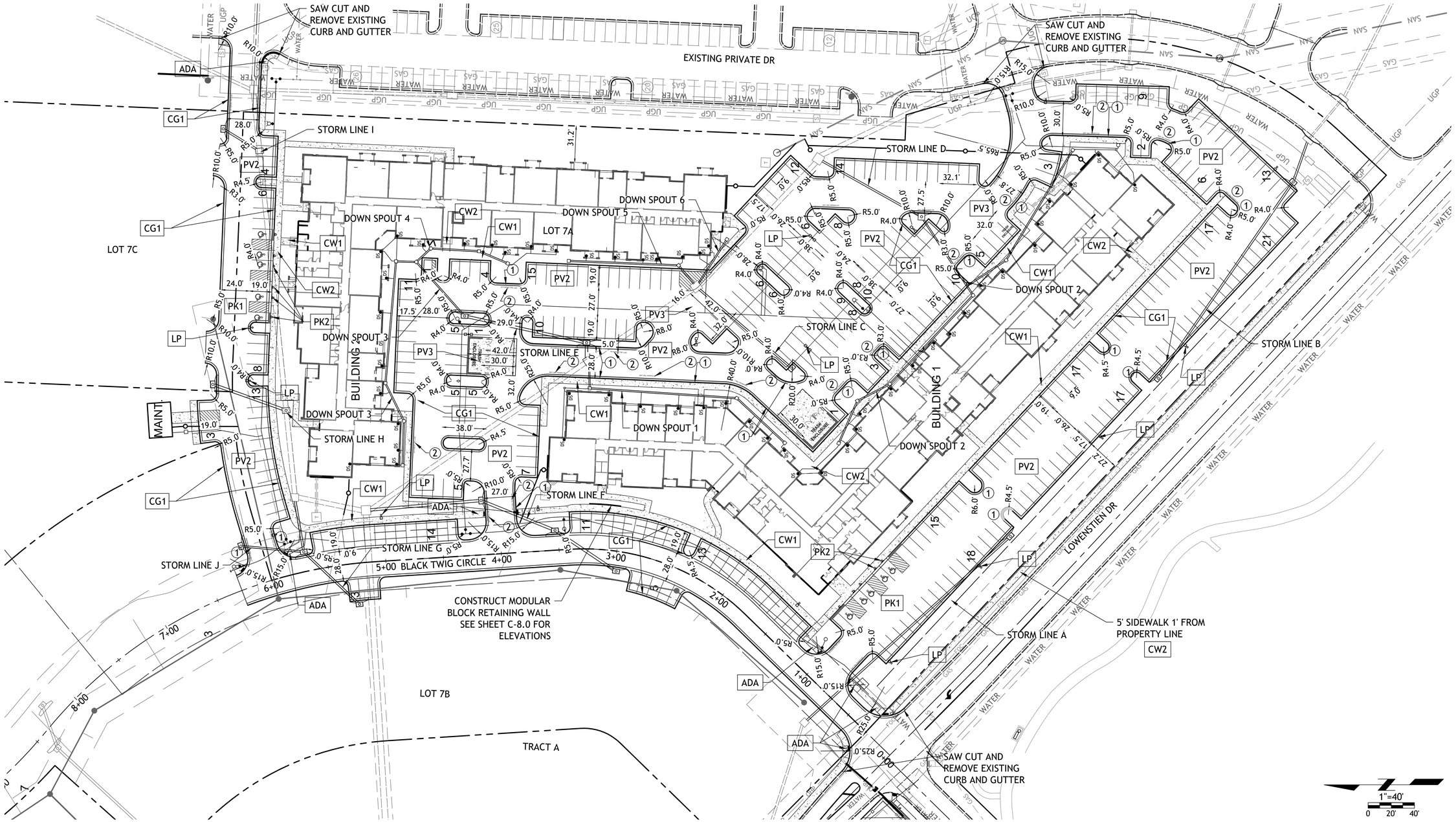
PK-1	96" ACCESSIBLE & VAN ACCESSIBLE SPACE STRIPING
PK-2	ACCESSIBLE SIGN
CG-1	CURB AND GUTTER
PV2	HEAVY DUTY ASPHALT PAVEMENT
CW2	SIDEWALK
ADA	HANDICAP RAMP SEE GEN-3A DETAIL
LP	LIGHT POLE BASE
CW1	CURB WALK
STM-1	STORM INLET
STM-3	JUNCTION BOX
TE	TRASH ENCLOSURE (SEE ARCHITECTURAL PLANS)

NOTES:

8A	DOOR (SEE ARCH. PLANS)
12K	WHITE PARKING LOT STRIPING (SHERWIN-WILLIAMS TM 2160 LEAD FREE OR APPROVED EQUAL)
CO	CLEAN-OUT (SEE GRADING PLAN)
PV2	HEAVY DUTY ASPHALT
PV3	HEAVY DUTY CONCRETE
1	PAINT CURB RED
2	PAINT 6" LETTERS "NO PARKING FIRE LANE"

SITE DATA

LOT	USE	LOT AREA (SF)	LOT AREA (ACRES)	BLDG AREA SF (ENVELOPE)	TOTAL SQFT	# OF DWELLING UNITS	DWELLING UNITS PER ACRE	# OF FLOORS	1 BDRM	2 BDRM	3 BDRM	PARKING REQUIRED	PARKING PROVIDED	ADA SPACES REQ (VAN)	ADA SPACES PROV (VAN)	PRK LOT COVERAGE	IMPERVIOUS COVERAGE	OPEN SPACE
Proposed LOT 7A	Apts Bldg 1	402,422	9.24	45,200	135,600	100	10.82	3	43	41	16	183	376	6 (1)	6 (1)	154,700	238,400	164,022
	Apts Bldg 2	NA	NA	38,500	115,500	84	NA	3	33	30	21	***158	N/A	5 (1)	5 (1)	NA	NA	NA



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STREETS OF W. PRYOR LOT 7A

LEES SUMMITT, MO.

sheet
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Civil
SITE PLAN
permit
5 MAY 2021

UTILITY NOTES:

1. ALL UTILITY AND STORM SEWER TRENCHES CONSTRUCTED UNDER AREAS THAT RECEIVE PAVING SHALL BE BACKFILLED TO 18 INCHES ABOVE THE TOP OF THE PIPE WITH SELECT GRANULAR MATERIAL PLACED ON EIGHT-INCH LIFTS, AND COMPACTED TO 95% MODIFIED PROCTOR DENSITY.

2. CONTRACTOR SHALL NOT OPEN, TURN OFF, INTERFERE WITH, OR ATTACH ANY PIPE OR HOSE TO OR TAP ANY WATER MAIN BELONGING TO THE CITY UNLESS DULY AUTHORIZED TO DO SO BY THE CITY. ANY ADVERSE CONSEQUENCE OF ANY SCHEDULED OR UNSCHEDULED DISRUPTIONS OF SERVICE TO THE PUBLIC ARE TO BE THE LIABILITY OF THE CONTRACTOR. SM ENGINEERING AND OWNER ARE TO BE HELD HARMLESS.

3. ALL WATER AND SANITARY SEWER SYSTEMS THAT ARE TO BE PUBLIC LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH SPECIFICATIONS PREVIOUSLY APPROVED BY THE CITY OF LEE'S SUMMIT AND THE STATE OF MISSOURI AND SHALL BE INSPECTED BY THE CITY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASSURE THAT THIS INSPECTION OCCURS.

4. LOCATIONS SHOWN FOR PROPOSED WATER LINES ARE APPROXIMATE. VARIATIONS MAY BE MADE, WITH APPROVAL OF THE ENGINEER, TO AVOID CONFLICTS.

5. CONTRACTOR TO INSTALL TRACING TAPE ALONG ALL NON-METALLIC WATER MAINS AND SERVICE LINES PER SPECIFICATIONS.

6. CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICT AND POINTS OF CONNECTION PRIOR TO ANY CONSTRUCTION OF NEW UTILITIES.

7. WATER LINES SHALL HAVE A MINIMUM COVER OF 42 INCHES. ALL VALVES ON MAINS AND FIRE HYDRANT LEADS SHALL BE WITH VALVE BOX ASSEMBLIES. THE SIZE OF VALVE BOX ASSEMBLY TO BE INSTALLED IS DETERMINED BY THE TYPE AND SIZE OF VALVE. VALVE BOX CAPS SHALL HAVE THE WORD "WATER".

8. A MINIMUM HORIZONTAL DISTANCE OF 10 FEET SHALL BE MAINTAINED BETWEEN PARALLEL WATER AND SANITARY SEWER LINES. WHEN IT IS NECESSARY FOR ANY WATER LINE TO CROSS A SANITARY SEWER LINE, THE SEWER LINE SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE AT LEAST 10 FEET EITHER SIDE OF THE WATER LINE UNLESS THE WATER LINE IS AT LEAST 2 FEET CLEAR DISTANCE ABOVE THE SANITARY SEWER LINE.

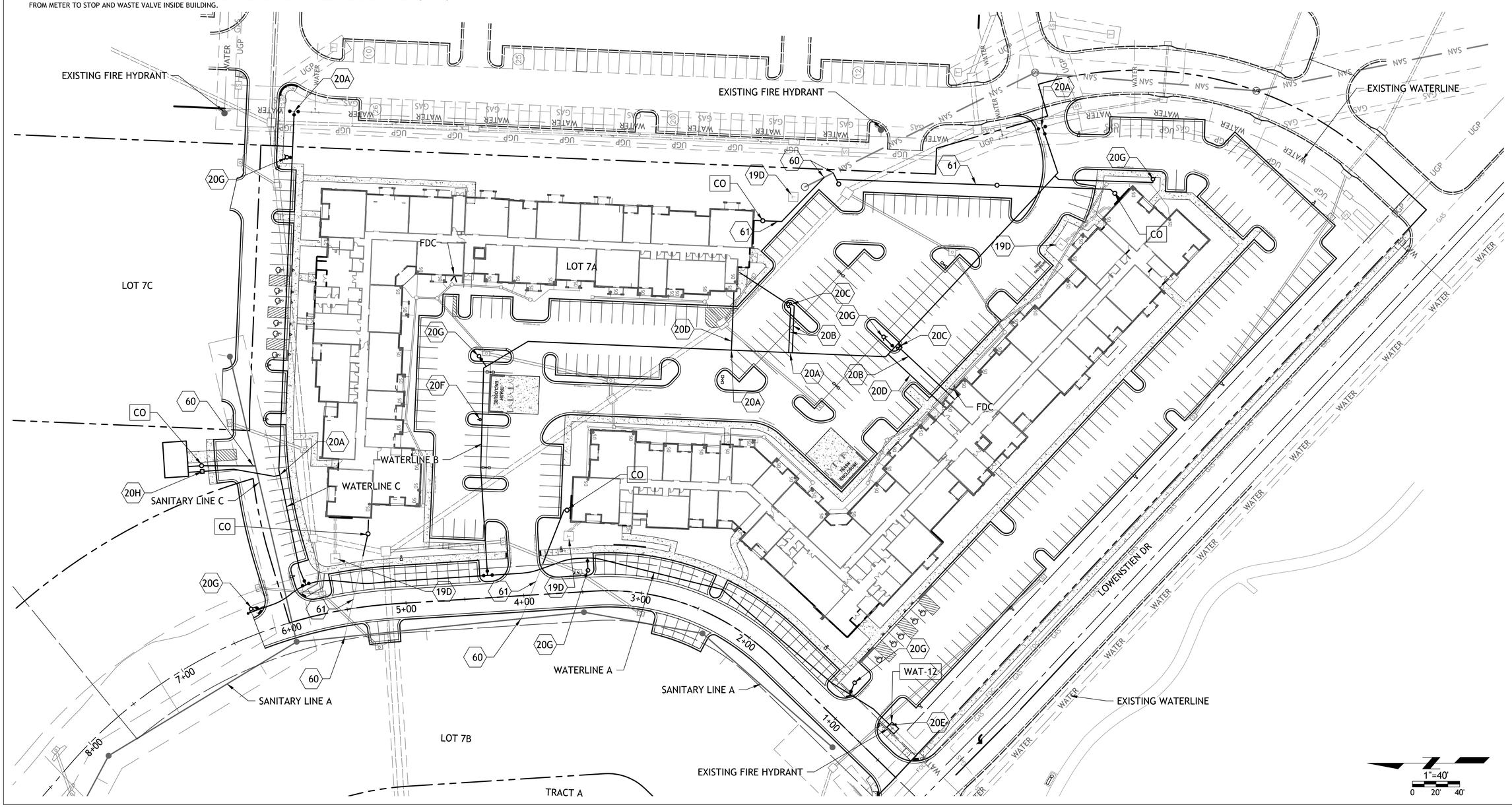
9. INSTALL 2" TYPE "K" COPPER FROM THE MAIN TO THE METER AND EITHER TYPE "K" OR POLYETHYLENE PLASTIC TUBING (PE 3608) FROM METER TO STOP AND WASTE VALVE INSIDE BUILDING.

DETAILS

MS1	TRENCH AND BEDDING DETAILS
WAT-12	DCD VAULT
WAT-11	WATER SERVICE CONNECTION
WAT-7	FIRE HYDRANT
CO	CLEANOUT

NOTES

18A	POINT OF CONNECTION - TELEPHONE SERVICE - COORDINATE WITH TELEPHONE COMPANY
18B	UNDERGROUND TELEPHONE SERVICE PER LOCAL TELEPHONE COMPANY
18C	2-2" CONDUIT INSTALLED BY CONTRACTOR - TELEPHONE SERVICE
19A	POINT OF CONNECTION - ELECTRICAL SERVICE
19B	ELECTRICAL SERVICE (SEE NOTE 10)
19C	4" CONDUIT INSTALLED BY CONTRACTOR - ELECTRIC SERVICE
19D	TRANSFORMER - PER EVERGY DETAIL 700-103
20A	POINT OF CONNECTION - WATER SERVICE
20B	2-2" TAPS WITH WITH 4.0" SERVICE LINE AFTER METERS
20C	2-2" METERS
20D	6" FIRE LINE
60	6" SANITARY SEWER SERVICE LINE SDR-26 PVC CONNECTION SHALL BE A CUT-IN WYE
61	6" SANITARY SEWER SERVICE LINE SDR 26 PVC
20E	INSTALL 8" BACKFLOW PREVENTION ASSEMBLY IN 8'X6' VAULT OR AS REQUIRED PER CLEARANCE SEE DETAIL WAT-12
20F	1" IRRIGATION METER & BFP
20H	1" WATER TAP & WATER METER
20G	FIRE HYDRANT ASSEMBLY WITH 1-6" GATE VALVE



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Revisions
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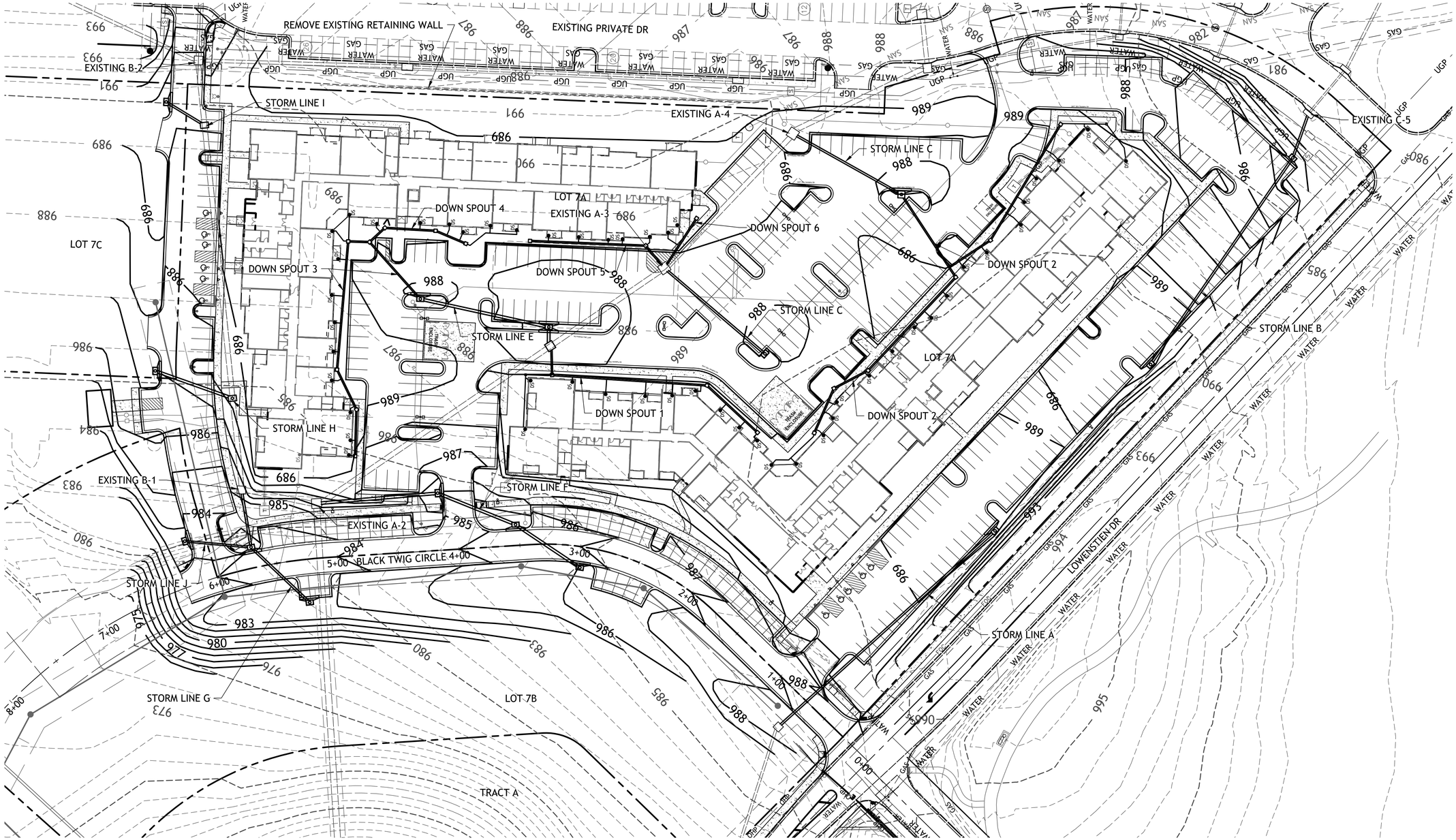
6-22-21 CITY COMMENTS

STREETS OF W. PRYOR LOT 7A

LEE'S SUMMITT, MO.

sheet
C4.0
Civil
UTILITY PLAN
permit
5 MAY 2021



GRADING NOTES:

1. EARTHWORK UNDER THE BUILDING SHALL COMPLY WITH THE PROJECT ARCHITECTURAL PLANS. OTHER FILL MATERIAL SHALL BE MADE IN LIFTS NOT TO EXCEED EIGHT INCHES DEPTH COMPACTED TO 95% STANDARD PROCTOR DENSITY. FILL MATERIAL MAY INCLUDE ROCK FROM ON-SITE EXCAVATION IF CAREFULLY PLACED SO THAT LARGE STONES ARE WELL DISTRIBUTED AND VOIDS ARE COMPLETELY FILLED WITH SMALLER STONES, EARTH, SAND OR GRAVEL TO FURNISH A SOLID EMBANKMENT. NO ROCK LARGER THAN THREE INCHES IN ANY DIMENSION NOR ANY SHALE SHALL BE PLACED IN THE TOP 12 INCHES OF EMBANKMENT.

2. AREAS THAT ARE TO BE CUT TO SUBGRADE LEVELS SHALL BE PROOF ROLLED WITH A MODERATELY HEAVY LOADED DUMP TRUCK OR SIMILAR APPROVED CONSTRUCTION EQUIPMENT TO DETECT UNSUITABLE SOIL CONDITIONS.

3. IN ALL AREAS OF EXCAVATION, IF UNSUITABLE SOIL CONDITIONS ARE ENCOUNTERED. A QUALIFIED GEOTECHNICAL ENGINEER SHALL RECOMMEND TO THE OWNER THE METHODS OF UNDERCUTTING AND REPLACEMENT OF PROPERLY COMPACTED, APPROVED FILL MATERIAL. ALL PROOF ROLLING AND UNDERCUTTING SHOULD BE PERFORMED DURING A PERIOD OF DRY WEATHER.

4. CONTRACTOR SHALL USE SILT FENCE OR OTHER MEANS OF CONTROLLING EROSION ALONG THE EDGE OF THE PROPERTY OR OTHER BOTTOM OF SLOPE LOCATIONS.

5. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS.

6. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGES TO THE ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASES OF THIS PROJECT.

7. IT IS NOT THE DUTY OF THE ENGINEER OR THE OWNER TO REVIEW THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON OR NEAR THE CONSTRUCTION SITE AT ANY TIME DURING CONSTRUCTION.

9. PIPE LENGTHS ARE CENTER TO CENTER OF STRUCTURE OR TO END OF END SECTIONS.

10. HANDICAP STALLS SHALL MEET ADA REQUIREMENTS AND SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION AT THE BUILDING ENTRY AND ACCESSIBLE PARKING STALLS. SLOPES EXCEEDING 2.0% WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

11. CONTRACTOR TO ADJUST DEPTHS OF EXISTING SERVICE LINES AS NECESSARY

12. ALL CONSTRUCTION TRAFFIC, TEMPORARY TRAFFIC CONTROL DEVICES AND PAVEMENT MARKINGS SHALL CONFORM TO REQUIREMENTS OF THE LATEST MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

13. SITE BEING ROUGH GRADED TO 12.5" BELOW FINISHED GRADE

14. CONTRACTOR TO PLACE 8" LOW PERMEABILITY LVC FOR BUILDING PAD

1"=40'
0 20' 40'

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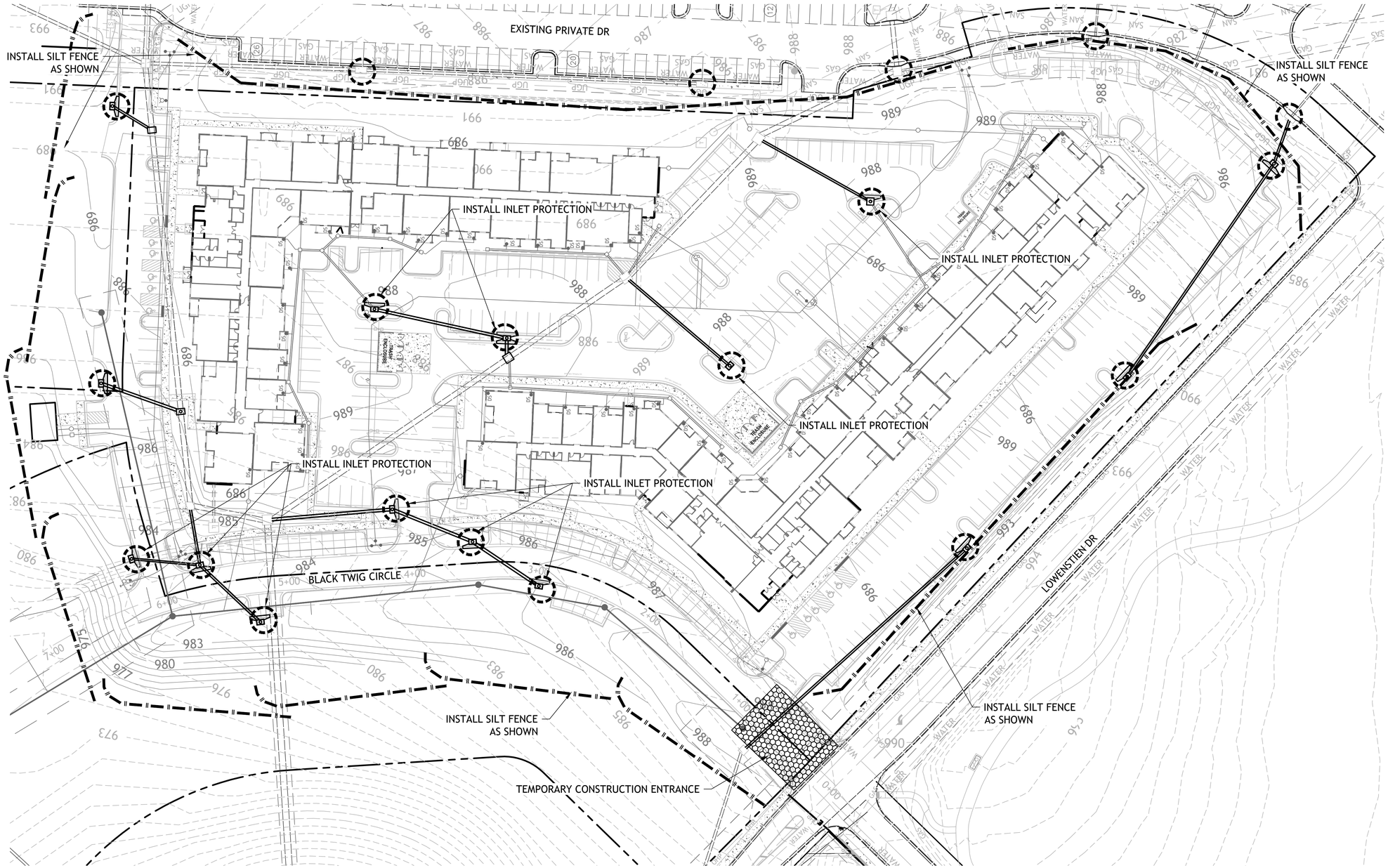

NOTES:

1. Prior to Land Disturbance activities, the following shall occur:
   a) Identify the limits of construcljan on the ground with easily recognizable indications such as construction staking, construction fencing and placement of physical barriers or other means acceptable to the City inspector and in conformance with the erosion and pollution control plan;
   b) Construct a stabilized entrance/parking/staging area;
   c) Install perimeter controls and protect any existing stormwater inlets;
   d) Request an initial inspection of the installed Phase I pollution control measures designated on the approved erosion and pollution control plan. Land disturbance work shall not proceed until there is a passed inspection
2. The site shall comply with all requirements of the MoDNR general requirements
   a) Immediate initiation of temporary stabilization BMPs on disturbed areas where construction activities have temporarily ceased on that portion of the project site If construction activities will not resume for a period exceeding 14 calendar days.
   Temporary stabilization may include establishment of vegetation, geotextiles, mulches or other techniques to reduce or eliminate erosion until either final stabilization con be achieved or until further construction activities take place to re-disturb the area. This stabilization must be completed within 14 calendar days;
   b) Inspection of erosion and sediment control measures shall be performed to meet or exceed the minimum inspection frequency in the MoDNR General Permit. At a minimum, inspections shall be performed during all phases of construction at least once every 14 days and within 24 hours of each precipitation event.
   c) An inspection log shall be maintained and shall be available for review by the regulatory authority;
   d) The erosion and pollution control plan shall be routinely updated to show all modifications and amendments to the original plan. A copy of the erosion and pollution control plan shall be kept on site and made available for review by the regulatory authority.
3. Temporary seeding shall only be used for periods not to exceed 12 months. For final stabilization. temporary seeding shall only be used to establish vegetation outside the permanent seeding or sodding dates as specified in the Standard Specifications. Final stabilization requires a uniform perennial vegetative cover with a density of 70% over 100% of disturbed area.
4. Erosion and pollution control shall be provided for the duration of a project. All installed erosion and pollution control BMPs shall be maintained in a manner that preserves their effectiveness. If the City determines that the BMPs in place do not provide adequate erosion and pollution control at any time during the project, additional or alternate measures that provide effective control shall be required.
5. Concrete wash or rinse water from concrete mixing equipment. Tools and/or ready-mix trucks. etc. may not be discharged into or be allowed to run to any existing water body or portion of the storm water system. One or more locations for concrete washout will be designated on site, such that discharges during concrete washout will be contained in a small area where waste concrete can solidify in place. Proper signage will be installed to direct users to the concrete washout. Concrete washouts must be handled prior to pouring any concrete.
6. Silt fences and sediment control BMPs which are shown along the back of curb must be installed within two weeks of curb backfill and prior to placement of base asphalt. Exact locations of these erosion control methods may be field adjusted to minimize conflicts with utility construction. However, anticipated disturbance by utility construction shall not delay installation.
7. Required sediment basins and traps shall be installed as early as possible during mass grading. Sediment basins and traps shall be cleaned out when the sediment capacity has been reduced by 20% of its original design volume.
8. All manufactured BMPs such as erosion control blankets, TRMs, biodegradable logs, filter socks, synthetic sediment barriers and hydraulic erasion control shall be installed as directed by the manufacturer.
9. The above requirements are the responsibility of the permittee for the site. Responsibility may be transferred to another party by the permittee, but the permittee shall remain liable by the City of Lee's Summit if any of the above conditions are not met.

LEGEND

- SILT FENCE
- INLET PROTECTION
- TEMPORARY CONSTRUCTION ENTRANCE

1"=40'
0 20' 40'

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S. D. WISK
NUMBER
2012031
PROFESSIONAL ENGINEER
6-22-21

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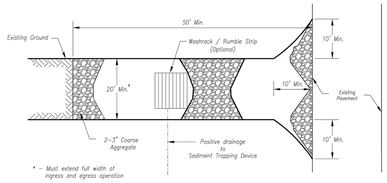
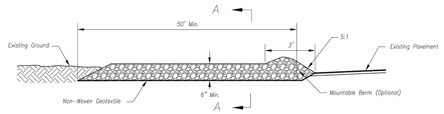
STREETS OF W. PRYOR
LOT 7A
LEE'S SUMMITT, MO.

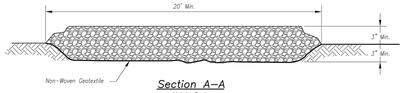
sheet
C6.0
Civil
EROSION CONTROL
permit
5 MAY 2021



Plan View
Not to Scale



Side Elevation
Not to Scale



Section A–A
Not to Scale

Notes for Construction Entrance:

1. Avoid locating on steep slopes, at curves on public roads, or downhill of disturbed area.
2. Remove all vegetation and other unsuitable material from the foundation area, grade, and crown for positive drainage.
3. If slope towards the public road exceeds 2%, construct a 6– to 8–inch high ridge with 3H:1V side slopes across the foundation approximately 15 feet from the edge of the public road to divert runoff from it.
4. Install pipe under the entrance if needed to maintain drainage ditches along public roads.
5. Place stone to dimensions and grade as shown on plans. Leave surface sloped for drainage.
6. Divert all surface runoff and drainage from the entrance to a sediment control device.
7. If conditions warrant, place geotextile fabric on the graded foundation to improve stability.

Maintenance for Construction Entrance:

1. Reshape entrance as needed to maintain function and integrity of installation. Top dress with clean aggregate as needed.

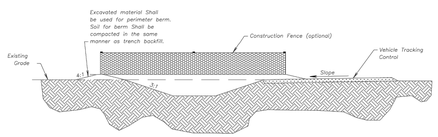
CONSTRUCTION ENTRANCE

Notes for Concrete Washout:

1. Concrete washout areas shall be installed prior to any concrete placement on site.
2. Concrete washout area shall include a flat subsurface pit sized relative to the amount of concrete to be placed on site. The slopes leading out of the subsurface pit shall be 3:1. The vehicle tracking pad shall be sloped towards the concrete washout area.
3. Vehicle tracking control is required at the access point to all concrete washout areas.
4. Signs shall be placed at the construction site entrance, washout area and elsewhere as necessary to clearly indicate the location(s) of the concrete washout area(s) to operators of concrete truck and pump rigs.
5. A one–piece impervious liner may be required along the bottom and sides of the subsurface pit in sandy or gravely soils.

Maintenance for Concrete Washout:

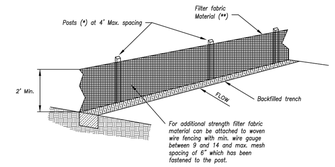
1. Concrete washout materials shall be removed once the materials have filled the washout to approximately 75% full.
2. Concrete washout areas shall be enlarged as necessary to maintain capacity for wasted concrete.
3. Concrete washout water, wasted pieces of concrete and all other debris in the subsurface pit shall be transported from the job site in a water–tight container and disposed of properly.
4. Concrete washout areas shall remain in place until all concrete for the project is placed.
5. When concrete washout areas are removed, excavations shall be filled with suitable compacted backfill and topsoil, any disturbed areas associated with the installation, maintenance, and/or removal of the concrete washout areas shall be stabilized.



CONCRETE WASHOUT

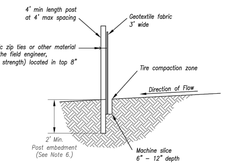
Construction Entrance modified from 2015 Overland Park Standard Details for Erosion and Sediment Control; Concrete Washout modified from 2009 City of Great Bend Standard Drawings.

AMERICAN PUBLIC WORKS ASSOCIATION
Kansas City Metro Chapter
KANSAS CITY METRO CHAPTER
CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT
STANDARD DRAWING NUMBER ESC-01
ADOPTED: 10/24/2016



(*) POSTS
– MIN. LENGTH 4'
– HARDWOOD 1 9/16" x 1 9/16"
– NO.2 SOUTHERN PINE 2 5/8" x 2 5/8"
– STEEL 1.33 LB/FT

(**) – Geotextile Fabric shall meet the requirements of AASHTO M288



SILT FENCE DETAILS
Not to Scale

Notes:

1. In order to contain water, the ends of the silt fence must be turned uphill (Figure A).
2. Long perimeter runs of silt fence must be limited to 100'. Runs should be broken up into several smaller segments to minimize water concentrations (Figure A).
3. Long slopes should be broken up with intermediate rows of silt fence to slow runoff velocities.
4. Attach fabric to upstream side of post.
5. Install posts a minimum of 2' into the ground.
6. Trenching will only be allowed for small or difficult installation, where slicing machine cannot be reasonably used.

Maintenance:

1. Remove and dispose of sediment deposits when the deposit approaches ½ the height of silt fence.
2. Repair as necessary to maintain function and structure.

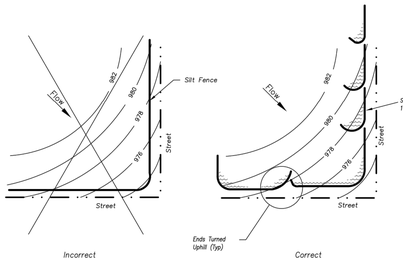
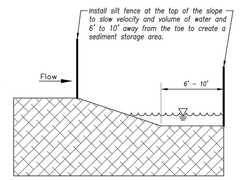
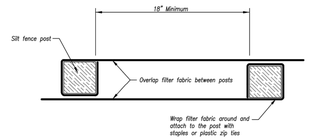


Figure A

SILT FENCE LAYOUT
Not to Scale

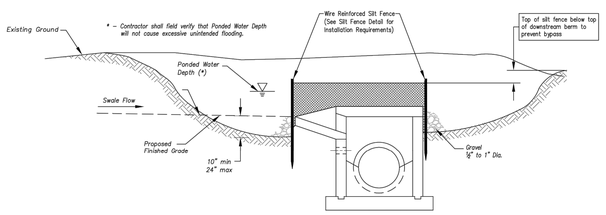




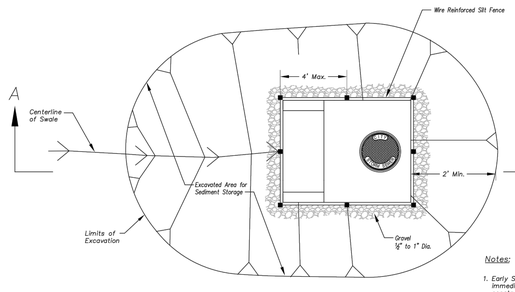
JOINING FENCE SECTIONS
Not to Scale

Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.

AMERICAN PUBLIC WORKS ASSOCIATION
Kansas City Metro Chapter
KANSAS CITY METRO CHAPTER
SILT FENCE
STANDARD DRAWING NUMBER ESC-03
ADOPTED: 10/24/2016

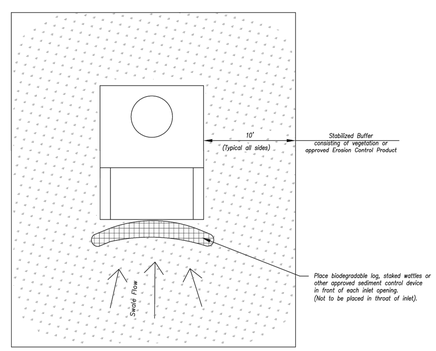


Section A–A
Not to Scale

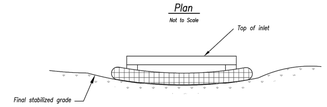


Plan
Not to Scale

EARLY STAGE AREA INLET
(All open boxes and inlets not at final grade)



Plan
Not to Scale



Front View

LATE STAGE AREA INLET
(Area inlets at final grade and existing inlets)

Notes:

1. Early Stage Area Inlet Sediment Barrier to be installed immediately after inlet or junction box is constructed.
2. Silt fence shall remain in place until excavated area is removed and Late Stage Area Inlet is being installed.
3. Backfill excavated area ONLY after final grading of the site. Stabilization of the site is to immediately follow.
4. Wire reinforced silt fence may be used in place of silt fence attached to wood frame.

Maintenance:

1. Remove deposited sediment from excavated storage areas when available storage has been reduced by 20%.
2. Remove deposited sediment from filter socks or similar when any accumulation of sediment is visible.
3. Repair or replace as necessary to maintain function and integrity of installation.

Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.

AMERICAN PUBLIC WORKS ASSOCIATION
Kansas City Metro Chapter
KANSAS CITY METRO CHAPTER
AREA INLET AND JUNCTION BOX PROTECTION
STANDARD DRAWING NUMBER ESC-07
ADOPTED: 10/24/2016

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785.341.9747

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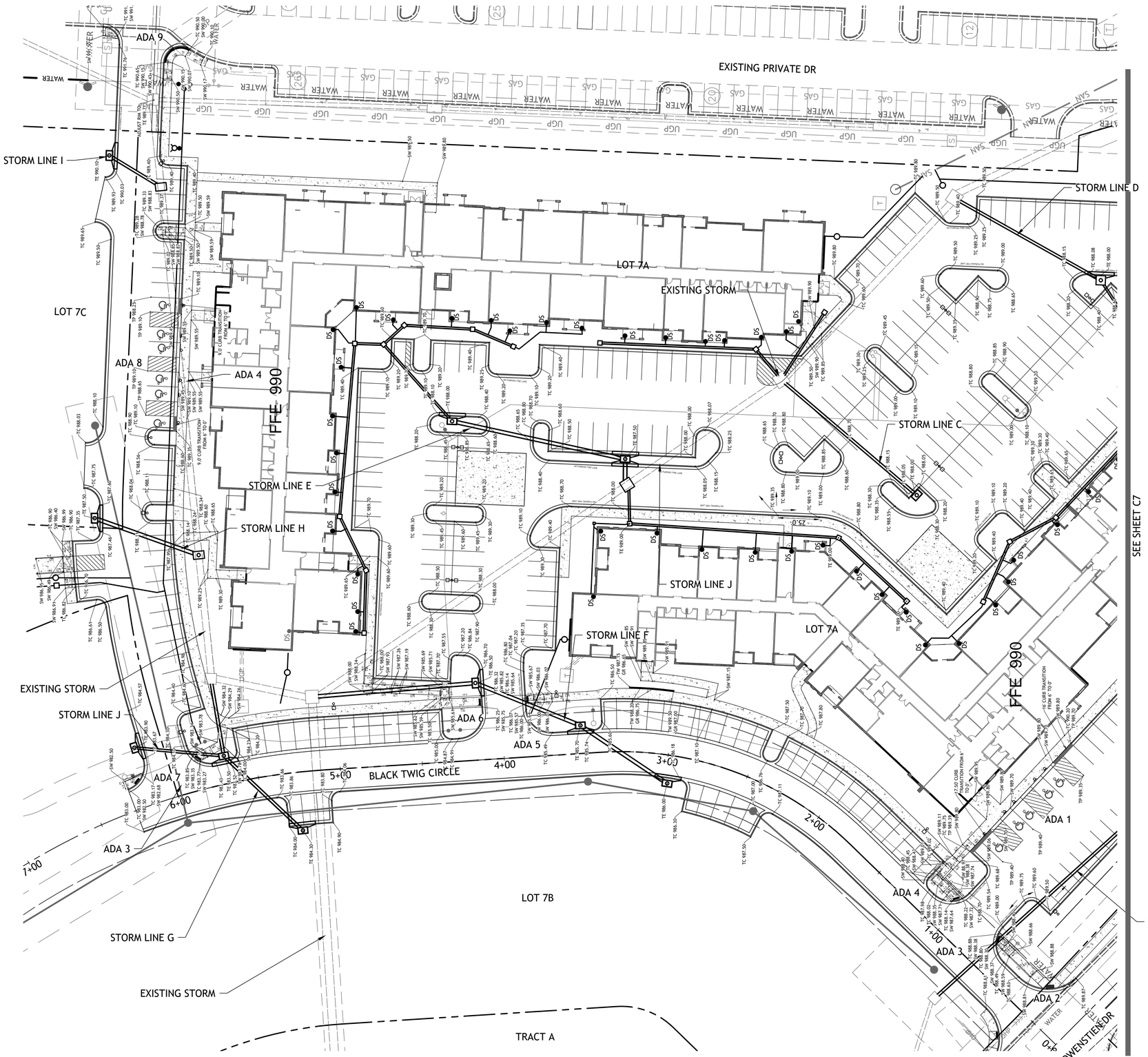
STATE OF MISSOURI
S. D. WISKIRCHEN
E-27201
PROFESSIONAL ENGINEER
6-22-21

Revisions
6-4-21 CITY COMMENTS
6-22-21 CITY COMMENTS

STREETS OF W. PRYOR
LOT 7A
LEES SUMMITT, MO.

sheet
C7.0
Civil
EROSION DETAILS
permit
5 MAY 2021



LEGEND

TC	TOP OF CURB ELEVATION
TE	TOP ELEVATION OF STRUCTURE
TP	TOP OF PAVEMENT ELEVATION
SW	TO OF SIDEWALK ELEVATION
R	RAMP
L	LANDING

1"=30'

0 15' 30'

SM Engineering

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smcivilengr@gmail.com
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Revisions
6-4-21 CITY COMMENTS
6-22-21 CITY COMMENTS

STREETS OF W. PRYOR LOT 7A

LEE'S SUMMITT, MO.

sheet

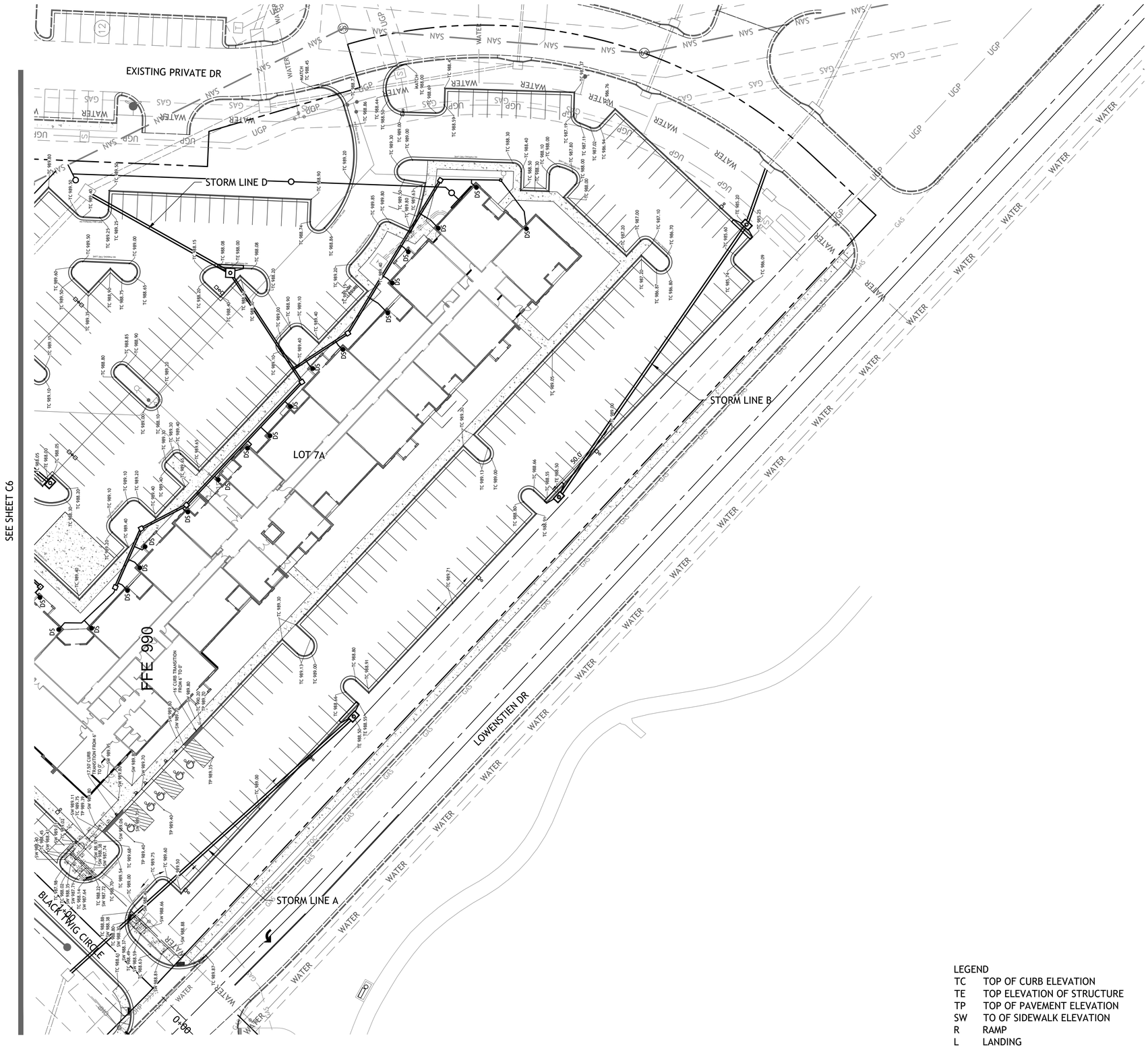
C8.0

Civil

SPOT GRADES

permit

5 MAY 2021



LEGEND

TC	TOP OF CURB ELEVATION
TE	TOP ELEVATION OF STRUCTURE
TP	TOP OF PAVEMENT ELEVATION
SW	TO OF SIDEWALK ELEVATION
R	RAMP
L	LANDING

1"=30'

0 15' 30'

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STATE OF KANSAS
S. D. DWSKI
PROFESSIONAL ENGINEER

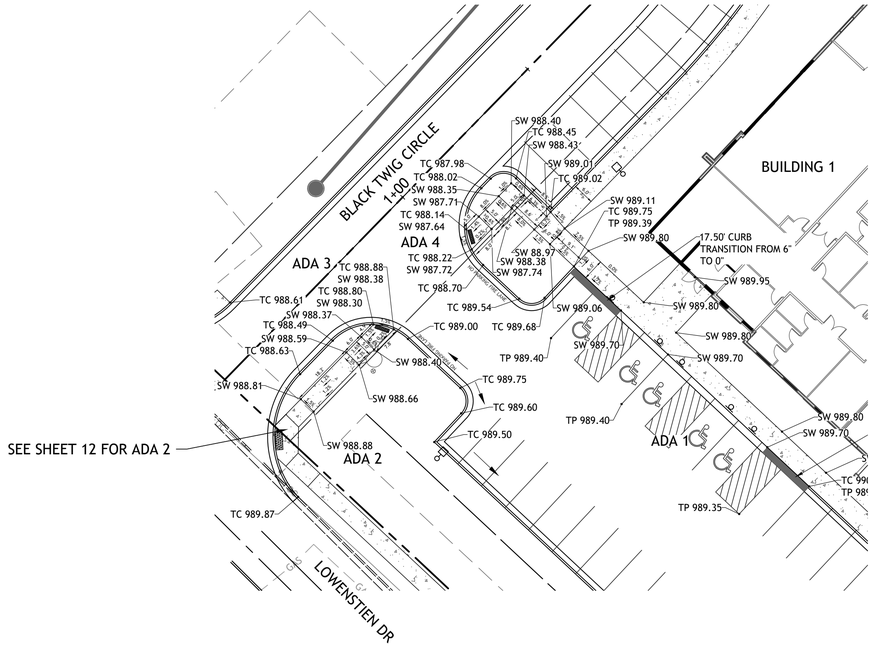
6-22-21

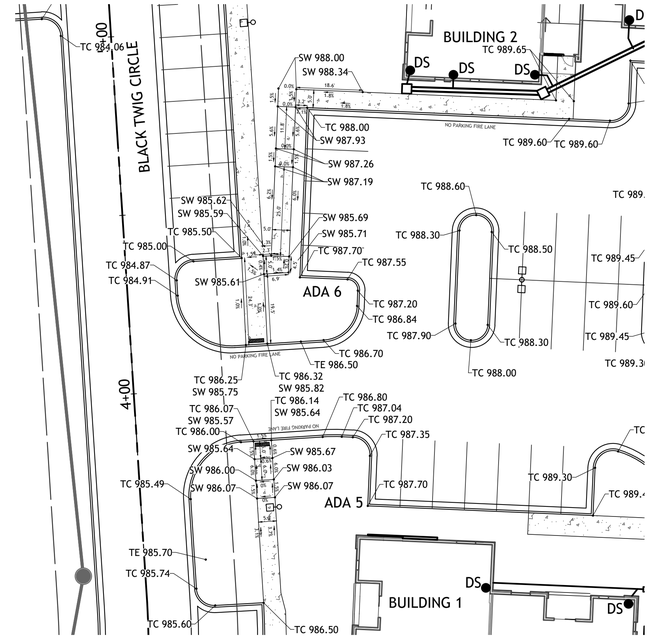
Revisions
6-4-21 CITY COMMENTS
6-22-21 CITY COMMENTS

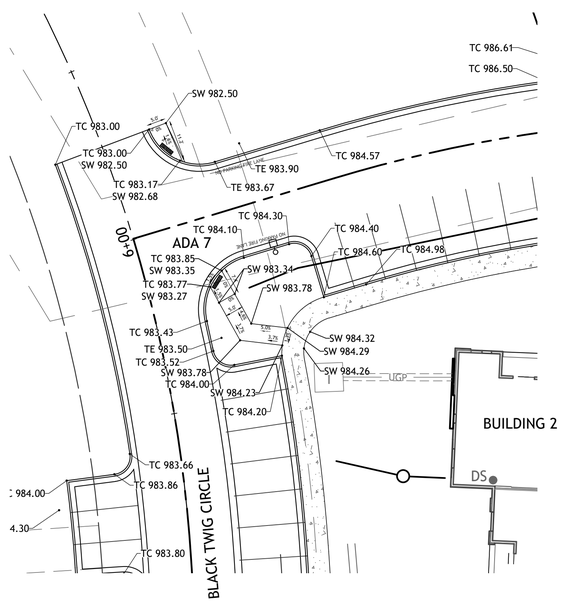
STREETS OF W. PRYOR LOT 7A

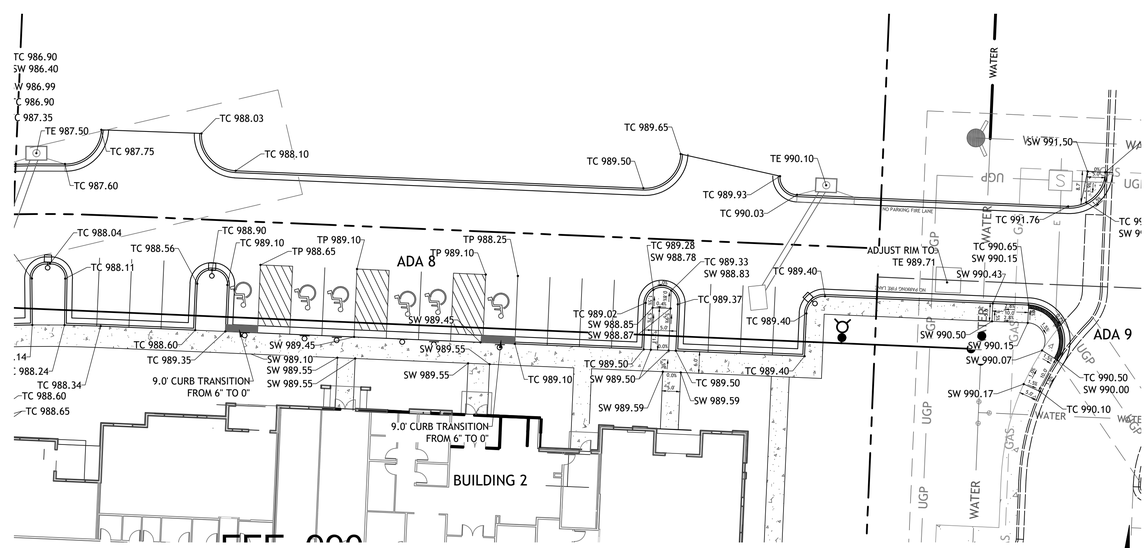
LEE'S SUMMITT, MO.

sheet
C9.0
Civil
SPOT GRADES
permit
5 MAY 2021









LEGEND

TC	TOP OF CURB ELEVATION
TE	TOP ELEVATION OF STRUCTURE
TP	TOP OF PAVEMENT ELEVATION
SW	TO OF SIDEWALK ELEVATION
R	RAMP
L	LANDING

1"=20'
0 10' 20'

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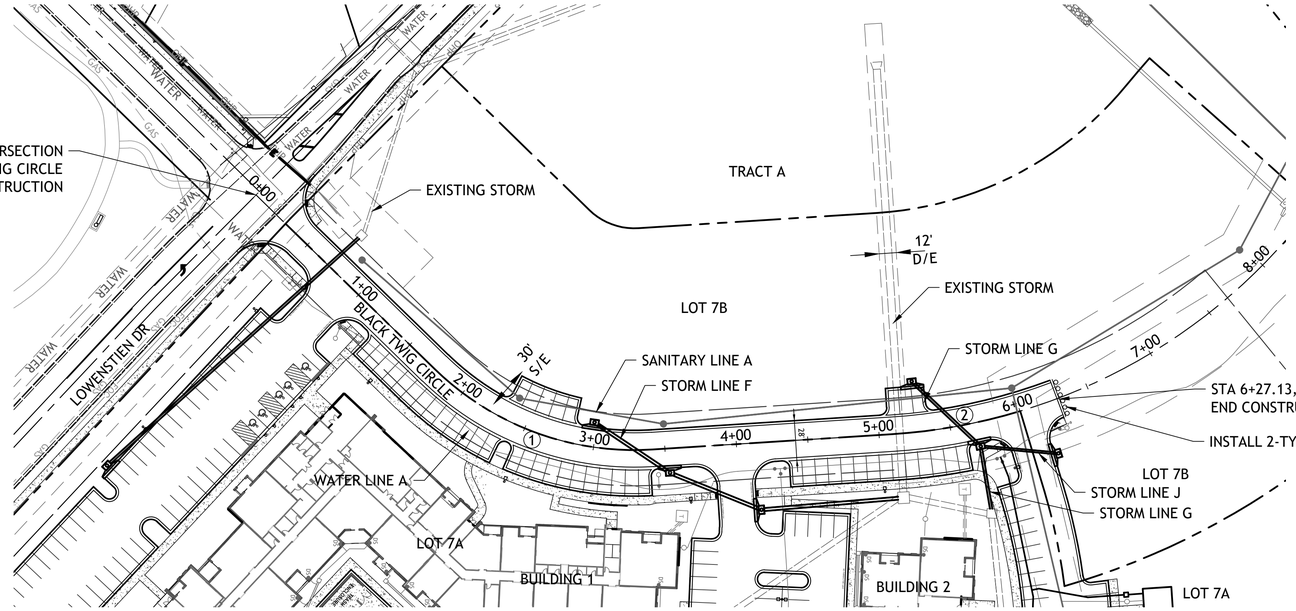
Revisions
6-4-21 CITY COMMENTS
6-22-21 CITY COMMENTS

STREETS OF W. PRYOR LOT 7A

LEES SUMMITT, MO.

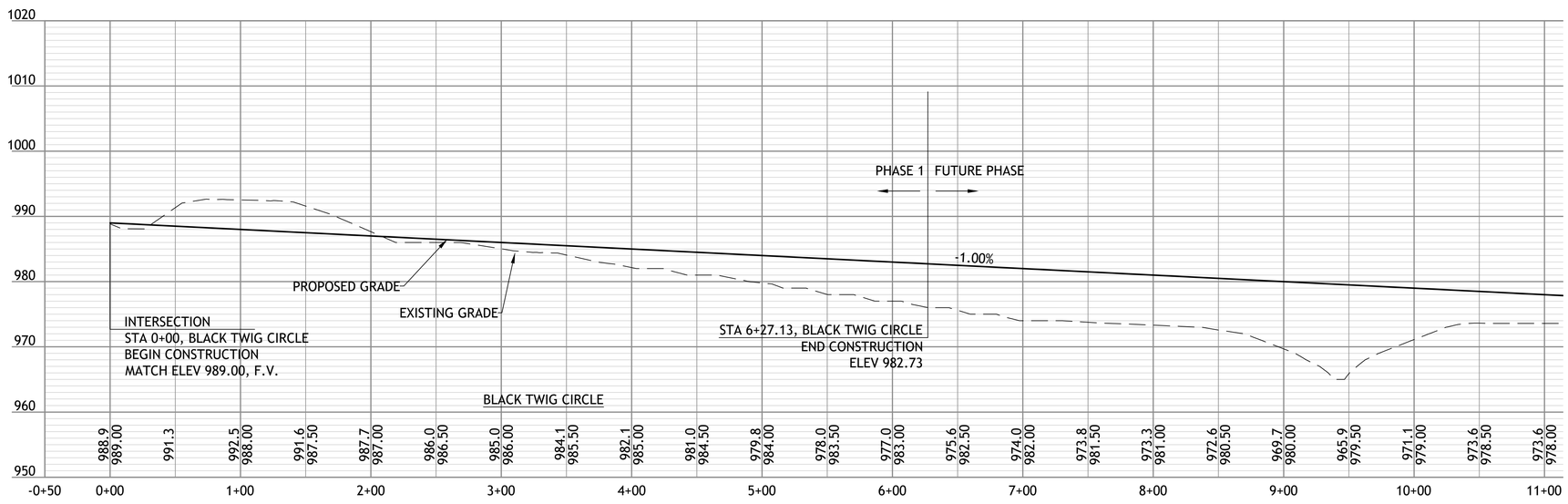
sheet
C10.0
Civil
ADA SPOT GRADES
permit
5 MAY 2021

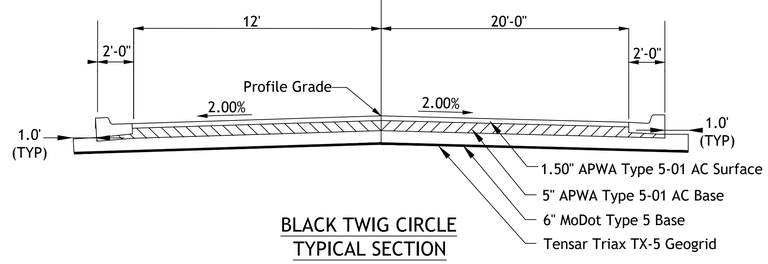


CURVE NO. 1
P.I. STA 2+57.69
Δ = 47° 55' 35"
R = 200.00'
T = 88.89'
L = 167.29'

CURVE NO. 2
P.I. STA 6+37.04
Δ = 47° 4' 28"
R = 400.00'
T = 174.23'
L = 328.64'

1"=50'
0 25' 50'





BLACK TWIG CIRCLE
TYPICAL SECTION
NTS

1"=50'
0 25' 50'
1"=10'
0 5' 10'

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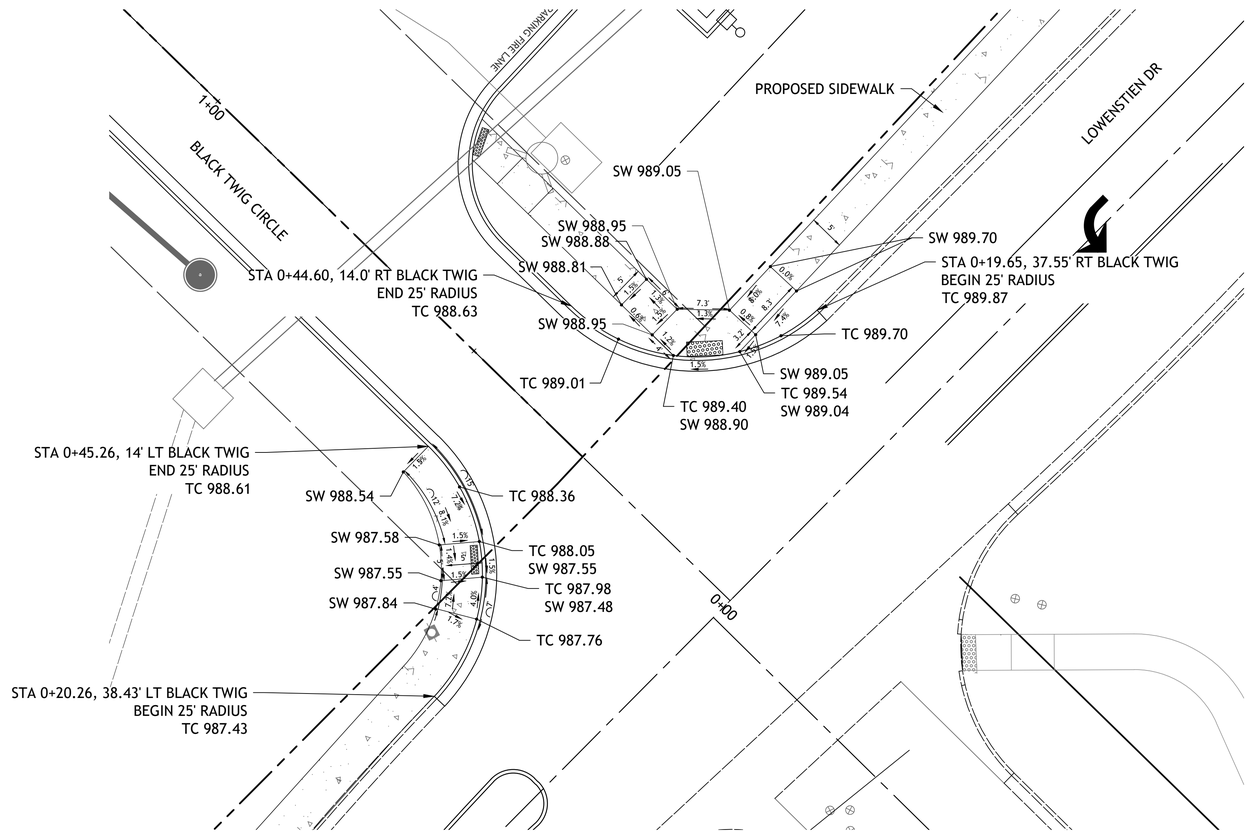
STATE OF MISSOURI
S. D. DUSKIN
E-27201
PROFESSIONAL ENGINEER
6-22-21

Revisions
6-4-21 CITY COMMENTS
6-22-21 CITY COMMENTS

STREETS OF W. PRYOR
LOT 7A
LEE'S SUMMITT, MO.

sheet
C11.0
Civil
BLACK TWIG CIRCLE
PLAN AND PROFILE
permit
5 MAY 2021



LEGEND

TC	TOP OF CURB ELEVATION
TE	TOP ELEVATION OF STRUCTURE
TP	TOP OF PAVEMENT ELEVATION
SW	TO OF SIDEWALK ELEVATION
R	RAMP
L	LANDING

1"=10'

0 5' 10'

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STATE OF MISSOURI
S. D. WISKIRCHEN
E-27201
PROFESSIONAL ENGINEER

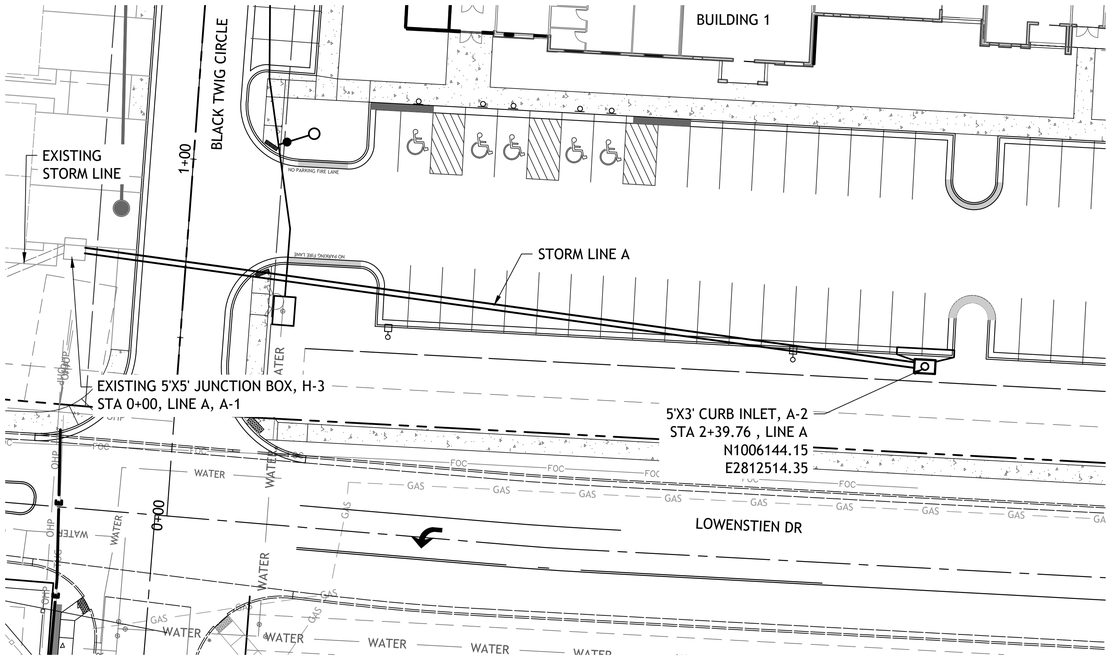
6-22-21

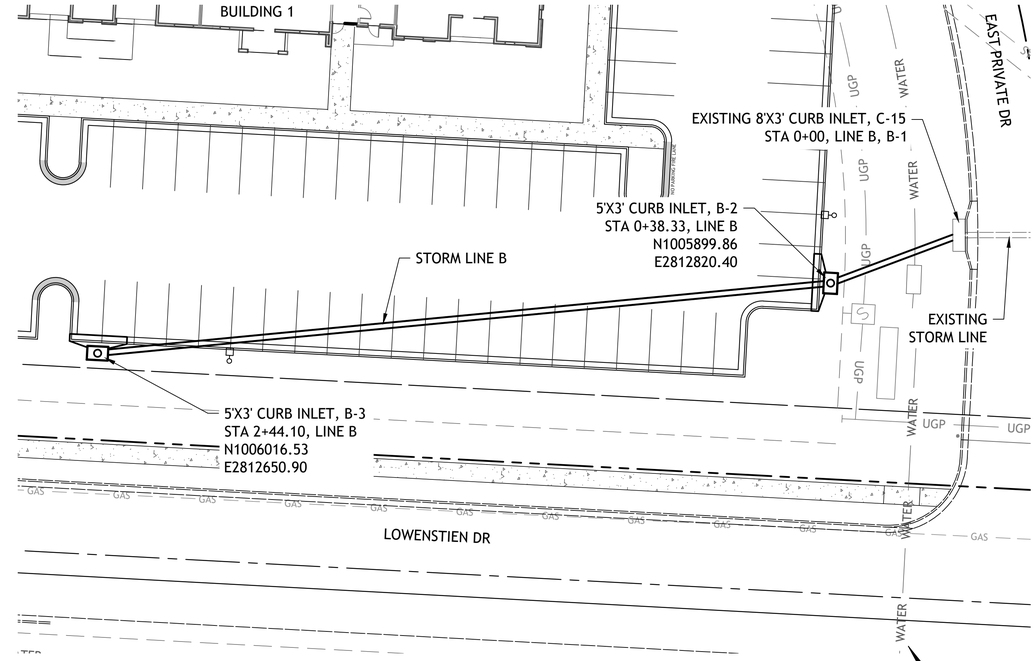
Revisions
6-4-21 CITY COMMENTS
6-22-21 CITY COMMENTS

STREETS OF W. PRYOR
LOT 7A

LEE'S SUMMITT, MO.

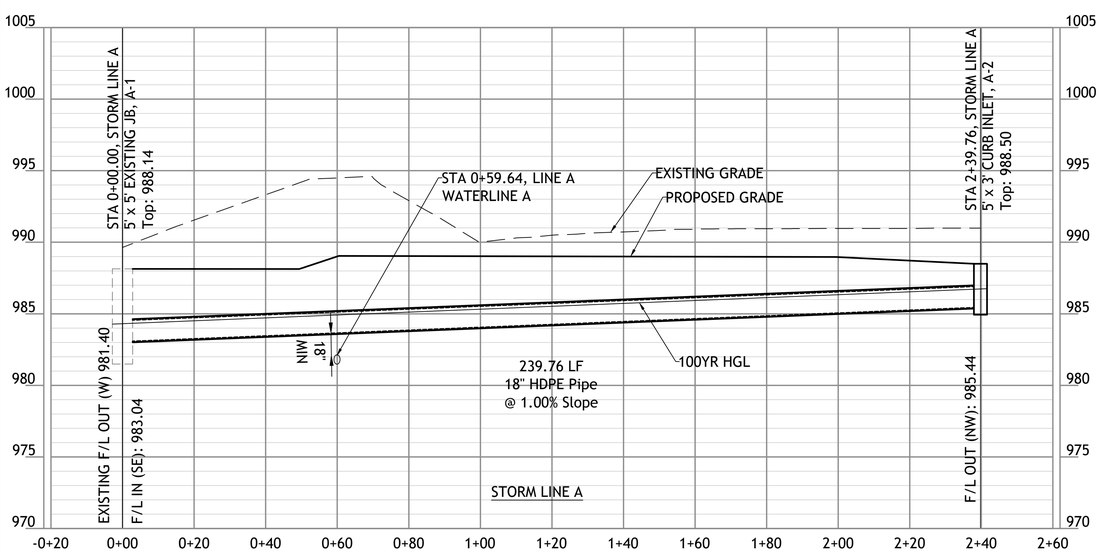
sheet
C12.0
Civil
INTERSECTION DETAIL
permit
5 MAY 2021

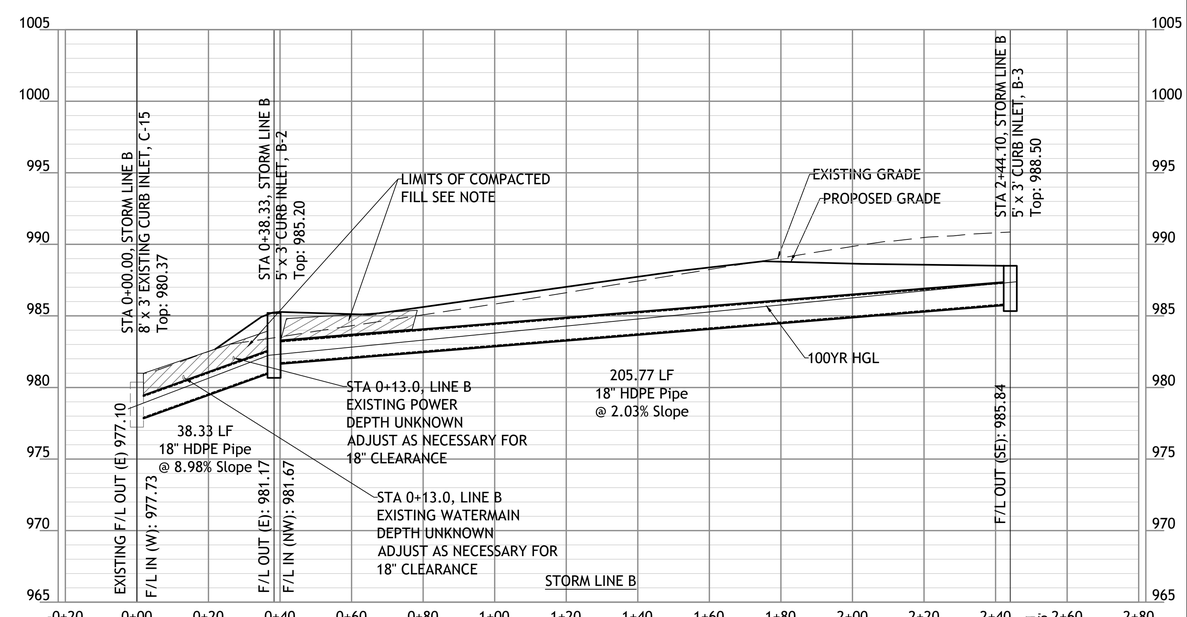




NOTE:
COMPACTED FILL SHALL BE PLACED TO A MINIMUM OF
18" ABOVE THE TOP OF PIPE PRIOR TO INSTALLATION

1"=20'
0 10' 20'





1"=5'
0 2.5' 5'

1"=20'
0 10' 20'

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Revisions
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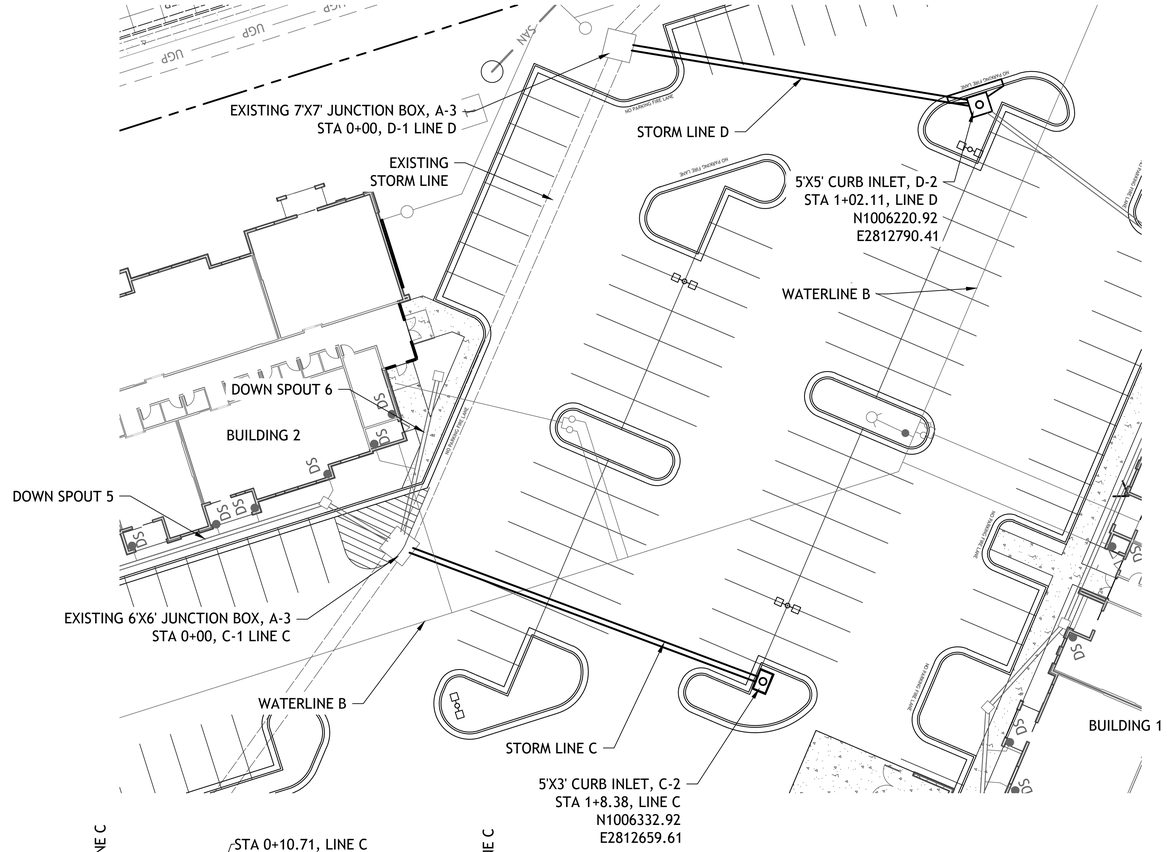
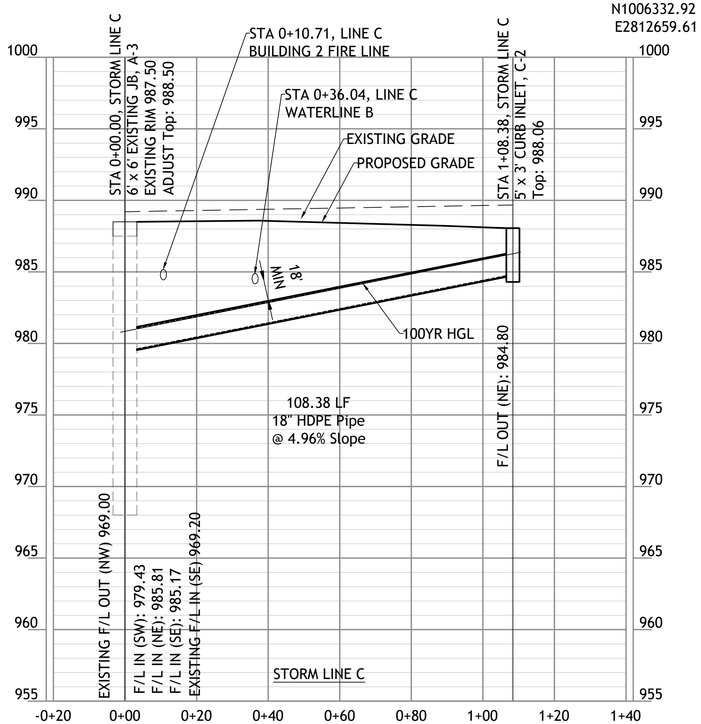
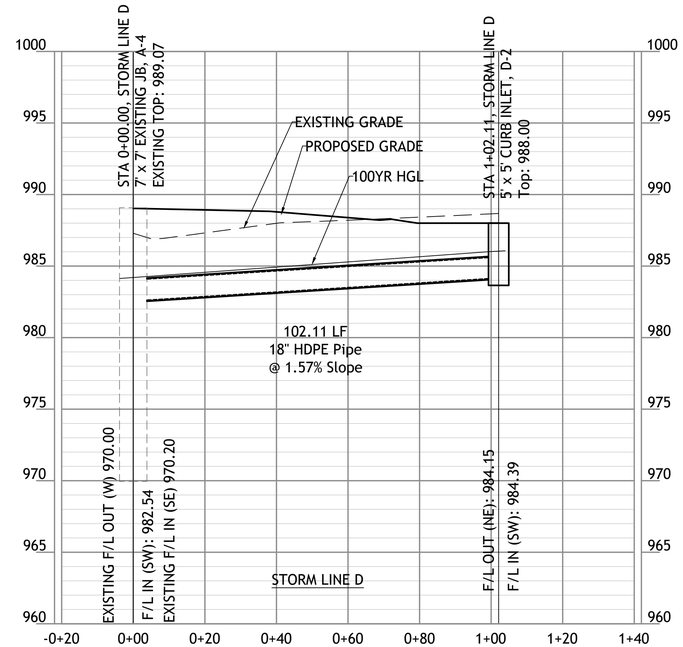
STREETS OF W. PRYOR
LOT 7A
LEE'S SUMMITT, MO.

sheet
C13.0
Civil
STORM LINE A & B
PLAN AND PROFILE
permit
5 MAY 2021







1"=20'
0 10' 20'

1"=10'
0 5' 10'

1"=50'
0 25' 50'

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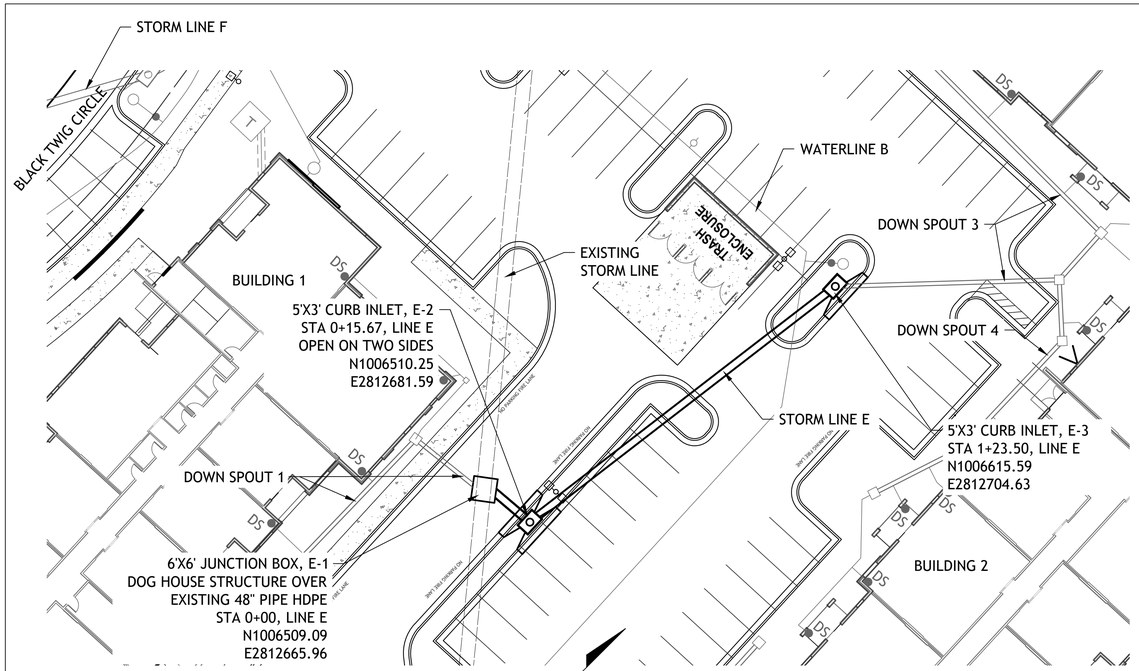
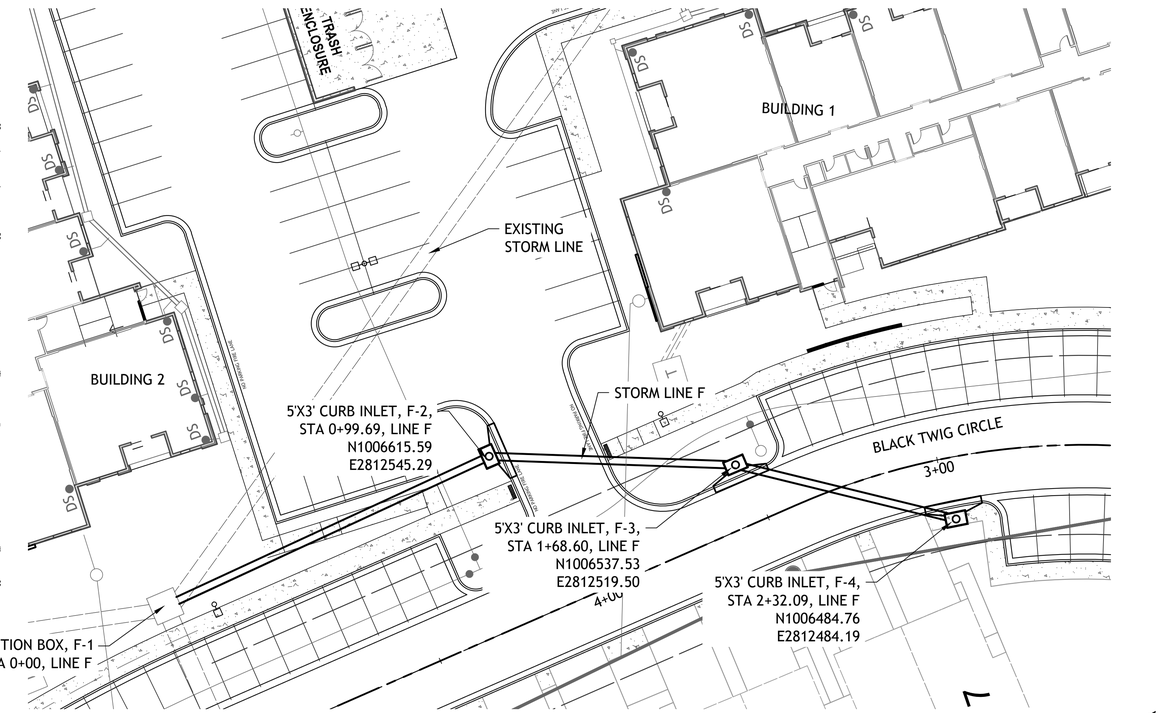
STATE OF MISSOURI
S. D. WISKIRCHEN
NUMBER
E-29201
PROFESSIONAL ENGINEER
6-22-21

Revisions
6-4-21 CITY COMMENTS
6-22-21 CITY COMMENTS

STREETS OF W. PRYOR
LOT 7A
LEE'S SUMMITT, MO.

sheet
C14.0
Civil
STORM LINE C & D
PLAN AND PROFILE
permit
5 MAY 2021





NOTE
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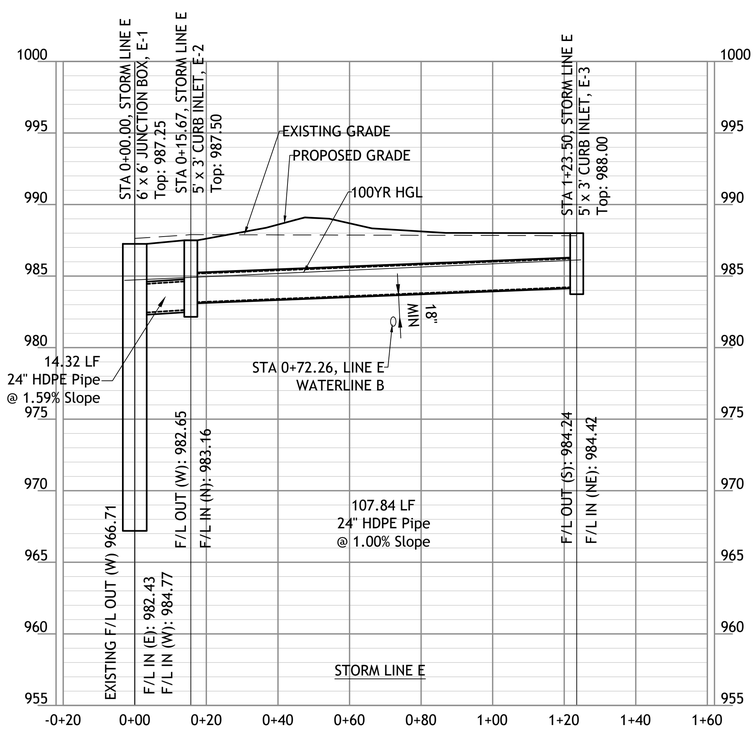
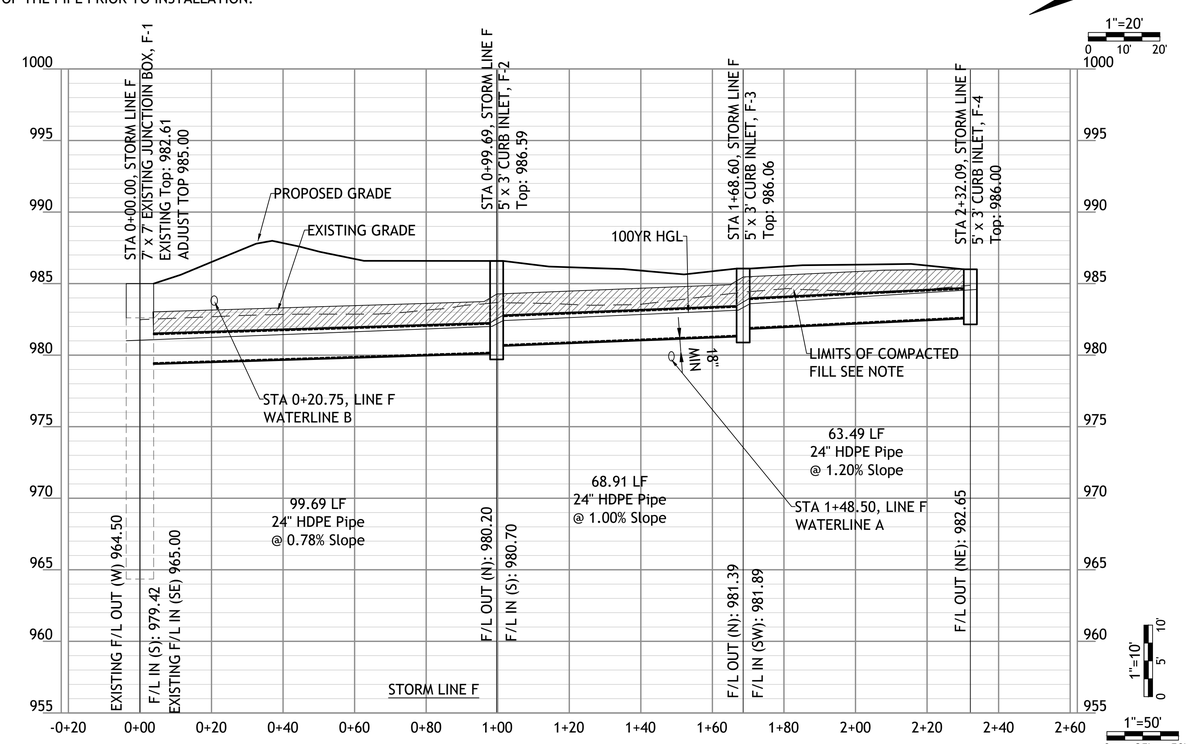
ABOVE THE TOP OF THE PIPE PRIOR TO INSTALLATION.





SM Engineering
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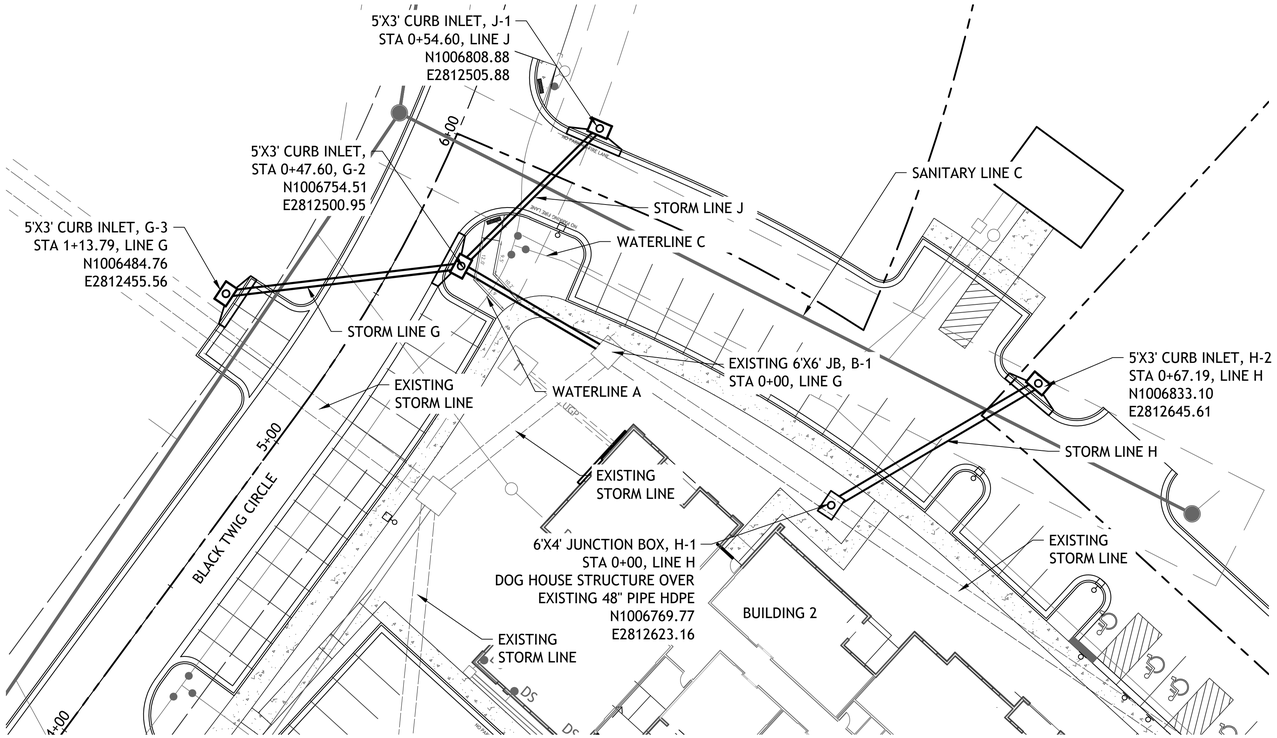
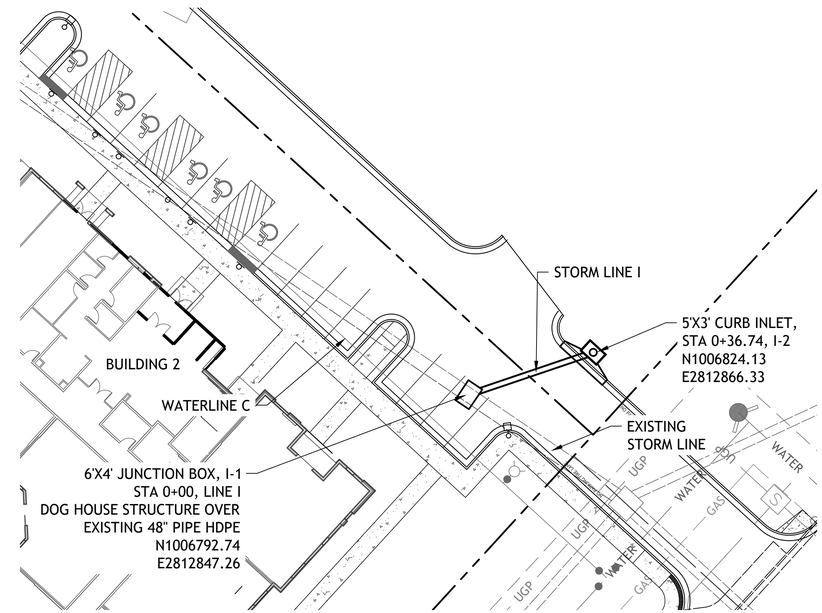
Revisions
6-4-21 CITY COMMENTS
6-22-21 CITY COMMENTS

STREETS OF W. PRYOR LOT 7A

LEES SUMMITT, MO.

sheet
C15.0
Civil
STORM LINE E & F
PLAN AND PROFILE
permit
5 MAY 2021





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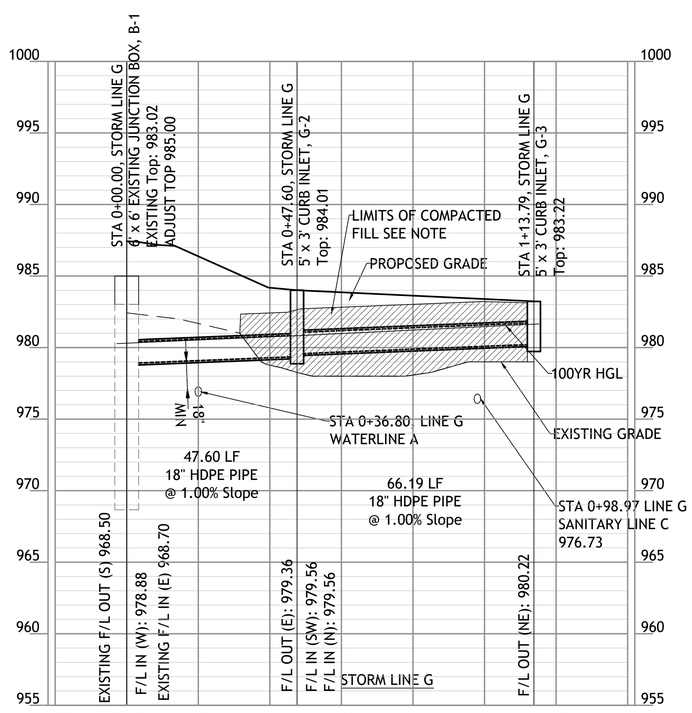
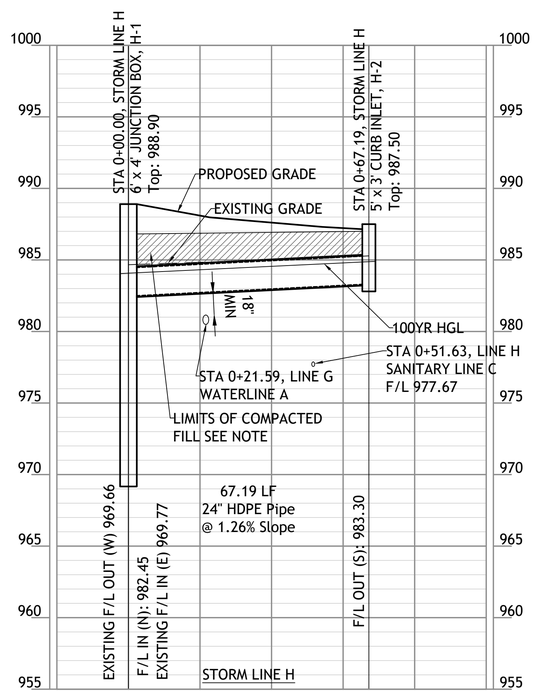
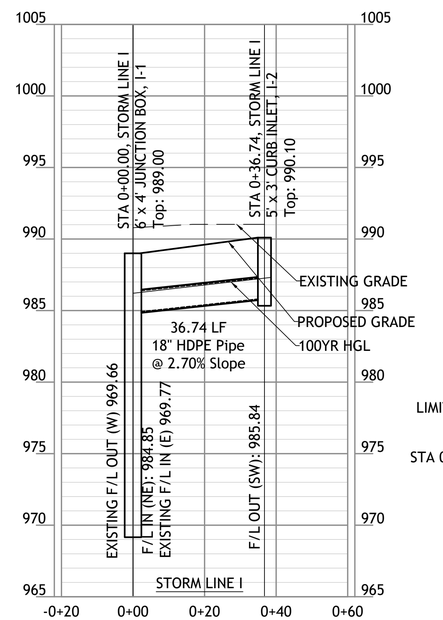
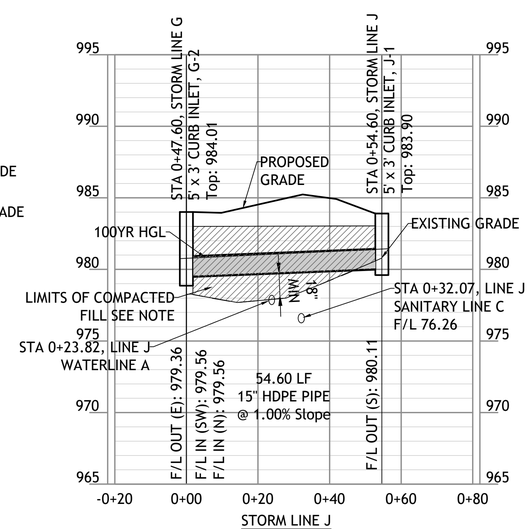
1"=20'
0 10' 20'









1"=5'
0 2.5' 5'

1"=20'
0 10' 20'

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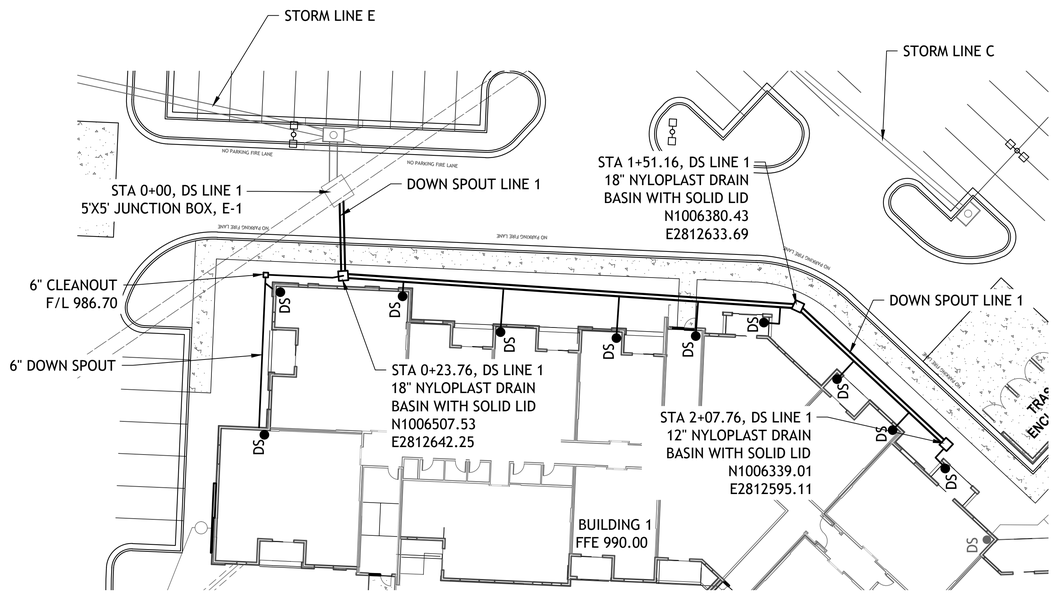
STATE OF MISSOURI
SCOTT D. DUNSKI
NUMBER A-2001038620
PROFESSIONAL ENGINEER
6-22-21

Revisions
6-4-21 CITY COMMENTS
6-22-21 CITY COMMENTS

STREETS OF W. PRYOR
LOT 7A
LEE'S SUMMITT, MO.

sheet
C16.0
Civil
STORM LINE G, H, I & J
PLAN AND PROFILE
permit
5 MAY 2021



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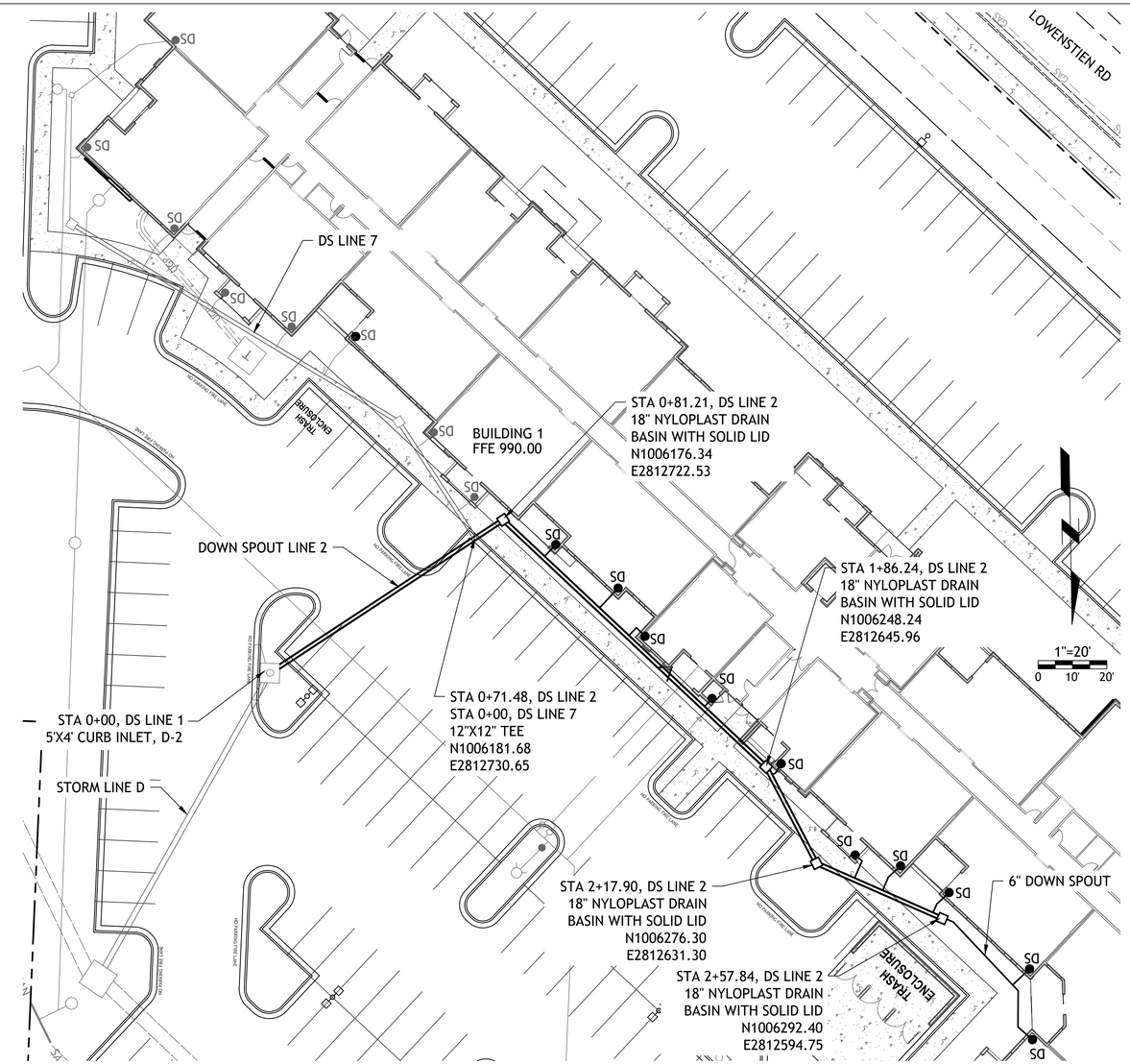

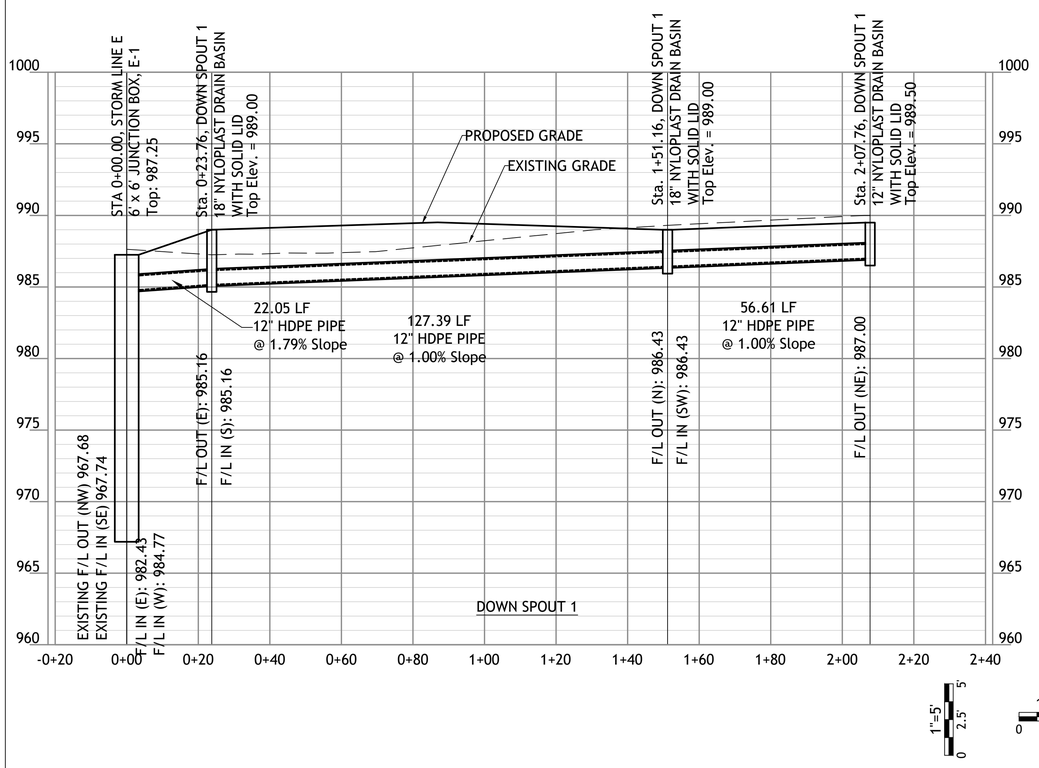

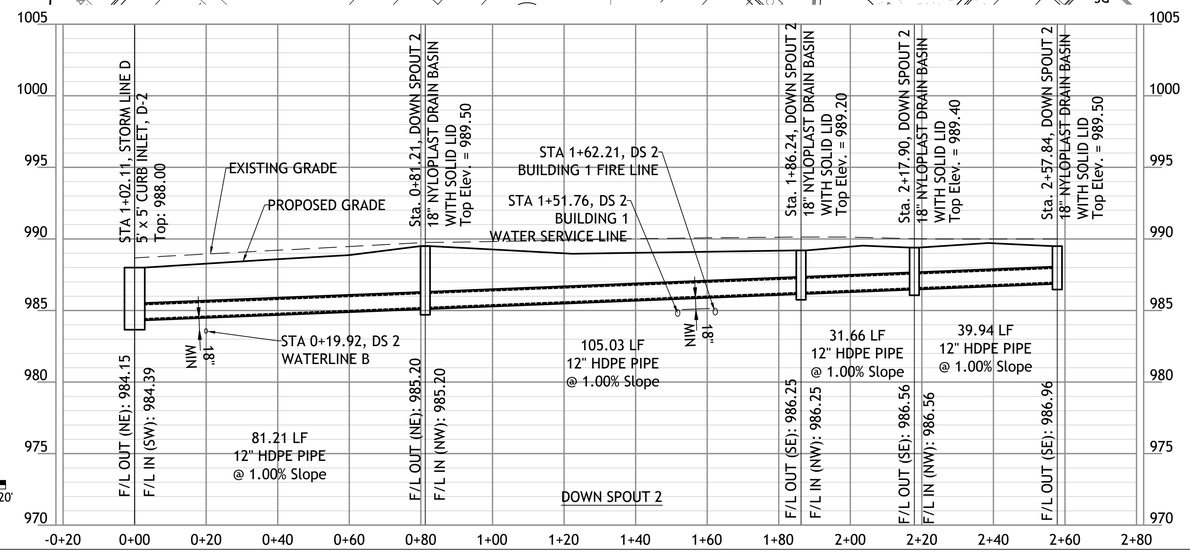

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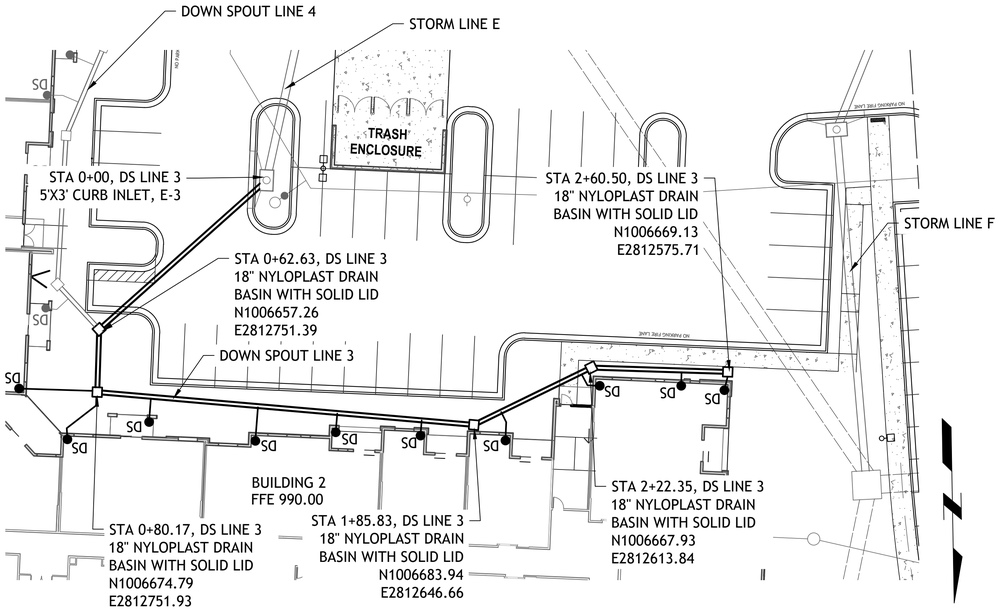
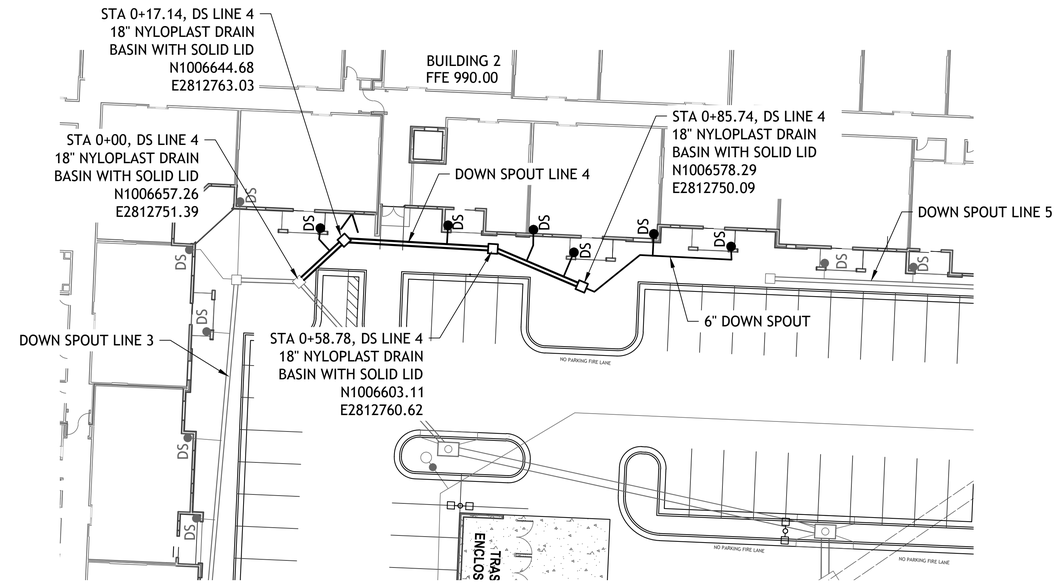
6-4-21 CITY COMMENTS
6-22-21 CITY COMMENTS

STREETS OF W. PRYOR
LOT 7A
LEE'S SUMMITT, MO.

sheet
C17.0
Civil
DOWN SPOUT 1 & 2
PLAN AND PROFILE
permit
5 MAY 2021





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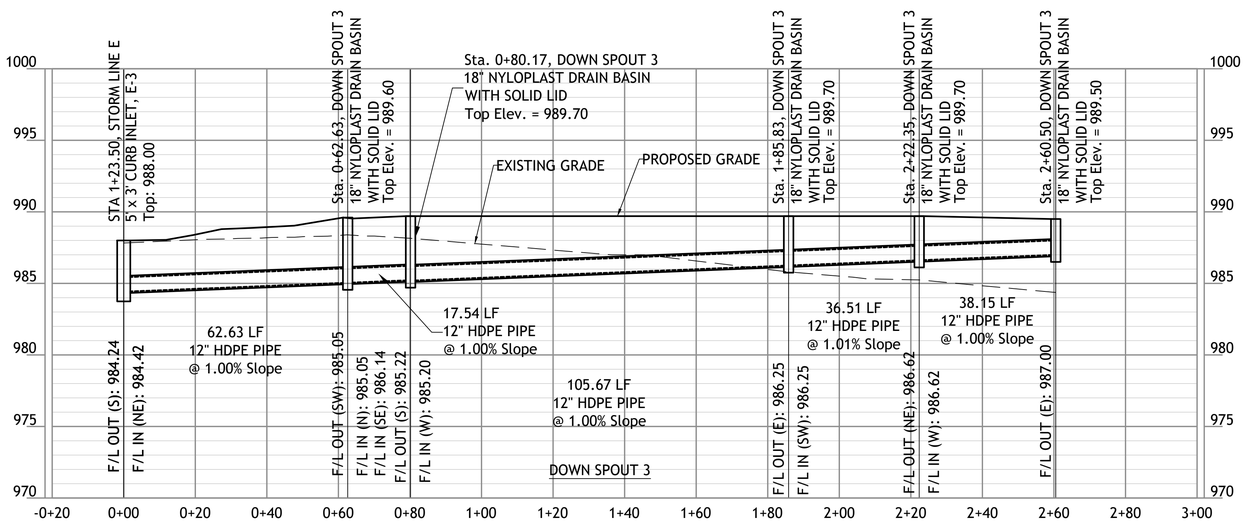

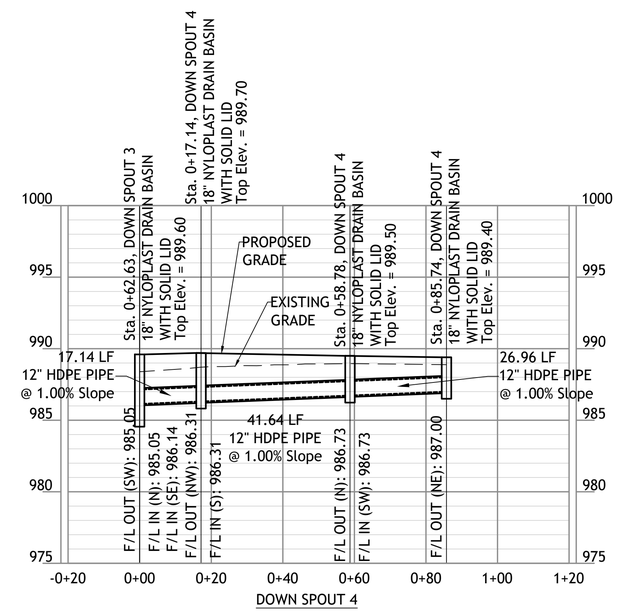

1"=5'
0 2.5' 5'

1"=20'
0 10' 20'

DS = DOWN SPOUT

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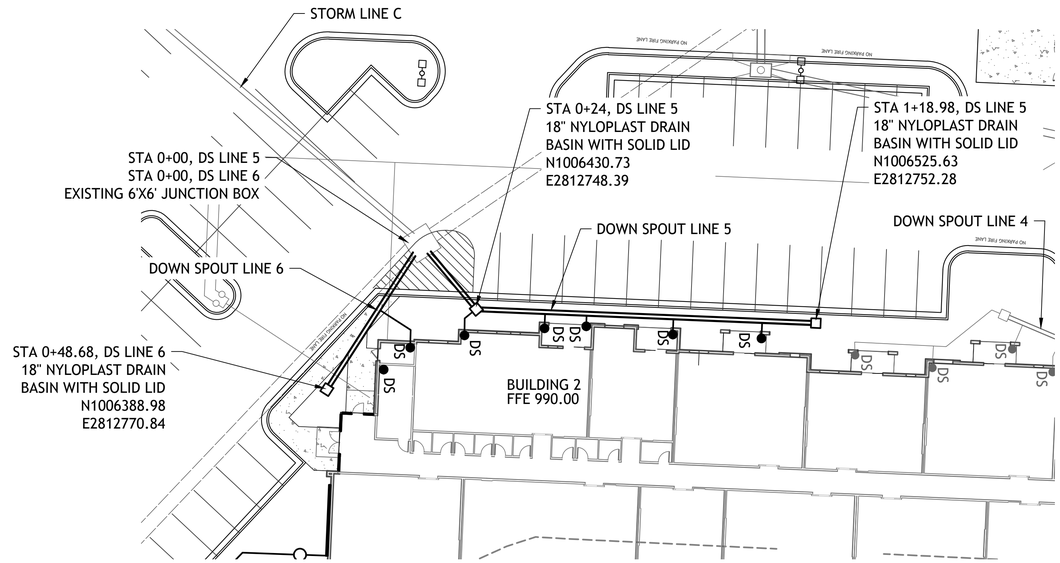
STATE OF KANSAS
S. D. WISK
PROFESSIONAL ENGINEER
6-22-21

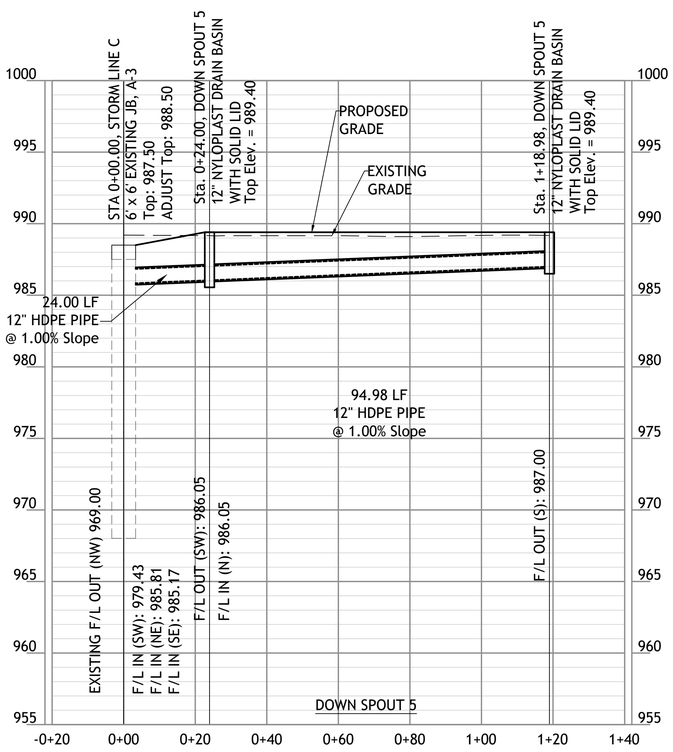
Revisions
6-4-21 CITY COMMENTS
6-22-21 CITY COMMENTS

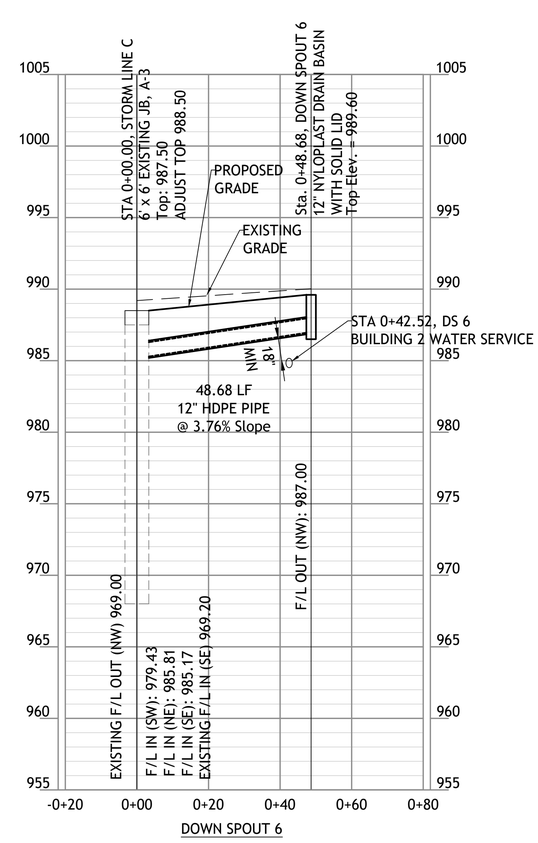
STREETS OF W. PRYOR
LOT 7A

LEE'S SUMMITT, MO.

sheet
C18.0
Civil
DOWN SPOUT 3 & 4
PLAN AND PROFILE
permit
5 MAY 2021







1"=20'
0 10' 20'

1"=5'
0 2.5' 5'

1"=20'
0 10' 20'

DS = DOWN SPOUT

SM Engineering
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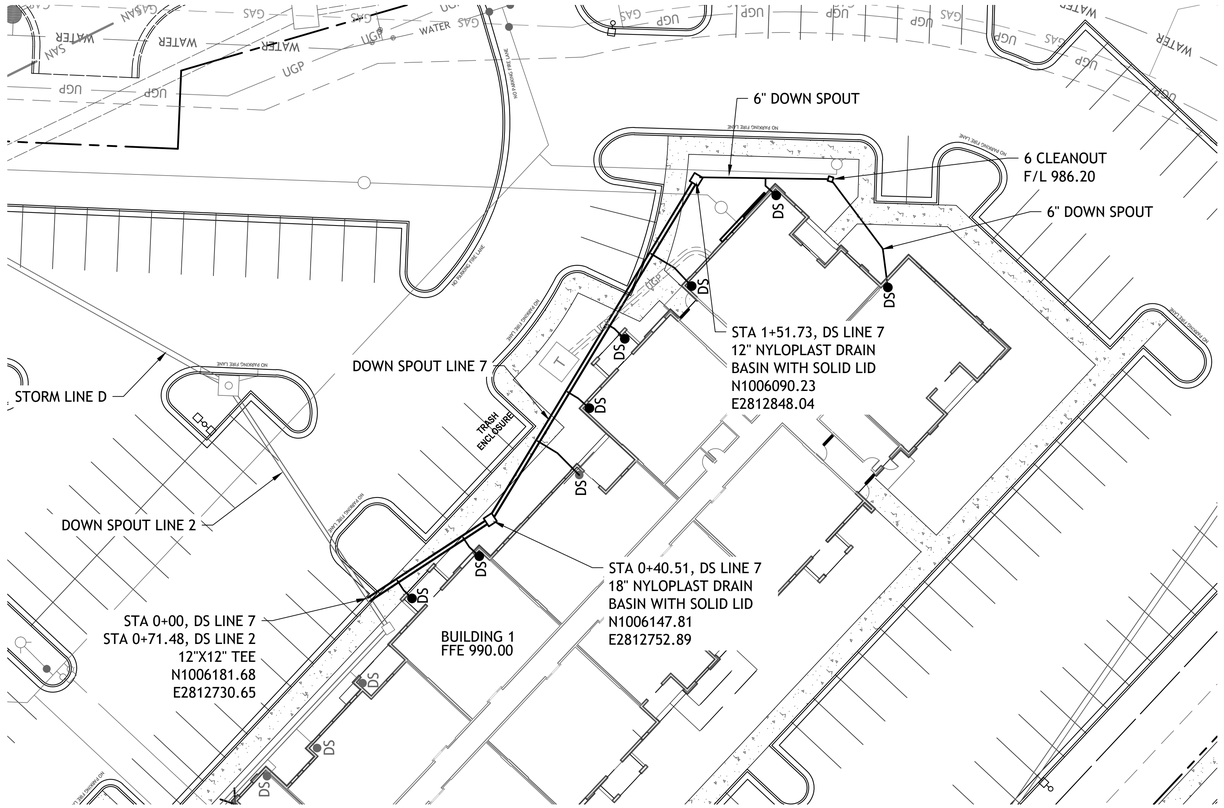
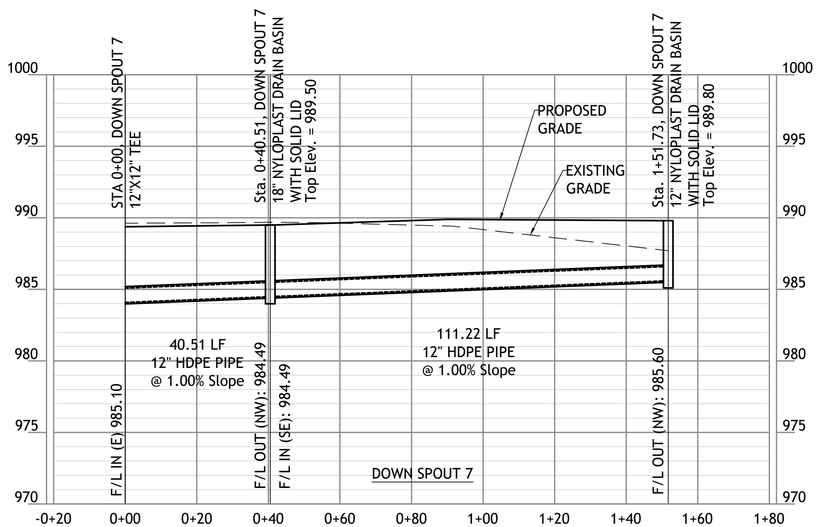
STATE OF KANSAS
S. D. WISKIRCHEN
NO. 16201
PROFESSIONAL ENGINEER
6-22-21

Revisions
6-4-21 CITY COMMENTS
6-22-21 CITY COMMENTS

STREETS OF W. PRYOR
LOT 7A
LEE'S SUMMITT, MO.

sheet
C19.0
Civil
DOWN SPOUT 5 & 6
PLAN AND PROFILE
permit
5 MAY 2021





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0 10' 20'

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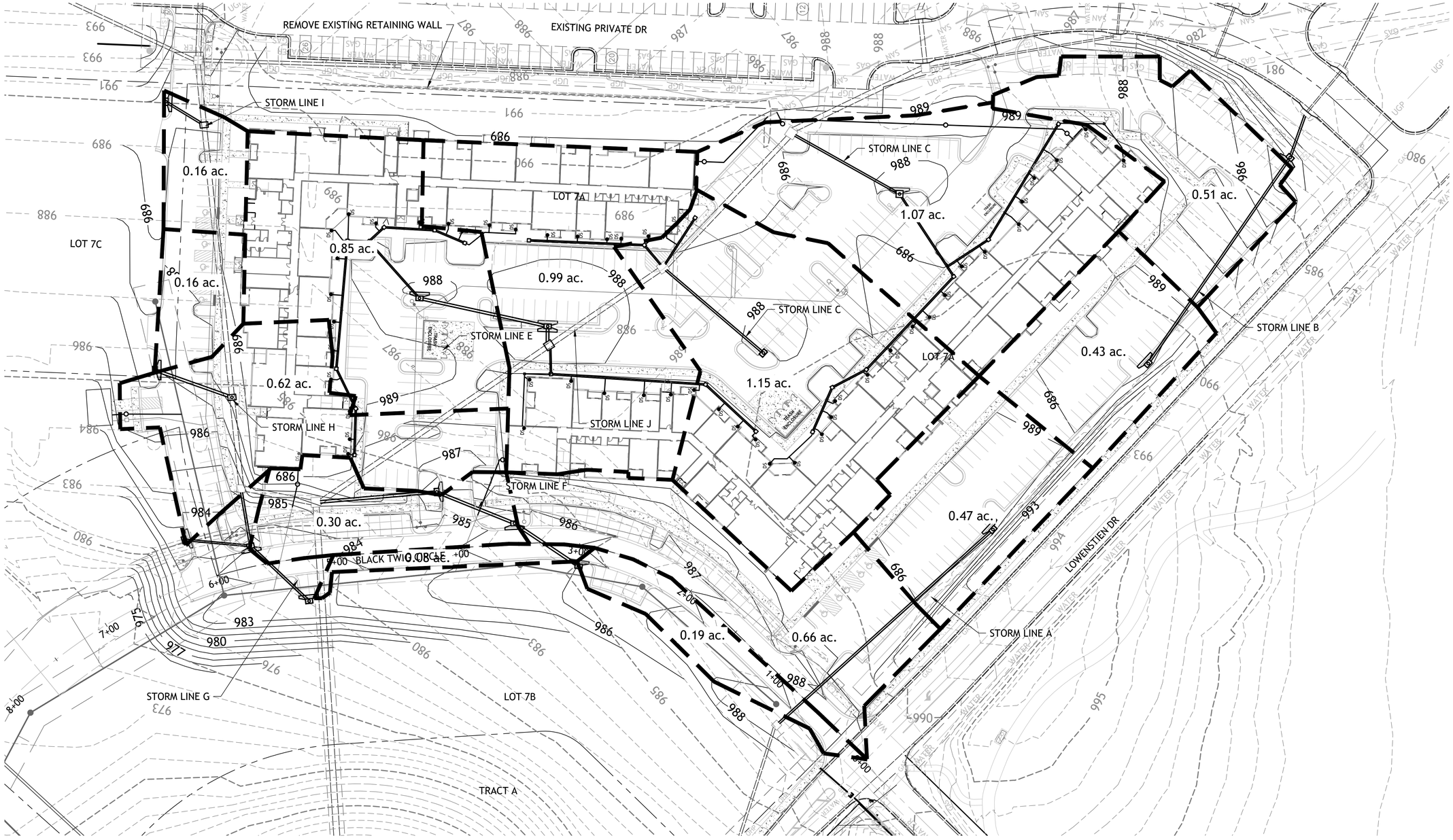
STATE OF MISSOURI
S. D. WISKIRCHEN
E-27201
PROFESSIONAL ENGINEER
6-22-21

Revisions
6-4-21 CITY COMMENTS
6-22-21 CITY COMMENTS

STREETS OF W. PRYOR
LOT 7A
LEE'S SUMMITT, MO.

sheet
C20.0
Civil
DOWN SPOUT 7
PLAN AND PROFILE
permit
5 MAY 2021



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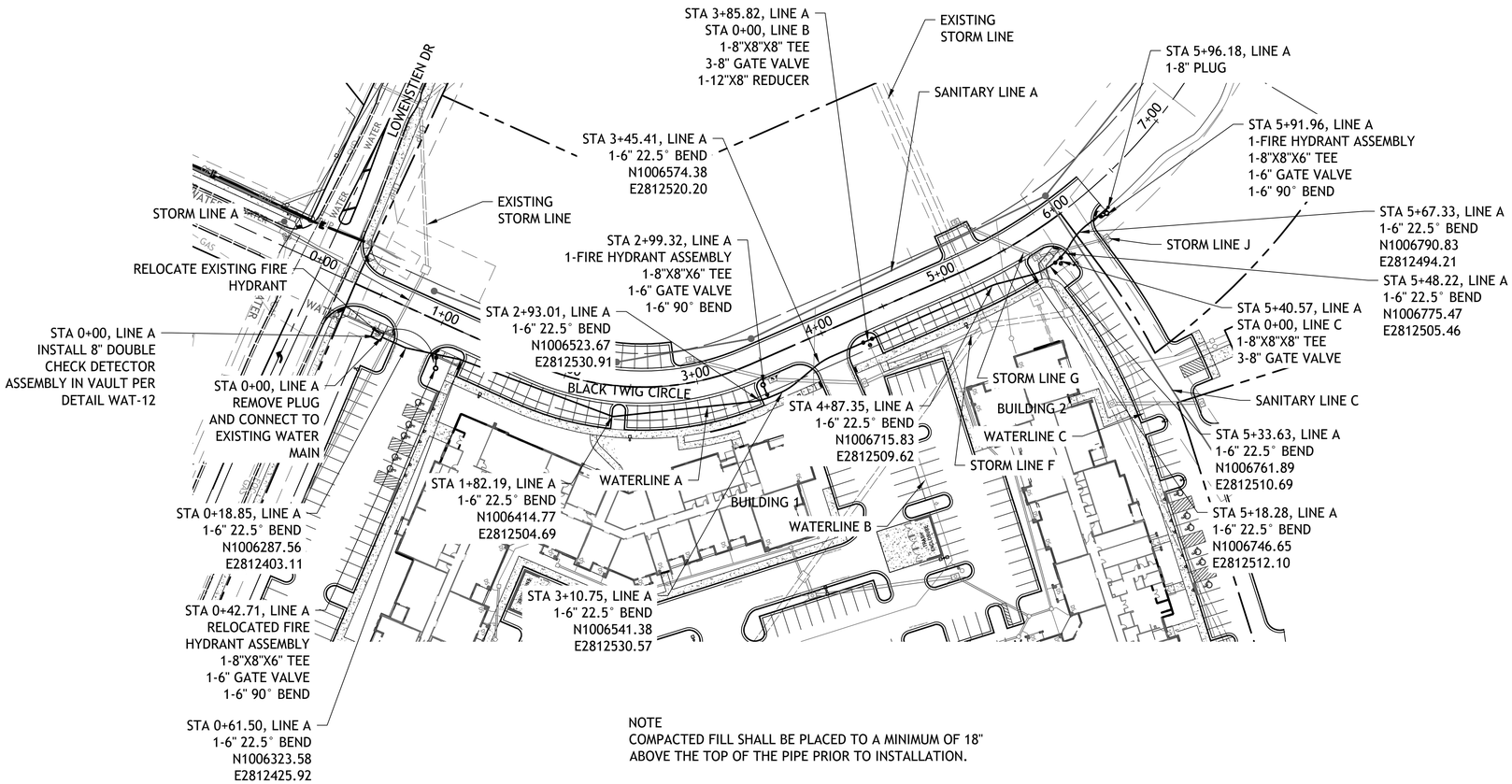
Revisions
6-4-21 CITY COMMENTS
6-22-21 CITY COMMENTS

STREETS OF W. PRYOR LOT 7A

LEE'S SUMMITT, MO.

1"=40'
0 20' 40'

sheet
C21.0
Civil
DRAINAGE PLAN
permit
5 MAY 2021



NOTE
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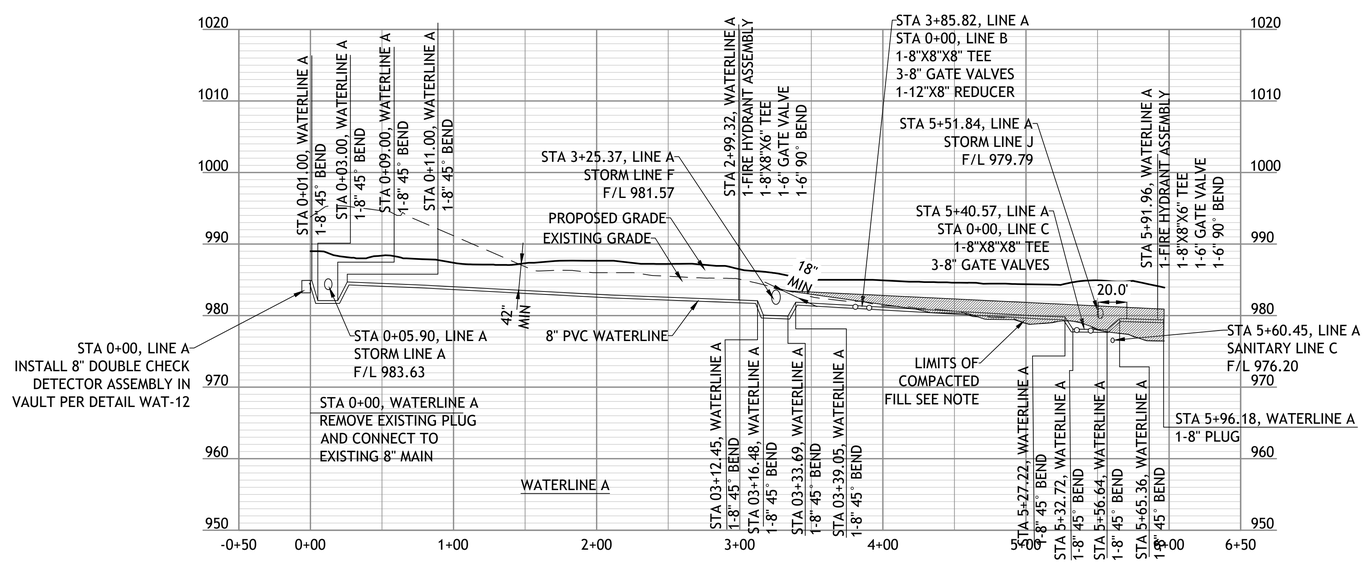
1"=50'
0 25' 50'



1"=10'
0 5' 10'

1"=50'
0 25' 50'

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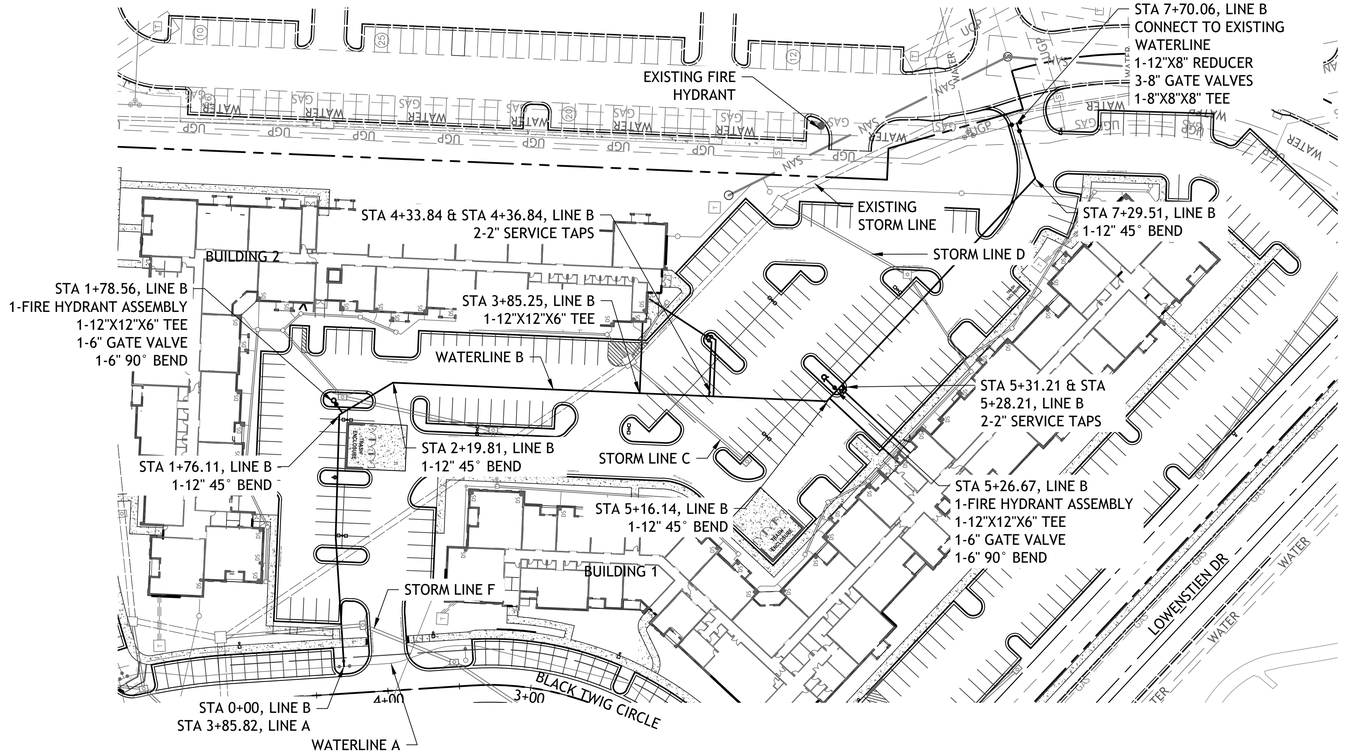
Revisions
6-4-21 CITY COMMENTS
6-22-21 CITY COMMENTS

STREETS OF W. PRYOR
LOT 7A
LEE'S SUMMITT, MO.

sheet
C22.0
Civil
WATERLINE A
PLAN AND PROFILE
permit
5 MAY 2021



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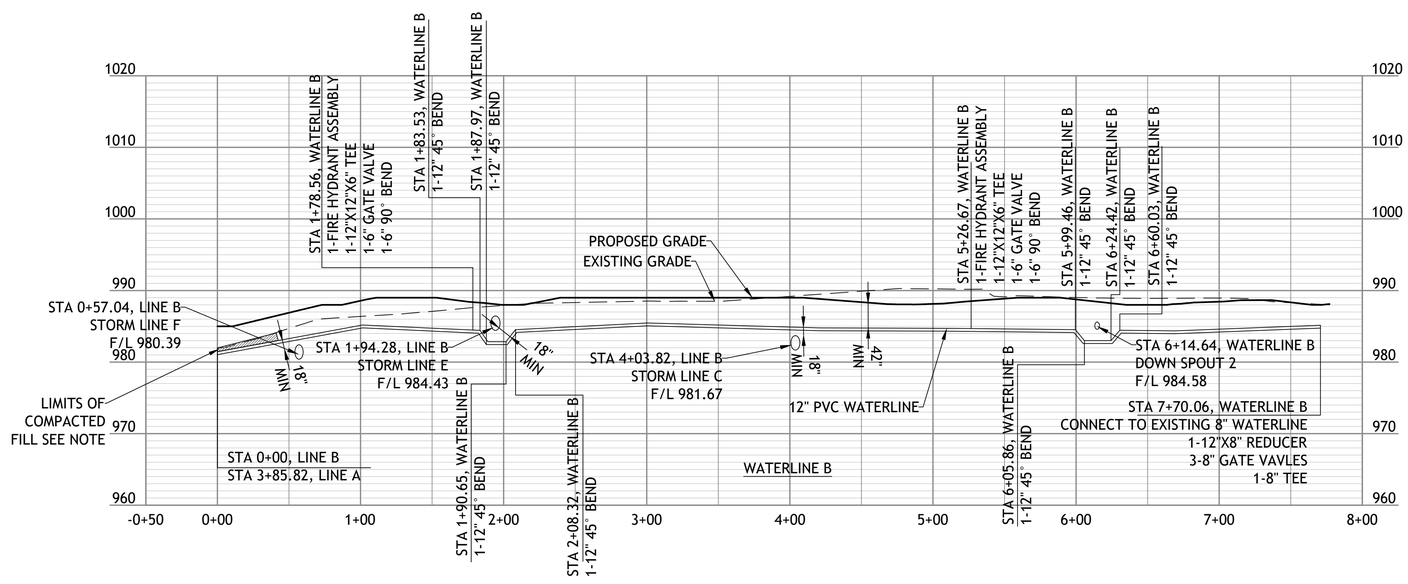

1"=50'
0 25' 50'

1"=10'
0 5' 10'

1"=50'
0 25' 50'

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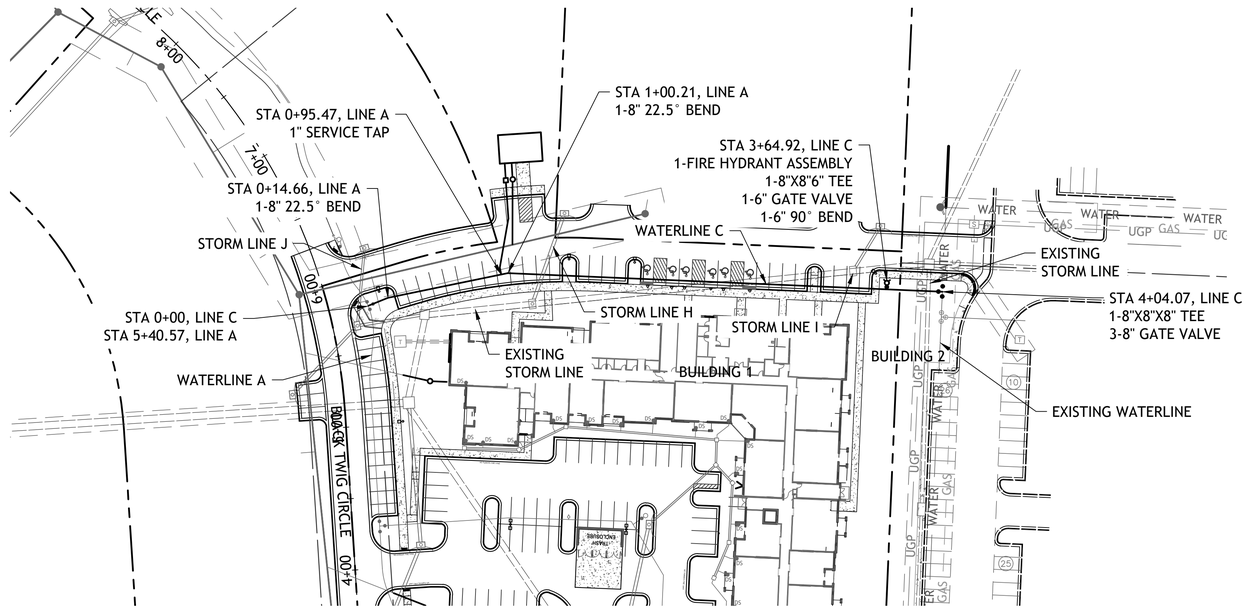
STATE OF KANSAS
S. D. WISKIRCHEN
NO. 16201
PROFESSIONAL ENGINEER
6-22-21

Revisions
6-4-21 CITY COMMENTS
6-22-21 CITY COMMENTS

STREETS OF W. PRYOR
LOT 7A
LEE'S SUMMITT, MO.

sheet
C23.0
Civil
WATERLINE B
PLAN AND PROFILE
permit
5 MAY 2021



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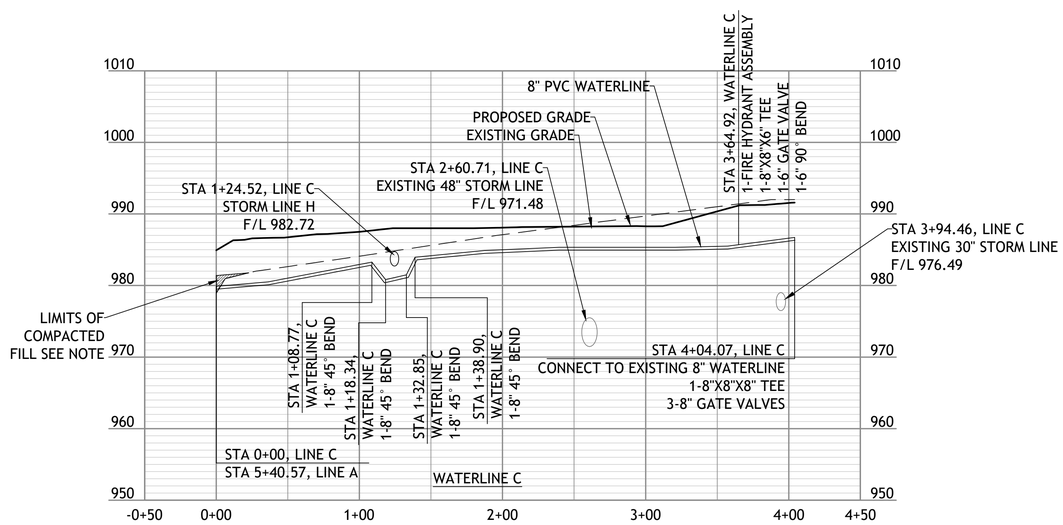

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0 25' 50'

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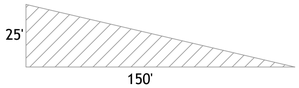
Revisions
6-4-21 CITY COMMENTS
6-22-21 CITY COMMENTS

STREETS OF W. PRYOR
LOT 7A
LEE'S SUMMITT, MO.

sheet
C24.0
Civil
WATERLINE C
PLAN AND PROFILE
permit
5 MAY 2021



SIGHT TRIANGLE

Shrub List

Symbol		Quantity	Common Name	Botanical Name	Size	Condition	Spacing
	—	160	Seagreen Juniper	Juniperus Chinensis 'Seagreen'	18"-24"sp.	Cont.	4'o.c.
	—	155	Dwarf Winged Euonymus	Euonymus Alatus 'Compactus'	18"-24"sp.	Cont.	4'o.c.
	—	114	Morning Light Maiden Grass	Miscanthos Sinensis 'Morning Light'	18"-24"sp.	Cont.	4'o.c.

Tree List

Symbol	Quantity	Common Name	Botanical Name	Size	Condition	Spacing
	52	October Glory Maple	Acer Rubrum 'October Glory'	3" cal	BB	As Shown
	52	Skyline Honeylocust	Gleditsia Triacanthos 'Skyline'	3" cal	BB	As Shown
	12	Golden Raintree	Koelreuteria Paniculata	3"cal	BB	As Shown
	19	Golden Raintree	Koelreuteria Paniculata	3"cal	BB	As Shown

LOT 7A SITE DATA:

LOWENSTEIN 658'
REQUIRED:
STREET TREES 1/30' = 22
PARKING LOT SHRUBS 12/40' = 197

PROVIDED:
SHADE TREES = 22
SHRUBS = 200

PRIVATE DR EAST 1,032'
REQUIRED:
STREET TREES 1/30' = 34
SHRUBS 2/20' = 52

PROVIDED:
SHADE TREES = 34
SHRUBS = 55

BLACK TWIG CIRCLE 571'
REQUIRED:
STREET TREES 1/30' = 19
SHRUBS 2/20' = 29

PROVIDED:
SHADE TREES = 19
SHRUBS = 30

INTERIOR PARKING
TOTAL PARKING SURFACE = 173,111 sf
REQUIRED
5% LANDSCAPE AREA = 8,655 sf
PROVIDED = 9,832 sf

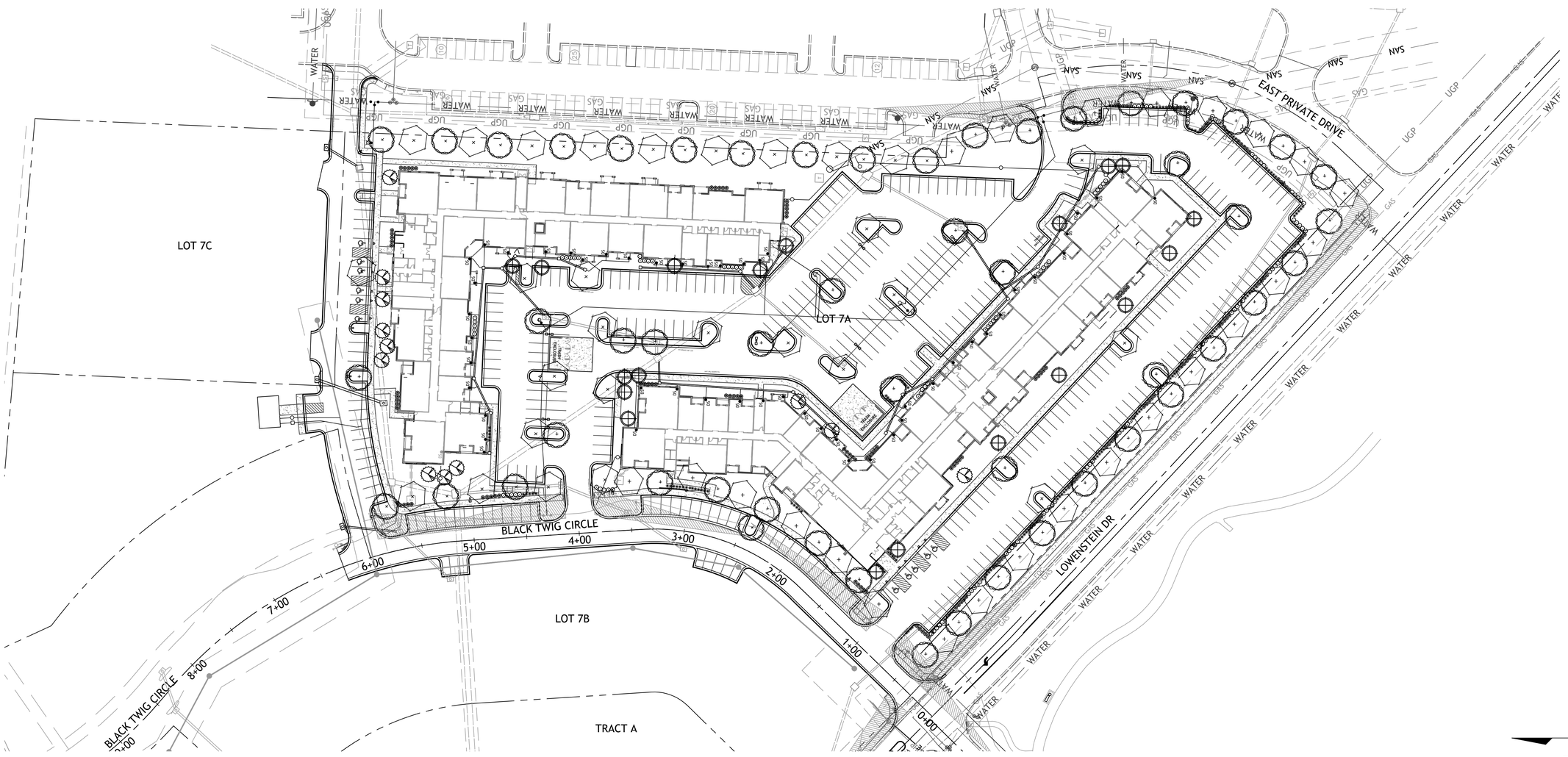
LOT 7A SITE DATA:

OPEN SPACE TREES
TOTAL SITE 9.34ac (406,422sf)
BUILDING AREA 83,700sf
OPEN SPACE 322,722sf

REQUIRED
1 / 5,000sf = 65

PROVIDED
SHADE TREES = 35
ORNAMENTALS = 31

OPEN SPACE SHRUBS
REQUIRED
2 / 5,000sf = 130
PROVIDED = 130



1"=50'
0 25' 50'

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Revisions
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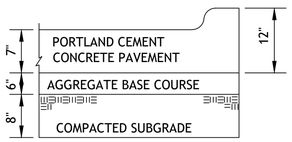
6-22-21 CITY COMMENTS

STREETS OF W. PRYOR
LOT 7A
LEE'S SUMMITT, MO.

sheet
C25.0
Civil
LANDSCAPE PLAN
permit
5 MAY 2021

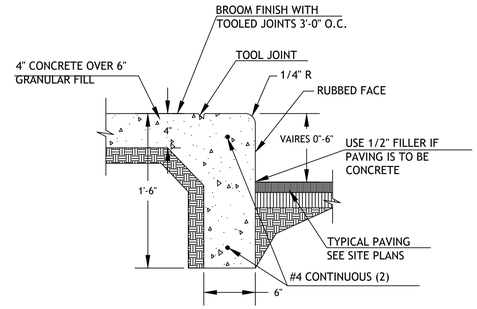


HEAVY DUTY CONCRETE PV3

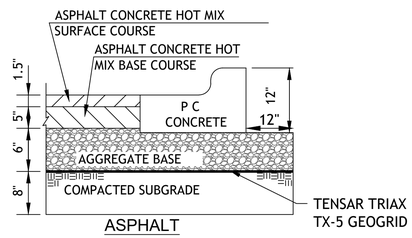
1. FLEXIBLE PAVEMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MISSOURI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.

ASPHALT SURFACE COURSE - APWA TYPE 3-01
ASPHALT BASE COURSE - APWA TYPE 2-01
AGGREGATE BASE MoDOT TYPE 5 OR EQUIVALENT

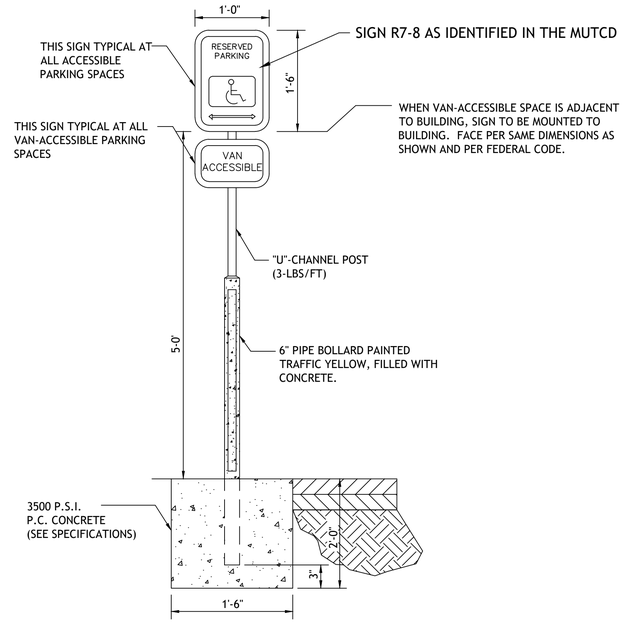
2. PORTLAND CEMENT CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS WITH 6% ENTRAINED AIR ±2% AND SHALL MEET OR EXCEED THE SPECIFICATIONS SET FORTH IN THE LATEST EDITION OF THE MISSOURI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.



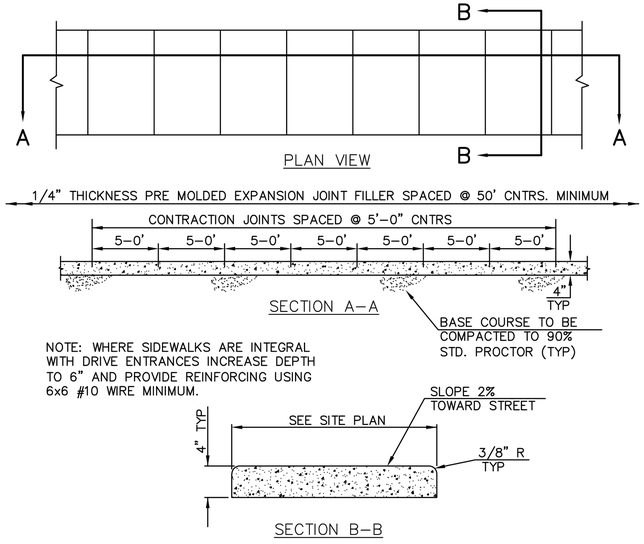
CURB WALK/CURB (AT BUILDING) CW1



HEAVY DUTY ASPHALT PAVING PV2

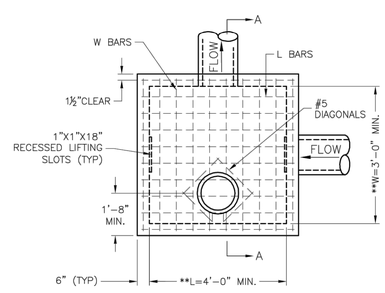


ACCESSIBLE PARKING SIGN PK2

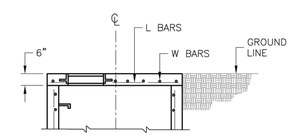


CONCRETE SIDEWALK CW2

NOTE: CONCRETE SHALL BE CLASS A WITH f'c = 3000 PSI.



PLAN



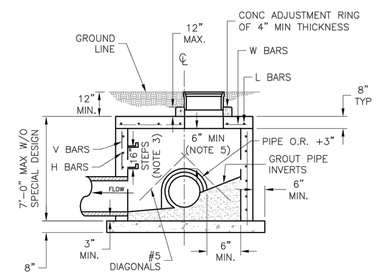
SLAB TOP ALTERNATE FOR JUNCTION BOX (SHALLOW)

NOTE:
FOR ALL JUNCTION BOXES EXCEEDING 7'-0" IN DEPTH, THE PRECAST BOX MANUFACTURER SHALL PROVIDE AN ENGINEERED DESIGN.

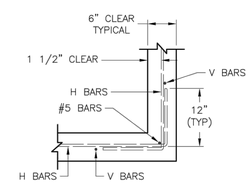
** INCREASE IN MULTIPLES OF 6"
(7'-0") MAX WITHOUT SPECIAL DESIGN.
(SEE PROJECT PLANS FOR DETAILS)

REINFORCING

BARS	BAR SIZE	SPACING (IN.)
H	4	12
V	4	12
L	5	6
W	5	6



SECTION A-A



WALL CORNER DETAIL

GENERAL NOTES:

1. LOCATE RING AND COVER ON BLANK WALL.
2. USE ¾" CHAMFER STRIP OR ½" R EDGER TOOL ON ALL EXPOSED CONCRETE CORNERS.
3. STEPS REQUIRED AT 16" O.C. WHEN DEPTH FROM TOP OF CASTING TO INVERT EXCEEDS 4' ON BLANK WALL IF POSSIBLE.
4. BOXOUTS WILL NOT BE ALLOWED TO PROJECT THROUGH THE CORNERS OF THE STRUCTURE AND THE MINIMUM DISTANCE BETWEEN BOXOUTS IS 6".
5. THE MINIMUM REINFORCING SHALL BE 1 H-BAR OVER A CAST-IN-PLACE PIPE AND 2 H-BARS OVER A PRECAST BOXOUT.
8. PRECAST LIDS SHALL BE PINNED, SEALED WITH NON-SHRINKABLE GROUT AND REMOVABLE FOR FUTURE MAINTENANCE.
9. REINFORCING OF COVERS IN STREETS REQUIRE SPECIAL DESIGN.
10. FOR RING AND COVER SEE THE STORMWATER APPROVED PRODUCT LIST.

LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
Sheet Name: JUNCTION BOX DETAIL

Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

STM-3

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

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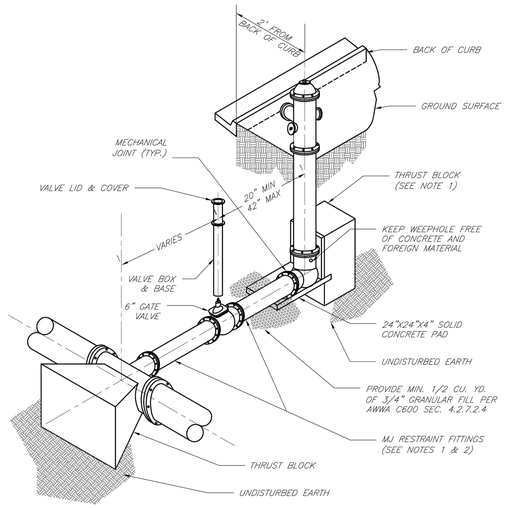
STATE OF MISSOURI
DAVID L. LINSKEY
NUMBER E-29191
PROFESSIONAL ENGINEER
6-22-21

Revisions
6-4-21 CITY COMMENTS
6-22-21 CITY COMMENTS

STREETS OF W. PRYOR
LOT 7A
LEES SUMMITT, MO.

sheet
C26.0
Civil
DETAILS
permit
5 MAY 2021



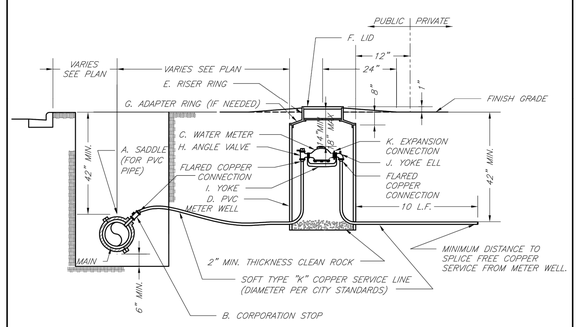
NOTES:

1. WHEN RETAINER GLANDS ARE USED IN LIEU OF MECHANICAL JOINT (MJ) RESTRAINT FITTINGS, HORIZONTAL THRUST BLOCKS ARE REQUIRED.
2. GATE VALVE MAY BE BOLTED DIRECTLY TO MJ RESTRAINT TEE.
3. SEE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR FIRE HYDRANT, VALVES, VALVE BOX LID, AND COVER.
4. BOTTOM HYDRANT FLANGE SHALL BE 2" TO 6" ABOVE FINISHED GRADE.
5. FOR STREETS WITHOUT CURBS FIRE HYDRANTS SHALL BE PLACED WITHIN 1 FOOT OF THE R/W LINE, BUT NOT MORE THAN 10' FROM EDGE OF PAVEMENT. FIRE HYDRANT SHALL NOT BE PLACED IN BOTTOM OF DITCH.
6. HYDRANT SHALL BE ROTATED AS DIRECTED BY INSPECTOR.

LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

HYDRANT INSTALLATION – STRAIGHT SET

Date: 02/13	
Drawn By: JN	
Checked By: DL	
FILE: WAT-7	
Rev: 1/14	
Rev:	



TYPICAL METER INSTALLATION – 2" AND SMALLER
NOT TO SCALE

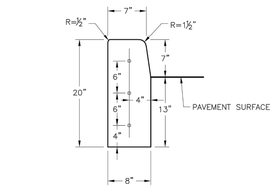
NOTES:

1. METER INSTALLATION SHALL NOT BE LOCATED IN AREAS SUBJECT TO VEHICULAR TRAFFIC OR IN CONCRETE PAVEMENT WITHOUT CITY APPROVAL.
2. IF METER IS TO BE LOCATED OTHER THAN IN FRONT OF PROPERTY LINE, CITY APPROVAL SHALL BE OBTAINED.
3. CITY TO FURNISH ITEMS A–K.
4. NO OTHER EQUIPMENT SHALL BE INSTALLED IN THIS PIT.
5. 42" MINIMUM BURY DEPTH FOR ALL SERVICE LINES.
6. EXCAVATION FOR TAP TO EXPOSE 4 LINEAR FEET OF MAIN.
7. NO SPLICES ALLOWED BETWEEN METER AND MAIN.
8. SERVICE CONNECTION TAP AT APPROXIMATELY 45 DEGREES.
9. LID AND RISER RING SHALL BE SET SO THAT GROUND WATER WILL DRAIN AWAY FROM THE WELL.
10. CONTACT WATER UTILITIES, 816–969–1900, FOR REQUIREMENTS OF A METER LARGER THAN 2"

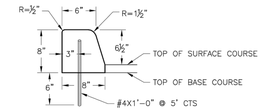
LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

SERVICE CONNECTION/METER WELL

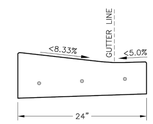
Date: 02/13	
Drawn By: JN	
Checked By: DL	
FILE: WAT-11	
Rev: 1/14	
Rev:	



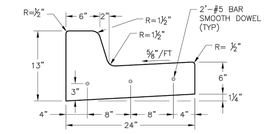
STRAIGHT CURB
(TYPE C–1)



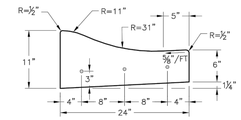
DOWELLED CURB
(TYPE DC)



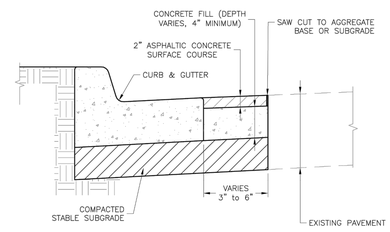
CURB & GUTTER DETAIL AT RAMP
(ADA SLOPE REQUIREMENTS)



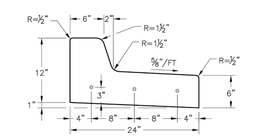
STRAIGHT BACK CURB & GUTTER
(TYPE CG–1)



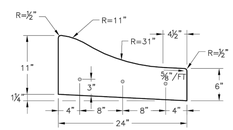
ROLL BACK CURB & GUTTER
(TYPE CG–2)



CURB REPLACEMENT DETAIL



STRAIGHT BACK DRY CURB & GUTTER
(TYPE CG–1 DRY)



ROLL BACK DRY CURB & GUTTER
(TYPE CG–2 DRY)

GENERAL NOTES

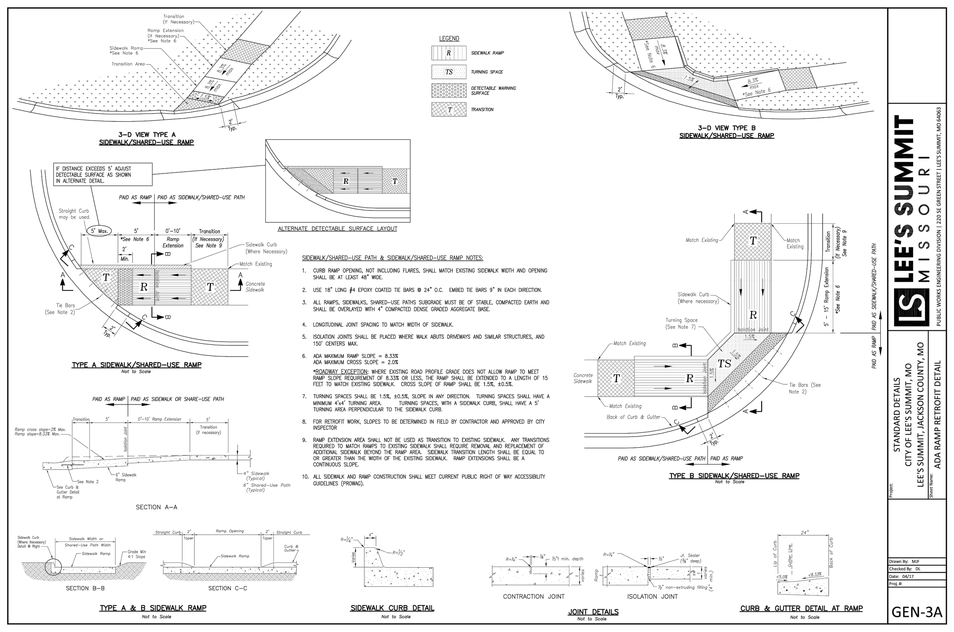
1. ¾" ISOLATION JOINTS WITH 3 (2'–#5 BAR) SMOOTH DOWELS SHALL BE PLACED AT RADIUS POINTS AND AT 150' INTERVALS. THESE DOWEL BARS SHALL BE GREASED AND WRAPPED ON ONE END WITH EXPANSION TUBES.
2. 3" DEEP CONTRACTION JOINTS SHALL BE INSTALLED AT APROXIMATELY 10' INTERVALS. THESE JOINTS SHALL PASS ACROSS THE ENTIRE CURB SECTION.
3. CONCRETE FILL SHALL HAVE UNIFORM AND SMOOTH FINISH
4. KCMMB 4K CONCRETE SHALL BE USED FOR ALL CURB.
5. ASPHALTIC CONCRETE SURFACE COURSE SHALL CONFORM TO STANDARD SPECIFICATIONS SECTION 2205.2.
6. CURBS FOR NEW STREETS SHALL BE BUILT ON ASPHALT OR AGGREGATE BASE AS SHOWN IN TYPICAL SECTION DETAIL.
7. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.

LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
Sheet Name: CURB & GUTTER DETAIL

Drawn By: MJF
Checked By: DL
Date: 04/17
Proj #:

GEN-4



SIDEWALK/SHARED–USE PATH & SIDEWALK/SHARED–USE RAMP NOTES:

1. CURB RAMP OPENING, NOT INCLUDING FLARES, SHALL MATCH EXISTING SIDEWALK WIDTH AND OPENING SHALL BE AT LEAST 48" WIDE.
2. USE 18" LONG #4 EPOXY COATED TIE BARS @ 24" O.C. EMBED TIE BARS 9" IN EACH DIRECTION.
3. ALL RAMPS, SIDEWALKS, SHARED–USE PATHS SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
4. LONGITUDINAL JOINT SPACING TO MATCH WIDTH OF SIDEWALK.
5. ISOLATION JOINTS SHALL BE PLACED WHERE WALK ABUTS DRIVEWAYS AND SIMILAR STRUCTURES, AND 150' CENTERS MAX.
6. ADA MAXIMUM RAMP SLOPE = 8.33%
   ADA MAXIMUM CROSS SLOPE = 2.0%
   *ROADWAY EXCEPTION: WHERE EXISTING ROAD PROFILE GRADE DOES NOT ALLOW RAMP TO MEET RAMP SLOPE REQUIREMENT OF 8.33% OR LESS, THE RAMP SHALL BE EXTENDED TO A LENGTH OF 15 FEET TO MATCH EXISTING SIDEWALK. CROSS SLOPE OF RAMP SHALL BE 1.5%, ±0.3%.
7. TURNING SPACES SHALL BE 1.5%, ±0.5%, SLOPE IN ANY DIRECTION. TURNING SPACES SHALL HAVE A MINIMUM 4'x4' TURNING AREA. TURNING SPACES, WITH A SIDEWALK CURB, SHALL HAVE A 5' TURNING AREA PERPENDICULAR TO THE SIDEWALK CURB.
8. FOR RETROFIT WORK, SLOPES TO BE DETERMINED IN FIELD BY CONTRACTOR AND APPROVED BY CITY INSPECTOR
9. RAMP EXTENSION AREA SHALL NOT BE USED AS TRANSITION TO EXISTING SIDEWALK. ANY TRANSITIONS REQUIRED TO MATCH RAMPS TO EXISTING SIDEWALK SHALL REQUIRE REMOVAL AND REPLACEMENT OF ADDITIONAL SIDEWALK BEYOND THE RAMP AREA. SIDEWALK TRANSITION LENGTH SHALL BE EQUAL TO OR GREATER THAN THE WIDTH OF THE EXISTING SIDEWALK. RAMP EXTENSIONS SHALL BE A CONTINUOUS SLOPE.
10. ALL SIDEWALK AND RAMP CONSTRUCTION SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).

LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
Sheet Name: ADA RAMP RETROFIT DETAIL

Drawn By: MJF
Checked By: DL
Date: 06/17
Proj #:

GEN-3A

Missing or invalid reference
File: ..\..\..\..\..\DESIGN\Sam Malinowsky\Streets Of Pryor Lot 7\Outside Files\Trash Enclosure.pdf
Sheet: 1

SM Engineering
5507 High Meadow Circle
Manhattan Kansas, 66503
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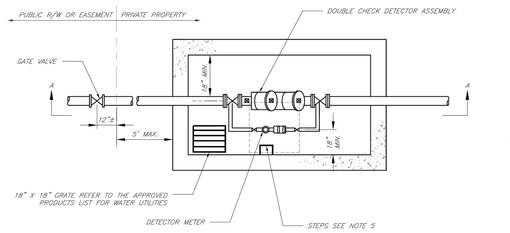
STATE OF MISSOURI
DAVID L. NOWSKI
NUMBER PE-2001027800
PROFESSIONAL ENGINEER
6-22-21

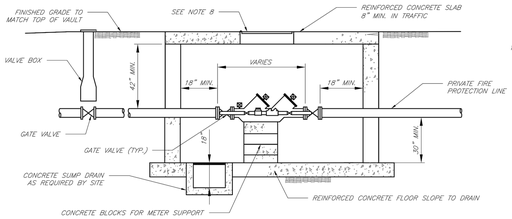
Revisions
6-4-21 CITY COMMENTS
6-22-21 CITY COMMENTS

STREETS OF W. PRYOR
LOT 7A
LEE'S SUMMITT, MO.

sheet
C27.0
Civil
DETAILS
permit
5 MAY 2021



PLAN VIEW
NOT TO SCALE



SECTION A–A
NOT TO SCALE

GENERAL NOTES:

1. METER VAULT WALLS TO BE POURED OR PRECAST CONCRETE. METER VAULT ROOF TO BE REINFORCED CONCRETE WITH OPENING CENTERED OVER DETECTOR METER. REINFORCED WALLS AND SLABS ARE TO BE DESIGNED BY THE OWNER'S ENGINEER OR PRECAST ENGINEER.
2. METER VAULT TO BE LOCATED, WHEN POSSIBLE, OUTSIDE TRAFFIC AREA AND WHERE SURFACE WATER WILL NOT DRAIN INTO IT. PROVIDE CONCRETE SUMP TO DRAIN TO AN ABOVE GROUND DISCHARGE POINT.
3. ALL PIPE AND FITTINGS FROM THE CITY WATER MAIN THROUGH THE VAULT SHALL BE PROVIDED WITH RESTRAINED JOINT FITTINGS.
4. ALL FITTINGS FOR THE DETECTOR METER TO BE BRASS.
5. STEPS SHALL BE IN ACCORDANCE WITH THE APPROVED PRODUCTS LIST FOR WATER UTILITIES AND SHALL BE ON 16" CENTERS.
6. A DEPARTMENT OF NATURAL RESOURCE'S APPROVED DOUBLE CHECK DETECTOR ASSEMBLY BACKFLOW PREVENTER MUST BE USED. FOR A COPY OF THE MISSOURI DEPARTMENT OF NATURAL RESOURCES APPROVED BACKFLOW PREVENTION ASSEMBLIES, CONTACT WATER UTILITIES AT 816–969–1900.
7. ALL VALVES SHALL HAVE RISING STEMS.
8. MANHOLE COVER SHALL BE A BILCO K–1 MODEL UNLESS IN A VEHICLE TRAFFIC AREA. SEE THE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR TRAFFIC CONDITIONS. THE COVER SHALL HAVE A 1–3/4" ø HOLE DRILLED FOR A TOUCH/READ DEVICE.
9. A MINIMUM OF 18" CLEARANCE SHALL BE PROVIDED AROUND ALL PIPING, VALVES, APPURTENANCES, ETC.
10. CONTACT PUBLIC WORKS ENGINEERING FOR VAULTS THAT INCLUDE A FIRE DEPARTMENT CONNECTION OR A 3" OR LARGER METER.

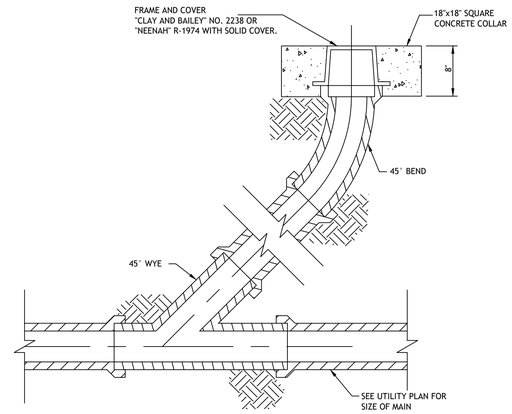
CITY OF LEE'S SUMMIT, MO
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
LEE'S SUMMIT, MO 64063

STANDARD DRAWINGS

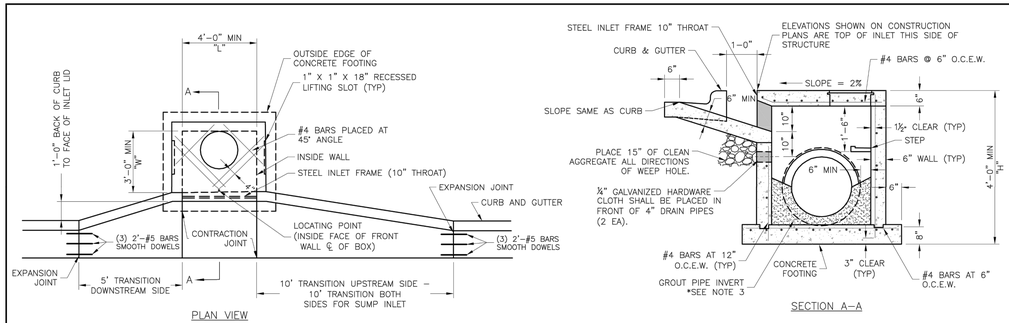
Sheet Name: VAULT FOR DOUBLE CHECK DETECTOR CHECK

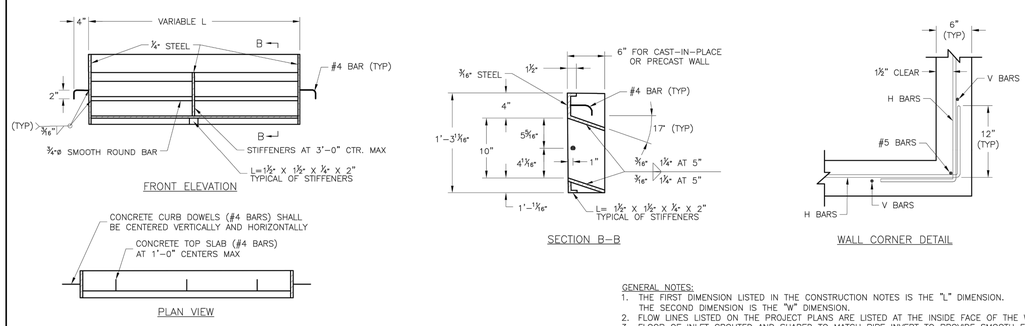
Drawn By: AB
Checked By: DL
Date: 3/24
Rev: 1/14
of

WAT–12



CLEAN-OUT CO





STEEL FRAME NOTES:

1. ALL WELDS SHALL BE PERFORMED IN ACCORDANCE WITH APPROPRIATE AWS SPECIFICATIONS AND PROCEDURES.
2. ALL WELDS ON EXPOSED SURFACES SHALL BE DRESSED SO AS TO PROVIDE A PLEASING FINISHED APPEARANCE.
3. THE ENTIRE FRAME SHALL BE PAINTED A SINGLE COAT OF CHEM–PRIME #37H–78 PRIMER (GRAY) OR EQUAL.

GENERAL NOTES:

1. THE FIRST DIMENSION LISTED IN THE CONSTRUCTION NOTES IS THE "L" DIMENSION. THE SECOND DIMENSION IS THE "W" DIMENSION.
2. FLOW LINES LISTED ON THE PROJECT PLANS ARE LISTED AT THE INSIDE FACE OF THE WALL.
3. FLOOR OF INLET GROUTED AND SHAPED TO MATCH PIPE INVERT TO PROVIDE SMOOTH FLOW.
4. LOCATE MH RING AND COVER ON BLANK WALL IF POSSIBLE.
5. STEPS SHALL BE SPACED AT 1'–4" O.C. VERTICALLY ON BLANK WALL IF POSSIBLE.
6. BEVEL ALL EXPOSED EDGES WITH ¾"CHAMFER OR ½" TOOLED EDGE.
7. ON–GRADE INLETS SHALL CONFORM TO THE STREET GRADE AND SUMP INLETS SHALL BE LEVEL.
8. PRECAST LIDS SHALL BE PINNED, SEALED WITH NON–SHRINKABLE GROUT AND REMOVABLE FOR FUTURE MAINTENANCE.
9. LIFTING RINGS SHALL BE REMOVED AND SEALED WITH NON–SHRINKABLE GROUT
10. FOR RING AND COVER SEE THE STORMWATER APPROVED PRODUCT LIST.

LS LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: CURB INLET DETAIL

Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

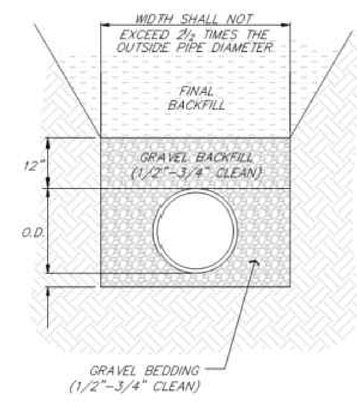
STM-1

BEDDING
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
–UNDER OPEN 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 90% OF STANDARD DENSITY PER ASTM D–698

BEDDING DEPTH BELOW PIPE		
PIPE DIAMETER	IN SOIL	IN ROCK
24" AND LESS	4"	6"
27" THRU 60"	4"	9"



PIPE BEDDING DETAIL

NOT TO SCALE

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STATE OF MISSOURI
S. D. WISKIRCHEN
E-20170
PROFESSIONAL ENGINEER
6-22-21

Revisions
6-4-21 CITY COMMENTS
6-22-21 CITY COMMENTS

STREETS OF W. PRYOR
LOT 7A
LEE'S SUMMITT, MO.

sheet
C28.0
Civil
DETAILS
permit
5 MAY 2021