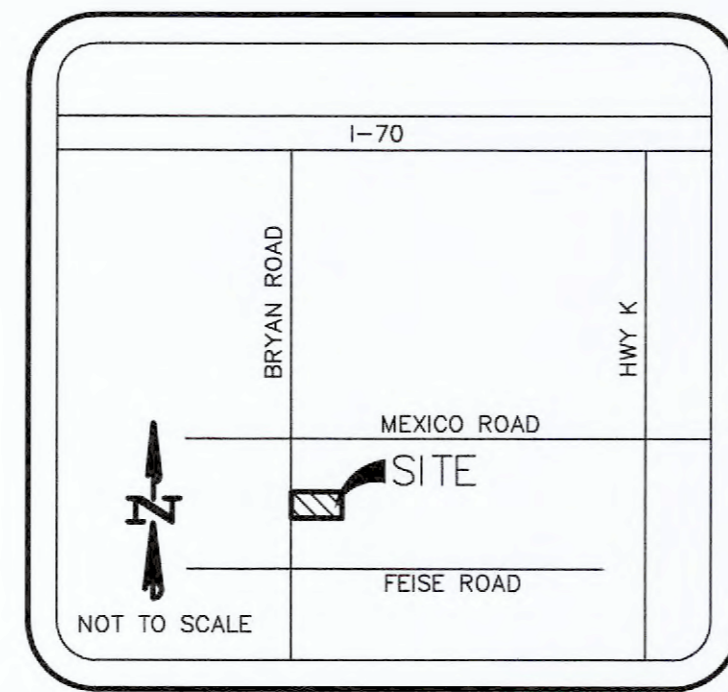
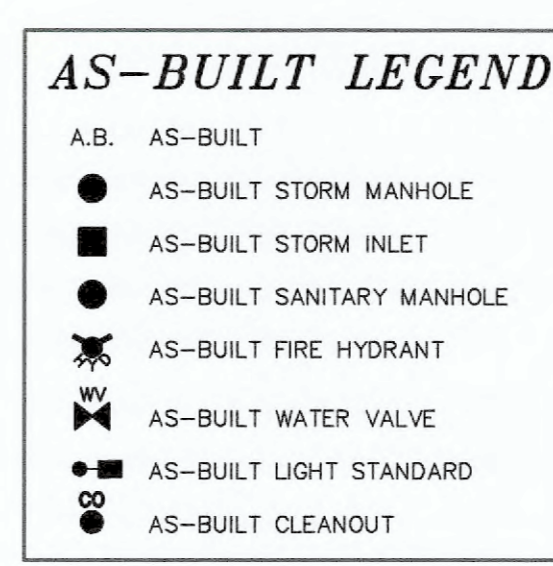
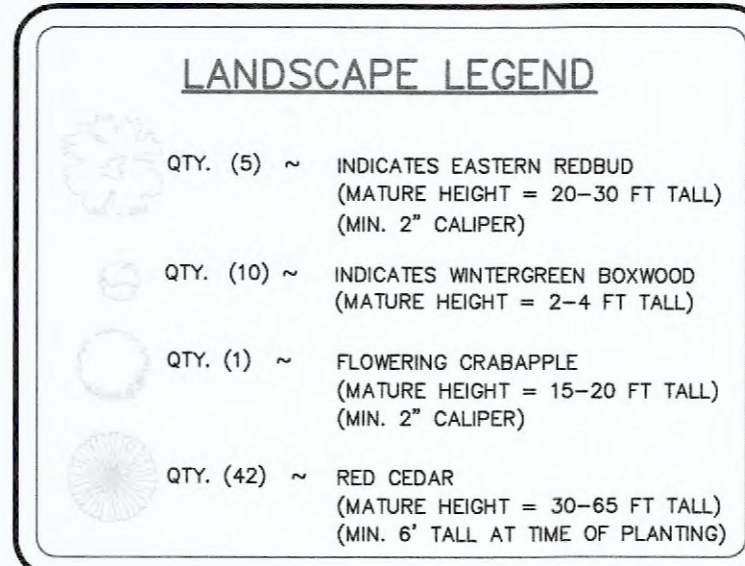


A SET OF AS-BUILT PLANS FOR BRYAN ROAD ANIMAL HOSPITAL

A TRACT OF LAND BEING ALL OF LOT 2 OF "HILLMANN FARM PLAZA SUBDIVISION" P.B. 44 PG. 17 IN THE SOUTHWEST QUARTER OF SECTION 31 TOWNSHIP 47 NORTH, RANGE 3 EAST CITY OF O'FALLON ST. CHARLES COUNTY, MISSOURI



Locator Map NOT TO SCALE



Legend

400.00	EXISTING LABELS	[Symbol]	EXIST. SINGLE CURB INLET
600.00	PROPOSED LABELS	[Symbol]	EXIST. AREA INLET
CI	SINGLE CURB INLET	[Symbol]	PROPOSED SINGLE CURB INLET
DCI	DOUBLE CURB INLET	[Symbol]	PROPOSED AREA INLET
AI	AREA INLET	[Symbol]	PROPOSED GRATE INLET
DAI	DOUBLE AREA INLET	[Symbol]	EXIST. SANITARY MANHOLE
GI	GRATE INLET	[Symbol]	EXIST. STORM MANHOLE
DGI	DOUBLE GRATE INLET	[Symbol]	PROPOSED MANHOLE
MH	MANHOLE	[Symbol]	POWER POLE
FE	FLARED END SECTION	[Symbol]	GUY WIRE
EP	END PIPE	[Symbol]	LIGHT STANDARD
CP	CONCRETE PIPE	[Symbol]	FIRE HYDRANT
RCP	REINFORCED CONCRETE PIPE	[Symbol]	WATER METER
CMP	CORRUGATED METAL PIPE	[Symbol]	WATER VALVE
CPP	CORRUGATED PLASTIC PIPE	[Symbol]	GAS VALVE
PVC	POLY VINYL CHLORIDE (PLASTIC)	[Symbol]	TELEPHONE PEDESTAL
CO	CLEAN OUT	[Symbol]	SIGN
-----	SLOPE LIMITS	[Symbol]	TREE
---STM---	EXISTING STORM SEWER	[Symbol]	SUR
---SAN---	EXISTING SANITARY SEWER	[Symbol]	R1
---W---	EXISTING WATER LINE	[Symbol]	R2
---FO---	EXISTING FIBER OPTIC LINE	[Symbol]	R3
---GAS---	EXISTING GAS LINE	[Symbol]	R4
---UG---	EXISTING UNDERGROUND ELECTRIC	[Symbol]	CONCRETE
---OHW---	EXISTING OVERHEAD ELECTRIC	[Symbol]	
---CTV---	EXISTING CABLE TV LINE	[Symbol]	
---T---	EXISTING TELEPHONE LINE	[Symbol]	
---	PROPOSED STORM SEWER	[Symbol]	
---	PROPOSED SANITARY SEWER	[Symbol]	
-X-X-	FENCE LINE	[Symbol]	
---	SAWCUT LINE	[Symbol]	
---	ASPHALT	[Symbol]	

Conditions of Approval From Planning and Zoning

- ANY OUTDOOR ACTIVITY SHALL REMAIN LIMITED TO A SINGLE ANIMAL UNDER THE SUPERVISION AND PHYSICAL CONTROL OF AN INDIVIDUAL.
- ALL MECHANICAL UNITS SHALL BE SCREENED ACCORDING CODE SECTION 400.278. SHOW ANY ROOFTOP UNITS ON THE ELEVATION TO ENSURE SCREENING.
- A PHOTOMETRIC LIGHTING PLAN SHALL BE PROVIDED BEFORE CONSTRUCTION PLAN APPROVAL.
- THE DRIVE AISLE ASPHALT PAVEMENT IS TO BE 4" ASPHALT OVER AN 8" ROCK BASE.
- PROVIDE A SIDEWALK CONNECTION TO THE BUILDING.

DEVELOPMENT NOTES:

- TO DETERMINE THE LOCATION OF FLOOD DESIGNATIONS AND BOUNDARIES, WE DETERMINED THE HORIZONTAL LOCATION OF THIS TRACT OF LAND BY SCALING THE FOLLOWING FLOOD INSURANCE RATE MAP (FIRM), ST. CHARLES COUNTY, MISSOURI AND INCORPORATED AREAS, MAP NUMBER 29183C0240G, WITH AN EFFECTIVE DATE OF JANUARY 20, 2016. COMMUNITY: CITY OF O'FALLON NUMBER 290316 PANEL 0240 SUFFIX G BY EXPRESS REFERENCE TO THIS MAP AND ITS LEGEND, THIS TRACT OF LAND IS INDICATED TO BE WITHIN THE FOLLOWING ZONE: ZONE X - AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.
- PARKING REQUIRED: VETERINARY CLINICS: ONE (1) SPACE PER 200 SQ.FT. OF FLOOR AREA. PROPOSED FLOOR AREA = 5,327 SQ.FT. 5,495/200 = 27.5 ~ 28 SPACES REQUIRED TOTAL SPACES REQUIRED = 28 TOTAL SPACES PROVIDED = 30 ACCESSIBLE SPACES: 2 REQUIRED, 2 PROVIDED
- LIGHTING VALUES WILL BE REVIEWED ON SITE PRIOR TO THE FINAL OCCUPANCY INSPECTION. CORRECTIONS WILL NEED TO BE MADE IF NOT IN COMPLIANCE WITH CITY STANDARDS.
- ALL PROPOSED UTILITIES AND/OR UTILITY RELOCATIONS SHALL BE LOCATED UNDERGROUND.
- NO SLOPES SHALL EXCEED 3 (HORIZONTAL): 1 (VERTICAL).
- ALL SANITARY LATERALS AND SANITARY MAINS CROSSING UNDER PAVEMENT MUST HAVE PROPER ROCK BACKFILL AND REQUIRED COMPACTION.
- PUBLIC WATER SUPPLY DISTRICT NO.2 REQUIRES ONE (1) WEEK NOTICE PRIOR TO THE START OF CONSTRUCTION.

GRADING QUANTITIES:

1,104 C.Y. CUT (INCLUDES SUBGRADES)
660 C.Y. FILL (INCLUDES 8% SHRINKAGE)
444 C.Y. HEAVY

THE ABOVE GRADING QUANTITY IS APPROXIMATE ONLY, NOT FOR BIDDING PURPOSES. CONTRACTOR SHALL VERIFY QUANTITIES PRIOR TO CONSTRUCTION.

CITY OF O'FALLON
COMMUNITY DEVELOPMENT DEPARTMENT
ACCEPTED FOR CONSTRUCTION
BY: Jamie Swindle DATE 06/24/2020
PROFESSIONAL ENGINEER'S SEAL
INDICATES RESPONSIBILITY FOR DESIGN

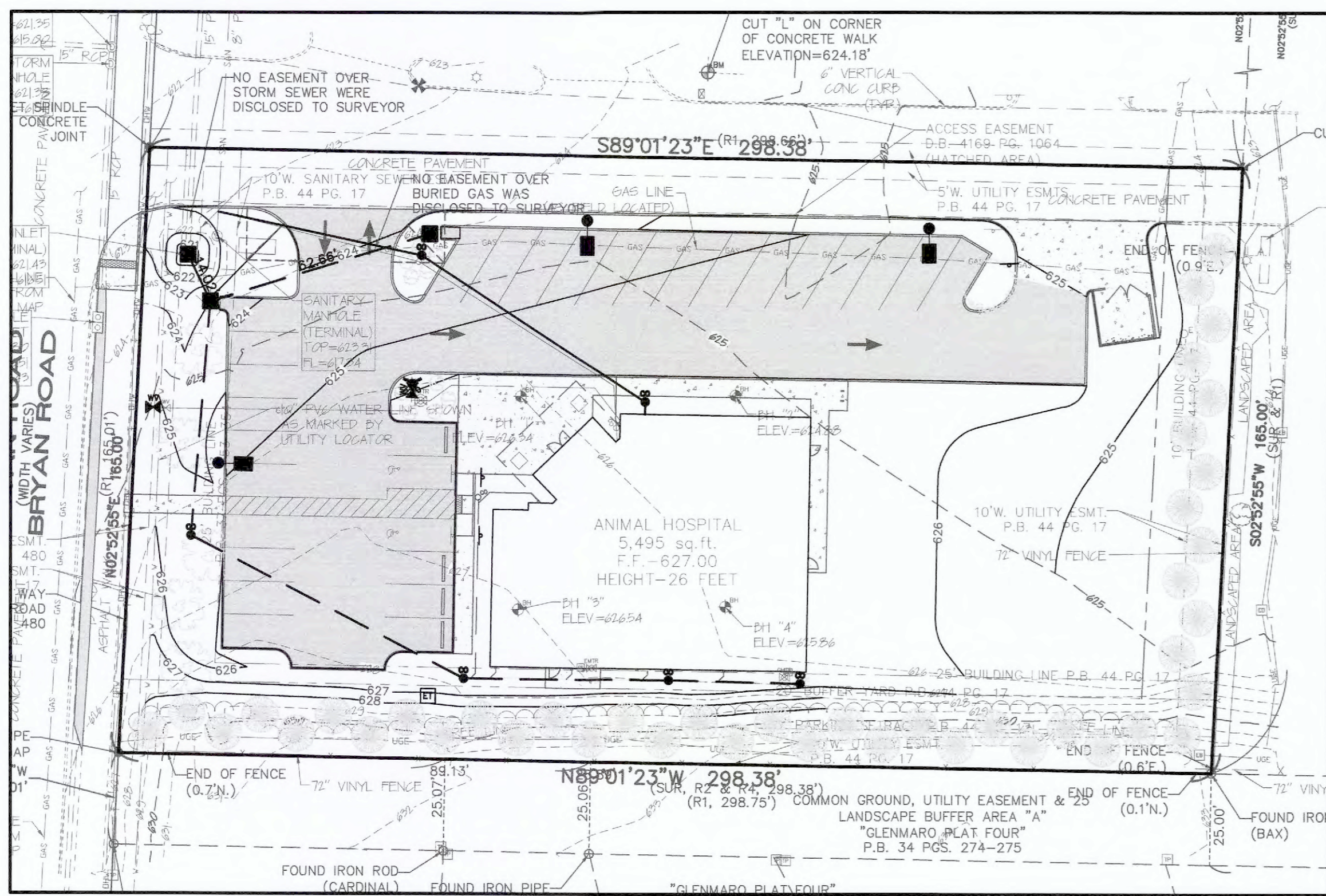
AS-BUILT PUBLIC UTILITY FINAL MEASUREMENTS

THE FOLLOWING UTILITIES HAVE BEEN LOCATED AND MEASURED AND THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLANS:

- STORM SEWERS, STORM SEWER LENGTHS, STORM SEWER PIPE SIZES, STORM SEWER FLOWLINES AND DEPTHS OF STORM SEWER STRUCTURES.
- SANITARY SEWERS, SANITARY SEWER LENGTHS, SANITARY SEWER PIPE SIZES, SANITARY SEWER FLOWLINES AND DEPTHS OF SANITARY SEWER STRUCTURES.
- FIRE HYDRANTS
- WATER VALVES
- LIGHT STANDARDS

ALL PUBLIC UTILITIES SHOWN HEREON AS BEING AS-BUILT ARE LOCATED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS.

SIGNED: _____
P.E./L.S. _____
DATE _____



Plan View

Drawing Index

- COVER SHEET
- O'FALLON NOTES
- DEMOLITION PLAN
- FLAT PLAN
- GRADING PLAN
- PRE-DEVELOPED DRAINAGE AREA MAP
- POST-DEVELOPED DRAINAGE AREA MAP
- STORM PROFILES AND ENTRANCE DETAIL
- SWPPP
- CONSTRUCTION DETAILS
- WATER QUALITY DETAILS
- EROSION CONTROL DETAILS
- PAVEMENT DETAILS
- PAVEMENT DETAILS
- STORM AND SANITARY DETAILS
- STORM DETAILS
- PWSD No. 2 WATER DETAILS
- PHOTOMETRIC PLAN

Reference Benchmarks

ALL AS-BUILT ITEMS HAVE BEEN LOCATED AND TIED TO THE MISSOURI COORDINATE SYSTEM OF 1983, EAST ZONE, (GRID NORTH), NAD83 FOR HORIZONTAL DATUM AND NAVD83 FOR VERTICAL DATUM.

PROJECT BENCHMARK:

THE HORIZONTAL COORDINATES WERE ESTABLISHED AND VERIFIED BY GPS OBSERVATIONS USING A CELLULAR EQUIPPED TRIMBLE R8 GNSS ROVER AND TRIMBLE TSC3 DATA COLLECTOR AND BASED ON THE MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION GLOBAL NAVIGATION SATELLITE REAL TIME NETWORK FOR CONTINUOUS OPERATING REFERENCE STATIONS, WHICH UTILIZES THE NAD83(2011) EPOCH 2010.00 GPS NETWORK.

A SITE GRID AZIMUTH AND COMBINED GRID FACTOR WAS CALCULATED UTILIZING THE TRIMBLE TSC3 DATA COLLECTOR SURVEY CONTROLLER SOFTWARE ON FIELD CONTROL POINT 1.

PROJECT COORDINATES ARE MODIFIED "MISSOURI COORDINATE SYSTEM OF 1983, EAST ZONE" COORDINATES AND WERE GENERATED BY SCALING THE COORDINATES BY THE INVERSE OF SAID COMBINED GRID FACTOR (1.000082883) ABOUT ONSITE POINT 1. THE COORDINATES WERE THEN CONVERTED TO FEET BY MULTIPLYING THE METRIC VALUES BY 3.280833333 (39.37 INCHES PER METER/12 INCHES PER FOOT).

TO THE BEST OF OUR KNOWLEDGE, THE MODIFIED MISSOURI STATE PLANE, EAST ZONE, COORDINATES MEET THE ACCURACY STANDARDS OF THE CURRENT MISSOURI STANDARDS FOR PROPERTY BOUNDARY SURVEYS (2 CSR 90-60) AS AN URBAN CLASS SURVEY.

PROJECT ELEVATIONS UTILIZE THE NAVD 88 VERTICAL DATUM AND WERE GENERATED BY GPS OBSERVATIONS USING A CELLULAR EQUIPPED TRIMBLE R8 GNSS ROVER AND TRIMBLE TSC3 DATA COLLECTOR AND ARE BASED ON THE MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION GLOBAL NAVIGATION SATELLITE REAL TIME NETWORK FOR CONTINUOUS OPERATING REFERENCE STATIONS.

SITE BENCHMARK:

SITE BENCHMARK (NAVD 88) - CUT "L" ON SOUTHWEST CORNER OF CONCRETE WALK LOCATED IN FRONT OF THE ENTRANCE TO THE CHIROPRACTIC OFFICE LOCATED IN HILLMANN FARM PLAZA AND SHOWN HEREON. (ELEVATION=624.18)

VEGETATION ESTABLISHMENT For Urban Development Sites APPENDIX A	
SEEDING RATES:	
PERMANENT:	
Tall Fescue	150 lbs./ac.
Smooth Brome	100 lbs./ac.
Combined Fescue & Brome	75 lbs./ac. AND Brome @ 50 lbs./ac.
TEMPORARY:	
Wheat or Rye	150 lbs./ac. (3.5 lbs. per 1,000 sq. ft.)
Oats	120 lbs./ac. (2.75 lbs. per 1,000 sq. ft.)
SEEDING PERIODS:	
Fescue or Brome	March 1 to June 1 August 1 to October 1
Wheat or Rye	March 15 to November 1
Oats	March 15 to September 15
MULCH RATES:	
	100 lbs. per 1000 sq. ft. (4,356 lbs. per ac.)
FERTILIZER RATES:	
Nitrogen	30 lbs./ac.
Phosphate	30 lbs./ac.
Potassium	30 lbs./ac.
Lime	600 lbs./ac. ENM*
* ENM = effective neutralizing material as per State evaluation of quarried rock.	

LANDSCAPING REQUIREMENTS:
STREET TREE REQUIREMENTS:
1 TREE FOR EVERY 40' OF FRONTAGE
165' OF RIGHT-OF-WAY FRONTAGE = 165/40=4.13 ~ 5 STREET TREES REQUIRED
5 STREET TREES PROVIDED

INTERIOR LANDSCAPING REQUIRED:
NOT LESS THAN 6% OF INTERIOR PARKING LOT SHALL BE LANDSCAPED.
30 SPACES X 270 = 8,100 X 6% = 486 SQ.FT. LANDSCAPING REQUIRED
589 SQ.FT. LANDSCAPING PROVIDED INCLUDING 1 TREES & 10 SHRUBS

BUFFER YARD REQUIREMENTS: 402.180(C)(2)(a)(1)
TWO PLANT UNITS AND A 6 FOOT HIGH SIGHT-PROOF FENCE WITHIN A 20 FOOT WIDE BUFFER YARD AREA PER EVERY 100 FEET OF FRONTAGE.

* 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 1.13 ACRES.
The area of land disturbance is 0.80 ACRES.
Number of proposed lots is 1.
Building setback information. Front: 25 FEET

Side: 0 feet, if adjacent to residential then same as residential side yard setback
Rear: No rear yard is required except that where a rear line of a lot in this district abuts lots zoned residential or office a rear yard of not less than ten (10) feet shall be provided.

* The estimated sanitary flow in gallons per day is 2,260 G.P.D.
2,000 GPD PER ACRE = 1.13 ACRES x 2,000 = 2,260 GPD

* Tree preservation calculations N/A

City approval of any construction site plan does not mean that any building can be constructed on the lots without meeting the building setbacks as required by the zoning codes.

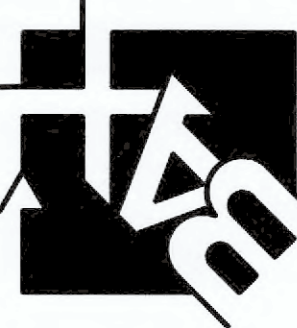
All installations and construction shall conform to the approved engineering drawings. However, if the developer chooses to make minor modifications in design and/or specifications during construction, they shall make such changes at their own risk, without any assurance that the City Engineer will approve the completed installation or construction. It shall be the responsibility of the developer to notify the City Engineer of any changes from the approved drawings. The developer may be required to correct the installed improvements so as to conform to the approved engineering drawings. The developer may request a letter from the Construction Inspection Division regarding any field changes approved by the City Inspector.

Lighting values will be reviewed on site prior to the final occupancy inspection.

PROJECT TITLE:

AS-BUILT PLANS FOR
BRYAN ROAD
ANIMAL HOSPITAL

ENGINEERING
SURVEYING
221 Point West Blvd.
St. Charles, MO 63301
636-998-5552
FAX 928-1718



Utility Contacts

Sanitary Sewers

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

Water

Public Water Supply District No. 2
P.O. Box 967
O'Fallon, MO. 63366
636-561-3737 Ext. 131

Storm Sewer

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

Electric

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

DISCLAIMER OF RESPONSIBILITY
I hereby specify that the documents intended to be authorized by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other drawings, specifications, estimates, reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

Box Engineering Company, Inc.
Missouri State Certificate of Authority
Engineering #000655
Missouri State Certificate of Authority
Surveying #000144

REVISIONS	

Developer / Owner:
BRYAN ROAD ANIMAL HOSPITAL
1161 BRYAN ROAD
O'FALLON, MO 63366
636-272-3900

P+Z No. # 18-000622

Approval Date: Mar. 1, 2018

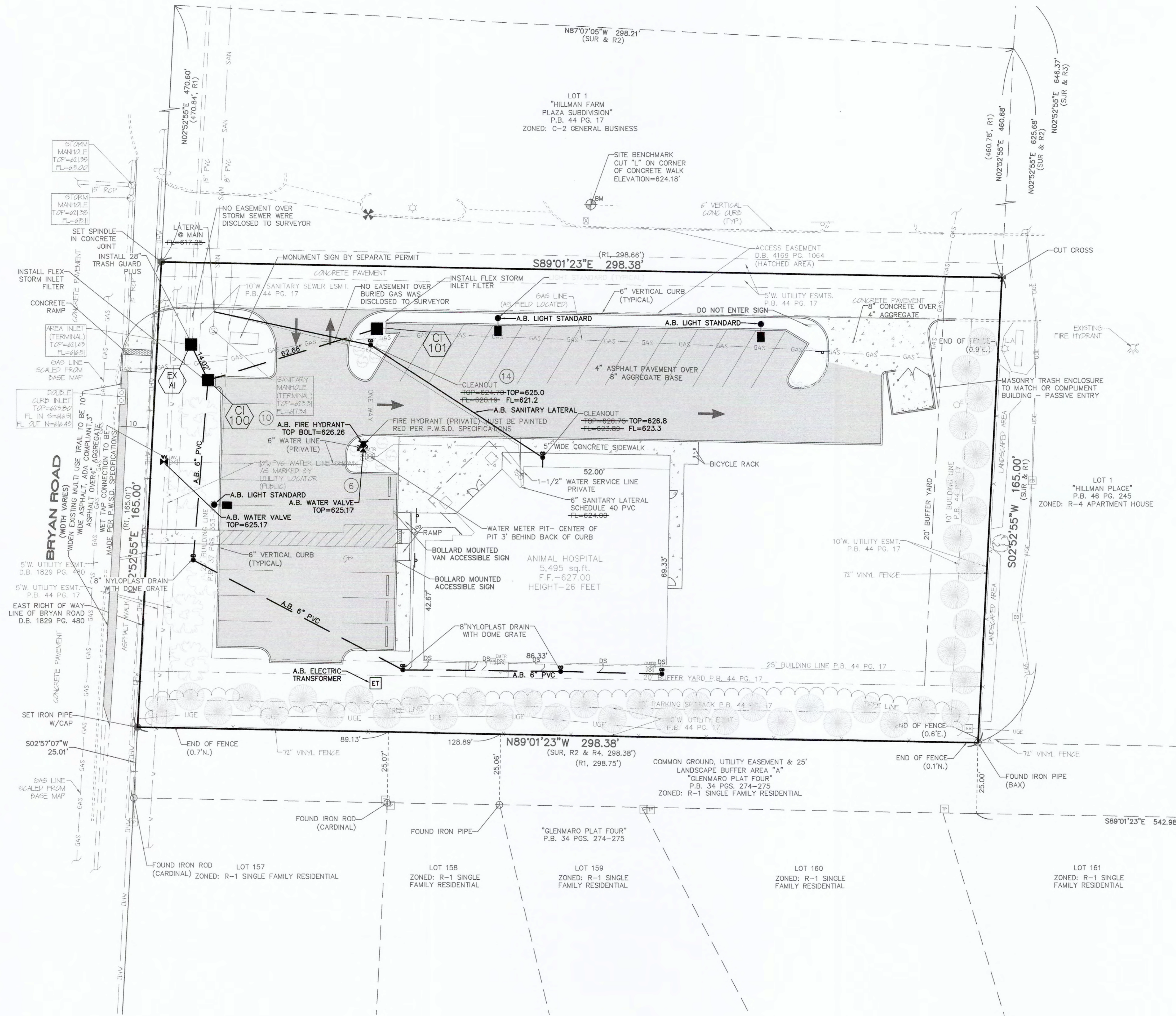
City No. #

Page No.

1 of 17

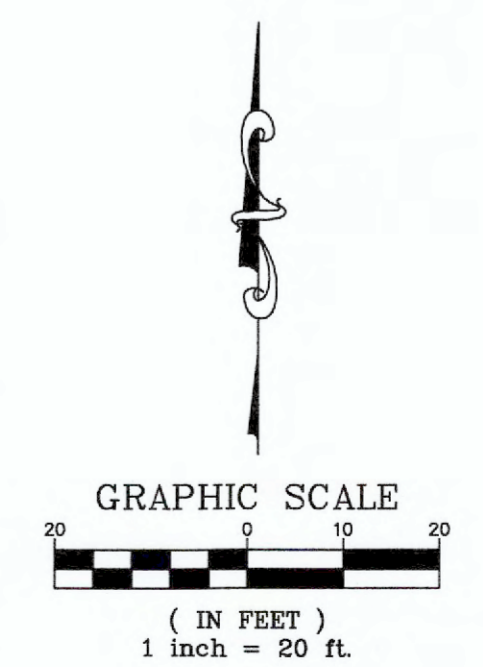
COVER SHEET

Box Project # 01-1707E Issue Date: 6/15/2020



AS-BUILT LEGEND

- AS-BUILT
- AS-BUILT STORM MANHOLE
- AS-BUILT STORM INLET
- AS-BUILT SANITARY MANHOLE
- ⊗ AS-BUILT FIRE HYDRANT
- ⊕ AS-BUILT WATER VALVE
- ⊙ AS-BUILT LIGHT STANDARD
- AS-BUILT CLEANOUT



PROJECT TITLE:

AS-BUILT PLANS FOR
BRYAN ROAD
ANIMAL HOSPITAL

Box Project # 01-1707E Issue Date: 6/15/2020

ENGINEERING
PLANNING
SURVEYING
221 Point West Blvd.
St. Charles, MO 63301
636-928-6562
FAX 928-1718



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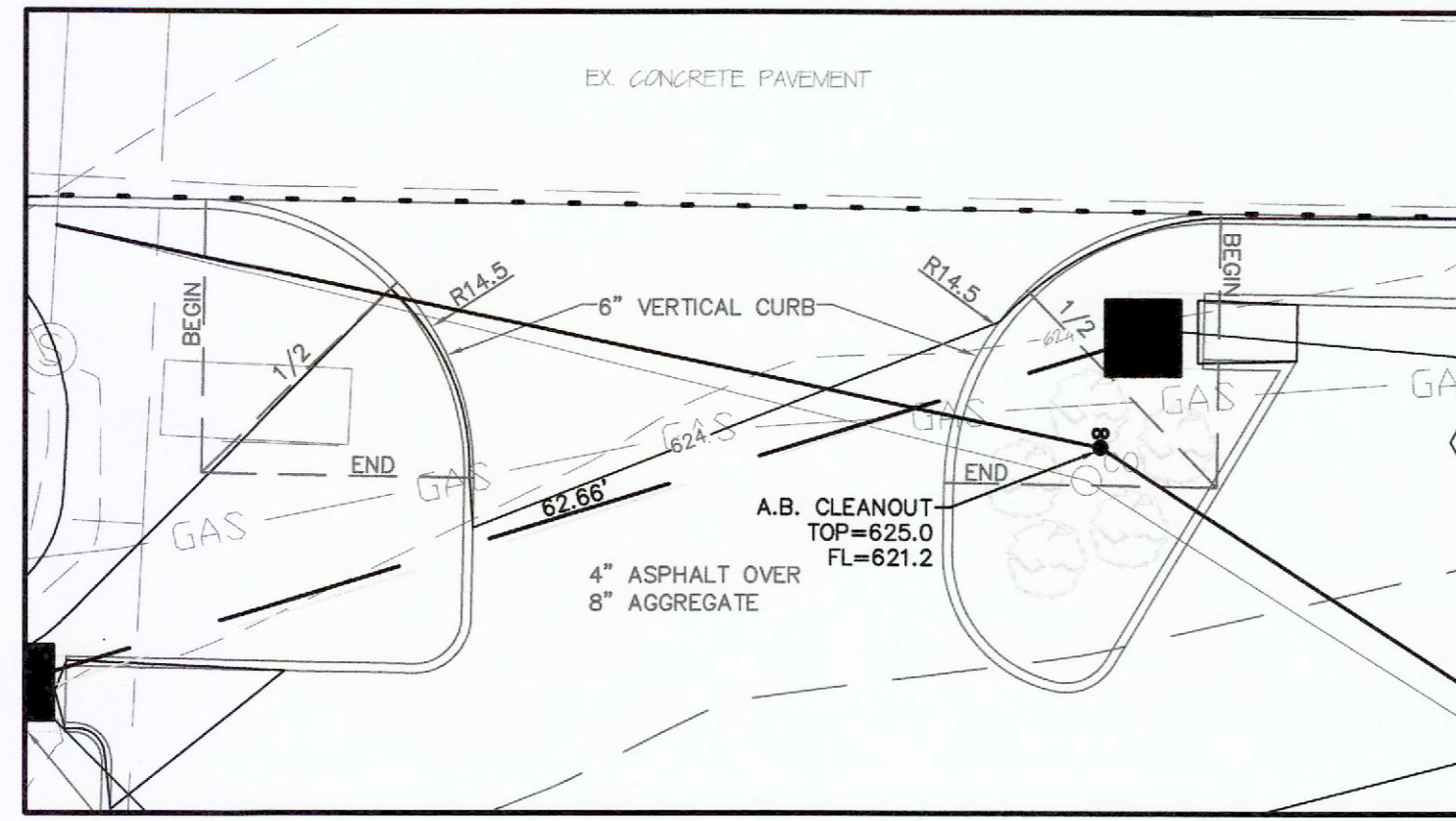
NO.	DATE	DESCRIPTION

Developer / Owner:
BRYAN ROAD ANIMAL HOSPITAL
1161 BRYAN ROAD
OFALLON, MO 63366
636-272-3900

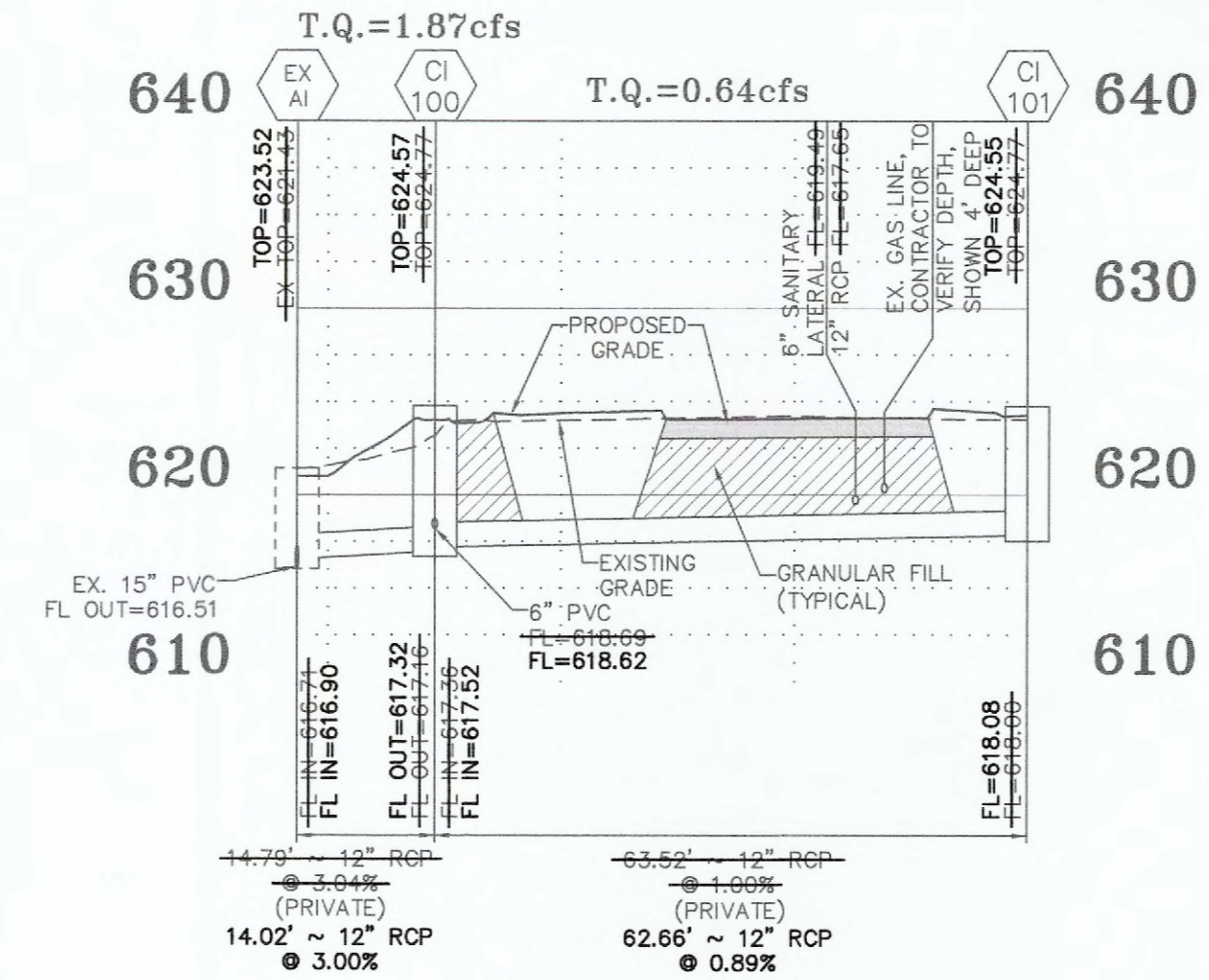
FLAT PLAN

P+Z No. # 18-00622
Approval Date: Mar. 1, 2018
City No. #

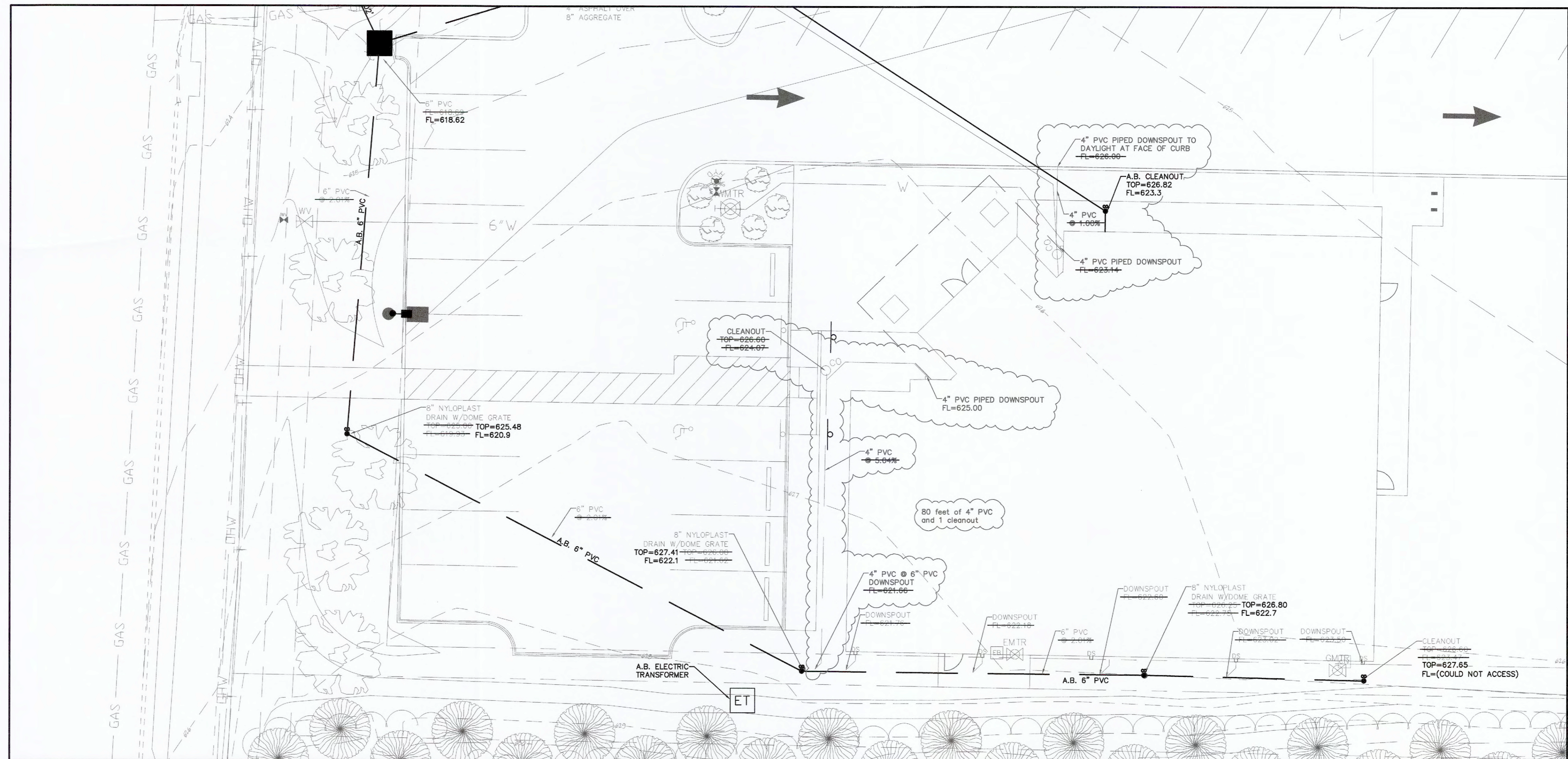
Page No.
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ENTRANCE DETAIL
HORIZONTAL SCALE: 1"=10'



STORM SEWER PROFILE
HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=10'



DOWNSPOUT PLAN
HORIZONTAL SCALE: 1"=10'

PROJECT TITLE:

AS-BUILT PLANS FOR
BRYAN ROAD
ANIMAL HOSPITAL

ENGINEERING
PLANNING
SURVEYING
221 Point West Blvd.
St. Charles, MO 63301
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FAX 636-928-1718



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Boyer Engineering Company, Inc.
Missouri State Certificate of Authority
Engineering #000655
Missouri State Certificate of Authority
Surveying #000144

REVISIONS

NO.	DATE	DESCRIPTION

Developer / Owner:
BRYAN ROAD ANIMAL HOSPITAL
1161 BRYAN ROAD
OF FALLON, MO 63366
636-272-3900

STORM PROFILES AND ENTRANCE DETAIL

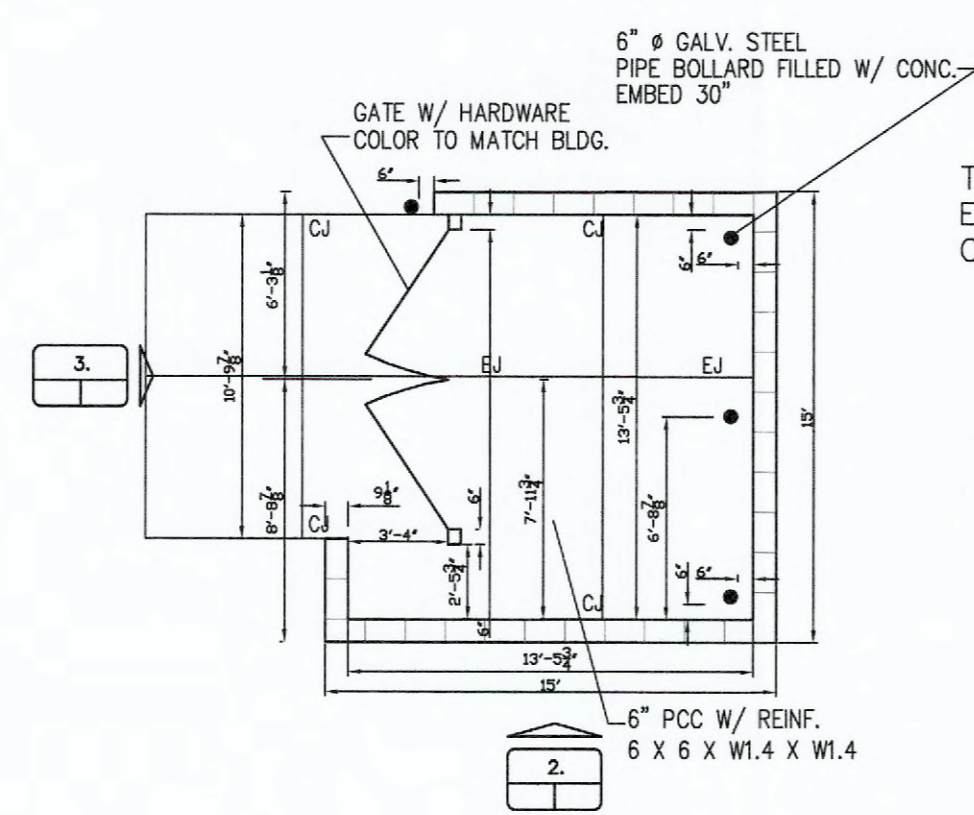
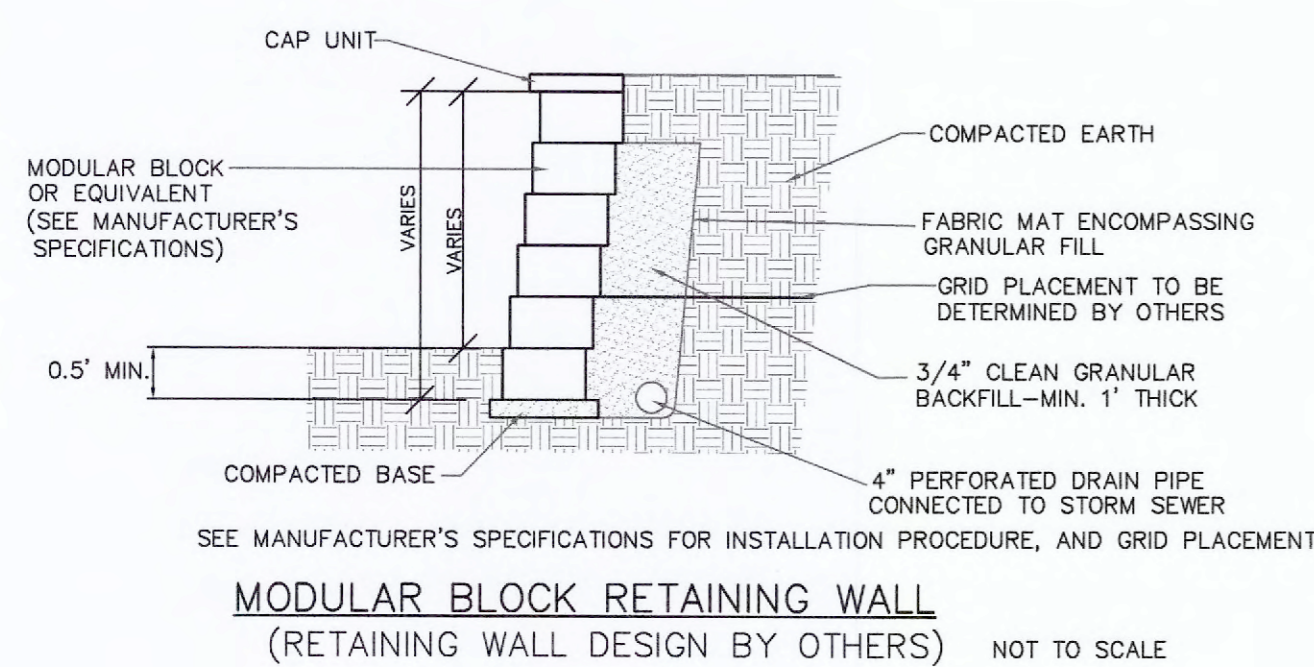
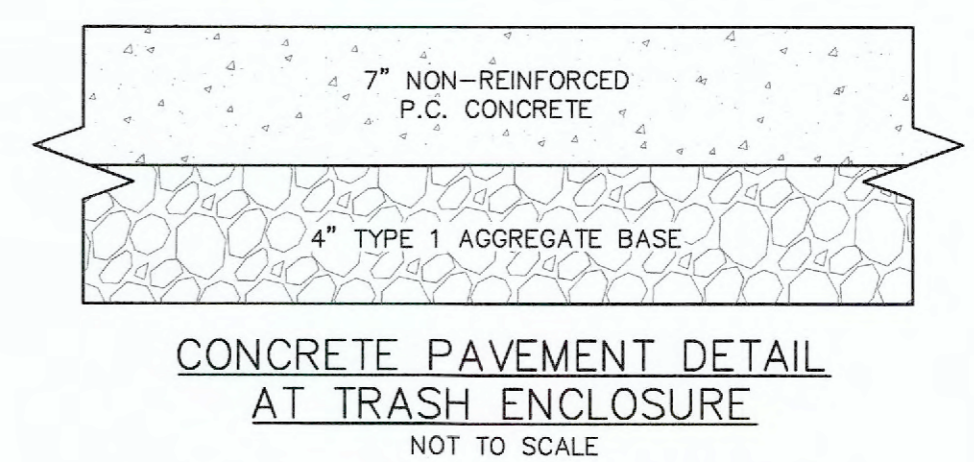
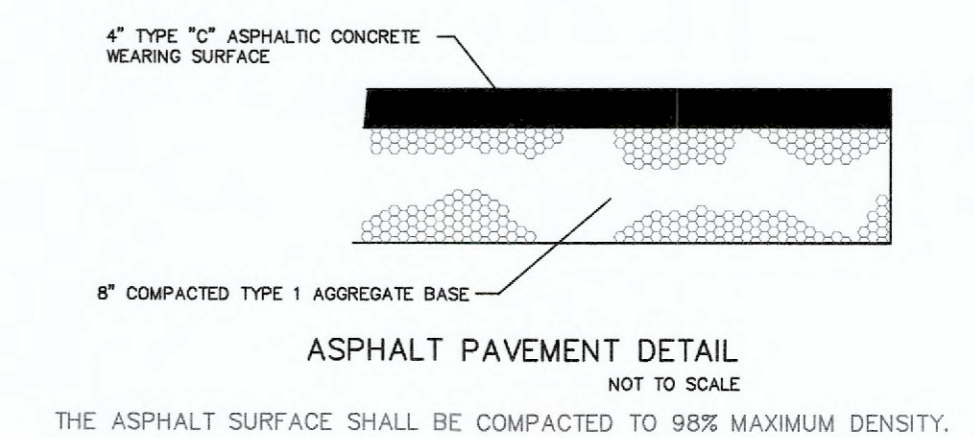
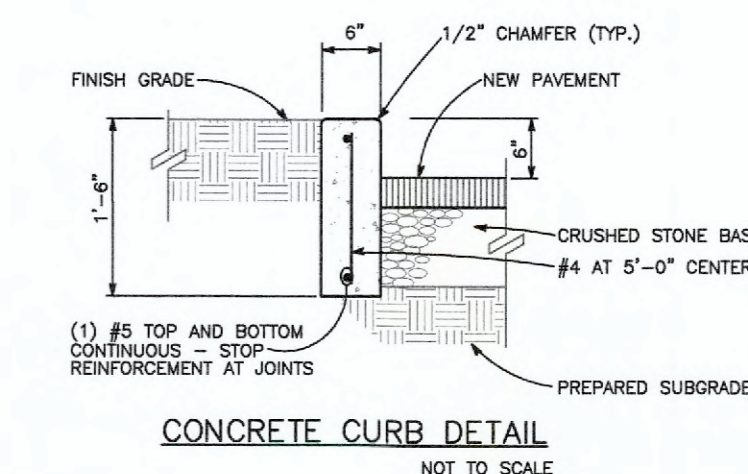
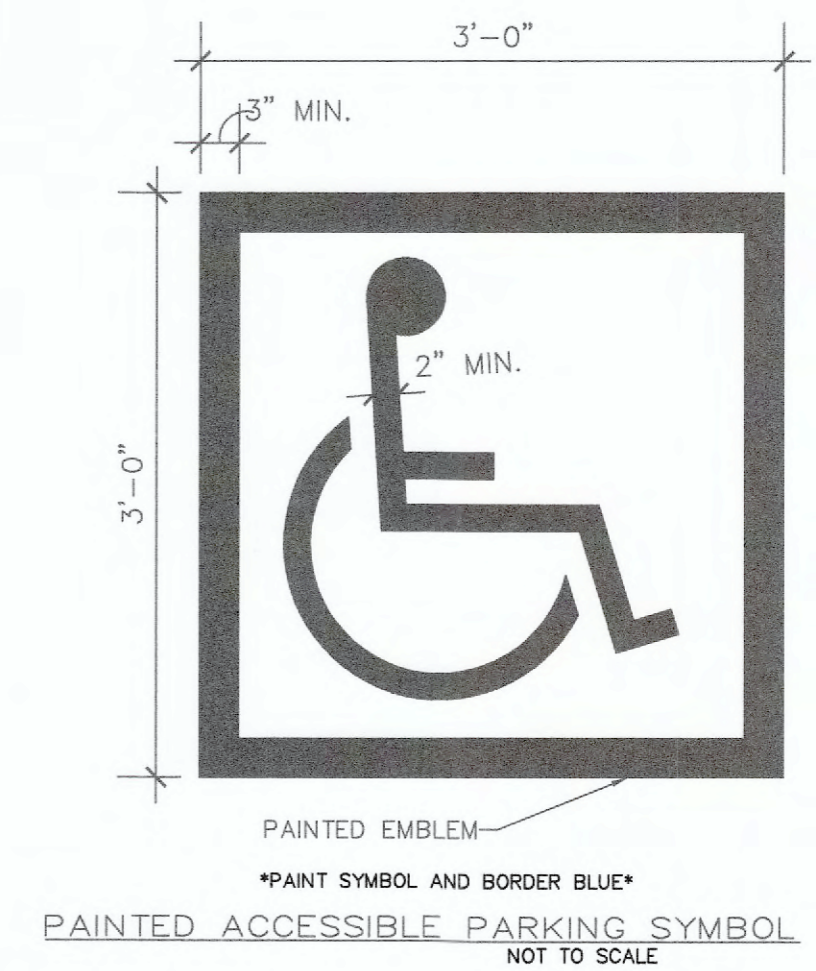
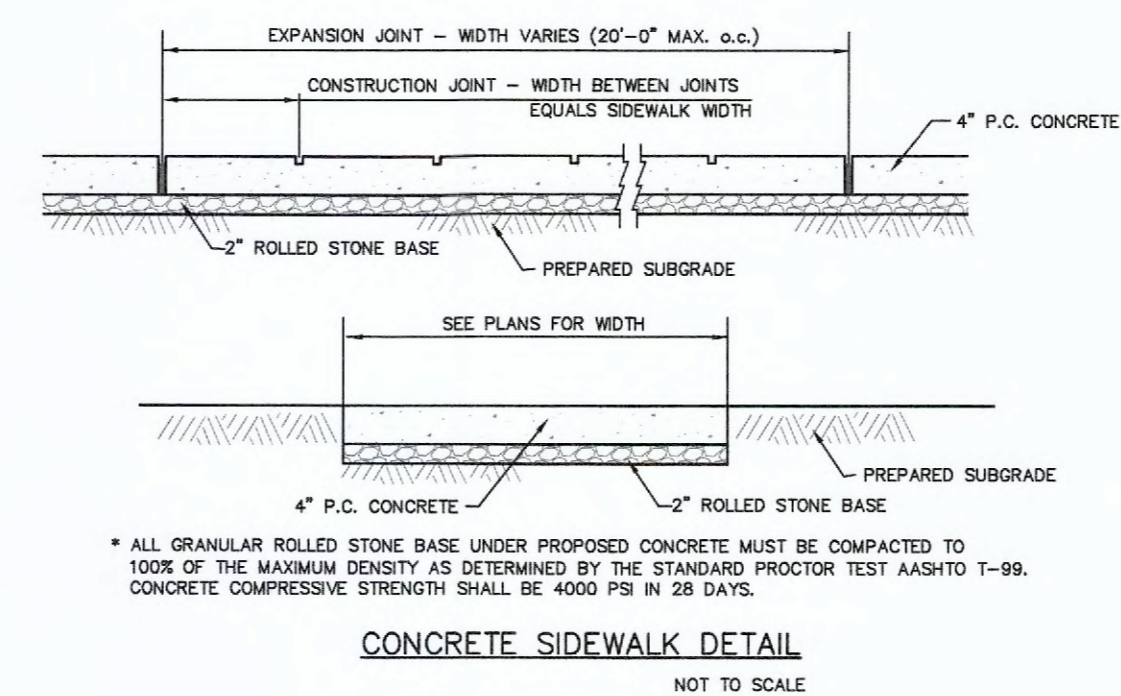
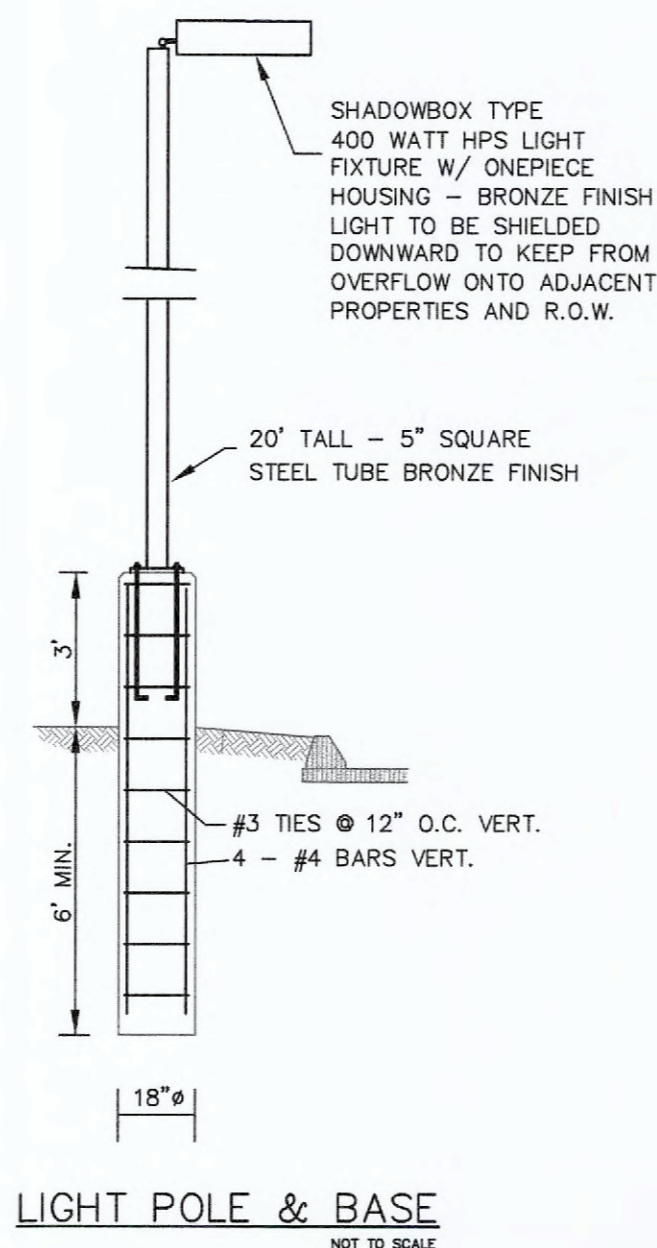
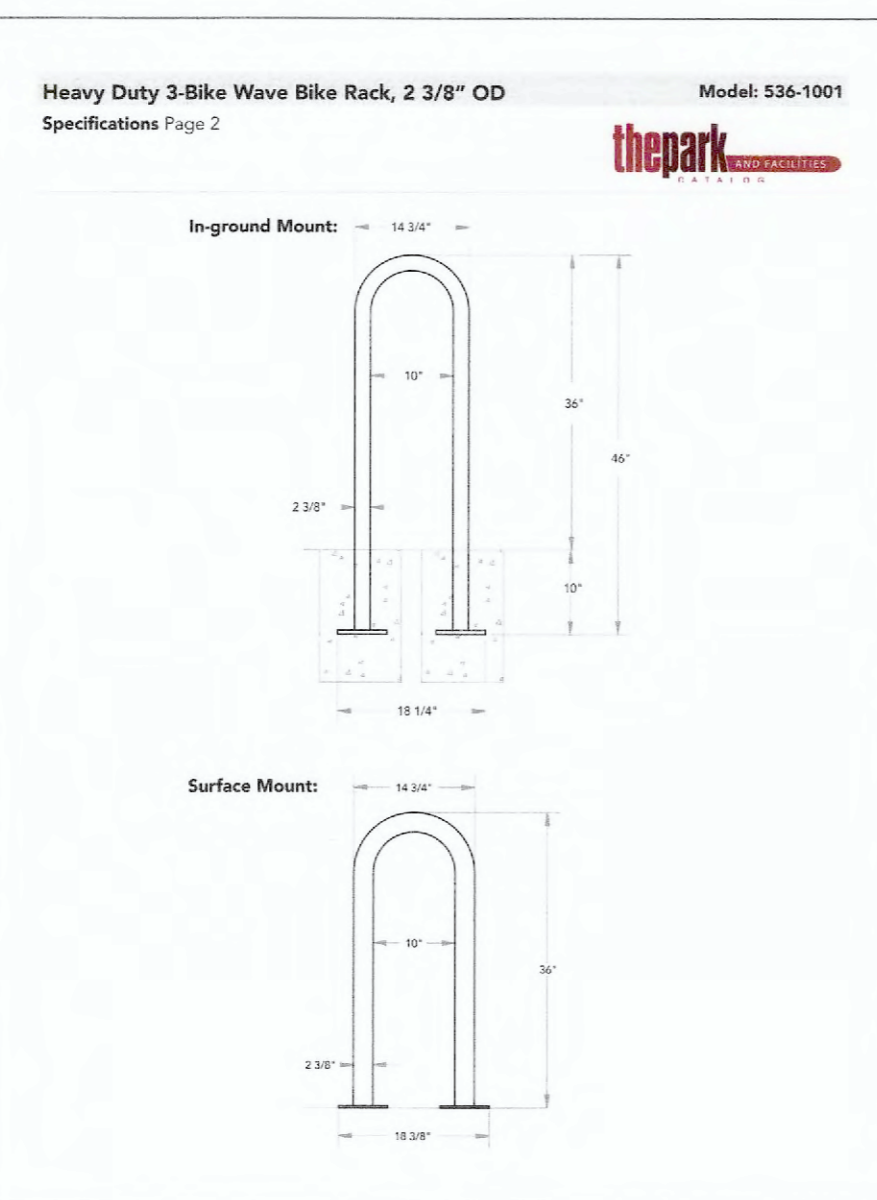
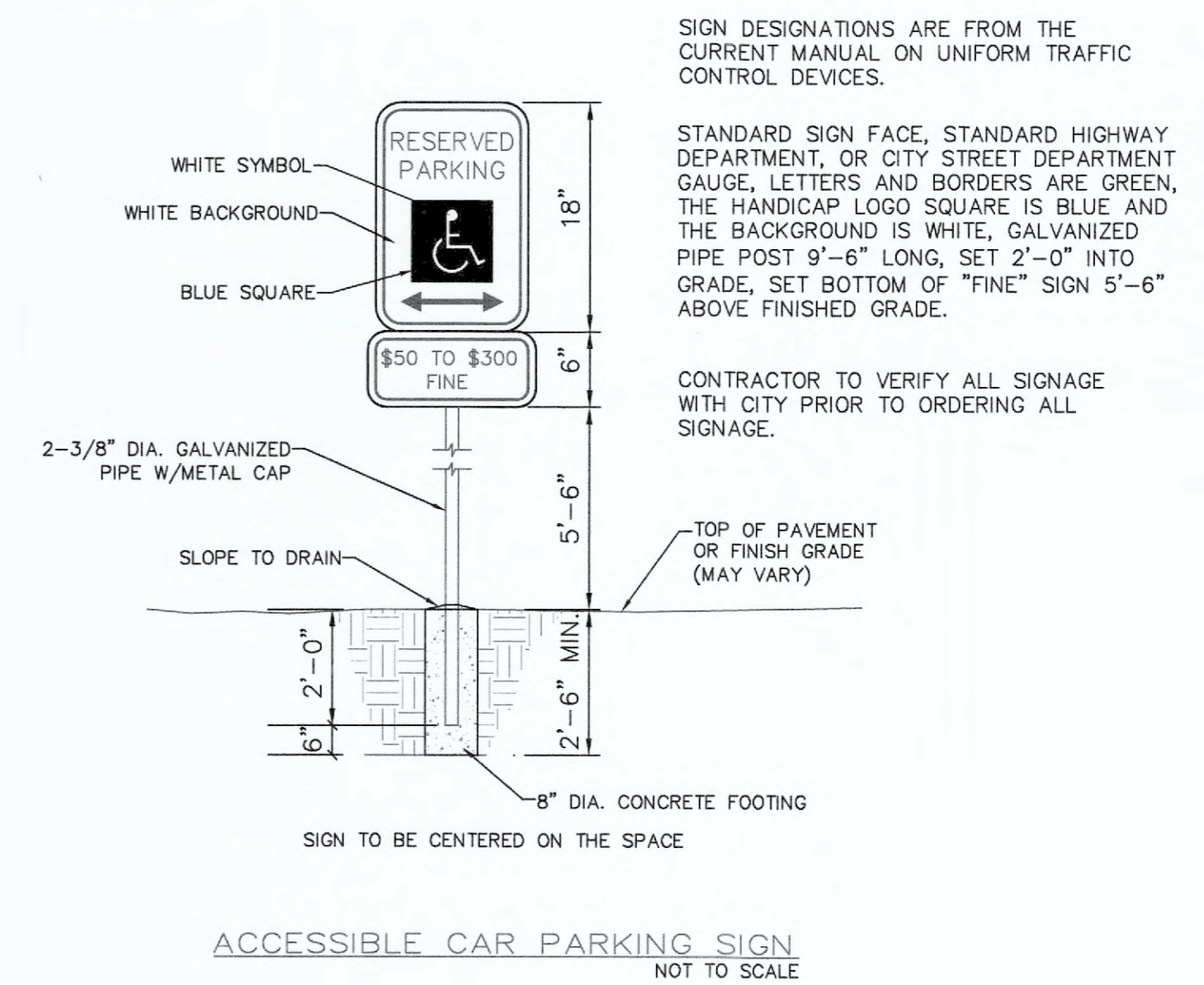
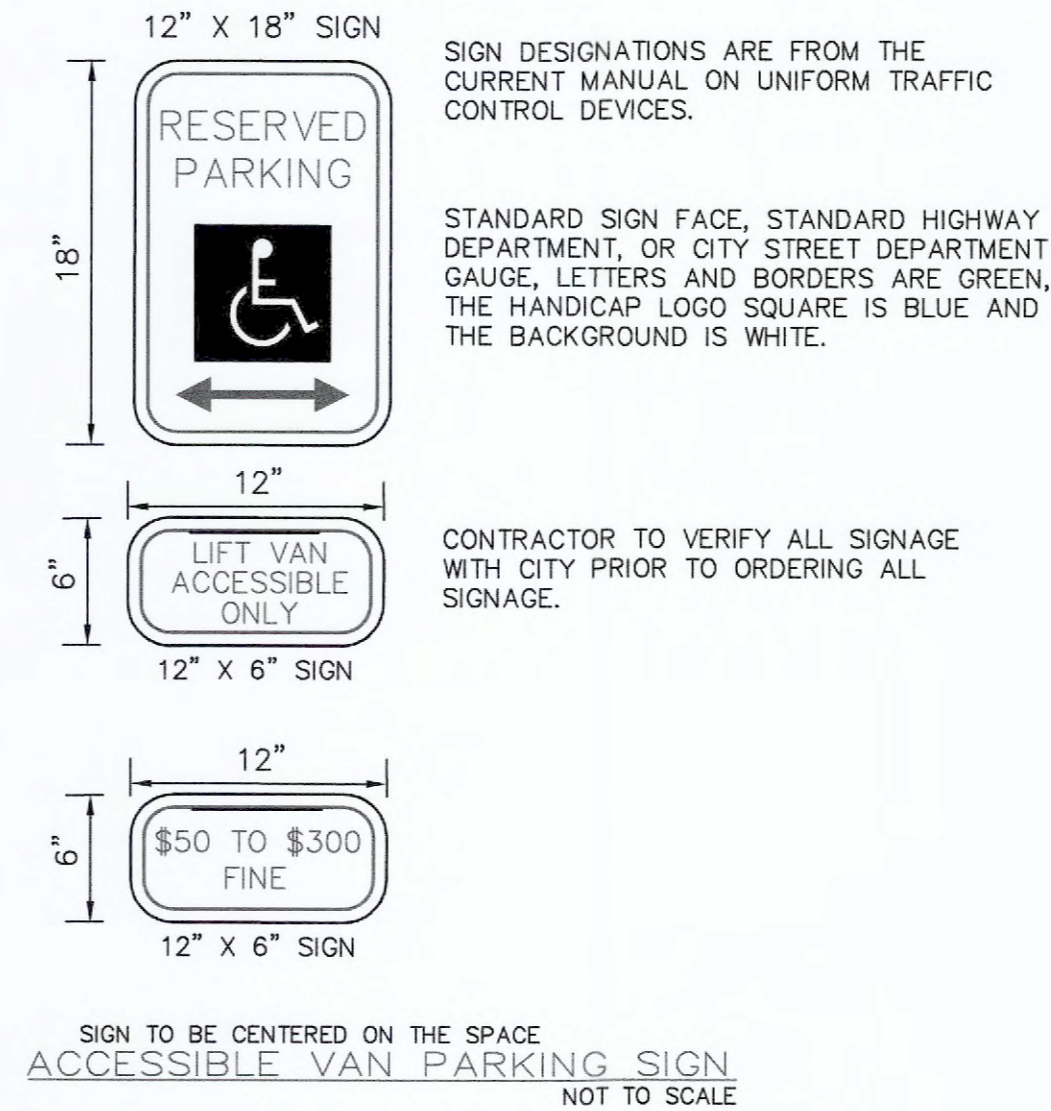
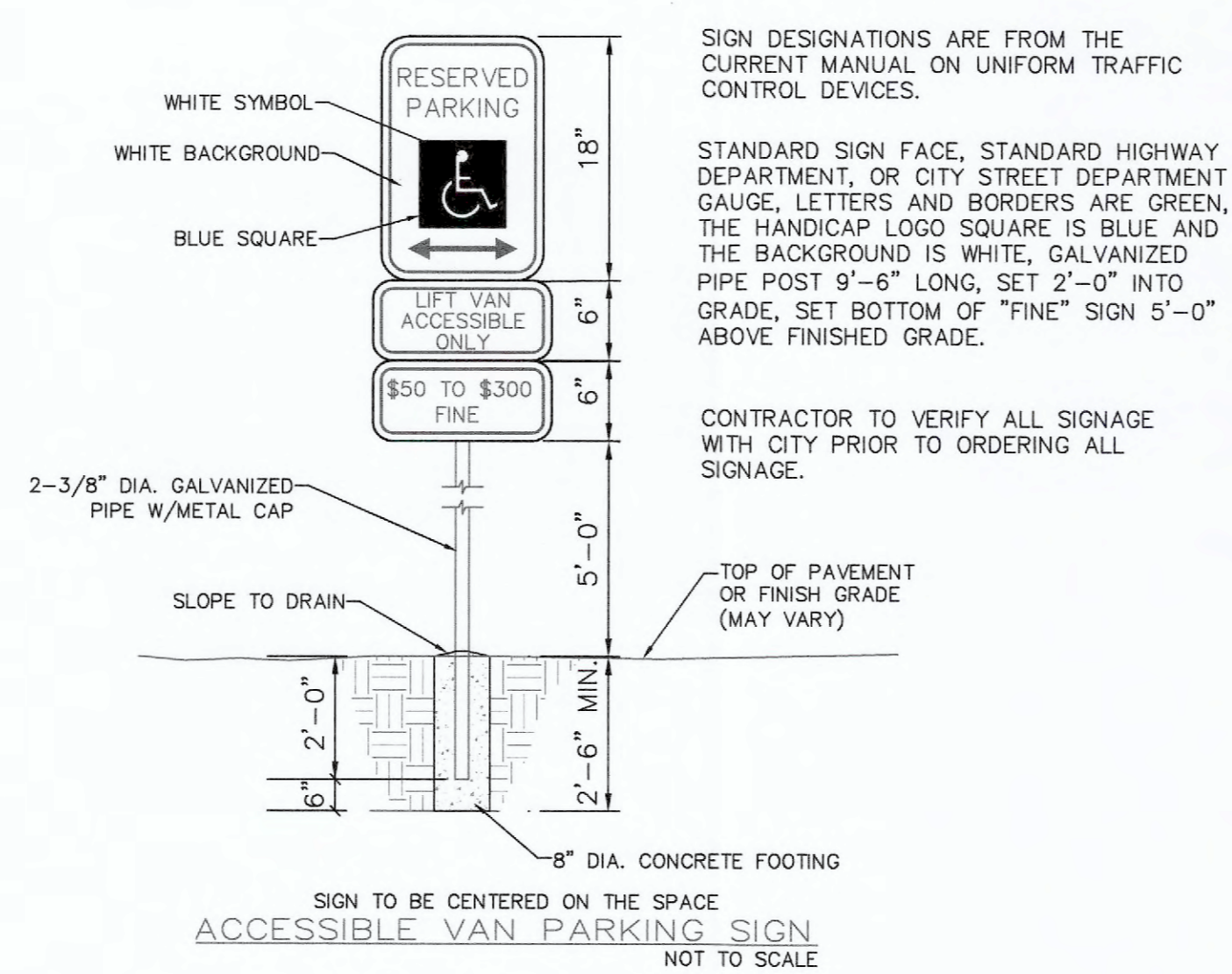
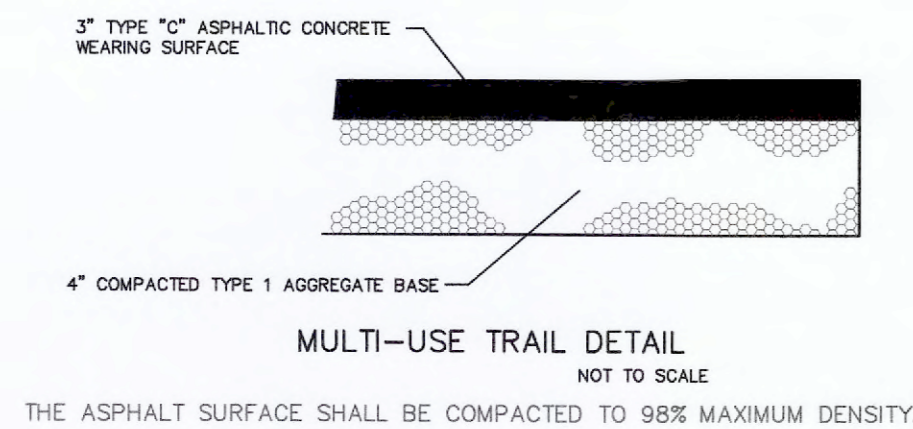
P+Z No. # 18-000622
Approval Date: Mar. 1, 2018

City No. #

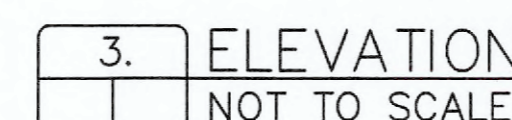
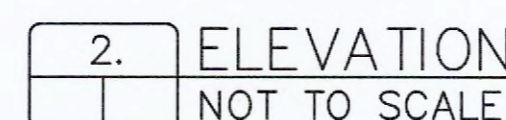
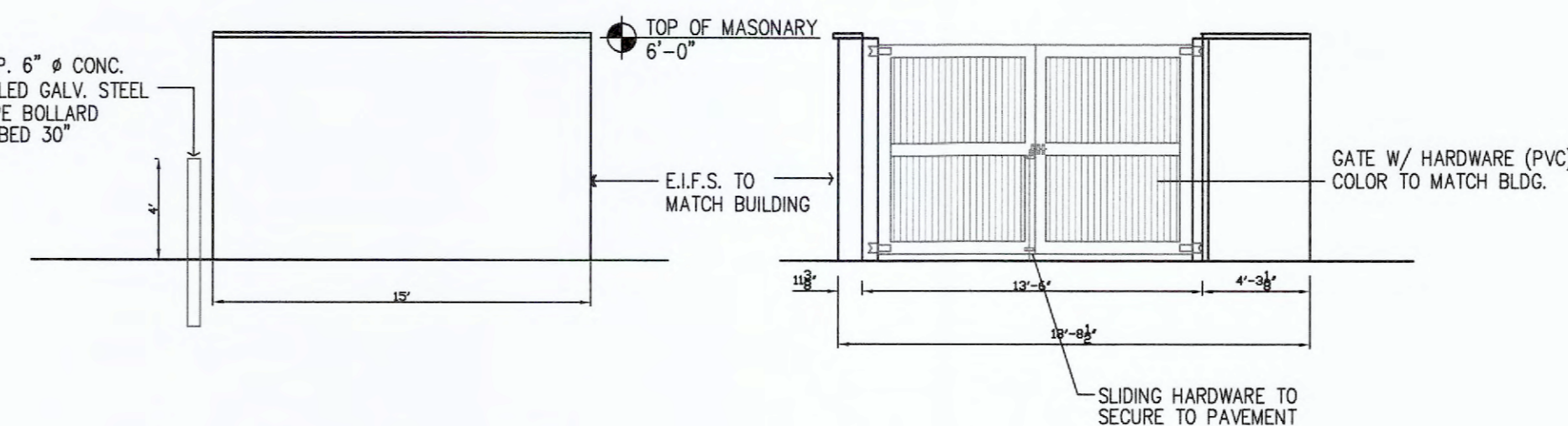
Page No.

PER RN #19 ON SHEET 2

All traffic signals, street signs, sign post, backs and bracket arms shall be painted black using Carboline Rust Bond Penetrating Sealer SG and Carboline 133 HB paint (or equivalent as approved by City of O'Fallon and MoDOT).



THIS DETAIL HAS BEEN PROVIDED FOR CONCEPTUAL APPROVAL ONLY. EXACT DETAIL OF MATERIAL AND CONSTRUCTION METHODS SHALL BE OUTLINES IN THE ARCHITECTURAL BUILDING PLANS.



** CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR CONSTRUCTION OF TRASH ENCLOSURE

PROJECT TITLE:

AS-BUILT PLANS FOR
BRYAN ROAD
ANIMAL HOSPITAL

ENGINEERING
PLANNING
SURVEYING
221 Point West Blvd.
St. Charles, MO 63301
636-928-5562
FAX 928-1718



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Box Engineering Company, Inc.
Missouri State Certificate of Authority
Engineering #000655
Missouri State Certificate of Authority
Surveying #000144

REVISIONS

NO.	DESCRIPTION

Developer / Owner:
BRYAN ROAD ANIMAL HOSPITAL
1161 BRYAN ROAD
O'FALLON, MO 63366
636-272-3900

CONSTRUCTION DETAILS

P+Z No. # 18-000622
Approval Date: Mar. 1, 2018

City No. #

Page No.

Trash Guard® Installation Instructions

Trash Guard® can be installed in a variety of catch basin configurations (or field conditions). In general the Trash Guard® is mounted on the catch basin wall, centered over the outlet pipe.

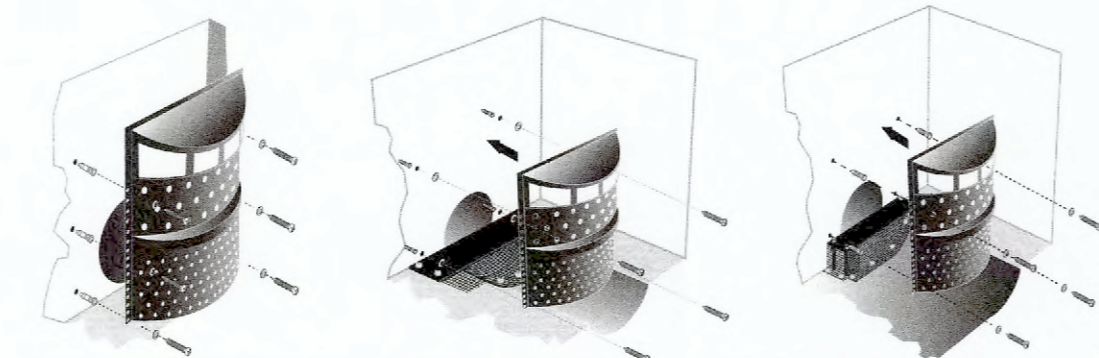
Before installing Trash Guard®, a hydraulic calculation should be performed to determine maximum flow rate based on depth of the catch basin and size of Trash Guard® used. This calculated model will determine maximum flow rate with no obstructions or varying amounts of trash build up, and determine drainage area required to support the calculated flow rate. Allowable trash build up and drainage area required for trash build up will determine maintenance frequency.

If catch basin conditions allow and increased flow rate and additional vertical capacity are desired, a model can be calculated to determine flow rate when extending Trash Guard® from one inch to seven inches from the catch basin wall. As above, this calculated model will determine maximum flow rate with no obstructions or varying amounts of trash build up. Contact Trash Guard® for assistance in determining flow rate and drainage areas under varying field conditions.

The following instructions are organized in sections described as follows:

- Section 1 – Trash Guard® installed on a flat perpendicular wall with a flat bottom
- Section 2 – Bottom Plate installed on an inverted bottom
- Section 3 – Trash Guard® installed on a flat perpendicular wall with an inverted bottom
- Section 4 – Trash Guard® installed on tiered brick wall escalating width from top to bottom with an inverted or flat bottom.
- Section 5 – Trash Guard® installed on concave wall reasonable flat at top and bottom with an inverted or flat bottom.
- Section 6 – Trash Guard® installed extended from wall to increase flow capacity with an inverted or flat bottom.

EXAMPLES OF FLAT AND INVERTED BOTTOMS



WARNING: Improper installation of the Trash Guard® or failure to keep the area around the Trash Guard® free from sediment, debris and litter after installation may result in clogging of the storm water drainage system and increase the risk of flooding during times of heavy rainfall. It is important to clear sediment, debris and litter from around the Trash Guard® at least four (4) times a year and more frequently in areas with large amounts of vegetation or litter. Please contact your local Trash Guard® distributor with any questions regarding the installation or regular maintenance requirements of the Trash Guard®.

Section 1 (Diagram I)

- Items Included:
 - Trash Guard® (Chosen Size)
 - Seven Plastic Anchors
 - Seven Flat Washers
 - Seven 1.75" x .25" Stainless Steel Phillips Screws
- Tools Needed:
 - Cordless Hammer Drill
 - 5/16" Masonry Drill Bit
 - Phillips Screwdriver

Installation Instructions

1. Place Trash Guard® over outlet pipe.
2. Drill 5/16" hole top and bottom each side.
3. Insert plastic anchor and attach washer and phillips screws as shown in diagram.

Section 2 (Diagram A & B)

- Items Included for A:
 - Bottom Plate with plastic netting attached
 - Seven Plastic Anchors
 - Seven Flat Washers
 - Seven 1.75" x .25" Stainless Steel Phillips Screws
- Tools Needed:
 - Cordless Hammer Drill
 - 5/16" Masonry Drill Bit
 - Phillips Screwdriver

Installation Instructions For A

1. Place bottom plate over inverted bottom with level sides. (Front and Back)
2. Drill 5/16" holes as shown in diagram.
3. Insert plastic wall anchors as shown in diagram A.
4. Attach with washer and screw as shown.

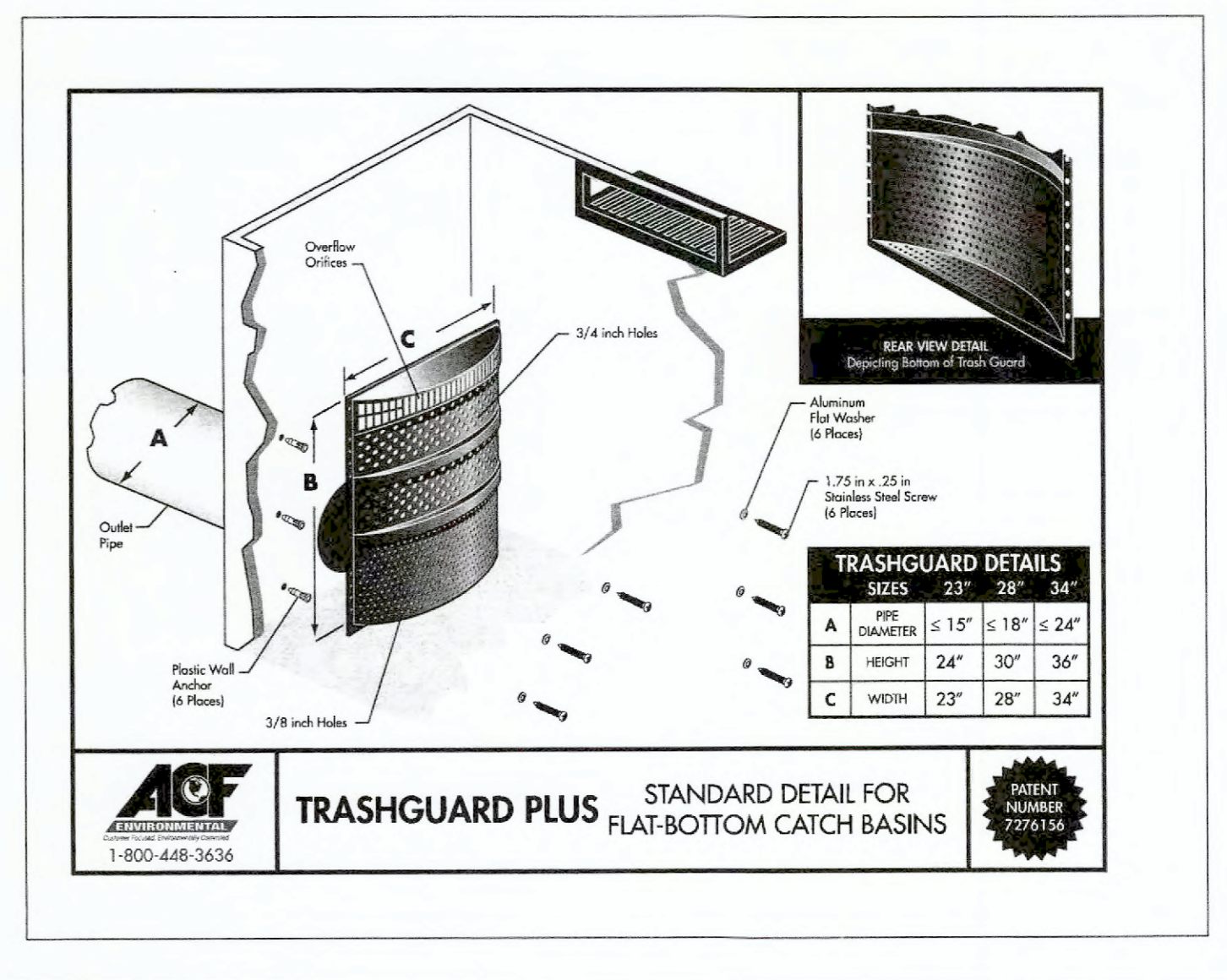
Items Included for B:

- Bottom Plate with plastic netting attached
- Seven Plastic Anchors
- Seven Flat Washers
- Seven 1.75" x .25" Stainless Steel Phillips Screws
- Stainless Steel All Thread Rod Cut to Size
- Fourteen Hex Nuts & Flat Washers
- Four Expansion Anchors
- Plastic Netting (if excess amount on plate is not enough)
- Two Tie Wraps

- Tools Needed:
 - Cordless Hammer Drill
 - 5/16" Masonry Drill Bit for Plastic Anchors
 - 1/2" Masonry Drill Bit for Expansion Anchors
 - Phillips Screwdriver

Installation Instructions For B

1. Follow instructions A if one side is level.
2. Drill 1/2" holes to accommodate expansion anchors.
3. Cut stainless steel rod to desired length. (Allow 1" inside expansion anchor and 1" through bottom plate)
4. Attach washers and hex nuts as shown in diagram.
5. Attach netting as shown in diagram.



Product selection for FLEXSTORM PURE FILTERS (Permanent Inlet Protection)

Standard	Inlet Type	Krieger Equivalent	Grate Size	Clear Opening Size	Bag Cap. (ft³)	Flow Ratings (CFS)			PRICE			
						FX/FX+	PC/PC+	Bypass	FX	FX+	PC	PC+
36" Open Throat Inlet	Open Throat (WM)	FGP-36CI	N/A	36	2.5	1.9	1.4	N/A	62HDWM36FX	62HDWM36FXP	62HDWM36PC	62HDWM36PCP
42" Open Throat Inlet	Open Throat (WM)	FGP-42CI	N/A	42	3.0	2.5	1.7	N/A	62HDWM42FX	62HDWM42FXP	62HDWM42PC	62HDWM42PCP
48" Open Throat Inlet	Open Throat (WM)	FGP-48CI	N/A	48	3.3	2.8	2.2	N/A	62HDWM48FX	62HDWM48FXP	62HDWM48PC	62HDWM48PCP
60" Open Throat Inlet (2 piece)	Open Throat (WM)	FGP-60CI	N/A	60	4.2	3.6	2.6	N/A	62HDWM60FX	62HDWM60FXP	62HDWM60PC	62HDWM60PCP
84" Open Throat Inlet (2 piece)	Open Throat (WM)	FGP-84CI	N/A	84	5.8	5.0	3.4	N/A	62HDWM84FX	62HDWM84FXP	62HDWM84PC	62HDWM84PCP
96" Open Throat Inlet (2 piece)	Open Throat (WM)	FGP-96CI	N/A	96	6.6	5.6	4.4	N/A	62HDWM96FX	62HDWM96FXP	62HDWM96PC	62HDWM96PCP
48" Open Throat with Side Wings	Open Throat (WM)	N/A	N/A	48 Winged	5.1	2.7	1.7	N/A	62HDWM4818FX	62HDWM4818FXP	62HDWM4818PC	62HDWM4818PCP

EASY INSTALL WALL MOUNT BRACKETS
304 STAINLESS STEEL FRAMING
REPLACEABLE BAG WITH HYDROCARBON MEDIA

FLEXSTORM HDWM WALL MOUNT INLET FILTERS FOR OPEN THROAT GUTTERS (2 piece set for 6", 7", 8")

INSTALLATION AND MAINTENANCE INSTRUCTIONS

1. ENTER MANHOLE OPENING WITH INLET FILTER AND MOUNTING HARDWARE
2. ALIGN FILTER FRAME WITH CURB OPENING AND MARK CENTERLINE OF EACH FRAME HANGER BRACKET
3. USING SUPPLIED WALL MOUNT BRACKETS, MARK LOCATION OF BRACKET SCREW HOLES SPACED 1" DOWN FROM TOP LEDGE OF CONCRETE
4. USING HAMMER DRILL, DRILL HOLE TO RECOMMENDED DEPTH OF SPECIFIED FASTENER
5. SECURE THE WALL MOUNT BRACKETS USING CONCRETE FASTENERS AND HANG THE FLEXSTORM INLET ASSEMBLY.
6. FOR MAINTENANCE LIFT THE FILTER FRAME OFF MOUNTING BRACKETS AND CARRY UP THROUGH MANHOLE OPENING. ALTERNATIVELY SERVICE WITH TRUCK MOUNTED VACUUM.

ALL PRODUCTS MANUFACTURED BY INLET & PIPE PROTECTION, INC. A DIVISION OF ADS, INC. WWW.INLETFILTERS.COM (866) 287-8635 PH (630) 355-3477 FX INFO@INLETFILTERS.COM

YOUR PURCHASE INCLUDES: C | HD | CALIFORNIA

PROJECT TITLE:
AS-BUILT PLANS FOR
BRYAN ROAD
ANIMAL HOSPITAL

Issue Date: 6/15/2020

ENGINEERING
DRAWING
SURVEYING

221 Point West Blvd.
St. Charles, MO 63301
636-928-5562
FAX 928-1718

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Engineering #000655
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REVISIONS	

Developer / Owner:
BRYAN ROAD ANIMAL HOSPITAL
1161 BRYAN ROAD
O'FALLON, MO 63366
636-272-3900

WATER QUALITY DETAILS

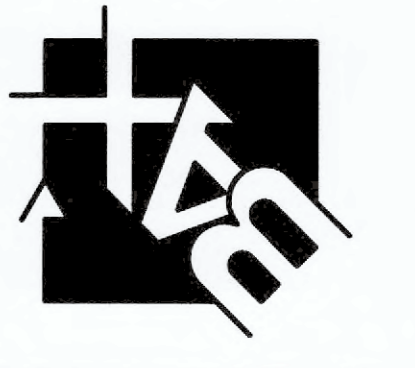
P+Z No. # 18-00622
Approval Date: Mar. 1, 2018
City No. #
Page No.

11 of 17

PROJECT TITLE:

AS-BUILT PLANS FOR
BRYAN ROAD
ANIMAL HOSPITAL

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Surveying #000144

REVISIONS

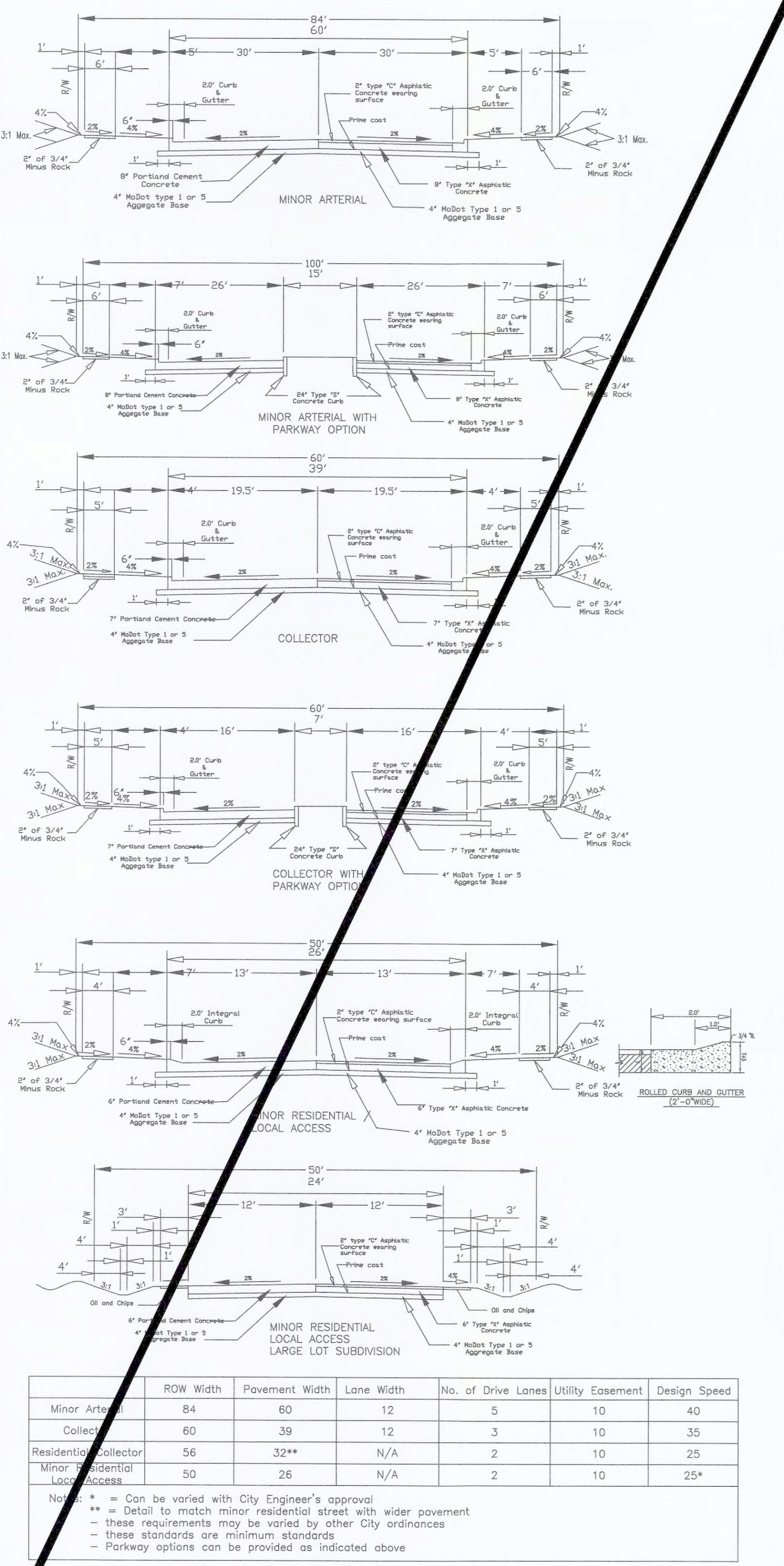
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1161 BRYAN ROAD
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636-272-3900

PAVEMENT DETAILS

P+Z No. # 18-000622
Approval Date: Mar. 1, 2018
City No. #

Page No.
13 of 17

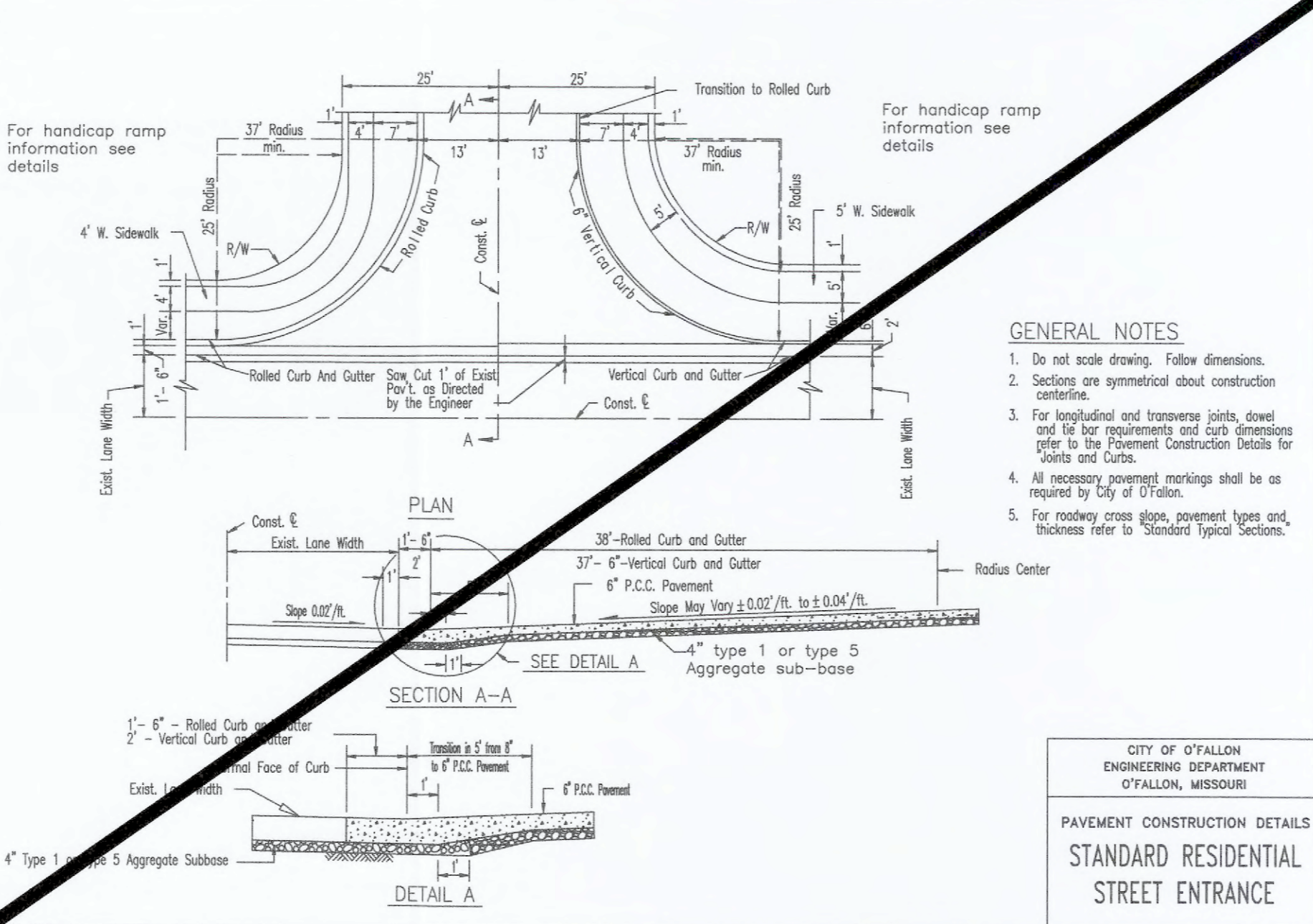


	ROW Width	Pavement Width	Lane Width	No. of Drive Lanes	Utility Easement	Design Speed
Minor Arterial	84	60	12	5	10	40
Collector	60	39	12	3	10	35
Residential Collector	56	32**	N/A	2	10	25
Minor Residential Local Access	50	26	N/A	2	10	25*

Notes:
* = Can be varied with City Engineer's approval
** = Detail to match minor residential street with wider pavement
- these requirements may be varied by other City ordinances
- these standards are minimum standards
- Parkway options can be provided as indicated above

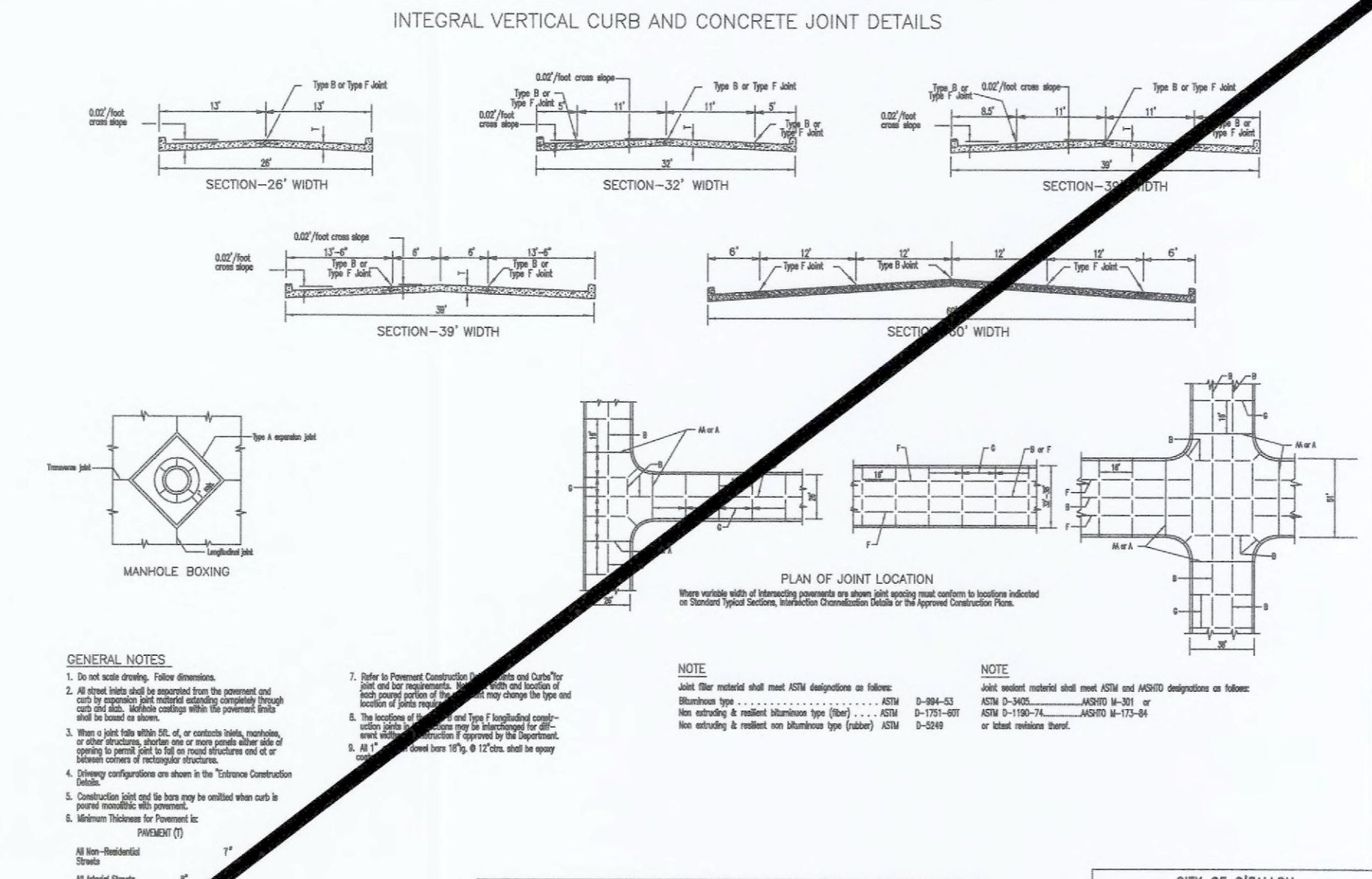
Designer will provide roadway cross section and joint locations in a separate detail drawing.
Residential streets shall be a minimum of 6" P.C. concrete over 4" rock base on compacted subgrade per ordinance number 4875.

CITY OF O'FALLON
ENGINEERING DEPARTMENT
O'FALLON, MISSOURI
Typical Pavement Design
SECTION NO. 405370



GENERAL NOTES
1. Do not scale drawing. Follow dimensions.
2. Sections are symmetrical about construction centerline.
3. For longitudinal and transverse joints, detail and bar requirements and curb dimensions refer to the Pavement Construction Details for Joints and Curbs.
4. All necessary pavement markings shall be as required by City of O'Fallon.
5. For roadway cross slopes, pavement types and thickness refer to Standard Typical Sections.

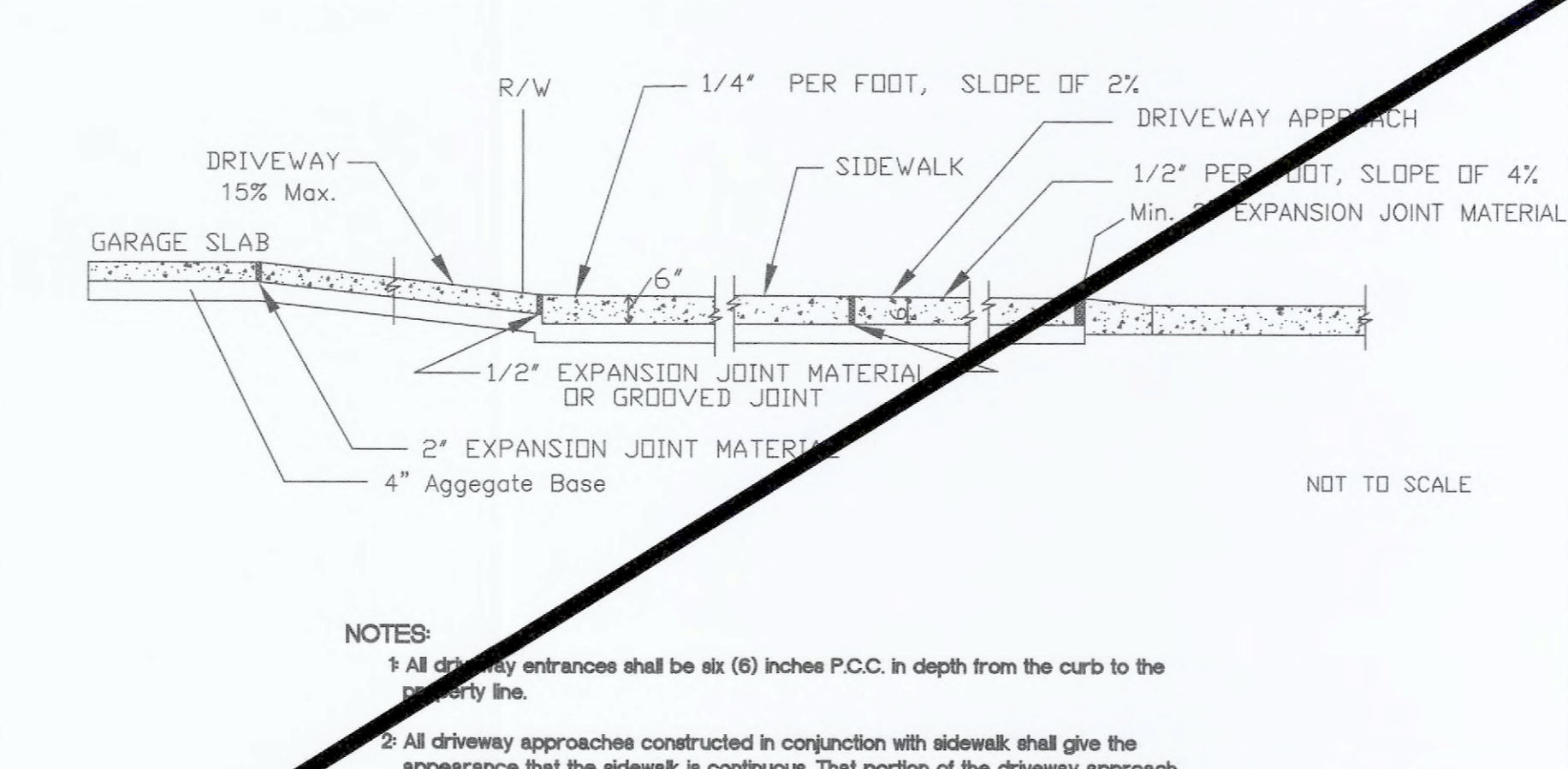
CITY OF O'FALLON
ENGINEERING DEPARTMENT
O'FALLON, MISSOURI
PAVEMENT CONSTRUCTION DETAILS
STANDARD RESIDENTIAL
STREET ENTRANCE



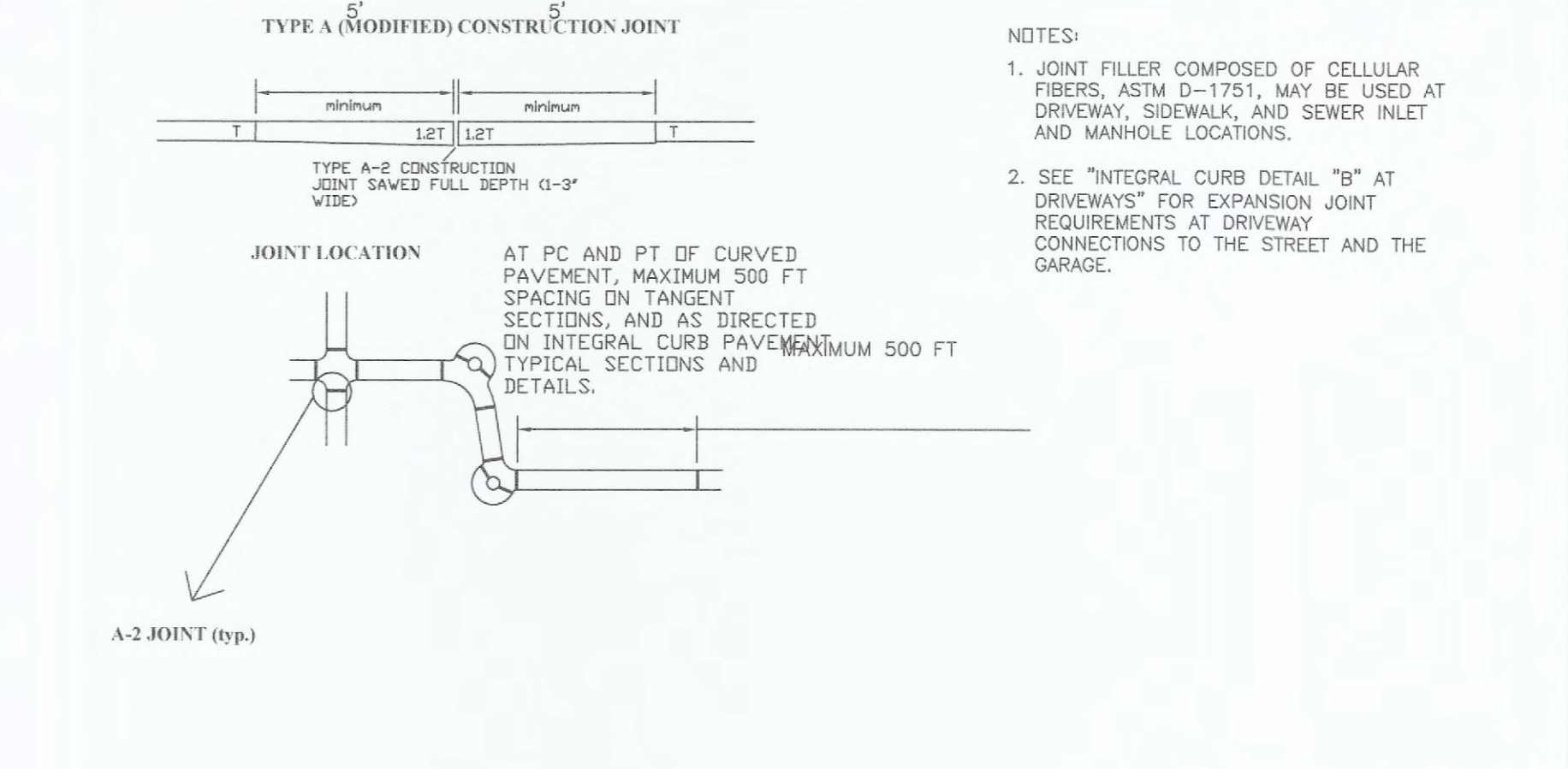
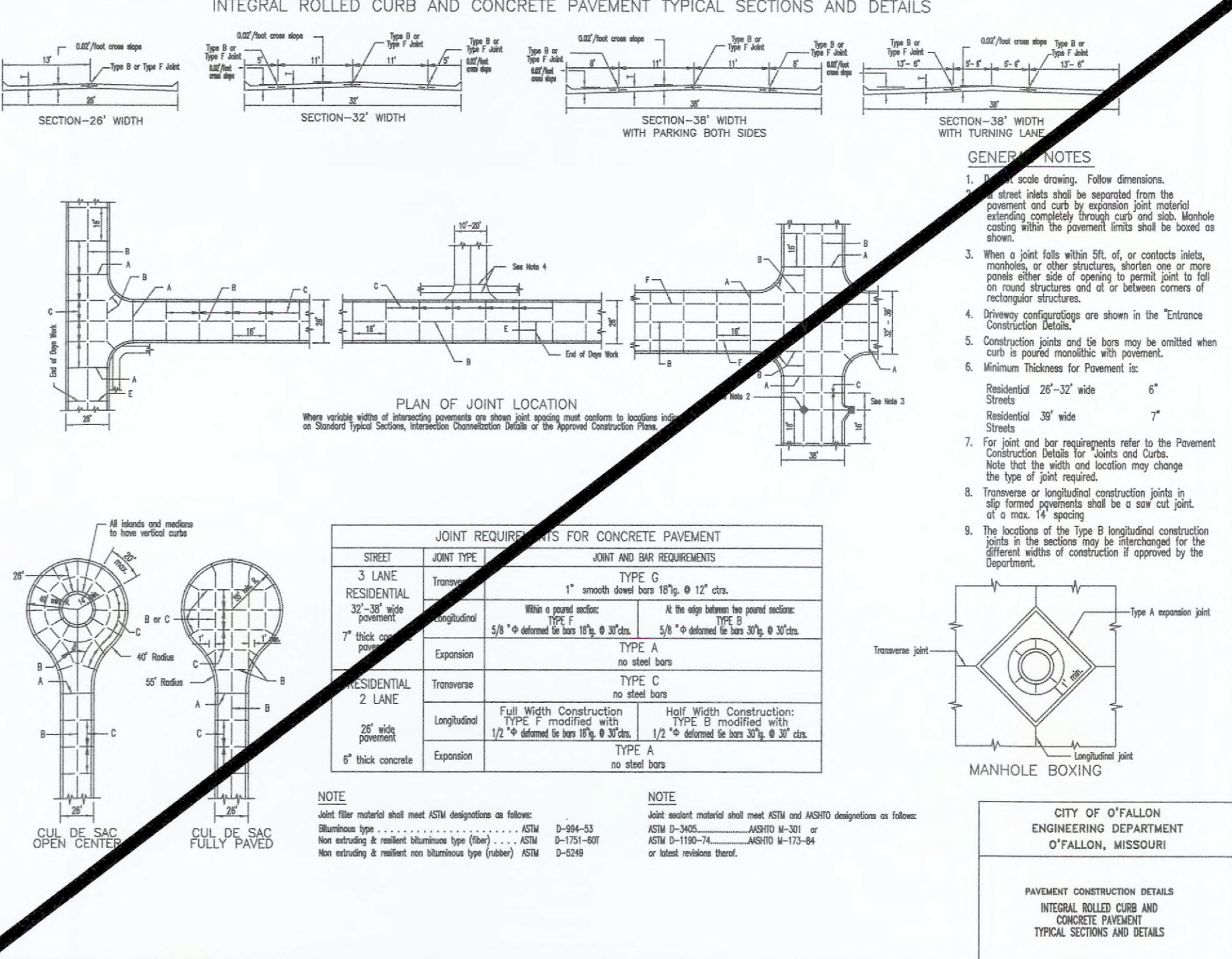
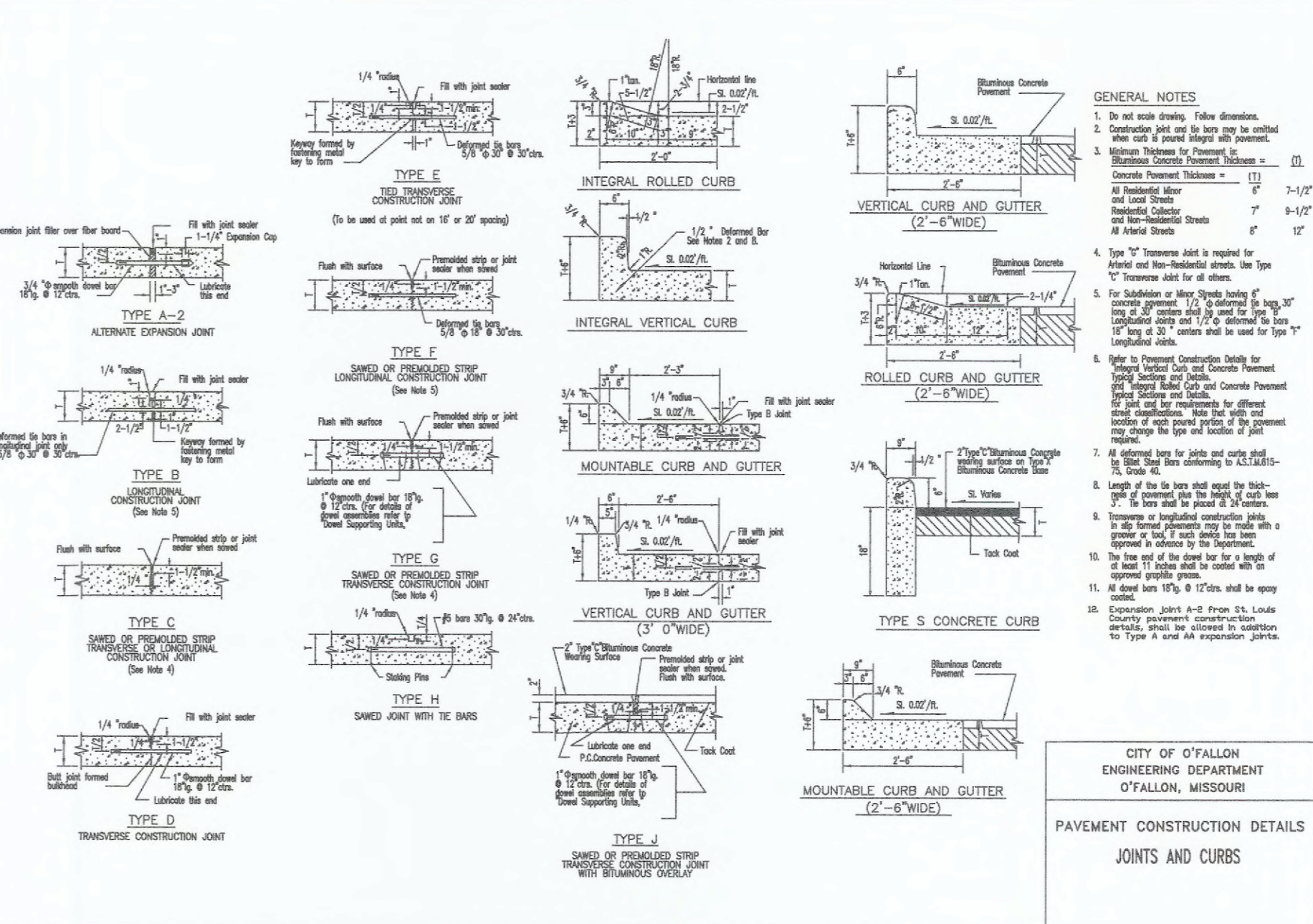
GENERAL NOTES
1. Do not scale drawing. Follow dimensions.
2. All curb and gutter details shall be constructed in accordance with the Standard Typical Sections, Section 405370 and 405371 of the Pavement Construction Details.
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CITY OF O'FALLON
ENGINEERING DEPARTMENT
O'FALLON, MISSOURI
PAVEMENT CONSTRUCTION DETAILS
INTEGRAL VERTICAL CURB
AND CONCRETE PAVEMENT
TYPICAL SECTIONS AND DETAILS

STREET	JOB TYPE	JOINT REQUIREMENTS FOR CONCRETE PAVEMENT	JOINT AND BAR REQUIREMENTS
ARIAL	Transverse	TYPE C 1" smooth dowel bars 18" @ 12' cts.	TYPE C 1" smooth dowel bars 18" @ 12' cts.
RESIDENTIAL	Transverse	TYPE C 1" smooth dowel bars 18" @ 12' cts.	TYPE C 1" smooth dowel bars 18" @ 12' cts.
RESIDENTIAL	Expansion	TYPE A no steel bars	TYPE A no steel bars
RESIDENTIAL	Transverse	TYPE C 1" smooth dowel bars 18" @ 12' cts.	TYPE C 1" smooth dowel bars 18" @ 12' cts.
RESIDENTIAL	Expansion	TYPE A no steel bars	TYPE A no steel bars

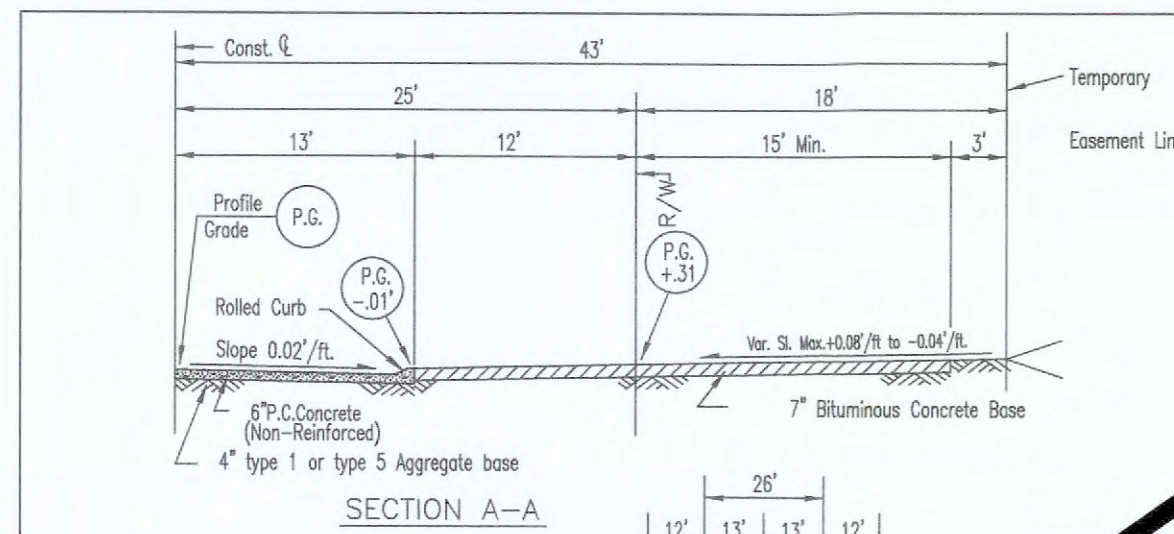


CITY OF O'FALLON
ENGINEERING DEPARTMENT
O'FALLON, MISSOURI
Integral Curb Detail
"B" at Driveway
SECTION NO. 505.080

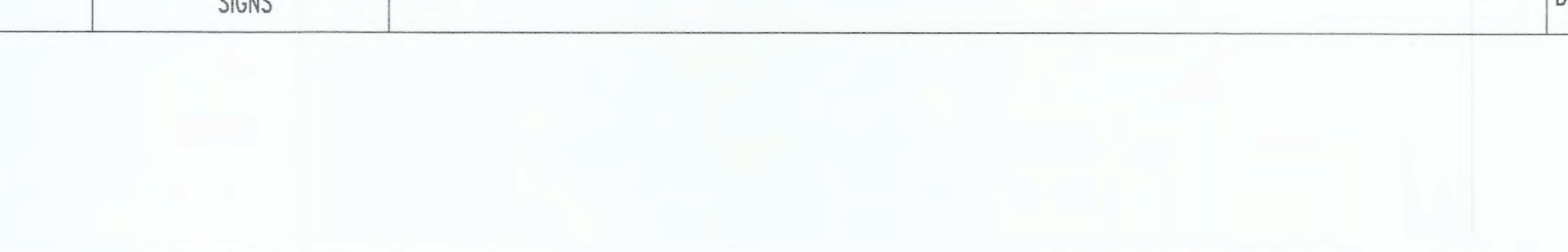
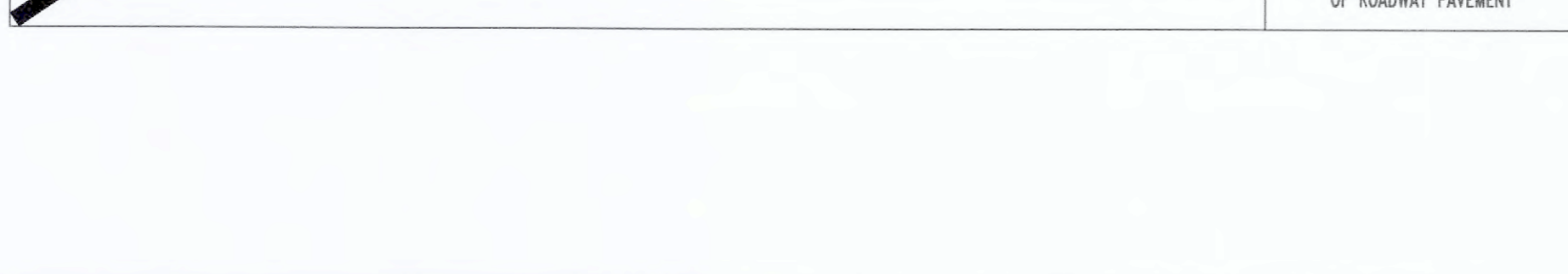
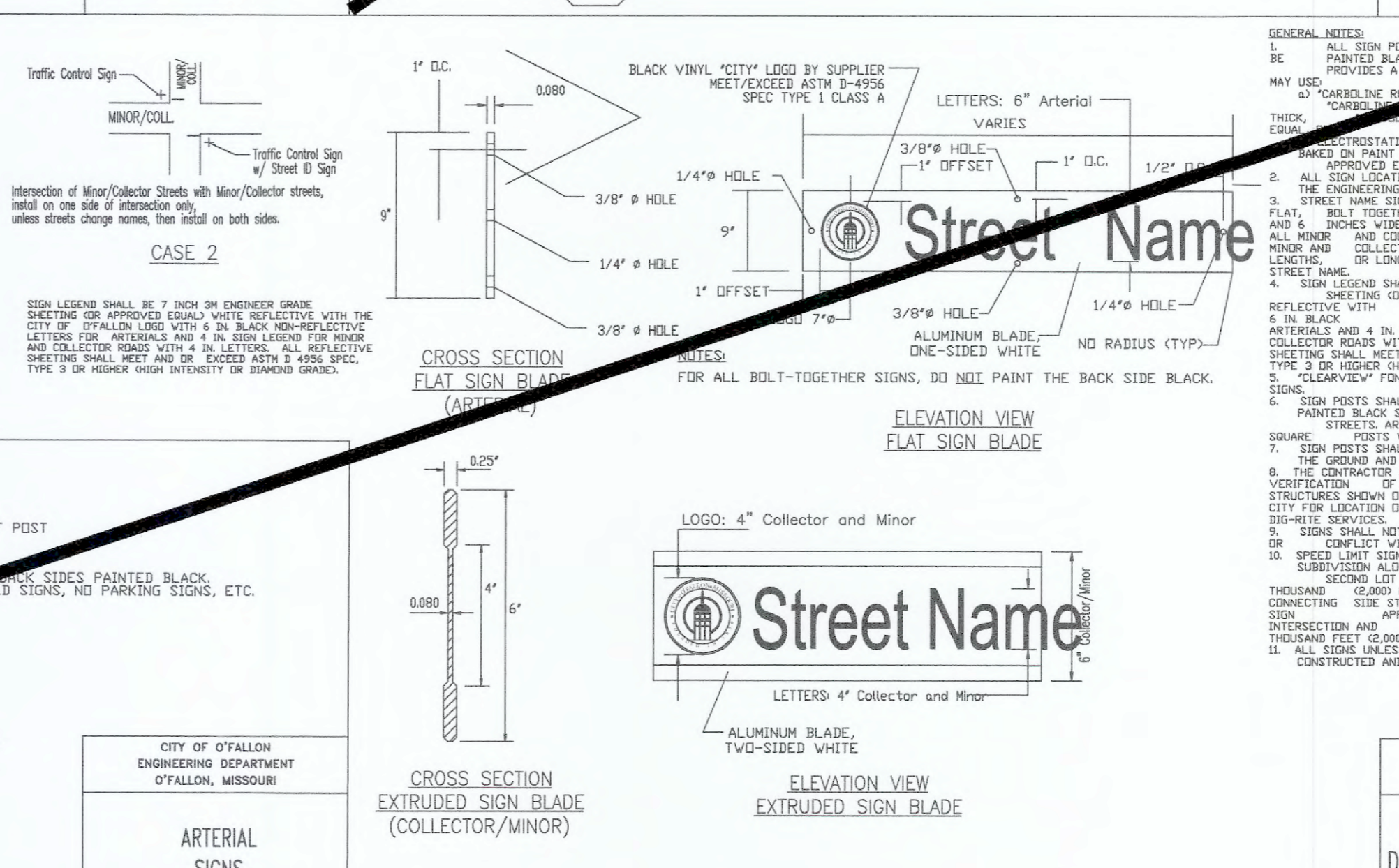
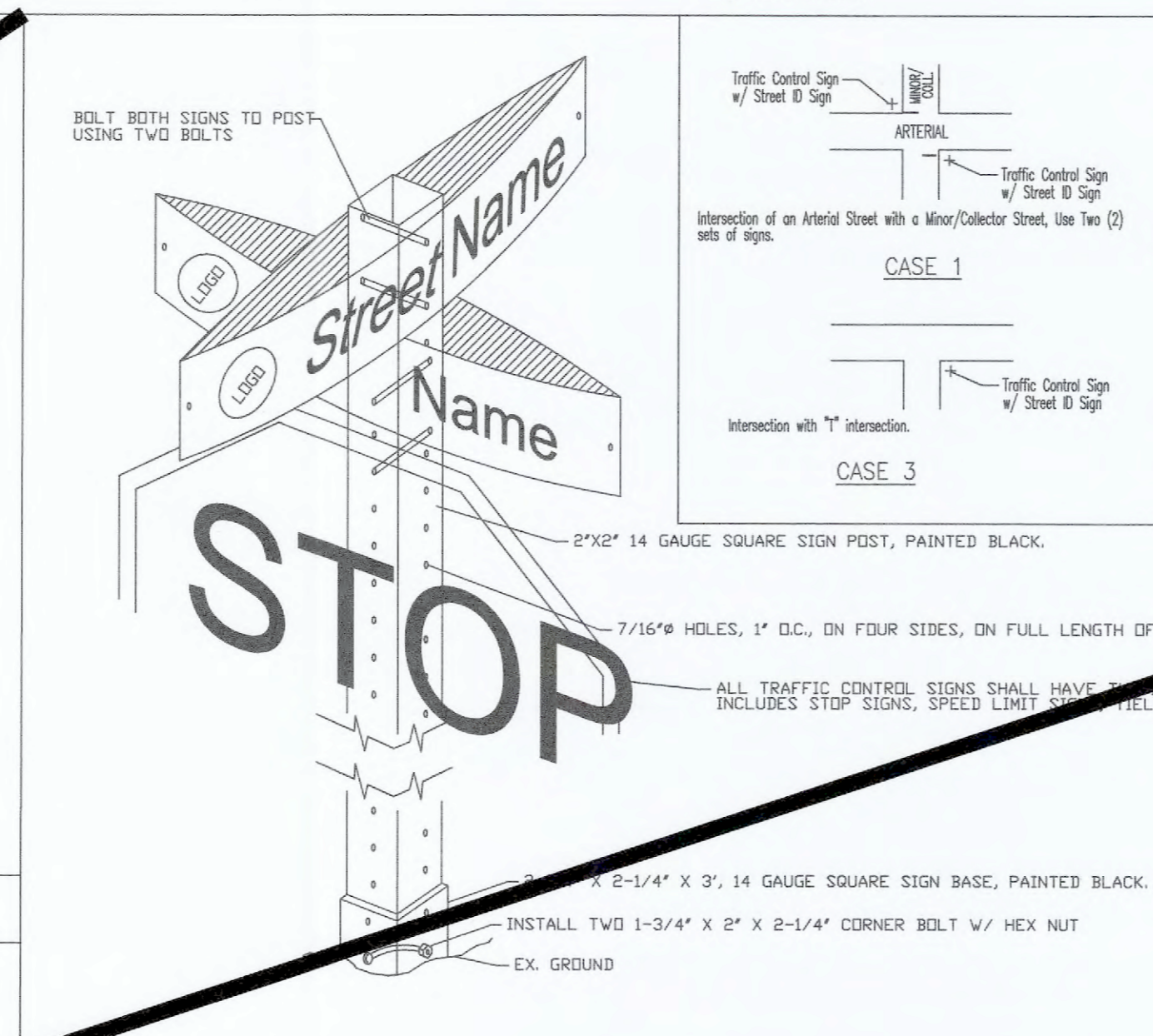
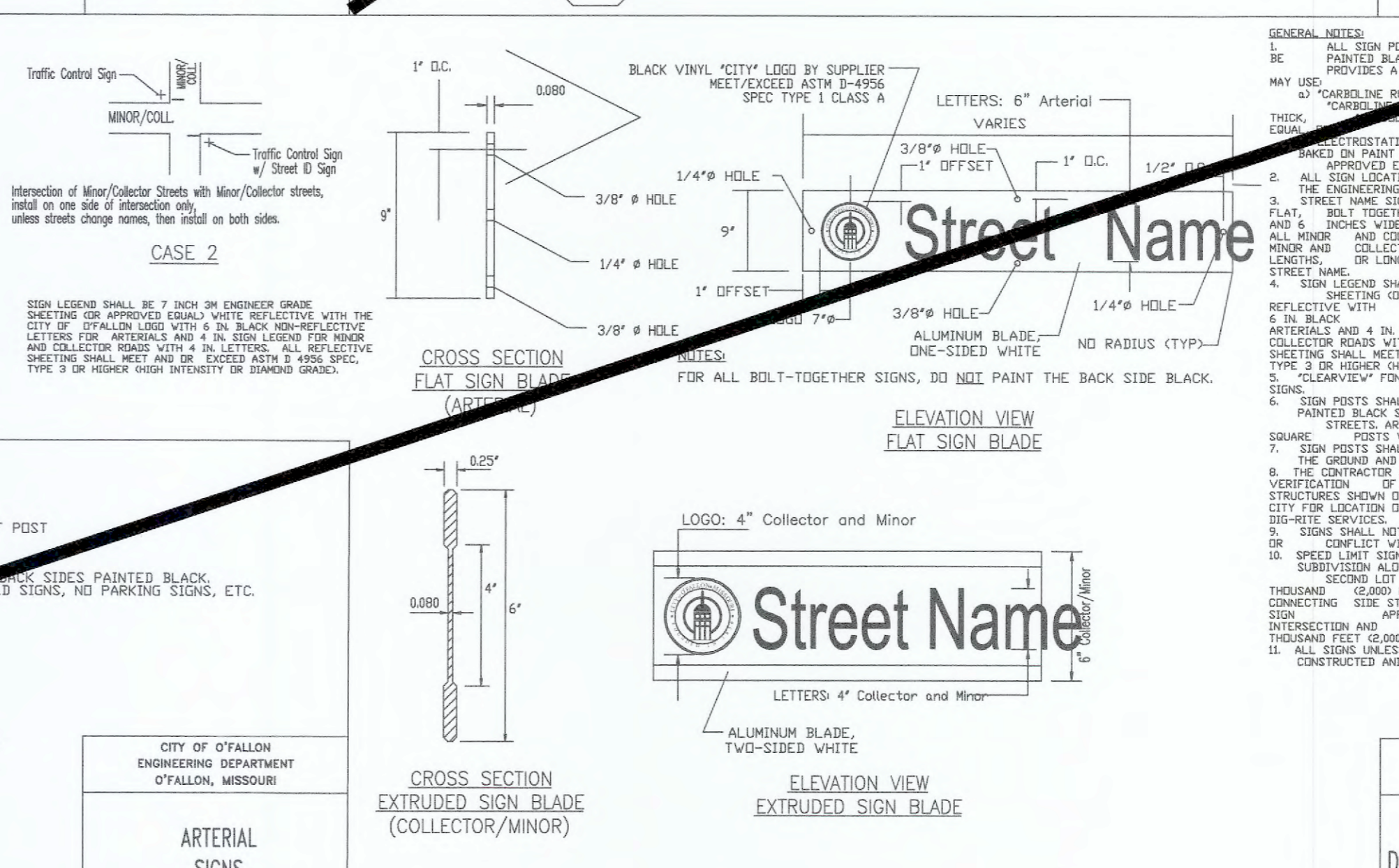
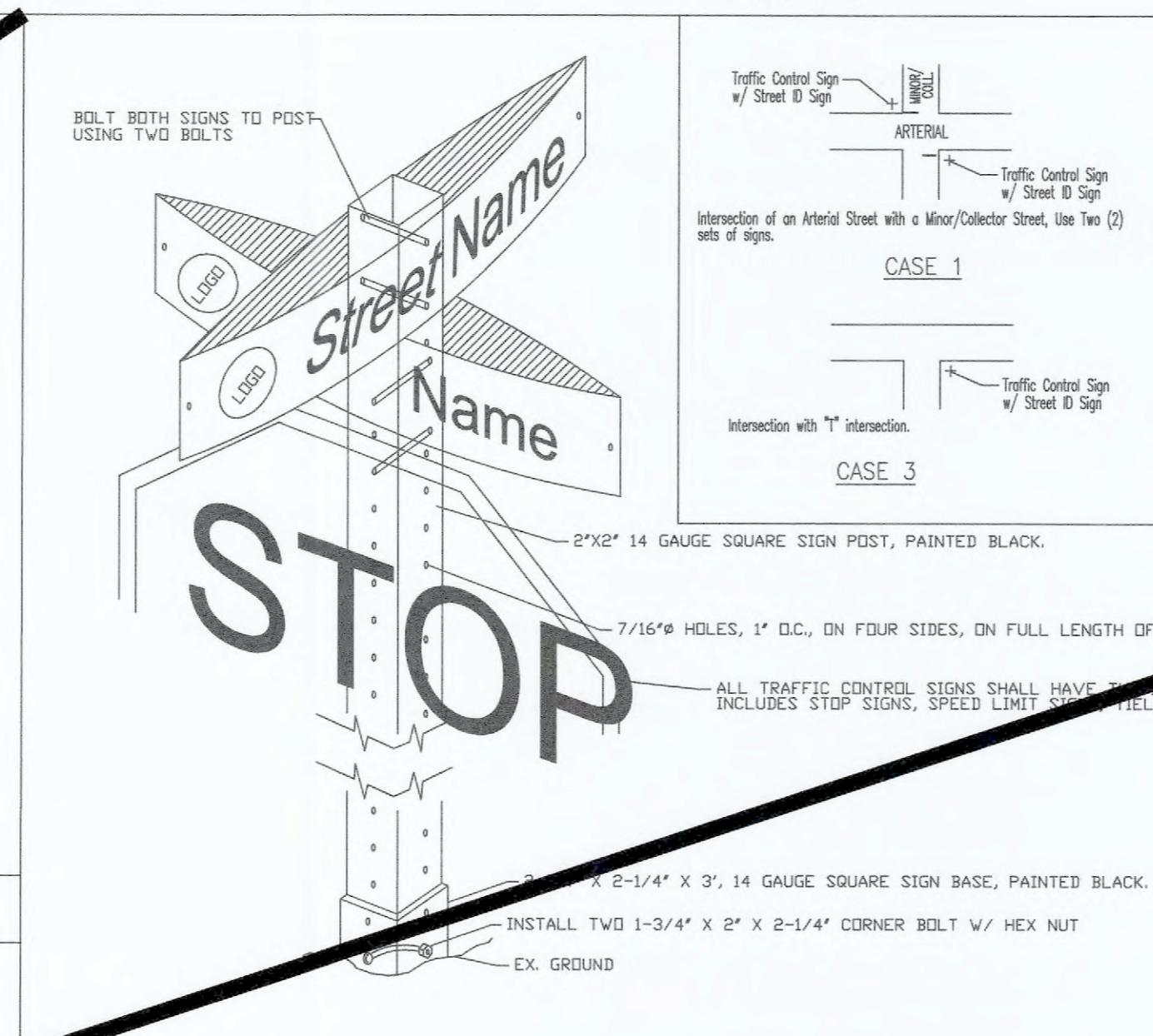
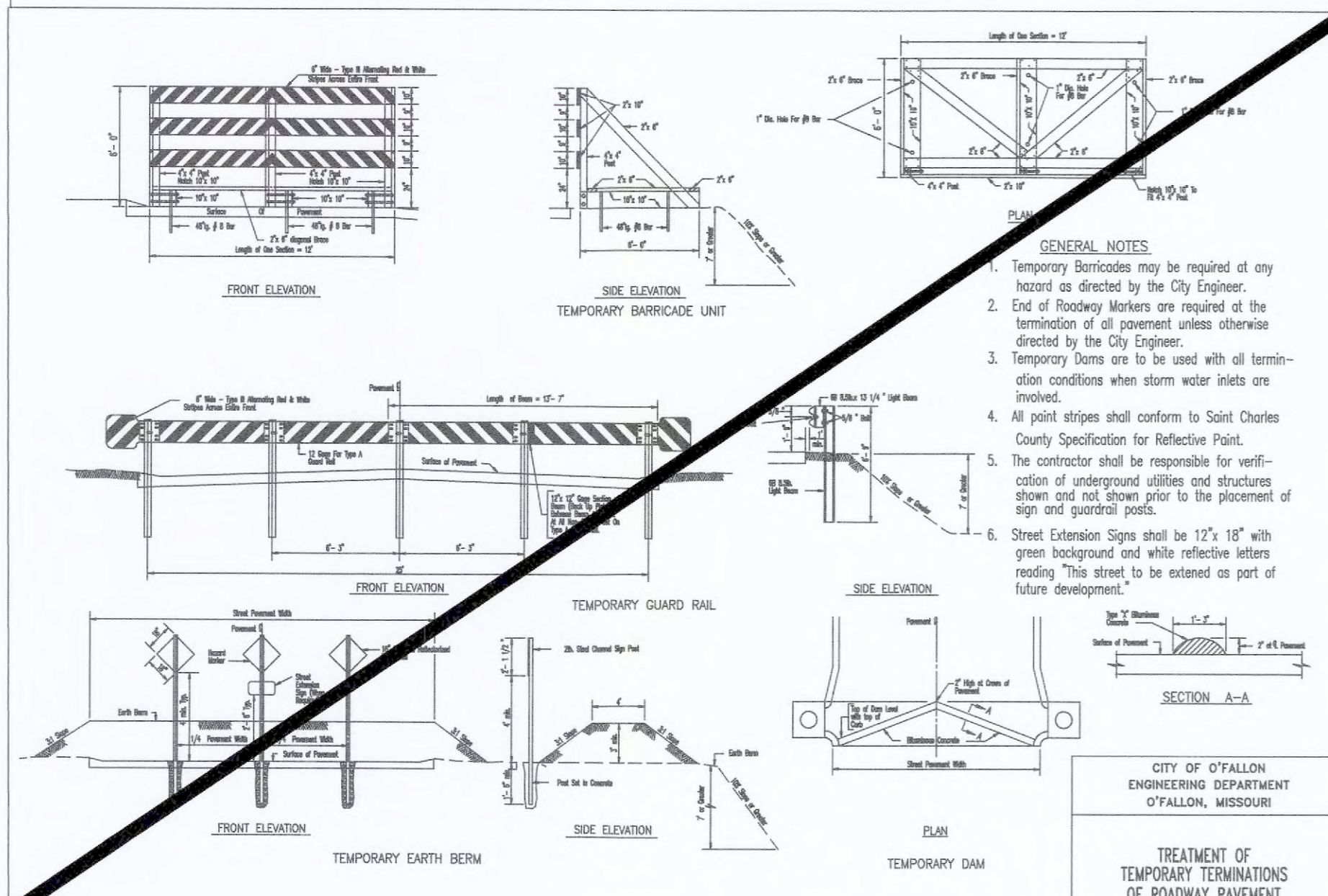
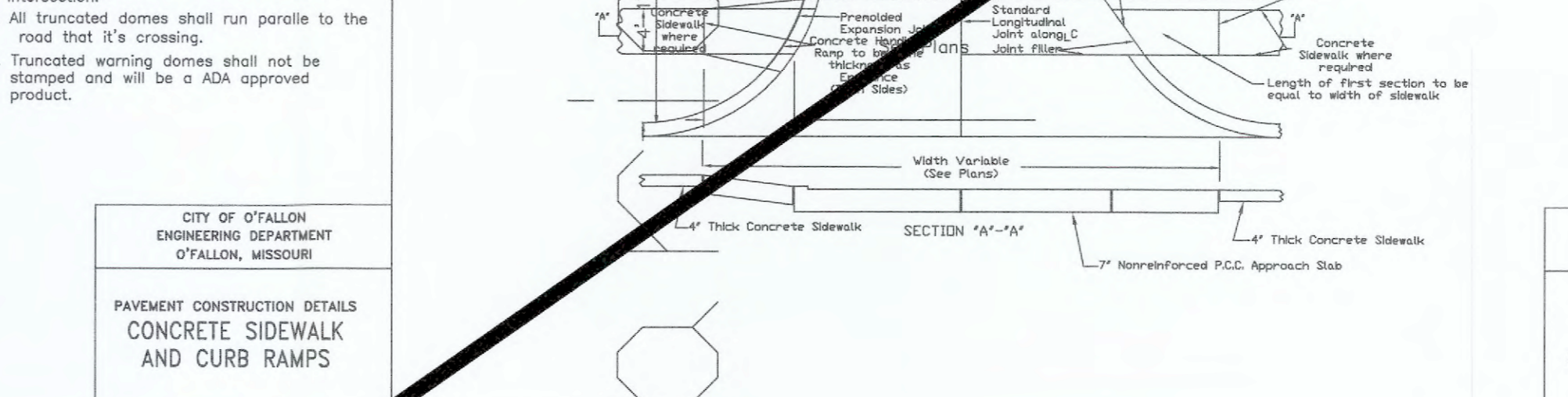
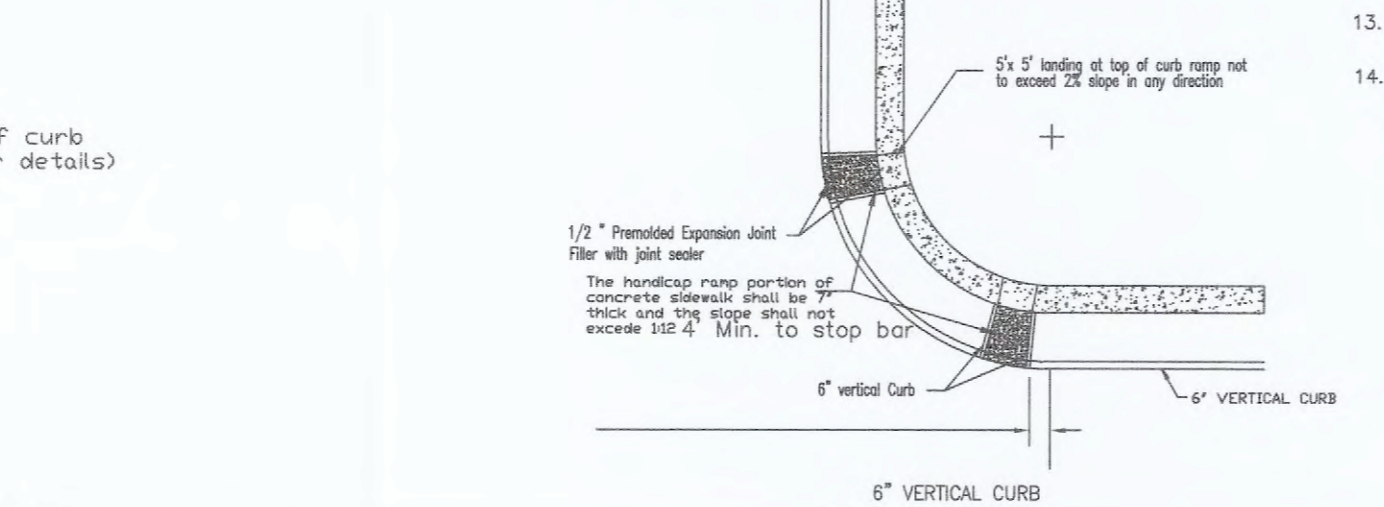
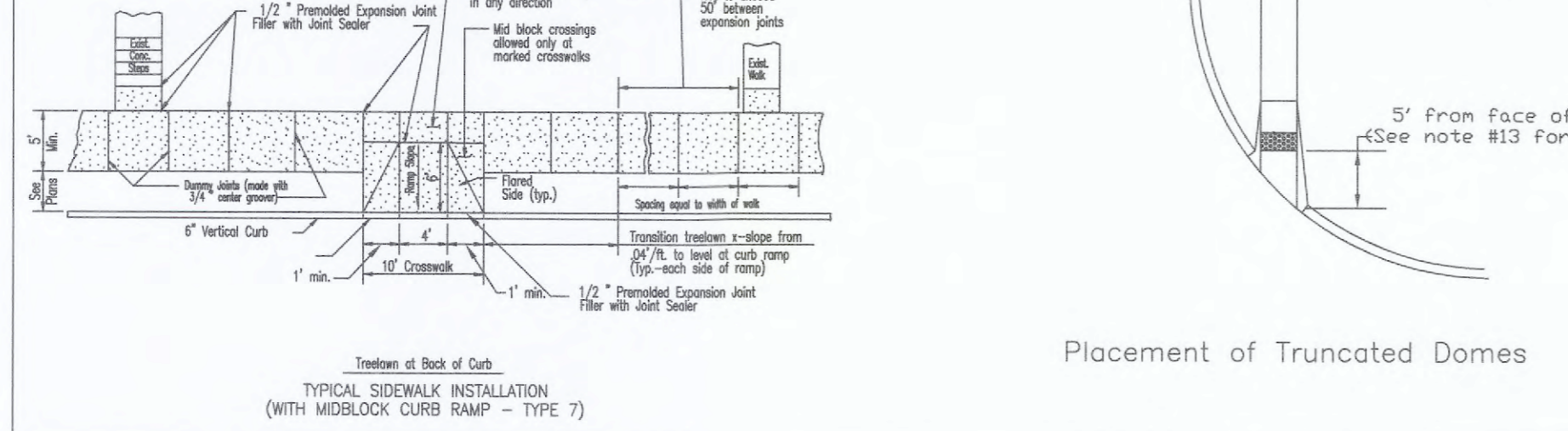
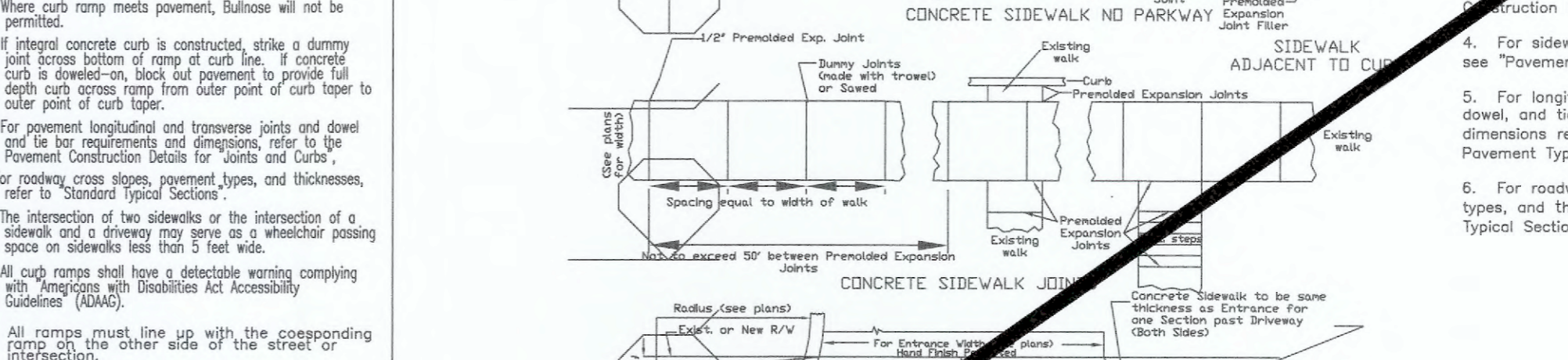
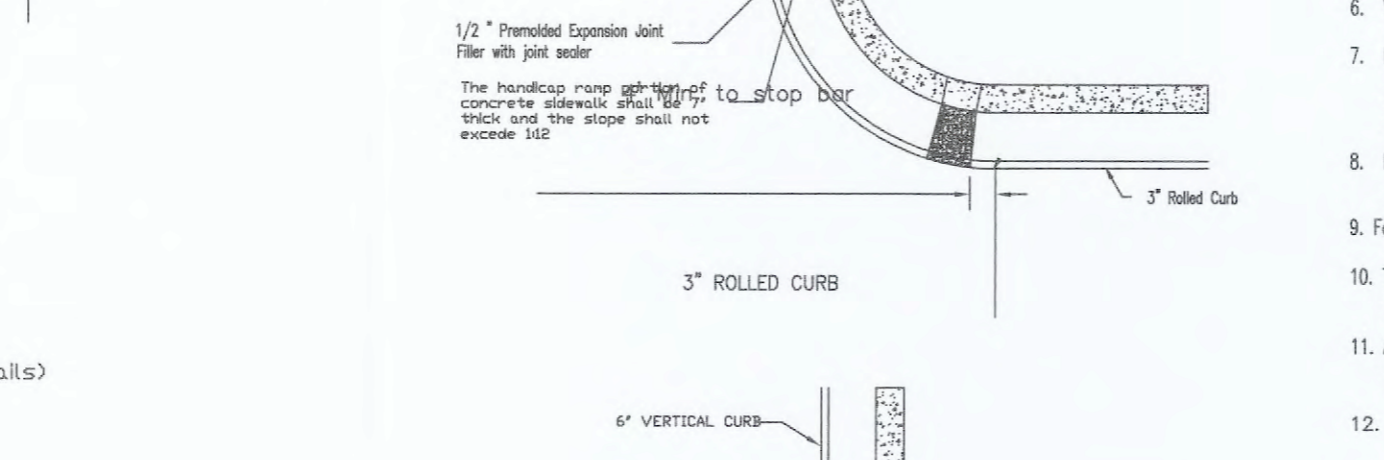
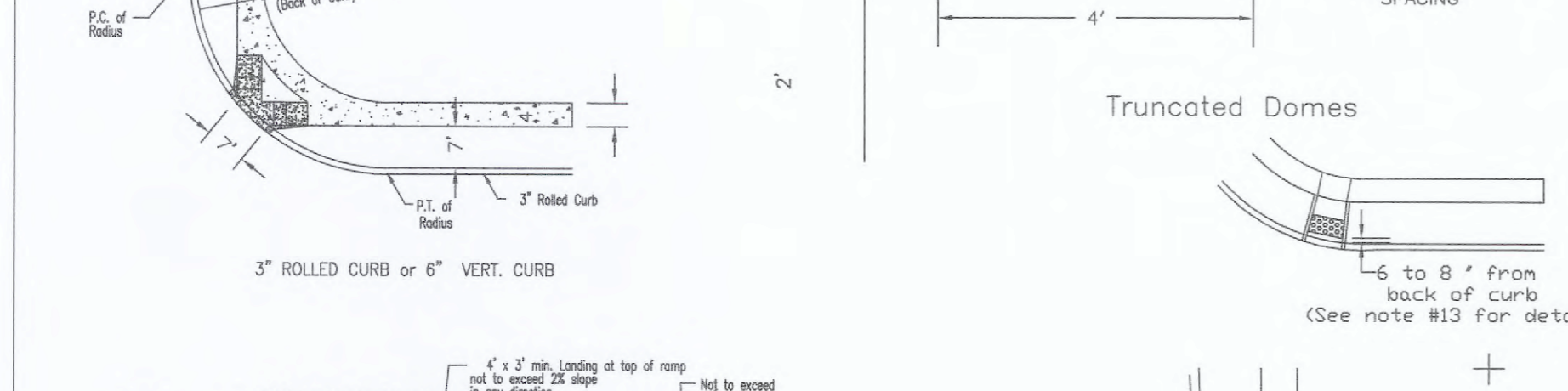
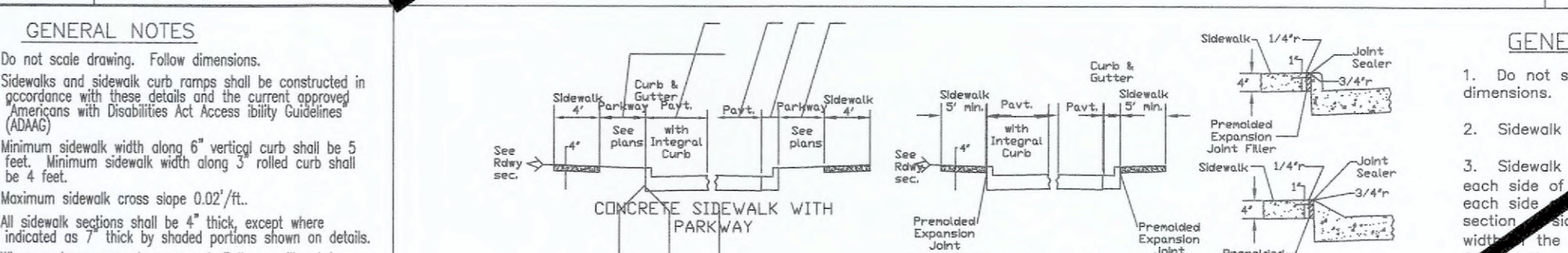
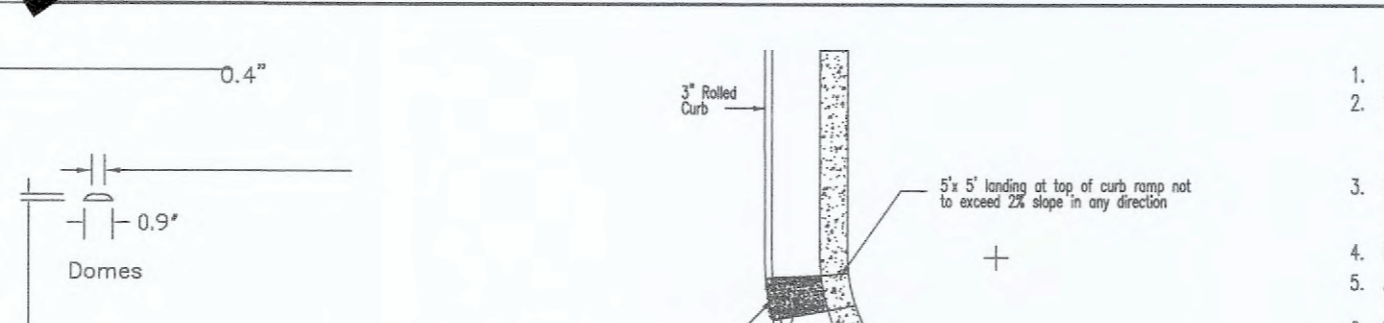
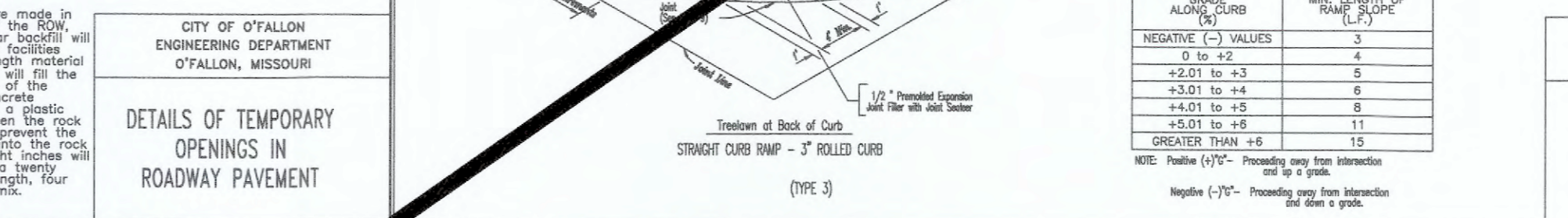
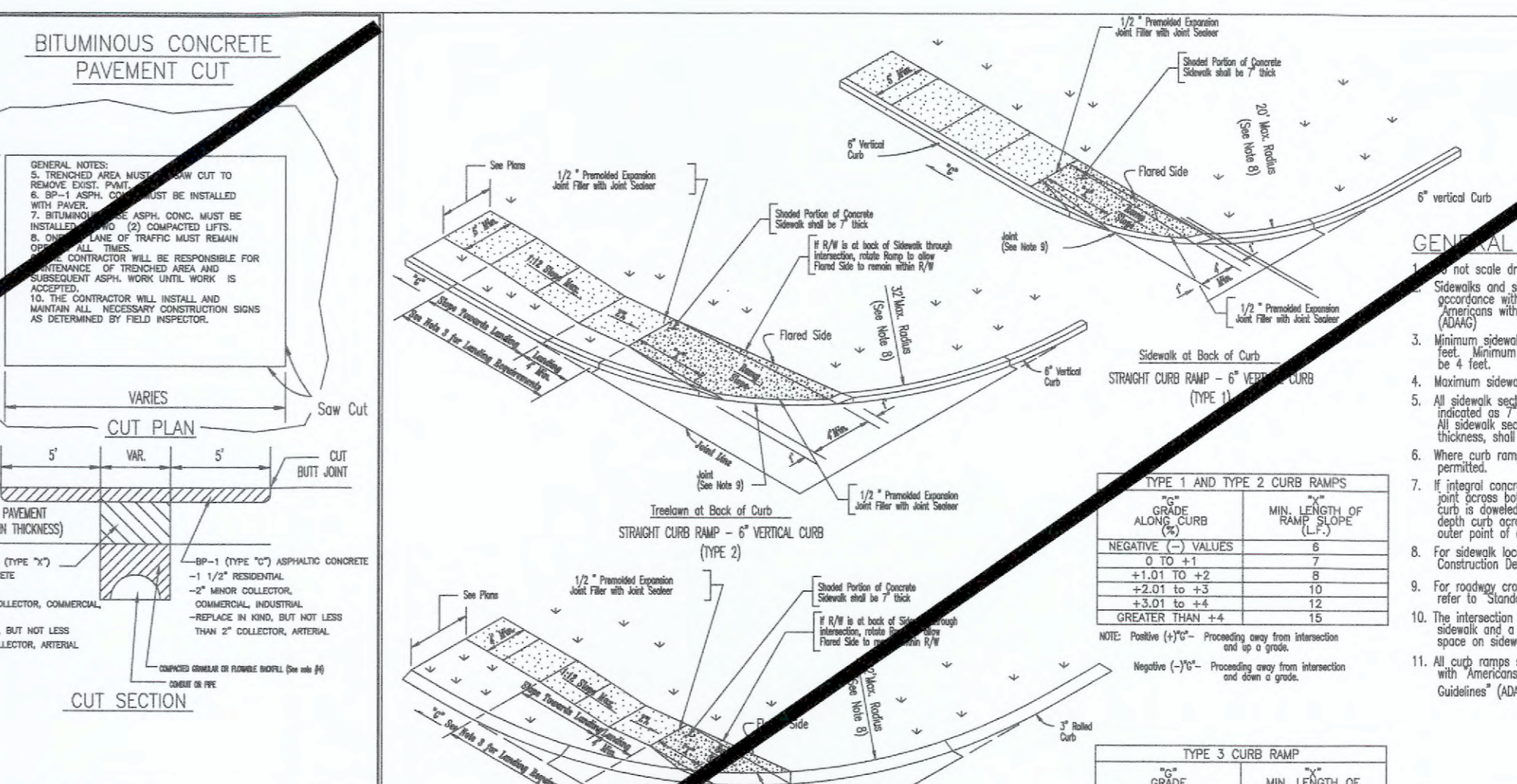
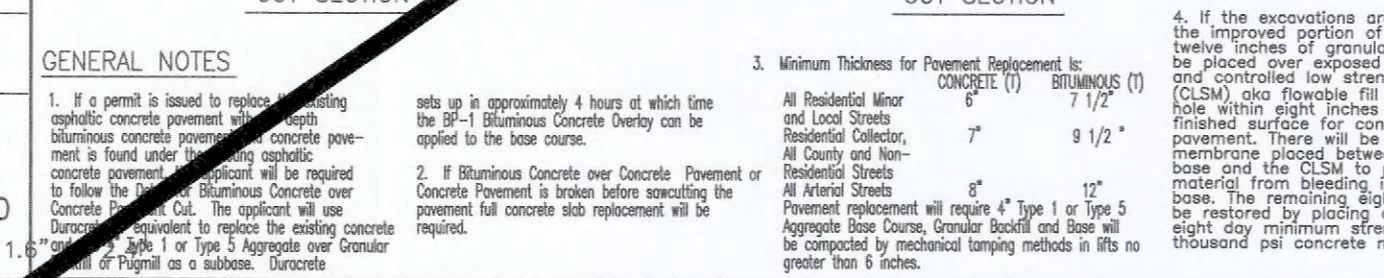
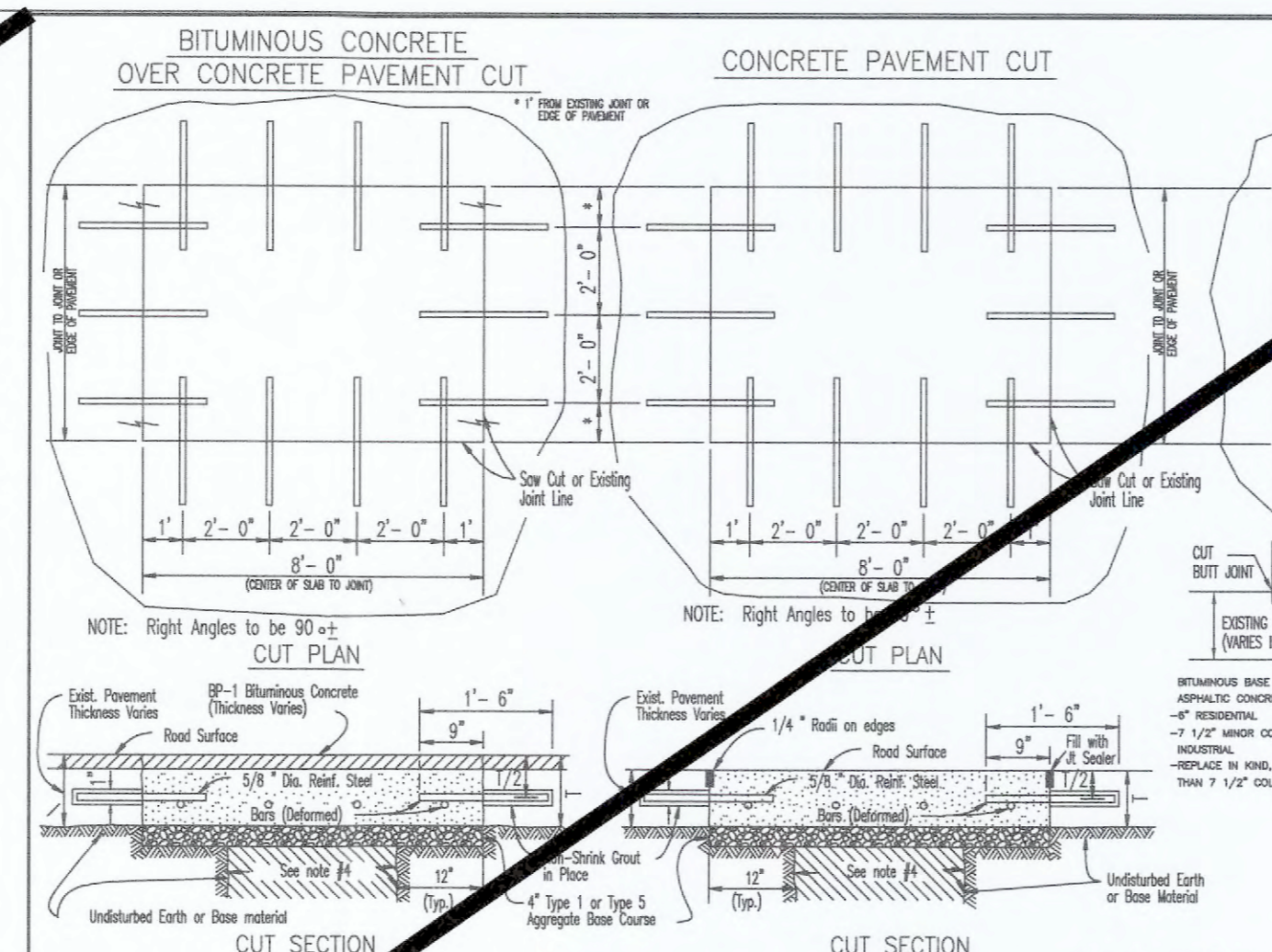
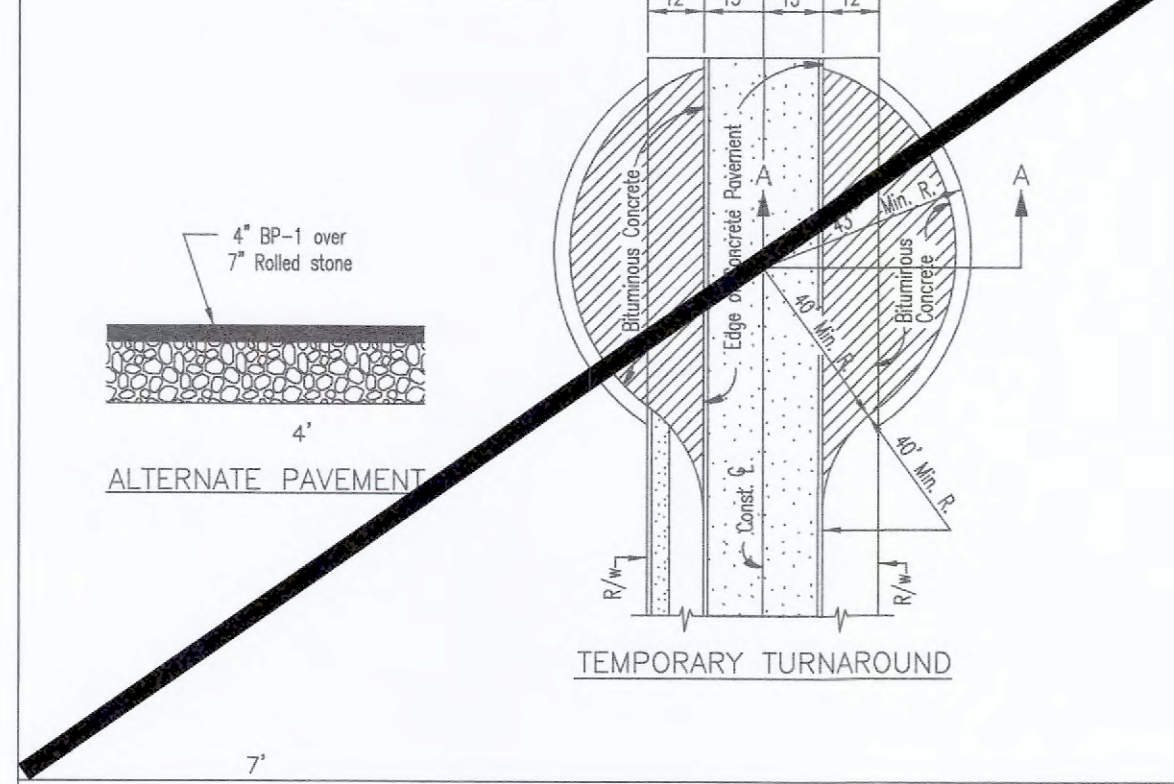


CITY OF O'FALLON
ENGINEERING DEPARTMENT
O'FALLON, MISSOURI
PAVEMENT CONSTRUCTION
DETAILS
SECTION NO. 505.080

CITY OF O'FALLON
ENGINEERING DEPARTMENT
O'FALLON, MISSOURI
PAVEMENT CONSTRUCTION
DETAILS
SECTION NO. 505.080



- GENERAL NOTES**
- Do not scale drawing. Follow dimensions and tie bar requirements. Dimensions not shown refer to Standard Typical Sections.
 - All necessary road markings shall be as required by the Manual of Uniform Traffic Control Devices (MUTCD).
 - For temporary cross slopes, pavement types and grades shall be as shown on Standard Typical Sections.
 - Permits will not be issued for building construction on lots abutting a temporary roadway unless and until the roadway is actually constructed to the satisfaction of the City Engineer.
 - The removal of the temporary roadway surface, the restoration of the disturbed ground, and the extension of any sidewalk shall be the responsibility of the party(ies) that will be extending the street.
 - Other temporary turn around types can be considered depending on type and dimensions.
 - Stub streets over two hundred fifty (250) feet shall have a minimum temporary turnaround pavement radius of forty (40) feet, covered by a temporary turnaround easement to remain until the road is extended and platted. In lieu of turnarounds, the Planning and Zoning Commission may approve a "T" or "Y" shaped paved space on streets which are less than two hundred fifty (250) feet in length and are planned to be extended in the future.



PROJECT TITLE:
AS-BUILT PLANS FOR
BRYAN ROAD
ANIMAL HOSPITAL

ENGINEERING PLANNING SURVEYING

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FAX 928-1718



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STATE OF MISSOURI
MARK COLLINS
Professional Engineer
PLS-2006000173
No. 117 280

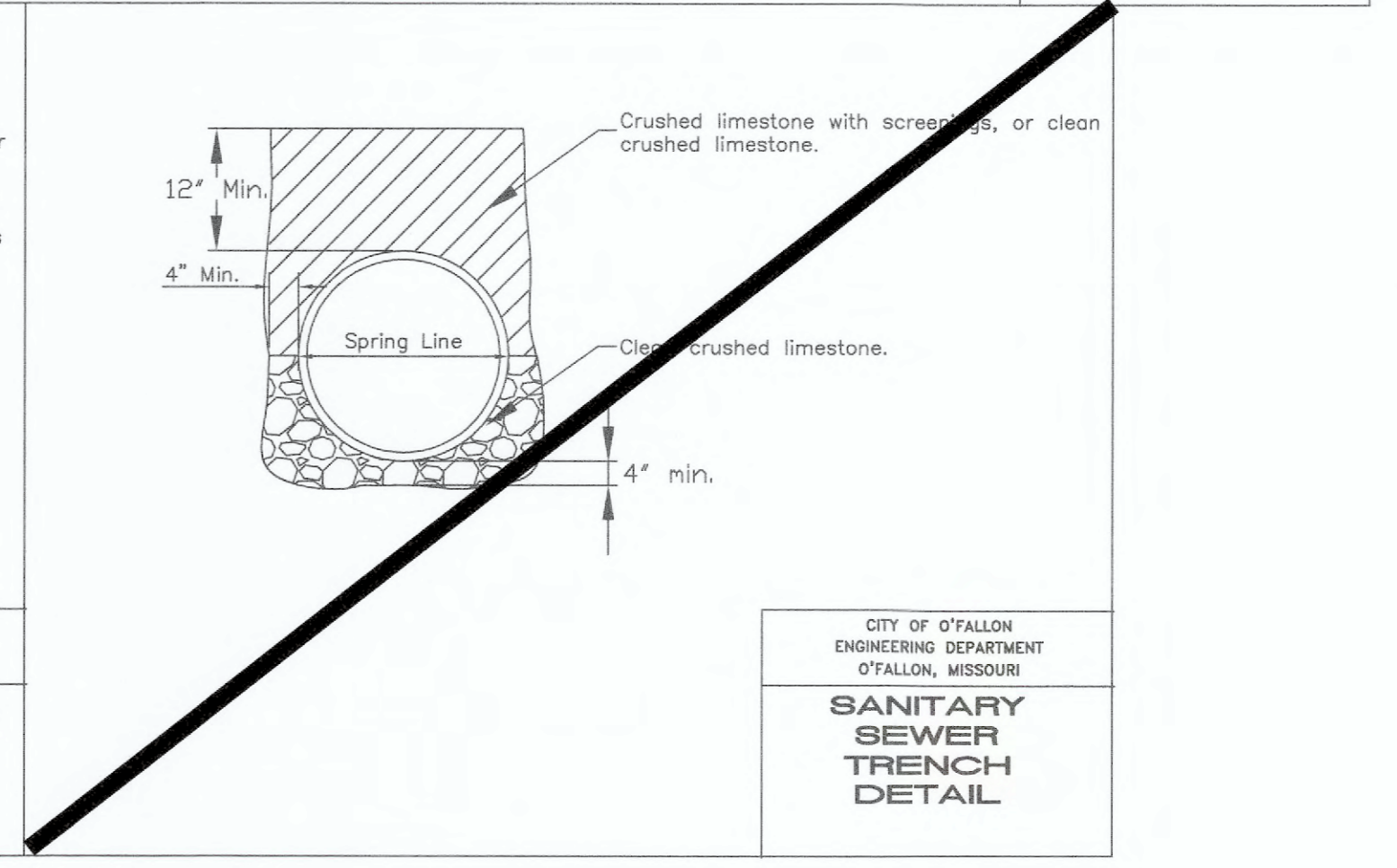
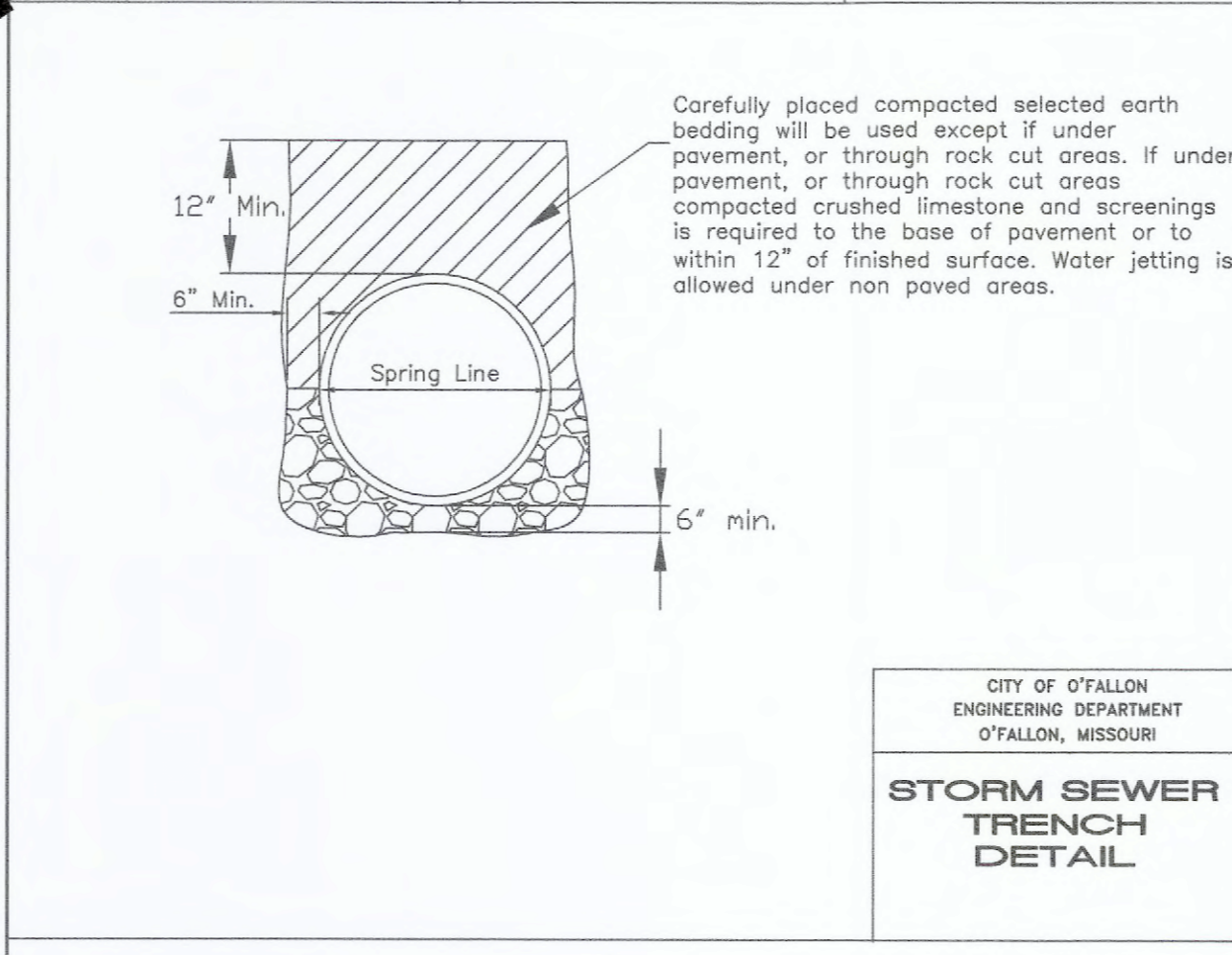
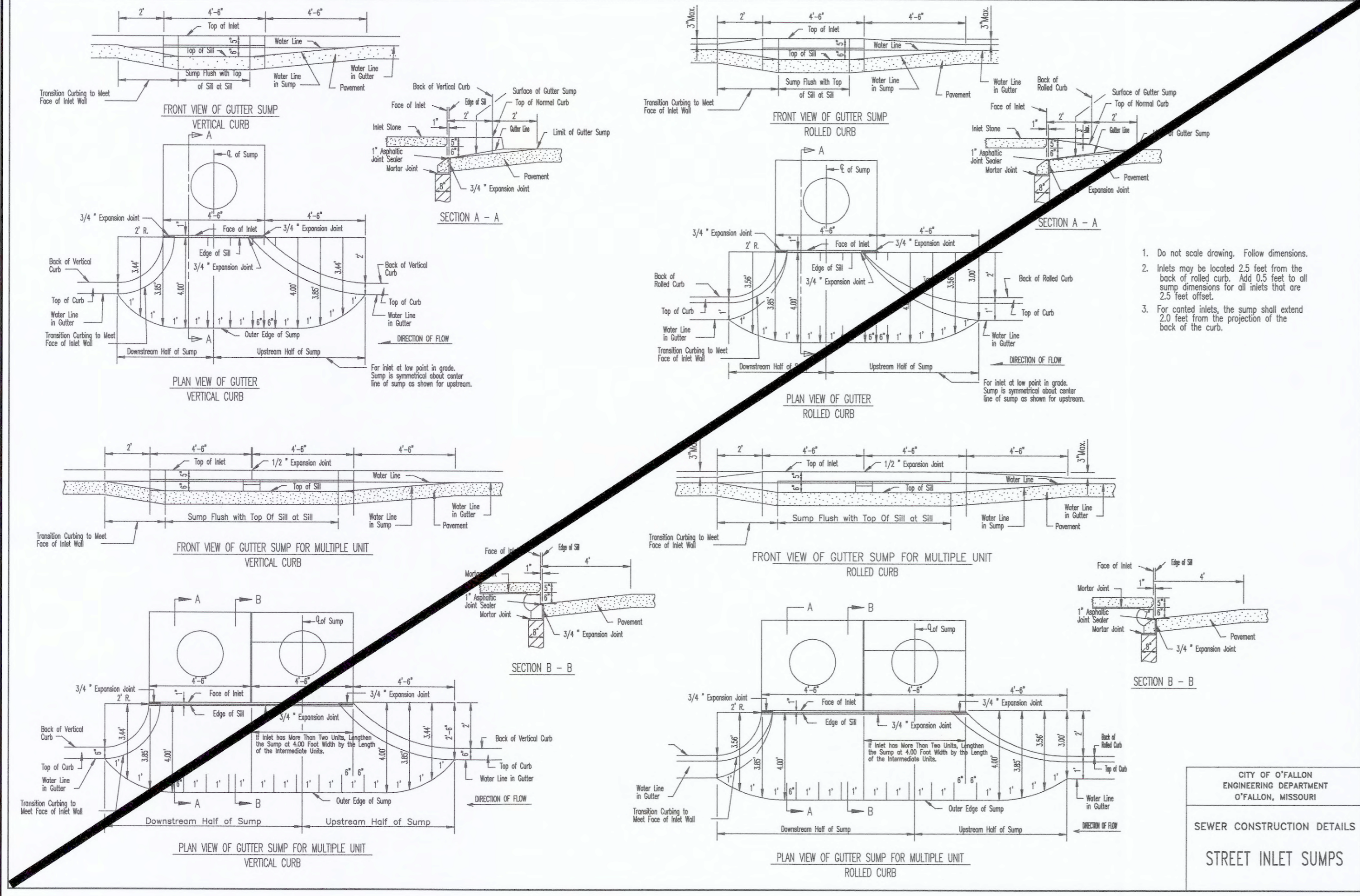
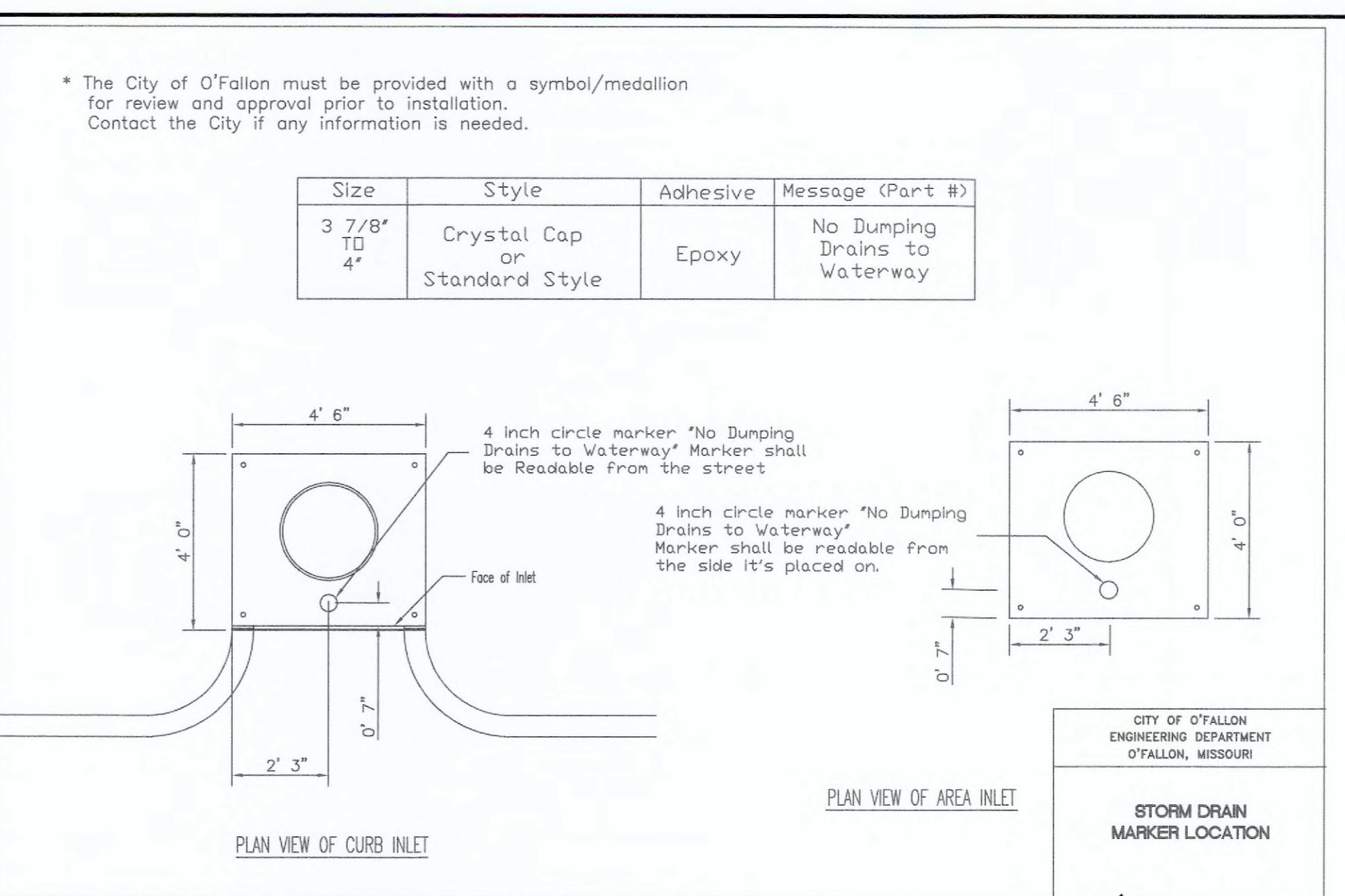
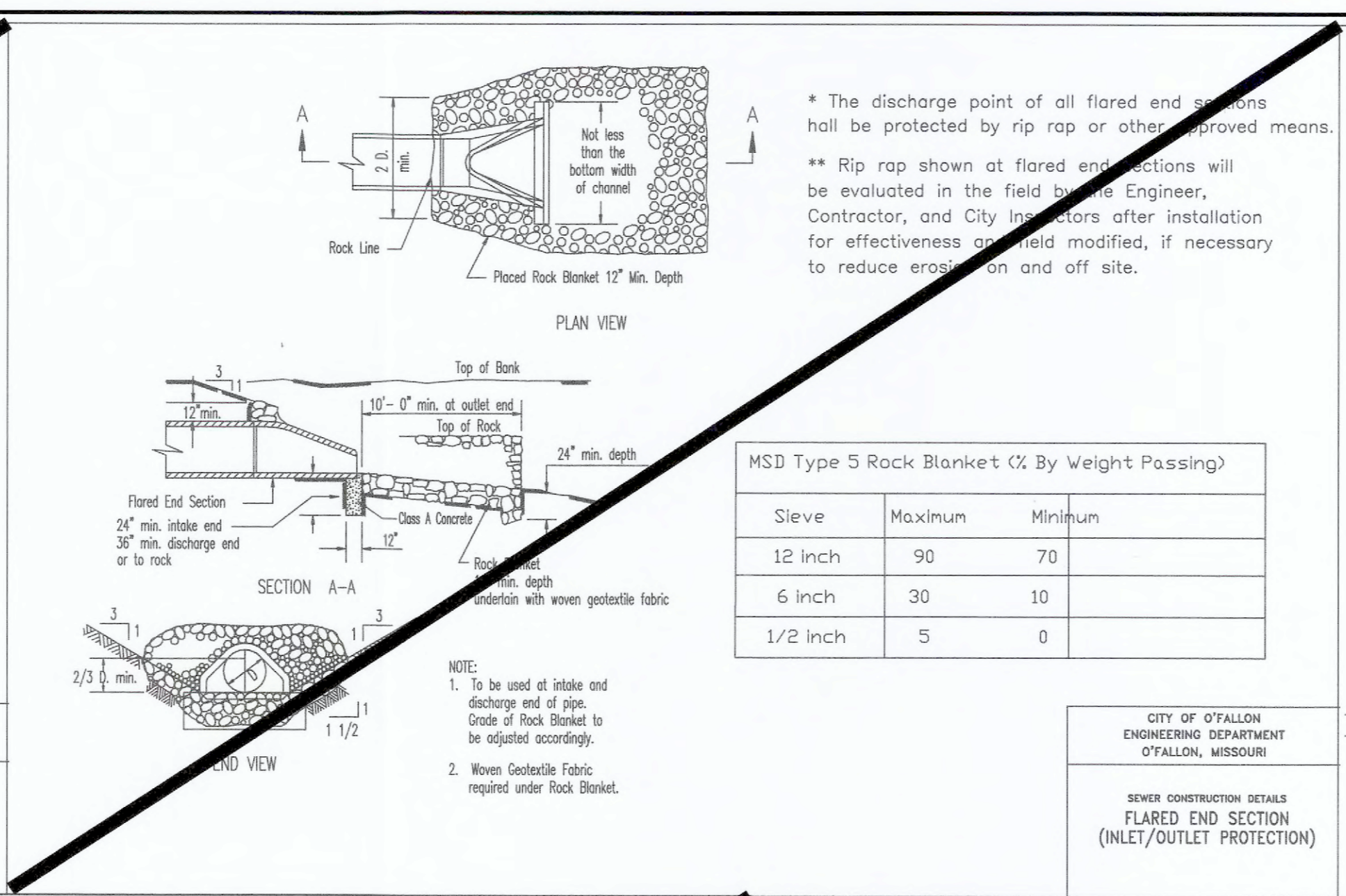
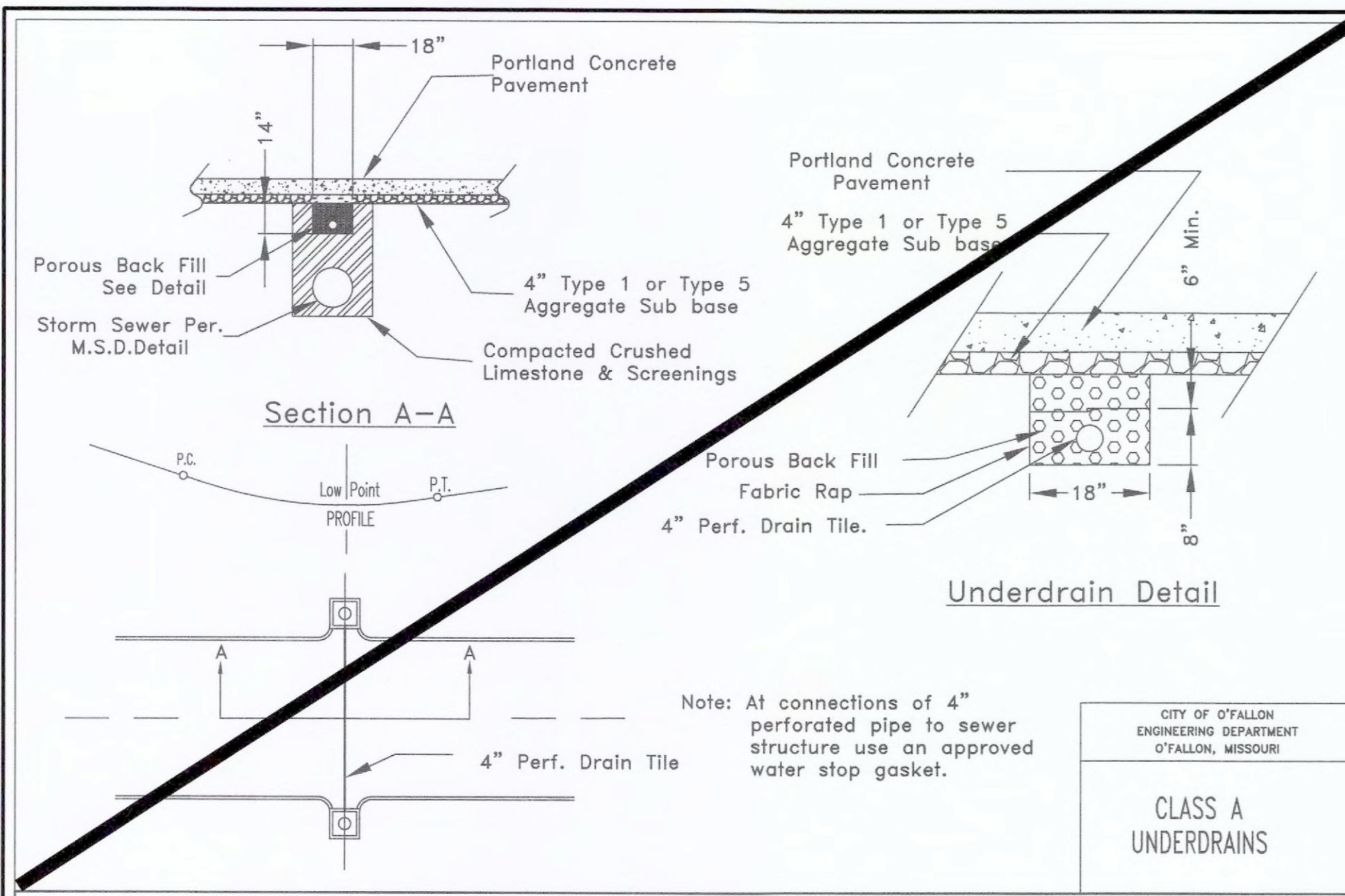
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Engineering #006655
Missouri State Certificate of Authority
Surveying #000144

REVISIONS

No.	Description

Developer / Owner:
BRYAN ROAD ANIMAL HOSPITAL
1161 BRYAN ROAD
O'FALLON, MO 63366
636-272-3900

P+Z No. # 18-00622
Approval Date: Mar. 1, 2018
City No. #
Page No. 14 of 17



* All other Storm or Sanitary Sewer Details will be by M.S.D. 2000 Standards and Specifications.
** All inlets shall have 5/8" trash bar centered with the opening(s).

* The discharge point of all flared end sections shall be protected by rip rap or other approved means.
** Rip rap shown at flared end sections will be evaluated in the field by the Engineer, Contractor, and City Inspectors after installation for effectiveness as field modified, if necessary to reduce erosion on and off site.

* The City of O'Fallon must be provided with a symbol/medallion for review and approval prior to installation. Contact the City if any information is needed.

Size	Style	Adhesive	Message (Part #)
3 7/8" TO 4"	Crystal Cap or Standard Style	Epoxy	No Dumping Drains to Waterway

MSD Type 5 Rock Blanket (% By Weight Passing)

Sieve	Maximum	Minimum
12 inch	90	70
6 inch	30	10
1/2 inch	5	0

NOTE:
1. To be used at intake and discharge end of pipe. Grade of Rock Blanket to be adjusted accordingly.
2. Woven Geotextile Fabric required under Rock Blanket.

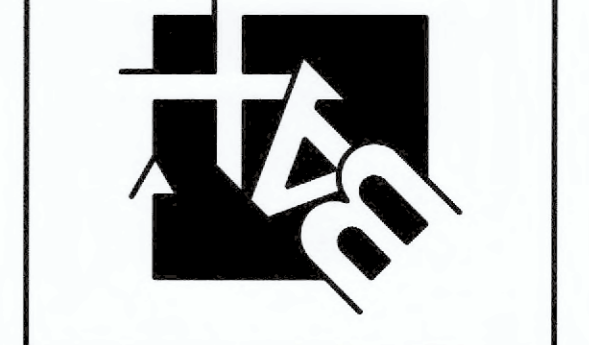
1. Do not scale drawing. Follow dimensions.
2. Inlets may be located 2.5 feet from the back of rolled curb. Add 0.5 feet to all sump dimensions for all inlets that are 2.5 feet offset.
3. For central inlets, the sump shall extend 2.0 feet from the projection of the back of the curb.

PROJECT TITLE:
AS-BUILT PLANS FOR
BRYAN ROAD
ANIMAL HOSPITAL

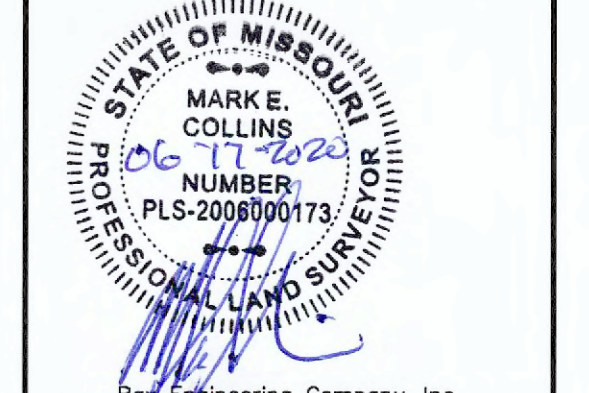
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ENGINEERING
PLANNING
SURVEYING

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St. Charles, MO 63301
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Missouri State Certificate of Authority
Engineering #000655
Missouri State Certificate of Authority
Surveying #000144

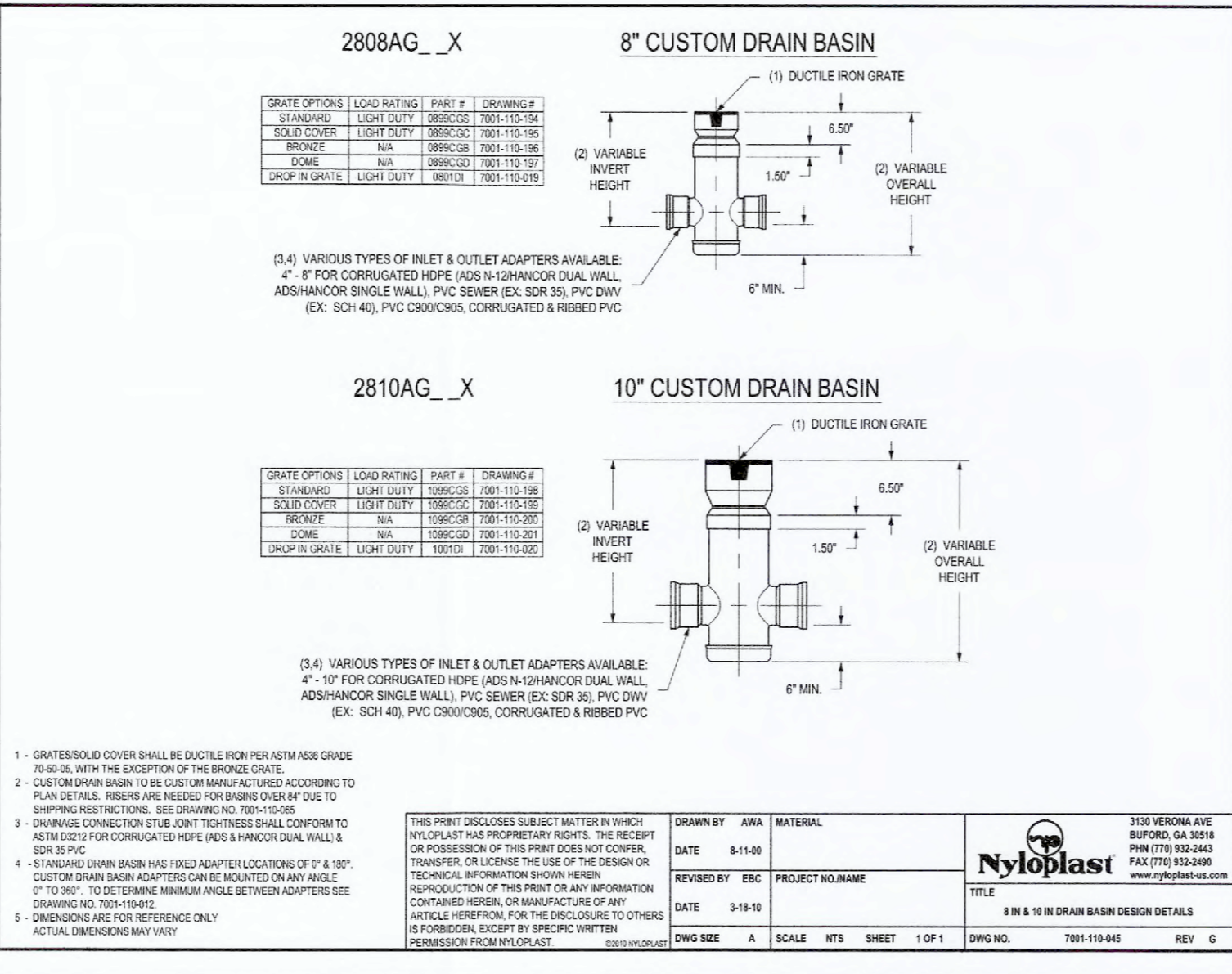
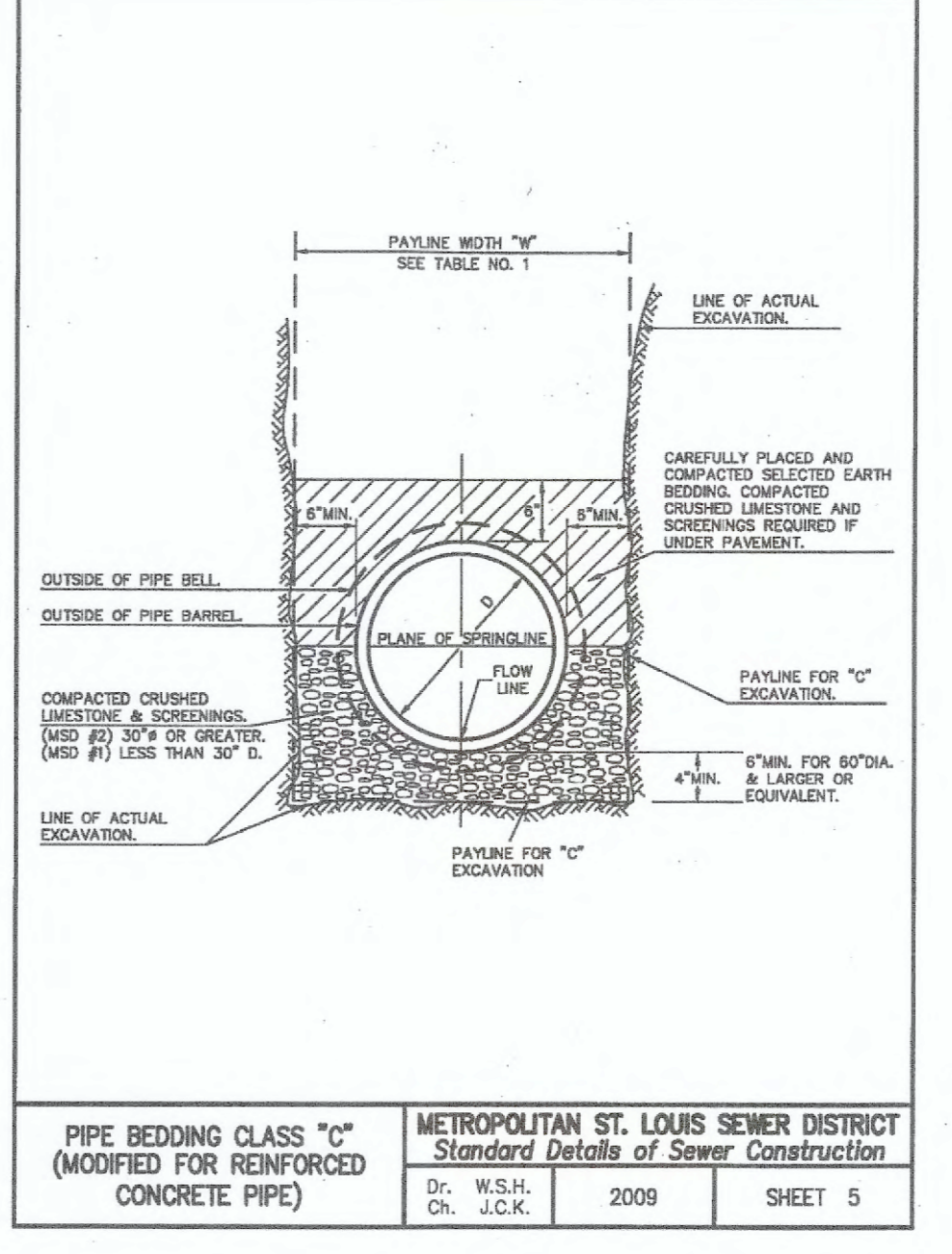
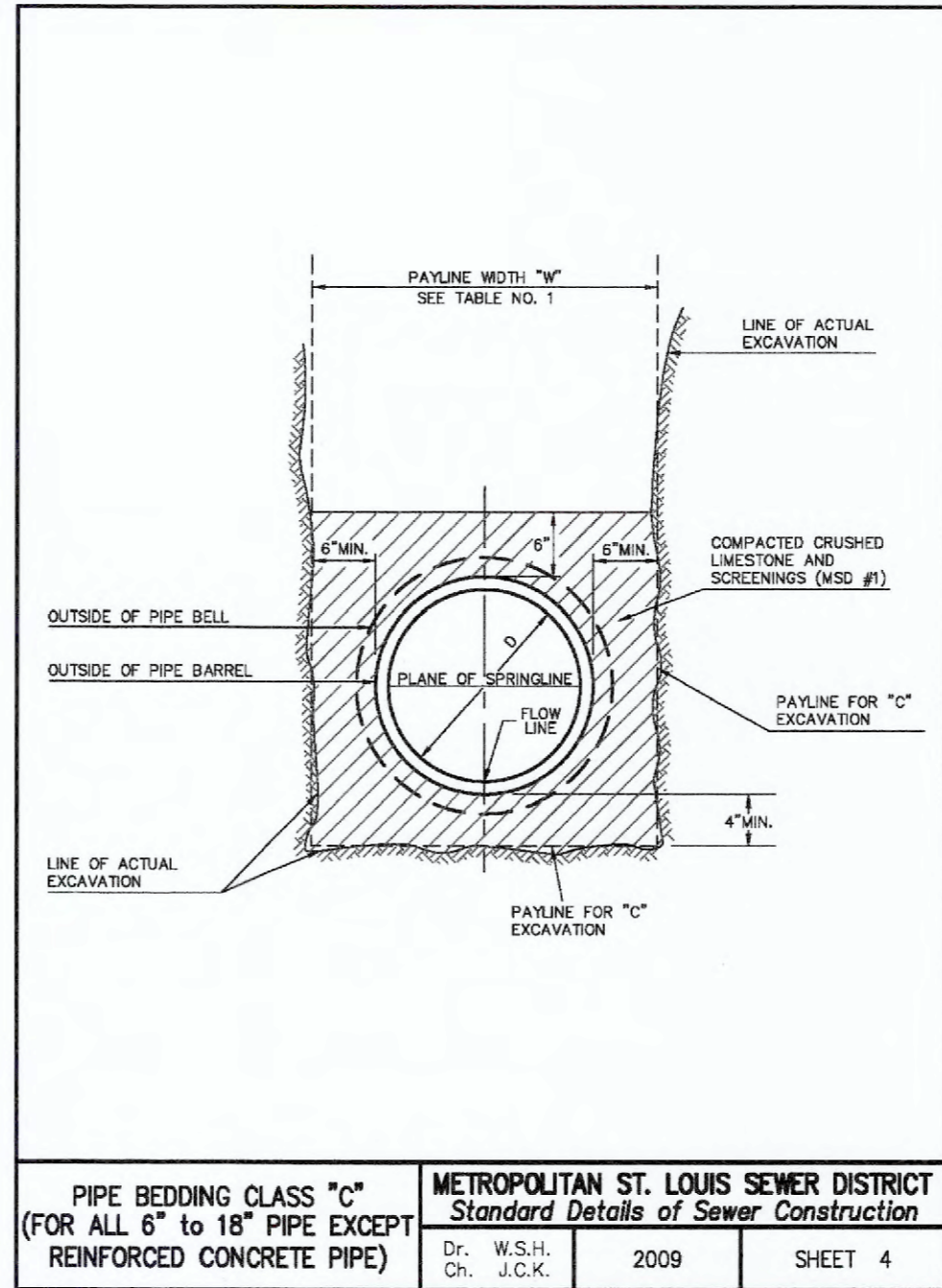
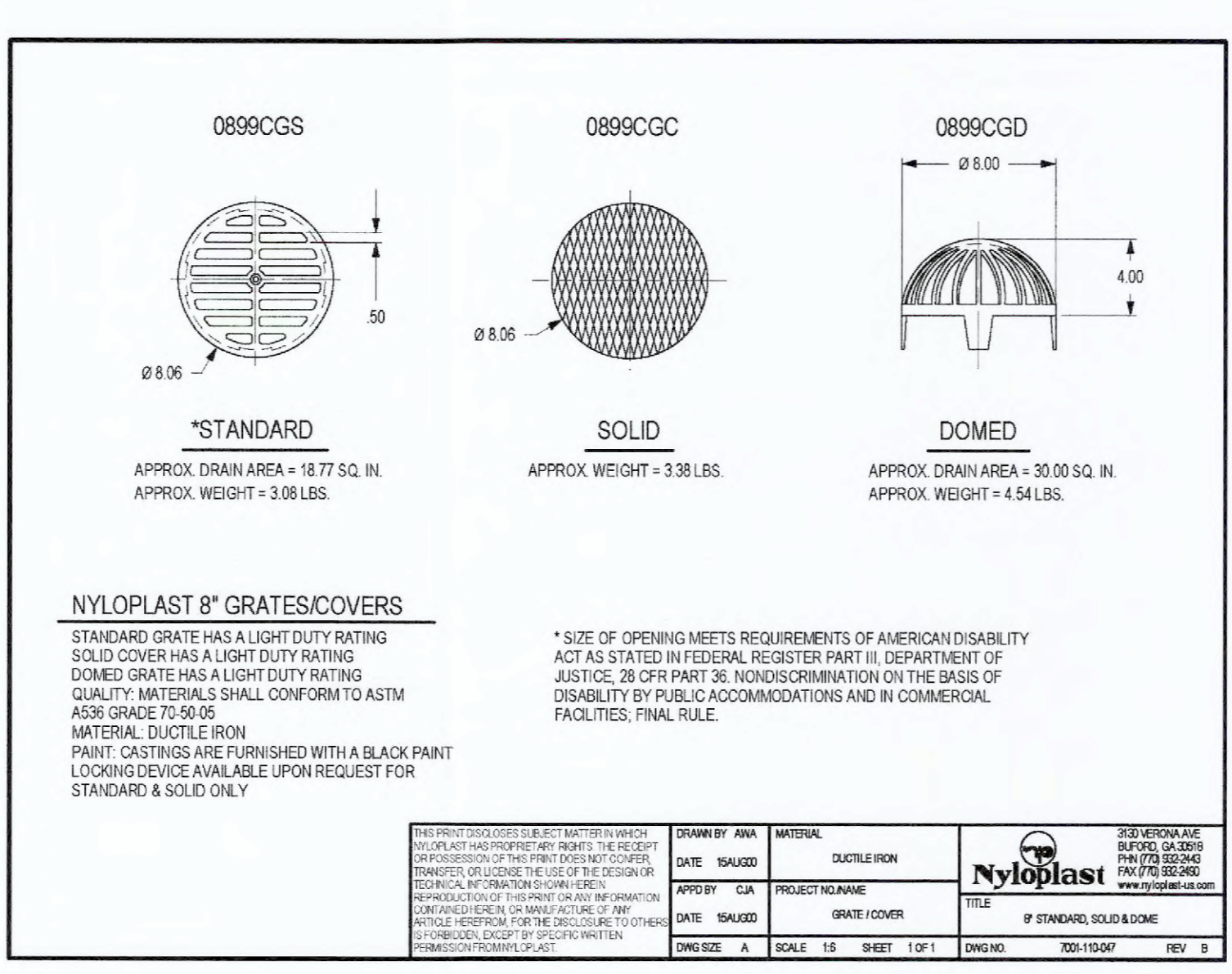
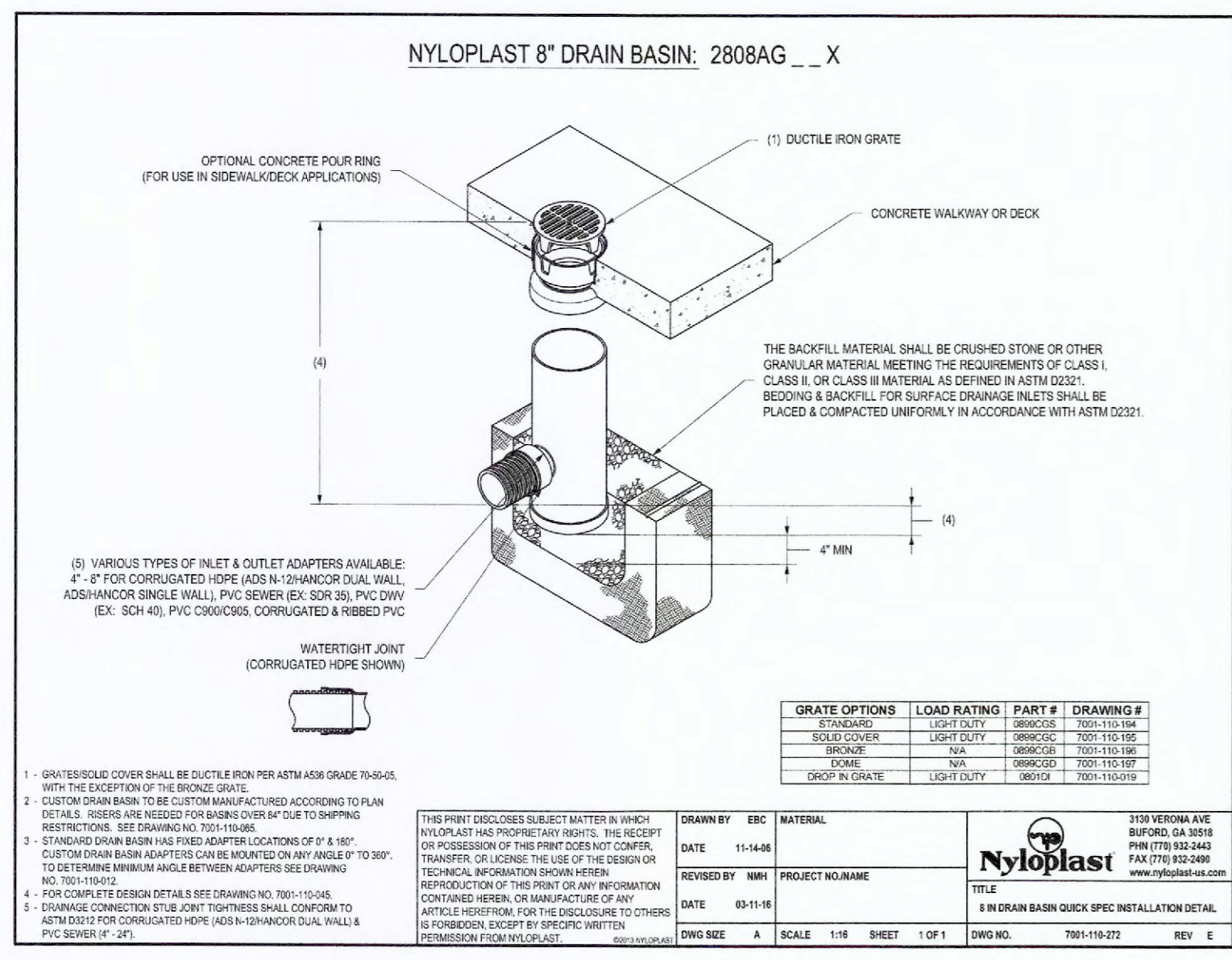
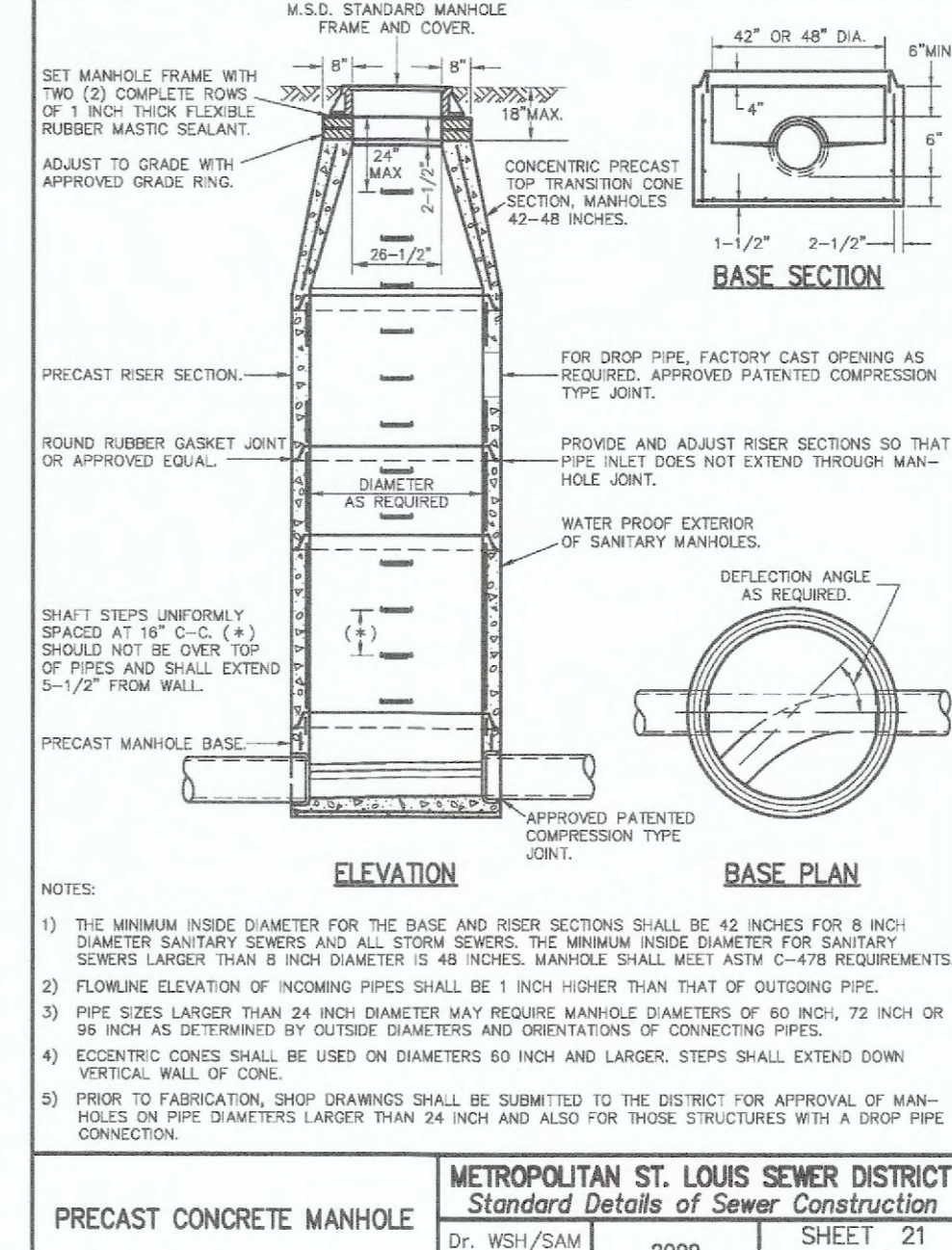
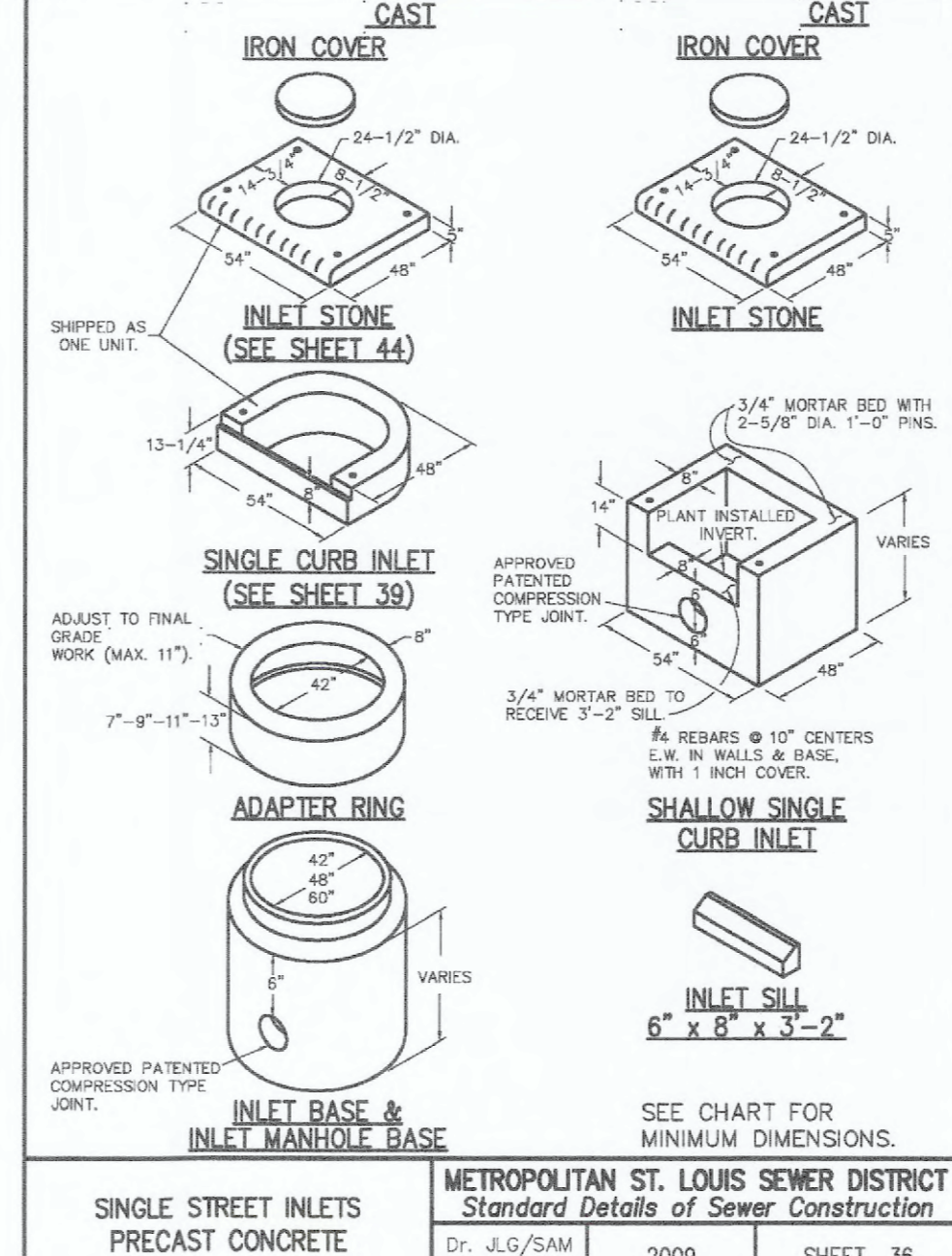
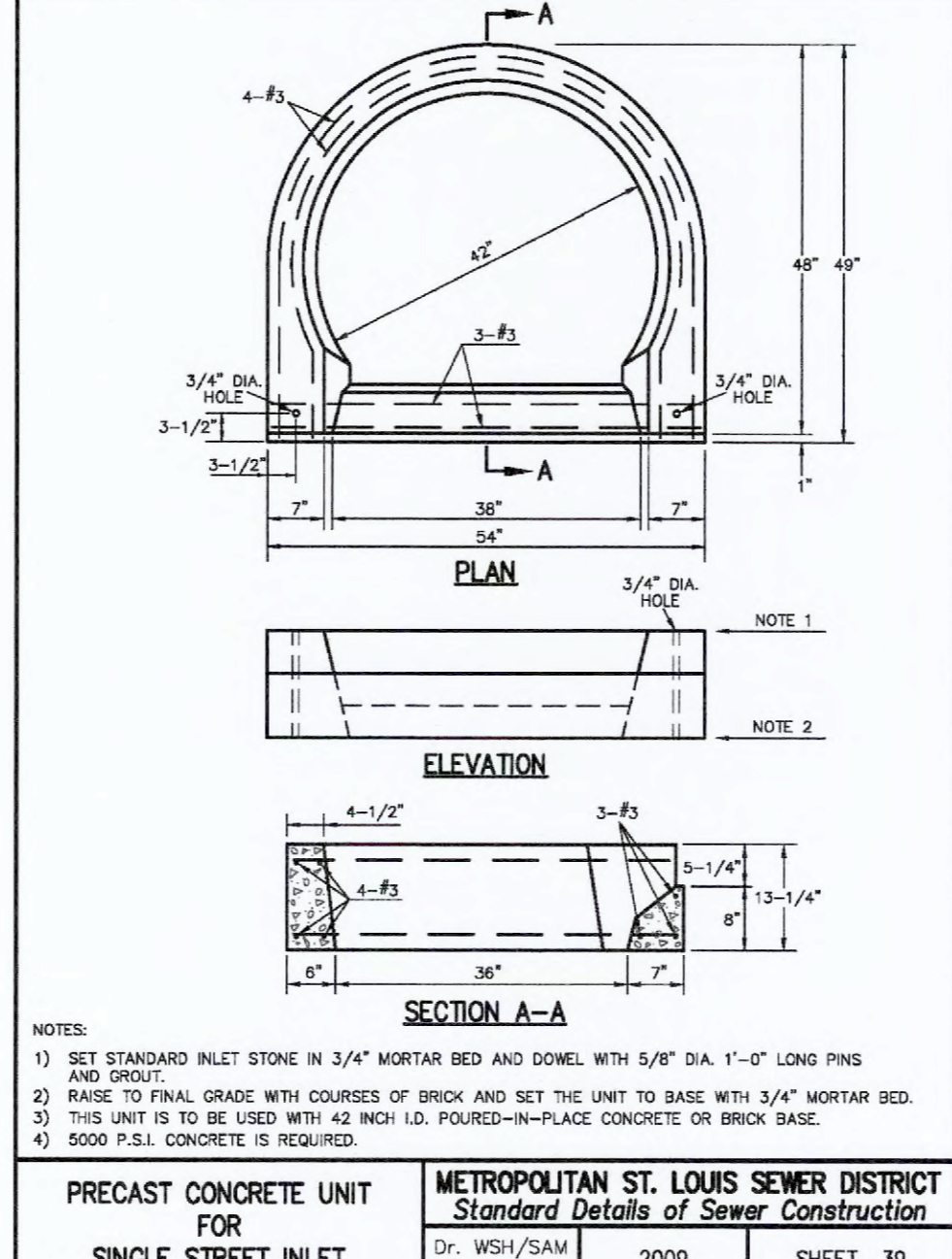
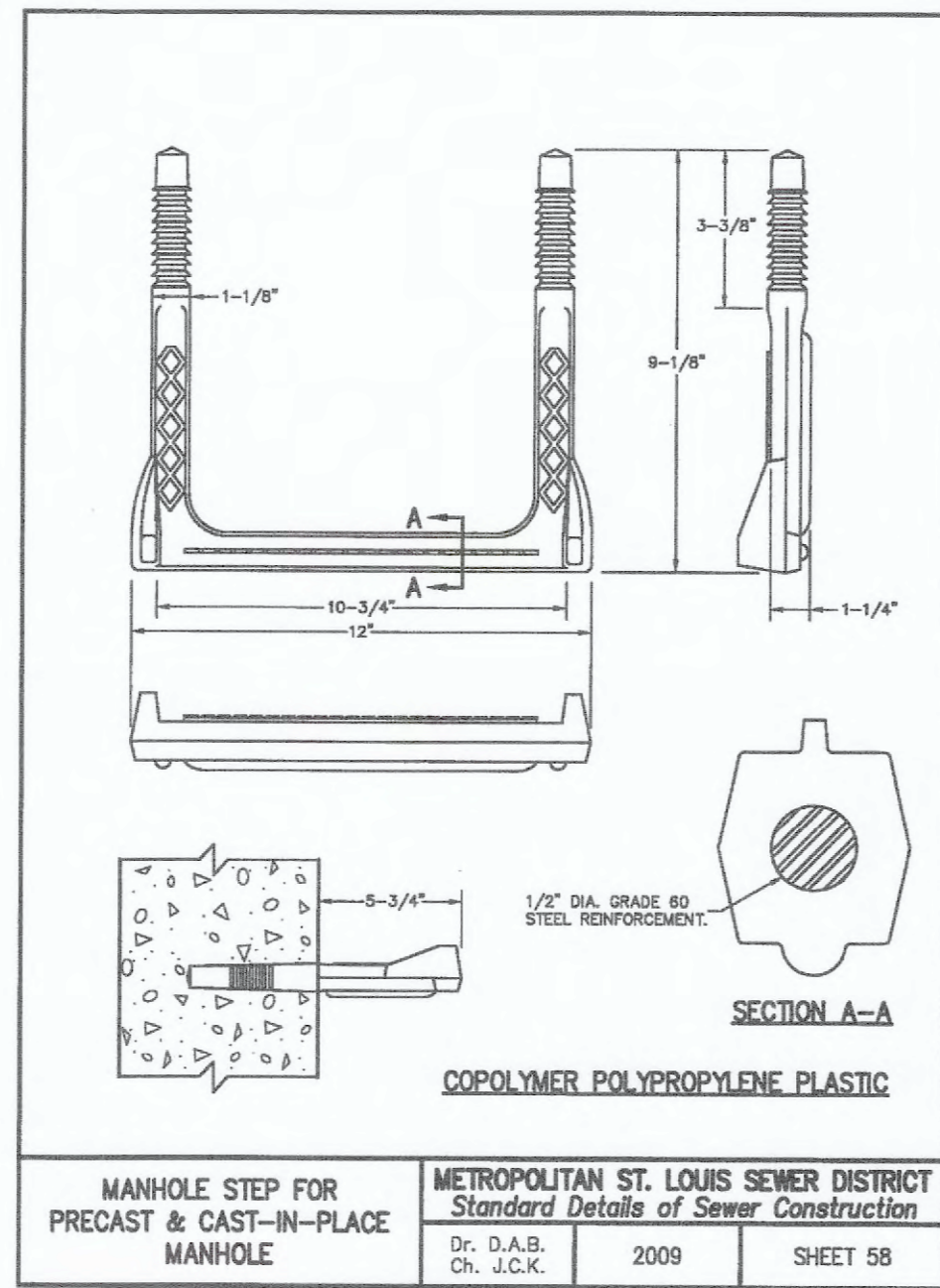
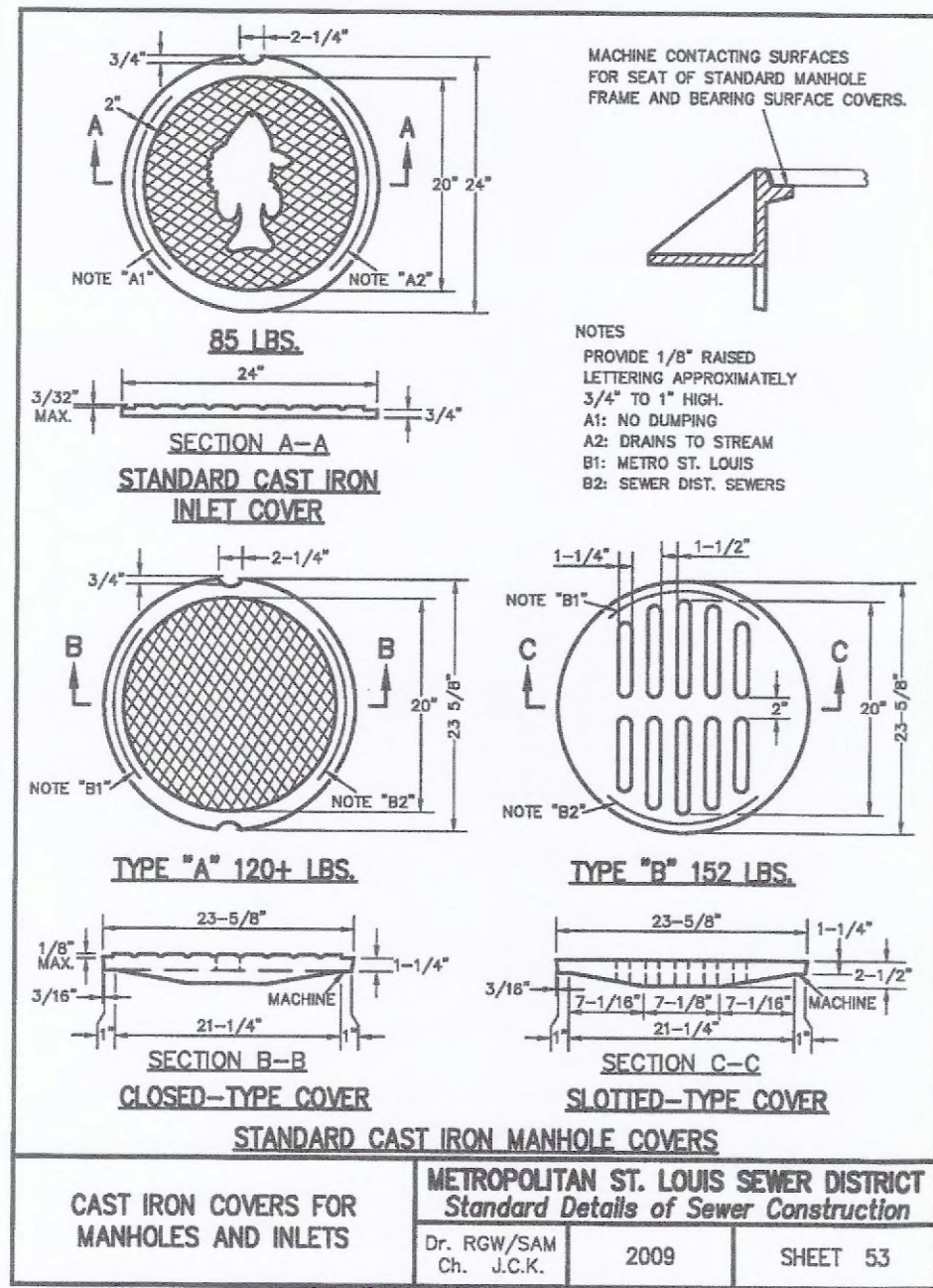
REVISIONS

NO.	DATE	DESCRIPTION

Developer / Owner:
BRYAN ROAD ANIMAL HOSPITAL
1161 BRYAN ROAD
O'FALLON, MO 63366
636-272-3900

STORM AND SANITARY DETAILS

P+Z No. # 18-00622
Approval Date: Mar. 1, 2018
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* All other Storm or Sanitary Sewer Details will be by M.S.D. 2000 Standards and Specifications.
 ** All inlets shall have 5/8" trash bar centered with the opening(s).

PROJECT TITLE:
AS-BUILT PLANS FOR
BRYAN ROAD
ANIMAL HOSPITAL

ENGINEERING PLANNING SURVEYING
221 Point West Blvd.
St. Charles, MO 63301
636-928-6562
FAX 636-928-1718

DISCLAIMER OF RESPONSIBILITY
I hereby certify that the documents intended to be authorized by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other drawings, specifications, estimates, reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

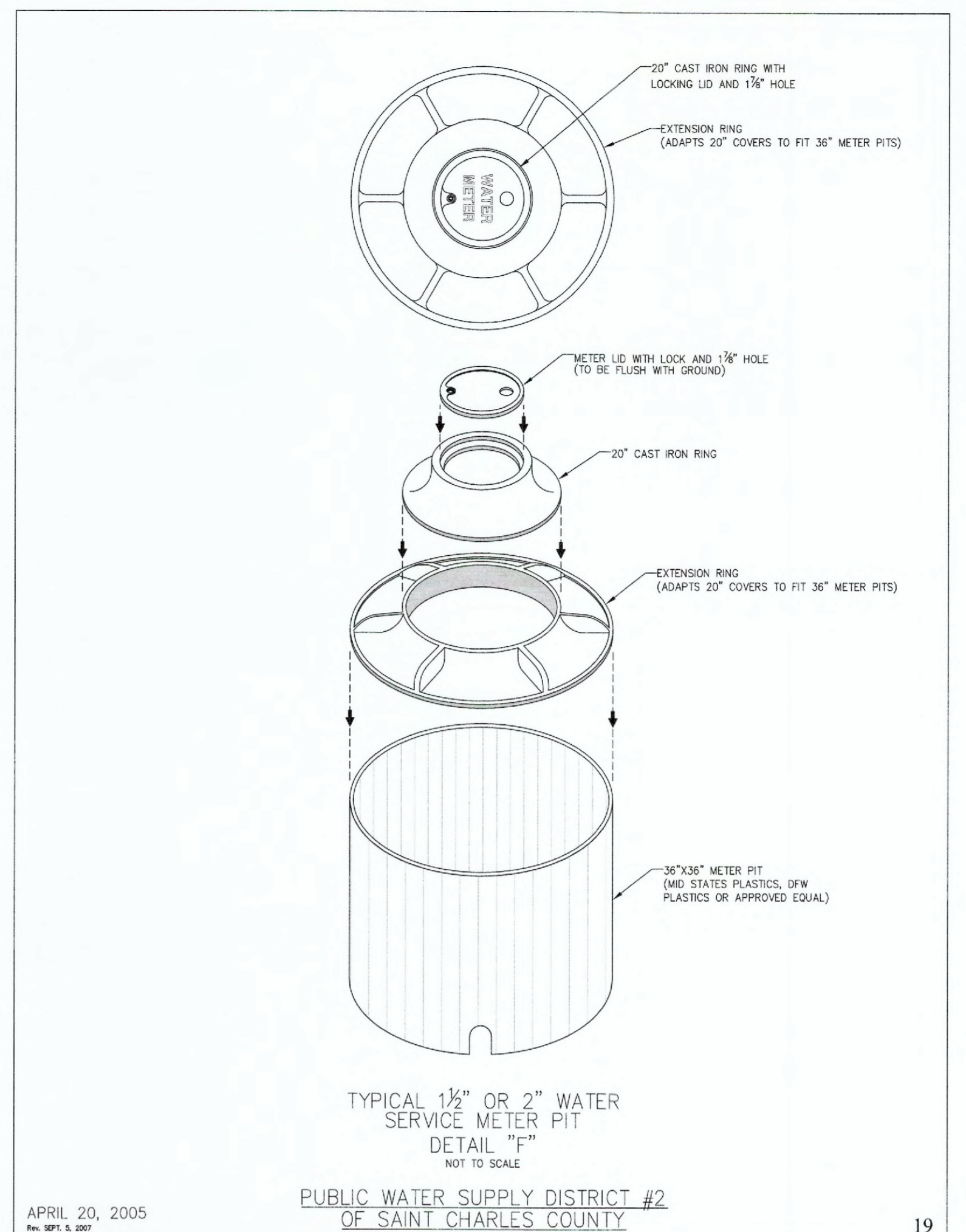
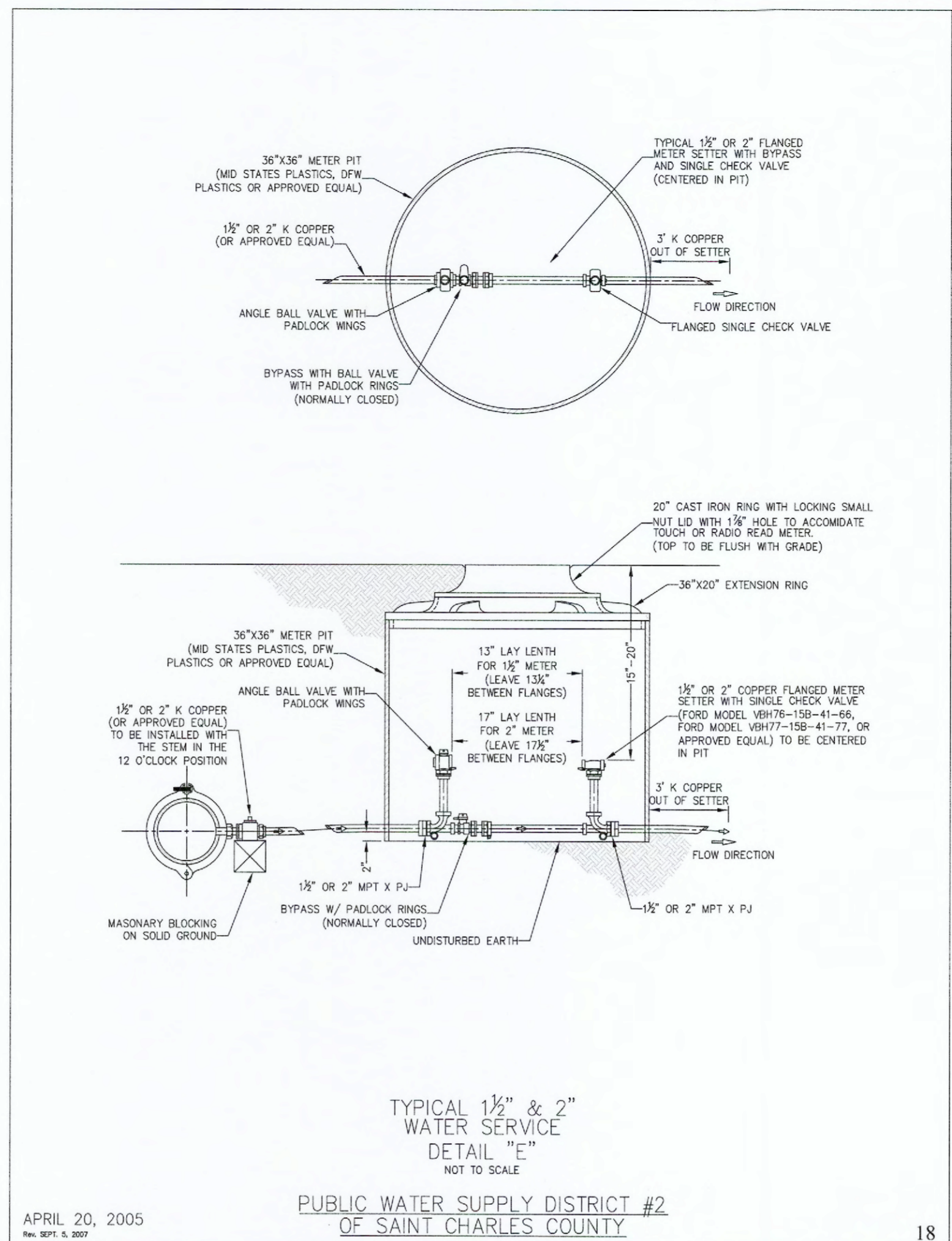
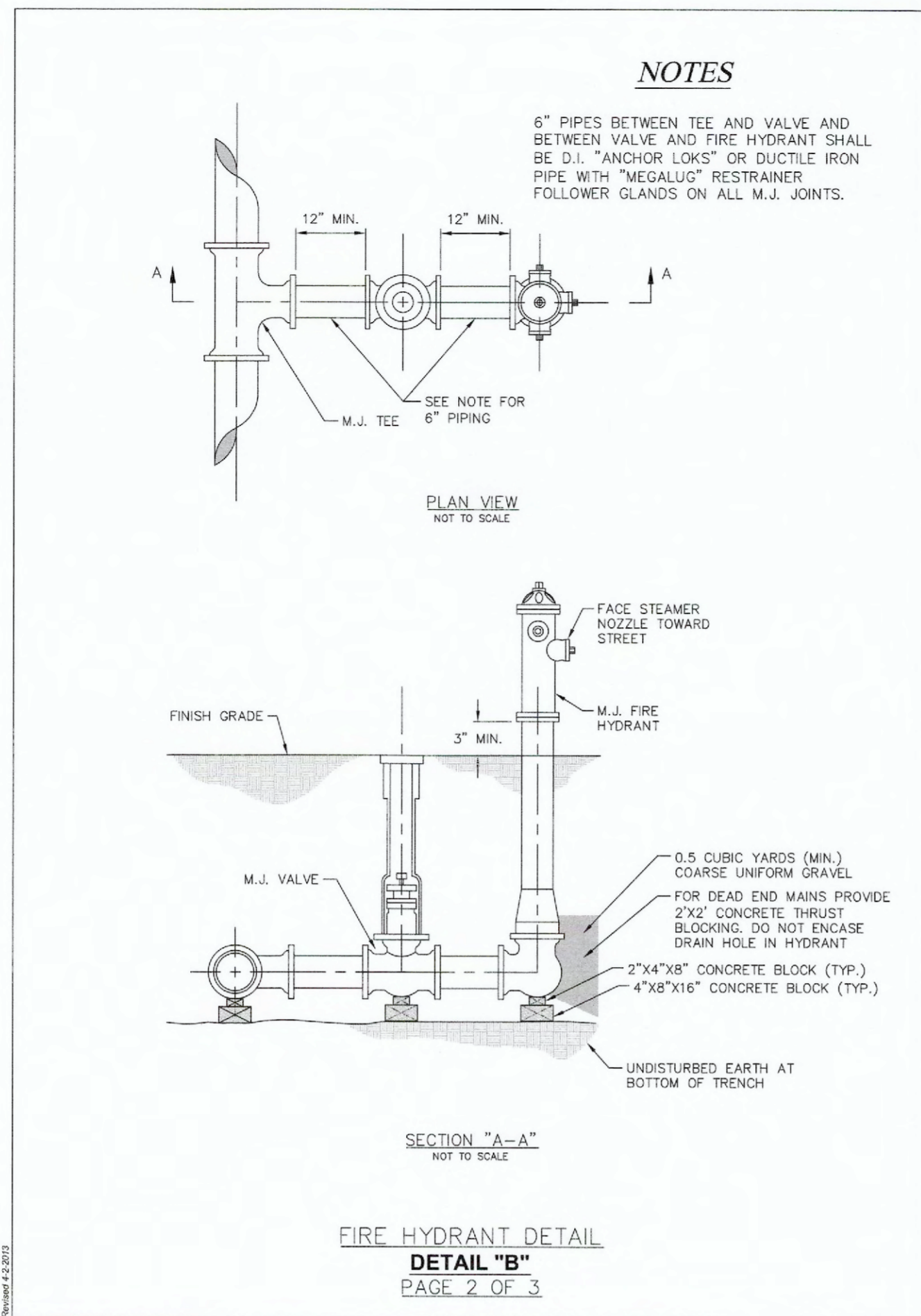
STATE OF MISSOURI
MARK E. COLLINS
Professional Land Surveyor
PLS-2006000173
#000144

REVISIONS

Developer / Owner:
BRYAN ROAD ANIMAL HOSPITAL
1161 BRYAN ROAD
O'FALLON, MO 63366
636-272-3900

STORM DETAILS

P+Z No. # 18-000622
Approval Date: Mar. 1, 2018
City No. #
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PUBLIC WATER SUPPLY DISTRICT NO.2 REQUIRES ONE (1) WEEK NOTICE PRIOR TO THE START OF CONSTRUCTION.

ALL METER PITS/VAULTS ARE TO BE INSTALLED IN GREEN SPACE PER THE WATER DISTRICT'S SPECIFICATIONS

PROJECT TITLE:
AS-BUILT PLANS FOR
BRYAN ROAD
ANIMAL HOSPITAL

**ENGINEERING
PLANNING
SURVEYING**
221 Point West Blvd.
St. Charles, MO 63301
636-928-5552
FAX 636-928-1718

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I hereby specify that the documents intended to be authenticated by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other drawings, specifications, estimates, reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

STATE OF MISSOURI
MARK E. COLLINS
06 11 2007
NUMBER
PLS-2006000173
PROFESSIONAL SURVEYOR

Box Engineering Company, Inc.
Missouri State Certificate of Authority
Engineering #000655
Missouri State Certificate of Authority
Surveying #000144

REVISIONS	

Developer / Owner:
BRYAN ROAD ANIMAL HOSPITAL
1161 BRYAN ROAD
OF FALLON, MO 63366
636-272-3900

PWSD No. 2 WATER DETAILS

P+Z No. # 18-000622
Approval Date: Mar. 1, 2018
City No. #
Page No.
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Issue Date: 6/15/2020
Box Project # 01-1707E