

Public Storm and Water Improvements

Section 6, Township 41 North, Range 31 West

Lee's Summit, Jackson County, Missouri

GENERAL NOTES:

- 1 - ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.
- 2 - ALL REQUIRED EASEMENTS WITHIN THE BOUNDARY OF THIS PROJECT SHALL BE PROVIDED BY SEPARATE DOCUMENT
- 3 - ANY REQUIRED EASEMENT LOCATED OUTSIDE OF THE BOUNDARY OF THIS PROJECT SHALL BE PROVIDED FOR BY SEPARATE INSTRUMENT PRIOR TO ISSUANCE OF CONSTRUCTION PERMITS.
- 4 - THE CONTRACTOR SHALL NOTIFY THE CITY OF LEE'S SUMMIT DEVELOPMENT ENGINEERING INSPECTION AT 816.969.1200 AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.
- 5 - THE CONTRACTOR SHALL NOTIFY ENGINEERING SOLUTIONS AT 816.623.9888 OF ANY CONFLICT WITH THE IMPROVEMENTS PROPOSED BY THESE PLANS AND SITE CONDITIONS.
- 6 - THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND OBTAIN THE APPROPRIATE BLASTING PERMITS FOR A REQUIRED BLASTING. IF BLASTING IS ALLOWED, ALL BLASTING SHALL CONFORM TO STATE REGULATIONS AND LOCAL ORDINANCES.

UTILITY COMPANIES:

THE FOLLOWING LIST OF UTILITY COMPANIES IS PROVIDED FOR INFORMATION ONLY. WE DO NOT OFFER ANY GUARANTEE OR WARRANTY THAT THIS LIST IS COMPLETE OR ACCURATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES THAT MAY BE AFFECTED BY THE PROPOSED CONSTRUCTION AND VERIFYING THE ACTUAL LOCATION OF EACH UTILITY LINE. THE CONTRACTOR SHALL NOTIFY ENGINEERING SOLUTIONS AT 816.623.9888 OF ANY CONFLICT WITH PROPOSED IMPROVEMENTS.

- KCP&L ~ 298-1196
- MISSOURI GAS ENERGY ~ 756-5261
- SOUTHWESTERN BELL TELEPHONE ~ 761-5011
- COMCAST CABLE ~ 795-1100
- WILLIAMS PIPELINE ~ 422-6300
- CITY OF LEE'S SUMMIT PUBLIC WORKS ~ 969-1800
- CITY OF LEE'S SUMMIT DEVELOPMENT ENGINEERING INSPECTION AT 816.969.1200
- CITY OF LEE'S SUMMIT WATER UTILITIES ~ 969-1900
- MISSOURI ONE CALL (DIG RITE) ~ 1-800-344-7483

OIL - GAS WELLS

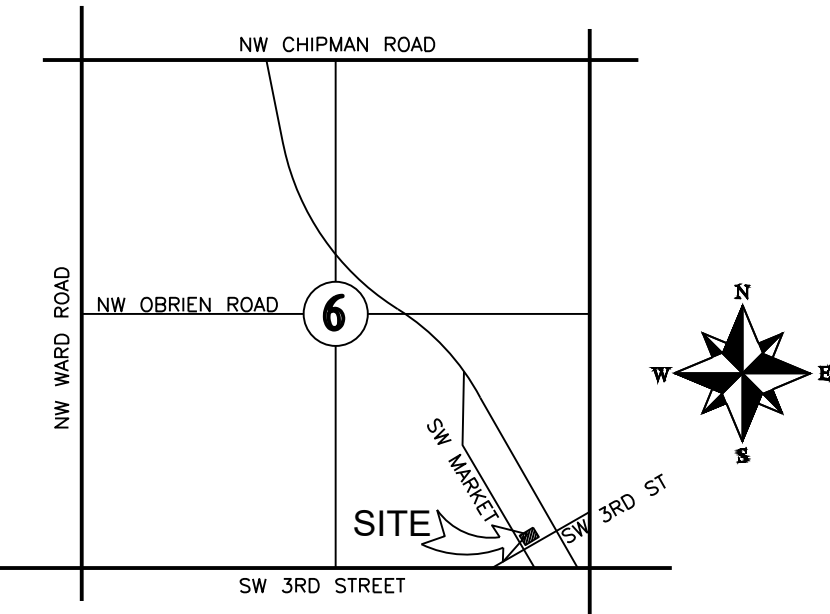
ACCORDING TO EDWARD ALTON MAY JR'S ENVIRONMENTAL IMPACT STUDY OF ABANDONED OIL AND GAS WELLS IN LEE'S SUMMIT, MISSOURI IN 1995, THERE ARE NOT OIL AND GAS WELLS WITHIN 185 FEET OF THE PROPERTY AS SURVEYED HEREON.

FLOOD INFORMATION:

SITE IS LOCATED ON FIRM PANEL 29095C0417G, DATED JANUARY 20, .

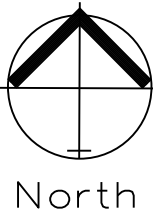
PROPERTY DESCRIPTION

Lots 1 & 2, Dahmer Development, Lots 1 - 3, a subdivision as recorded in the Office of the Recorder, Jackson County, Missouri



LOCATION MAP
SECTION 6-T41N-R31W

Not to Scale



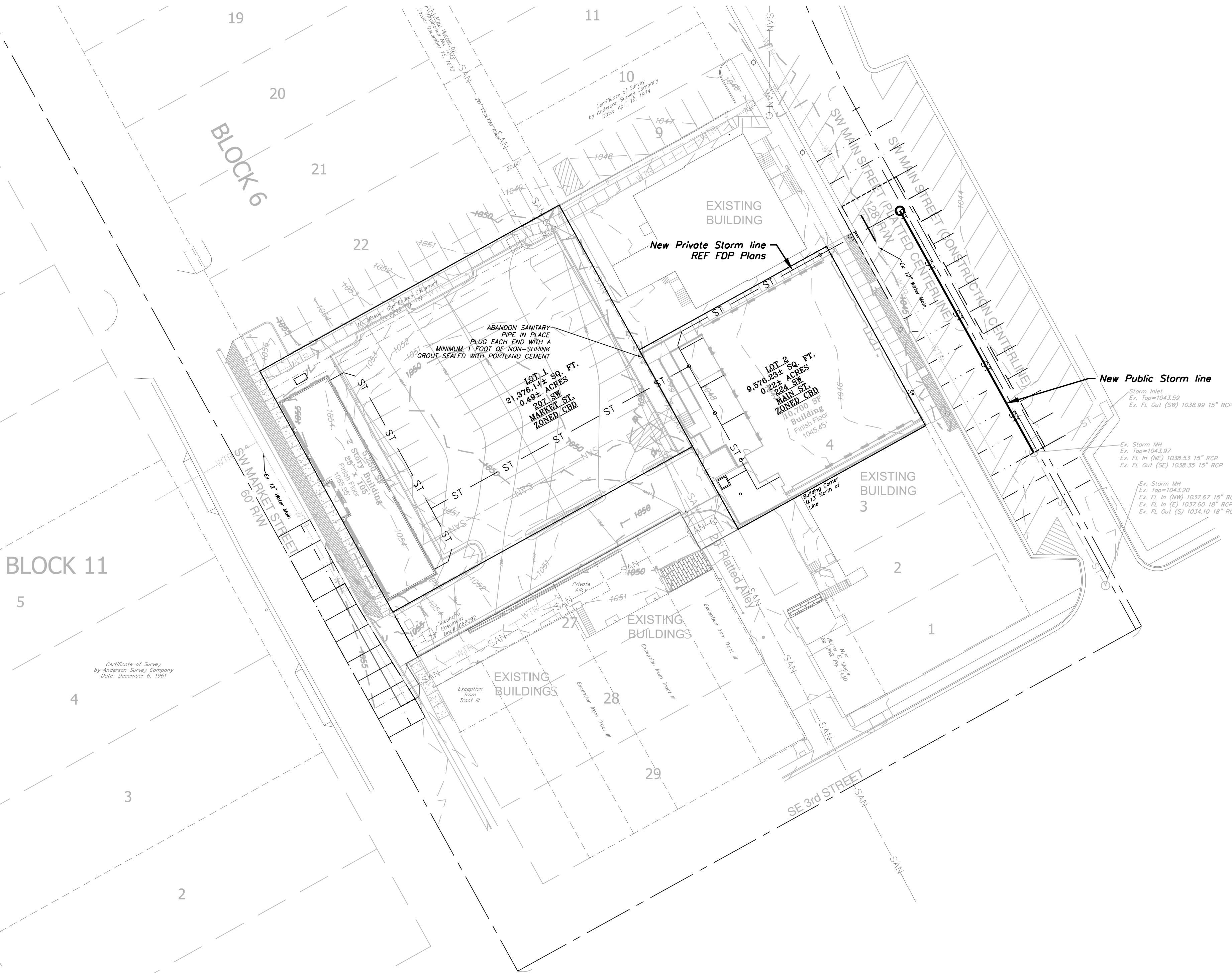
COVER SHEET
SCALE: 1" = 30'

INDEX OF SHEETS:

- C.300 ~ COVER SHEET
- C.301 ~ STORM SEWER GENERAL LAYOUT
- C.302 ~ STORM SEWER PLAN AND PROFILE
- C.303 ~ EXISTING WATER LINE PLAN AND PROFILE
- C.304 ~ CONCRETE JOINT PLAN
- C.305 ~ CONCRETE JOINT PLAN
- C.306 ~ TRAFFIC CONTROL PLAN GENERAL LAYOUT
- C.307 ~ TRAFFIC CONTROL STANDARD DETAILS

OWNER:
TUSTIN LLC
Dusty Dahmer
12650 S PFLUM RD STE 201
OLATHE KS

ALL PAVING ON THE PARKING LOT WILL COMPLY WITH THE UNIFIED DEVELOPMENT ORDINANCE ARTICLE 8 IN TERMS OF PAVING THICKNESS AND BASE

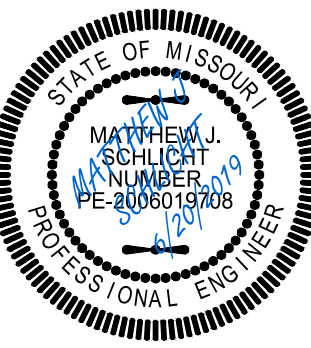


Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005008182-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Construction Plans for:
Reece Nichols
Lee's Summit, Jackson County, Missouri

Project AND
NICHOLS, LSWO
Issue Date:
January 29, 2019

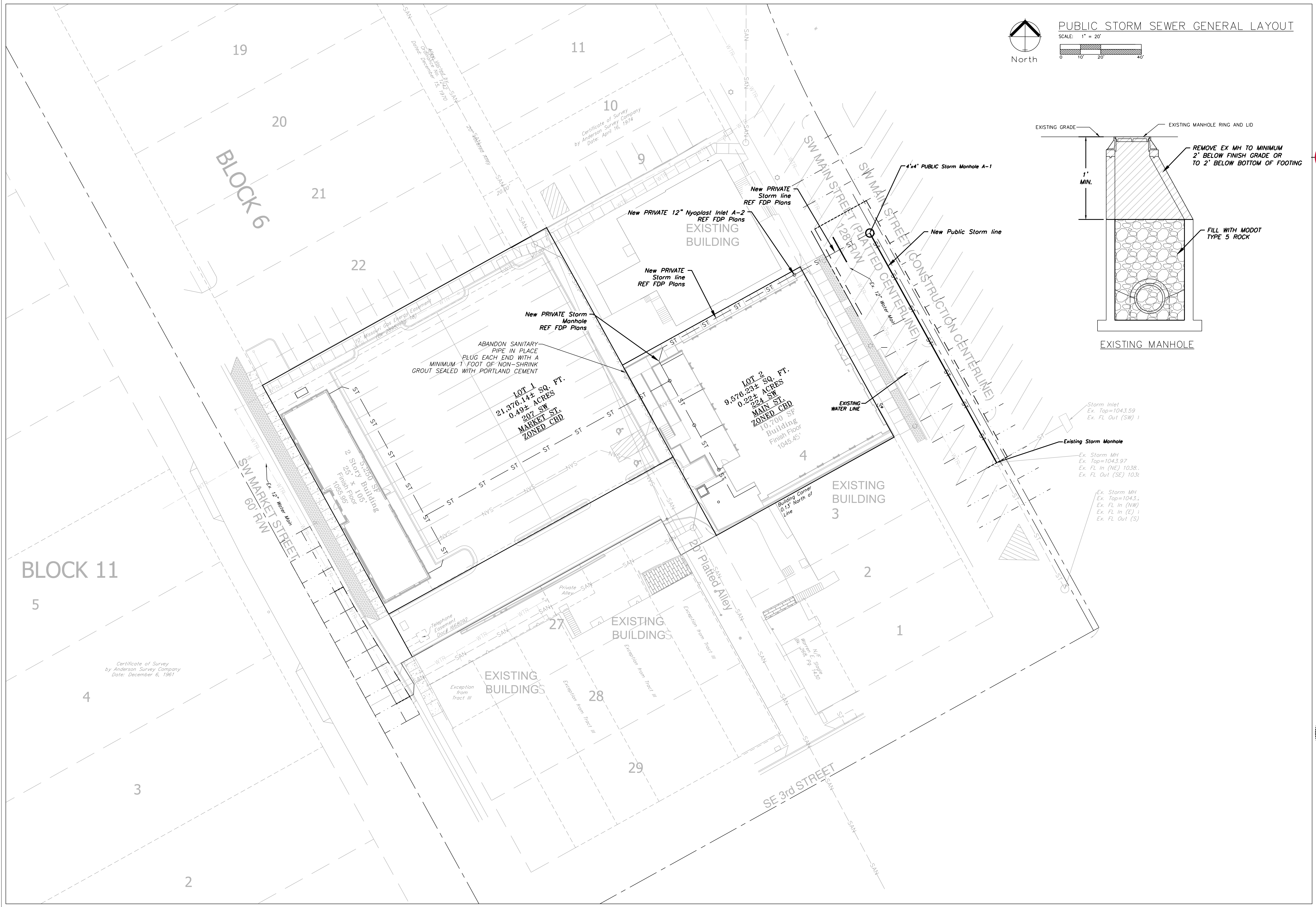
Cover Sheet
Public Storm Construction Plans for:
Reece Nichols
Lee's Summit, Jackson County, Missouri



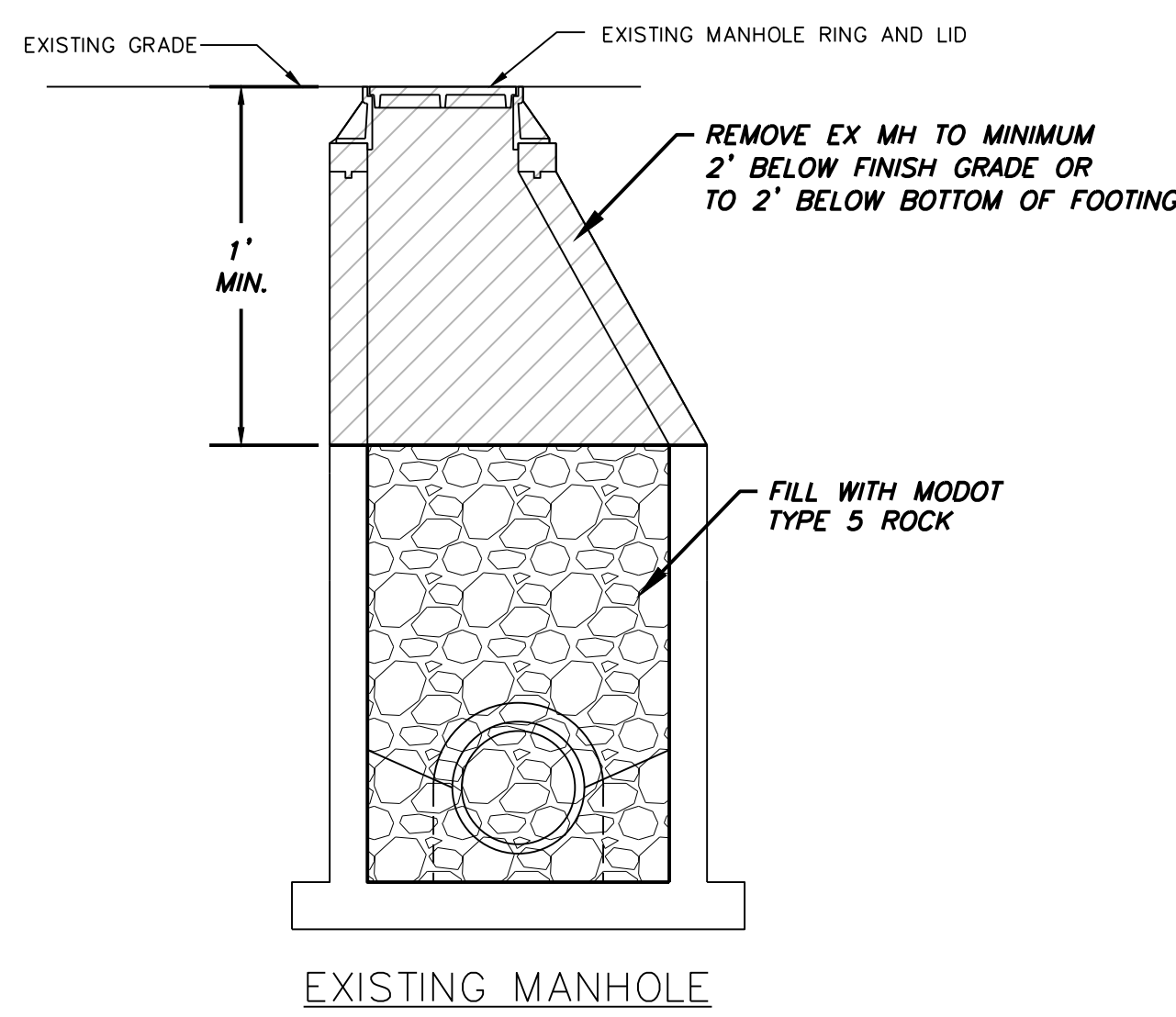
Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226

REVISIONS

- Revised 4/2/19
- Revised 5/8/19
- Revised 6/6/19
- Revised 6/20/19



PUBLIC STORM SEWER GENERAL LAYOUT
SCALE: 1" = 20'



Storm Inlet
Ex. Top=1043.59
Ex. FL Out (SW) 1

Existing Storm Manhole
Ex. Storm MH
Ex. Top=1043.97
Ex. FL In (NE) 1038.
Ex. FL Out (SE) 1034

Ex. Storm MH
Ex. Top=1043.
Ex. FL In (NW)
Ex. FL In (E) 1
Ex. FL Out (S)

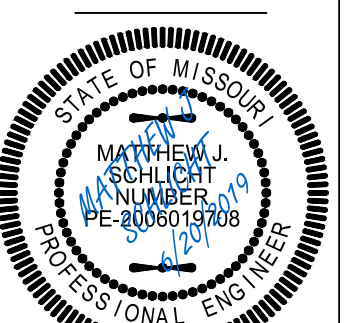


Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005003192-D
Kansas
Engineering E-1696
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Construction Plans for:
Reece Nichols
Lee's Summit, Jackson County, Missouri

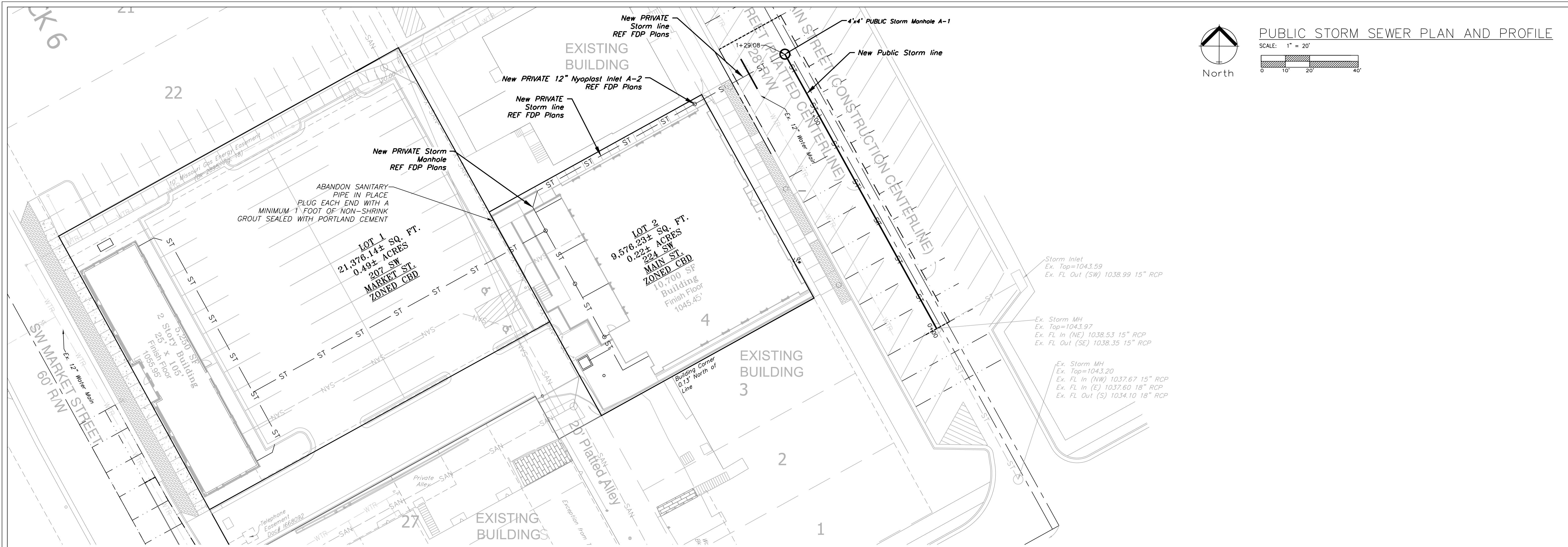
Project AND
NICHOLS, LSHO
Issue Date
January 28, 2019

Public Storm Sewer General Layout
Public Storm Construction Plans for:
Reece Nichols
Lee's Summit, Jackson County, Missouri

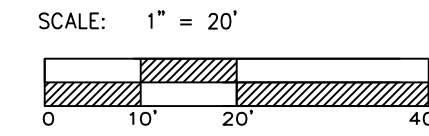


Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226

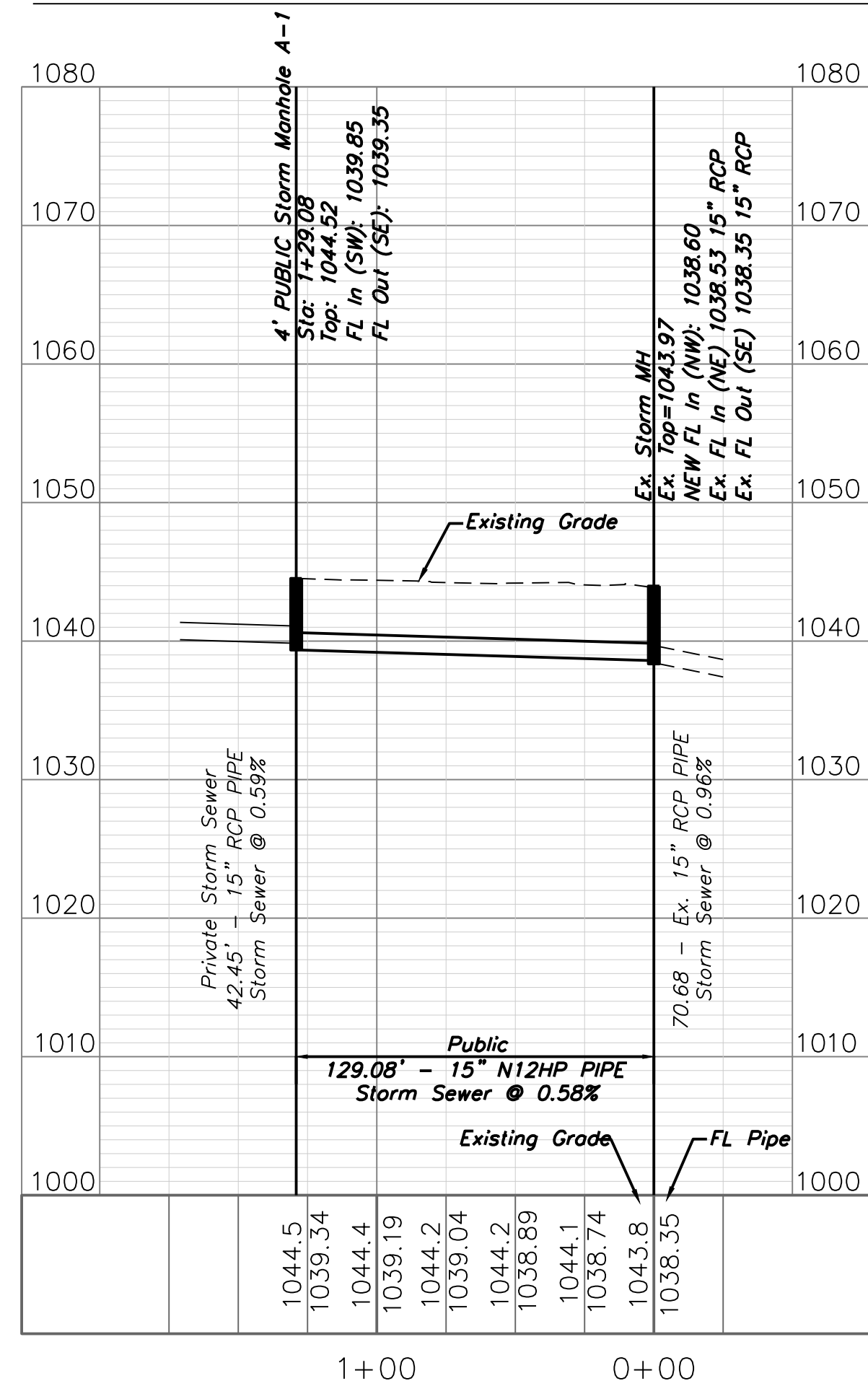
REVISIONS	
△	Revised 4/2/19
△	Revised 5/8/19
△	Revised 6/6/19
△	Revised 6/20/19



PUBLIC STORM SEWER PLAN AND PROFILE



PUBLIC STORM LINE



REVISIIONS

NO.	DATE	DESCRIPTION
1	4/2/19	Revised 4/2/19
2	5/8/19	Revised 5/8/19
3	6/6/19	Revised 6/6/19
4	6/20/19	Revised 6/20/19

ENGINEERING SOLUTIONS
ENGINEERING & SURVEYING
50 SE 30TH STREET
LEE'S SUMMIT, MO 64082
P: (816) 623-9888 F: (816) 623-9849

Professional Registration
Missouri
Engineering 2005002188-D
Surveying 200500019-D
Kansas
Engineering E-1895
Surveying LS-219
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Construction Plans for:
Reece Nichols
Lee's Summit, Jackson County, Missouri

Project AND
NICHOLS, LSWO
Issue Date
January 29, 2019

Public Storm Sewer Plan and Profile
Public Storm Construction Plans for:
Reece Nichols
Lee's Summit, Jackson County, Missouri

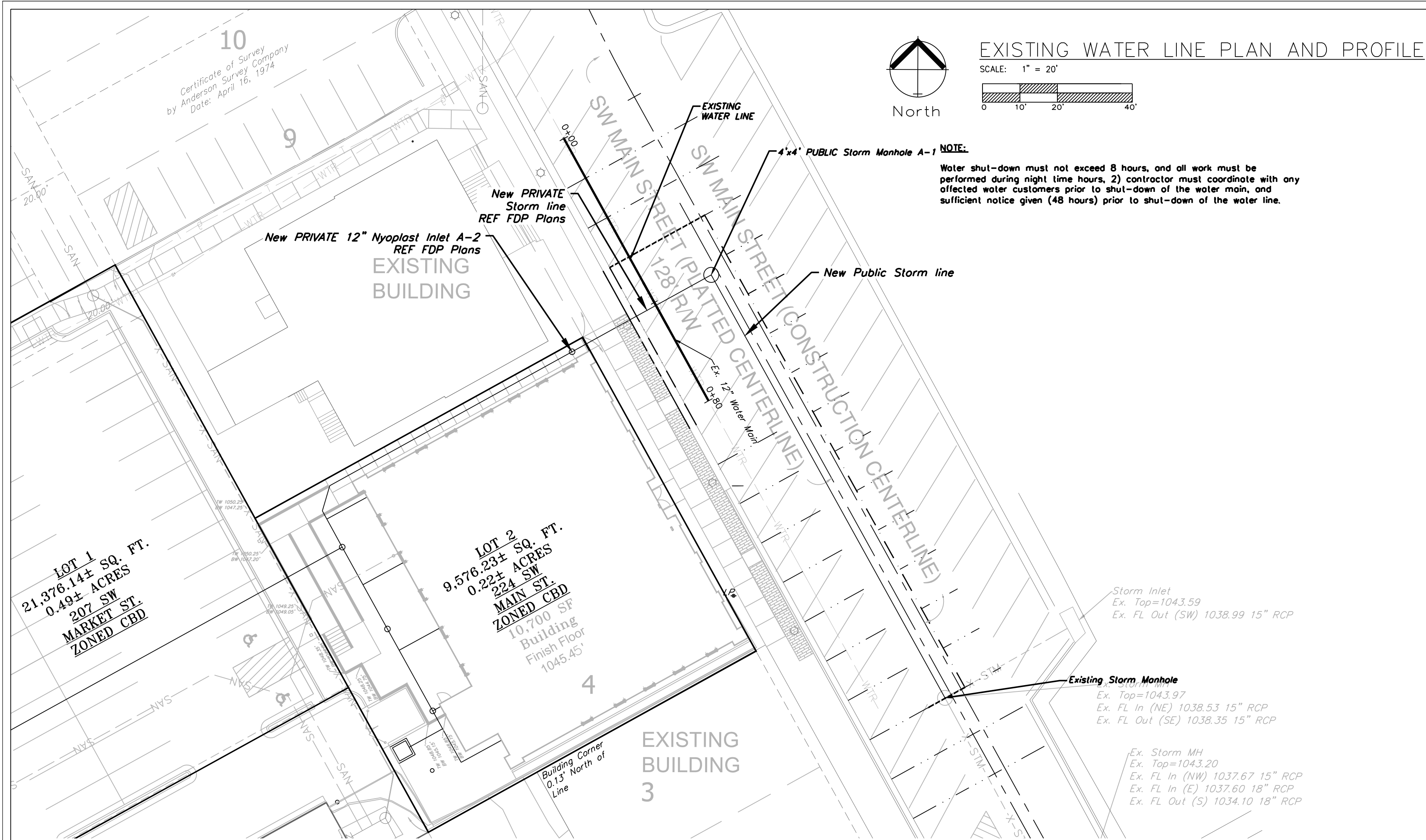
STATE OF MISSOURI
MATTHEW J. SCHLICHT
PE 2006019708
K.S. PE 19071
OK PE 25526
Professional Engineer

Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25526

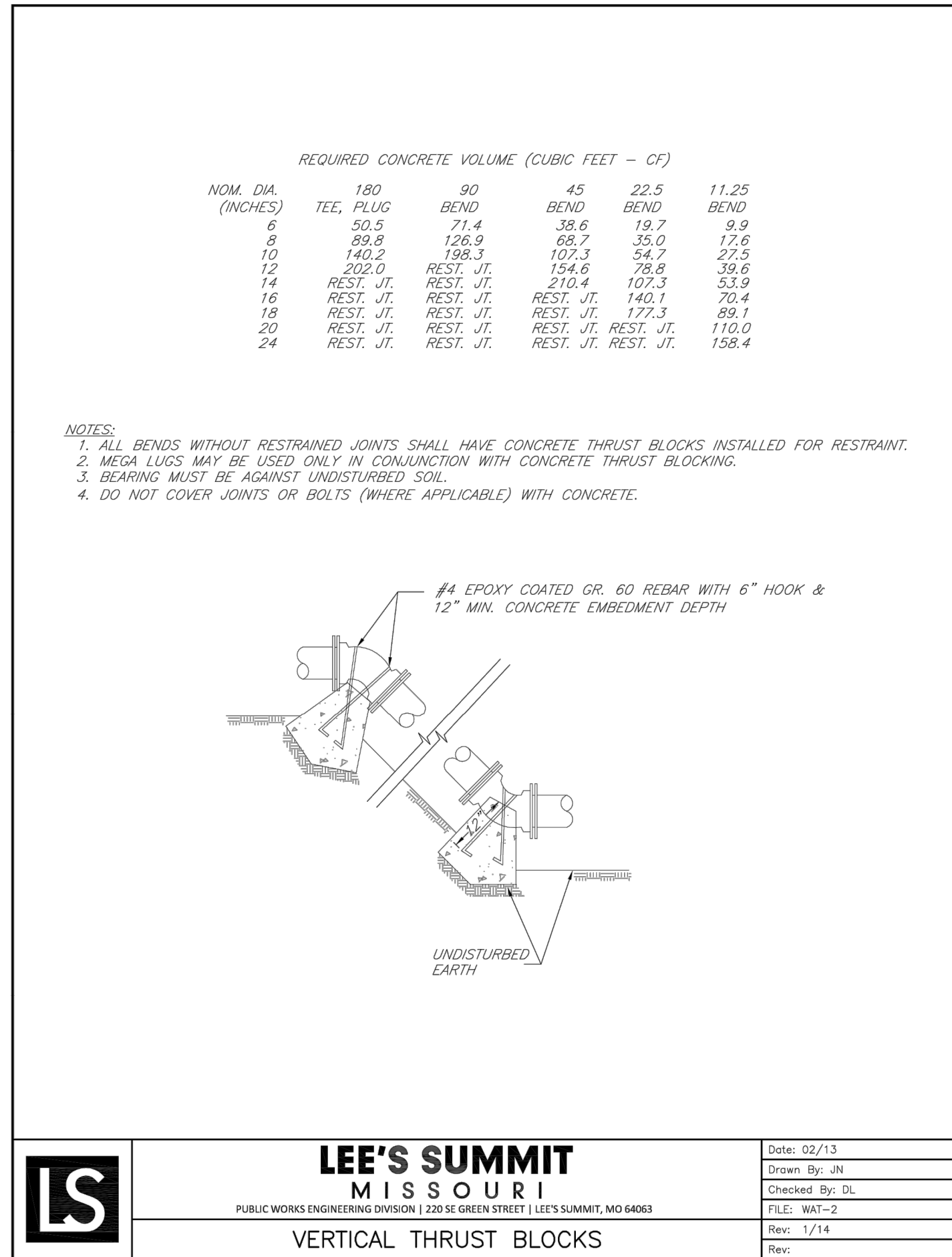
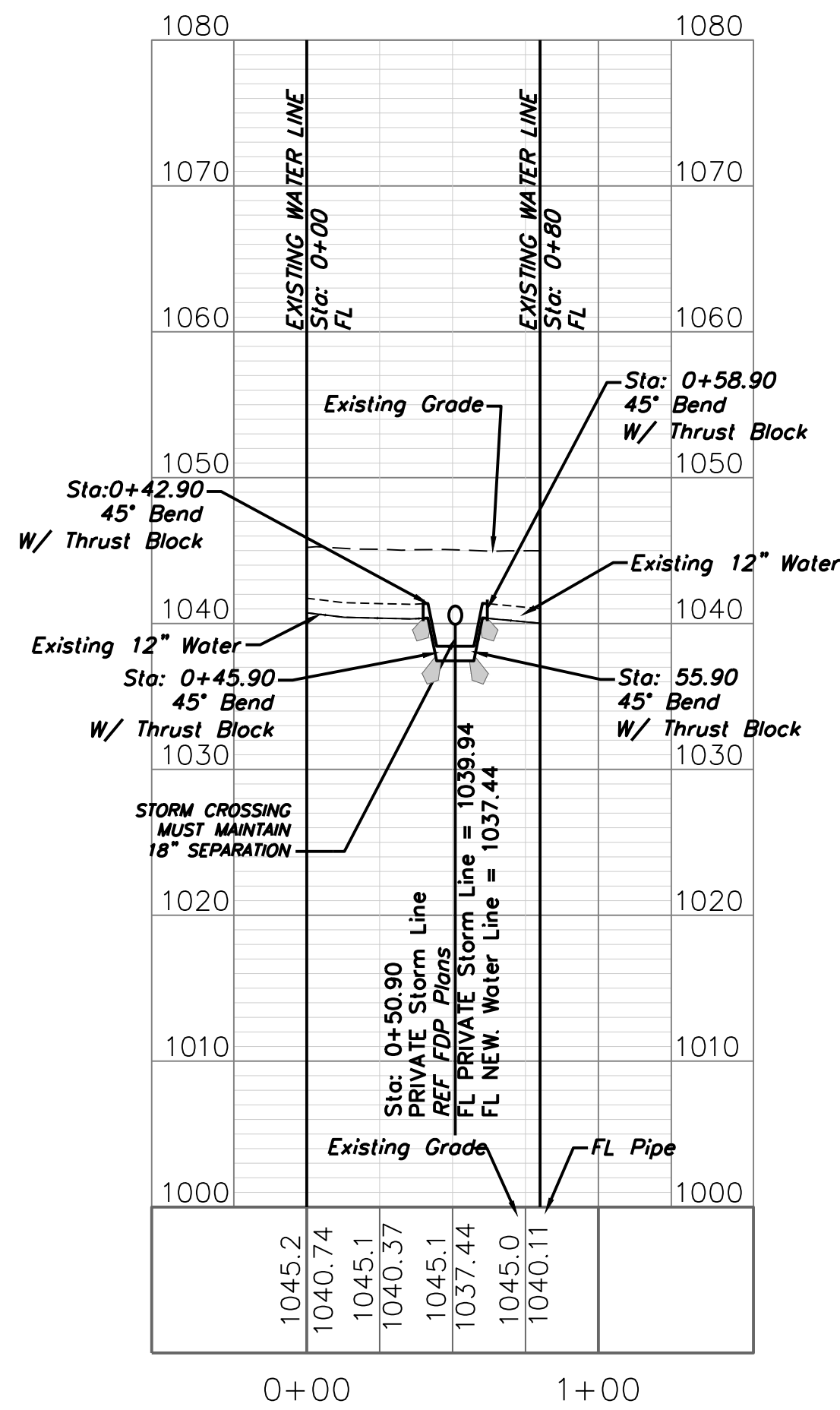
REVISIONS

NO.	DATE	DESCRIPTION
1	4/2/19	Revised 4/2/19
2	5/8/19	Revised 5/8/19
3	6/6/19	Revised 6/6/19
4	6/20/19	Revised 6/20/19

C.302



EXISTING WATER LINE



ENGINEERING SOLUTIONS
ENGINEERING & SURVEYING
50 SE 30TH STREET
LEE'S SUMMIT, MO 64062
P: (816) 623-9888 F: (816) 623-9849

Professional Registration
Missouri
Engineering 2005002186-D
Surveying 20050001812-D
Kansas
Engineering E-1696
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Construction Plans for:
Reece Nichols
Lee's Summit, Jackson County, Missouri

Project AND
NICHOLS, LSWO
Issue Date:
January 29, 2019

Existing Water Line Plan and Profile
Public Storm Construction Plans for:
Reece Nichols
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
MATTHEW J. SCHLICHT
PE NUMBER: 2006019708
PE 19071
OK PE 25226
Professional Engineer

Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226

REVISIONS
Revised 4/2/19
Revised 5/8/19
Revised 6/6/19
Revised 6/20/19

C.303

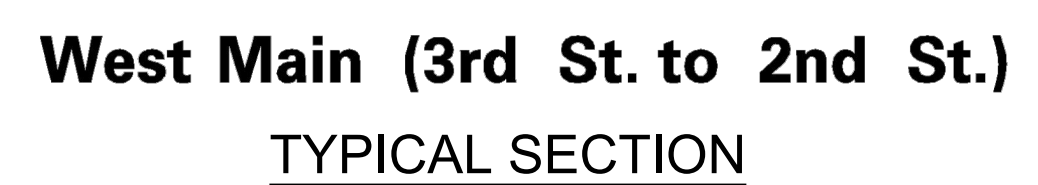
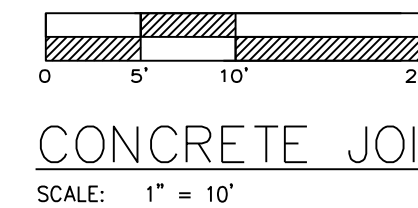
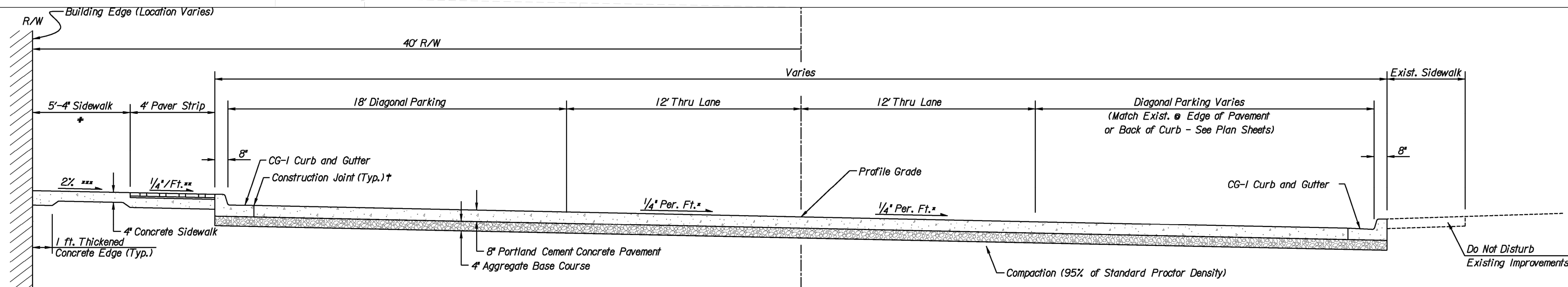
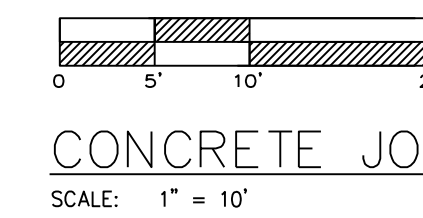
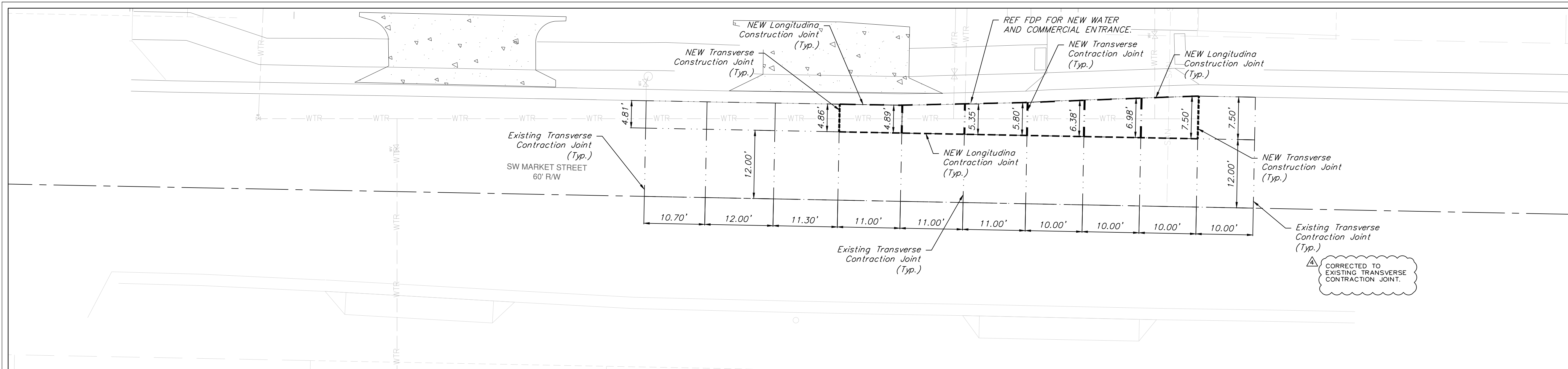


Figure 1 shows five types of joints used in the study, each represented by a schematic diagram:

- Transverse Contraction Joint:** A solid line with small circles (dots) placed along its length.
- Transverse Construction Joint:** A dashed line.
- Longitudinal Contraction Joint:** A dashed line with small circles (dots) placed along its length.
- Longitudinal Construction Joint:** A solid line with small circles (dots) placed along its length.
- Isolation Joint:** A solid line with gaps or breaks in it.

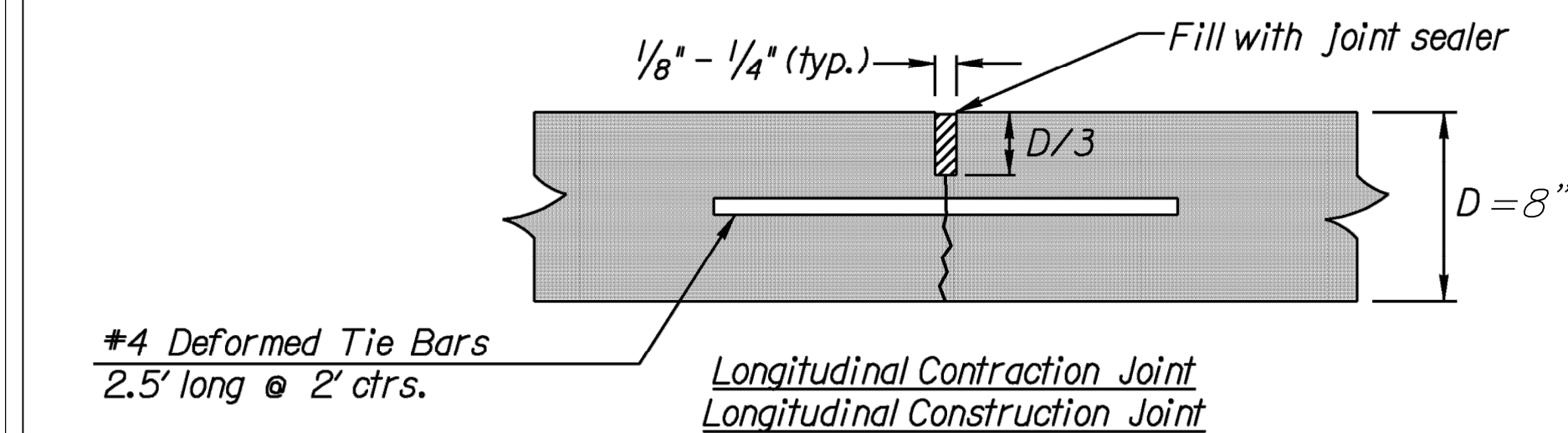
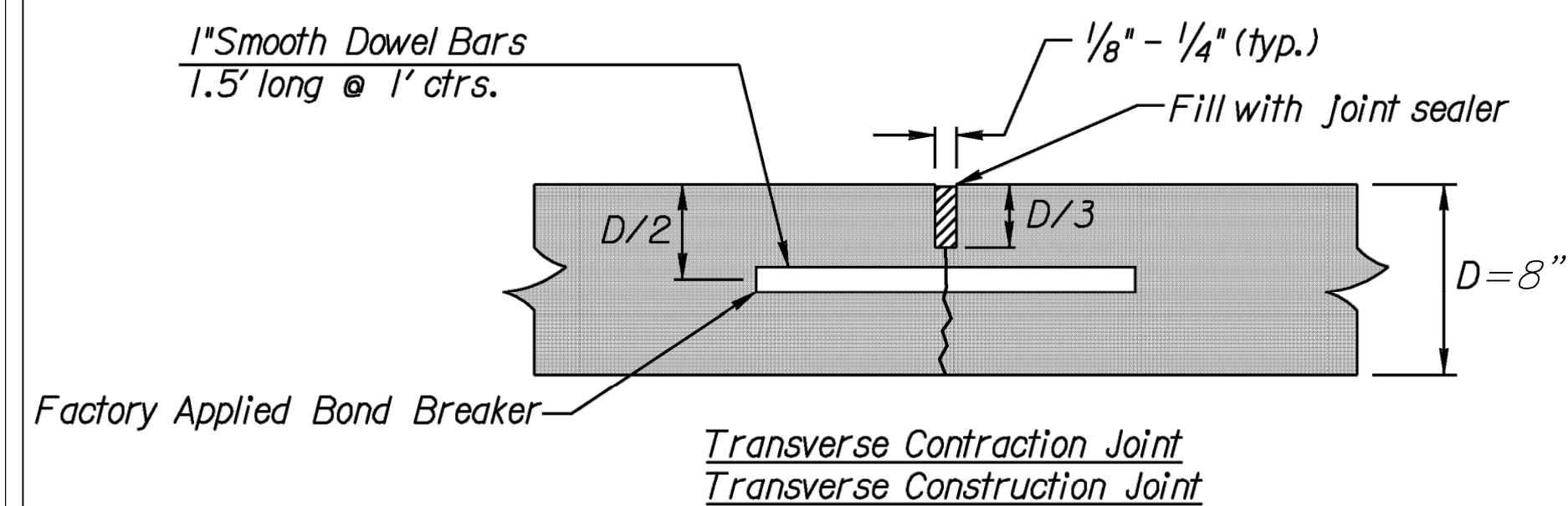
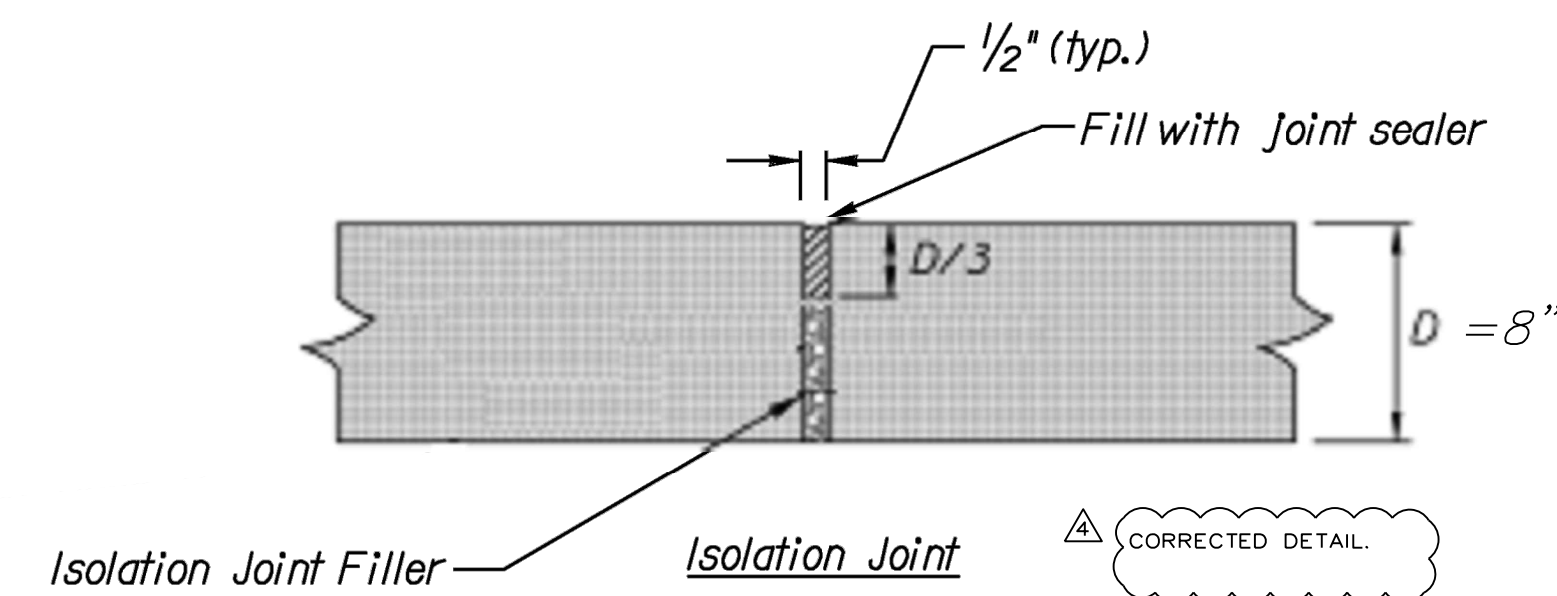


1. Contractor shall submit a final detailed Jointing plan (based upon their Approved Construction Phasing Plan) to the Engineer for Approval at least 30 days prior to placing any concrete pavement.
2. All valves, manhole rings, and any other casting that fall within the pavement shall be isolated with 1/2" Ceramar (or Approved Equal).
3. Manholes and valves shall be jointed where possible. For manholes and valves that cannot be jointed, #4 deformed bars shall be placed in the slab 6" from the structure on all sides.
4. Contractor shall submit a Concrete Paving Plan that includes their Concrete Delivery Plan and Guaranteed Concrete Supply Rate to the Engineer for Approval at least 30 days prior to placing any Concrete Pavement.
5. All longitudinal joints shall be tied. Keyways will not be allowed.
6. Tie Bars shall be evenly spaced along the length of the slab and no tie bar shall be within 2 ft. of a contraction joint.
7. Tie Bars shall be supported in the proper position by chairs driven into the base, or may be placed by approved mechanical methods into the plastic concrete ahead of the finishing screed prior to the final consolidation of the concrete. Tie Bars Shall NOT be inserted by driving (or "poking") them into the finished consolidated concrete.
8. All tie bars and dowels shall be epoxy coated.
9. Maximum joint spacing for pavement shall be 12 feet. Sidewalk joint spacing shall match sidewalk width but should not exceed 8 feet in any direction.
10. Where a joint deadends into an adjacent slab, a 2 inch hole at the junction of the joint shall be either preformed or cored (full depth) to prevent reflective cracking. The hole shall be filled 2/3 with foam or some other compressible material and topped off with joint sealant material when sealing the joints.



SW MARKET (3rd St. to 2nd St.)

TYPICAL SECTION



LEGEND:

Transverse Contraction Joint	---
Transverse Construction Joint	----
Longitudinal Contraction Joint	----
Longitudinal Construction Joint	----
Isolation Joint	----

CONCRETE JOINT DETAILS

GENERAL NOTES:

- Contractor shall submit a final detailed Jointing plan (based upon their Approved Construction Phasing Plan) to the Engineer for Approval at least 30 days prior to placing any concrete pavement.
- All valves, manhole rings, and any other casting that fall within the pavement shall be isolated with 1/2" Ceramar (or Approved Equal).
- Manholes and valves shall be jointed where possible. For manholes and valves that cannot be jointed, #4 deformed bars shall be placed in the slab 6" from the structure on all sides.
- Contractor shall submit a Concrete Paving Plan that includes their Concrete Delivery Plan and Guaranteed Concrete Supply Rate to the Engineer for Approval at least 30 days prior to placing any Concrete Pavement.
- All longitudinal joints shall be tied. Keyways will not be allowed.
- Tie Bars shall be evenly spaced along the length of the slab and no tie bar shall be within 2 ft. of a contraction joint.
- Tie Bars shall be supported in the proper position by chairs driven into the base, or may be placed by approved mechanical methods into the plastic concrete ahead of the finishing screed prior to the final consolidation of the concrete. Tie Bars Shall NOT be inserted by driving (or "poking") them into the finished consolidated concrete.
- All tie bars and dowels shall be epoxy coated.
- Maximum joint spacing for pavement shall be 12 feet. Sidewalk joint spacing shall match sidewalk width but should not exceed 8 feet in any direction.
- Where a joint deadheads into an adjacent slab, a 2 inch hole at the Junction of the joint shall be either preformed or cored (full depth) to prevent reflective cracking. The hole shall be filled 2/3 with foam or some other compressible material and topped off with joint sealant material when sealing the joints.

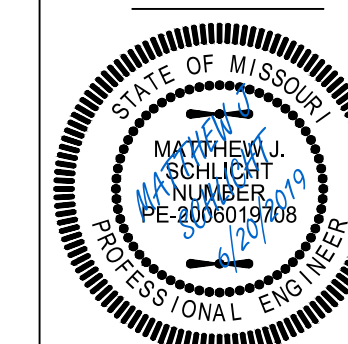


Professional Registration
Missouri
Engineering 200502188-D
Surveying 200503012-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Construction Plans for:
Reece Nichols
Lee's Summit, Jackson County, Missouri

Project AND
NICHOLS, LSWO
Issue Date
January 29, 2019

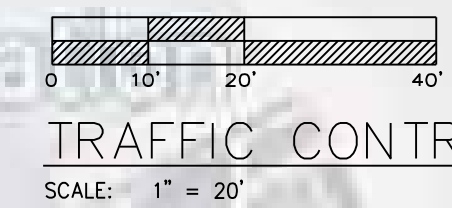
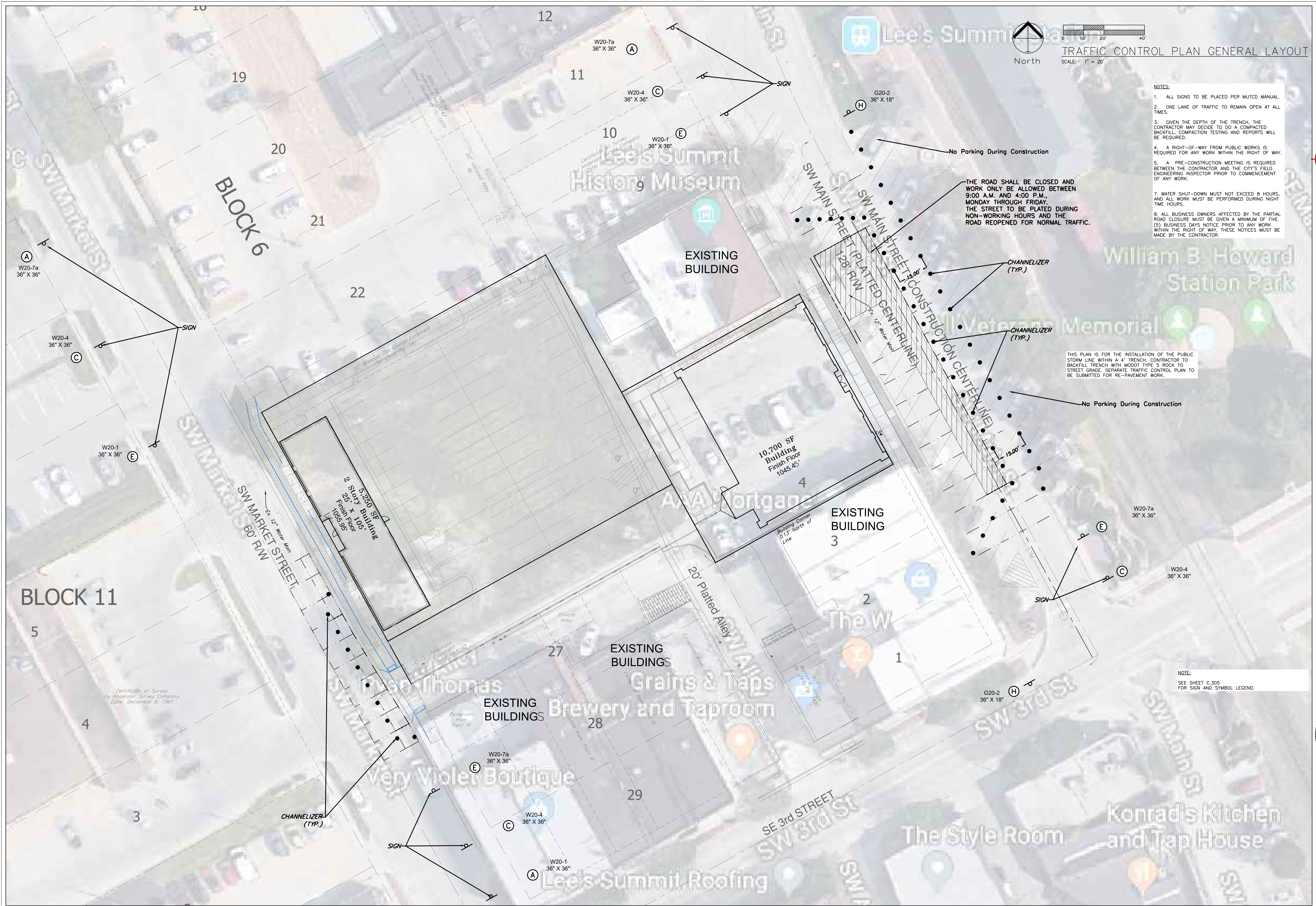
Concrete Joint Plan
Public Storm Construction Plans for:
Reece Nichols
Lee's Summit, Jackson County, Missouri



Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226

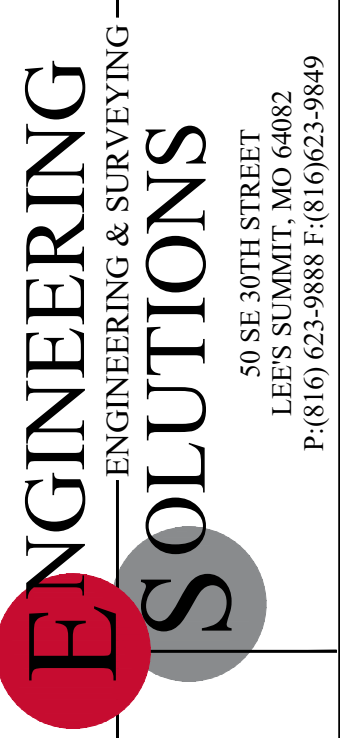
REVISIONS

- Revised 4/2/19
- Revised 5/8/19
- Revised 6/6/19
- Revised 6/20/19



TRAFFIC CONTROL PLAN GENERAL LAYOUT

- NOTES:
1. ALL SIGNS TO BE PLACED PER MUTCD MANUAL.
 2. ONE LANE OF TRAFFIC TO REMAIN OPEN AT ALL TIMES.
 3. GIVEN THE DEPTH OF THE TRENCH, THE CONTRACTOR MAY DECIDE TO DO A COMPACTED BACKFILL, COMPACTION TESTING AND REPORTS WILL BE REQUIRED.
 4. A RIGHT-OF-WAY FROM PUBLIC WORKS IS REQUIRED FOR ANY WORK WITHIN THE RIGHT OF WAY.
 5. A PRE-CONSTRUCTION MEETING IS REQUIRED BETWEEN THE CONTRACTOR AND THE CITY'S FIELD ENGINEERING INSPECTOR PRIOR TO COMMENCEMENT OF ANY WORK.
 7. WATER SHUT-DOWN MUST NOT EXCEED 8 HOURS, AND ALL WORK MUST BE PERFORMED DURING NIGHT TIME HOURS.
 8. ALL BUSINESS OWNERS AFFECTED BY THE PARTIAL ROAD CLOSURE MUST BE GIVEN A MINIMUM OF FIVE (5) BUSINESS DAYS NOTICE PRIOR TO ANY WORK WITHIN THE RIGHT OF WAY. THESE NOTICES MUST BE MADE BY THE CONTRACTOR.

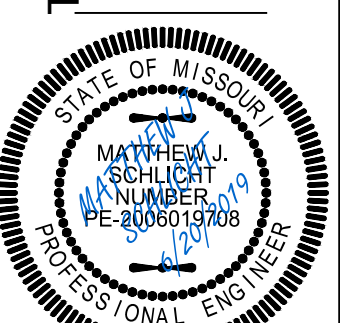


Professional Registration
Missouri
Engineering 2005002188-D
Surveying 2005000192-D
Kansas
Engineering E-1696
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Construction Plans for:
Reece Nichols
Lee's Summit, Jackson County, Missouri

Project and
Nichols, LSWO
Issue Date:
January 28, 2019

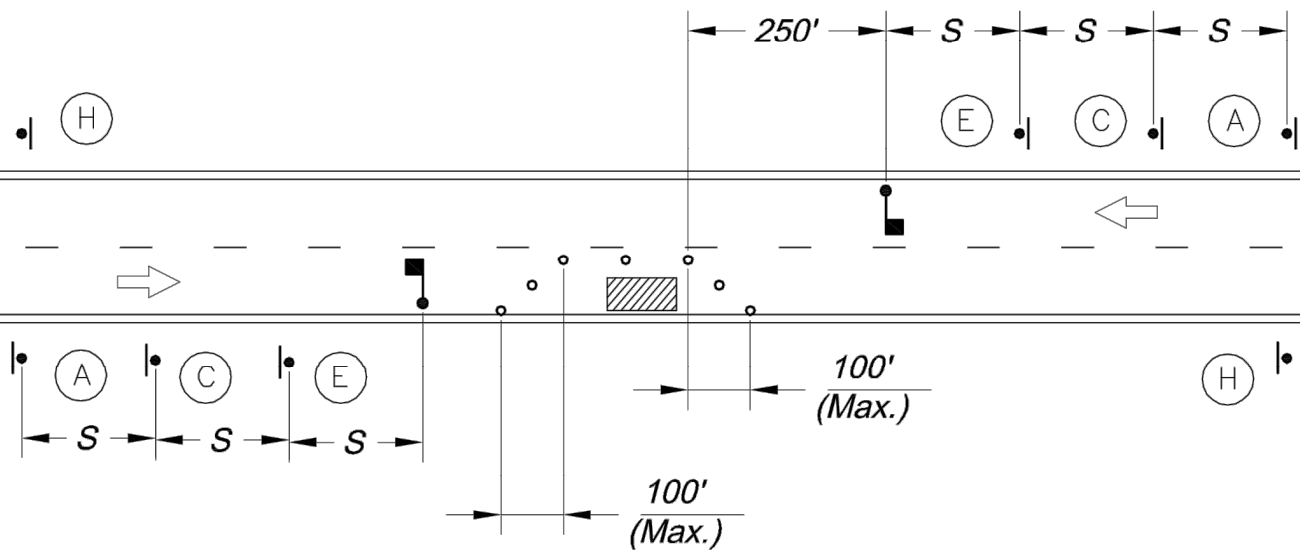
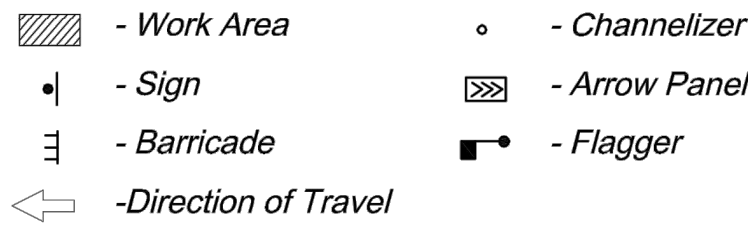
TRAFFIC CONTROL PLAN GENERAL LAYOUT
Public Storm Construction Plans for:
Reece Nichols
Lee's Summit, Jackson County, Missouri



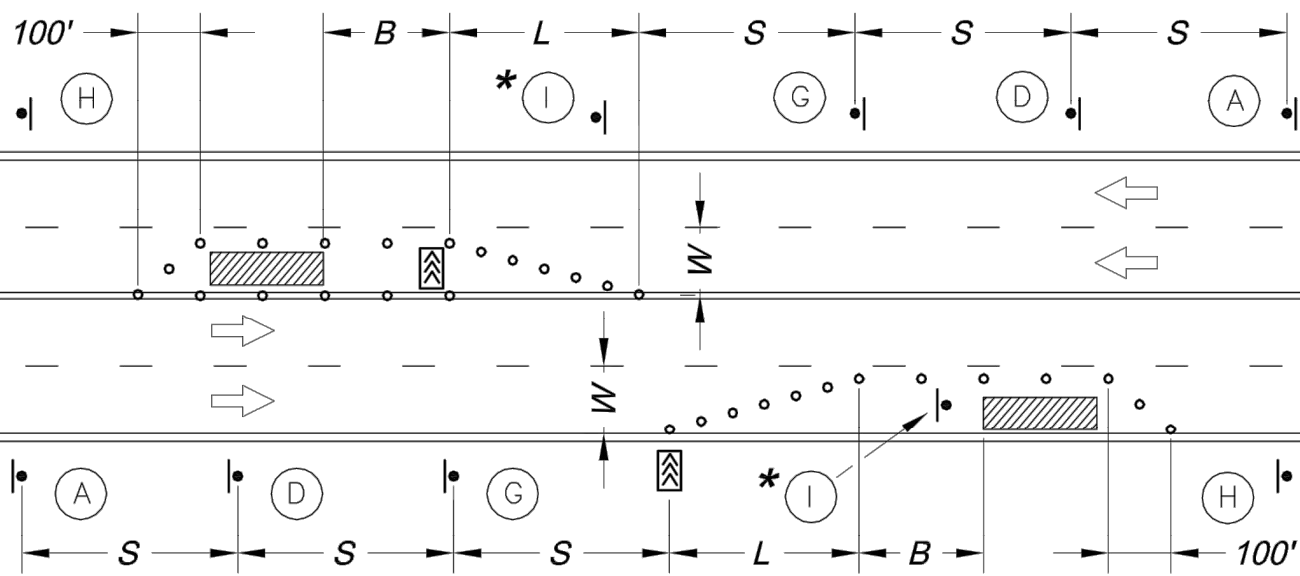
Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226

REVISIONS	
△	Revised 4/2/19
△	Revised 5/8/19
△	Revised 6/6/19
△	Revised 6/20/19

SYMBOL LEGEND

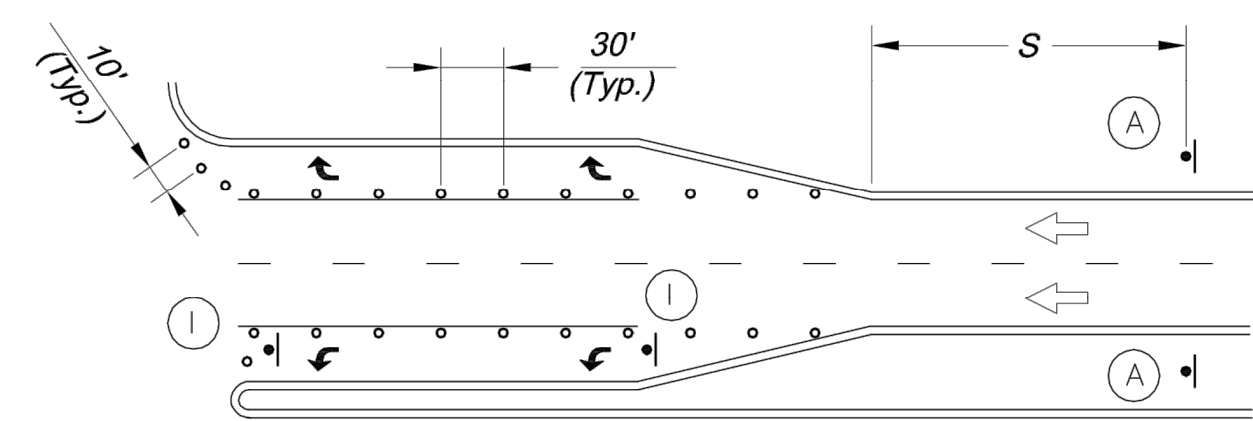


LANE CLOSURE - TWO LANE STREET



LANE CLOSURE - FOUR LANE STREET

* Install Signs Every 200 Feet Throughout the Closed Lane or As Needed



TURN LANE CLOSURE

Sign Spacing "S"

Speed Limit (mph)	Spacing (Feet)
25	100
30 - 35	250
≥ 40	350

Taper Dimensions (Feet)

Speed Limit (mph)	Minimum Taper Length "L", per Lane Width "W"			Minimum Number of Channelizers
	10	11	12	
25	105	115	125	6
30	150	165	180	7
35	205	225	245	8
40	270	295	320	9
45	450	495	540	13

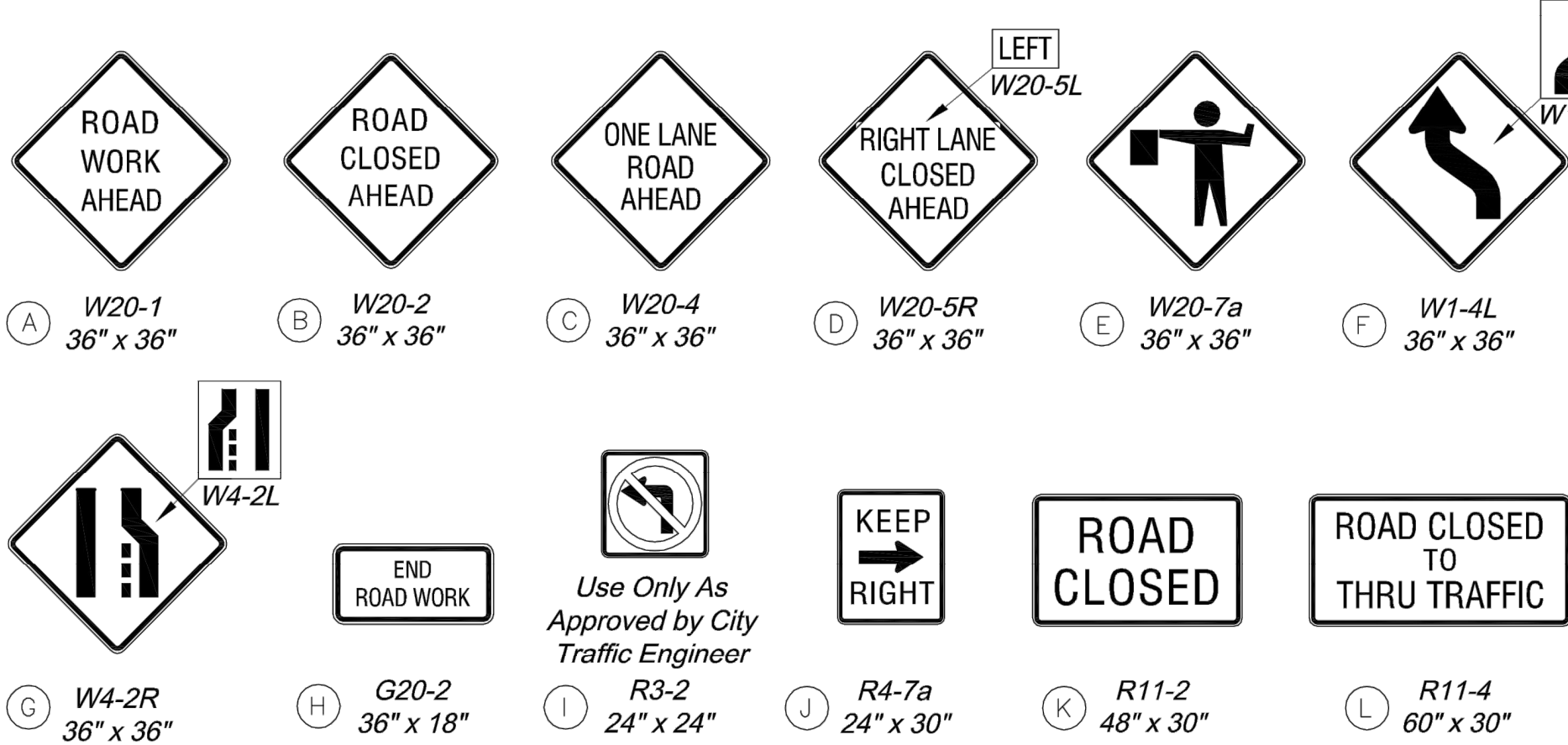
Guidelines for Length of Longitudinal Buffer Space "B"

Speed Limit (mph)	Length (Feet)
25	35
30	55
35	85
40	120
45	170

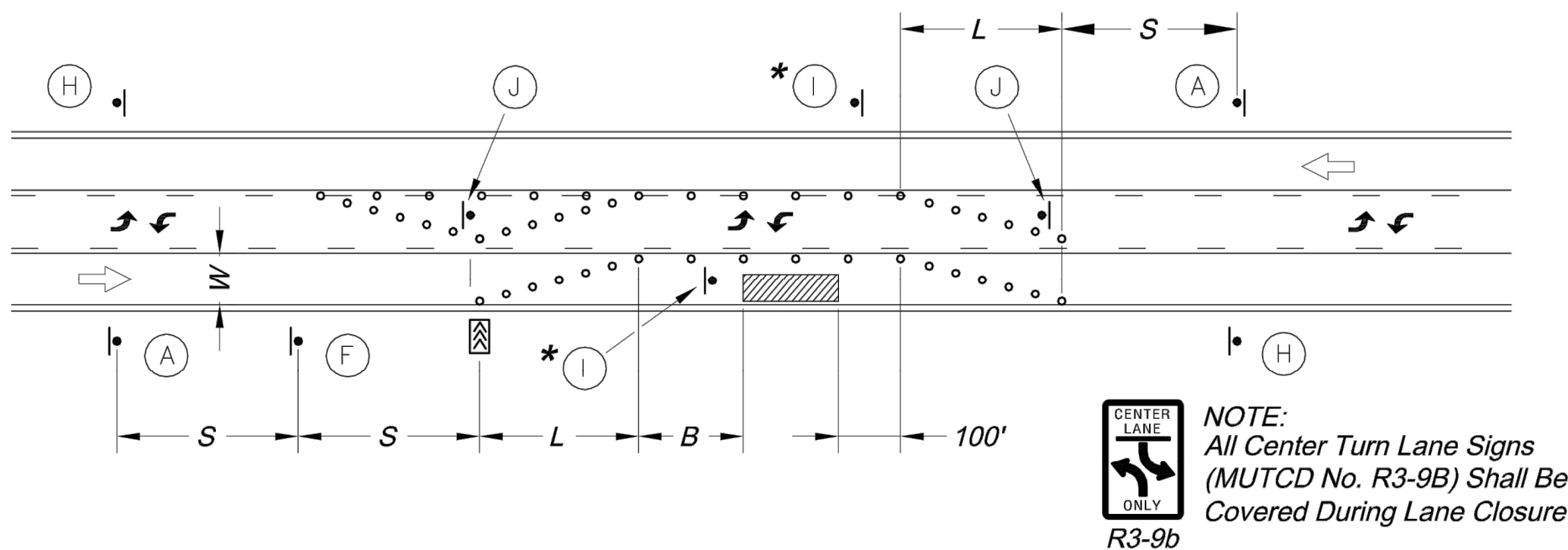
Maximum Channelizer Spacing

Speed Limit (mph)	Within Taper (Feet)	Outside Taper (Feet)
25	25	50
30	30	60
35	35	70
40	40	80
45	45	90

SIGN LEGEND

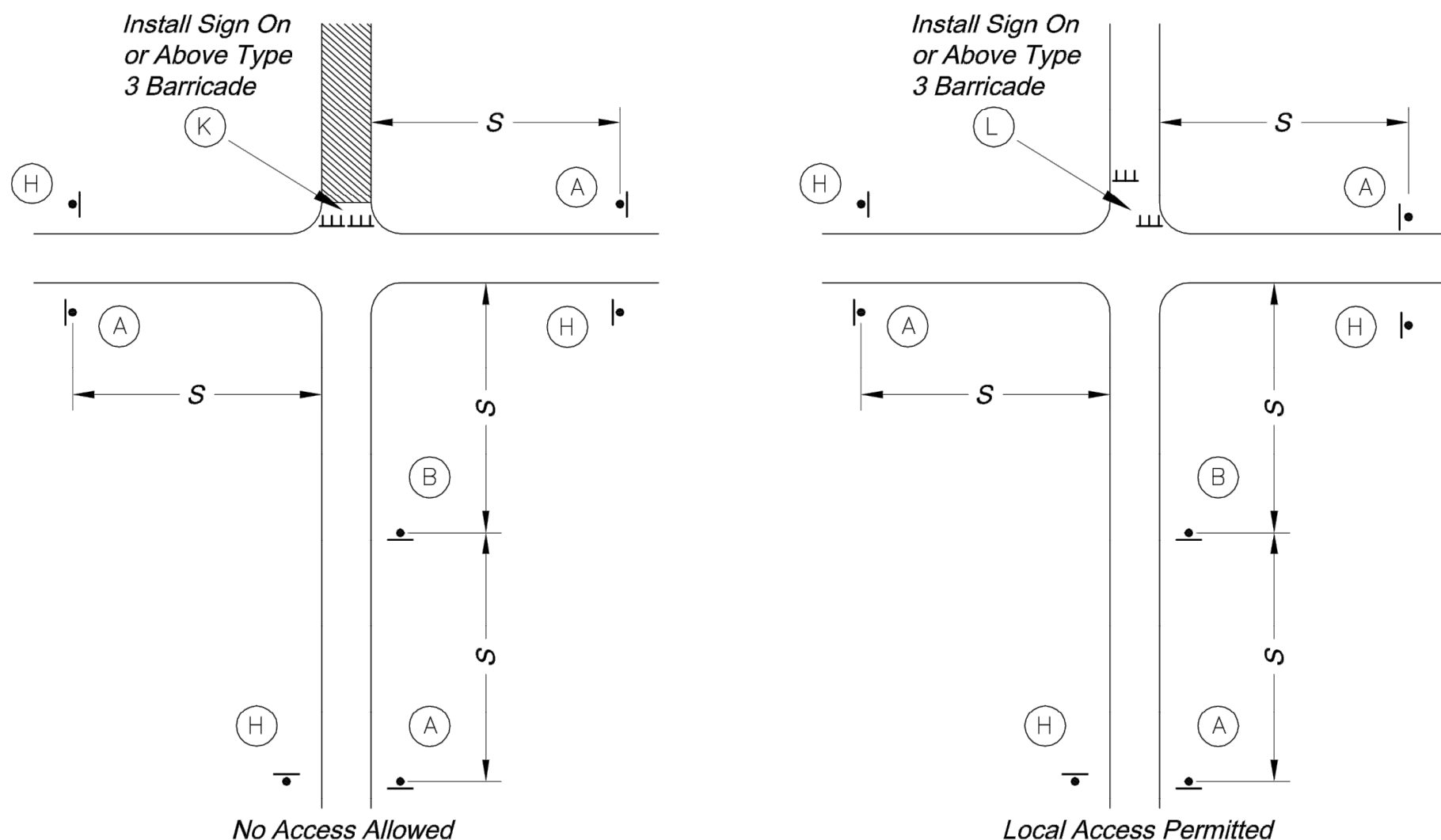


TYPICAL SIGNING FOR WORK ADJACENT TO THE STREET



LANE CLOSURE - THREE LANE STREET

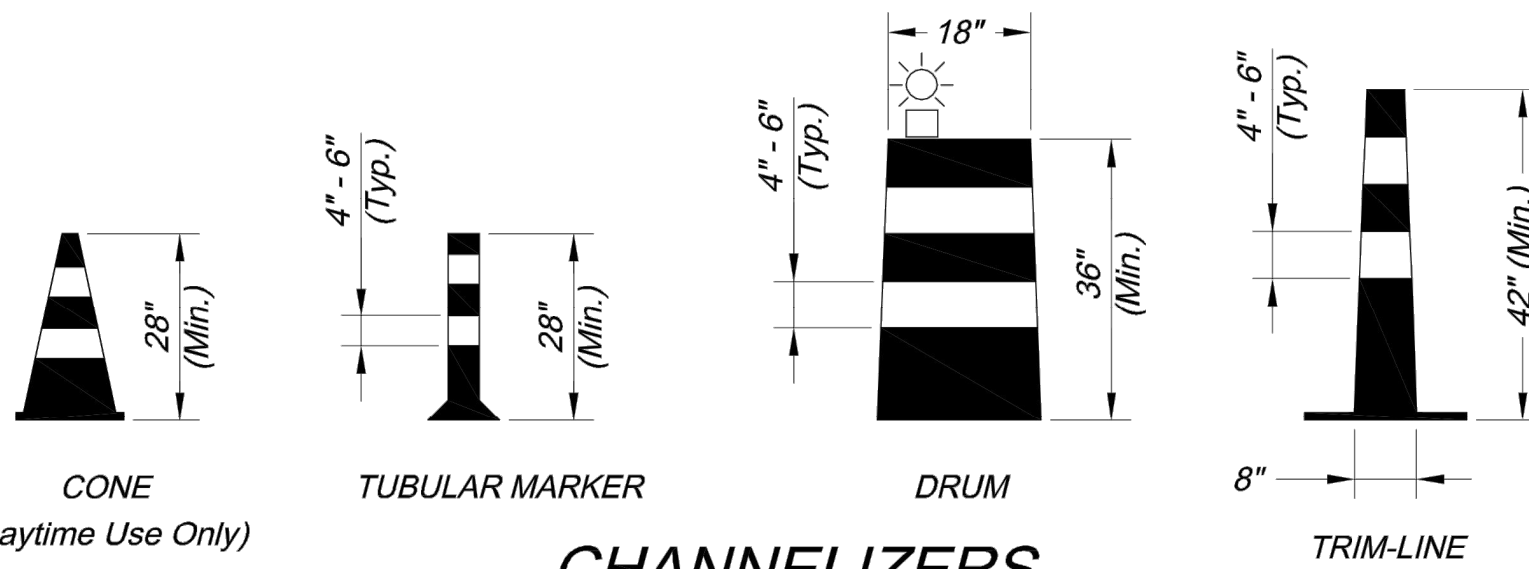
* Install Signs Every 200 Feet Throughout the Closed Lane or As Needed



TYPICAL STREET CLOSURE

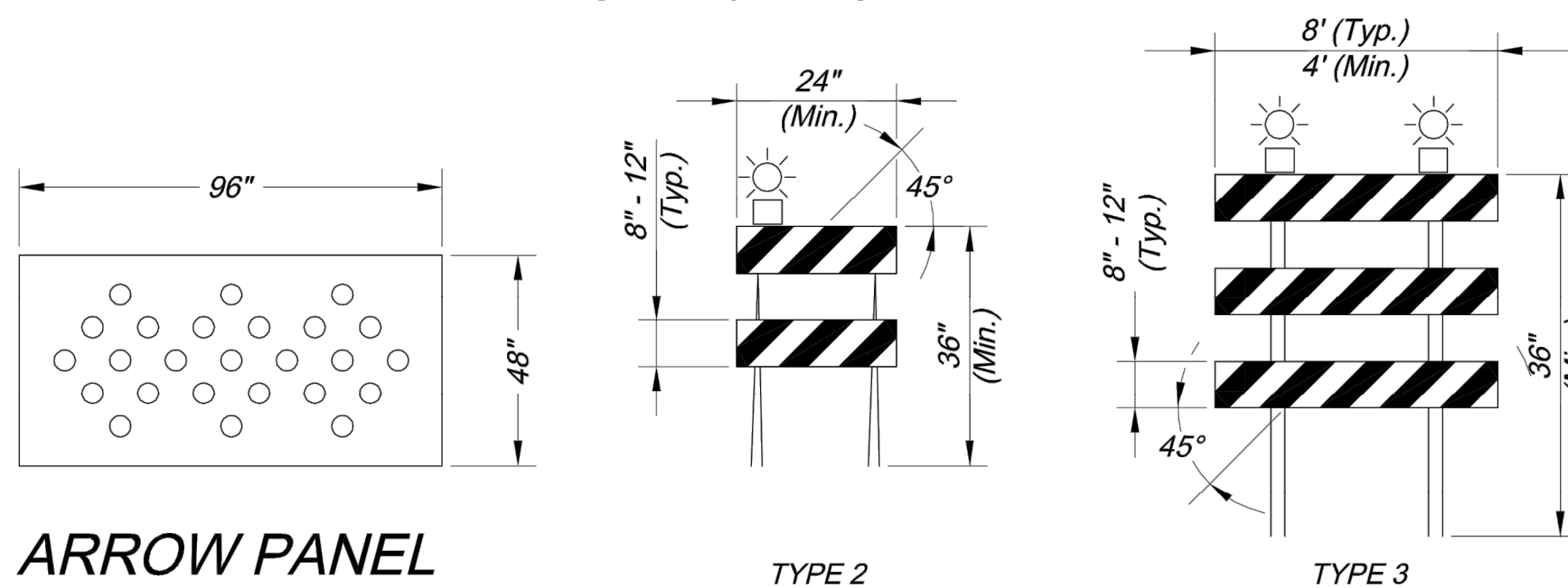
GENERAL NOTES:

- All signs, barricades, channelizers, markings and other traffic control devices shall conform to the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD).
- All traffic control devices shall be standard in size, shape, color, and message, in good condition, and retro-reflectorized. All signs shall be securely mounted with height and lateral location as described in the MUTCD.
- Warning lights shall be used on barricades in place at night and on warning signs which alert drivers about a change in alignment, traffic control, lane closure, or road closure.
- Flaggers shall be used where indicated on the plans, where construction vehicles interact with normal traffic, or where construction activities impose a restriction on traffic, as directed by the City Traffic Engineer. Where flaggers are used, advance signing shall be erected as shown in the details or as specified in the MUTCD. Flaggers shall meet the requirements in the MUTCD in regard to character, training, attire, and behavior.
- Trim-lines are the City's preferred channelizing device. Cones may not be used at nighttime.
- Traffic control devices not in use or not applicable shall be either covered or removed from the work area.
- The Contractor shall use barricades, street plates, or fencing as needed to effectively shield pedestrian and vehicular traffic from exposed objects, excavations, and construction activities.
- Access shall be maintained to all driveways and side streets unless noted otherwise on the plans.
- No street shall be closed without the approval of the City Traffic Engineer. The Contractor shall notify the City Traffic Engineer at least 7 days in advance of any street closure. If a detour route around the closure is to be provided, all detour signing shall be as shown on a plan approved by the City Traffic Engineer.
- Construction vehicles parked along streets shall be located within the work area (traffic control) or where otherwise normally permitted. Construction materials, including traffic control and vehicles shall not restrict sight distance for vehicles exiting at streets or drives.
- Construction materials shall be kept off of sidewalks, consolidated in one location within City right-of-way, and removed daily unless otherwise approved by the Inspector. Dirt, mud, and other construction debris on streets and sidewalks shall be removed immediately.
- The Contractor shall not perform any work that will restrict vehicular traffic in any way between the hours of 7:00 a.m. and 9:00 a.m. or 4:00 p.m. and 6:00 p.m. Monday through Friday unless otherwise indicated in the specifications.
- All travel lanes should be at least 11 feet wide unless otherwise authorized by the City Traffic Engineer. A "Narrow Lanes" sign shall be installed in advance of a lane width reduction to less than 11 feet.
- All edge drop-offs of more than 2 inches and less than 4 inches should be protected by a wedge or barrier and all edge drop-offs greater than 4 inches shall have edge protection (see Traffic Control Specifications for edge treatment requirements).
- The "Workers" symbolic sign (MUTCD No. W21-1a) may be used instead of the "Road Work Ahead" sign for work with a duration of 12 hours or less. The "End Road Work" sign is not required to be installed after the "Workers" sign.
- No traffic signal shall be altered or modified in any way without a plan approved by the City Traffic Engineer.
- The Contractor shall be responsible for maintaining all traffic control devices on an around-the-clock basis, whether or not work is actively being pursued and any deficiencies noted shall be corrected immediately.
- The traffic control requirements shown on these plans are minimum requirements only and do not attempt to address in depth the variety of situations that may occur once construction has started. In no way do the requirements shown on these plans relieve the Contractor of his responsibility for selecting the proper traffic control devices and implementation procedures that will assure the safety of drivers, pedestrians, and workers at all times.
- Should the contractor fail to enforce the traffic control plan or fail to clean, replace or otherwise maintain the traffic control devices when directed to do so by the City Traffic Engineer or representative, the City may take one or more of the following actions:
 - Employ another agency to correct deficiencies in traffic control devices and deduct the cost from the Contractor's pay estimate,
 - Stop the work until deficiencies are corrected,
 - Suspend all pay estimates until deficiencies are corrected, or
 - Place the Contractor in default.



CHANNELIZERS

NOTE: White Bands On Barricades and Channelizers Shall Be Made From High Intensity Sheeting Material.



ARROW PANEL

TYPE 2

BARRICADES

TYPE 3

Project:

TRAFFIC CONTROL DETAILS

STANDARD DRAWING TC-1

Sheet Name:

Drawn By: JJW

Checked By: MP

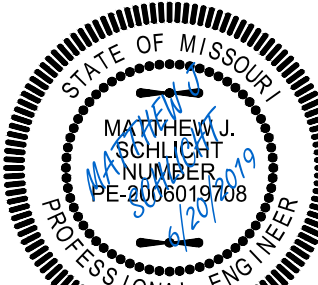
Date: 12-10-2008

Project No.: X

x OF x



TRAFFIC CONTROL STANDARD DETAILS
Public Storm Construction Plans for:
Reece Nichols
Lee's Summit, Jackson County, Missouri



Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25526

- REVISIONS
- Revised 4/2/19
 - Revised 5/8/19
 - Revised 6/6/19
 - Revised 6/20/19