

SUMMIT ORCHARD LOT 4 PUBLIC INFRASTRUCTURE IMPROVEMENTS

LEE'S SUMMIT, JACKSON COUNTY, MISSOURI
SEC.31 TWP. 48N, RNG. 31W
SEC.36 TWP. 48N, RNG. 32W



SITE LOCATION MAP

FEMA INFORMATION:
This tract is located in an "Area of Minimal Flood Hazard", as shown on FEMA FIRM Panel #29095C0417G, dated 1-20-17.

**APPROVED RECORD
DRAWING**

These plans have been reviewed for
accuracy by the Development

Services Staff

DEVELOPER
Townsend Summit, LLC
11311 McCormick Road, Suite 470
Hunt Valley, Maryland 21031
CONTACT: Steve Rich

SHEET INDEX:

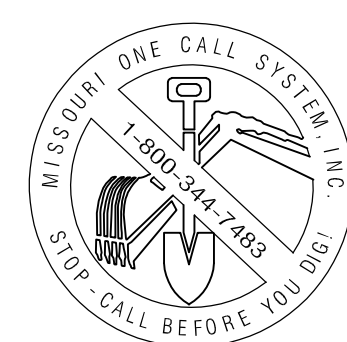
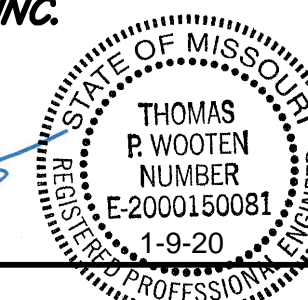
- C001 COVER
- C021-C022 TRAFFIC CONTROL PLAN
- C030 DEMOLITION PLAN
- C101-C102 ROAD WIDENING PLANS
- C150 CHIPMAN ROAD SIDEWALK
- C501-C502 DETAILS

ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL, ORDINANCE NO. 5813. PORTIONS OF THE KANSAS CITY APWA SPECIFICATIONS HAVE BEEN INCORPORATED INTO THE LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL. THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL IS THE FINAL AUTHORITY.

PREPARED & SUBMITTED BY:

ANDERSON ENGINEERING, INC.
COLUMBIA, MISSOURI

Thomas P. Wooten
Thomas P. Wooten, P.E.
Missouri: P.E. No E-2000150081



Know what's below.
Call before you dig.

UTILITY CONTACTS

- LOCATES: MISSOURI ONE CALL SYSTEM 811/800-DIG-RITE
- WATER & SEWER: CITY OF LEE'S SUMMIT 816-969-1940
- ELECTRIC: KANSAS CITY POWER & LIGHT 816-471-5275
- GAS: SPIRE 816-969-2298
- CABLE TV: COMCAST CABLEVISION 816-795-1100
TIME WARNER 816-358-8833
- TELEPHONE: SBC/AT&T 800-464-7928

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EMPLOYEE OWNED

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4240 PHILIPS FARM RD. STE. 101 - COLUMBIA, MO 65201 - PHONE (673) 397-5476
A LICENSED MISSOURI ENGINEERING & SURVEYING CORPORATION
MISSOURI CERTIFICATE OF AUTHORITY #000062 EXPIRES 12/31/2019

REVISIONS		DRAWING INFO.			
NO.	DESCRIPTION	BY	DATE	DRAWN BY:	JEN
1	City 2nd Review Comments	TPW	5-29-19	CHECK BY:	TPW
2	ESI #11, Sheet C150	TPW	10-22-19	LICENSE NO.	E-2000150081
3	Public Infrastructure As Built	JEN	1-9-20	DATE:	5/29/2019
				FIELD BOOK:	19C010001
				JOB NUMBER:	

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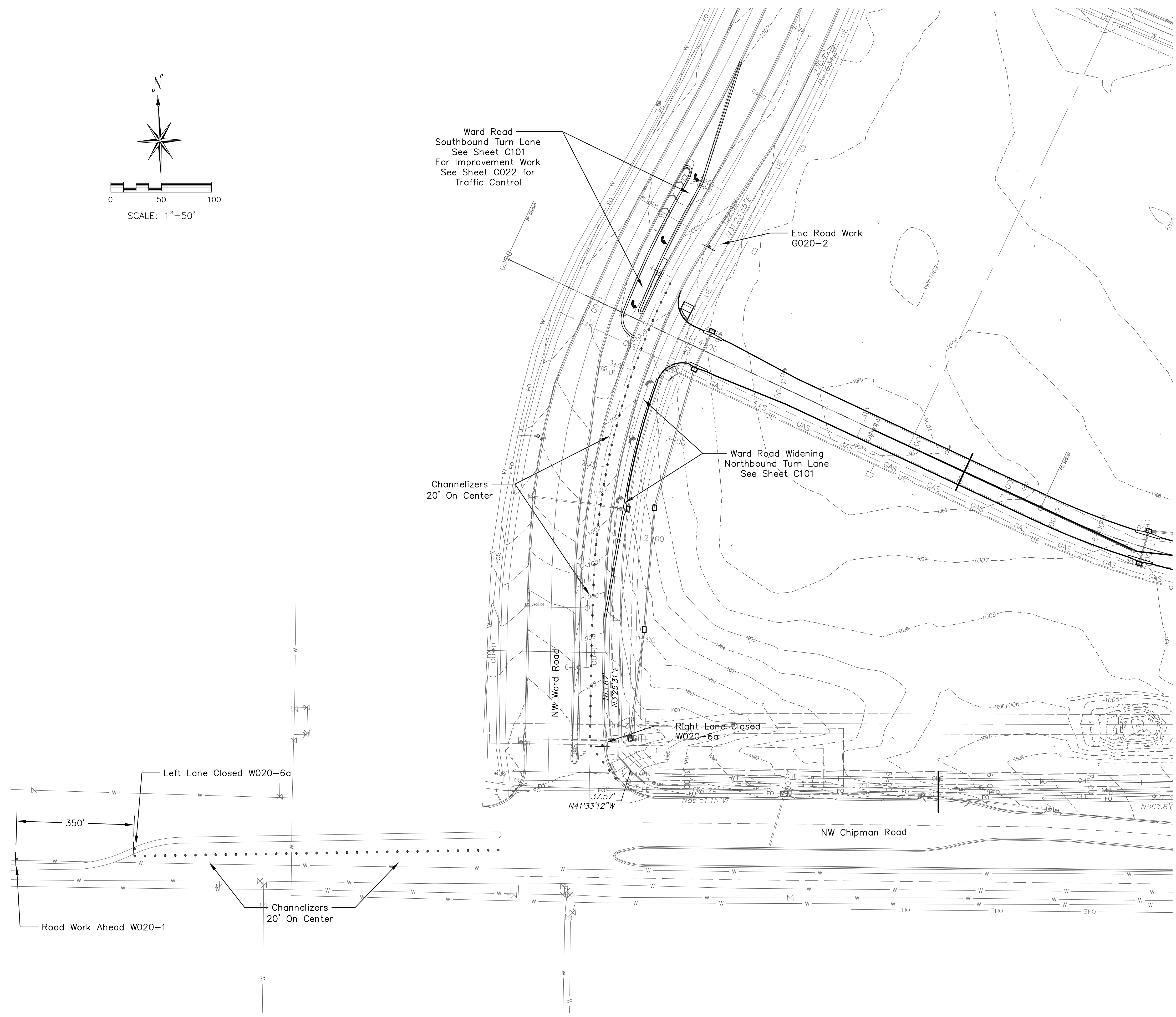
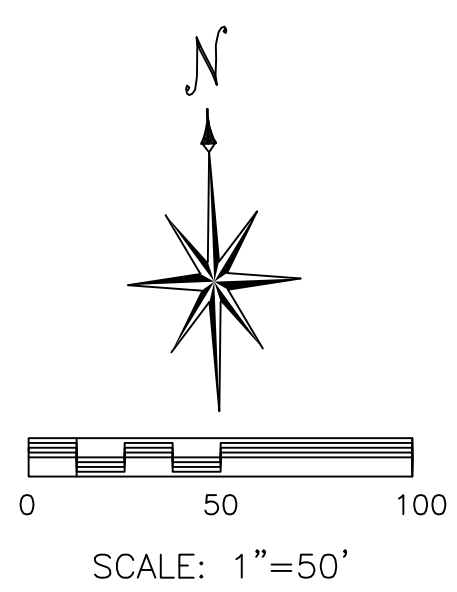
SUMMIT ORCHARD LOT 4
PUBLIC INFRASTRUCTURE
IMPROVEMENTS

COVER
LEE'S SUMMIT, MISSOURI

SHEET NUMBER
C001
1 OF 9

Jan 08, 2020 - 1:45pm Picked Bjr Plus C:\Users\Plus\Desktop\user\19c010001-Cov Leg Def_Roads.dwg Layout: C001 Public

May 14, 2019 - 10:46am Plotted By: jhus Z:\AE-COL\1-Projects\180010001 - Townsend Lot 4 CID Infrastructure\Draw\Summit Orchards Plans - Roads Traffic Control.dwg Layout: C021 Public



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accuracy by the Development
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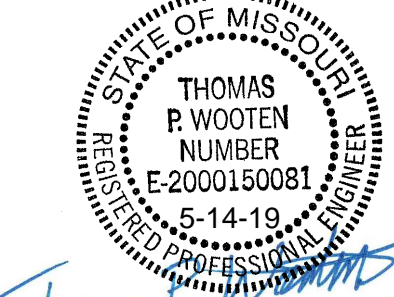


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REVISIONS		DRAWING INFO.	
NO.	DESCRIPTION	BY	DATE
		DRAWN BY:	JEN
		CHECK BY:	TPW
		LICENSE NO.	E-2000150081
		DATE:	5/13/2019
		FIELD BOOK:	19C010001
		JOB NUMBER:	

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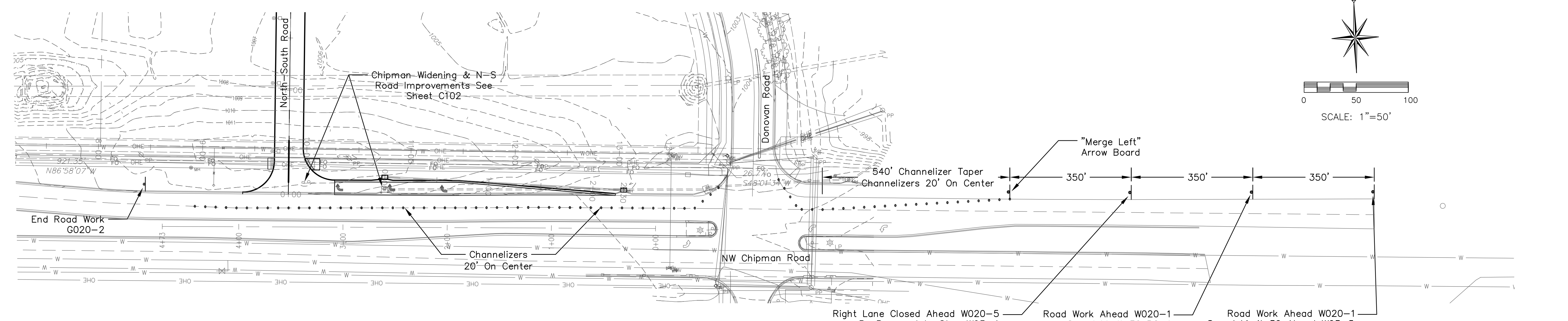
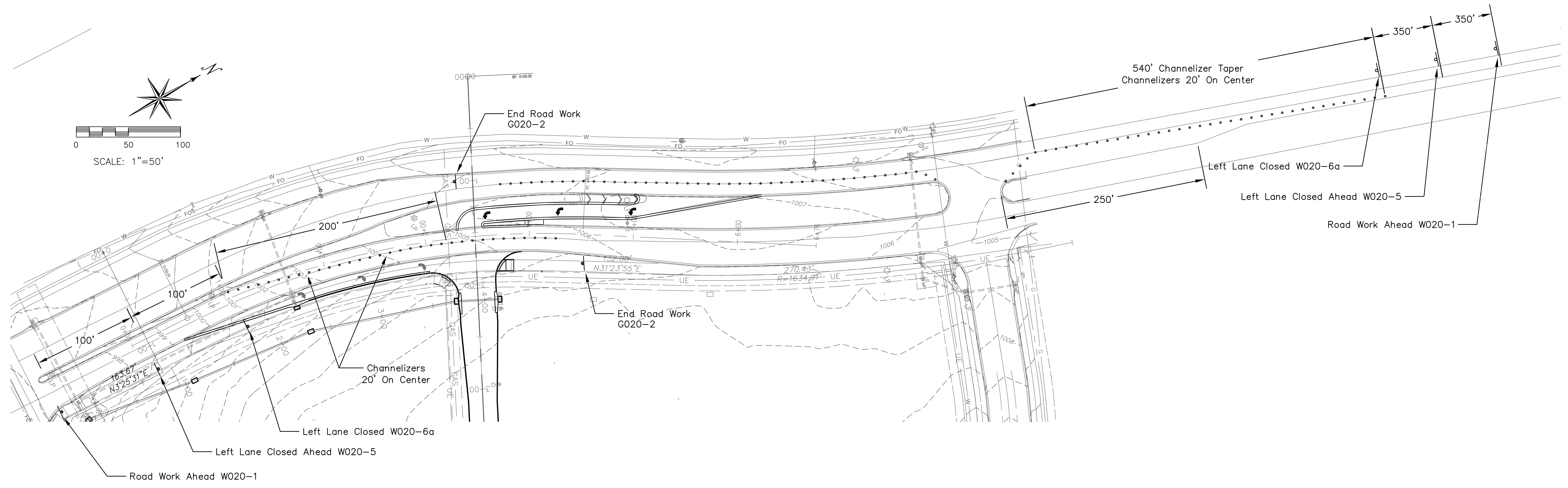
SUMMIT ORCHARD LOT 4
INFRASTRUCTURE IMPROVEMENTS
ROAD PLANS
TRAFFIC CONTROL PLAN
LEE'S SUMMIT, MISSOURI



THOMAS P. WOOTEN
NUMBER E-2000150081
5-14-19
PROFESSIONAL ENGINEER

SHEET NUMBER
C021
2 OF 9

May 14, 2019 - 10:47am Plotted By: jhus Z:\AE-COL\1-Projects\180010001 - Townsend Lot 4 CID Infrastructure\Draw\Summit Orchards Plans - Roads Traffic Control.dwg Layout: C022 Public



APPROVED RECORD DRAWING
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 A LICENSED MISSOURI ENGINEERING & SURVEYING CORPORATION
 MISSOURI CERTIFICATE OF AUTHORITY #000662 EXPIRES 12/31/2019

DRAWING INFO.	
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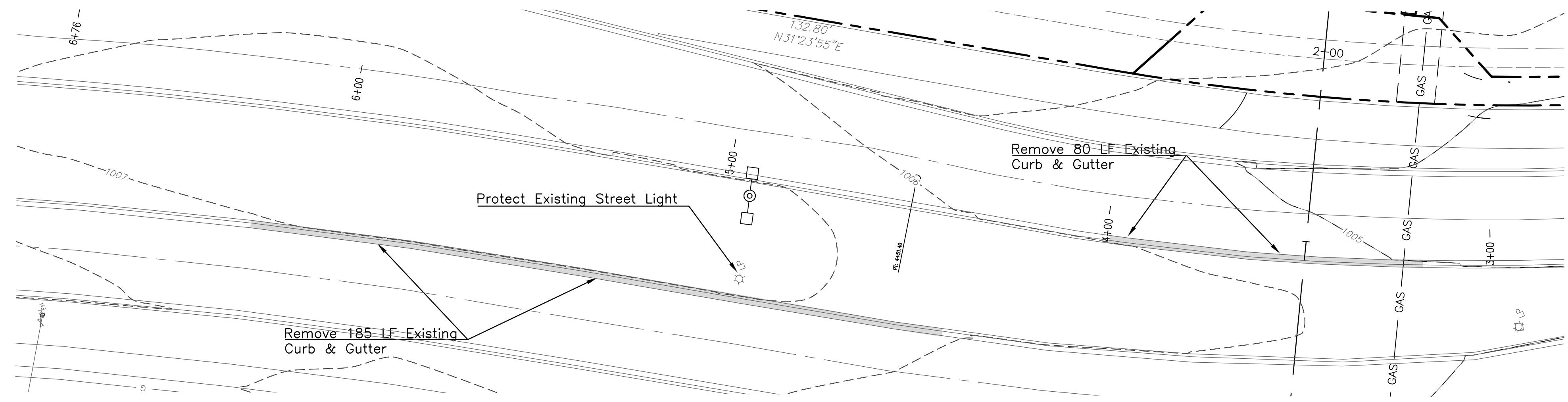
REVISIONS	
NO.	DESCRIPTION

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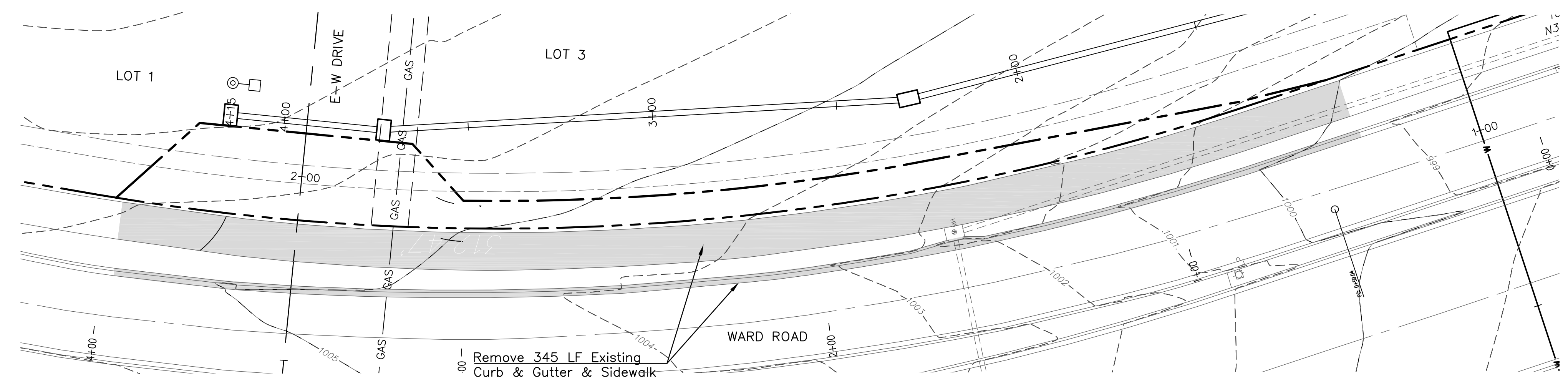
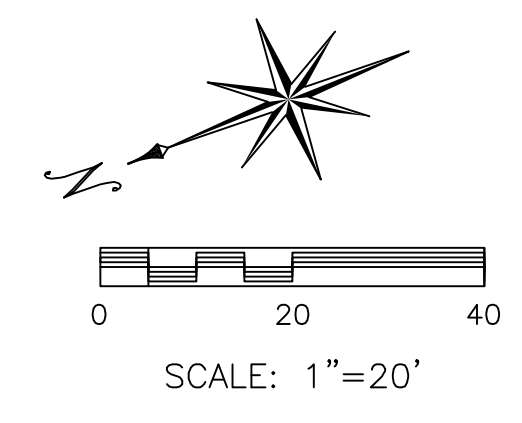
SUMMIT ORCHARD LOT 4
INFRASTRUCTURE IMPROVEMENTS
ROAD PLANS
TRAFFIC CONTROL PLAN
 LEE'S SUMMIT, MISSOURI

STATE OF MISSOURI
 REGISTERED PROFESSIONAL ENGINEER
 THOMAS P. WOOTEN
 NUMBER E-2000150081
 5-14-19

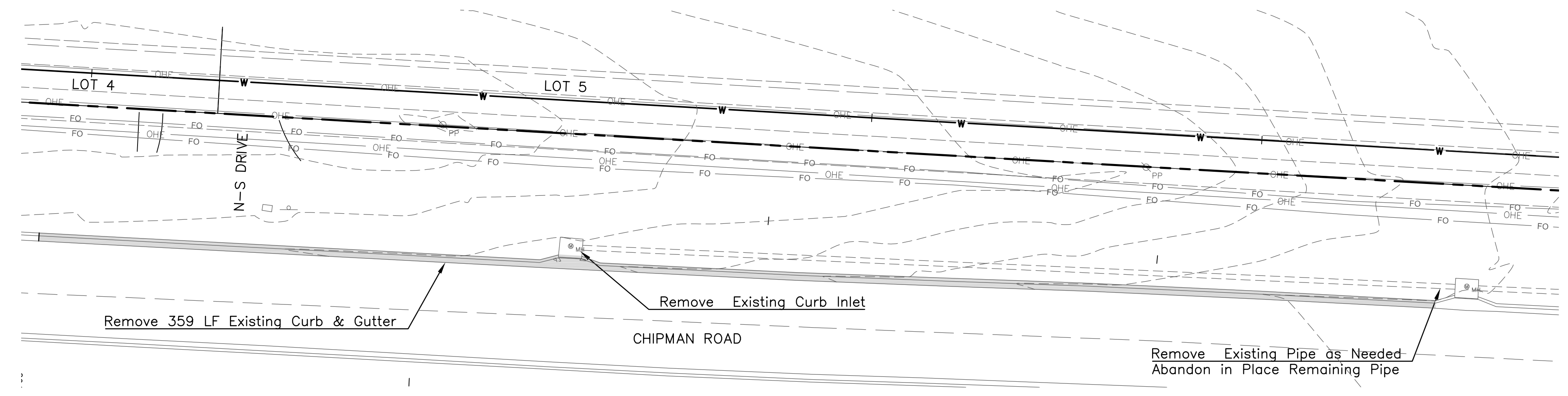
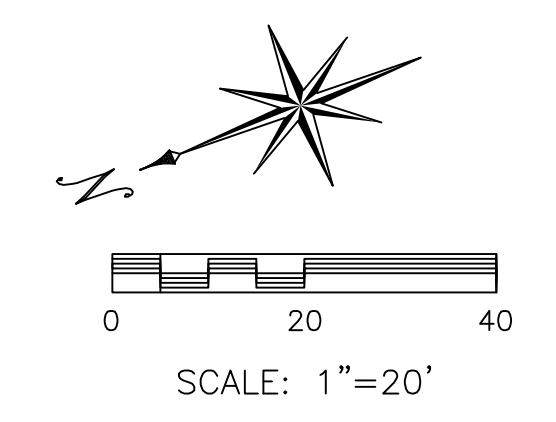
May 14, 2019 - 10:48am Plotted By: jhus Z:\AE-COL\1-Projects\18cc10001 - Townsend Lot 4 CID Infrastructure\DWG\Summit Orchards Plans - Roads C105.dwg Layout: C030 Public



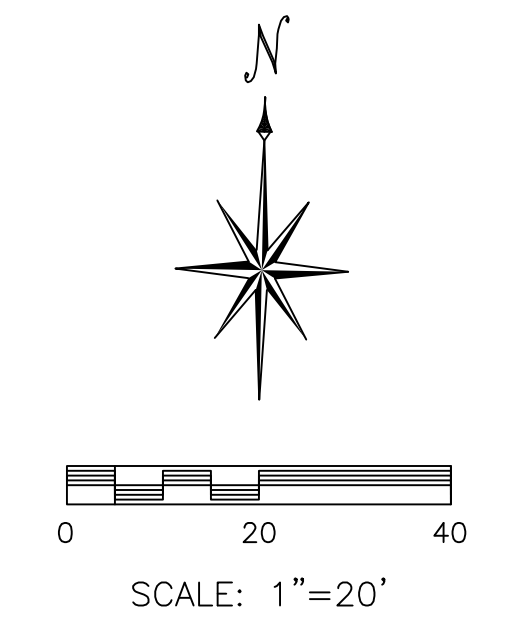
WARD ROAD SOUTHBOUND LEFT TURN LANE DEMO



WARD ROAD WIDENING DEMO



CHIPMAN ROAD WIDENING DEMO



APPROVED RECORD DRAWING

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DRAWING INFO.		REVISIONS	
DRAWN BY:	JEN	NO.	
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LICENSE NO.	E-2000150081	BY	DATE
DATE:	5/13/2019		
FIELD BOOK:	19C010001		
JOB NUMBER:			

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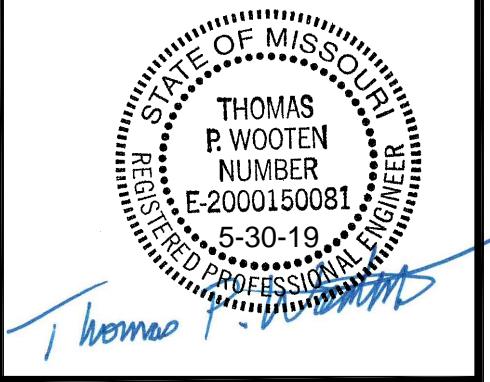
SUMMIT ORCHARD LOT 4
PUBLIC INFRASTRUCTURE IMPROVEMENTS
DEMOLITION PLAN
 LEE'S SUMMIT, MISSOURI

STATE OF MISSOURI
 THOMAS P. WOOTEN
 REGISTERED PROFESSIONAL ENGINEER
 NUMBER E-2000150081
 5-14-19

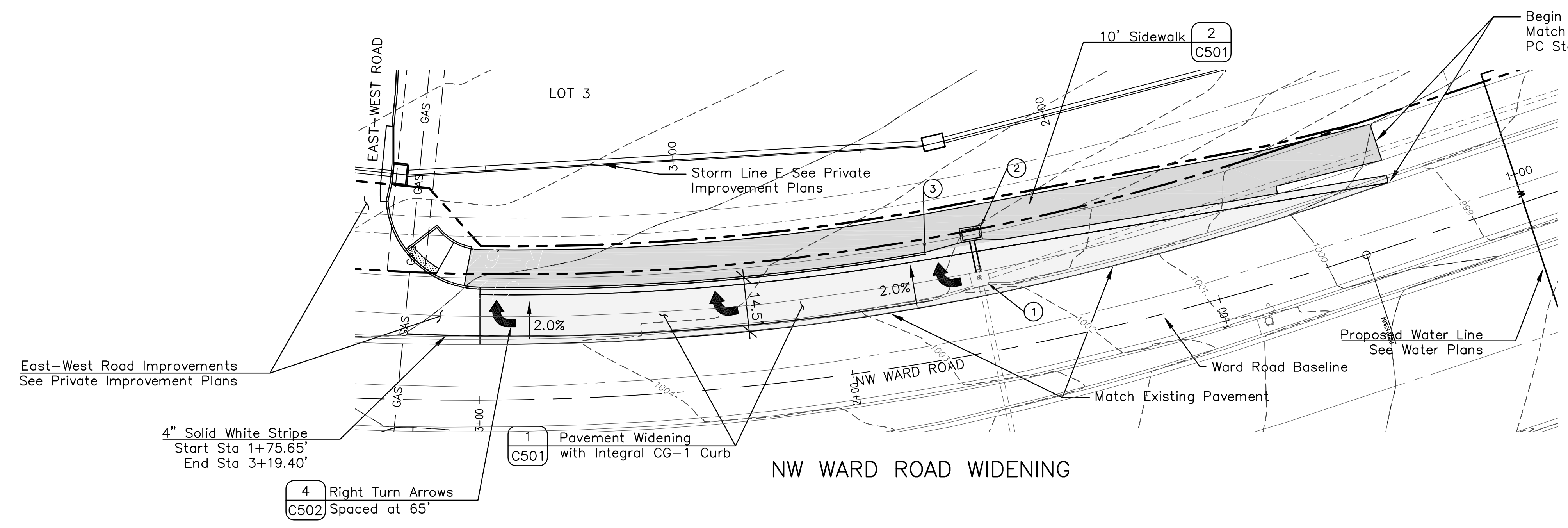
SHEET NUMBER
C030
 4 OF 9

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		CHECK BY:	
		LICENSE NO.	E-2000150081
		DATE:	5/29/2019
		FIELD BOOK:	19C010001
		JOB NUMBER:	

SUMMIT ORCHARD LOT 4
PUBLIC INFRASTRUCTURE
IMPROVEMENTS
ROAD WIDENING PLANS
LEE'S SUMMIT, MISSOURI



May 30, 2019 - 4:53pm Plotted By: CO Eng2 G:\AE-COL\1-Projects\19c010001 - Townsend Lot 4 CID Infrastructure\Draw\Summit Orchards Plans - Roads C105.dwg Layout: C101 - Public



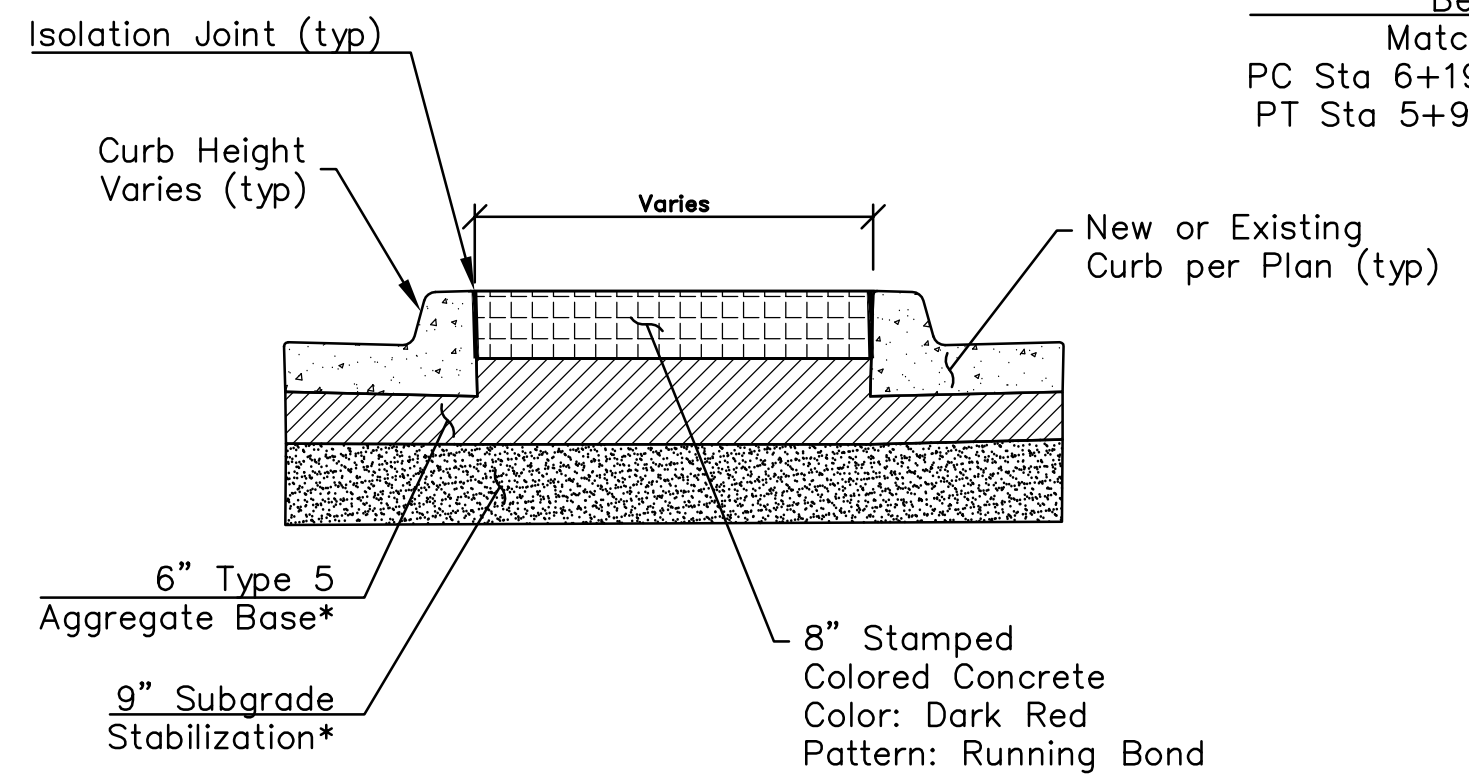
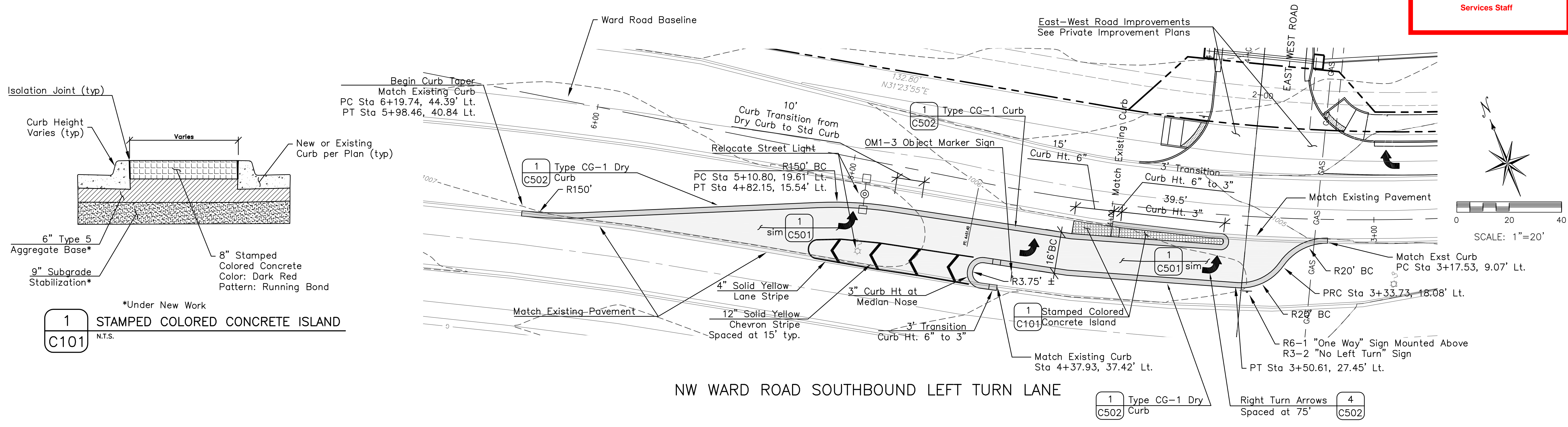
- KEYED NOTES:**
- Convert existing curb inlet to junction box:
 - Remove Top Slab
 - Modify Structure for Junction Box Top Slab
 - Provide & Install New Top Slab for Junction Box Detail - Top Elevation: 1002.15
 - Connect to New Curb Inlet w/8 LF 15" RCP @ 2.0% FL 15" RCP 998.96
 - New Curb Inlet
N: 1004888.2094
E: 2818954.1558
Top 1002.47
FL 15" RCPw 999.12
 - End 125' Curb Taper
N: 1004901.1098
E: 2818955.4269
Sta 1+75.65, 29.17' Rt
- SCALE: 1"=20'

Ward Road Baseline Curve:
PC Sta: 0+59.04
Length: 392.366'
Radius: 762.007'
Delta: 29.5023°
PT Sta: 4+51.40

All Long Line Pavement Markings Shall Be High Build Paint and All Symbols, Stop Line, Crosswalk Lines and Diagonals Shall Be Preformed Thermoplastic Material in Accordance With City Specifications.

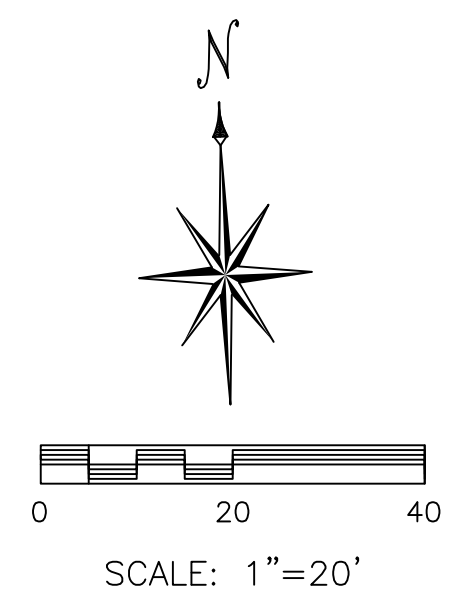
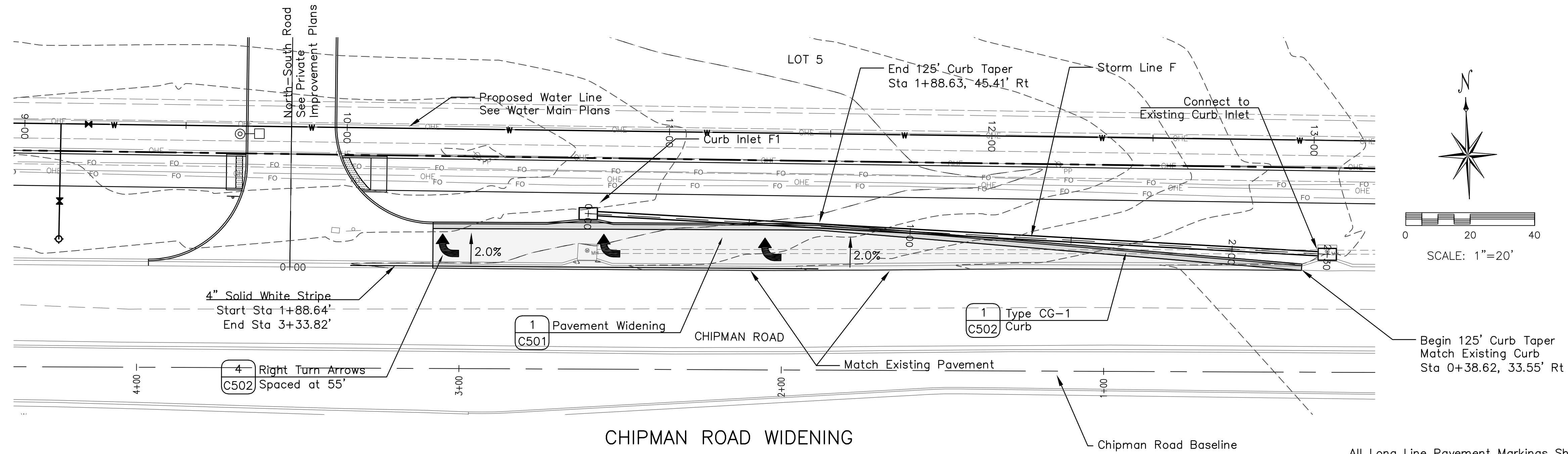
APPROVED RECORD DRAWING

These plans have been reviewed for accuracy by the Development Services Staff

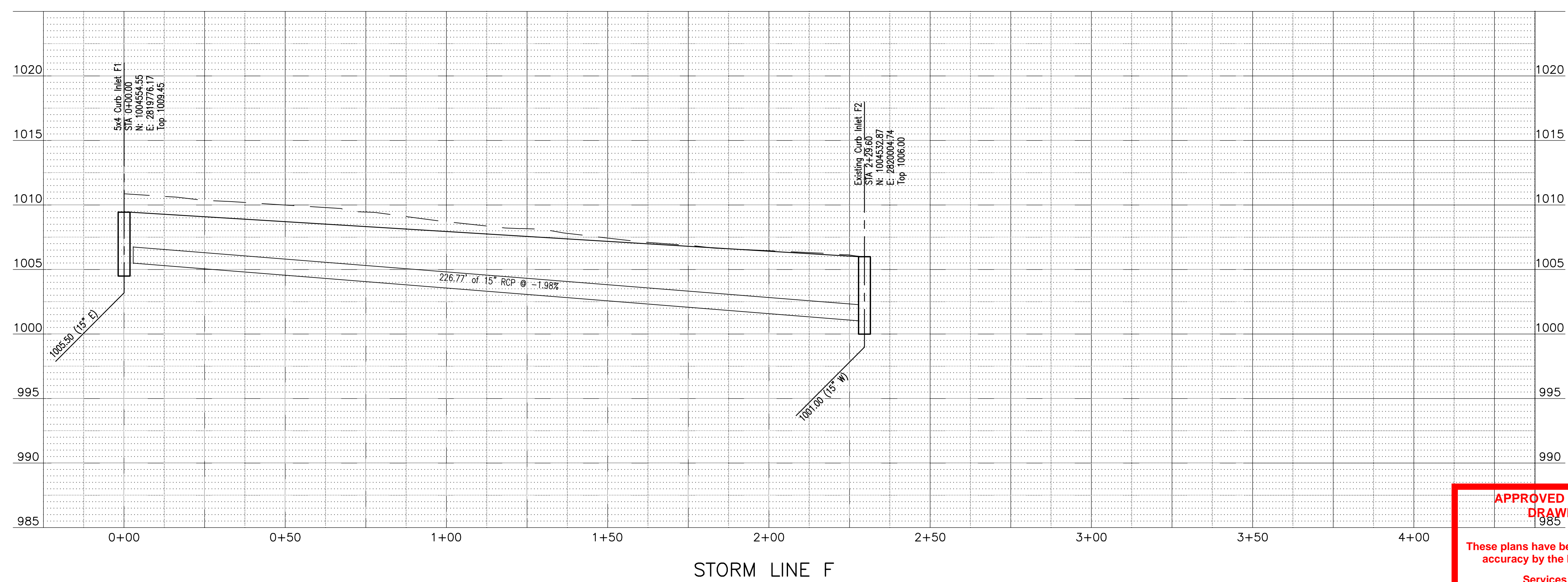


1 STAMPED COLORED CONCRETE ISLAND (C101)
N.T.S.

May 14, 2019 - 10:52am Plotted By: jhus Z:\AE-COL\1-Projects\180010001 - Townsend Lot 4 CID Infrastructure\Draw\Summit Orchards Plans - Roads C102.dwg Layout: C102 Public



All Long Line Pavement Markings Shall Be High Build Paint and All Symbols, Stop Line, Crosswalk Lines and Diagonals Shall Be Performed Thermoplastic Material in Accordance With City Specifications.



APPROVED RECORD DRAWING
 These plans have been reviewed for accuracy by the Development Services Staff

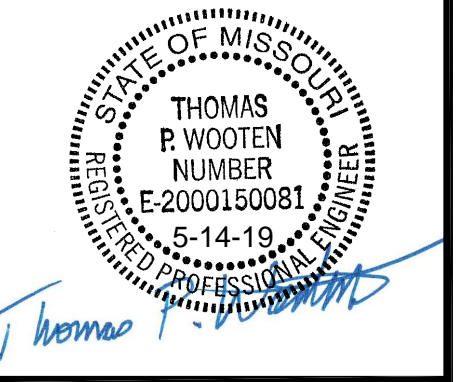
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DRAWING INFO.	
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CHECK BY:	TPW
LICENSE NO.	E-2000150081
DATE:	5/13/2019
FIELD BOOK:	19C010001
JOB NUMBER:	

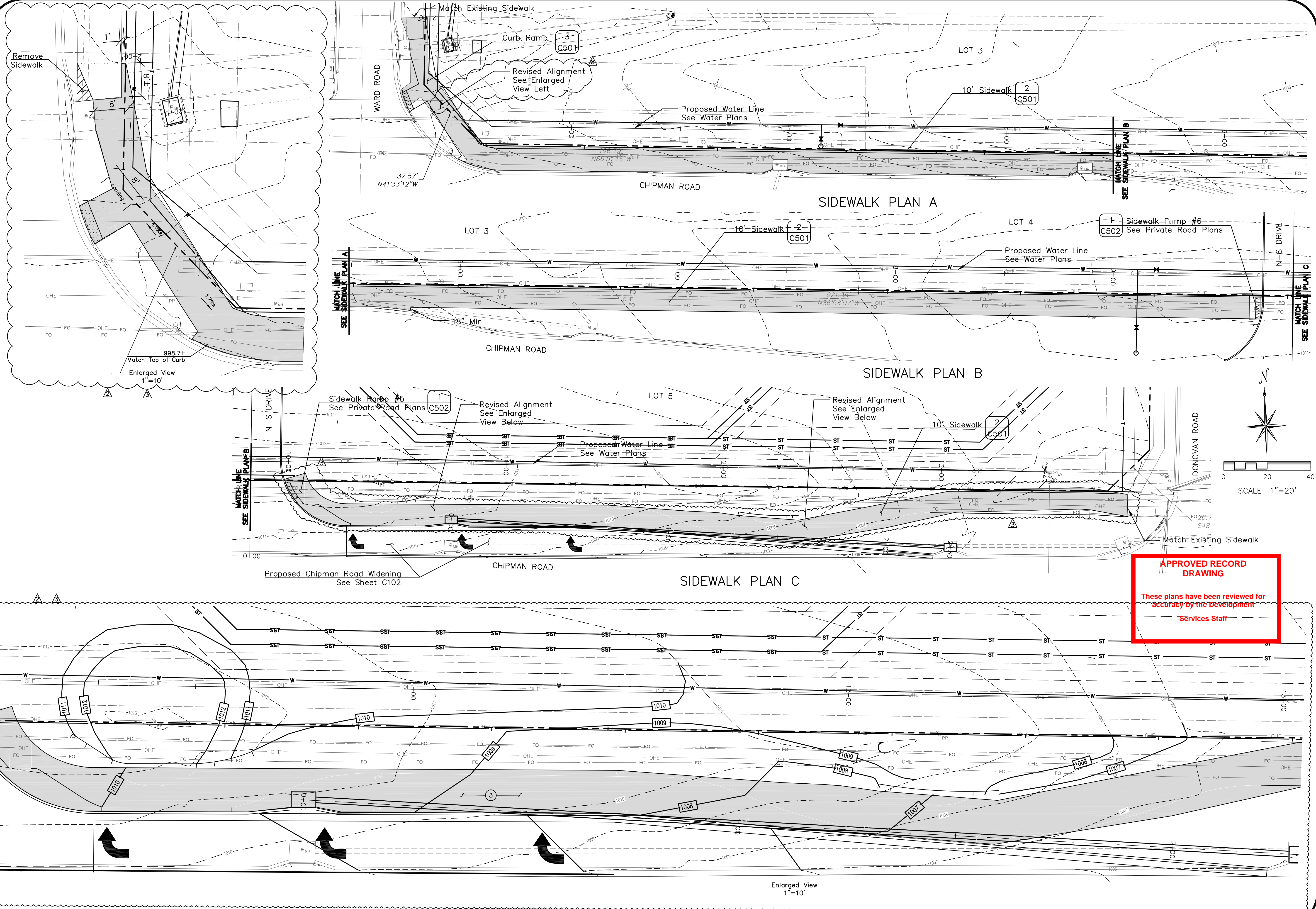
REVISIONS			
NO.	DESCRIPTION	BY	DATE

SUMMIT ORCHARD LOT 4
 PUBLIC INFRASTRUCTURE
 IMPROVEMENTS
 ROAD WIDENING PLANS
 LEE'S SUMMIT, MISSOURI



SHEET NUMBER
C102
 6 OF 9

Jan 11, 2020 - 1:12pm Plotted By: hest Z:\AE-001-Projects\190010001 - Townsend Lot 4 CID Infrastructure\Eng\Summit Orchards Plans - Roads C105.dwg Layout: C150 Public



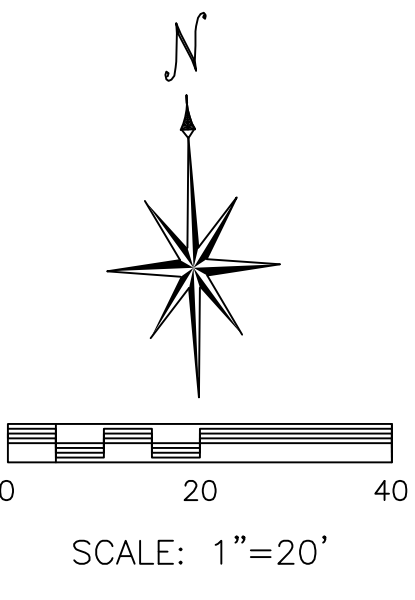
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 MISSOURI CERTIFICATE OF AUTHORITY #000062 EXPIRES 12/31/2019

DRAWING INFO.	
NO.	DESCRIPTION
2	ESI #11
3	Public Infrastructure As Built

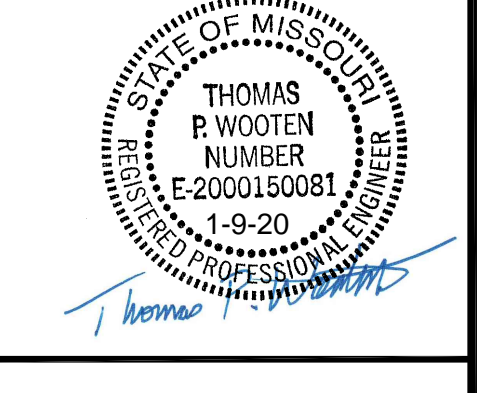
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NO.	DATE	BY	DESCRIPTION
	10-22-19	TPW	ESI #11
	1-9-20	JEN	Public Infrastructure As Built

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CHECKED BY:	TPW
LICENSE NO.:	E-2000150081
DATE:	5/13/2019
FIELD BOOK:	
JOB NUMBER:	19CO10001



APPROVED RECORD DRAWING
 These plans have been reviewed for accuracy by the development Services Staff

SUMMIT ORCHARD LOT 4
PUBLIC INFRASTRUCTURE IMPROVEMENTS
CHIPMAN ROAD SIDEWALK
 LEE'S SUMMIT, MISSOURI



SHEET NUMBER
C150
 7 OF 9

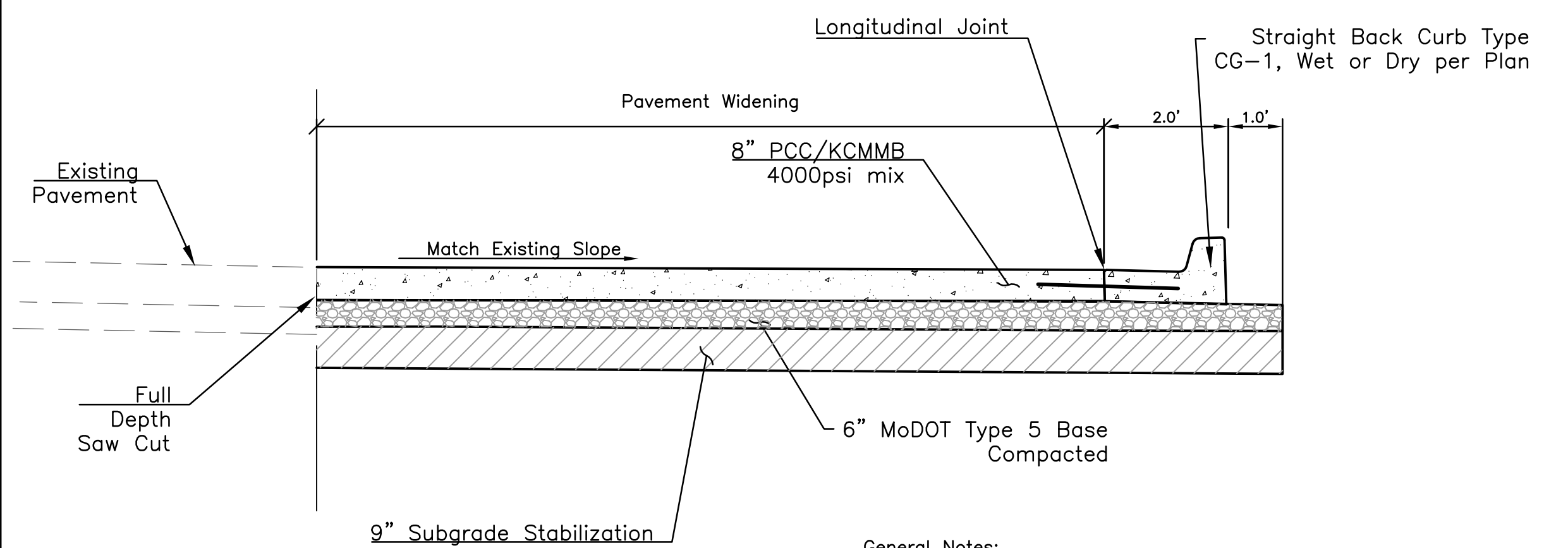
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NO.	DESCRIPTION	DATE	BY
1	City 2nd Review Comments	5-29-19	JEN
			TPW
			E-2000150081
			5/29/2019
			19C010001

SUMMIT ORCHARD LOT 4
PUBLIC INFRASTRUCTURE
IMPROVEMENTS
DETAILS

LEE'S SUMMIT, MISSOURI

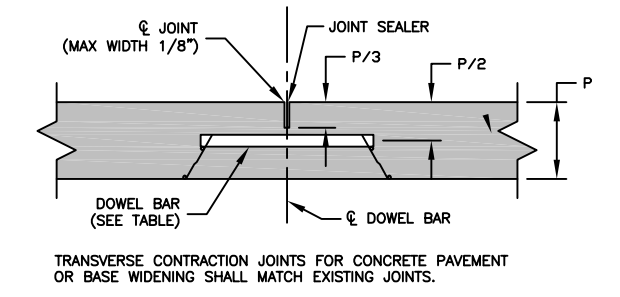
STANDARD DETAILS
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI
ADA RAMP RETROFIT DETAIL

THOMAS P. WOOTEN
REGISTERED PROFESSIONAL ENGINEER
E-2000150081
5-30-19



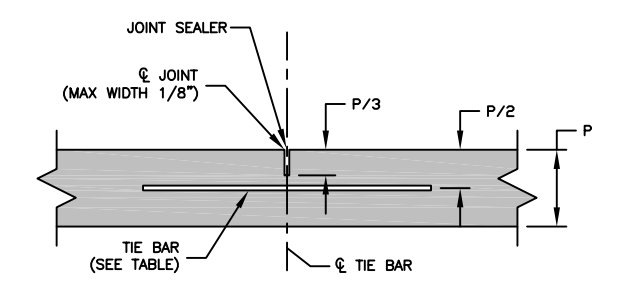
- General Notes:
1. Place Additional Longitudinal Joint at Center of 16' Wide Section, Ward Road Southbound Turn Lane
 2. Place Transverse Contraction Joints Spaced at a maximum of 15'
 3. All Tie Bars and Dowels Shall be Epoxy Coated

1
C501 PAVEMENT WIDENING
N.T.S.

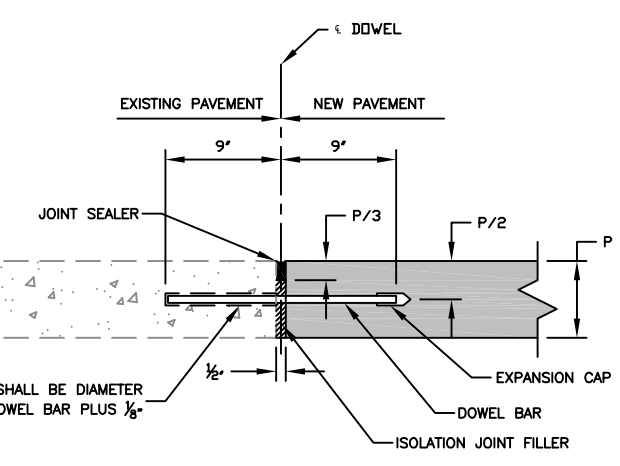


TRANSVERSE CONTRACTION JOINTS FOR CONCRETE PAVEMENT OR BASE WIDENING SHALL MATCH EXISTING JOINTS.

NOTES:
THE FINAL POSITION OF ALL DOWELS AND TIE BARS SHALL BE PERPENDICULAR TO THE PLANE OF THE JOINT AND PARALLEL TO THE SURFACE OF THE PAVEMENT AND PARALLEL TO EACH OTHER.



LONG. CONTRACTION/CONSTRUCTION JOINT



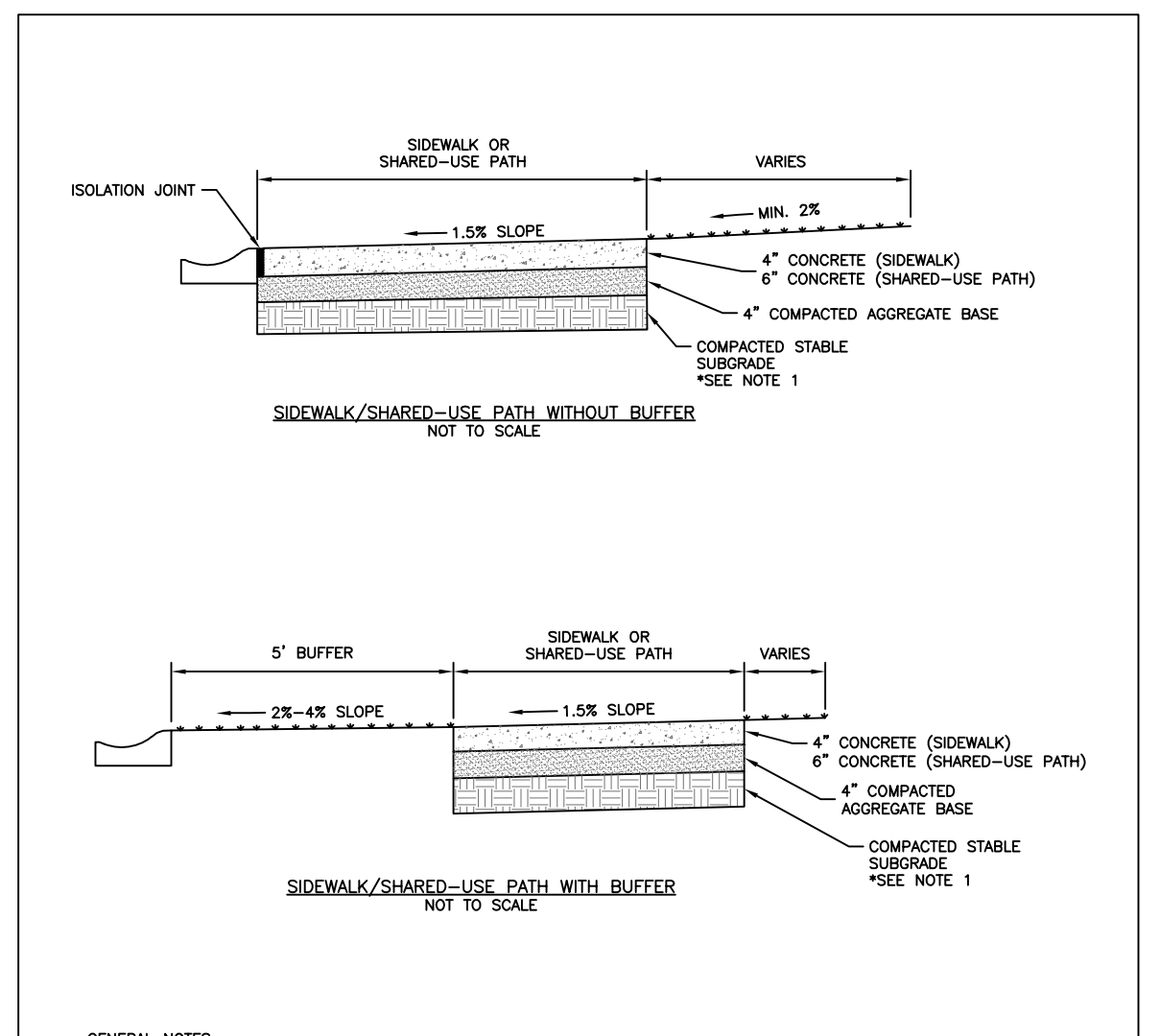
DOWEL BARS SHALL BE SMOOTH REINFORCING BARS. DOWEL BARS SHALL BE BORED INTO THE EXISTING PAVEMENT. BONDING FOR DOWEL BARS SHALL BE EPOXY OR POLYESTER BONDING AGENTS. THE PORTION OF THE DOWEL OUTSIDE THE HOLE SHALL BE COATED WITH AN APPROVED LUBRICANT.

TRANSVERSE ISOLATION JOINT

TABLE			
PCRP THICKNESS (P)	DOWEL SIZE	TIE BAR SIZE	TIE BAR SPACING
8"	1/2" x 18"	#5 x 30"	12" CTRS.
6"	N/A	#5 x 30"	N/A
			30" CTRS.

GENERAL NOTES:
THE FINAL POSITION OF ALL DOWELS AND TIE BARS SHALL BE PERPENDICULAR TO THE PLANE OF THE JOINT AND PARALLEL TO THE SURFACE OF THE PAVEMENT AND PARALLEL TO EACH OTHER.

3
C501 ADA RAMP RETROFIT DETAIL
N.T.S.



- GENERAL NOTES:
1. SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
 2. 1.5% CROSS SLOPE MUST BE MAINTAINED THROUGH DRIVEWAYS.
 3. KCMMB 4K CONCRETE MIX SHALL BE REQUIRED FOR ALL SIDEWALKS/SHARED-USE PATHS OR AS APPROVED BY THE CITY INSPECTOR.
 4. ALL SIDEWALK/SHARED-USE PATHS SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).
 5. AN ISOLATION JOINT SHALL BE PLACED AT A MAXIMUM OF 150 FT. CONSTRUCTION JOINTS SHALL BE PLACED THE SAME WIDTH OF SIDEWALK/SHARED-USE PATHS, BUT NO GREATER THAN 10 FT.
 6. AN ISOLATION JOINT SHALL BE PLACED WHERE THE SIDEWALK/SHARED-USE PATHS MEETS A RESIDENTIAL DRIVEWAY.
 7. SHARED-USE PATHS WIDTH SHALL BE 10 FT. WIDE.
 8. SIDEWALK/SHARED-USE PATHS FINISHING SHALL BE FULL BROOM FINISH OR AS DIRECTED BY CITY INSPECTOR.
 9. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.

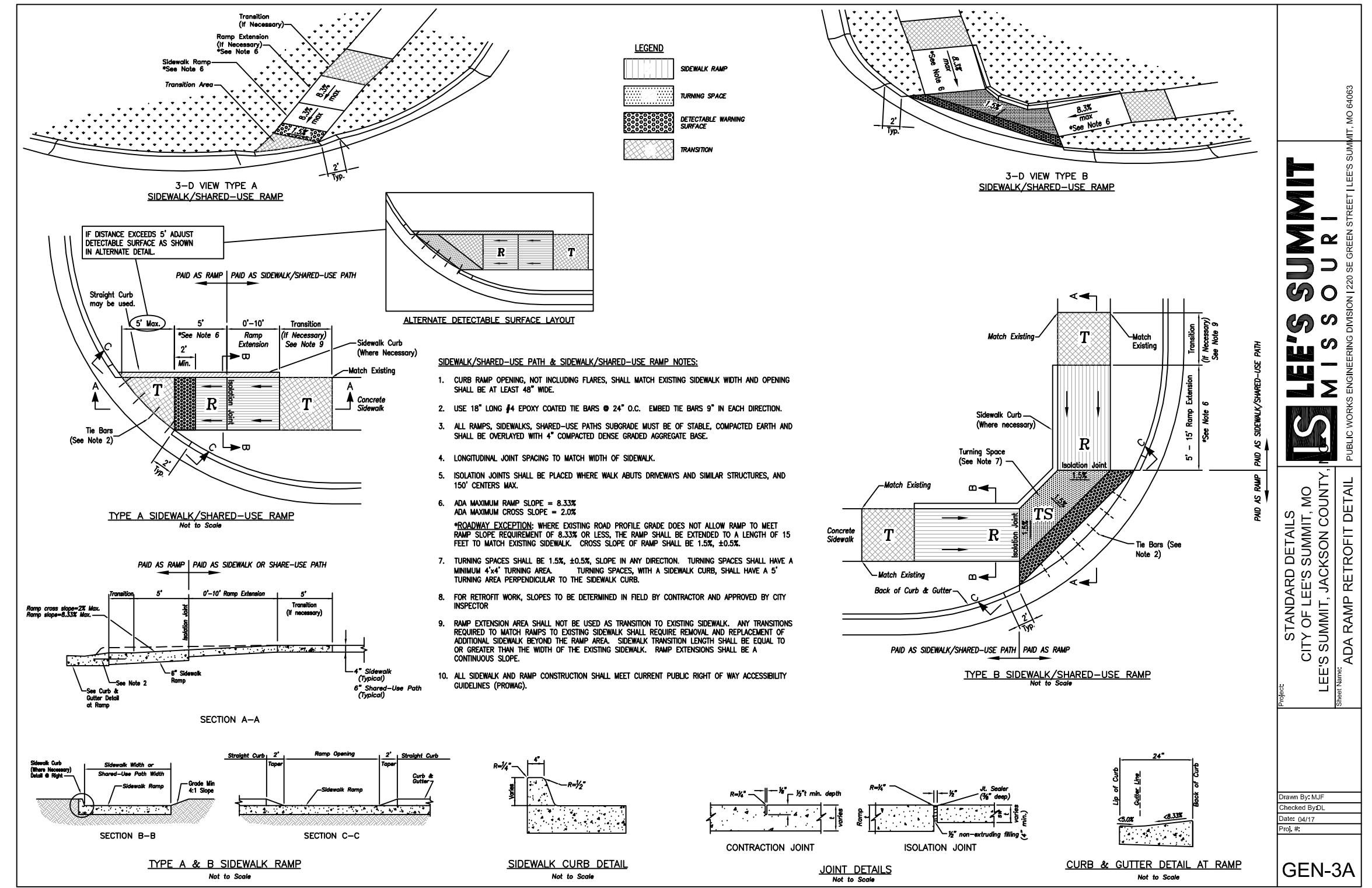
LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 2295 GREEN STREET | LEE'S SUMMIT, MO 65043
SIDEWALK/SHARED-USE PATH DETAIL

GEN-2

2
C501 SIDEWALK DETAIL
N.T.S.

APPROVED RECORD DRAWING

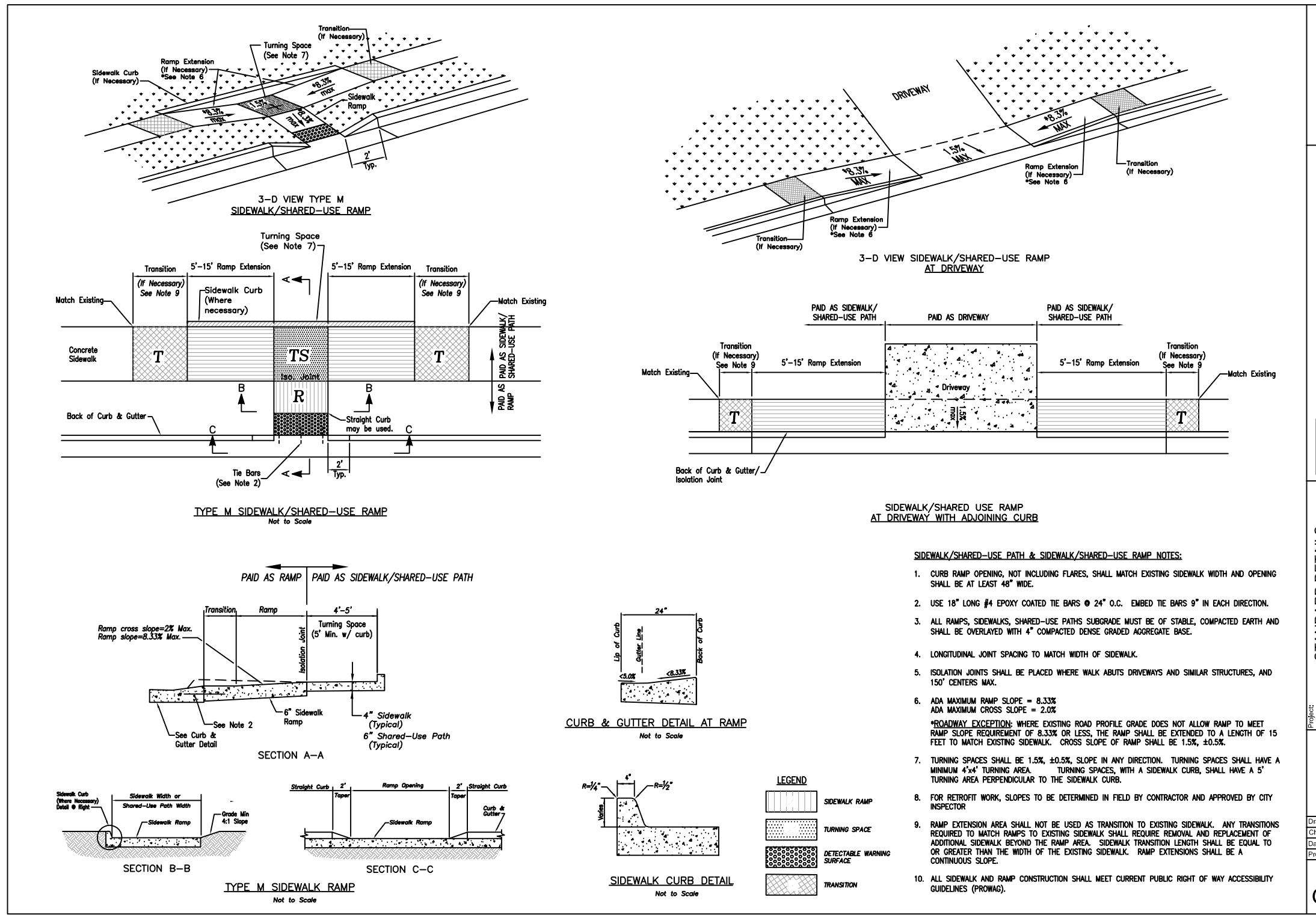
These plans have been reviewed for accuracy by the Development Services Staff



STANDARD DETAILS
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI
ADA RAMP RETROFIT DETAIL

LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 2295 GREEN STREET | LEE'S SUMMIT, MO 65043

GEN-3A

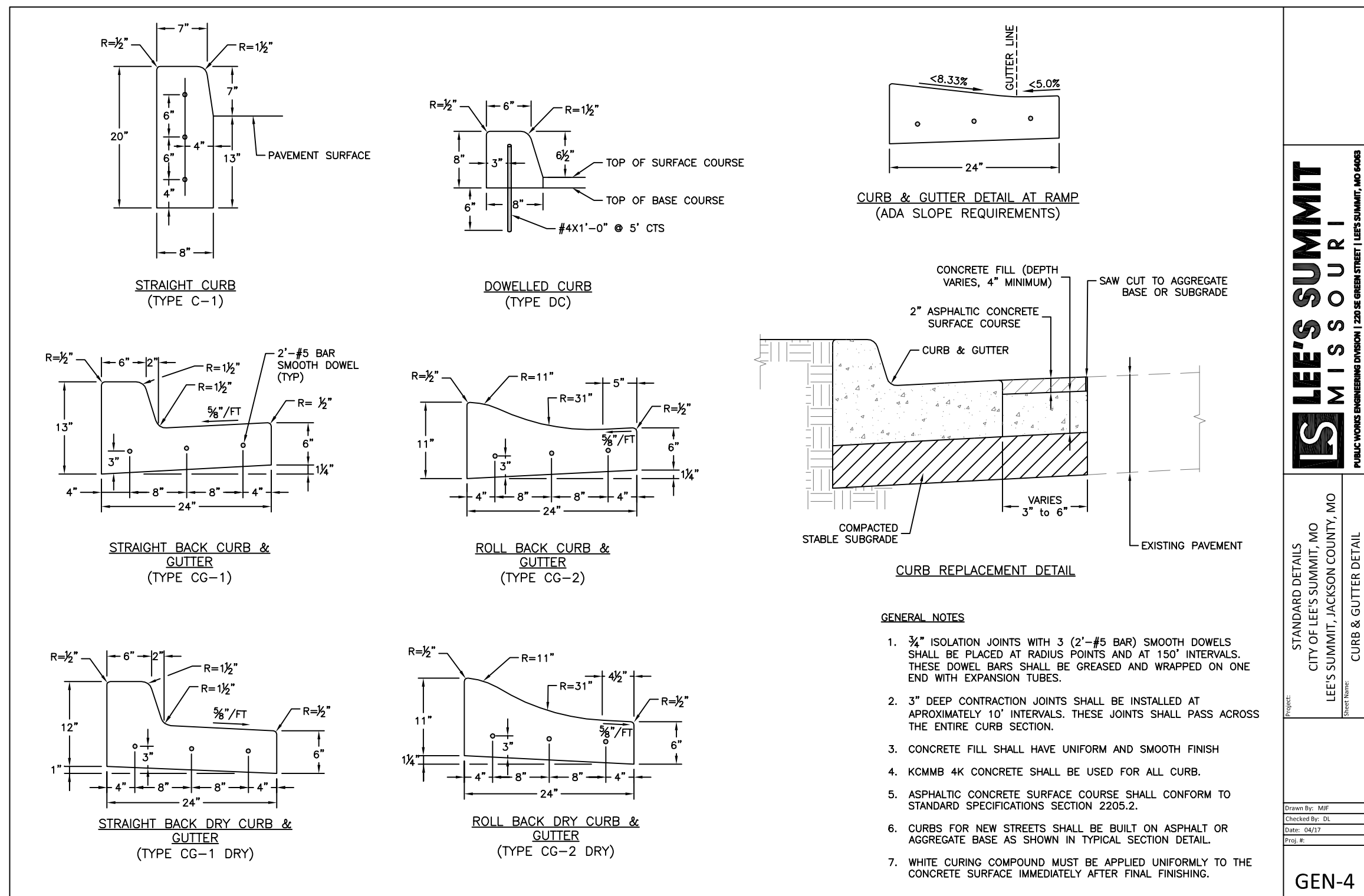


STANDARD DETAILS
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI
ADA RAMP RETROFIT DETAIL

LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 2295 GREEN STREET | LEE'S SUMMIT, MO 65043

GEN-3B

3
C501 ADA RAMP RETROFIT DETAIL
N.T.S.



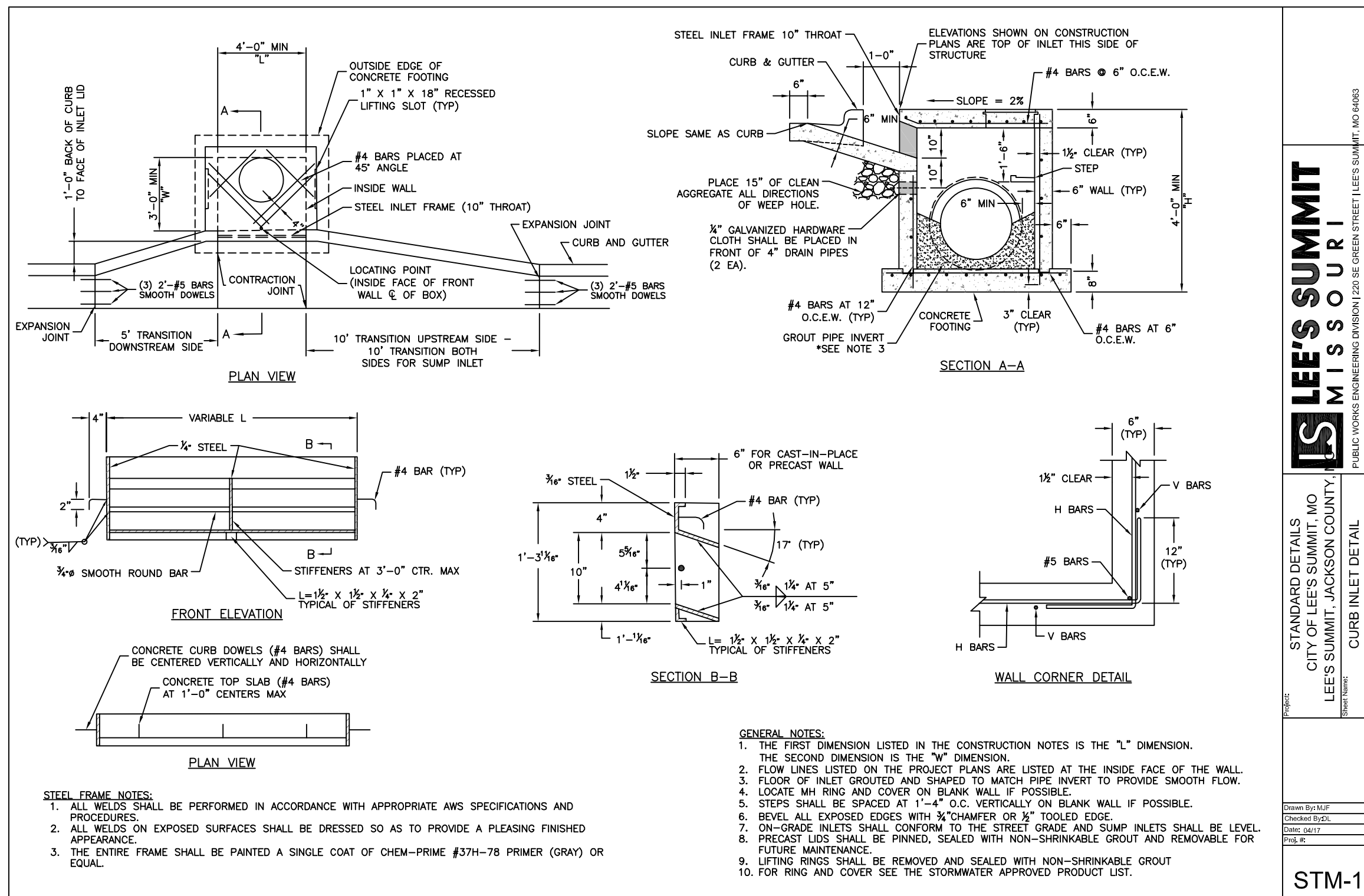
1 CURB & GUTTER DETAIL
C502 N.T.S.

LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION 1200 BE GREEN STREET, LEE'S SUMMIT, MO 64083

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

Drawn By: JEM
Checked By: JEM
Date: 05/14/2019
File #

GEN-4



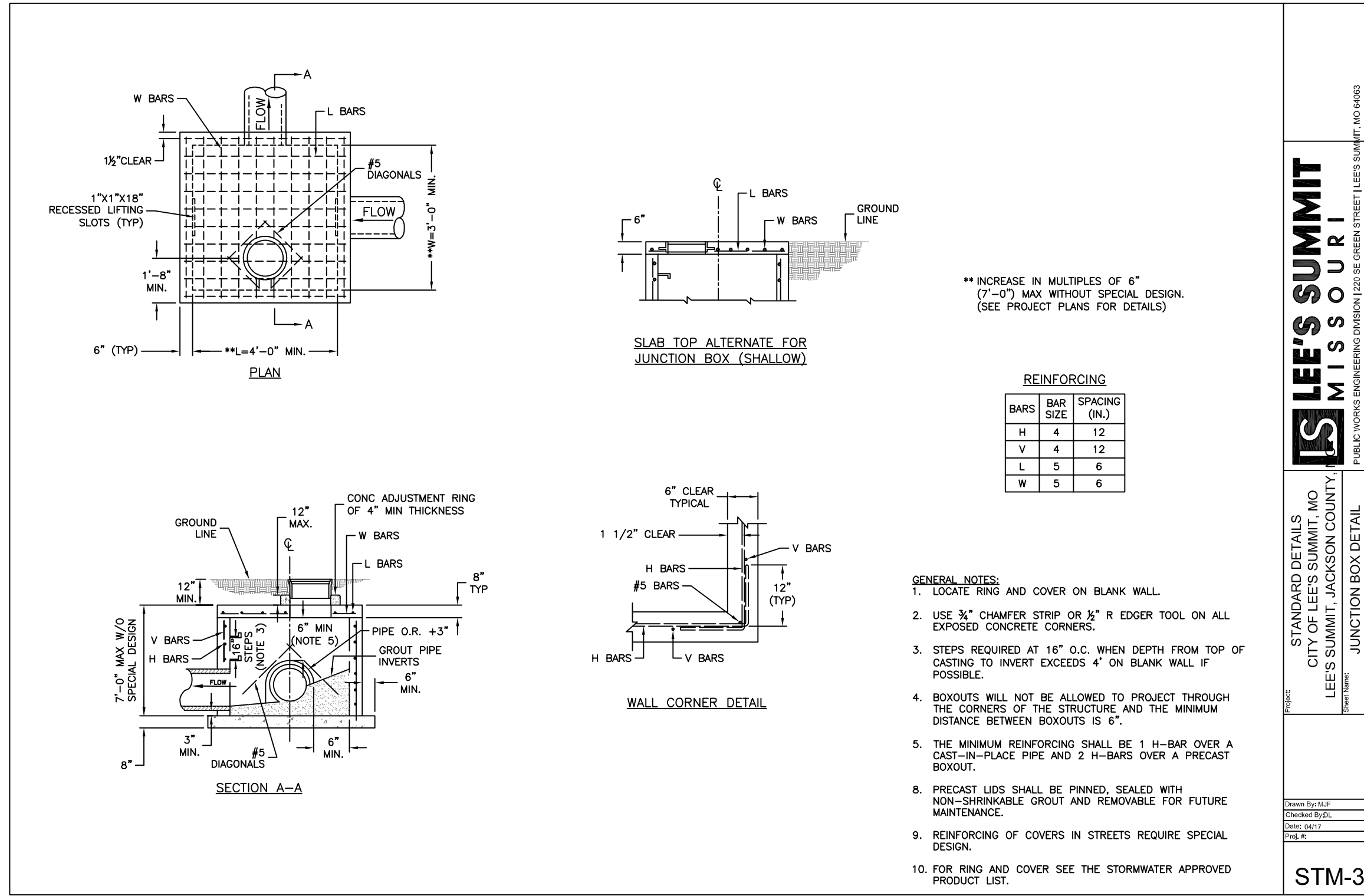
2 CURB INLET DETAIL
C502 N.T.S.

LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION 1200 BE GREEN STREET, LEE'S SUMMIT, MO 64083

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

Drawn By: JEM
Checked By: JEM
Date: 05/14/2019
File #

STM-1



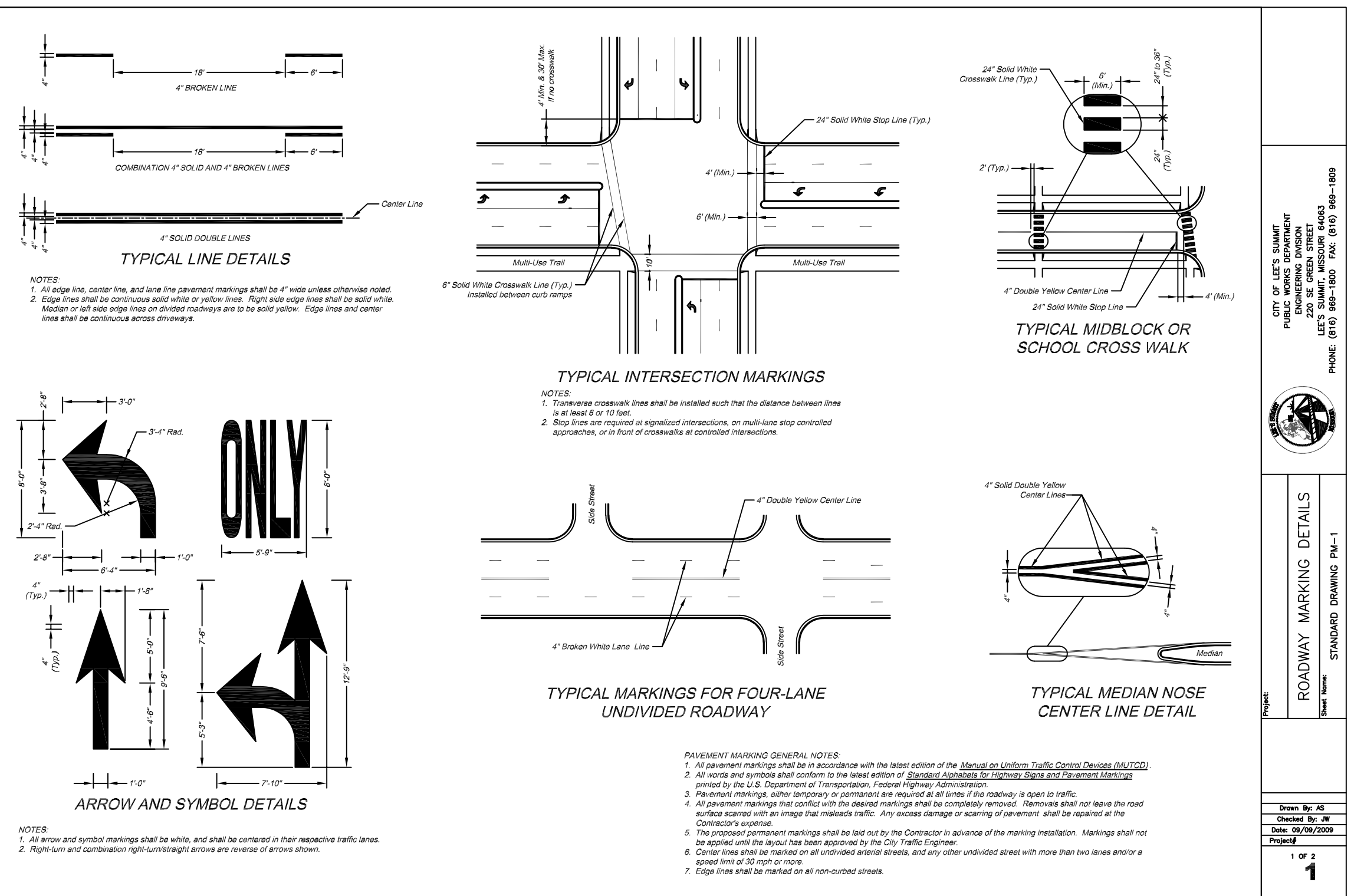
3 JUNCTION BOX DETAIL
C502 N.T.S.

LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION 1200 BE GREEN STREET, LEE'S SUMMIT, MO 64083

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

Drawn By: JEM
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Date: 05/14/2019
File #

STM-3



4 ROADWAY MARKING DETAILS
C502 N.T.S.

LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION 1200 BE GREEN STREET, LEE'S SUMMIT, MO 64083

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

Drawn By: JEM
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APPROVED RECORD DRAWING

These plans have been reviewed for accuracy by the Development Services Staff

ANDERSON ENGINEERING
EMPLOYEE OWNED

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SUMMIT ORCHARD LOT 4
PUBLIC INFRASTRUCTURE IMPROVEMENTS
DETAILS
LEE'S SUMMIT, MISSOURI

STATE OF MISSOURI
REGISTERED PROFESSIONAL ENGINEER
THOMAS P. WOOTEN
NUMBER E-2000150081
5-14-19

SHEET NUMBER
C502
9 OF 9

May 14, 2019 - 10:58am Plotted By: Jhus Z:\AE-COL\1-Projects\19c010001 - Cov Leg Def Roads.dwg Layout: C502 Public