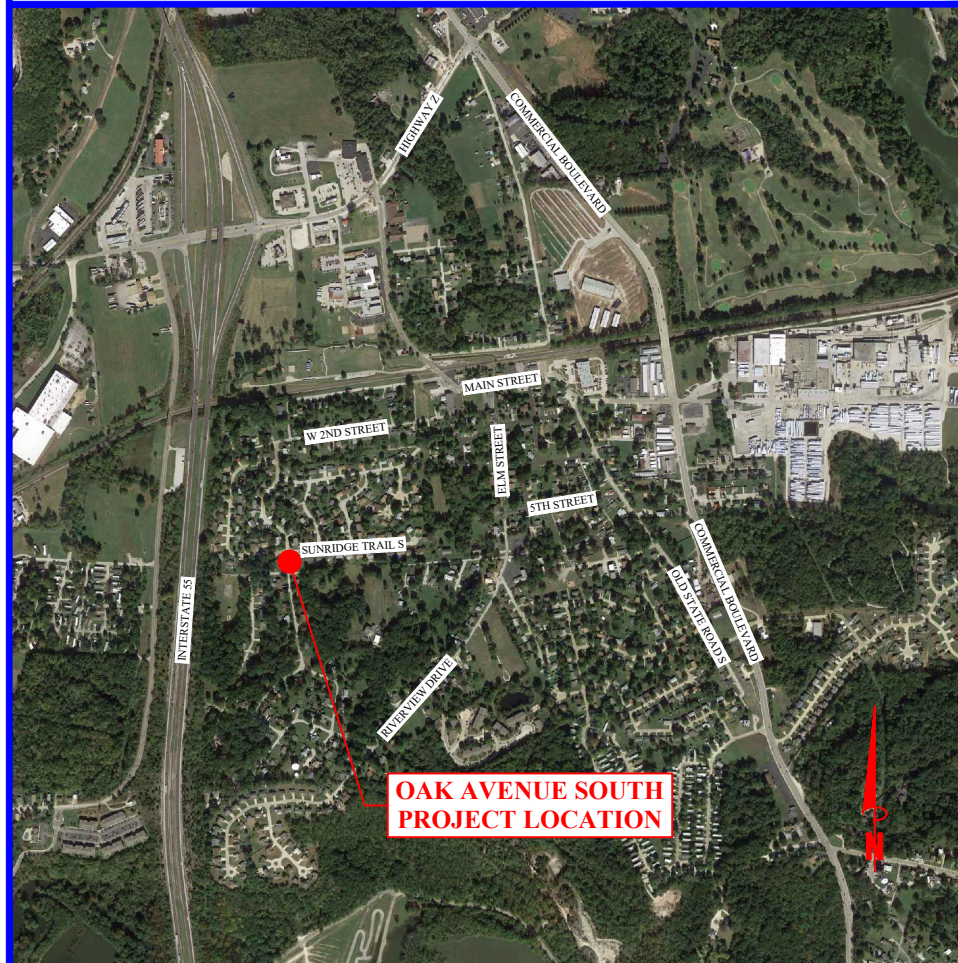


CONTACT INFORMATION	
<b>WATER</b> <b>CITY OF PEVELY</b> REPRESENTATIVE: BRIAN BONE ADDRESS: 401 MAIN STREET PEVELY, MISSOURI 63070 PHONE: (314) 315-5049	<b>SEWER</b> <b>CITY OF PEVELY</b> REPRESENTATIVE: WADE AMSDEN ADDRESS: 401 MAIN STREET PEVELY, MISSOURI 63070 PHONE: (636) 475-4452
<b>ELECTRIC</b> <b>AMEREN U.E.</b> REPRESENTATIVE: JOHN FRIEL ADDRESS: 6450 HWY. MM HOUSE SPRINGS, MISSOURI 63051 PHONE: (636) 671-6151	<b>GAS</b> <b>SPIRE</b> REPRESENTATIVE: CRAIG FALLERT ADDRESS: 410 WEST MAIN FESTUS, MISSOURI 63028 PHONE: (636) 931-8383
<b>TELEPHONE</b> <b>AT&amp;T</b> REPRESENTATIVE: GLEN HOGENMILLER ADDRESS: 122 N. 2ND STREET FESTUS, MISSOURI 63028 PHONE: (636) 931-7504	<b>CABLE</b> <b>CHARTER</b> REPRESENTATIVE: DARRELL STEFFEN ADDRESS: PHONE: (636) 387-6663
REPRESENTATIVE: ADDRESS: PHONE:	REPRESENTATIVE: ADDRESS: PHONE:

### LOCATION INFORMATION

QUADRANGLE/YEAR: HERCULANEUM/2017  
TOWNSHIP: 41N  
RANGE: 6E  
SECTION: US SURVEY 266



**OAK AVENUE SOUTH  
PROJECT LOCATION**

**VICINITY MAP**  
NOT TO SCALE

# SANITARY SEWER IMPROVEMENTS OAK AVENUE SOUTH

IN THE  
**CITY OF PEVELY**  
**JEFFERSON COUNTY, MISSOURI**



401 MAIN STREET  
PEVELY, MISSOURI 63070  
TELEPHONE (636) 474-4452  
FAX (636) 237-4116  
www.cityofpevely.org



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- General Consulting

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TELEPHONE (314) 842-4033  
FAX (314) 842-5957  
www.cochraneng.com

## COCHRAN PROJECT NO. SC19-1030

### JULY 2022

### SHEET INDEX

SHEET NAME	SHEET NO.
SITE PLAN - OAK AVENUE SOUTH	S-1
DETAILS	DE-1 TO DE-2
TRAFFIC CONTROL	TC-1

ALL OSHA RULES & REGULATIONS ESTABLISHED FOR THE TYPE OF CONSTRUCTION REQUIRED BY THESE PLANS SHALL BE STRICTLY FOLLOWED (IE. TRENCHING, BLASTING, ETC.)

TWO WORKING DAYS PRIOR TO THE START OF ANY EXCAVATION ON THIS SITE, CONTRACTOR SHALL CALL 1-800-DIG-RITE FOR UTILITY LOCATION INFORMATION.

WHERE THE TERM "STANDARD SPECIFICATIONS" IS USED, SUCH REFERENCE SHALL MEAN THE CURRENT EDITION OF THE MISSOURI STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EXCEPT AS OTHERWISE PROVIDED IN THE PROJECT MANUAL. IN CASE OF CONFLICT IN THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE REQUIREMENTS STATED IN THE PROJECT MANUAL, THE REQUIREMENTS IN THE PROJECT MANUAL SHALL PREVAIL.



TARY TODD  
NO. E-24182  
STATE OF MISSOURI  
REGISTERED PROFESSIONAL ENGINEER  
FOR SO ENGINEERING LLC,  
DBA COCHRAN  
THIS SHEET HAS BEEN SIGNED,  
SEALED AND DATED ELECTRONICALLY

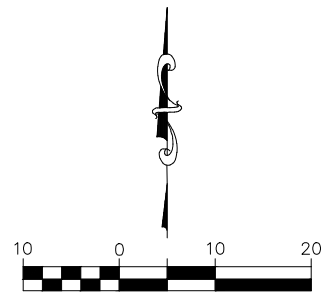
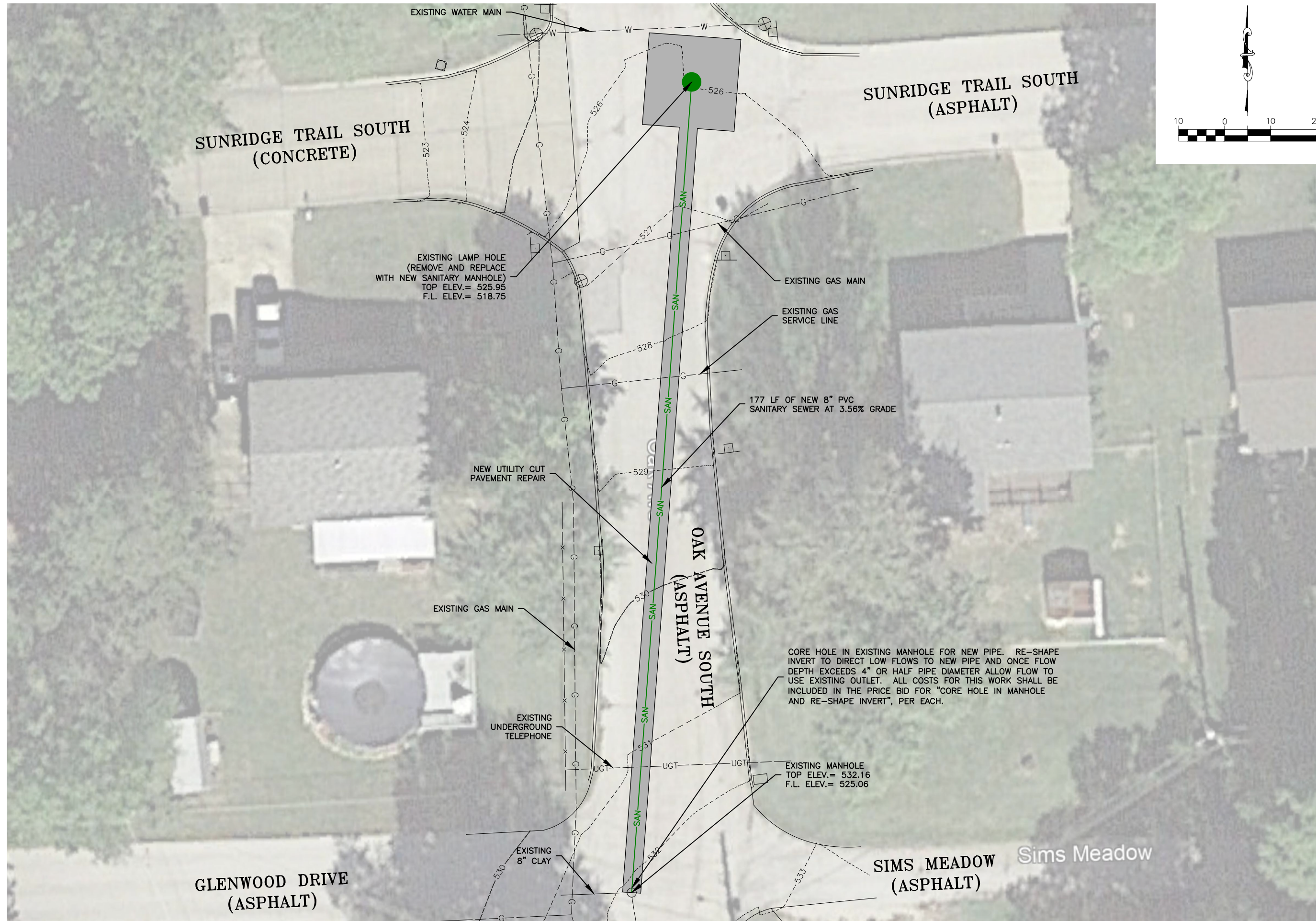
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ENGINEERING CERTIFICATE OF AUTHORITY NUMBER - 2007006937  
LAND SURVEYING CERTIFICATE OF AUTHORITY NUMBER - 2007004529

**CITY OF PEVELY**

ACCEPTED BY:

WADE AMSDEN

Drawing name: J:\SC19-1030 Pevely - City Engineer Services\Oak Trolla\SITE.dwg Tab: S-1 Plotted on: Jul 25, 2022 - 10:02am Plotted by: mburton



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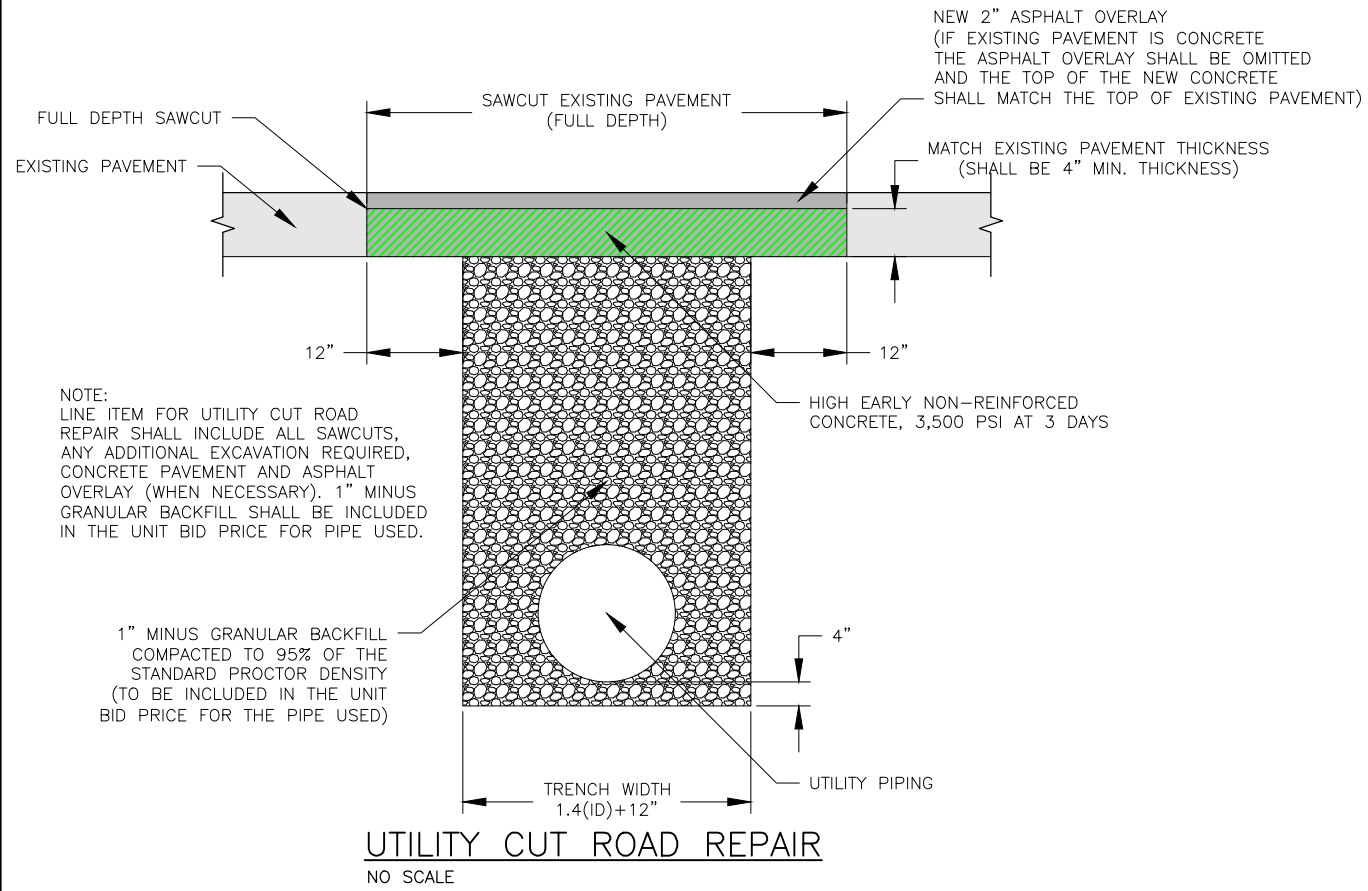
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Architecture  
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Master Planning  
General Consulting  
ENGINEERING CERTIFICATE OF AUTHORITY NUMBER: 2007000937  
LAND SURVEYING CERTIFICATE OF AUTHORITY NUMBER: 2007004929

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**SANITARY SEWER IMPROVEMENTS**  
**OAK AVENUE SOUTH**  
**CITY OF PEVELY, MISSOURI**

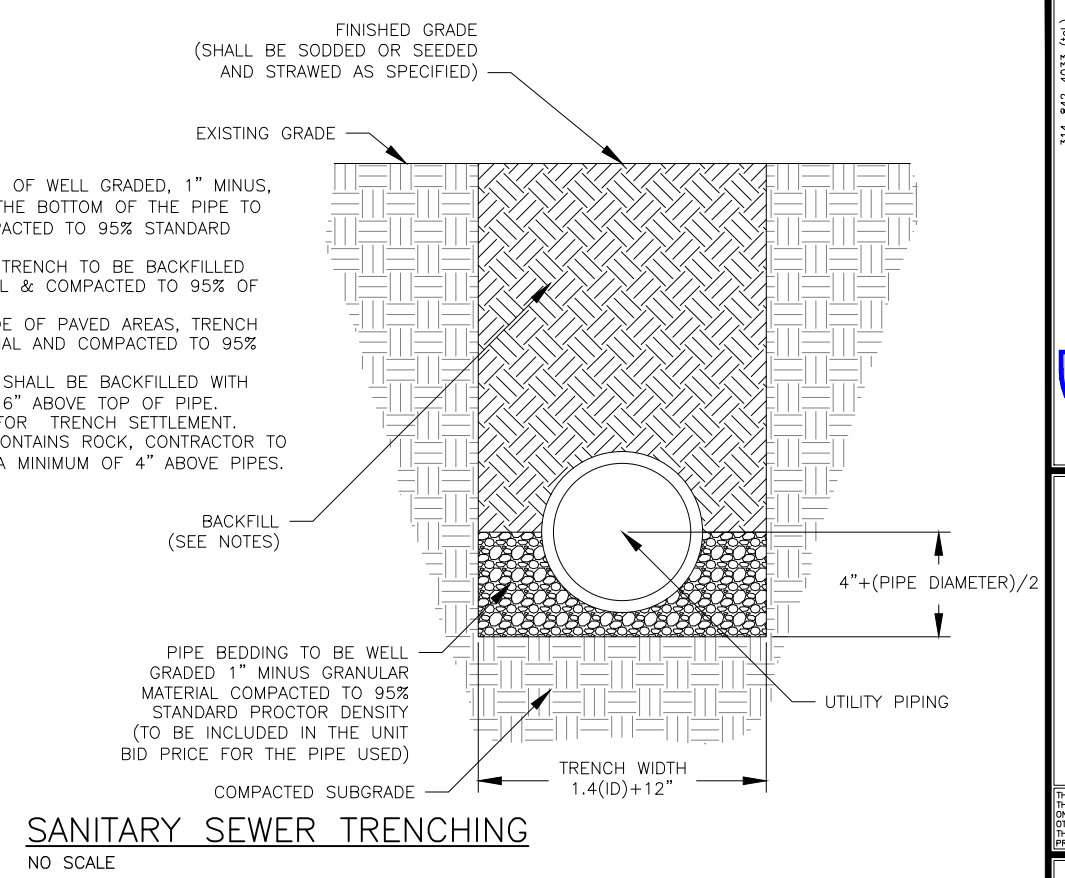
DATE:	REVISION:
DWN. BY: M.R.B.	APP'D. BY: T.D.T.
DATE: JULY 2022	
SCALE: 1" = 20'	
PROJ. NO: SC19-1030	
DWG. NO: <b>S-1</b>	

**SITE PLAN**



NOTES:

1. ALL TRENCHES SHALL HAVE A BEDDING OF WELL GRADED, 1" MINUS, GRANULAR MATERIAL FROM 4" BELOW THE BOTTOM OF THE PIPE TO 1/2 THE DIAMETER OF THE PIPE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
2. IN AREAS TO BE PAVED OVER, ENTIRE TRENCH TO BE BACKFILLED WITH WELL GRADED GRANULAR MATERIAL & COMPACTED TO 95% OF THE STANDARD PROCTOR DENSITY.
3. IN AREAS OF CLEAN DIRT CUTS OUTSIDE OF PAVED AREAS, TRENCH MAY BE BACKFILLED WITH SAME MATERIAL AND COMPACTED TO 95% OF THE STANDARD PROCTOR DENSITY.
4. IN AREAS OF ROCK CUT, THE TRENCH SHALL BE BACKFILLED WITH WELL GRADED GRANULAR MATERIAL TO 6" ABOVE TOP OF PIPE.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR TRENCH SETTLEMENT.
6. IN AREAS WHERE BACKFILL MATERIAL CONTAINS ROCK, CONTRACTOR TO PLACE 1" MINUS GRANULAR MATERIAL A MINIMUM OF 4" ABOVE PIPES.



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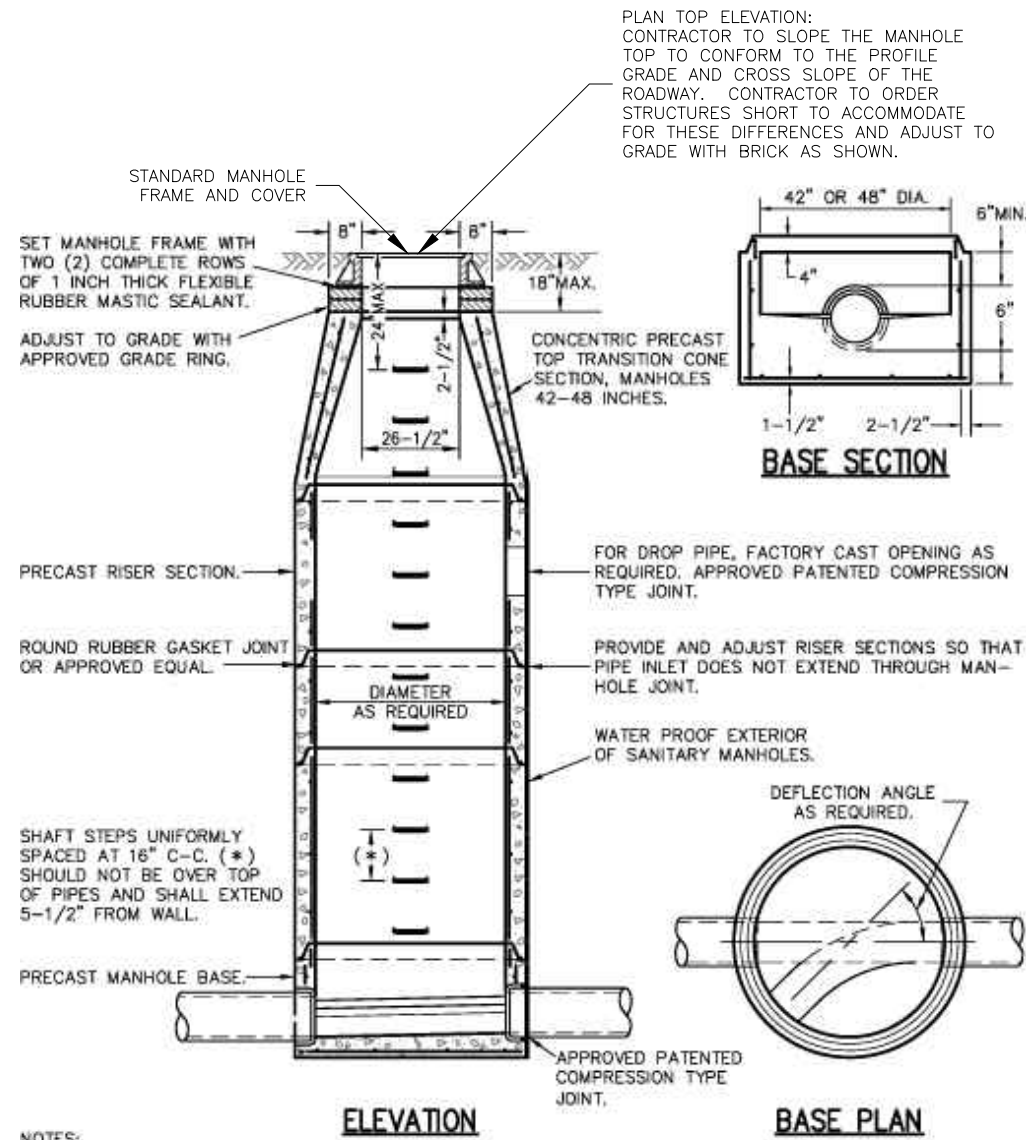
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SCALE: NO SCALE	
PROJ. NO: SC19-1030	
DWG. NO: <b>DE-1</b>	

Drawing name: J:\SC19-1030 Pevely - City Engineer Services\Oak Trails\DETAILS.dwg Tab: DE-2 Plotted on: Jul 25, 2022 - 10:02am Plotted by: mburton



PLAN TOP ELEVATION:  
CONTRACTOR TO SLOPE THE MANHOLE TOP TO CONFORM TO THE PROFILE GRADE AND CROSS SLOPE OF THE ROADWAY. CONTRACTOR TO ORDER STRUCTURES SHORT TO ACCOMMODATE FOR THESE DIFFERENCES AND ADJUST TO GRADE WITH BRICK AS SHOWN.

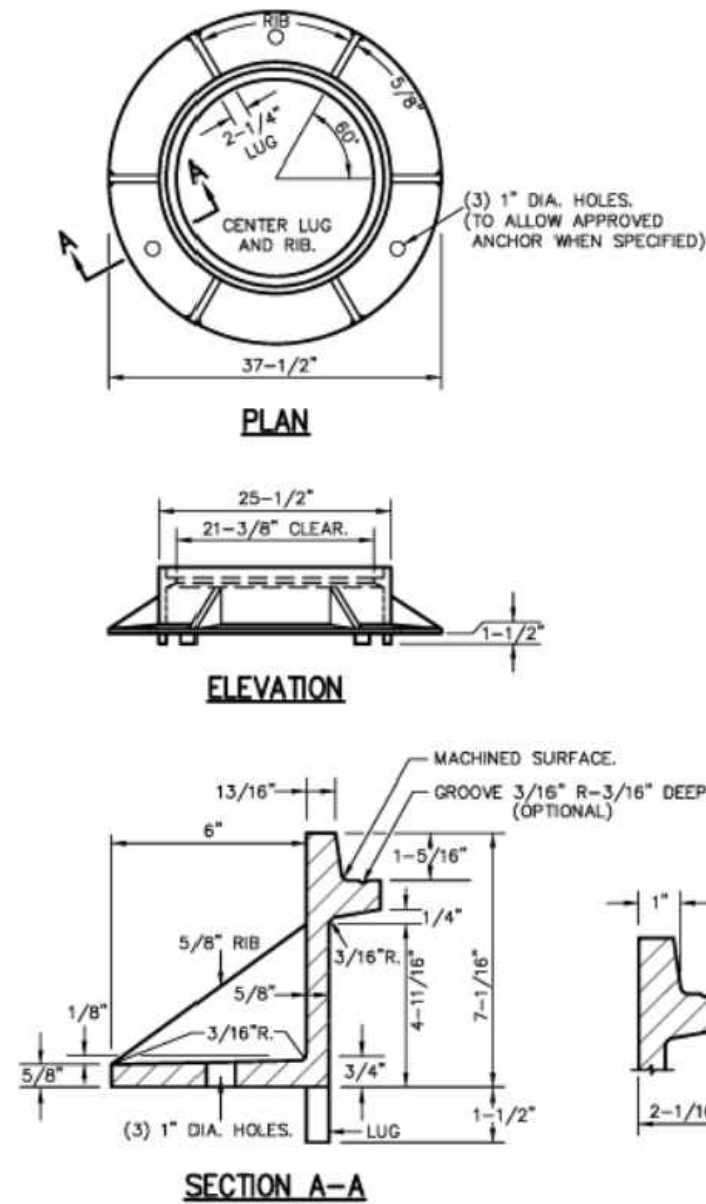
STANDARD MANHOLE FRAME AND COVER  
SET MANHOLE FRAME WITH TWO (2) COMPLETE ROWS OF 1 INCH THICK FLEXIBLE RUBBER MASTIC SEALANT.  
ADJUST TO GRADE WITH APPROVED GRADE RING.  
CONCENTRIC PRECAST TOP TRANSITION CONE SECTION, MANHOLES 42-48 INCHES.  
PRECAST RISER SECTION.  
ROUND RUBBER GASKET JOINT OR APPROVED EQUAL.  
DIAMETER AS REQUIRED  
SHAFT STEPS UNIFORMLY SPACED AT 16" C-C. (\*) SHOULD NOT BE OVER TOP OF PIPES AND SHALL EXTEND 5-1/2" FROM WALL.  
PRECAST MANHOLE BASE.  
APPROVED PATENTED COMPRESSION TYPE JOINT.  
FOR DROP PIPE, FACTORY CAST OPENING AS REQUIRED, APPROVED PATENTED COMPRESSION TYPE JOINT.  
PROVIDE AND ADJUST RISER SECTIONS SO THAT PIPE INLET DOES NOT EXTEND THROUGH MANHOLE JOINT.  
WATER PROOF EXTERIOR OF SANITARY MANHOLES.  
DEFLECTION ANGLE AS REQUIRED.

NOTES:

- 1) THE MINIMUM INSIDE DIAMETER FOR THE BASE AND RISER SECTIONS SHALL BE 42 INCHES FOR 8 INCH DIAMETER SANITARY SEWERS AND ALL STORM SEWERS. THE MINIMUM INSIDE DIAMETER FOR SANITARY SEWERS LARGER THAN 8 INCH DIAMETER IS 48 INCHES. MANHOLE SHALL MEET ASTM C-478 REQUIREMENTS.
- 2) FLOWLINE ELEVATION OF INCOMING PIPES SHALL BE 1 INCH HIGHER THAN THAT OF OUTGOING PIPE.
- 3) PIPE SIZES LARGER THAN 24 INCH DIAMETER MAY REQUIRE MANHOLE DIAMETERS OF 60 INCH, 72 INCH OR 96 INCH AS DETERMINED BY OUTSIDE DIAMETERS AND ORIENTATIONS OF CONNECTING PIPES.
- 4) ECCENTRIC CONES SHALL BE USED ON DIAMETERS 60 INCH AND LARGER. STEPS SHALL EXTEND DOWN VERTICAL WALL OF CONE.
- 5) PRIOR TO FABRICATION, SHOP DRAWINGS SHALL BE SUBMITTED FOR APPROVAL OF MANHOLES ON PIPE DIAMETERS LARGER THAN 24 INCH AND ALSO FOR THOSE STRUCTURES WITH A DROP PIPE CONNECTION.

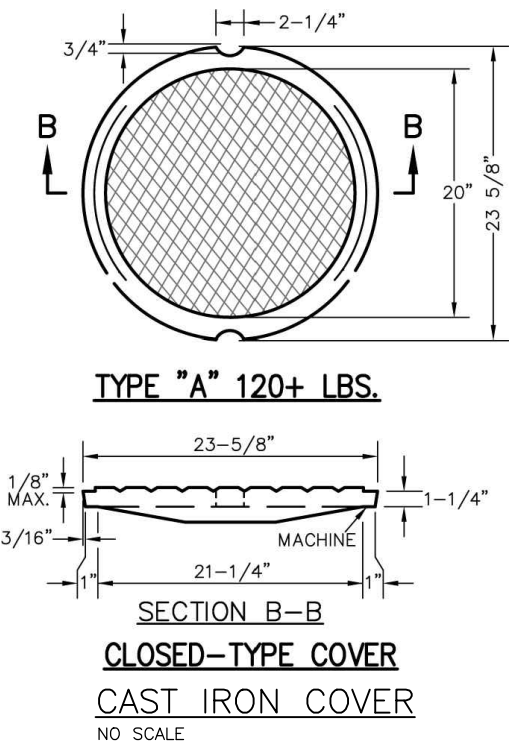
**MANHOLE**

NO SCALE



**CAST IRON MANHOLE FRAME**

NO SCALE



**TYPE "A" 120+ LBS.**

**CLOSED-TYPE COVER**

**CAST IRON COVER**

NO SCALE

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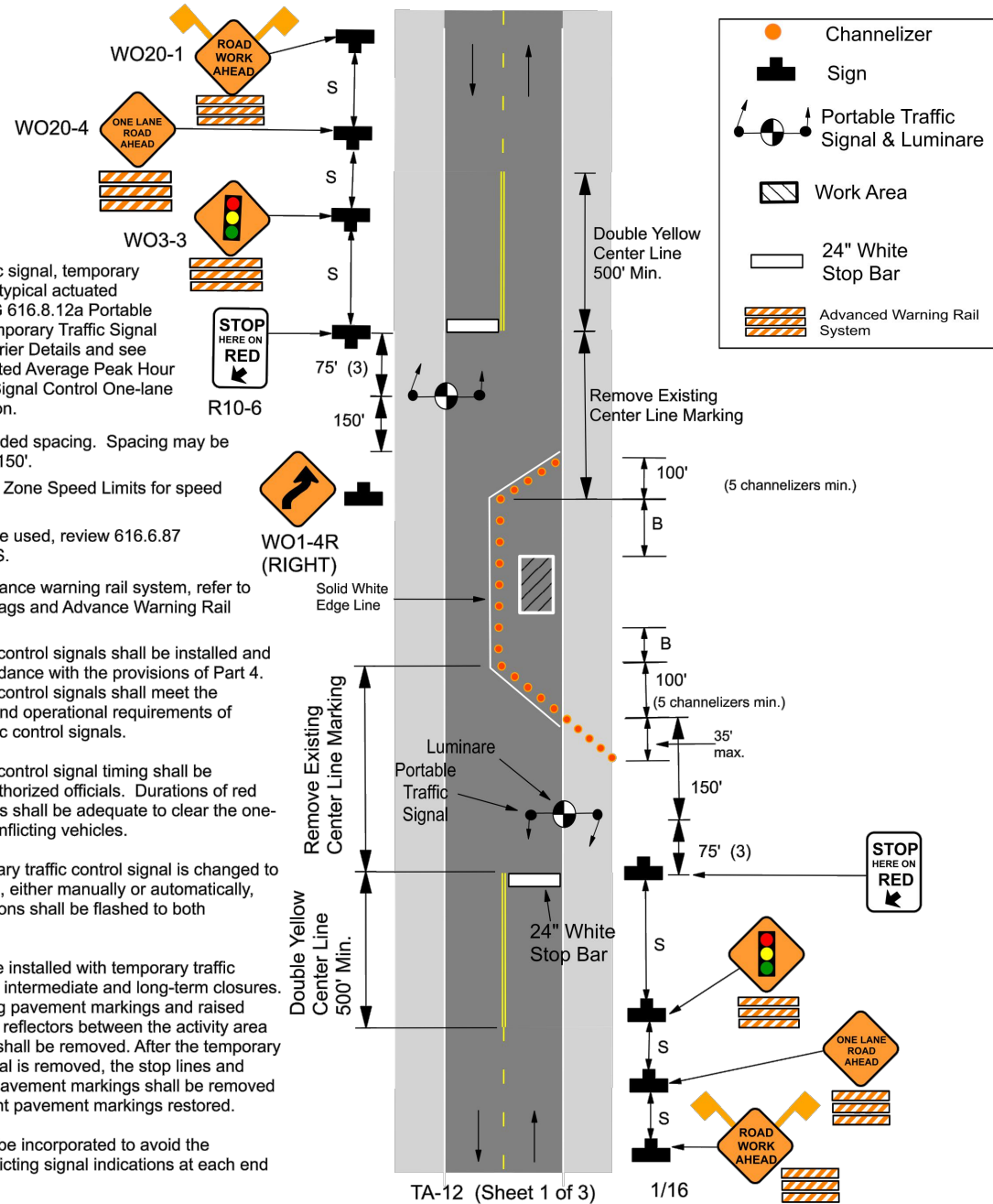
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OAK AVENUE SOUTH  
CITY OF PEVELY, MISSOURI

DATE:	REVISION:
DWN. BY: M.R.B.	APP'D. BY: T.D.T.
DATE: JULY 2022	
SCALE: NO SCALE	
PROJ. NO: SC19-1030	
DWG. NO: DE-2	

616.8.12 (TA-12) LANE CLOSURE ON A TWO-LANE ROAD USING TRAFFIC CONTROL SIGNALS - DE/CM www.invarion.com

SPEED Permanent Posted (mph)	SIGN SPACING (ft.)		TAPER LENGTH (ft.)		OPTIONAL BUFFER LENGTH (ft.) (B)	CHANNELIZER SPACING (ft.)	
	Undivided (S)	Divided (S)	Shoulder (1) (T1)	Lane (2) (T2)		Tapers	Buffer/ Work Areas
0-35	200	-	-	-	280	-	40
40-45	350	-	-	-	400	-	80
50-55	500	-	-	-	560	-	80
60-70	1000	-	-	-	840	-	120

1 Shoulder taper length based on 10 ft. (standard shoulder width) offset. 2. Lane taper length based on 12 ft. (standard lane width) offset.

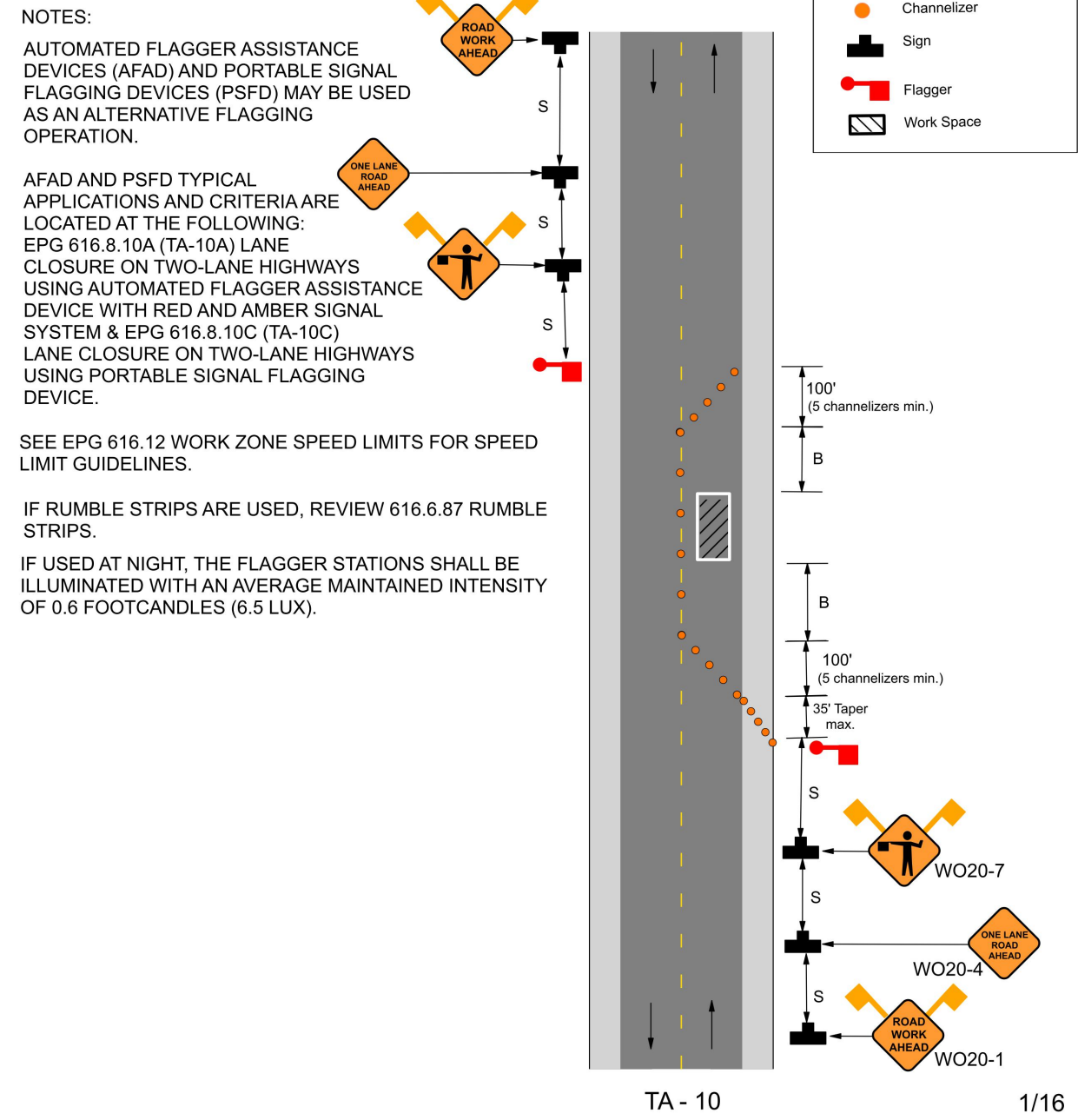


**Notes:**  
 For portable traffic signal, temporary traffic signal, and typical actuated phasing, see EPG 616.8.12a Portable Traffic Signal, Temporary Traffic Signal and Concrete Barrier Details and see 616.8.12b Estimated Average Peak Hour Signal Delay for Signal Control One-lane Two-way Operation.  
 (3) 75' recommended spacing. Spacing may be between 40' and 150'.  
 See 616.12 Work Zone Speed Limits for speed limit guidelines.  
 If rumble strips are used, review 616.6.87 RUMBLE STRIPS.  
 For flags and advance warning rail system, refer to EPG 616.6.2.2 Flags and Advance Warning Rail System.  
 Temporary traffic control signals shall be installed and operated in accordance with the provisions of Part 4. Temporary traffic control signals shall meet the physical display and operational requirements of conventional traffic control signals.  
 Temporary traffic control signal timing shall be established by authorized officials. Durations of red clearance intervals shall be adequate to clear the one-lane section of conflicting vehicles.  
 When the temporary traffic control signal is changed to the flashing mode, either manually or automatically, red signal indications shall be flashed to both approaches.  
 Stop lines shall be installed with temporary traffic control signals for intermediate and long-term closures. Existing conflicting pavement markings and raised pavement marker reflectors between the activity area and the stop line shall be removed. After the temporary traffic control signal is removed, the stop lines and other temporary pavement markings shall be removed and the permanent pavement markings restored.  
 Safeguards shall be incorporated to avoid the possibility of conflicting signal indications at each end of the TTC zone.

616.8.10 (TA-10) LANE CLOSURE ON TWO-LANE ROAD USING FLAGGERS - DE/CM www.invarion.com

SPEED Permanent Posted (mph)	SIGN SPACING (ft.)		TAPER LENGTH (ft.)		OPTIONAL BUFFER LENGTH (ft.) (B)	CHANNELIZER SPACING (ft.)	
	Undivided (S)	Divided (S)	Shoulder (1) (T1)	Lane (2) (T2)		Tapers	Buffer/ Work Areas
0-35	200	-	-	-	280	-	40
40-45	350	-	-	-	400	-	80
50-55	500	-	-	-	560	-	80
60-70	1000	-	-	-	840	-	120

1 Shoulder taper length based on 10 ft. (standard shoulder width) offset. 2. Lane taper length based on 12 ft. (standard lane width) offset.



**NOTES:**  
 AUTOMATED FLAGGER ASSISTANCE DEVICES (AFAD) AND PORTABLE SIGNAL FLAGGING DEVICES (PSFD) MAY BE USED AS AN ALTERNATIVE FLAGGING OPERATION.  
 AFAD AND PSFD TYPICAL APPLICATIONS AND CRITERIA ARE LOCATED AT THE FOLLOWING:  
 EPG 616.8.10A (TA-10A) LANE CLOSURE ON TWO-LANE HIGHWAYS USING AUTOMATED FLAGGER ASSISTANCE DEVICE WITH RED AND AMBER SIGNAL SYSTEM & EPG 616.8.10C (TA-10C) LANE CLOSURE ON TWO-LANE HIGHWAYS USING PORTABLE SIGNAL FLAGGING DEVICE.  
 SEE EPG 616.12 WORK ZONE SPEED LIMITS FOR SPEED LIMIT GUIDELINES.  
 IF RUMBLE STRIPS ARE USED, REVIEW 616.6.87 RUMBLE STRIPS.  
 IF USED AT NIGHT, THE FLAGGER STATIONS SHALL BE ILLUMINATED WITH AN AVERAGE MAINTAINED INTENSITY OF 0.6 FOOTCANDLES (6.5 LUX).

Drawing name: J:\SC19-1030 Pevely - City Engineer Services\Oak Trails\TRAFFIC CONTROL.dwg Tab: TC-1 Plotted on: Jul 25, 2022 - 10:02am Plotted by: mburton

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