

# LAKEWOOD BUSINESS CENTER ON I-470 - PLAT S

## Lot 1 SANITARY SEWER CONSTRUCTION PLANS Part of Section 20, Township 48 N, Range 31 W LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

Accepted  
Record Drawings

These plans have been reviewed for  
accuracy and are accepted for basic  
conformance to the approved  
construction drawings.

### CONSTRUCTION AND DESIGN NOTES:

- SANITARY SEWER PIPE SHALL BE VINYL CHLORIDE (PVC), SDR-26, UNLESS OTHERWISE NOTED IN THESE PLANS
- HOUSE SEWER LATERALS SHALL BE 4 INCH PVC, SDR-26. LATERALS SHALL BE CONSTRUCTED USING A TOP ORIENTED "WYE" AT THE SEWER STATION SHOWN IN THESE PLANS. LATERALS SHALL BE LAID AT A GRADE OF 2.0% FROM THE SEWER MAIN TO THE STREET RIGHT-OF-WAY LINE OR EASEMENT LINE AS REPRESENTED BY THE LATERAL LENGTH SHOWN IN THESE PLANS. THE ELEVATION SHOWN FOR THE END OF THE LATERAL IN THESE PLANS IS APPROXIMATE. THE ACTUAL ELEVATION SHALL BE DETERMINED BY THE FLOW LINE ELEVATION OF THE SEWER MAIN, THE FITTINGS AND THE GRADE OF THE SEWER LATERAL.
- THE CONTRACTOR SHALL MAINTAIN A LOG OF THE "AS-BUILT" STATION AND THE LENGTH OF EACH HOUSE LATERAL AND SHALL PROVIDE POWELL, CWM WITH A COPY OF SAID LOG UPON THE COMPLETION OF THE SEWER CONSTRUCTION.
- ALL MANHOLES INSTALLED IN THE STREET RIGHT-OF-WAY SHALL BE FINISHED  $\frac{1}{2}$ " PER FOOT ABOVE THE NEAREST ADJACENT BACK OF CURB.
- A STAKE SHALL BE PLACED AT THE END OF EACH WYE CONNECTION WITH THE END ELEVATION WRITTEN ON THE STAKE.
- FILL AREAS SHALL HAVE 3 FEET OF COMPACTED FILL IN PLACE PRIOR TO TRENCHING
- A TRENCH CHECK CONSISTING OF FLOWABLE FILL MUST BE INSTALLED ON EVERY PRIVATE LATERAL.

### GENERAL NOTES:

- ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.
- TRENCH CHECKS SHALL BE INSTALLED AT ALL SANITARY WYE LOCATIONS
- ALL CONSTRUCTION ACTIVITIES CONDUCTED ON THE LEE'S SUMMIT AIRPORT SITE SHALL BE COORDINATED WITH THE DEVELOPMENT SERVICES INSPECTOR AND THE AIRPORT MANAGER.EXCAVATION EQUIPMENT MAY REQUIRE THE ISSUANCE OF A NOTICE TO AIRMEN (NOTAM) FOR THE DURATION OF THE EXCAVATION EQUIPMENT BEING PRESENT ON THE AIRPORT PROPERTY.

### LEGAL:

A TRACT OF LAND BEING PART OF THE TRACT DESCRIBED BY THE WARRANTY DEED RECORDED UNDER DOCUMENT NUMBER 2015E0090550, OF THE JACKSON COUNTY MISSOURI RECORDS AND BEING LOCATED IN PART OF SECTION 20, TOWNSHIP 48 NORTH, RANGE 31 WEST, IN THE CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHWEST CORNER OF LOT 23B, OF LAKEWOOD BUSINESS CENTER ON I-470, LOTS 23A AND 24B, A SUBDIVISION IN SAID CITY OF LEE'S SUMMIT, SAID POINT BEING ON THE NORTH RIGHT-OF-WAY LINE OF NE MAGUIRE BOULEVARD, AS NOW ESTABLISHED; THENCE ALONG SAID NORTH RIGHT-OF-WAY LINE, ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 530.00 FEET, A CURVE LENGTH OF 51.21 FEET, CHORD BEARING OF NORTH 77°13'19" WEST, AND A CHORD LENGTH OF 61.19 FEET, TO THE NORTHWESTERN CORNER OF SAID NE MAGUIRE BOULEVARD; THENCE ALONG WEST END OF SAID NE MAGUIRE BOULEVARD, SOUTH 10°00'36" WEST, 60.00 FEET, TO THE SOUTHWESTERN CORNER OF SAID NE MAGUIRE BOULEVARD; THENCE NORTH 79°57'09" WEST, 146.05 FEET; THENCE ALONG A CURVE THE LEFT, HAVING A RADIUS OF 30.00, A CURVE LENGTH OF 47.12 FEET, CHORD BEARING OF SOUTH 55°02'51" WEST, AND A CHORD LENGTH OF 42.43 FEET; THENCE SOUTH 10°02'51" WEST, 21.08 FEET; THENCE NORTH 79°57'09" WEST, 60.00 FEET; THENCE NORTH 10°02'51" EAST, 17.07 FEET; THENCE ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 30.00 FEET, A CURVE LENGTH OF 51.14 FEET, A CHORD BEARING OF NORTH 38°47'01" WEST, AND A CHORD LENGTH OF 45.17 FEET; THENCE ALONG A COMPOUND CURVE TO THE LEFT, HAVING A RADIUS OF 480.00 FEET, A CURVE LENGTH OF 6.44 FEET, A CHORD BEARING OF NORTH 87°59'57" WEST, AND A CHORD LENGTH OF 6.44 FEET; THENCE NORTH 88°23'00" WEST, 934.92 FEET; THENCE ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 25.00 FEET, A CURVE LENGTH OF 39.07 FEET, A CHORD BEARING OF SOUTH 46°50'51" WEST, AND A CHORD LENGTH OF 35.21 FEET, TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF NE HAGEN ROAD, AS NOW ESTABLISHED; THENCE ALONG SAID EAST RIGHT-OF-WAY LINE, NORTH 02°04'42" EAST, 84.80 FEET, TO THE SOUTHWEST CORNER OF LOT 27, LAKEWOOD BUSINESS CENTER ON I-470 PLAT K, A SUBDIVISION IN SAID CITY OF LEE'S SUMMIT; THENCE ALONG THE SOUTH LINE OF SAID LOT 27, SOUTH 88°23'00" EAST, 404.01 FEET, TO THE SOUTHEAST CORNER THEREOF; THENCE ALONG THE EAST LINE OF SAID LOT 27, NORTH 01°38'44" EAST, 370.07 FEET, TO THE SOUTHWEST CORNER OF TRACT C, LAKEWOOD BUSINESS CENTER ON I-470 - PLAT R, A SUBDIVISION IN SAID CITY OF LEE'S SUMMIT; THENCE ALONG THE SOUTH LINE OF SAID TRACT C, SOUTH 88°21'07" EAST, 889.46 FEET, TO THE SOUTHEAST CORNER THEREOF AND BEING A POINT ON THE WEST LINE OF SAID LAKEWOOD BUSINESS CENTER ON I-470, LOTS 23A AND 23B; THENCE ALONG SAID WEST LINE, SOUTH 01°47'11" WEST, 415.53 FEET, TO THE POINT OF BEGINNING AND CONTAINS 9.49 ACRES, MORE OR LESS.



VICINITY MAP  
NOT TO SCALE



CALL BEFORE YOU DIG 1-800-DIG-RITE

### UTILITY CONTACTS:

ENERGY	816-471-5275
SPIRE	800-582-1234
COMCAST	816-795-1100
AT&T	816-325-5610
SPECTRUM	816-358-5360
CITY OF LEE'S SUMMIT PUBLIC WORKS	816-969-1800
CITY OF LEE'S SUMMIT PUBLIC WORKS INSPECTIONS	816-969-1800
CITY OF LEE'S SUMMIT WATER UTILITIES	816-969-1900

### UTILITY NOTE:

THE UTILITIES AS SHOWN IN THESE DRAWINGS WERE DEVELOPED FROM THE INFORMATION AVAILABLE. IT IS NOT IMPLIED NOR INTENDED TO BE THE COMPLETE INVENTORY OF UTILITIES IN THIS AREA. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATIONS OF ALL UTILITIES (WHETHER SHOWN OR NOT) AND PROTECT SAID UTILITIES FROM ANY DAMAGE.

### SHEET INDEX:

400	COVER SHEET
411	OVERALL LAYOUT PLAN
421-422	PLAN & PROFILE
451	DETAILS

### BENCHMARK:

BEARINGS SHOWN HEREON ARE GRID BEARINGS BASED ON THE MISSOURI COORDINATE SYSTEM OF 1983, WEST ZONE AND TIED TO CONTROL MONUMENT "JA-42", DATE OF OBSERVATION 2003 (N: 312505.303 METERS, E: 859594.663 METERS) OF THE MISSOURI GEOGRAPHIC REFERENCE SYSTEM, AS DEVELOPED FROM GPS OBSERVATIONS, A GRID FACTOR OF 0.9999031 WAS USED.

### ENGINEER'S CERTIFICATION:

I HEREBY CERTIFY THAT THIS PROJECT HAS BEEN DESIGNED AND THESE PLANS PREPARED IN ACCORDANCE WITH THE CURRENT DESIGN CRITERIA OF THE CITY OF LEE'S SUMMIT, MISSOURI AND THE STATE OF MISSOURI. I FURTHER CERTIFY THAT THESE PLANS WERE IN ACCORDANCE TO AASHTO STANDARDS.

SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

CITY OF LEE'S SUMMIT, MISSOURI

APPROVED \_\_\_\_\_ DATE: \_\_\_\_\_

BY: \_\_\_\_\_  
CITY ENGINEER



Certificates of Authority:  
Architecture: MO 310 / KS 73  
Engineering: MO 4 / KS 241  
Land Surveying: MO 123 / KS 36

DEVELOPER/OWNER  
DAVID WARD  
NORTH OAK SAFETY  
STORAGE, LLC  
1120 NW EAGLE RIDGE BLVD.  
GRAIN VALLEY, MO 64029  
(816) 229-8115

LAKEWOOD BUSINESS  
CENTER ON I-470 - PLAT S  
2710 NE HAGEN ROAD  
LEE'S SUMMIT, MO 64064  
JACKSON COUNTY



Jadrienne S. Rodell-Tipton, PE  
PE-2021032725 (MISSOURI #)

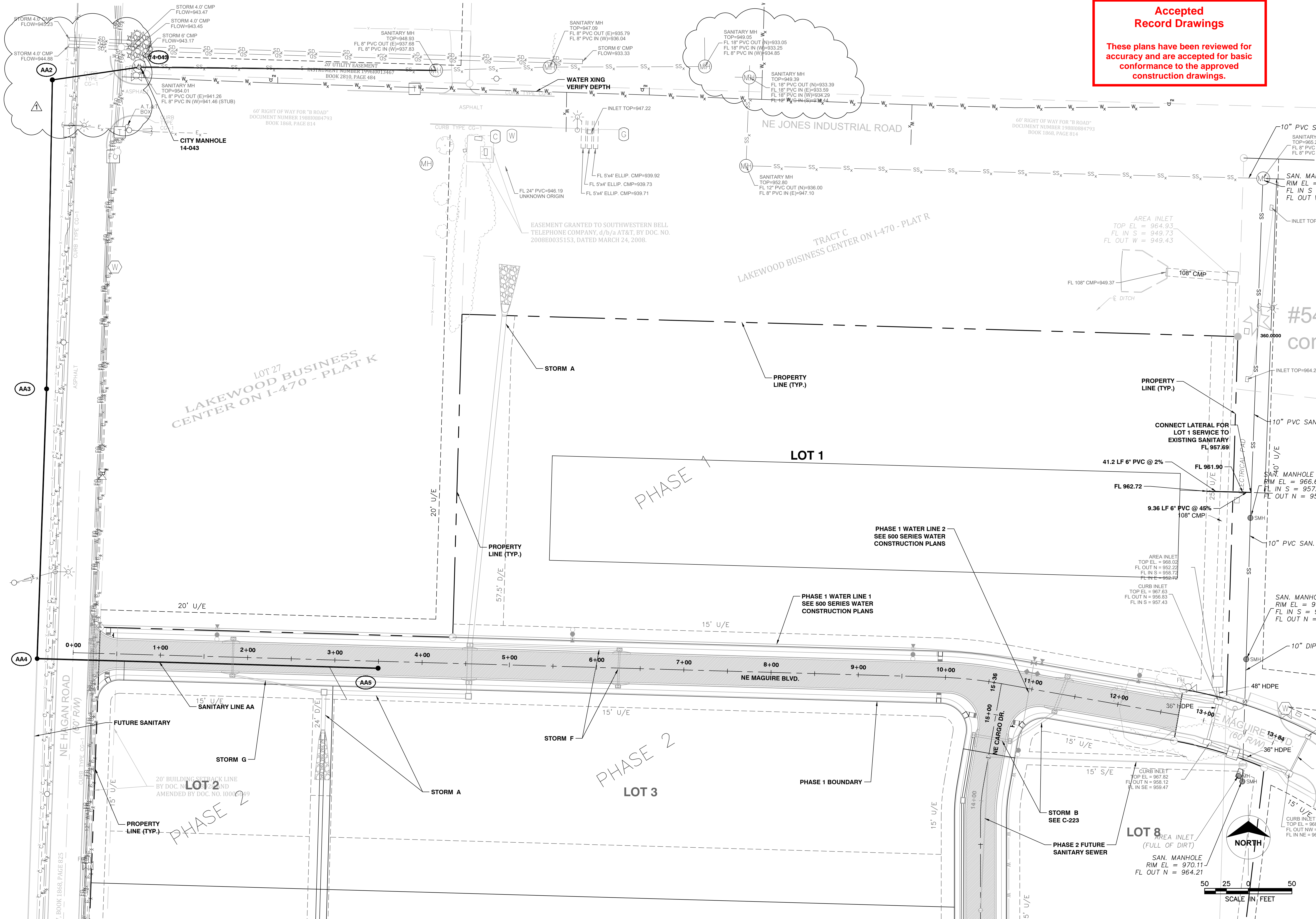
© 2021 Powell CWM, Inc. This drawing has been prepared by Powell CWM, Inc. This drawing is provided as an instrument of service by Powell CWM, Inc. and is intended for use on this project only. Pursuant to the Architectural Works Copyright Protection Act of 1990, all drawings, specifications, ideas and designs, including the overall form, arrangement and composition of spaces and elements appearing herein constitute the original, copyrighted work of Powell CWM, Inc. Any reproduction, use, or disclosure of information contained herein without prior written consent of Powell CWM, Inc. is strictly prohibited.

REVISIONS NO. DATE / DESCRIPTION
1-12-19-2023 SS REVISIONS

DRAWN BY: JDS  
CHECKED BY: JRT  
PROJECT #: 21-1883  
ISSUE DATE: 03/31/2022  
ISSUED FOR:

PERMIT

COVER SHEET



**Accepted  
Record Drawings**

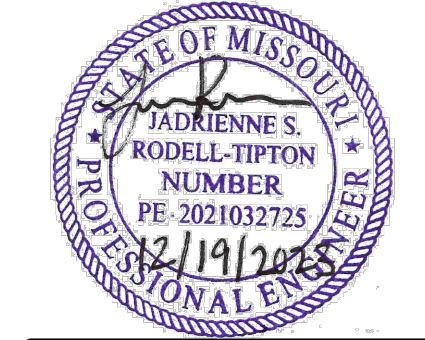
These plans have been reviewed for accuracy and are accepted for basic conformance to the approved construction drawings.

**POWELL CWM**  
ARCHITECTURE/ENGINEERING/SURVEYING  
3200 S. State Route 291, Bldg. 1, Independence, MO 64057  
(816) 373-4800 | powellcwm.com

Certificates of Authority:  
Architecture: MO 310 / KS 73  
Engineering: MO 4 / KS 241  
Land Surveying: MO 123 / KS 36

**DEVELOPER/OWNER**  
DAVID WARD  
NORTH OAK SAFETY  
STORAGE, LLC  
1120 NW EAGLE RIDGE BLVD.  
GRAIN VALLEY, MO 64029  
(816) 229-8115

**LAKEWOOD BUSINESS  
CENTER ON I-470 - PLAT S**  
**2710 NE HAGEN ROAD**  
**LEE'S SUMMIT, MO 64064**  
**JACKSON COUNTY**

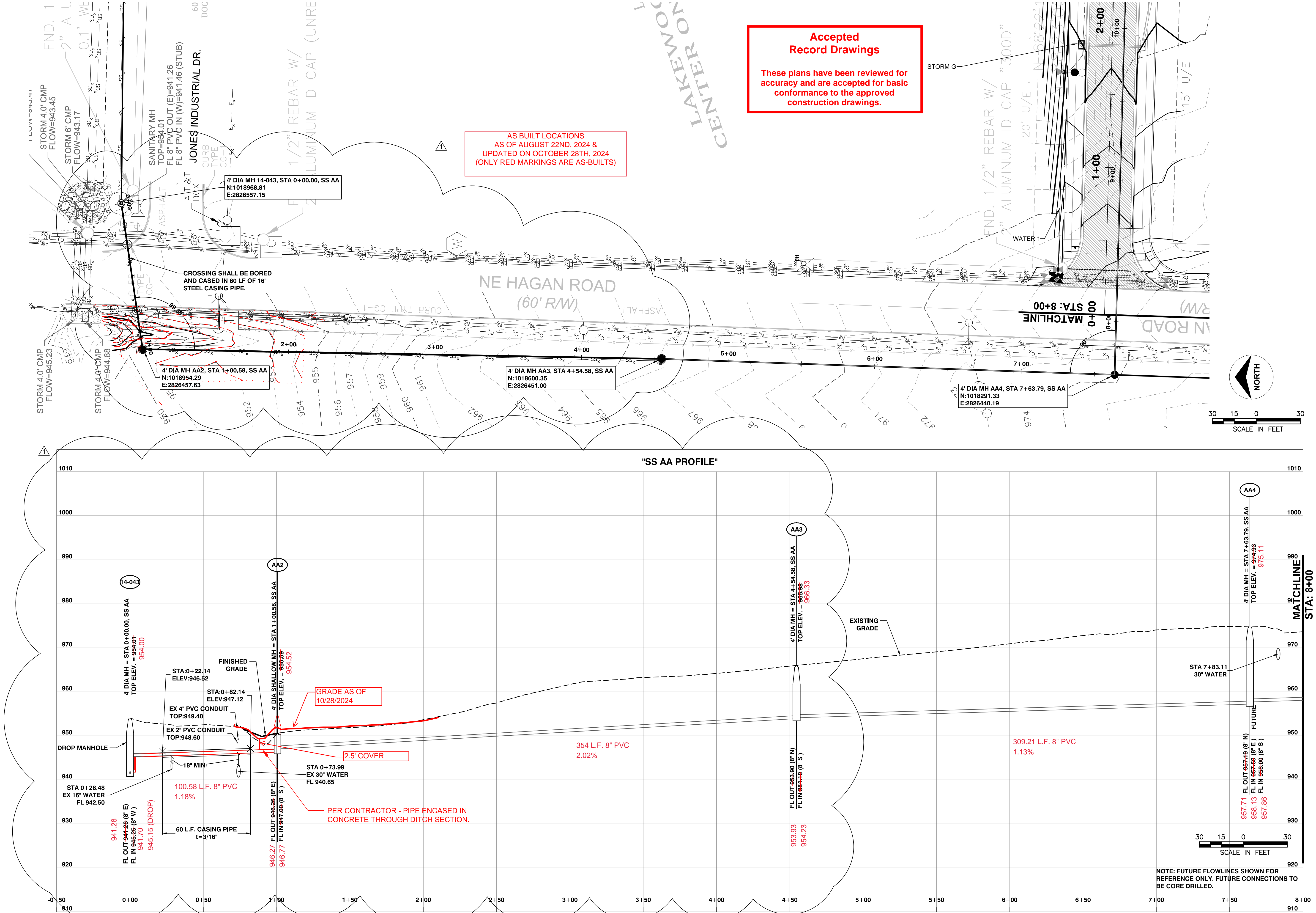


Jadrienne S. Rodell-Tipton, PE  
PE-2021032725 (MISSOURI #)

© 2021 Powell CWM, Inc. This drawing has been prepared by Powell CWM, Inc. This drawing is provided as an instrument of service by Powell CWM, Inc. and is intended for use on this project only. Pursuant to the Architectural Works, Copyright Protection Act of 1990, all drawings, specifications, ideas and designs, including the overall form, arrangement and composition of spaces and elements appearing herein constitute the original, copyrighted work of Powell CWM, Inc. Any reproduction, use, or disclosure of information contained herein without prior written consent of Powell CWM, Inc. is strictly prohibited.

REVISIONS	NO.	DATE / DESCRIPTION
1-12-19-2023	SS REVISIONS	
DRAWN BY: JDS		
CHECKED BY: JRT		
PROJECT #: 21-1883		
ISSUE DATE: 03/31/2022		
ISSUED FOR: PERMIT		
OVERALL UTILITY PLAN		
411		

P:\Ward Development\21-1883 Lakewood Business Park\Civil\XXXX-XX-XX 100% CD\Sanitary\0-421 Plan & Profile.dwg, P&P, 10/31/2024 9:52:11 AM, JRodell-Tipton, ANS full bleed D (34.00 x 22.00 inches), 1:1



POWELL

ARCHITECTURE/ENGINEERING/SURVEYING

CWM

3200 S. State Route 291, Bldg. 1, Independence, MO 64057  
(816) 373-4800 | powellcwm.com

Certificates of Authority  
Architecture: MO 310 / KS 73  
Engineering: MO 4 / KS 241  
Land Surveying: MO 123 / KS 36

DEVELOPER/OWNER  
DAVID WARD  
NORTH OAK SAFETY  
STORAGE, LLC  
1120 NW EAGLE RIDGE BLVD.  
GRAIN VALLEY, MO 64029  
(816) 229-8115

LAKWOOD BUSINESS  
CENTER ON I-470 - PLAT S  
2710 NE HAGEN ROAD  
LEE'S SUMMIT, MO 64064  
JACKSON COUNTY

STATE OF MISSOURI  
JADRIENNE S. RODELL-TIPTON  
NUMBER  
PE-2021032725  
2/19/2025  
PROFESSIONAL ENGINEER

Jadrienne S. Rodell-Tipton, PE  
PE-2021032725 (MISSOURI #)

REVISIONS  
NO. DATE / DESCRIPTION  
1-12-19-2023 SS REVISIONS

DRAWN BY: JDS

CHECKED BY: JRT

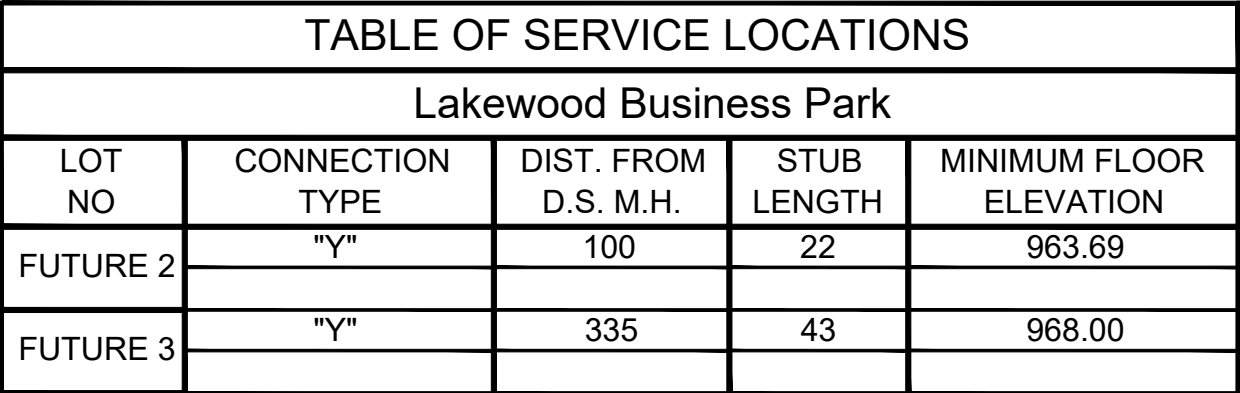
PROJECT #: 21-1883

ISSUE DATE: 03/31/2022

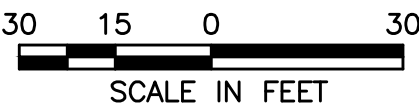
ISSUED FOR:  
PERMIT

SANITARY PLAN &  
PROFILE

421



**These plans have been reviewed for accuracy and are accepted for basic conformance to the approved construction drawings.**

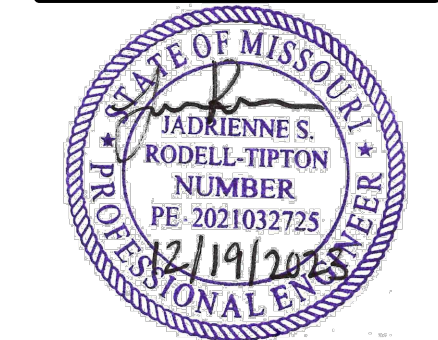


**POWELL** **C W M**  
ARCHITECTURE/ENGINEERING/SURVEYING  
3200 S. State Route 291, Bldg. 1, Independence, MO 64057  
(816) 373-4800 | [powellcwm.com](http://powellcwm.com)

Certificates of Authority  
Architecture: MO 310 / KS 73  
Engineering: MO 4 / KS 241  
Land Surveying: MO 123 / KS 36

**DEVELOPER/OWNER**  
DAVID WARD  
NORTH OAK SAFETY  
STORAGE, LLC  
1120 NW EAGLE RIDGE BLVD.  
GRAIN VALLEY, MO 64029  
(816) 229-8115

**LAKWOOD BUSINESS  
CENTER ON I-470 - PLATS  
2710 NE HAGEN ROAD  
LEE'S SUMMIT, MO 64064  
JACKSON COUNTY**



Jadrienne S. Rodell-Tipton, PE  
PE-2021032725 (MISSOURI #)

© 2021 Powell CWM, Inc. This drawing has been prepared by Powell CWM, Inc. This drawing is provided as an instrument of service by Powell CWM, Inc. and is intended for use on this project only. Pursuant to the Architectural Works Copyright Protection Act of 1990, drawings, specifications, ideas and designs, including the overall form, arrangement and composition of spaces and elements appearing herein constitute the original, copyrighted work of Powell CWM, Inc. Any reproduction, use or disclosure of information contained herein without prior written consent of Powell CWM, Inc. is strictly prohibited.

[illegible]

DRAWN BY: JDS  
CHECKED BY: JRT  
PROJECT #: 21-1883  
ISSUE DATE: 03/31/2022  
ISSUED FOR:

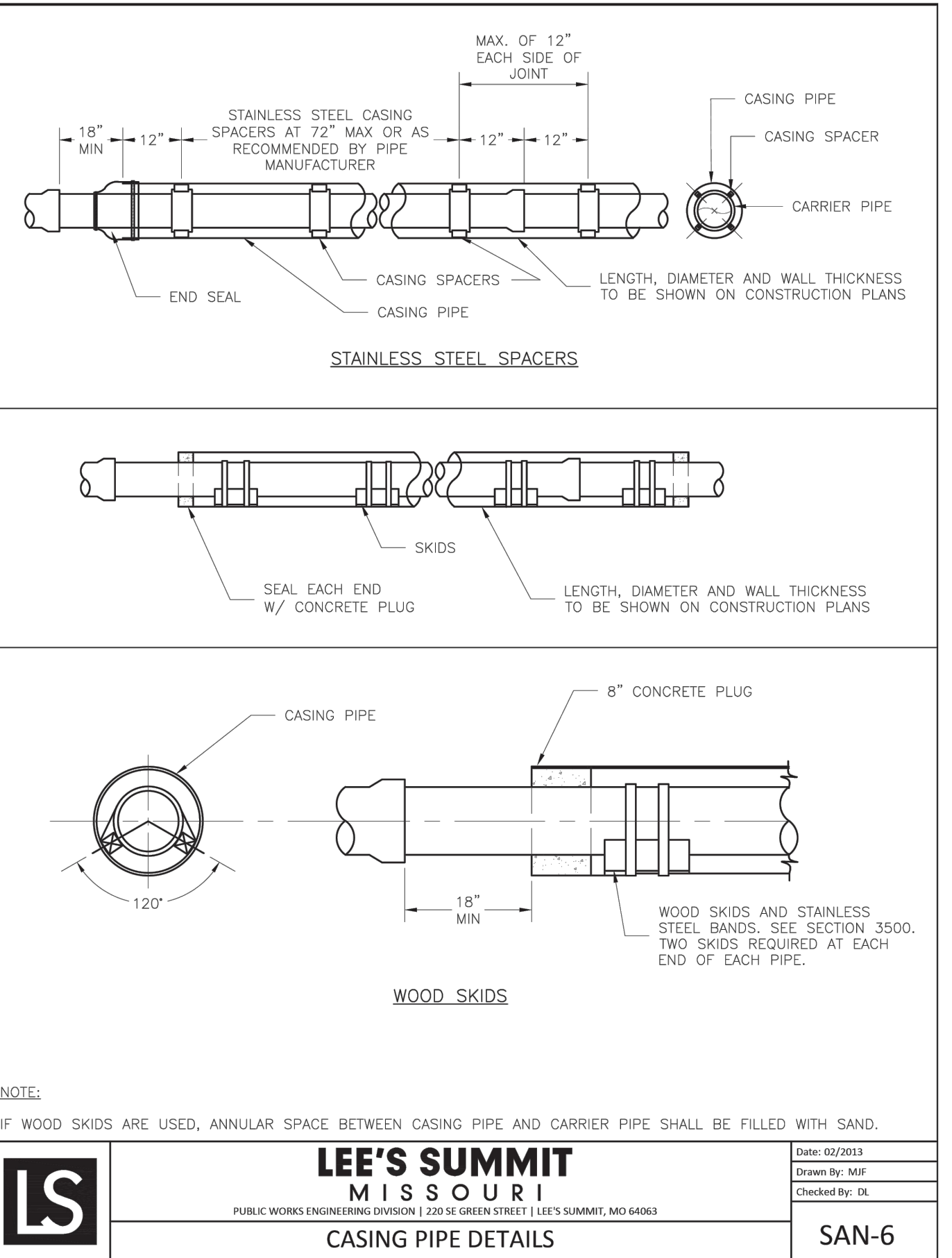
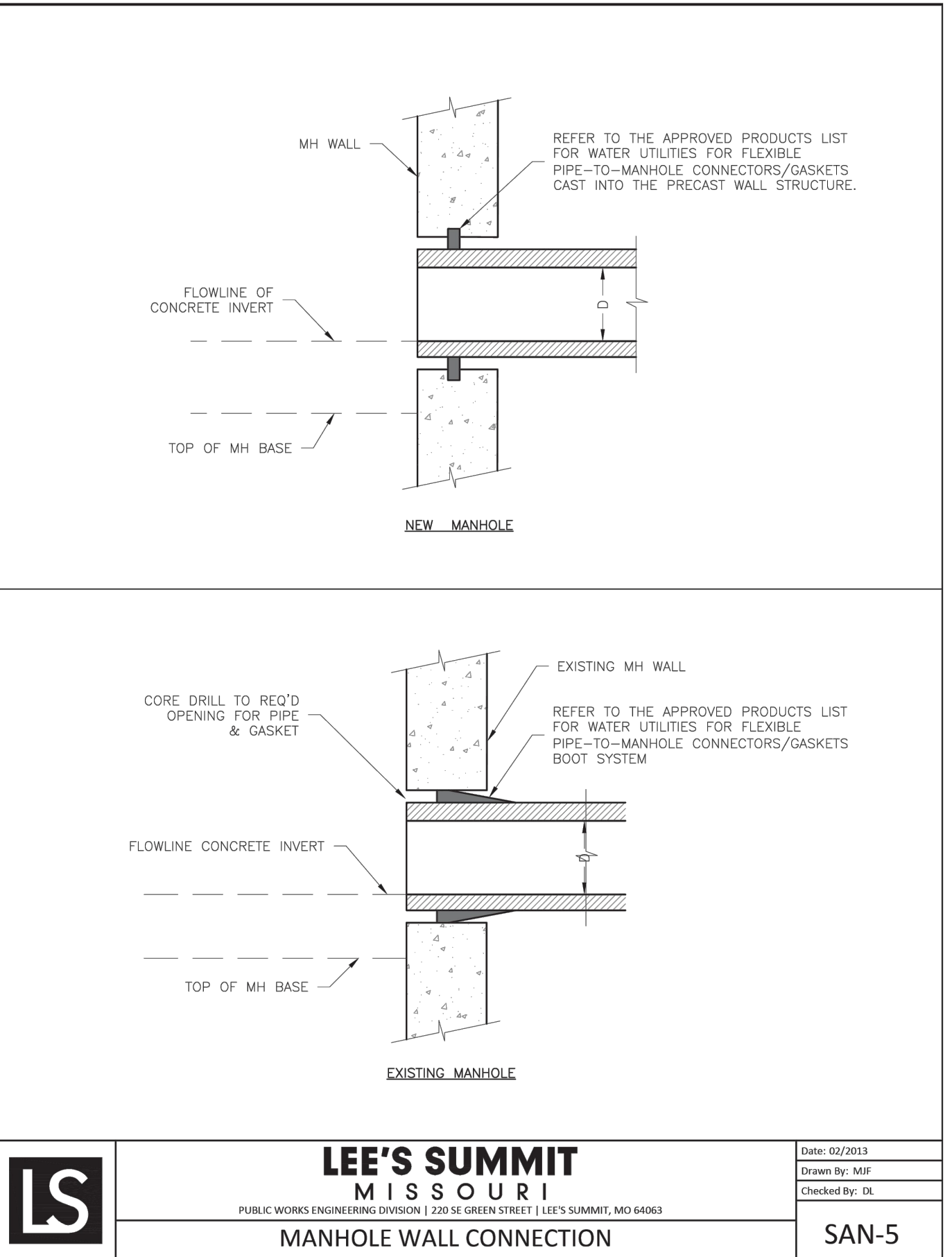
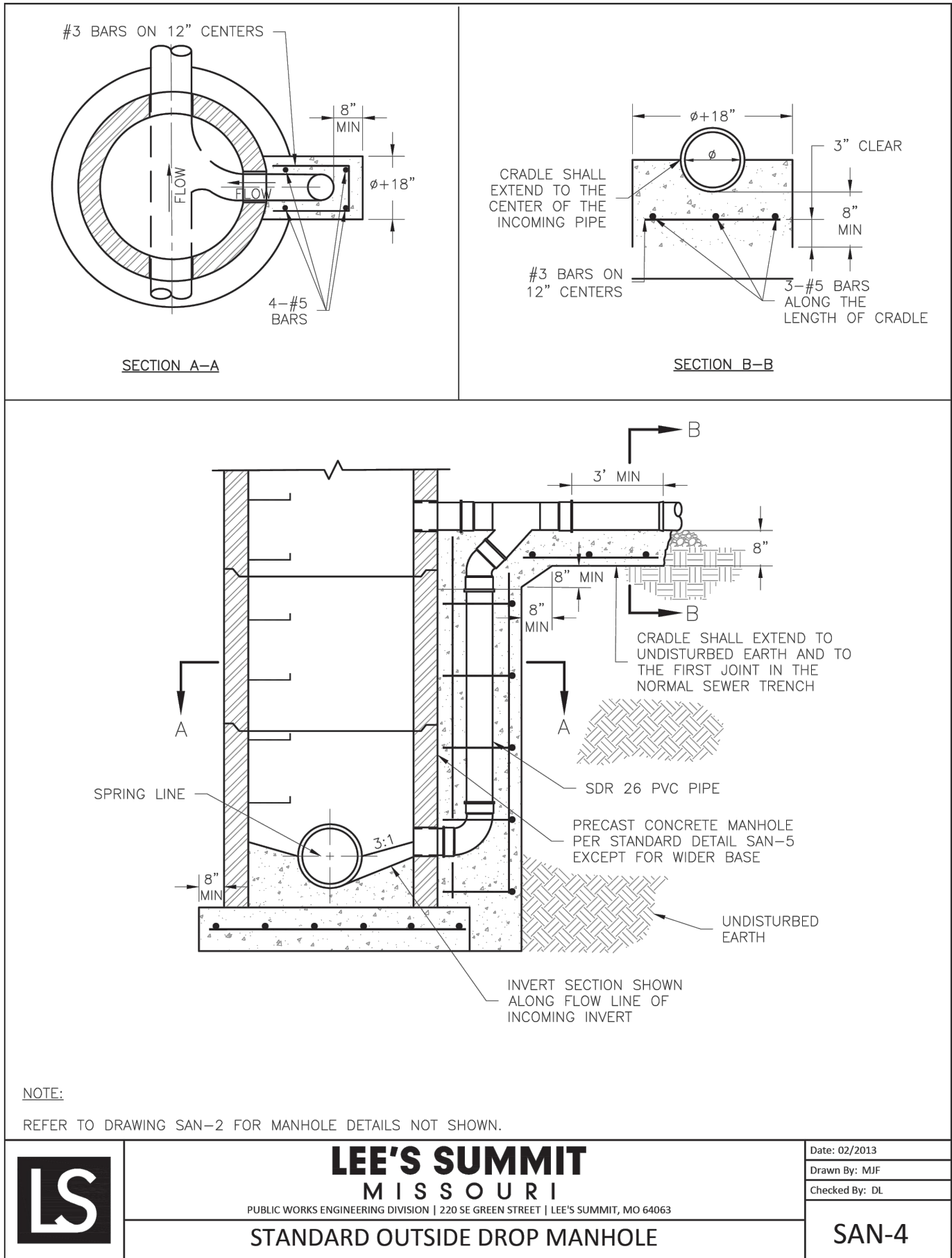
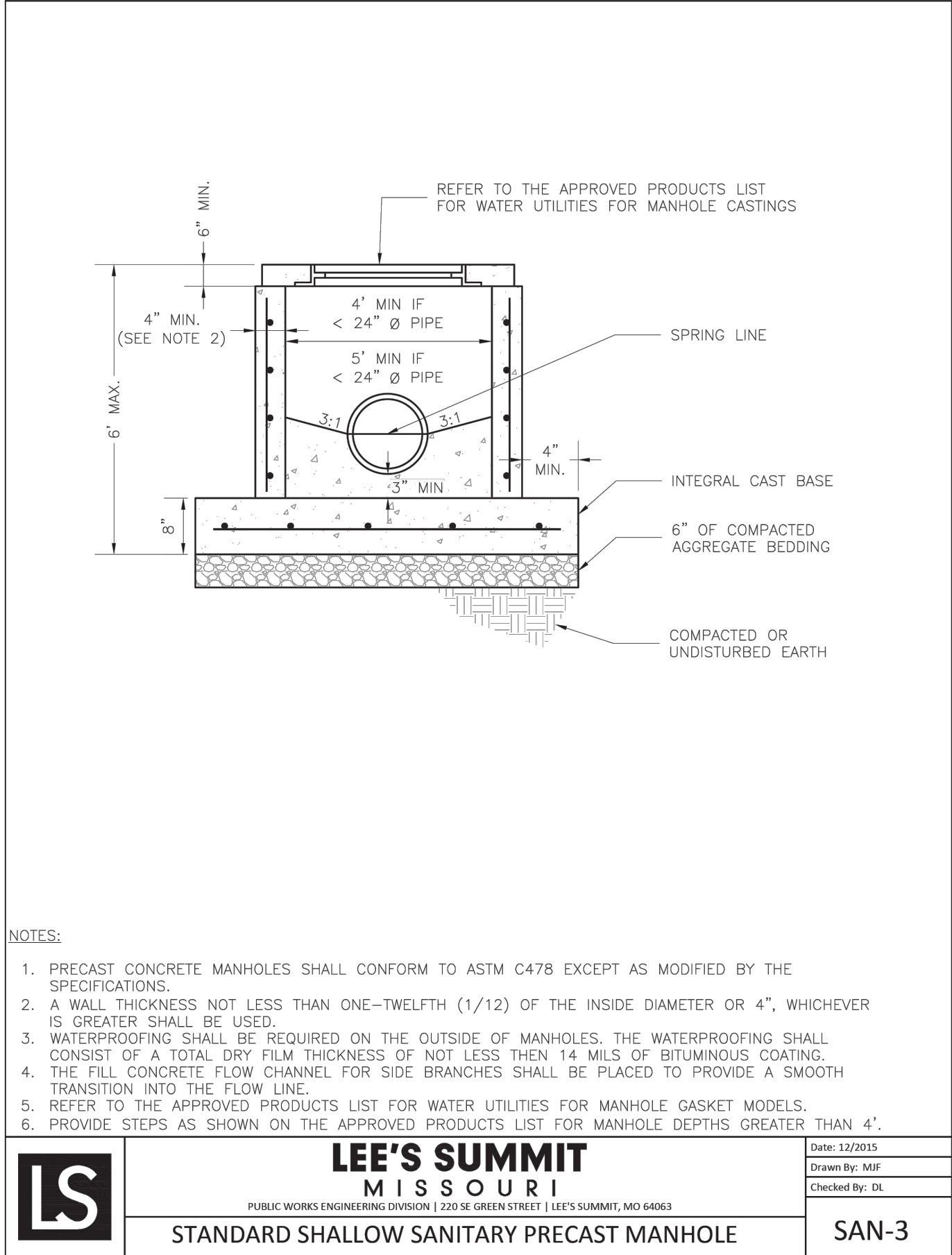
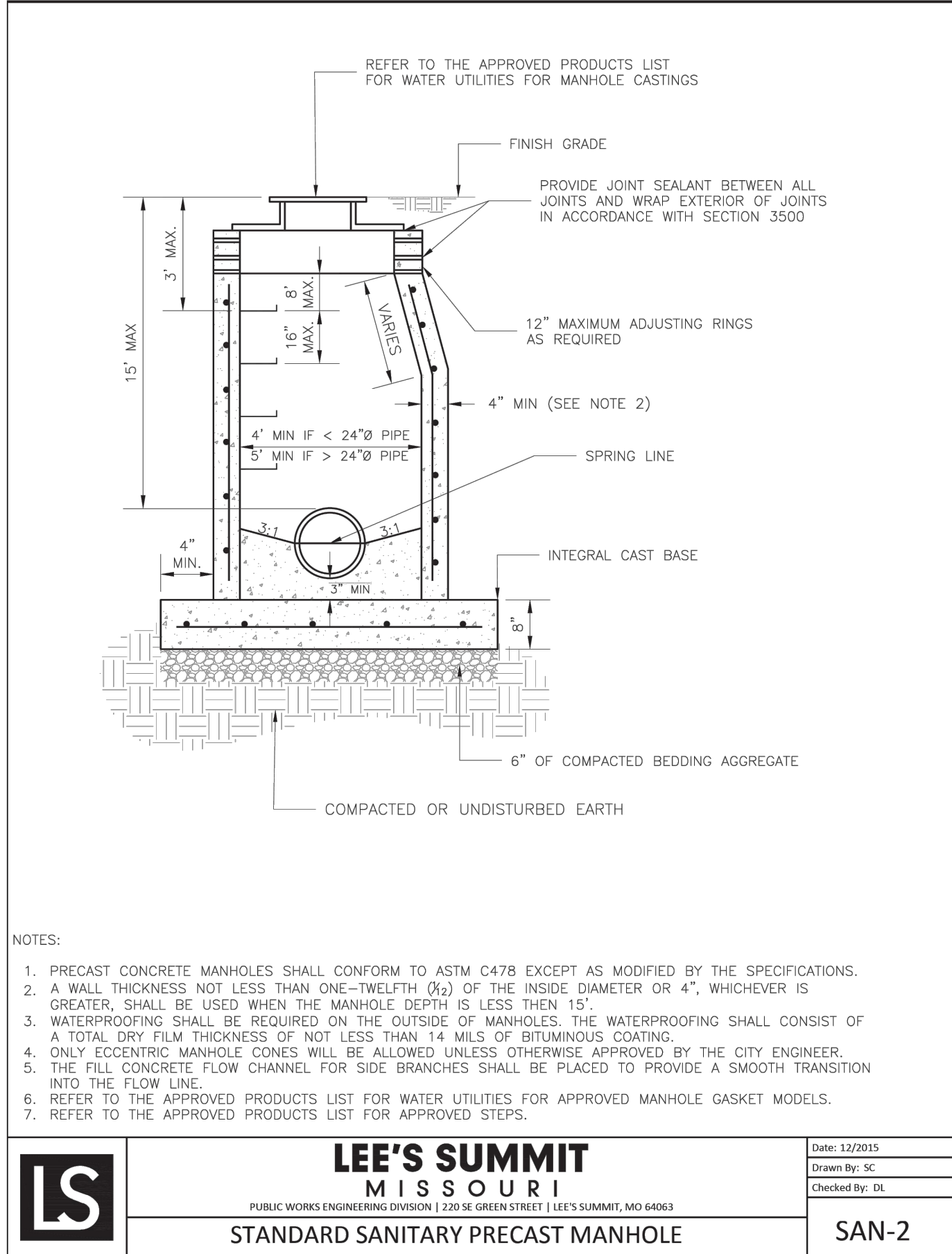
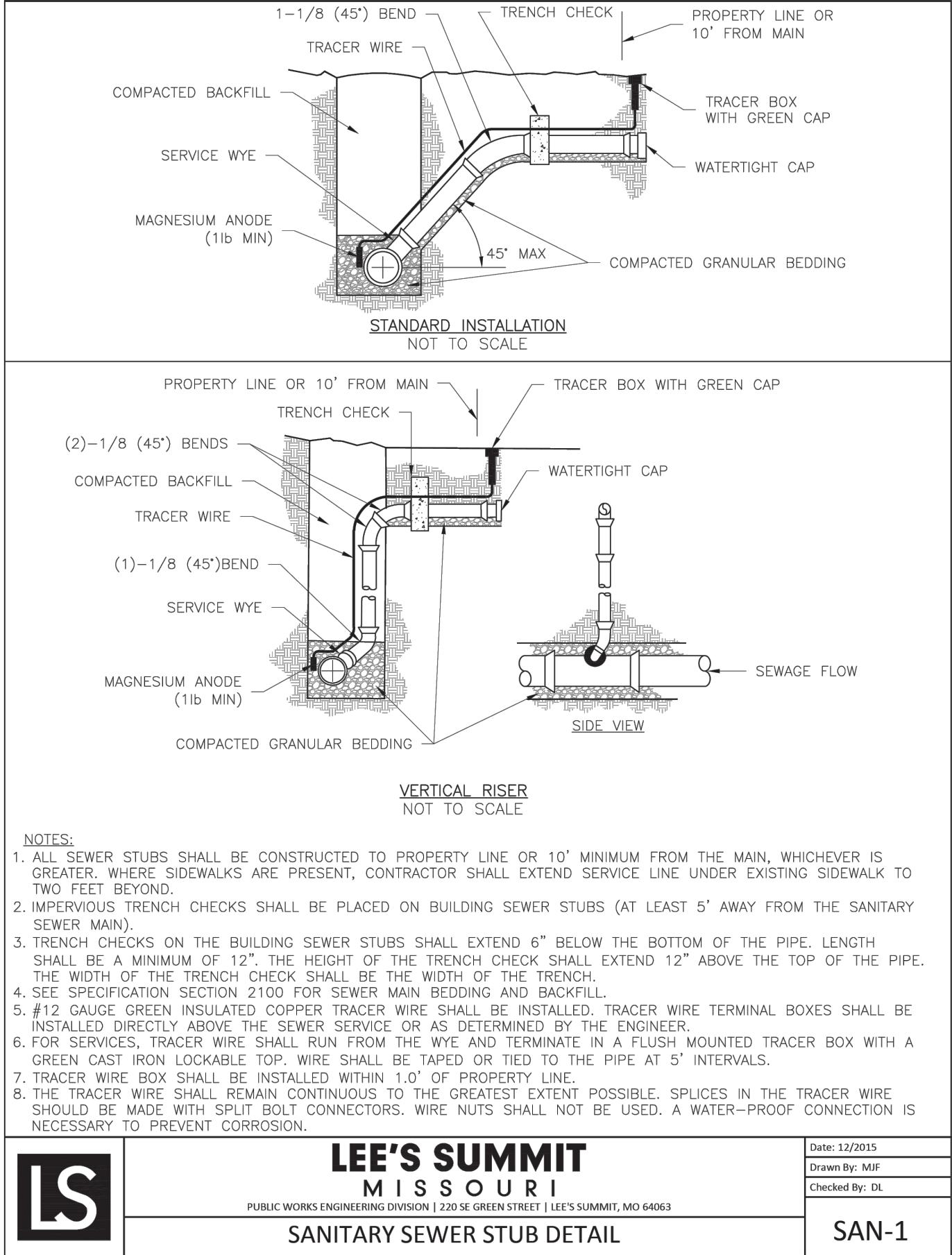
PERMIT

---

**SANITARY PLAN &  
PROFILE**

---

**422**



Accepted  
Record Drawings

These plans have been reviewed for accuracy and are accepted for basic conformance to the approved construction drawings.

POWELL

ARCHITECTURE/ENGINEERING/SURVEYING

3200 S. State Route 291, Bldg. 1, Independence, MO 64057

(816) 373-4800 | powellcwm.com

CWM

ARCHITECTURE/ENGINEERING/SURVEYING

3200 S. State Route 291, Bldg. 1, Independence, MO 64057

(816) 373-4800 | powellcwm.com

Certificates of Authority

Architecture: MO 310 / KS 73

Engineering: MO 4 / KS 241

Land Surveying: MO 123 / KS 36

DEVELOPER/OWNER

DAVID WARD

NORTH OAK SAFETY STORAGE, LLC

1120 NW EAGLE RIDGE BLVD.

GRAIN VALLEY, MO 64029

(816) 229-8115

LAKWOOD BUSINESS CENTER ON I-470 - PLAT S

2710 NE HAGEN ROAD

LEE'S SUMMIT, MO 64064

JACKSON COUNTY

STATE OF MISSOURI

JADRIENNE S. RODELL-TIPTON

NUMBER

PE-2021032725

12/19/2023

PROFESSIONAL ENGINEER

Jadrienne S. Rodell-Tipton, PE

PE-2021032725 (MISSOURI #)

© 2021 Powell CWM, Inc. This drawing has been prepared by Powell CWM, Inc. This drawing is provided as an instrument of service by Powell CWM, Inc. and is intended for use on this project only. Pursuant to the Architectural Works Copyright Protection Act of 1990, all drawings, specifications, ideas and designs, including the overall form, arrangement and composition of spaces and elements appearing herein constitute the original, copyrighted work of Powell CWM, Inc. Any reproduction, use, or disclosure of information contained herein without prior written consent of Powell CWM, Inc. is strictly prohibited.

REVISIONS

NO. DATE / DESCRIPTION

1-12-19-2023 SS REVISIONS

DRAWN BY: JDS

CHECKED BY: JRT

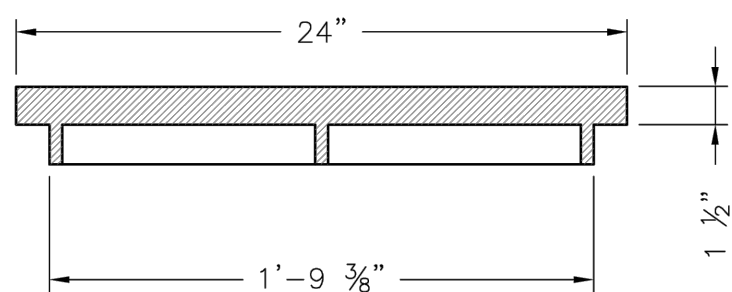
PROJECT #: 21-1883

ISSUE DATE: 03/31/2022

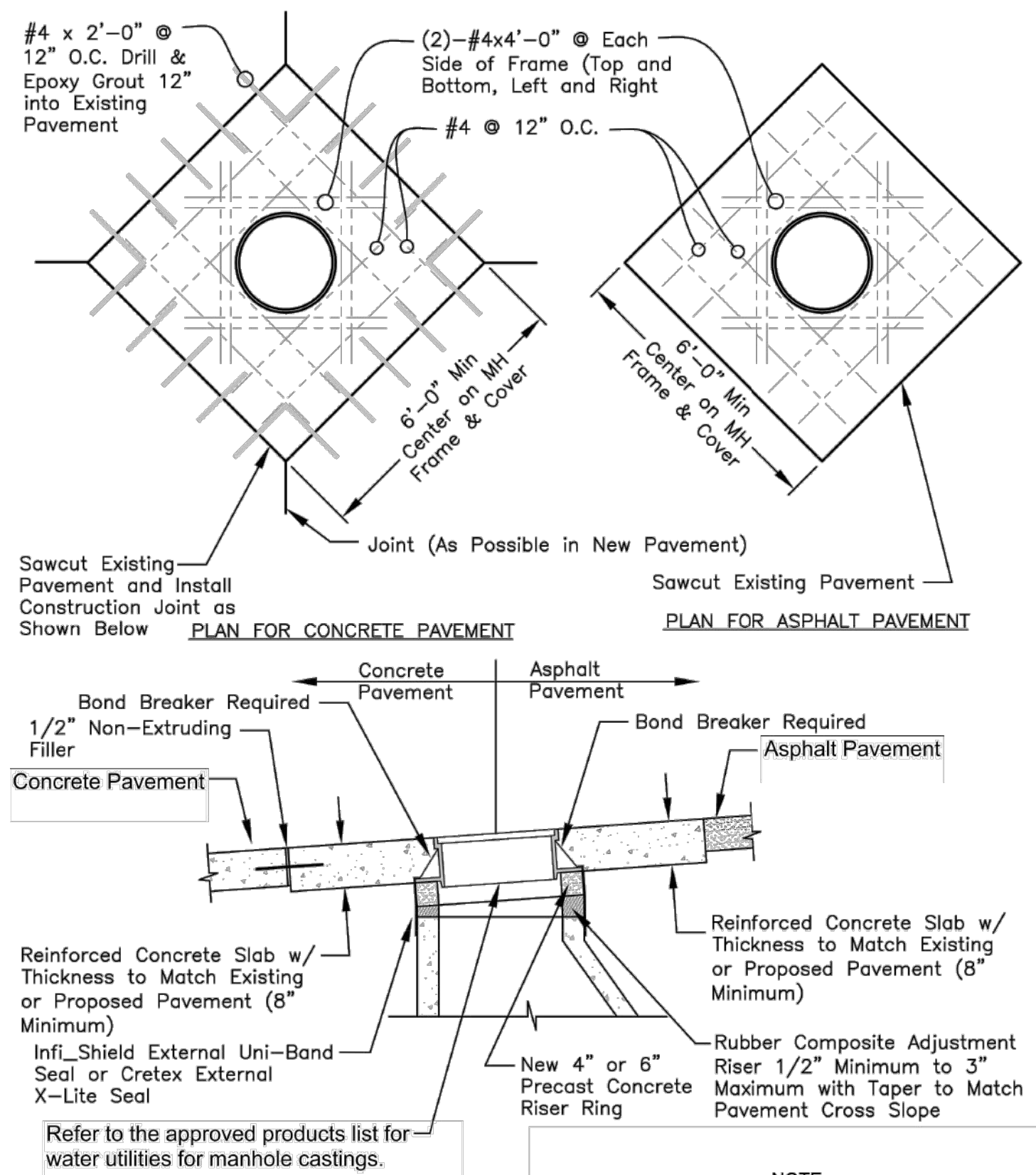
ISSUED FOR: PERMIT

DETAILS

451



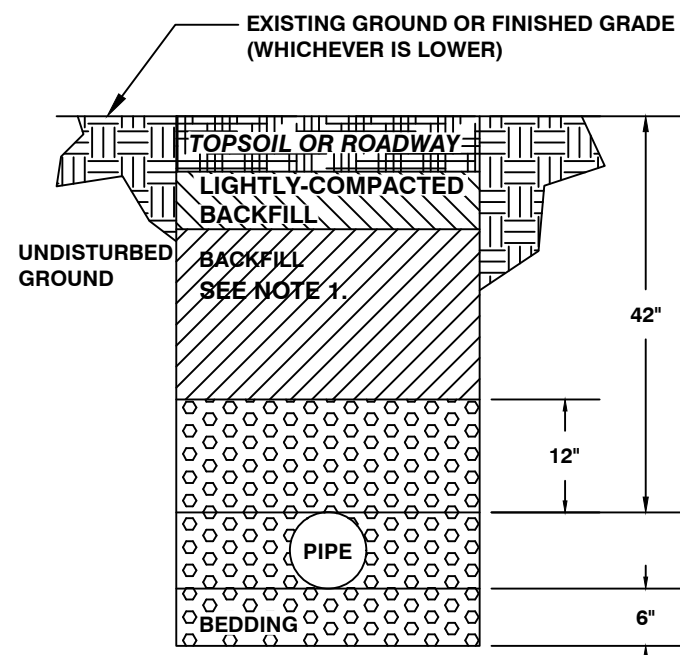
STANDARD 24" MANHOLE COVER  
MINIMUM WEIGHT = 160 LB  
NOTE: PICK HOLES NOT SHOWN



### MANHOLE IN PAVED AREA DETAIL

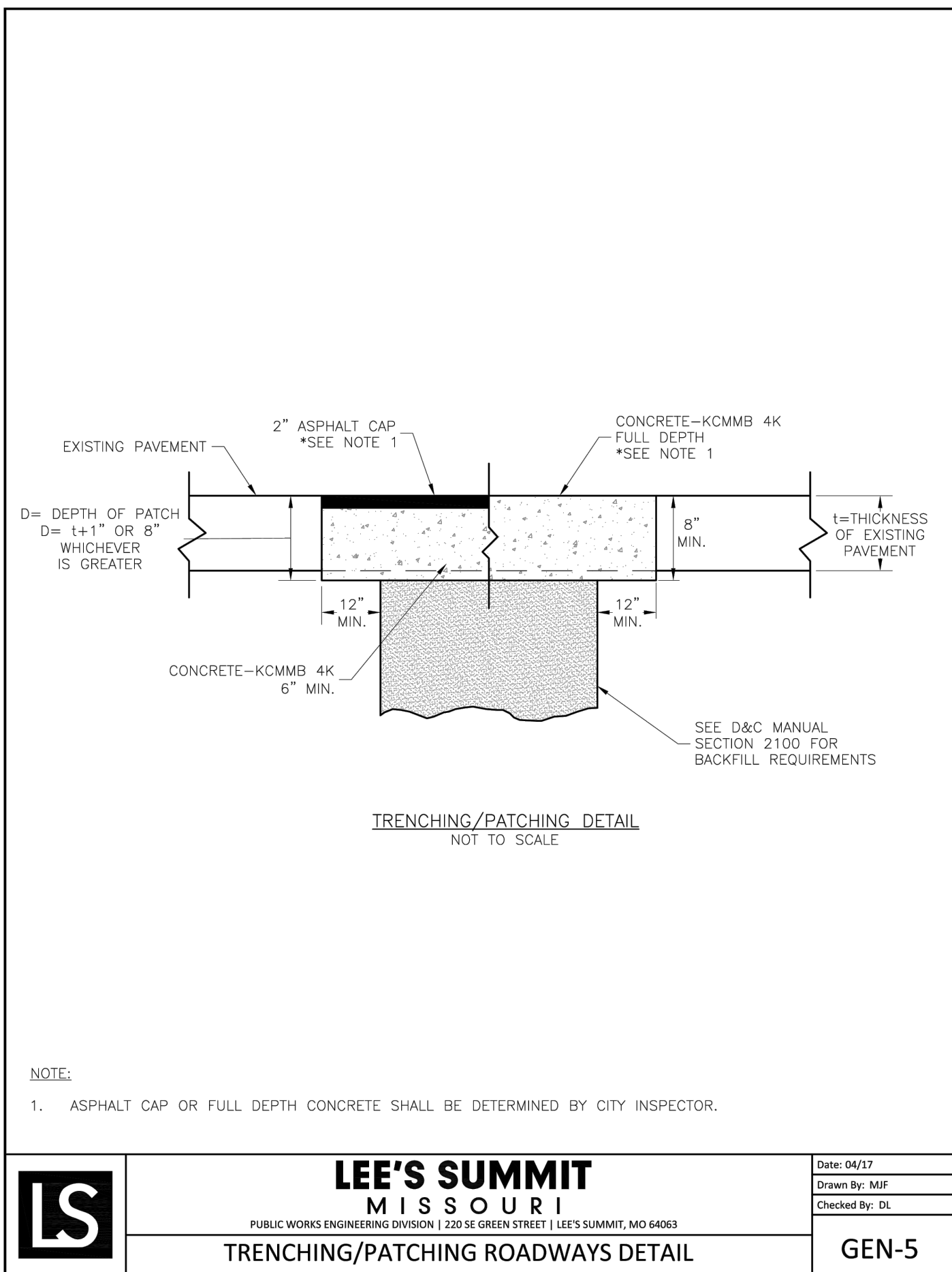
NOTE:

CONCRETE SLAB TO BE  
POSITIONED TO CREATE A  
DIAMOND SHAPE AS VIEWED  
WHEN TRAVELING ALONG  
THE ROAD.  
CONCRETE MAY BE  
BROUGHT TO SURFACE  
IN LIEU OF 2" ASPHALT  
CAP.



### **TRENCHING AND BACKFILL DETAIL**

1. Backfill of all pipes under roadways, curb and gutter and all other paved areas within the right of way shall consist of flowable backfill as specified in Section 2602.2.H Mix Design Type. A. The flowable fill shall extend to 2 feet from back of curb to 2 feet back of curb, up to 18 inches below finished grade. For existing roadways flowable shall be extend up to the base of pavement.



**Accepted  
Record Drawings**

**These plans have been reviewed for accuracy and are accepted for basic conformance to the approved construction drawings.**

Certificates of Authority  
 Architecture: MO 310 / KS 73  
 Engineering: MO 4 / KS 241  
 Land Surveying: MO 123 / KS 36

DEVELOPER/OWNER

DAVID WARD  
NORTH OAK SAFETY  
STORAGE, LLC  
1120 NW EAGLE RIDGE BLVD.  
GRAIN VALLEY, MO 64029  
(816) 229-8115

**LAKWOOD BUSINESS  
CENTER ON I-470 - PLAT S  
2710 NE HAGEN ROAD  
LEE'S SUMMIT, MO 64064  
JACKSON COUNTY**



Jadrienne S. Rodell-Tipton, PE  
PE-2021032725 (MISSOURI #

© 2021 Powell CWM, Inc. This drawing has been prepared by Powell CWM, Inc. This drawing is provided as an instrument of service by Powell CWM, Inc. and is intended for use on this project only. Pursuant to the Architectural Works Copyright Protection Act of 1990, all drawings, specifications, ideas and designs including the overall form, arrangement and composition of spaces and elements appearing herein constitute the original, copyrighted work of Powell CWM, Inc. Any reproduction, use or disclosure of information contained herein without prior written consent of Powell CWM, Inc. is strictly prohibited.

[illegible]

DRAWN BY: JDS

CHECKED BY: JRT

PROJECT #: 21-1883

ISSUE DATE: 03/31/2022

ISSUED FO

PERMIT

## DETAILS 2