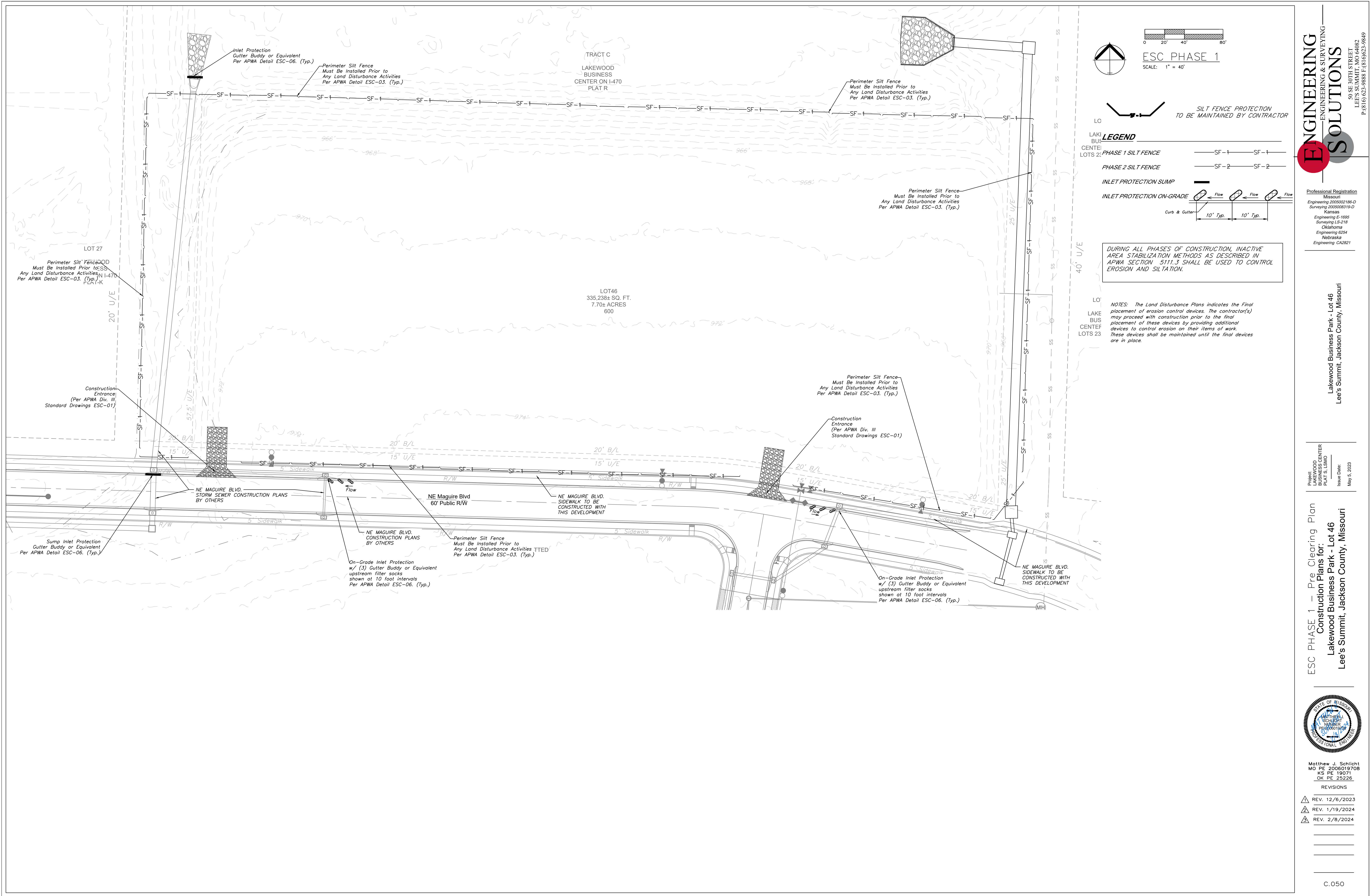








ESC PHASE 1  
SCALE: 1" = 40'

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LAKE  
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**LEGEND**

PHASE 1 SILT FENCE — SF-1 — SF-1

PHASE 2 SILT FENCE — SF-2 — SF-2

INLET PROTECTION SUMP

INLET PROTECTION ON-GRADE

SILT FENCE PROTECTION TO BE MAINTAINED BY CONTRACTOR

Flow

10' Typ.

10' Typ.

DURING ALL PHASES OF CONSTRUCTION, INACTIVE AREA STABILIZATION METHODS AS DESCRIBED IN APWA SECTION 5111.3 SHALL BE USED TO CONTROL EROSION AND SILTATION.

NOTES: The Land Disturbance Plans indicates the final placement of erosion control devices. The contractor(s) may proceed with construction prior to the final placement of these devices by providing additional devices to control erosion on their items of work. These devices shall be maintained until the final devices are in place.

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Engineering 6254  
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Engineering CA2821

Project: LAKEWOOD BUSINESS CENTER PLAT 5, L&MO  
Issue Date: May 5, 2023

ESC PHASE 1 – Pre Clearing Plan  
Construction Plans for:  
Lakewood Business Park - Lot 46  
Lee's Summit, Jackson County, Missouri

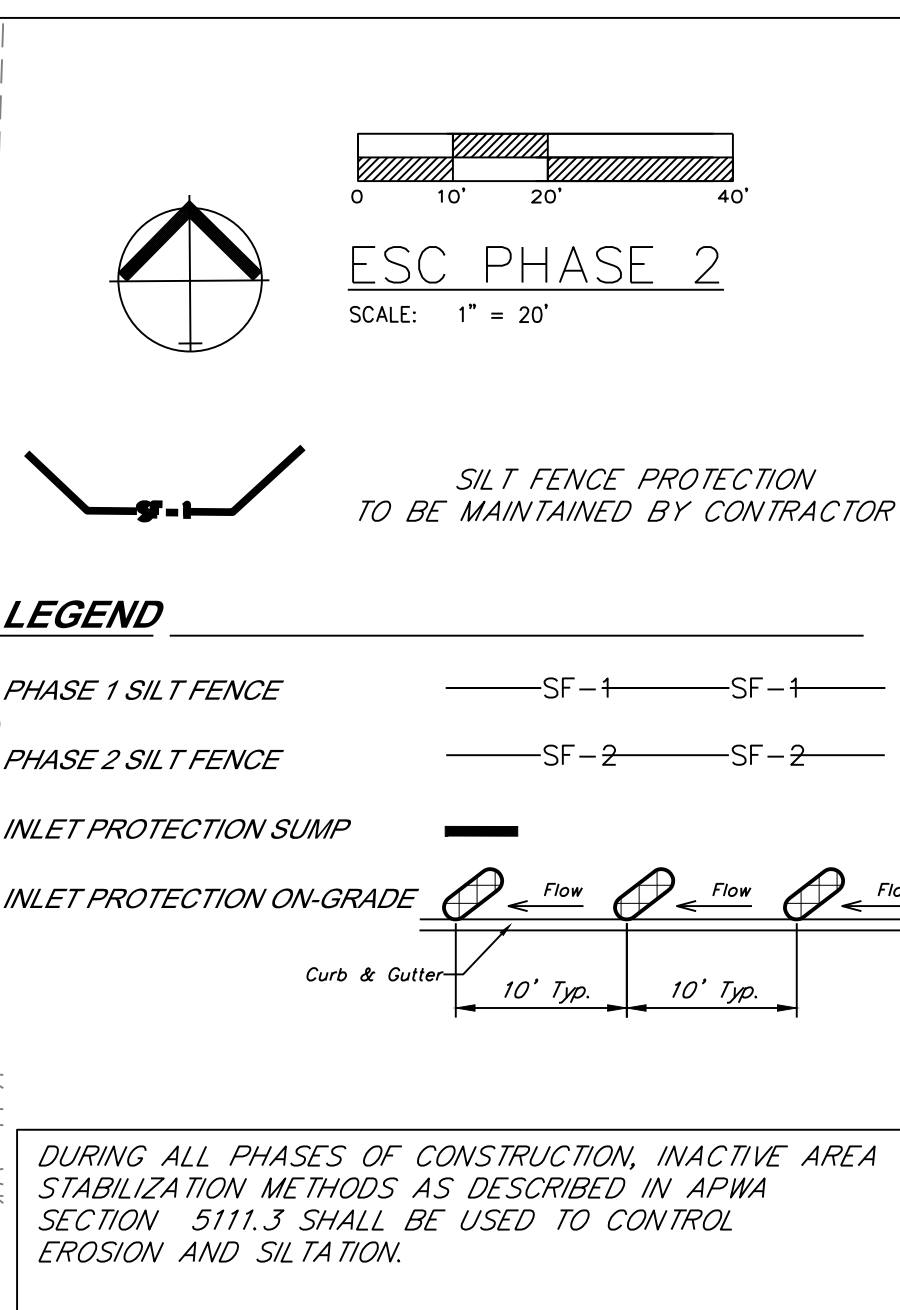
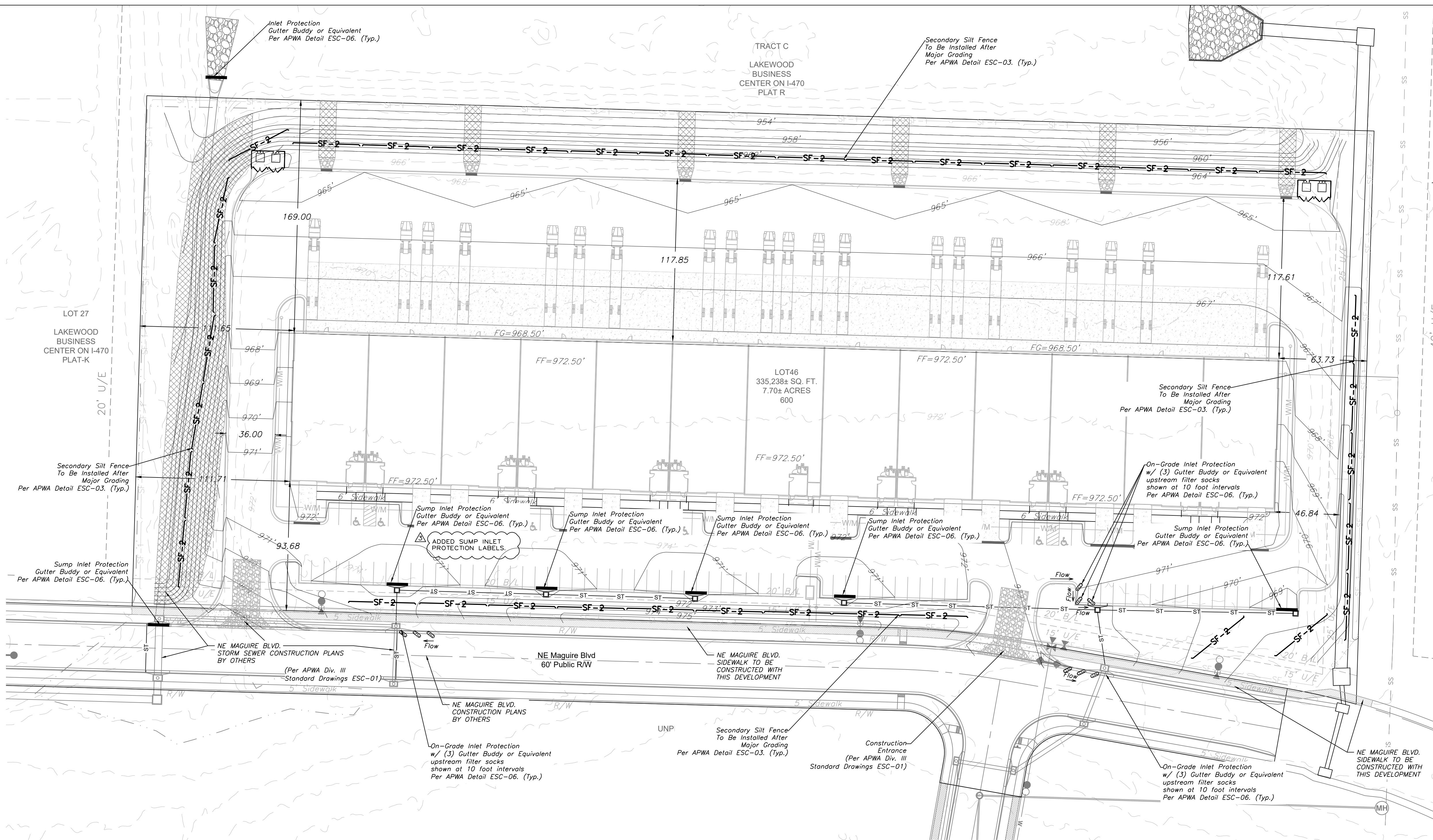
Matthew J. Schlicht  
MO PE 2006019708  
KS PE 19071  
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#### EROSION CONTROL DESCRIPTION:

- 1) SILT FENCE SHALL BE PLACED AT THE PERIMETER OF THE GRADING AND AT INTERMEDIATE AREAS THROUGHOUT THE SITE AS SHOWN ON THE PLAN. INLET SEDIMENT TRAPS SHALL BE PLACED SURROUNDING ALL STORM INLETS
- 2) INSTALL TEMPORARY CONSTRUCTION ENTRANCE AS SHOWN ON PLAN

#### EROSION CONTROL PROCEDURE:

- 1) SILT FENCE AND TEMPORARY CONSTRUCTION ENTRANCE SHALL BE INSTALLED AT THE PERIMETER OF THE GRADED AREAS PRIOR TO BEGINNING OF CLEARING OR DEMOLITION OPERATIONS. THE CONTRACTOR SHALL INSTALL SILT FENCE AS SHOWN ON PLANS AS GRADING PROGRESSES.

#### TEMPORARY CONSTRUCTION ENTRANCE NOTES:

- INSTALLATION**
  - 1) AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC STREETS. IF POSSIBLE, LOCATE WHERE PERMANENT ROADS WILL EVENTUALLY BE CONSTRUCTED
  - 2) REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
  - 3) IF SLOPE TOWARDS THE PUBLIC ROAD EXCEED 2%, CONSTRUCT A 6 TO 8 INCH HIGH RIDGE WITH 3H : 1V SIDE SLOPES ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE EDGE OF THE PUBLIC ROAD TO DIVERT RUNOFF AWAY FROM IT.
  - 4) INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES ALONG PUBLIC ROADS
  - 5) PLACE STONE TO DIMENSIONS AND GRADES AS SHOWN ON PLANS. LEAVE SURFACE SMOOTH AND SLOPED FOR DRAINAGE
  - 6) DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE
  - 7) IF WET CONDITIONS ARE ANTICIPATED PLACE GEOTEXTILE FABRIC ON THE GRADED FOUNDATION TO IMPROVE STABILITY
- TROUBLESHOOTING**
  - 1) CONSULT WITH A QUALIFIED DESIGN PROFESSIONAL IF ANY OF THE FOLLOWING OCCUR:
    - INADEQUATE RUNOFF CONTROLS TO THE EXTENT THAT SEDIMENT WASHES ONTO PUBLIC ROADS
    - INSTALL DIVERSIONS OR OTHER RUNOFF CONTROL MEASURES
    - SMALL STONE, THIN PAD, OR ABSENCE OF GEOTEXTILE FABRIC RESULTS IN RUTS AND MUDDY CONDITIONS AS STONE IS PRESSED INTO SOIL - INCREASE STONE SIZE OR PAD THICKNESS OR ADD GEOTEXTILE FABRIC
    - PAD TOO SHORT FOR HEAVY CONSTRUCTION TRAFFIC - EXTEND PAD BEYOND THE MINIMUM 50 FOOT LENGTH AS NECESSARY
- INSPECTION AND MAINTENANCE**
  - 1) INSPECT STONE PAD AND SEDIMENT DISPOSAL AREA WEEKLY AND AFTER ANY RAIN EVENT
  - 2) RESHAPE PAD AS NEEDED FOR PROPER DRAINAGE AND RUNOFF CONTROL
  - 3) TOP DRESS WITH CLEAN 2 AND 3 INCH STONE AS NEEDED
  - 4) IMMEDIATELY REMOVE MUD OR SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADWAY. REPAIR ANY BROKEN ROAD PAVEMENT IMMEDIATELY
  - 5) REMOVE ALL TEMPORARY ROAD MATERIALS FROM AREAS WHERE PERMANENT VEGETATION WILL BE ESTABLISHED

#### MAINTENANCE:

- TO MAINTAIN THE EROSION AND SEDIMENT CONTROLS, THE FOLLOWING PROCEDURES WILL BE PERFORMED:
- SEDIMENT CAPTURE DEVICES:** SEDIMENT WILL BE REMOVED FROM THE UPSTREAM OR UPSLOPE SIDE OF THE FILTER FABRIC FENCES, WHEN THE DEPTH OF ACCUMULATED SEDIMENT REACHES ABOUT ONE-THIRD THE HEIGHT OF THE STRUCTURE.
- STORM SEWER INLETS:** ANY SEDIMENT IN THE STORM SEWER INLETS WILL BE REMOVED AND DISPOSED OF PROPERLY.
- TEMPORARY CONTROLS:** ALL TEMPORARY CONTROLS WILL BE REMOVED AFTER THE DISTURBED AREAS HAVE BEEN STABILIZED.

#### INSPECTION PROCEDURES:

INSPECTIONS WILL BE DONE BY THE RESPONSIBLE PERSON(S) AT LEAST ONCE EVERY WEEK AND WITHIN 24 HOURS EACH STORM EVENT PRODUCING ANY AMOUNT OF RAINFALL. AREAS THAT HAVE BEEN RESEEDED WILL BE INSPECTED REGULARLY AFTER SEED GERMINATION TO ENSURE COMPLETE COVERAGE OF EXPOSED AREAS. DISTURBED AREAS THAT HAVE NOT BEEN FINALLY STABILIZED SHALL HAVE ALL POLLUTION CONTROL MEASURES INSPECTED FOR PROPER INSTALLATION, OPERATION AND MAINTENANCE. LOCATIONS WHERE STORM WATER LEAVES THE SITE SHALL BE INSPECTED FOR EVIDENCE OF EROSION OR SEDIMENT DEPOSITION. ANY DEFICIENCIES SHALL BE NOTED IN A REPORT OF THE INSPECTION AND CORRECTED WITHIN SEVEN CALENDAR DAYS OF THE INSPECTION. THE PERMITTEE SHALL PROMPTLY NOTIFY THE SITE CONTRACTORS RESPONSIBLE FOR OPERATION AND MAINTENANCE OF POLLUTION CONTROL DEVICES OF DEFICIENCIES.

IF THE EXISTING GROUND COVER IS NATURAL GRASS, DISTURBED AREAS SHALL BE TEMPORARILY SEEDED WITH WHEAT/RYE AT A RATE OF 1.5 POUNDS PER 1000 SQUARE FEET. PERMANENT SEEDED AREAS SHALL BE SEEDING SHALL CONSIST OF 80% IN THREE EQUAL PARTS OF THIN BLADE, TURF-TYPE, TALL FESCUE AND 10% BLUEGRASS SEED AT A RATE OF 10 POUNDS PER 1000 SQUARE FEET. BOTH TEMPORARY AND PERMANENT SEEDED AREAS SHALL BE MULCHED AND WATERED TO MAINTAIN THE PROPER MOISTURE LEVEL OF THE SOIL TO ESTABLISH GRASS. NEW GRASS SHALL BE WATERED AND MAINTAINED UNTIL IT REACHES A HEIGHT OF 3 INCHES. ANY BARE AREAS SHALL BE RESEED.

ALL EROSION CONTROL DEVICES SHALL BE REMOVED BY GENERAL CONTRACTOR AFTER SITE STABILIZATION IS COMPLETE AND APPROVED BY ENGINEER.

THE DEVELOPER WILL DESIGNATE A QUALIFIED PERSON OR PERSONS TO PERFORM THE FOLLOWING INSPECTIONS:

**STABILIZATION MEASURES:** DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION WILL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM. AFTER A PORTION OF THE SITE IS FINALLY STABILIZED, INSPECTIONS WILL BE CONDUCTED AT LEAST ONCE EVERY MONTH THROUGHOUT THE LIFE OF THE PROJECT. CONTRACTOR CAN CONTACT ENGINEERING SOLUTIONS FOR COPIES OF THE INSPECTION FORM TO BE USED FOR STABILIZATION MEASURES.

**STRUCTURAL CONTROLS:** FILTER FABRIC FENCES AND ALL OTHER EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN WILL BE INSPECTED REGULARLY FOR PROPER POSITIONING, ANCHORING AND EFFECTIVENESS IN TRAPPING SEDIMENTS. SEDIMENT WILL BE REMOVED FROM THE UPSTREAM OR UPSLOPE SIDE OF THE FILTER FABRIC. CONTRACTOR CAN CONTACT ENGINEERING SOLUTIONS FOR COPIES OF THE INSPECTION FORM TO BE USED FOR STABILIZATION MEASURES.

**DISCHARGE POINTS:** DISCHARGE POINTS OR LOCATIONS WILL BE INSPECTED TO DETERMINE WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT AMOUNTS OF POLLUTANTS FROM ENTERING RECEIVING WATERS.

**CONSTRUCTION ENTRANCE:** LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE WILL BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING.

A LOG OF EACH INSPECTION SHALL BE KEPT. THE INSPECTION REPORT IS TO INCLUDE THE FOLLOWING MINIMUM INFORMATION: INSPECTOR'S NAME, DATE OF INSPECTION, OBSERVATIONS RELATIVE TO THE EFFECTIVENESS OF THE POLLUTION CONTROL DEVICES, ACTIONS TAKEN OR NECESSARY TO CORRECT DEFICIENCIES, AND LISTING OF AREAS WHERE LAND DISTURBANCE OPERATIONS HAVE PERMANENTLY OR TEMPORARILY STOPPED. THE INSPECTION REPORT SHALL BE SIGNED BY THE PERMITTEE OR BY THE PERSON PERFORMING THE INSPECTION IF DULY AUTHORIZED TO DO SO.

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PLAT 5, LEMO

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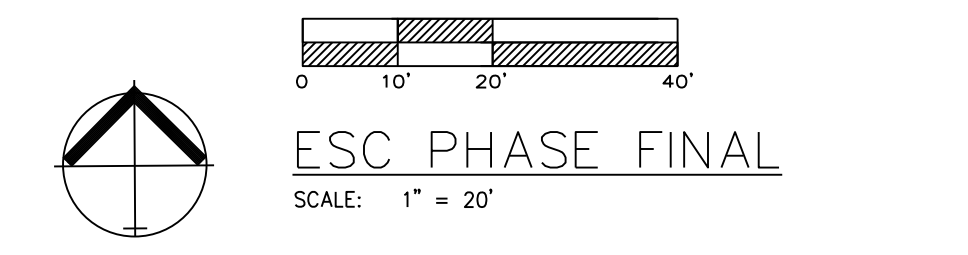
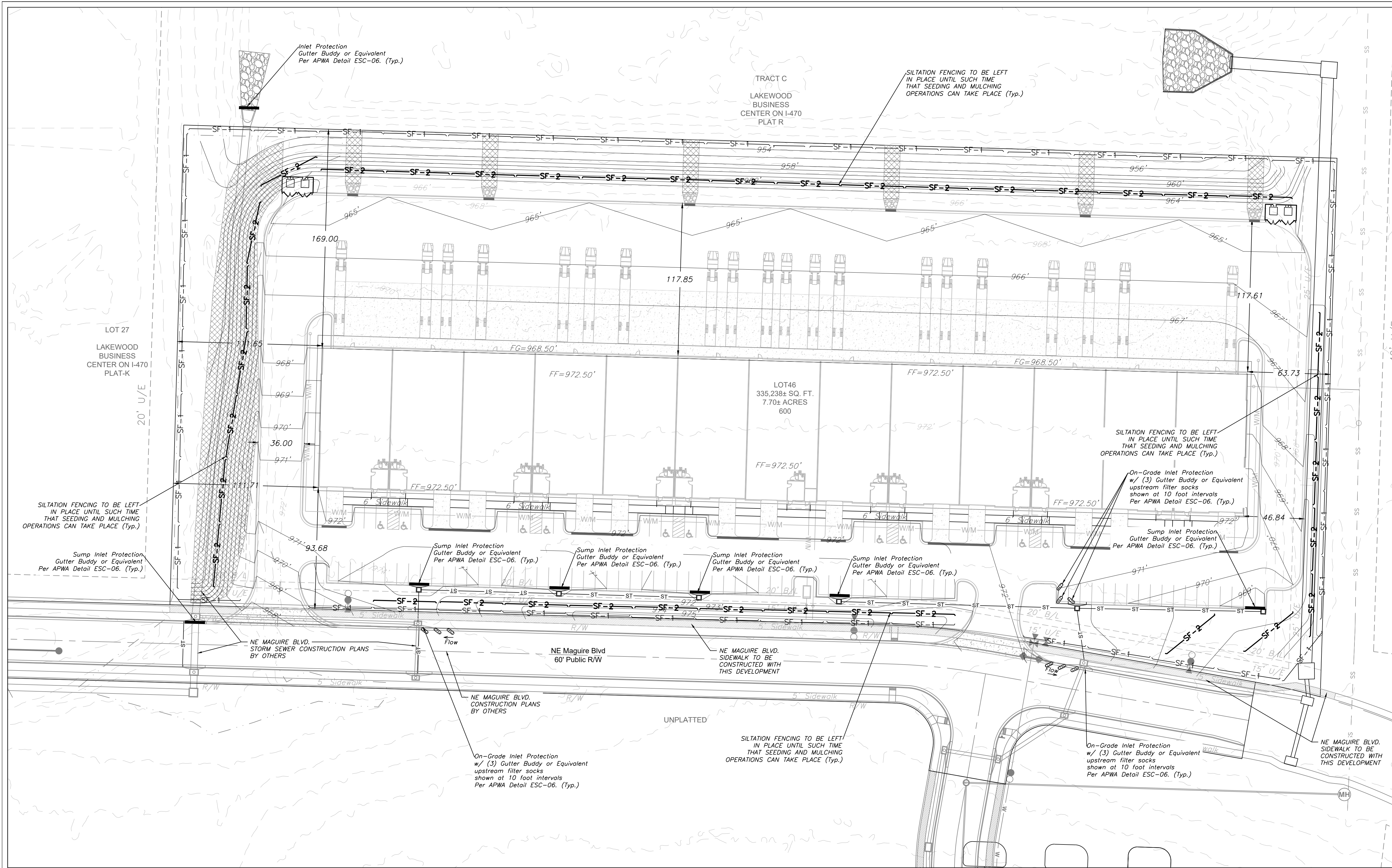
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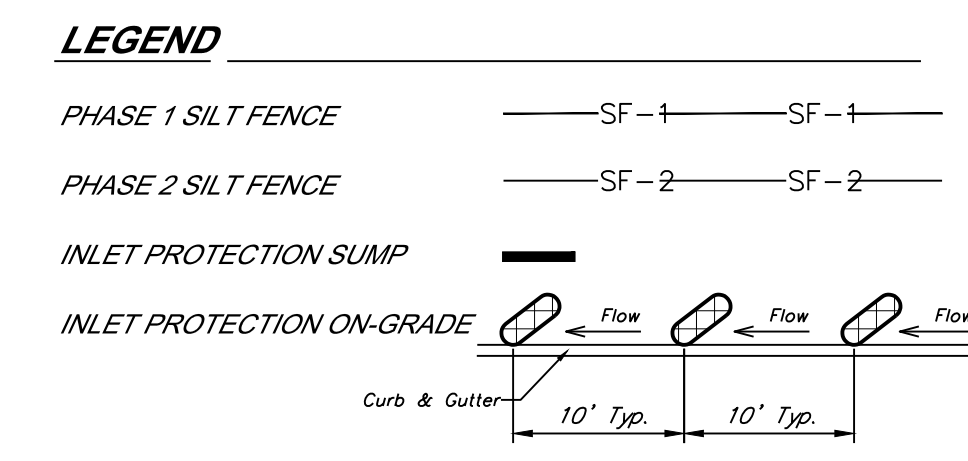
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PLAT 5, LEMO





**ESC PHASE FINAL**  
SCALE: 1" = 20'



**DURING ALL PHASES OF CONSTRUCTION, INACTIVE AREA STABILIZATION METHODS AS DESCRIBED IN APWA SECTION 5111.3 SHALL BE USED TO CONTROL EROSION AND SILTATION.**

**NOTES:** The Land Disturbance Plans indicates the final placement of erosion control devices. The contractor(s) may proceed with construction prior to the final placement of these devices by providing additional devices to control erosion on their items of work. These devices shall be maintained until the final devices are in place.

**SEED AND MULCH NOTES:**

All areas disturbed by construction activities shall be seeded and mulched. Seeding shall be done before the proposed seedbed becomes eroded, crusted over, or dried out and shall not be done when the ground is frozen, or covered with snow. The seed shall comply with the requirements of the Missouri Seed Law and the Federal Seed Act. Also, it shall contain no seed of any plant on the Federal Noxious Weed List. Other weed seeds shall not exceed one percent by weight of mix.

**Seed and Fertilizer Rate:**

| Mix                               | lbs. per Acre | lbs. per 1000 sq. ft. |
|-----------------------------------|---------------|-----------------------|
| Mix I - Rye Grass / Blue Grass    | 100           | 100                   |
| Mix II - Tall Fescue / Blue Grass | 195           | 195                   |
| Lime                              | 2000          | 2000                  |
| Fertilizer                        | 800           | 800                   |

to 1200 lbs per Acre (25 lbs per 1000 sq. ft.)

During the dates December 15th through May 31 ALL lime fertilizer, seed and mulch shall be applied to finished slopes of disturbed areas. During the months of June, July, October and November 1st through December 15th, lime fertilizer, seed and mulch shall be applied at the following rates:

- Lime - 100% of specified quantity
- Fertilizer - 75% of the specified quantity
- Seed - 50% of the specified quantity
- Mulch - 100% of the specified quantity

Mulch shall be Vegetative type, cereal straw from stalks of oats, rye, or barley, or approved equal. The straw shall be free of prohibited weed seed and relatively free of all other noxious and undesirable seed. Mulch shall be applied at the rate of 2 tons per acre, (70 to 90 lbs per 1000 sq. ft.). Mulch shall be embedded by a mulch anchoring tool or disk type roller having flat serrated disks spaced not more than 10 inches apart and cleaning scrapers shall be provided.

**ONCE SITE IS 90% VEGETATED ALL ESC DEVICES SHALL BE REMOVED AND ANY DISTURBED AREAS SHALL BE RESTORED**

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Project: LAKEWOOD BUSINESS CENTER PLAT 6, L&MO  
Issue Date: May 5, 2023

ESC PHASE 3 - Final Restoration Plan  
Construction Plans for:  
Lakewood Business Park - Lot 46  
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI  
MATTHEW J. SCHLICHT  
LAND SURVEYOR  
PROFESSIONAL ENGINEER

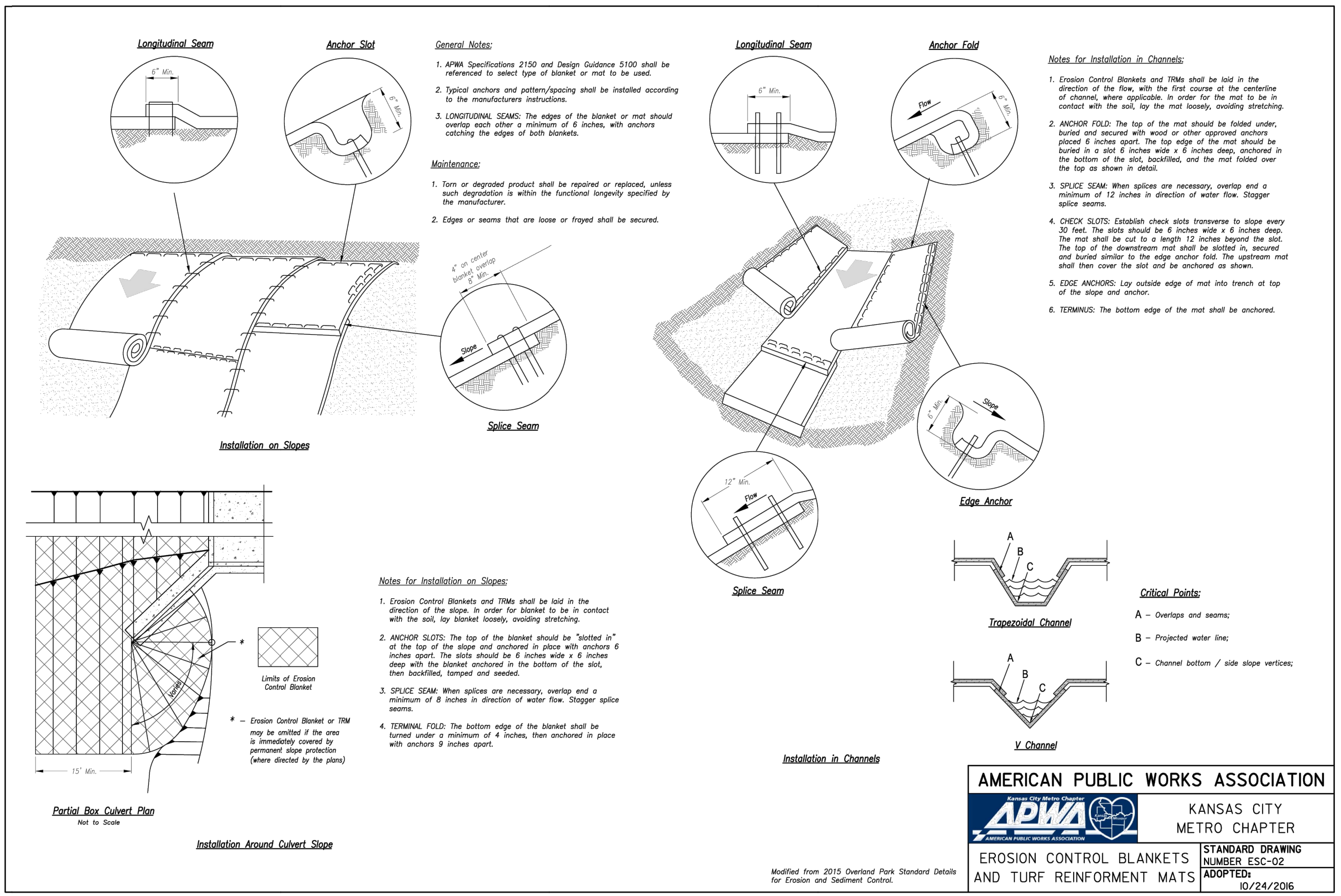
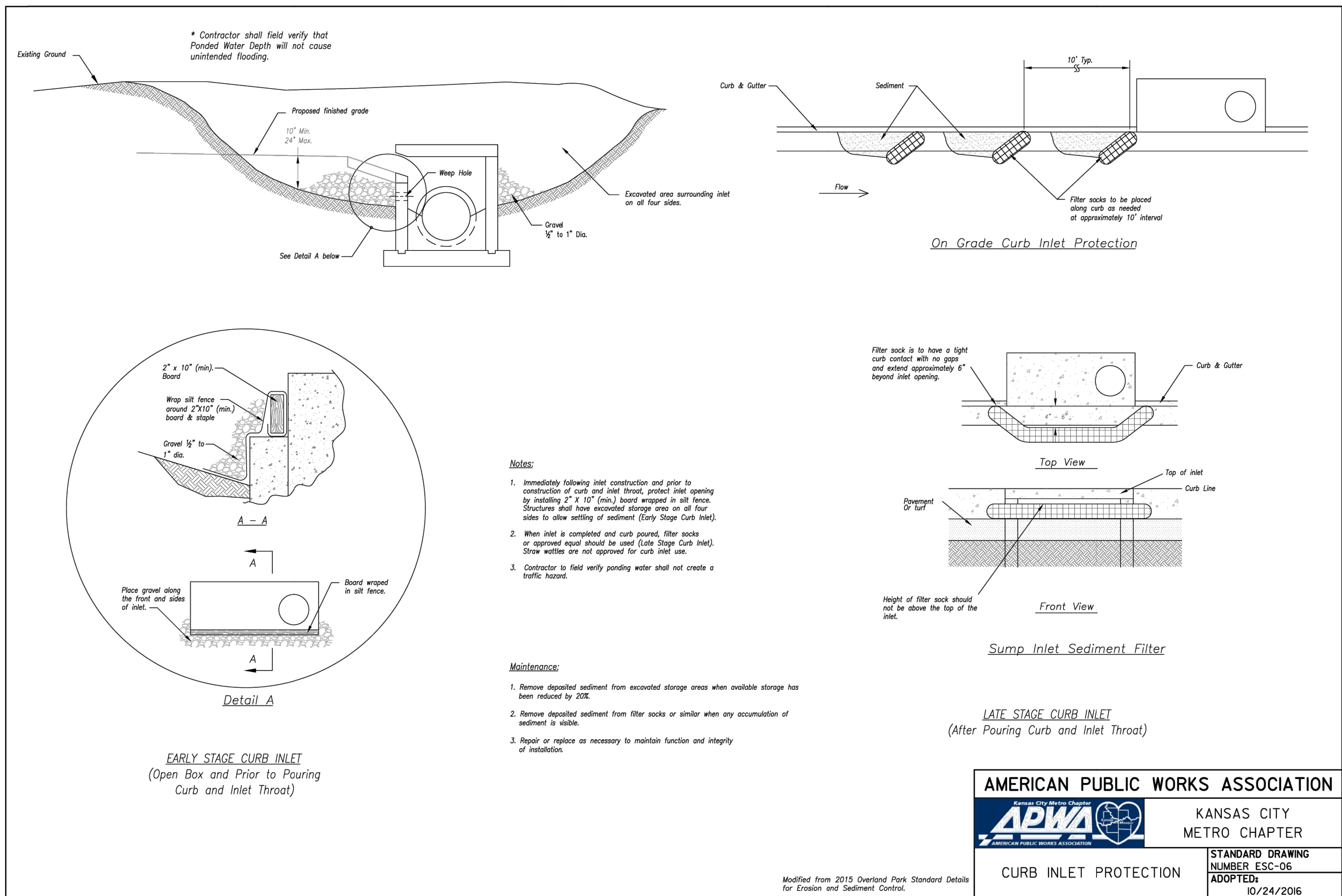
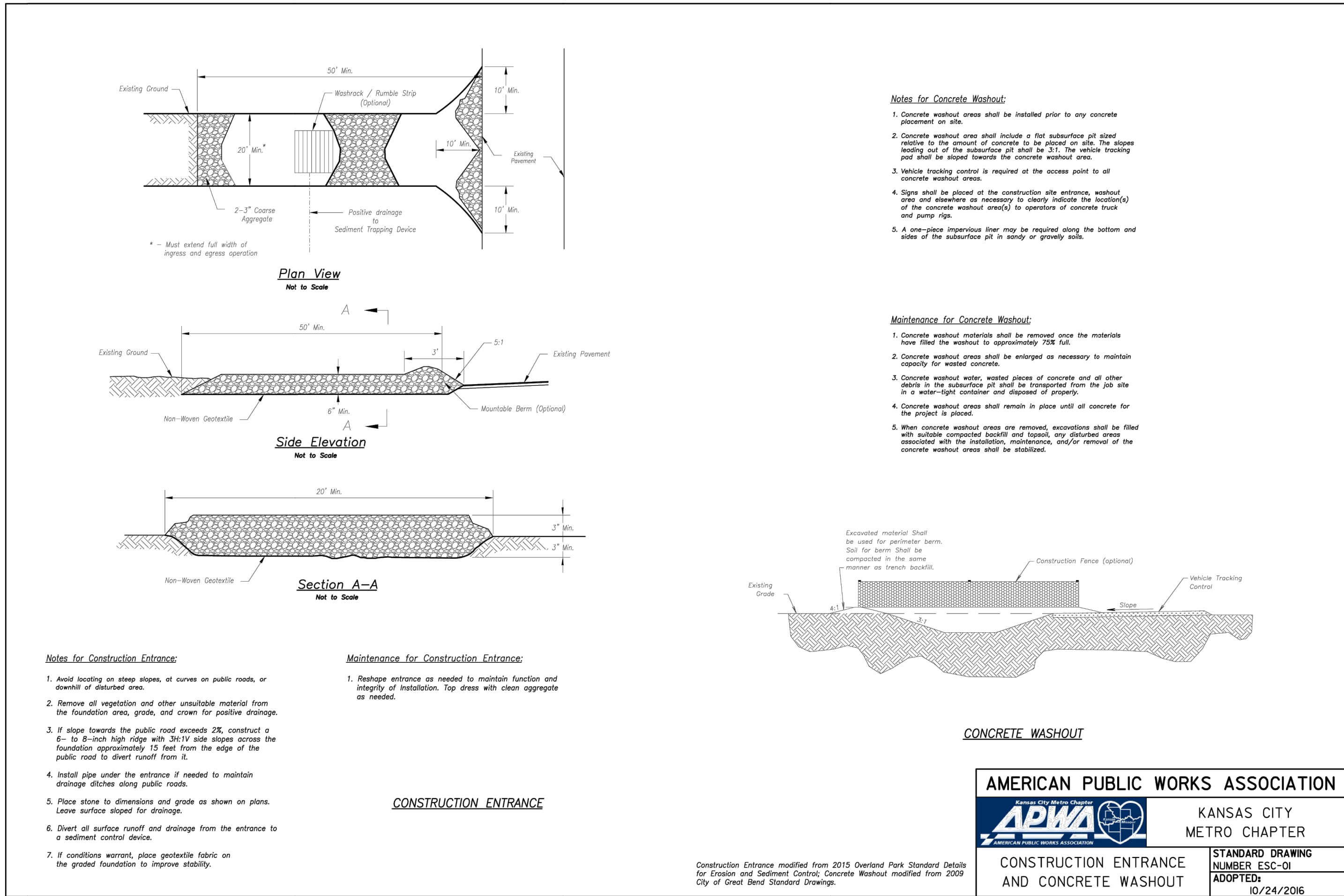
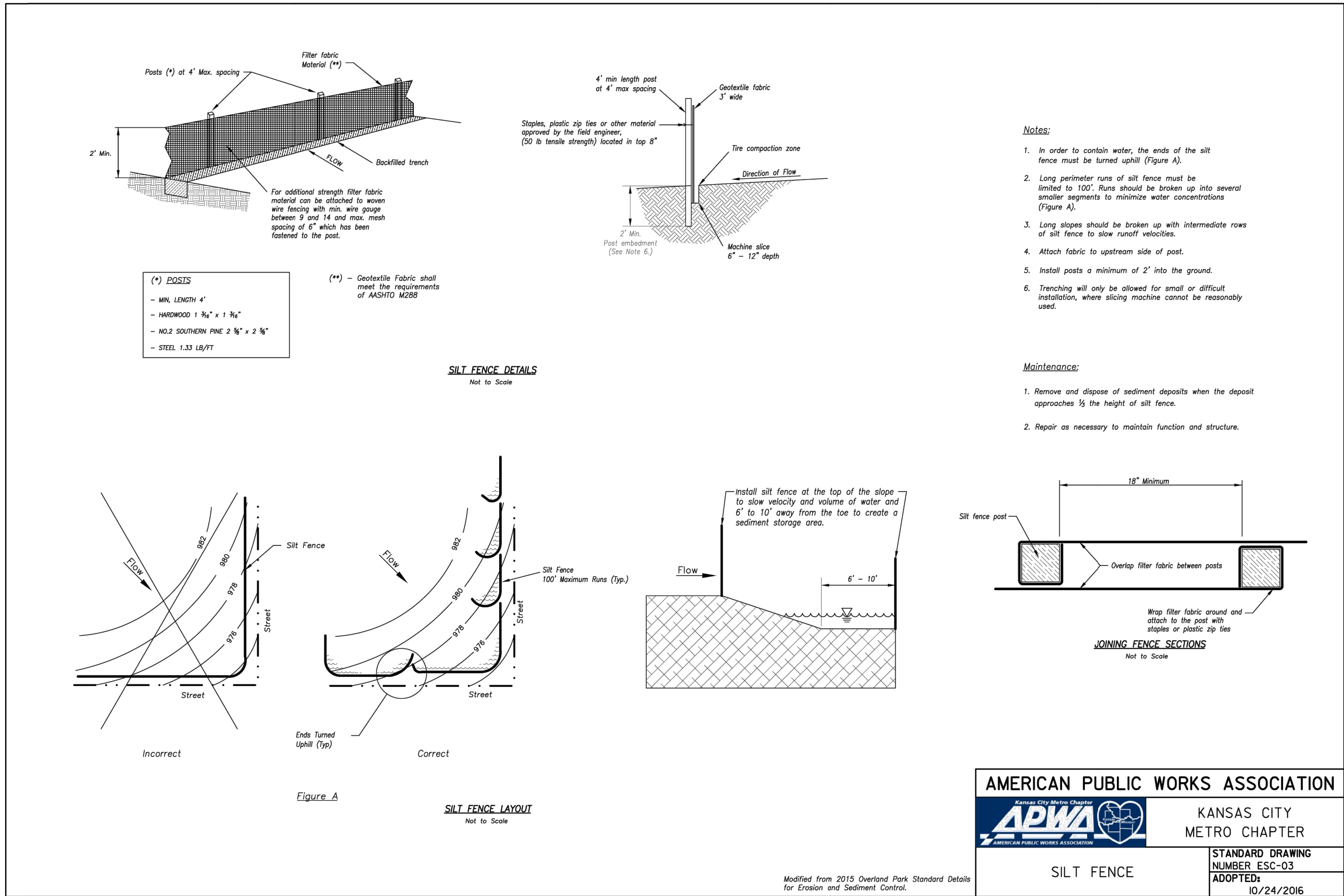
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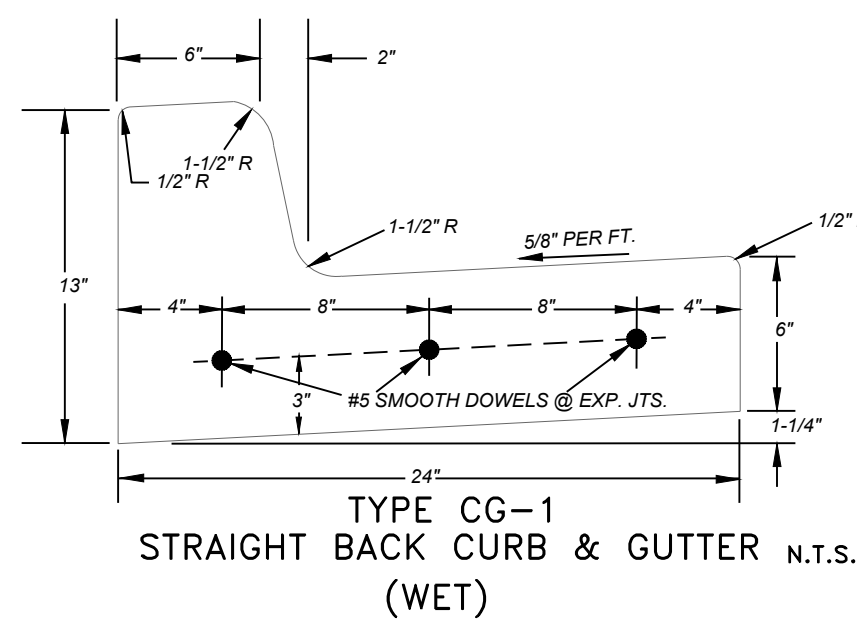
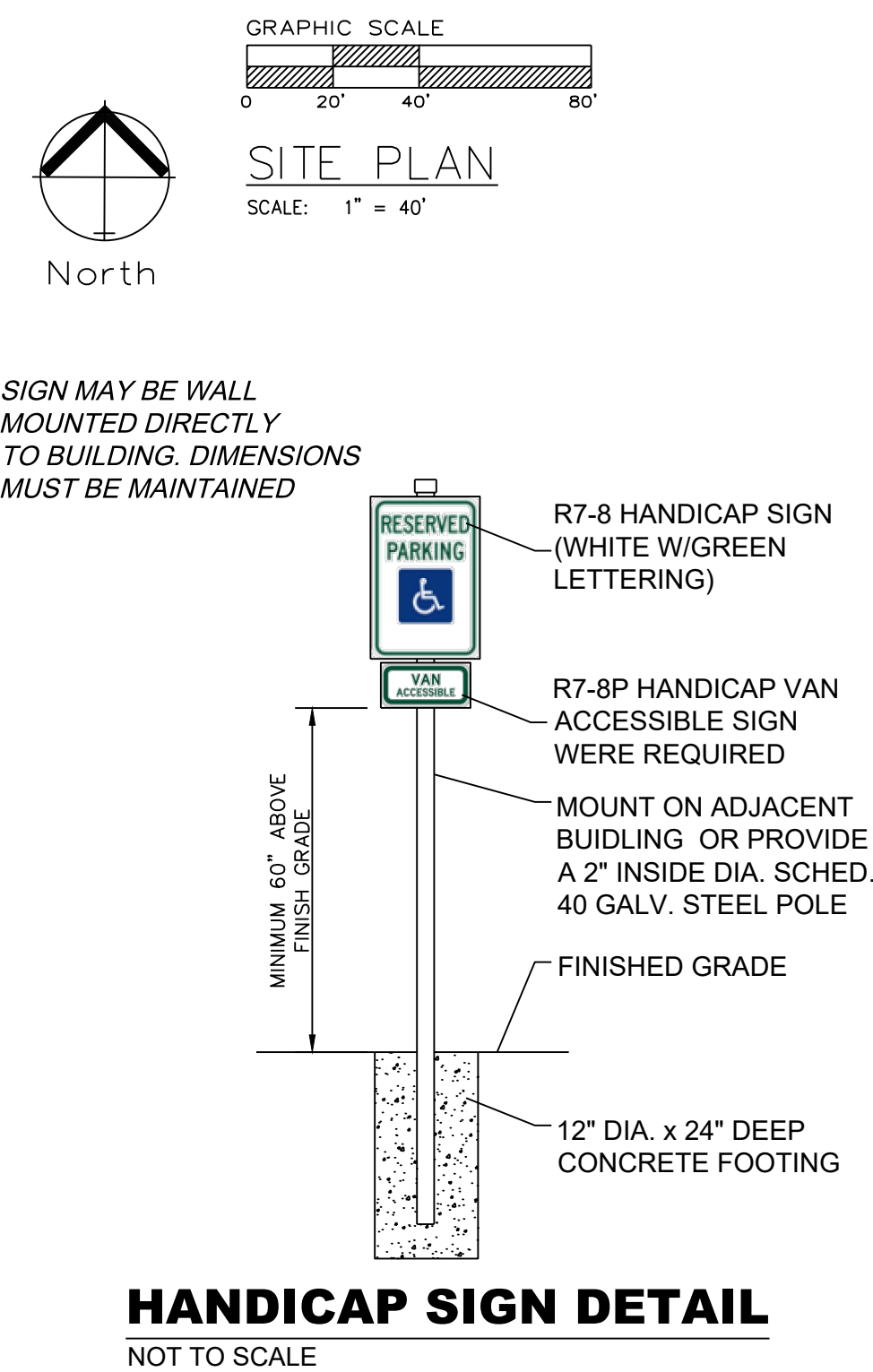
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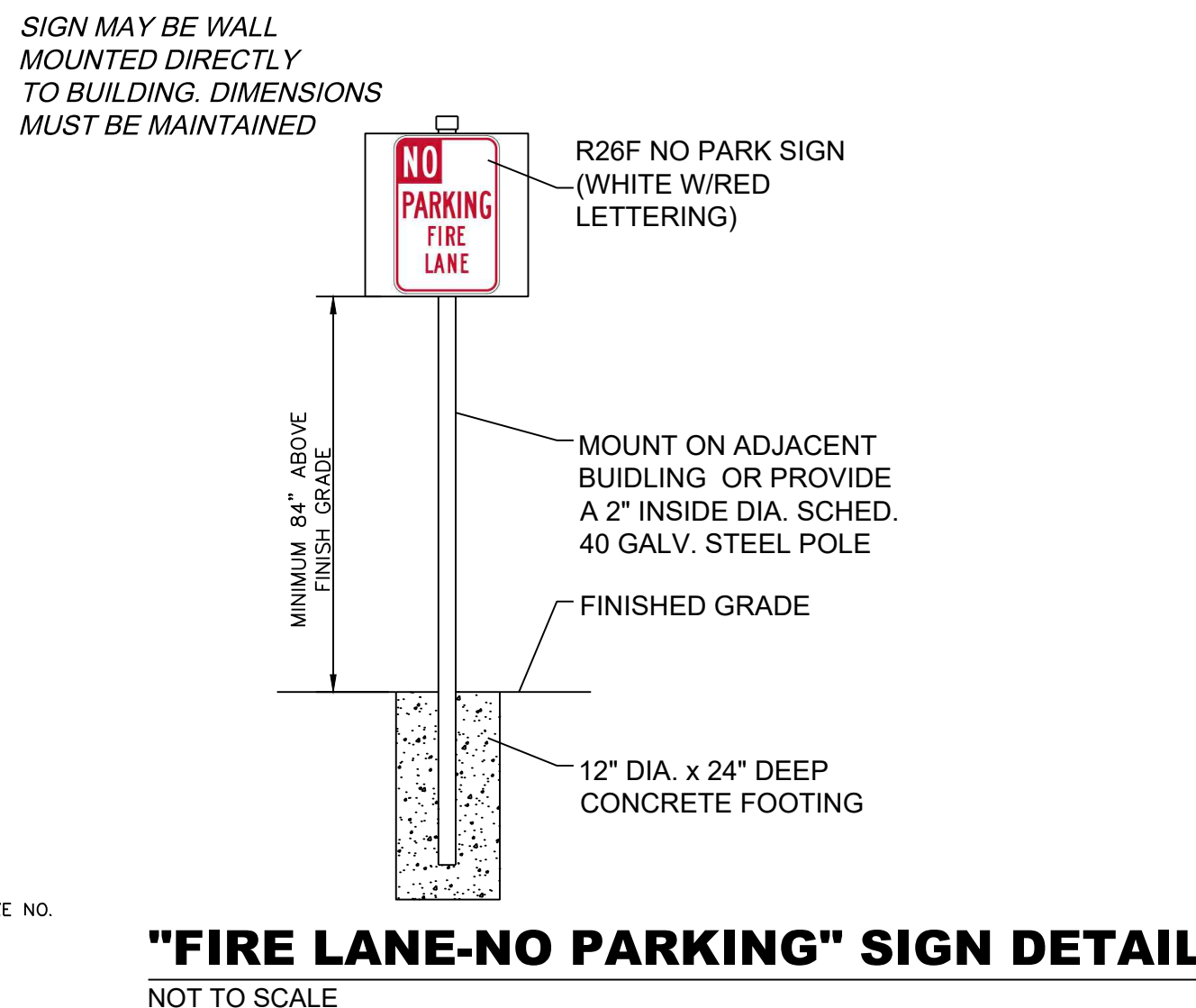
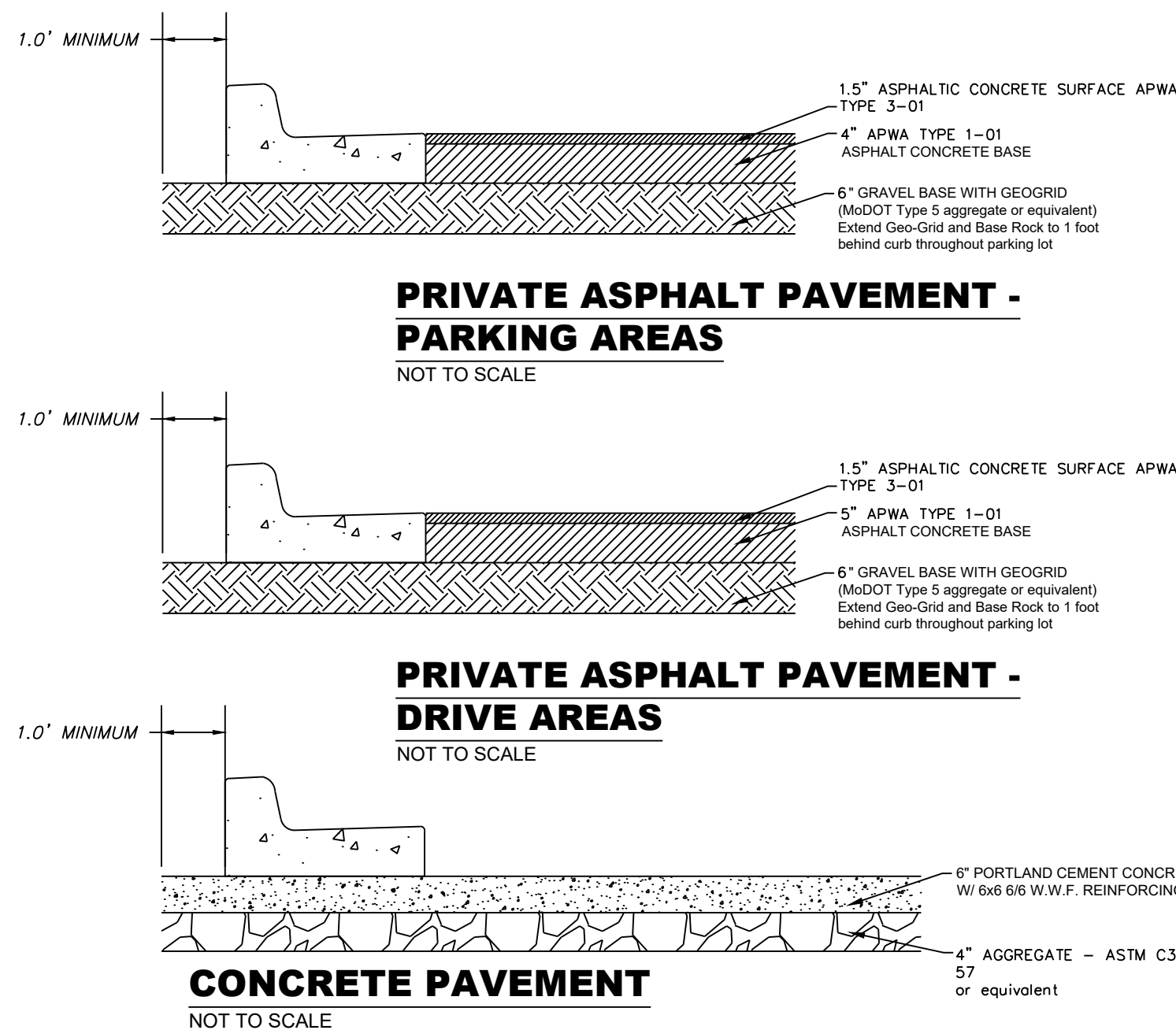






Notes:

- Trash enclosures shall be constructed of masonry walls or steel architecturally designed walls with either a solid steel opaque gate painted to be compatible with the color of the masonry or steel walls and building it is to serve or a steel framed semi-opaque gate with a screen mesh material approved by the Director that provides an appropriate visual barrier.
- Trash enclosure areas shall be improved with a Portland cement and sand or a Portland cement concrete approach. The length, measured from the enclosure opening, the pad and approach shall be improved with a minimum six inches of full depth unreinforced Portland cement concrete constructed on a sub-grade of four inches of granular base course.



## 1.1 JOINTS

Coordinate joint types, descriptions, and locations with Drawings. Three types of joints and tool edgings have been consolidated in this Article for consistency rather than for strict sequence of installation.

- A. General: Form construction, isolation, and contraction joints and tool edgings true to line with faces perpendicular to surface plane of concrete. Construct transverse joints at right angles to centerline, unless otherwise indicated.
1. When joining existing pavement, place transverse joints to align with previously placed joints, unless otherwise indicated.
- B. Construction Joints: Set construction joints at side and end terminations of pavement and at locations where pavement operations are stopped for more than one-half hour unless pavement terminates at isolation joints.
1. Continue steel reinforcement across construction joints, unless otherwise indicated. Do not continue reinforcement through sides of pavement strips, unless otherwise indicated.

Retain subparagraph below for load-transfer doweled joints. Revise if precoated dowels are required.

2. **Doweled Joints:** Install dowel bars and support assemblies at joints where indicated. Lubricate or asphalt-coat one-half of dowel length to prevent concrete bonding to one side of joint.
- C. **Isolation Joints:** Form isolation joints of preformed joint-filler strips abutting concrete curbs, catch basins, manholes, inlets, structures, walks, other fixed objects, and where indicated.

Expansion joints are types of isolation joints. Revise spacing in first subparagraph below to suit Project or delete if not required.

1. Locate expansion joints at intervals of **50 feet**, unless otherwise indicated.
2. Extend joint fillers full width and depth of joint.
3. Terminate joint filler not less than 1/2 inch or more than 1 inch below finished surface if joint sealant is indicated.
4. Place top of joint filler flush with finished concrete surface if joint sealant is not indicated.
5. Furnish joint fillers in one-piece lengths. Where more than one length is required, lace or clip joint-filler sections together.
6. Protect top edge of joint filler during concrete placement with metal, plastic, or other temporary preformed cap. Remove protective cap after concrete has been placed on both sides of joint.

Edging is included in this Article for its similarity to jointing. Timing of edging after initial floating is critical.

- D. Edging: Tool edges of pavement, gutters, curbs, and joints in concrete after initial floating with an edging tool to a **1/4-inch** radius. Repeat tooling of edges after applying surface finishes. Eliminate tool marks on concrete surfaces.



5 EXTERIOR ELEVATION  
TRASH ENCLOSURE - FRONT ELEVATION

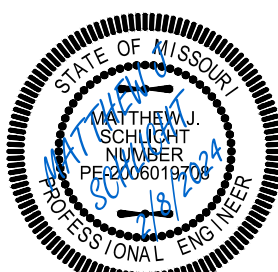
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**Missouri**  
*Engineering 2005002186-D*  
*Surveying 2005008319-D*  
**Kansas**  
*Engineering E-1695*  
*Surveying LS-218*  
**Oklahoma**  
*Engineering 6254*  
**Nebraska**  
*Engineering CA2821*

Lakewood Business Park - Lot 46  
Lee's Summit, Jackson County, Missouri

Project: LAKEWOOD  
BUSINESS CEN  
PLAT S, LSMO

Issue Date:  
May 5, 2023

Site Plan  
Construction Plans for:  
Lakewood Business Park - Lot 46  
Lee's Summit, Jackson County, Missouri



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

## REVISIONS

1 REV. 12/6/2023

2 REV. 1/19/2024

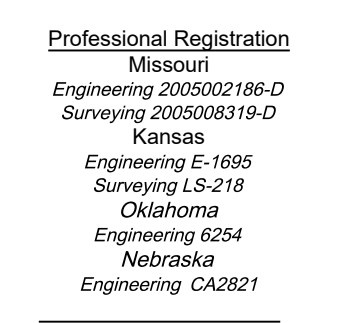
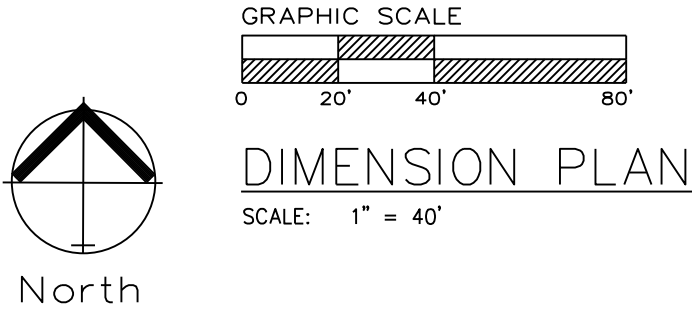
3 REV. 2/8/2024

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C 100

C,100



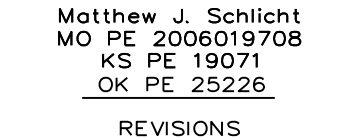


Lakewood Business Park - Lot 46  
Lee's Summit, Jackson County, Missouri

Project: LAKEWOOD  
BUSINESS CENTER  
PLAT S, LSMO

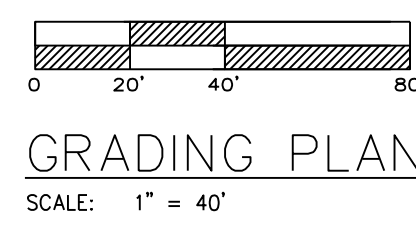
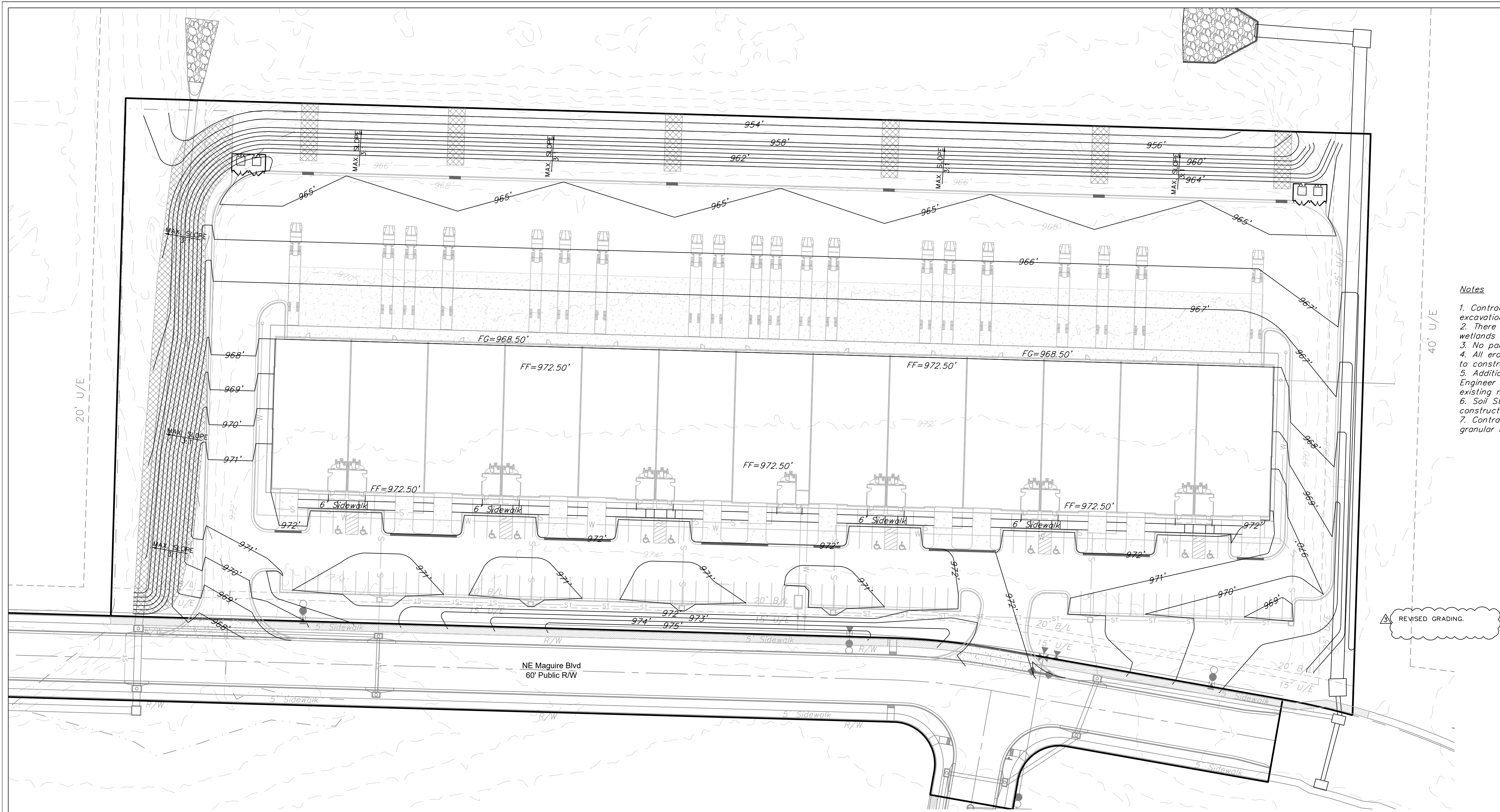
Issue Date: May 5, 2023

Dimension Plan  
Construction Plans for:  
Lakewood Business Park - Lot 46  
Lee's Summit, Jackson County, Missouri



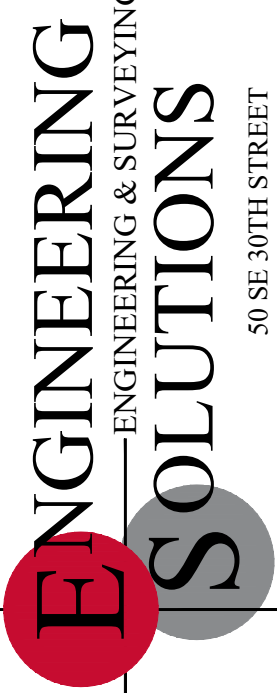
| REVISIONS |                |
|-----------|----------------|
| 1         | REV. 12/6/2023 |
| 2         | REV. 1/19/2024 |
| 3         | REV. 2/8/2024  |





**Notes**

1. Contractor is responsible for verifying all existing utility locations prior to excavation
2. There are no known natural or artificial water storage detention areas, or wetlands in the area designated for construction
3. No part of the project lies within the 100 year flood plain
4. All erosion and sediment control measures need to be implemented prior to construction
5. Additional erosion control may be required by the City Engineer, Design Engineer or Owner at any time problematic areas are noted in the field or existing measures are found to be ineffective
6. Soil Stabilization of disturbed areas shall be completed within 14 days of construction inactivity
7. Contractor responsible for all density testing of roadway subgrade and granular base.

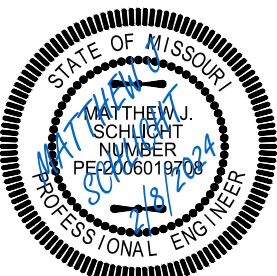


Professional Registration  
Missouri  
Engineering 2005002188-D  
Surveying 2005006519-D  
Kansas  
Engineering E-1695  
Surveying LS-218  
Oklahoma  
Engineering 6254  
Nebraska  
Engineering CA2821

Lakewood Business Park - Lot 46  
Lee's Summit, Jackson County, Missouri

Project: LAKWOOD BUSINESS CENTER  
PLAT 5, LEMO  
Issue Date: May 5, 2023

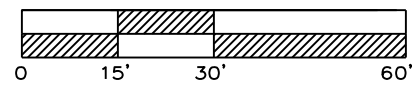
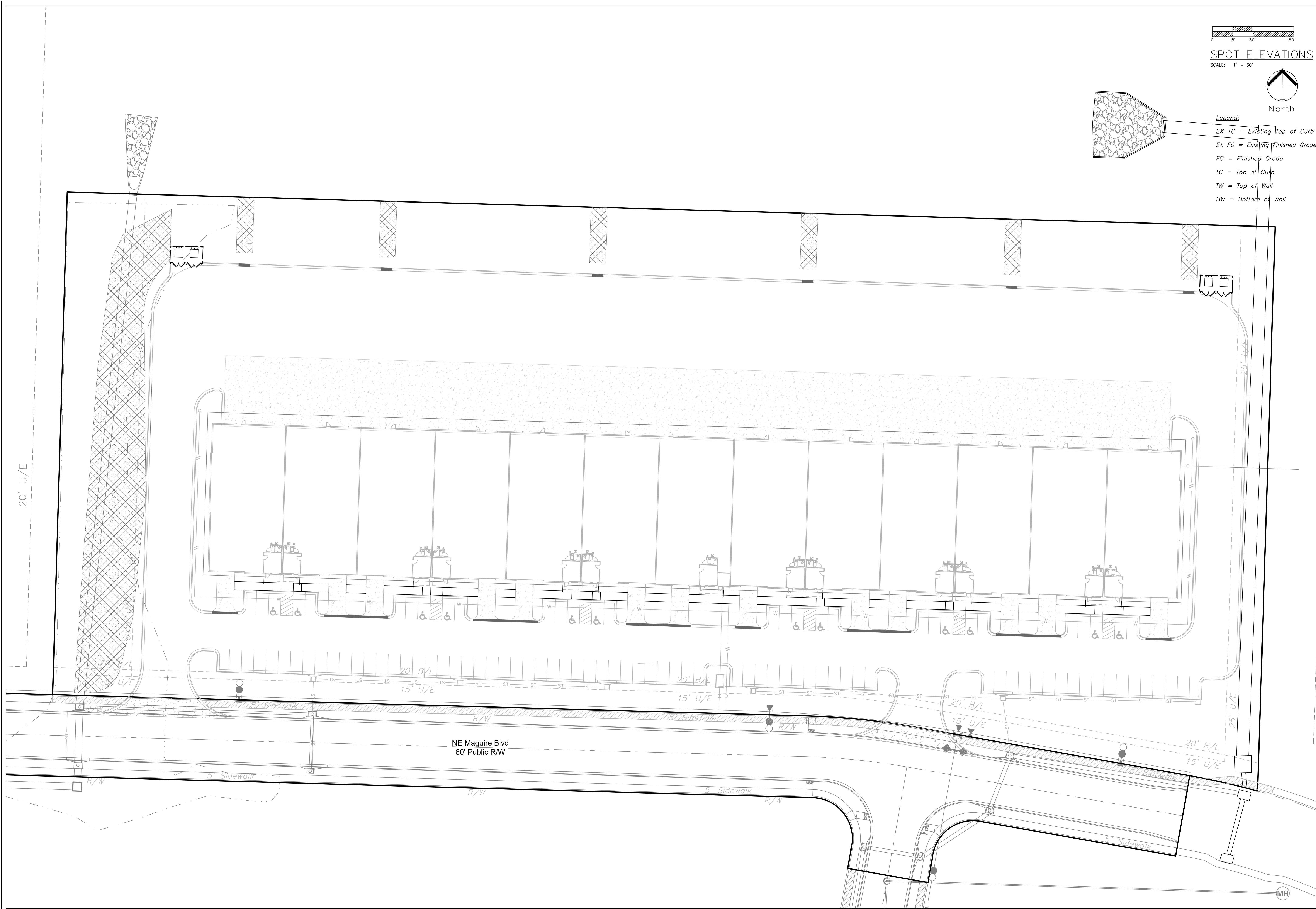
Grading Plan  
Construction Plans for:  
Lakewood Business Park - Lot 46  
Lee's Summit, Jackson County, Missouri



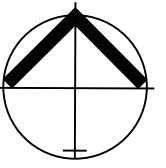
Matthew J. Schlicht  
MO PE 2006019708  
KS PE 19071  
OK PE 25526

| REVISIONS      |  |
|----------------|--|
| REV. 12/6/2023 |  |
| REV. 1/19/2024 |  |
| REV. 2/8/2024  |  |

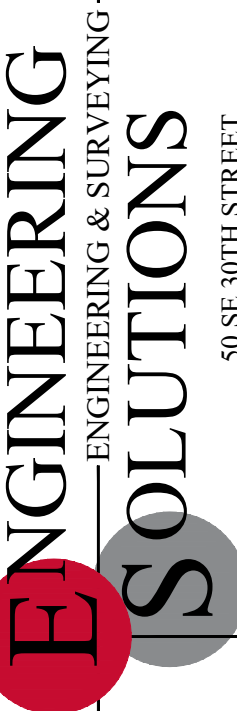
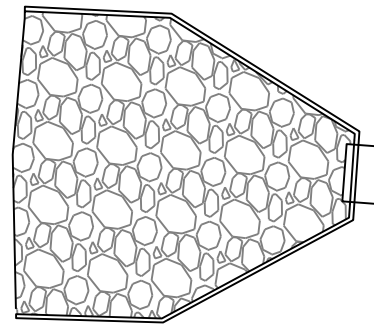




SPOT ELEVATIONS  
SCALE: 1" = 30'



- Legend:
- EX TC = Existing Top of Curb
  - EX FG = Existing Finished Grade
  - FG = Finished Grade
  - TC = Top of Curb
  - TW = Top of Wall
  - BW = Bottom of Wall

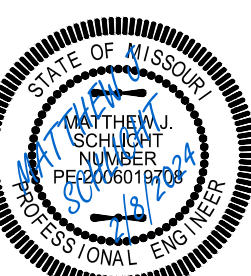


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Kansas  
Engineering E-1695  
Surveying LS-218  
Oklahoma  
Engineering 6254  
Nebraska  
Engineering CA2821

Lakewood Business Park - Lot 46  
Lee's Summit, Jackson County, Missouri

Project: LAKWOOD BUSINESS CENTER  
PLAT 5, LEMO  
Issue Date: May 5, 2023

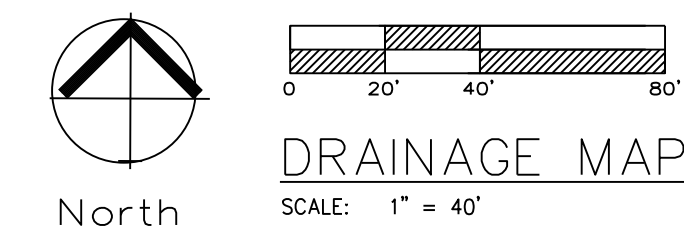
Spot Elevations  
Construction Plans for:  
Lakewood Business Park - Lot 46  
Lee's Summit, Jackson County, Missouri



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

| REVISIONS      |  |
|----------------|--|
| REV. 12/6/2023 |  |
| REV. 1/19/2024 |  |
| REV. 2/8/2024  |  |





ENGINEERING  
—ENGINEERING & SURVEYING—  
SOLUTIONS

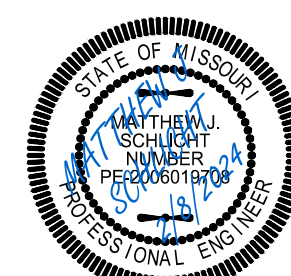
**Professional Registration**  
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*Engineering 2005002186-D*  
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Kansas  
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*Surveying LS-218*  
Oklahoma  
*Engineering 6254*  
Nebraska  
*Engineering CA2821*

Lakewood Business Park - Lot 46  
Lee's Summit, Jackson County, Missouri

Project: LAKEWOOD  
BUSINESS CENTER  
PLAT S, LSMO

Issue Date: May 5, 2023

Drainage Map  
Construction Plans for:  
Lakewood Business Park - Lot 46  
Lee's Summit, Jackson County, Missouri



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

REVISIONS

1 REV. 12/6/2021

REV 1/19/2024

REV 3 / 8 / 2024

REV. 2/8/2024

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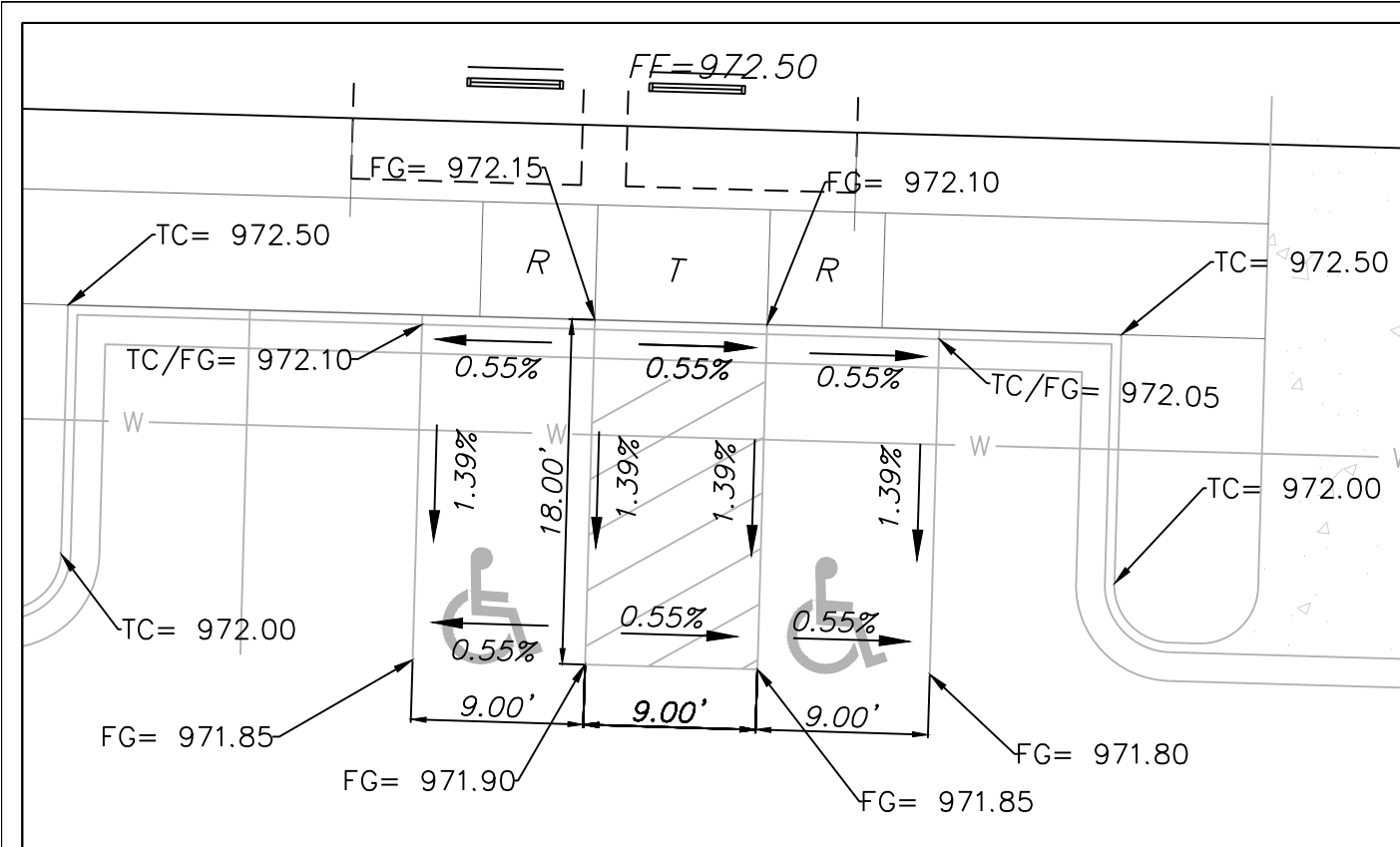
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C.202

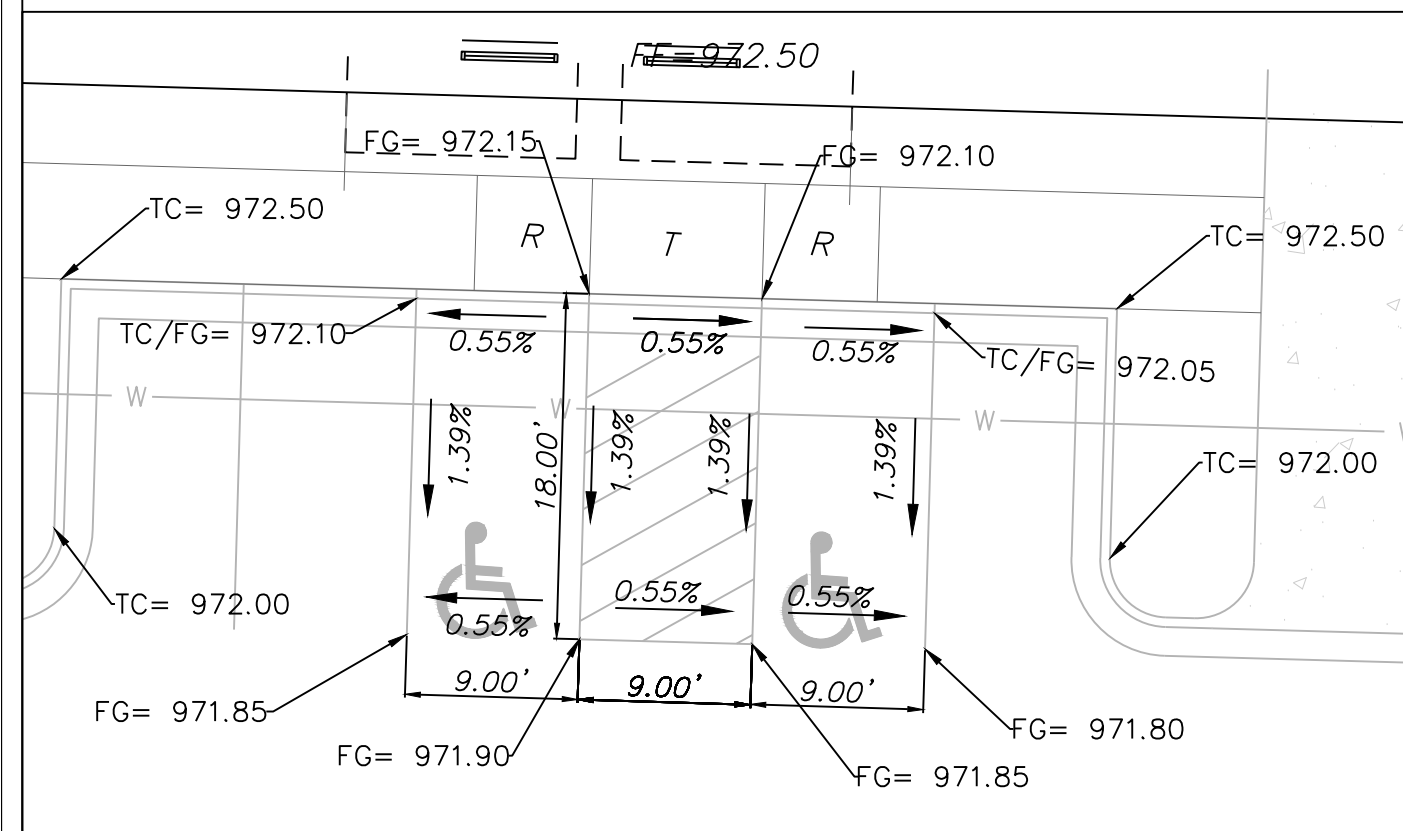
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| APWA STORM DRAINAGE "TC" COMPUTATIONS FOR: LAKEWOOD INDUSTRIAL (LSMO) |              |             |               |         |         |                                                                                                  |                                               |       |       |        |     |   |       |       |                                                |           |                |            |         |         |         |                |                                                             |                |         |              |                        |                        |                |                 |          |              |                 |                      |                      |             |  |  |  |  |
|-----------------------------------------------------------------------|--------------|-------------|---------------|---------|---------|--------------------------------------------------------------------------------------------------|-----------------------------------------------|-------|-------|--------|-----|---|-------|-------|------------------------------------------------|-----------|----------------|------------|---------|---------|---------|----------------|-------------------------------------------------------------|----------------|---------|--------------|------------------------|------------------------|----------------|-----------------|----------|--------------|-----------------|----------------------|----------------------|-------------|--|--|--|--|
| AREA ID<br>POST                                                       | TOTAL SQ.FT. | TOTAL ACRES | WTRSHD LENGTH | UP ELEV | DN ELEV | <div>yellow areas are self computing<br/>overwrite if necessary</div> <div>TOTAL WATERSHED</div> | Surface types:<br>SURFACE CODES<br>"C" Values |       |       |        |     |   |       |       | Asph/ConcBus/Com                               |           | Dirt           | Grass/Park | Lake    | MultFam | SnglFam | Undev          | Other                                                       | TC COMPUTATION |         |              |                        |                        | Intensity 10 i | Intensity 100 i | CFS 10 Q | K 1.25 CFS Q | AREA ID<br>POST |                      |                      |             |  |  |  |  |
|                                                                       |              |             |               |         |         |                                                                                                  |                                               |       |       |        |     |   |       |       | A                                              | B         | D              | G          | L       | M       | S       | Z              |                                                             |                |         |              |                        |                        |                |                 |          |              |                 |                      |                      |             |  |  |  |  |
|                                                                       |              |             |               |         |         |                                                                                                  |                                               |       |       |        |     |   |       |       | 0.90                                           | 0.87      | 0.60           | 0.30       | 0.90    | 0.66    | 0.51    | 0.3            |                                                             |                |         |              |                        |                        |                |                 |          |              |                 |                      |                      |             |  |  |  |  |
|                                                                       |              |             |               |         |         |                                                                                                  |                                               |       |       |        |     |   |       |       | Override Length - DnElev or Slope if necessary |           |                |            |         |         |         |                | P=Paved P=Unpaved Override Slope or Elevations if necessary |                |         |              |                        |                        |                |                 |          |              |                 |                      |                      |             |  |  |  |  |
|                                                                       |              |             |               |         |         |                                                                                                  |                                               |       |       |        |     |   |       |       | SURFACE CODE                                   |           |                |            |         |         |         |                | CHANNEL UP DN SLOPE VELOCITY F/S                            |                |         |              |                        |                        |                |                 |          |              |                 |                      |                      |             |  |  |  |  |
|                                                                       |              |             |               |         |         |                                                                                                  |                                               |       |       |        |     |   |       |       | OVRRLND FLOW - 100' MAX                        |           |                |            |         |         |         |                | FLOW-FIRST REACH                                            |                |         |              |                        |                        |                |                 |          |              |                 |                      |                      |             |  |  |  |  |
|                                                                       |              |             |               |         |         |                                                                                                  |                                               |       |       |        |     |   |       |       | CODE                                           | "C" VALUE | OVRRLND LENGTH | ELEV       | DN ELEV | SLOPE % | P or U  | CHANNEL LENGTH | UP ELEV                                                     | DN ELEV        | SLOPE % | VELOCITY F/S | Cal Overland Flow T(i) | Used Min 5 Max 15 T(i) |                |                 |          |              |                 | Cal Channel One T(T) | Cal Channel Two T(T) | Total T@ 10 |  |  |  |  |
| 1                                                                     | 21625        | 0.50        | 250.00        | 970.00  | 964.00  | Z                                                                                                | 0.90                                          | 100.0 | 970.0 | 968.00 | 2.0 | P | 150.0 | 968.0 | 964.0                                          | 2.67      | 3.3            | 2.9        | 5.0     | 0.8     | 0.0     | 5.8            | 7.1                                                         | 10.0           | 3.18    | 560          | 1                      |                        |                |                 |          |              |                 |                      |                      |             |  |  |  |  |
| 2                                                                     | 35619        | 0.82        | 283.00        | 970.00  | 964.00  | Z                                                                                                | 0.90                                          | 100.0 | 970.0 | 968.00 | 2.0 | P | 183.0 | 968.0 | 964.0                                          | 2.19      | 3.0            | 2.9        | 5.0     | 1.0     | 0.0     | 6.0            | 7.1                                                         | 9.9            | 5.19    | 912          | 2                      |                        |                |                 |          |              |                 |                      |                      |             |  |  |  |  |
| 3                                                                     | 35612        | 0.82        | 283.00        | 970.00  | 964.00  | Z                                                                                                | 0.90                                          | 100.0 | 970.0 | 968.00 | 2.0 | P | 183.0 | 968.0 | 964.0                                          | 2.19      | 3.0            | 2.9        | 5.0     | 1.0     | 0.0     | 6.0            | 7.1                                                         | 9.9            | 5.19    | 912          | 3                      |                        |                |                 |          |              |                 |                      |                      |             |  |  |  |  |
| 4                                                                     | 34456        | 0.79        | 283.00        | 970.00  | 964.00  | Z                                                                                                | 0.90                                          | 100.0 | 970.0 | 968.00 | 2.0 | P | 183.0 | 968.0 | 964.0                                          | 2.19      | 3.0            | 2.9        | 5.0     | 1.0     | 0.0     | 6.0            | 7.1                                                         | 9.9            | 5.02    | 882          | 4                      |                        |                |                 |          |              |                 |                      |                      |             |  |  |  |  |
| 5                                                                     | 34455        | 0.79        | 283.00        | 970.00  | 964.00  | Z                                                                                                | 0.90                                          | 100.0 | 970.0 | 968.00 | 2.0 | P | 183.0 | 968.0 | 964.0                                          | 2.19      | 3.0            | 2.9        | 5.0     | 1.0     | 0.0     | 6.0            | 7.1                                                         | 9.9            | 5.02    | 882          | 5                      |                        |                |                 |          |              |                 |                      |                      |             |  |  |  |  |
| 6                                                                     | 23605        | 0.54        | 218.00        | 970.00  | 964.00  | Z                                                                                                | 0.90                                          | 100.0 | 970.0 | 968.00 | 2.0 | P | 118.0 | 968.0 | 964.0                                          | 3.39      | 3.7            | 2.9        | 5.0     | 0.5     | 0.0     | 5.5            | 7.2                                                         | 10.1           | 3.51    | 616          | 6                      |                        |                |                 |          |              |                 |                      |                      |             |  |  |  |  |
| 7                                                                     | 9730         | 0.22        | 98.00         | 972.00  | 970.00  | B                                                                                                | 0.87                                          | 88.0  | 972.0 | 970.00 | 1.7 | P | 10.0  | 970.5 | 970.0                                          | 5.00      | 4.5            | 3.3        | 5.0     | 0.0     | 0.0     | 5.0            | 7.3                                                         | 10.3           | 1.43    | 250          | 7                      |                        |                |                 |          |              |                 |                      |                      |             |  |  |  |  |
| 8                                                                     | 9219         | 0.21        | 131.00        | 972.00  | 970.00  | B                                                                                                | 0.87                                          | 100.0 | 972.0 | 971.00 | 1.0 | P | 31.0  | 971.0 | 970.0                                          | 3.23      | 3.7            | 4.1        | 5.0     | 0.1     | 0.0     | 5.1            | 7.3                                                         | 10.3           | 1.35    | 236          | 8                      |                        |                |                 |          |              |                 |                      |                      |             |  |  |  |  |
| 9                                                                     | 10013        | 0.23        | 131.00        | 972.00  | 970.00  | B                                                                                                | 0.87                                          | 100.0 | 972.0 | 971.00 | 1.0 | P | 31.0  | 971.0 | 970.0                                          | 3.23      | 3.7            | 4.1        | 5.0     | 0.1     | 0.0     | 5.1            | 7.3                                                         | 10.3           | 1.46    | 257          | 9                      |                        |                |                 |          |              |                 |                      |                      |             |  |  |  |  |
| 10                                                                    | 13884        | 0.32        | 141.00        | 972.00  | 970.00  | B                                                                                                | 0.87                                          | 100.0 | 972.0 | 971.00 | 1.0 | P | 41.0  | 971.0 | 970.0                                          | 2.44      | 3.2            | 4.1        | 5.0     | 0.2     | 0.0     | 5.2            | 7.3                                                         | 10.2           | 2.02    | 355          | 10                     |                        |                |                 |          |              |                 |                      |                      |             |  |  |  |  |
| 11                                                                    | 6705         | 0.15        | 129.00        | 972.00  | 970.00  | B                                                                                                | 0.87                                          | 100.0 | 972.0 | 971.00 | 1.0 | P | 29.0  | 971.0 | 970.0                                          | 3.45      | 3.8            | 4.1        | 5.0     | 0.1     | 0.0     | 5.1            | 7.3                                                         | 10.3           | 0.98    | 172          | 11                     |                        |                |                 |          |              |                 |                      |                      |             |  |  |  |  |
| 12                                                                    | 11292        | 0.26        | 198.00        | 972.00  | 968.50  | B                                                                                                | 0.87                                          | 72.0  | 972.0 | 970.50 | 2.1 | P | 126.0 | 970.5 | 968.5                                          | 1.59      | 2.6            | 2.8        | 5.0     | 0.8     | 0.0     | 5.8            | 7.1                                                         | 10.0           | 1.60    | 282          | 12                     |                        |                |                 |          |              |                 |                      |                      |             |  |  |  |  |
| 13                                                                    | 2458         | 0.06        | 67.00         | 972.00  | 968.50  | B                                                                                                | 0.87                                          | 58.0  | 972.0 | 969.00 | 5.1 | P | 8.0   | 969.0 | 968.5                                          | 6.25      | 5.1            | 1.8        | 5.0     | 0.0     | 0.0     | 5.0            | 7.3                                                         | 10.3           | 0.36    | 063          | 13                     |                        |                |                 |          |              |                 |                      |                      |             |  |  |  |  |

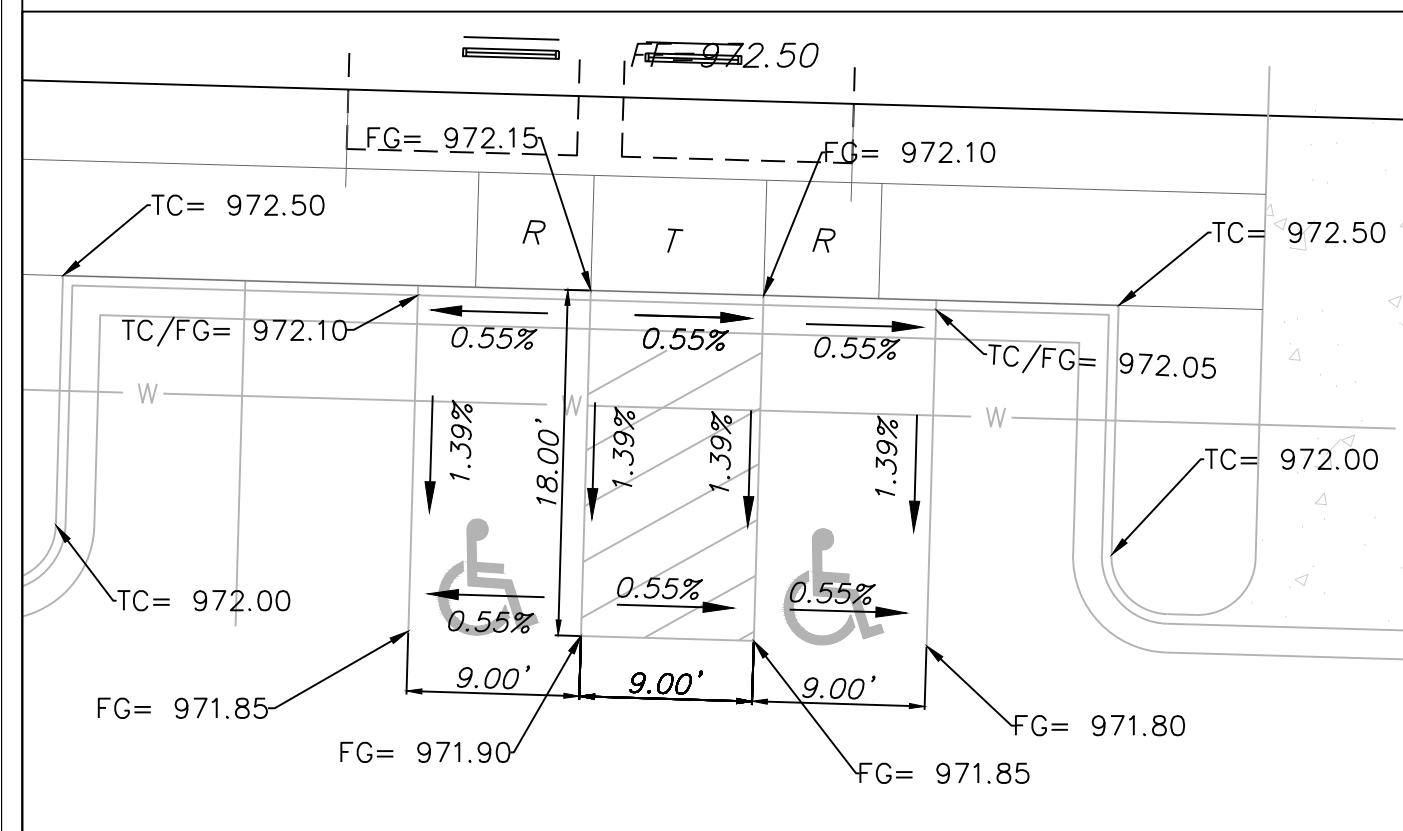




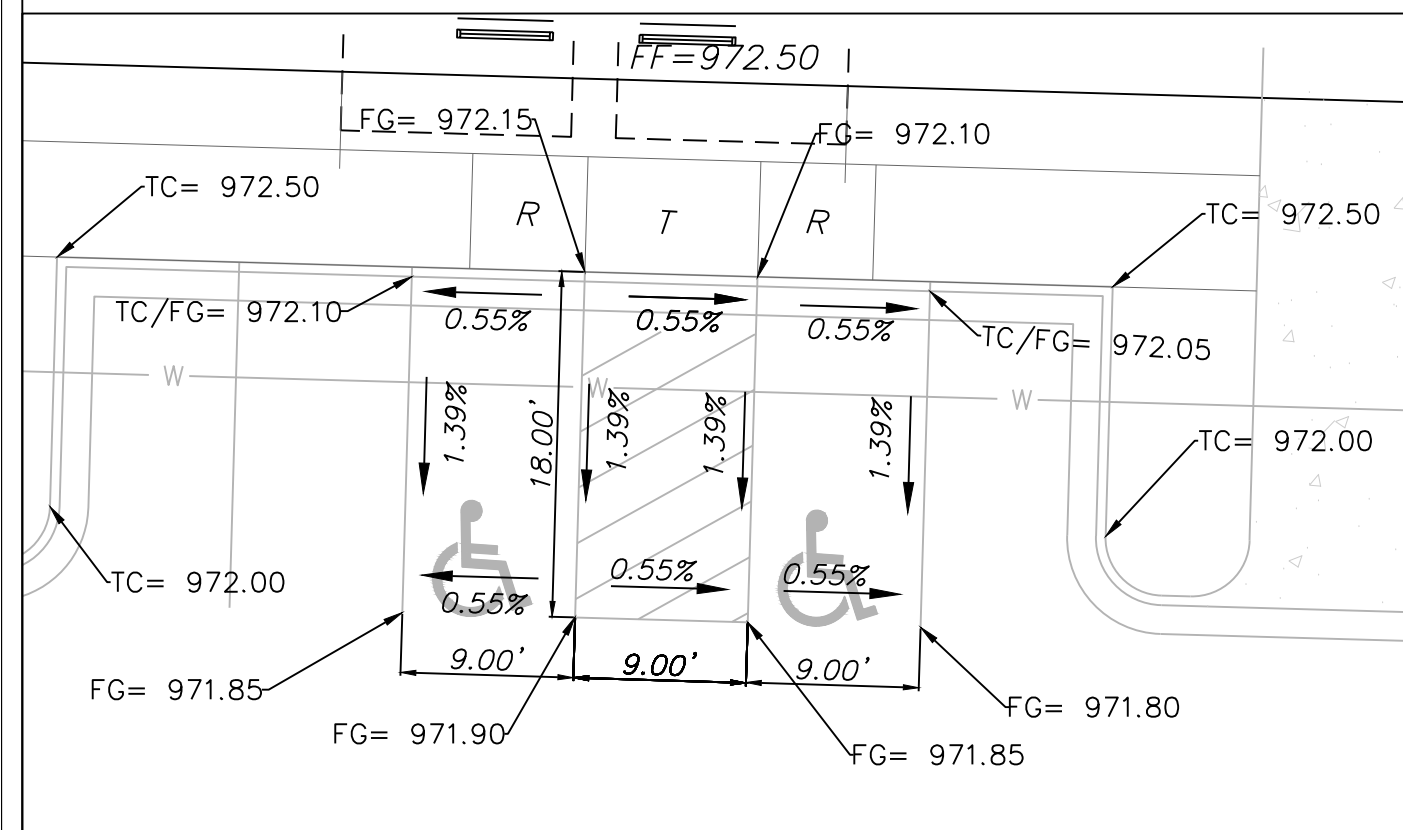
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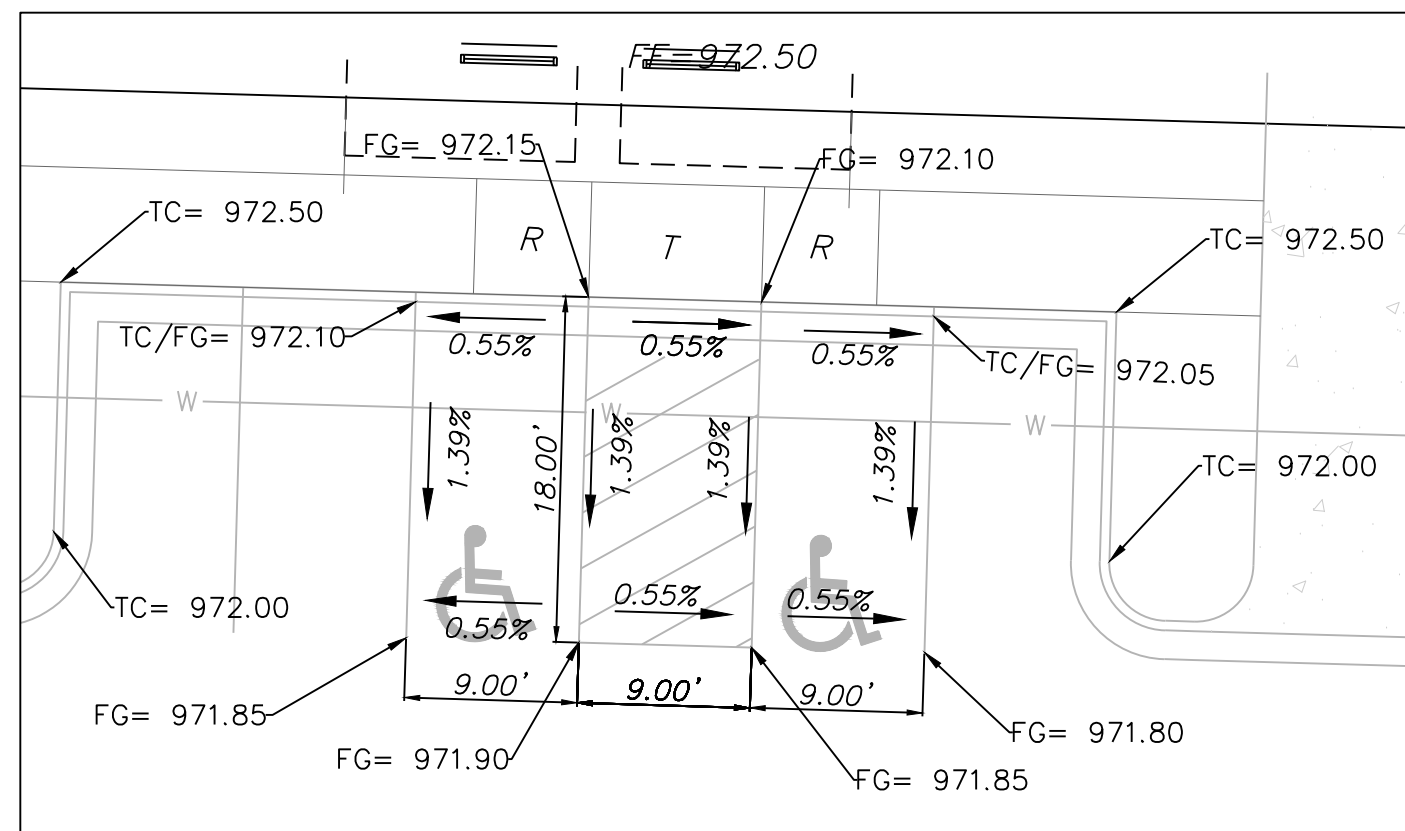
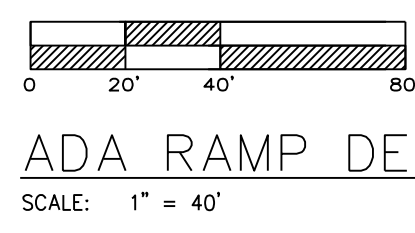
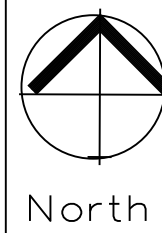
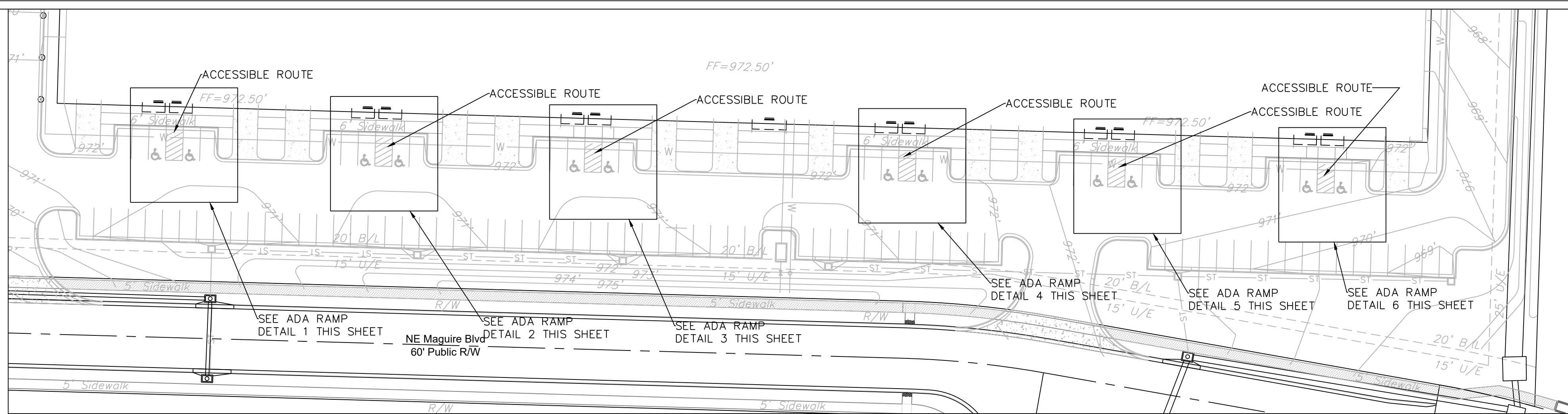
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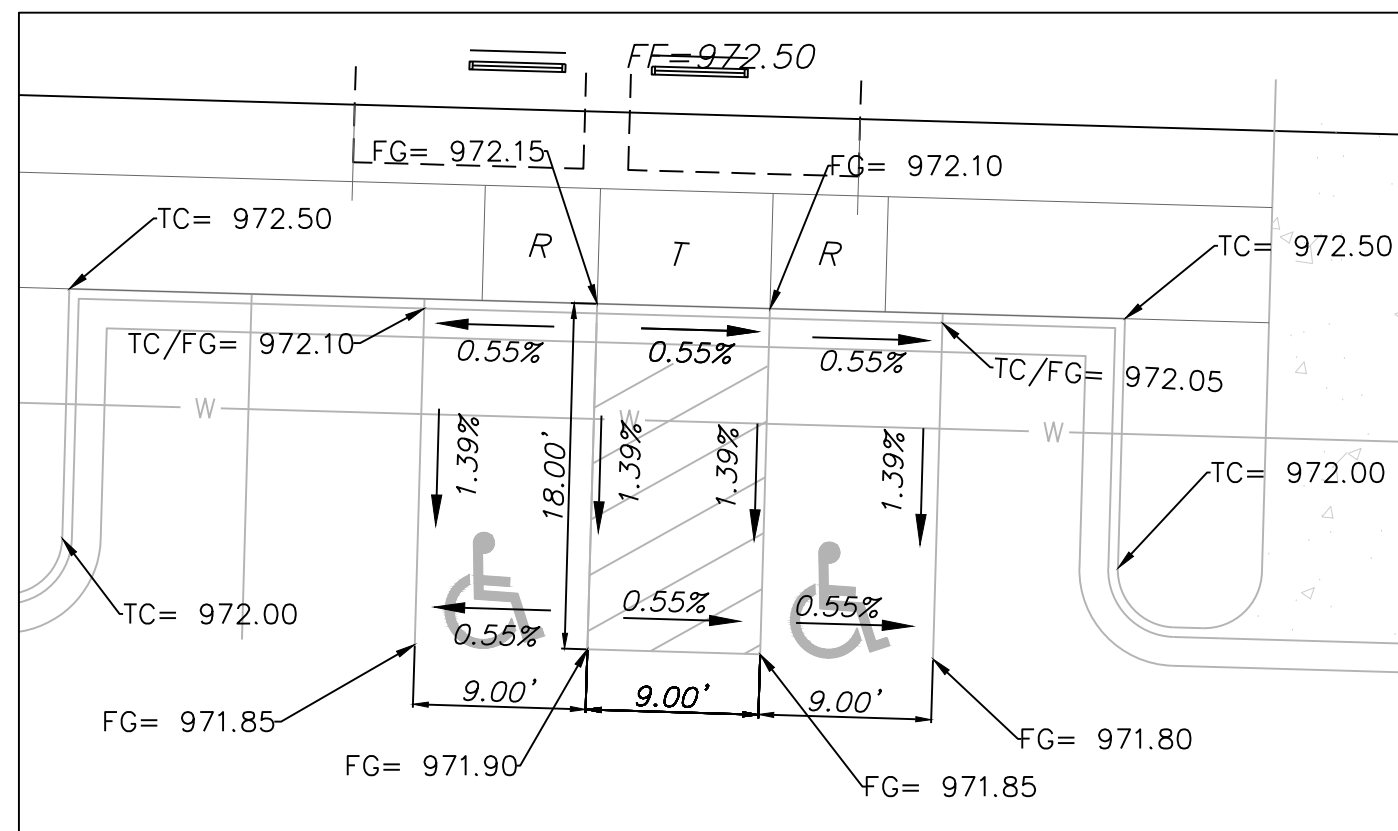
**ADA RAMP DETAIL 3**  
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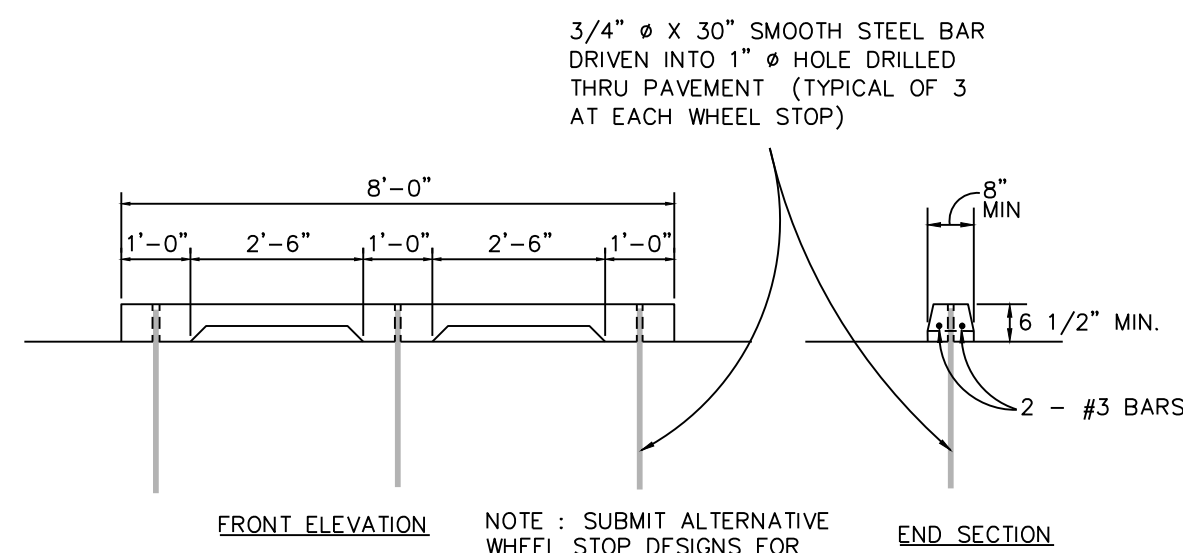
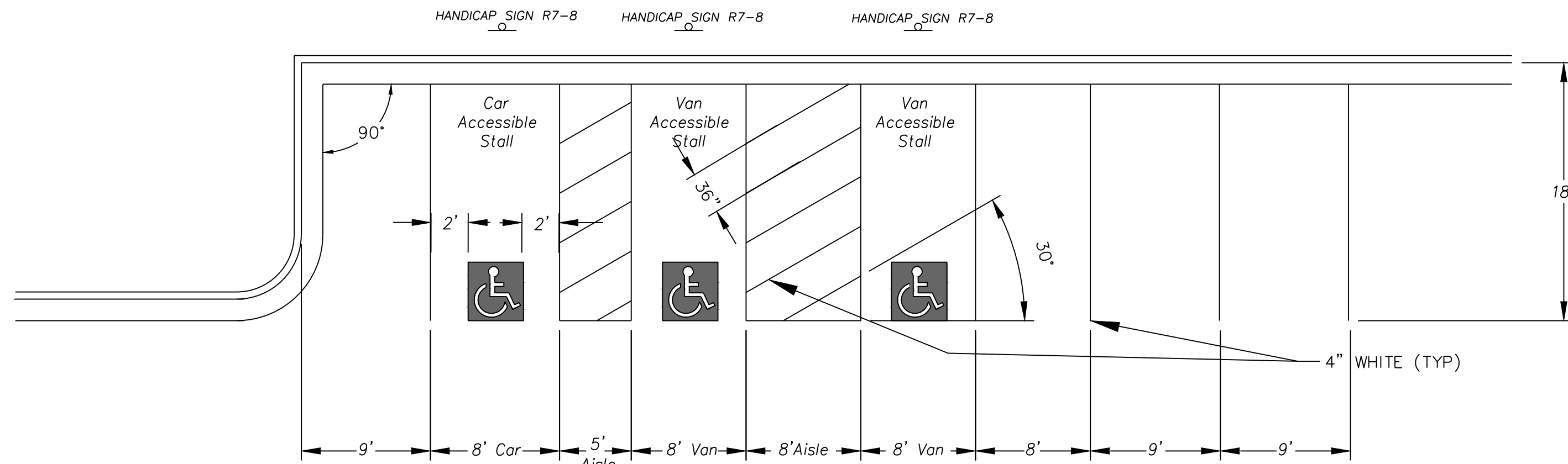
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SCALE: 1"=10'



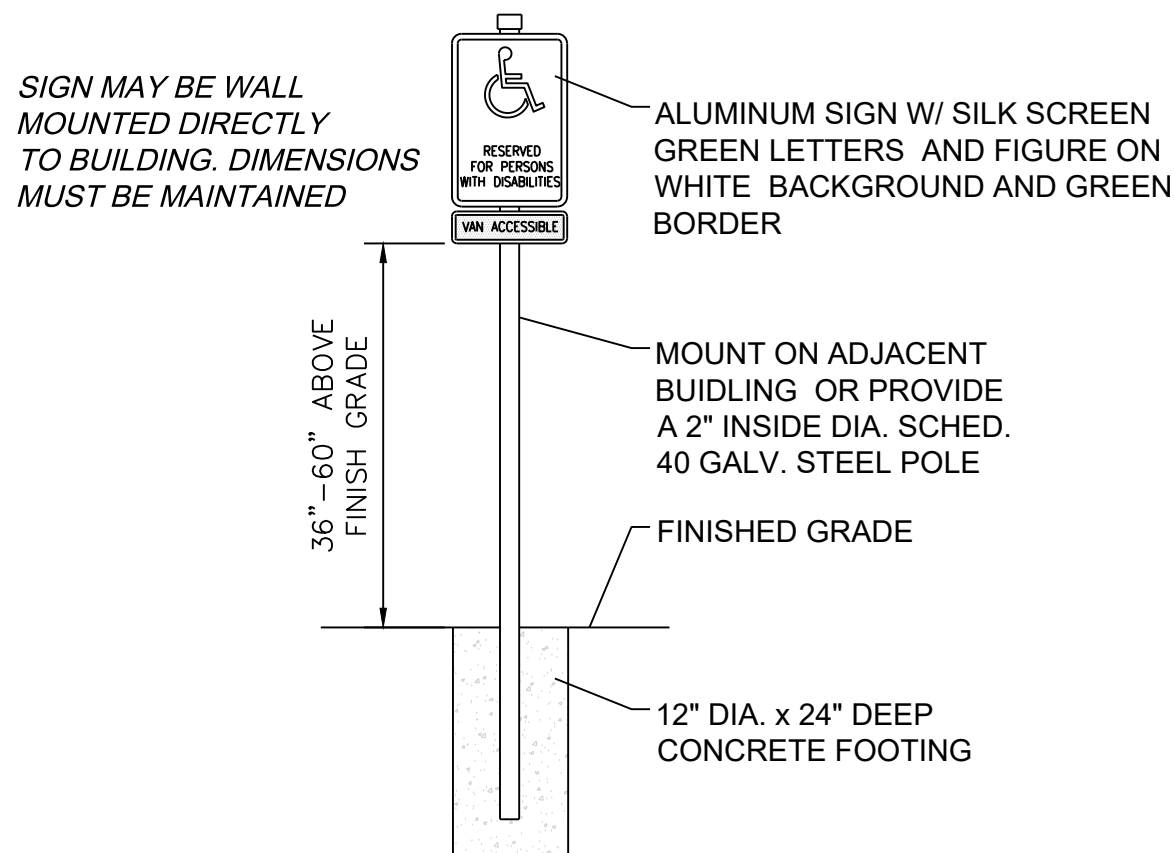
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SCALE: 1"=10'



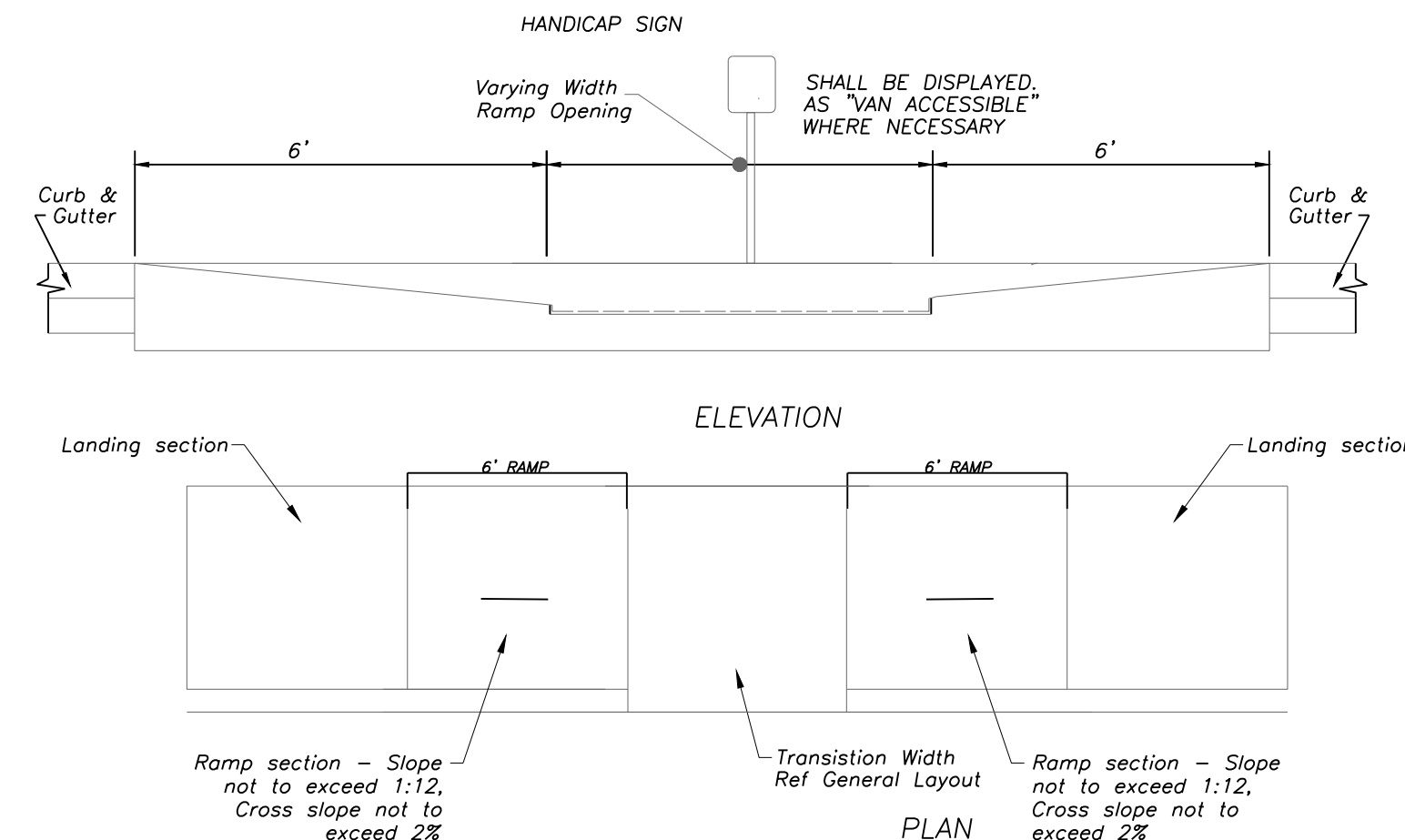
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SCALE: 1"=10'



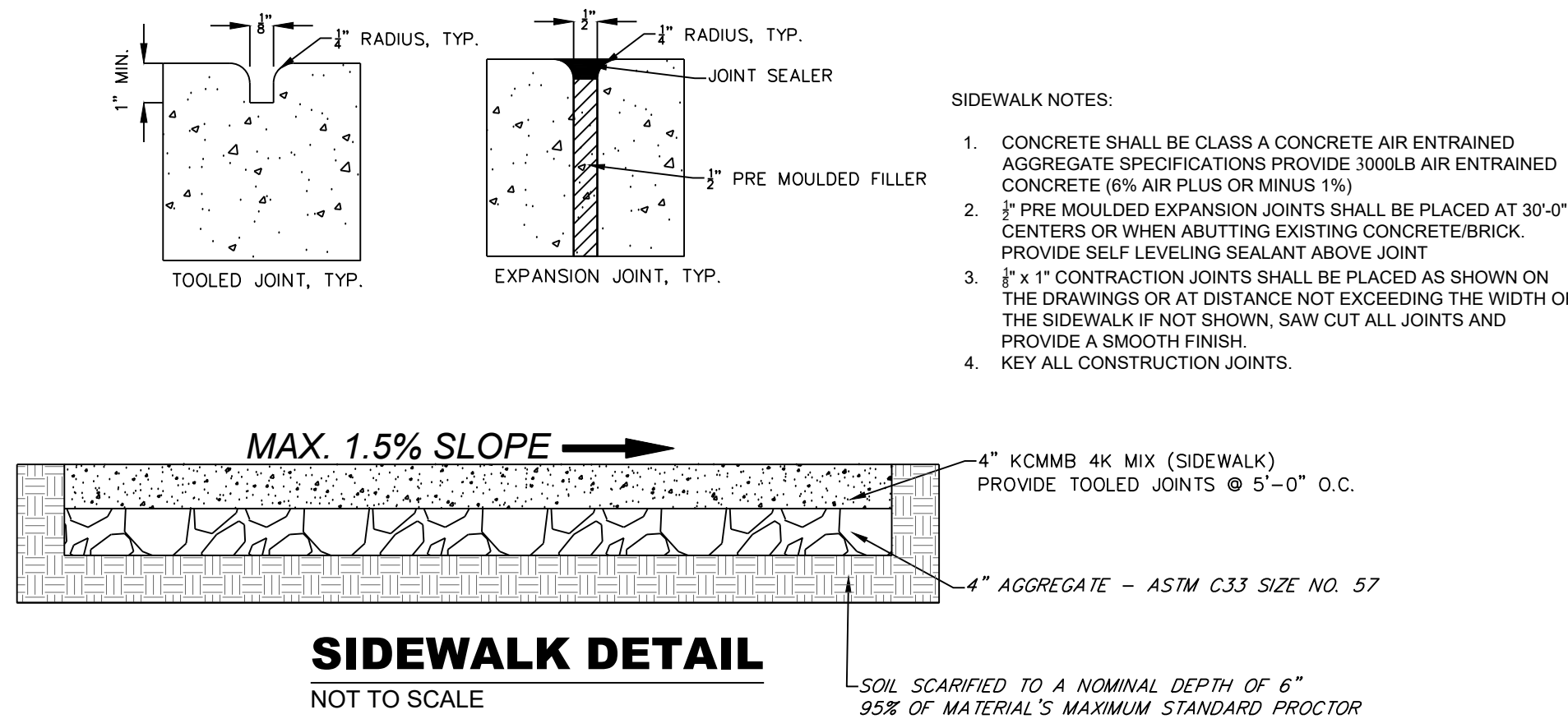
**CONCRETE WHEEL STOP**  
N.T.S.



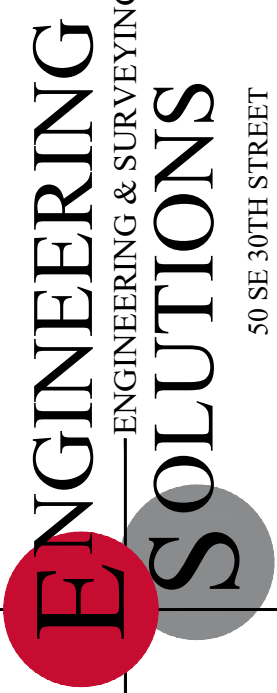
**HANDICAP SIGN DETAIL**  
NOT TO SCALE



**ACCESSIBLE RAMP DETAILS**  
NOT TO SCALE  
Ramp and ramp landings shall be constructed per ANSI 117.1-03 407.7



**SIDEWALK DETAIL**  
NOT TO SCALE

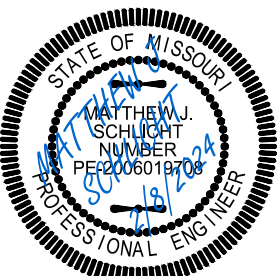


Professional Registration  
Missouri  
Engineering 2005002188-D  
Surveying 2005005189-D  
Kansas  
Engineering E-1695  
Surveying LS-218  
Oklahoma  
Engineering 6254  
Nebraska  
Engineering CA2821

Lakewood Business Park - Lot 46  
Lee's Summit, Jackson County, Missouri

Project: LAKESIDE BUSINESS CENTER  
PLAT 5, LEMO  
Issue Date: May 5, 2023

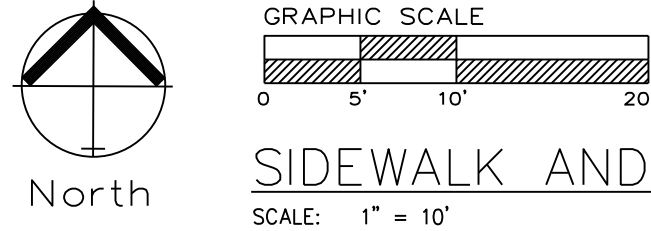
ADA RAMP DETAILS  
Construction Plans for:  
Lakewood Business Park - Lot 46  
Lee's Summit, Jackson County, Missouri



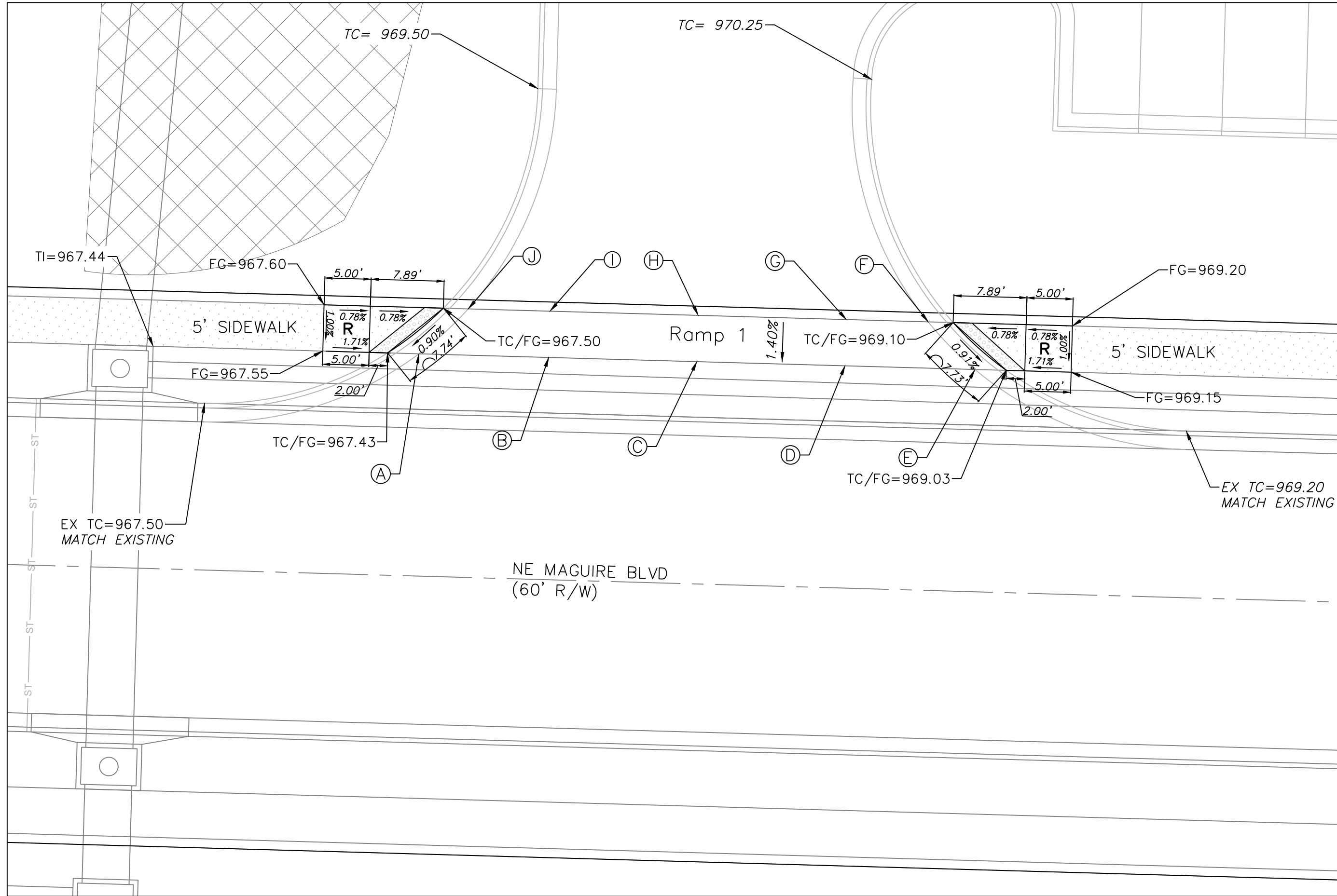
Matthew J. Schlicht  
MO PE 2006019708  
KS PE 19071  
Exp. 12/31/2026

REVISIONS  
REV. 12/6/2023  
REV. 1/19/2024  
REV. 2/8/2024

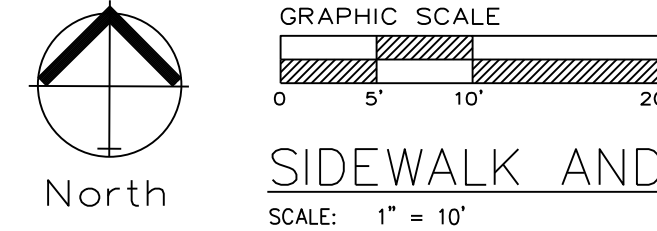




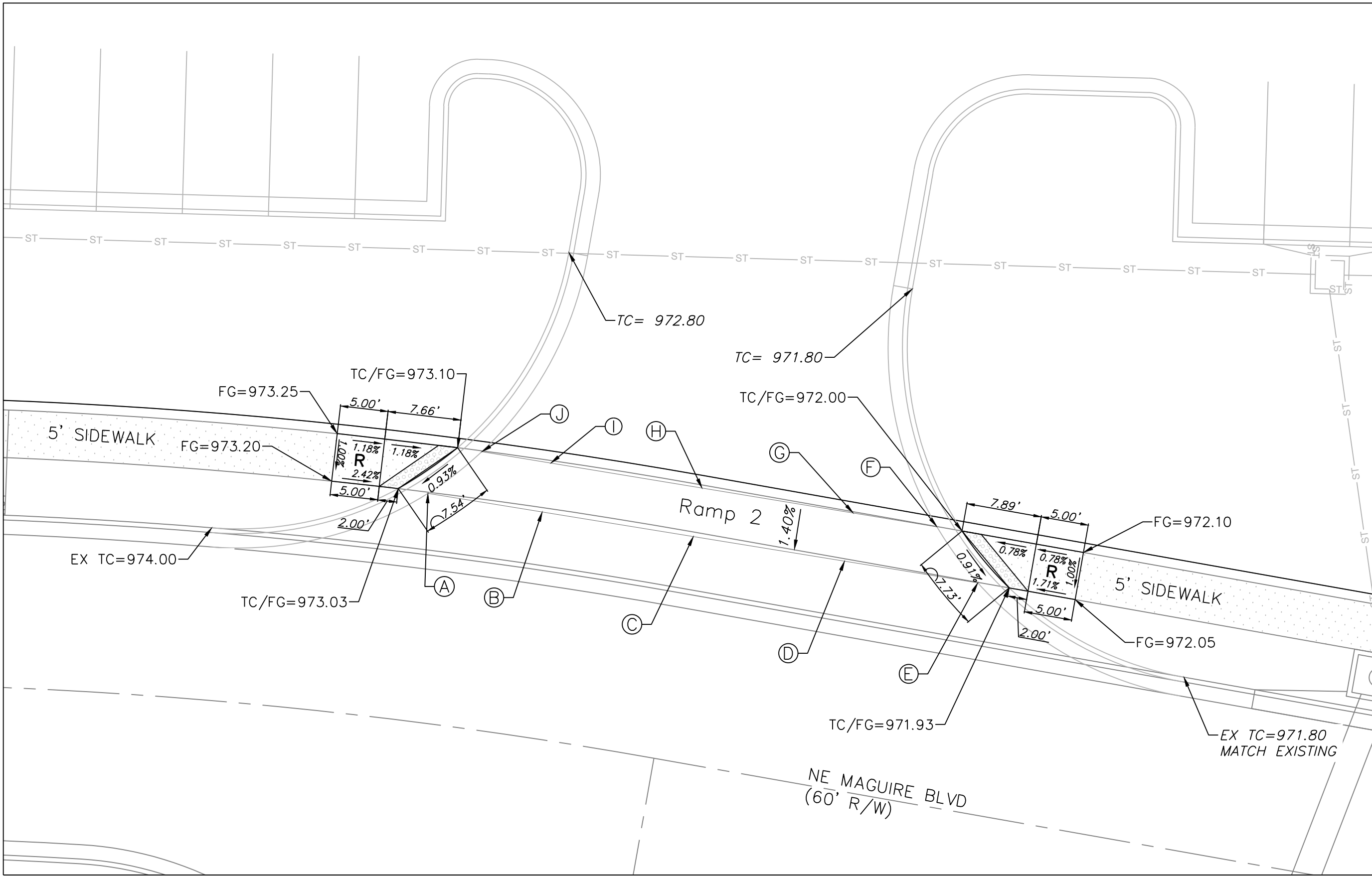
SIDEWALK AND INTERSECTION PLAN  
SCALE: 1" = 10'



DETAIL 1



SIDEWALK AND INTERSECTION PLAN  
SCALE: 1" = 10'



DETAIL 2

| SPOT ELEVATION TABLE |                     |                     |  |  |
|----------------------|---------------------|---------------------|--|--|
| Spot                 | Ramp 1<br>Elevation | Ramp 2<br>Elevation |  |  |
| A                    | 967.43              | 973.03              |  |  |
| B                    | 967.83              | 972.76              |  |  |
| C                    | 968.23              | 972.48              |  |  |
| D                    | 968.63              | 972.21              |  |  |
| E                    | 969.03              | 971.93              |  |  |
| F                    | 969.10              | 972.00              |  |  |
| G                    | 968.70              | 972.28              |  |  |
| H                    | 968.30              | 972.55              |  |  |
| I                    | 967.90              | 972.83              |  |  |
| J                    | 967.50              | 973.10              |  |  |

Legend:

EX TC = Existing Top of Curb

EX FG = Existing Finished Grade

FG = Finished Grade

TC = Top of Curb

TC/FG = Top of Curb/Finished Grade

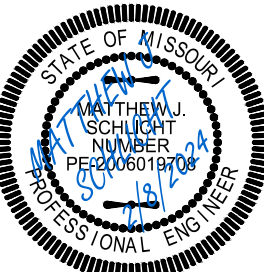
 Detectable Warning

Professional Registration  
Missouri  
Engineering 2005002188-D  
Surveying 2005005119-D  
Kansas  
Engineering E-1695  
Surveying LS-218  
Oklahoma  
Engineering 6254  
Nebraska  
Engineering CA2821

Lakewood Business Park - Lot 46  
Lee's Summit, Jackson County, Missouri

Project  
Lakewood Business Center  
Plat 5, LEMO  
Issue Date  
May 5, 2023

Sidewalk and Intersection Plan  
Construction Plans for:  
Lakewood Business Park - Lot 46  
Lee's Summit, Jackson County, Missouri

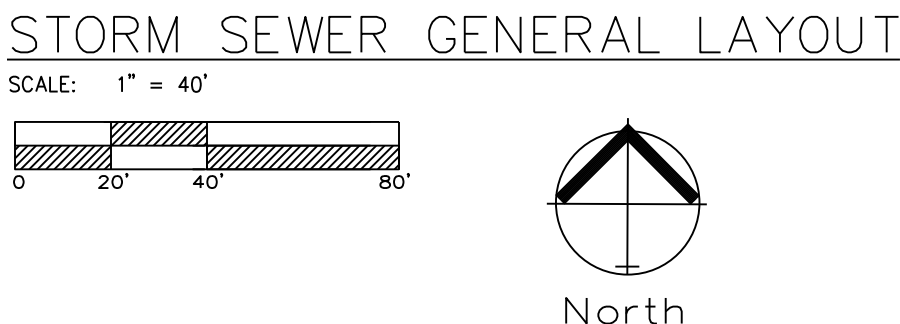


Matthew J. Schlicht  
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KS PE 19071  
OK PE 25526

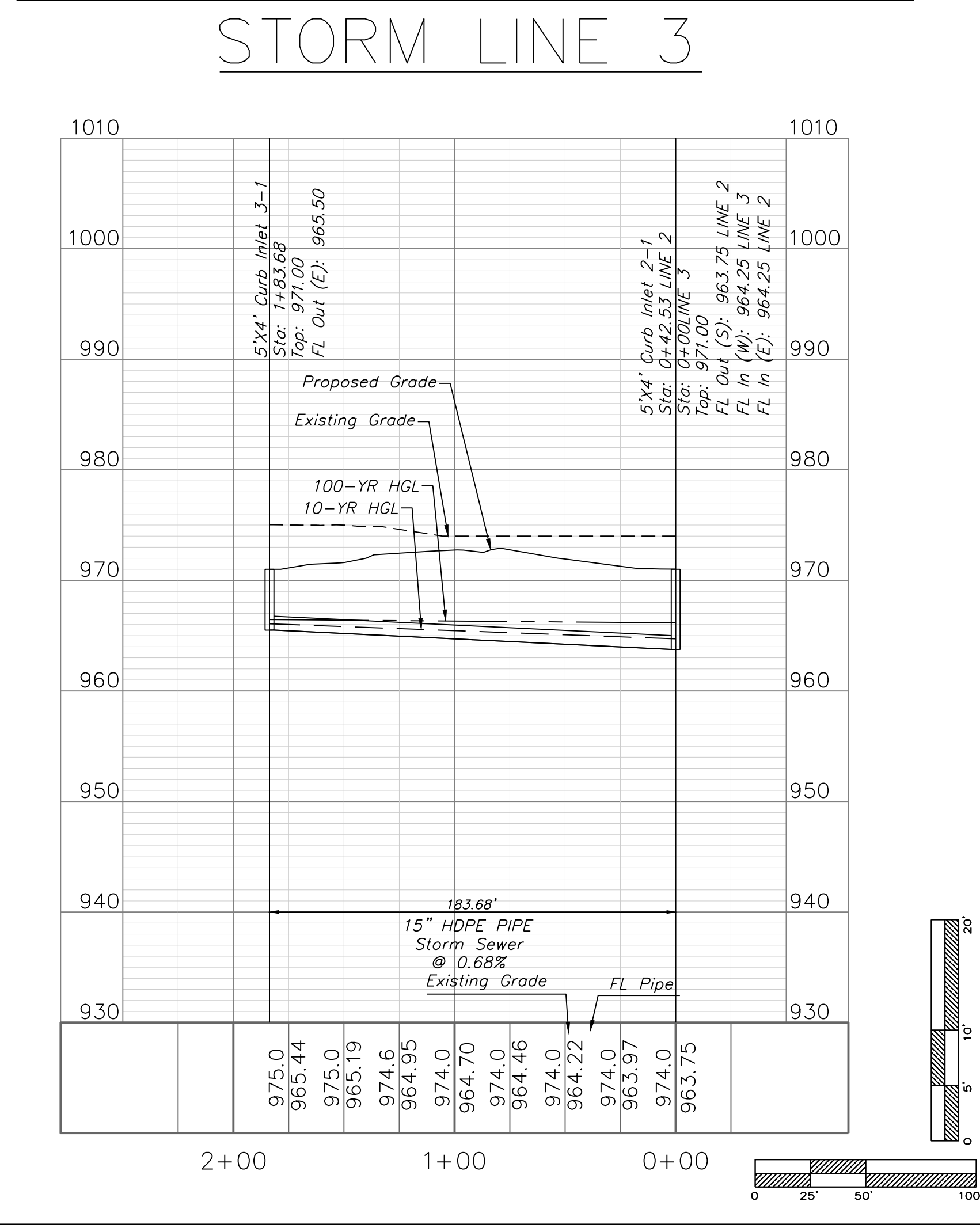
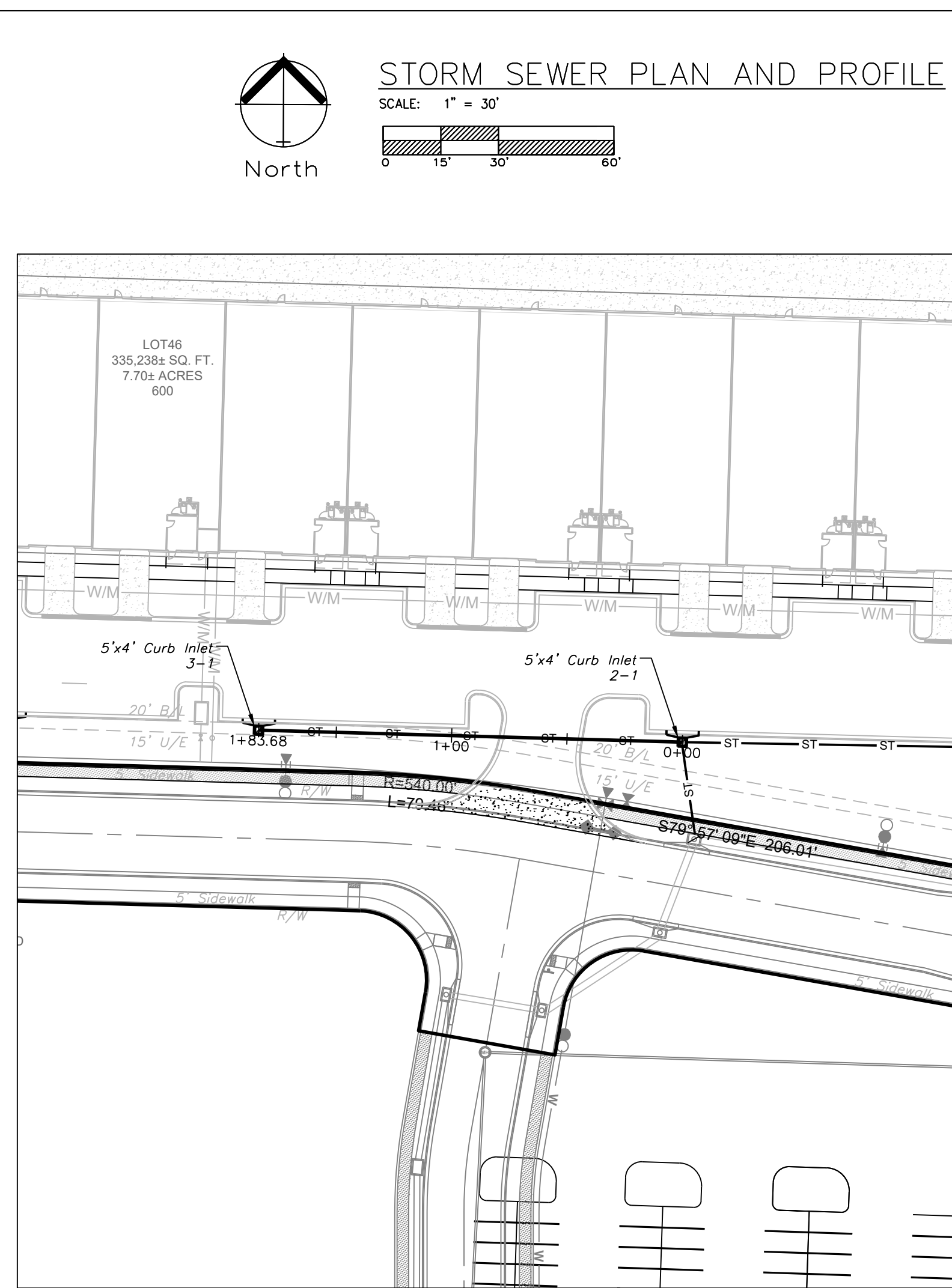
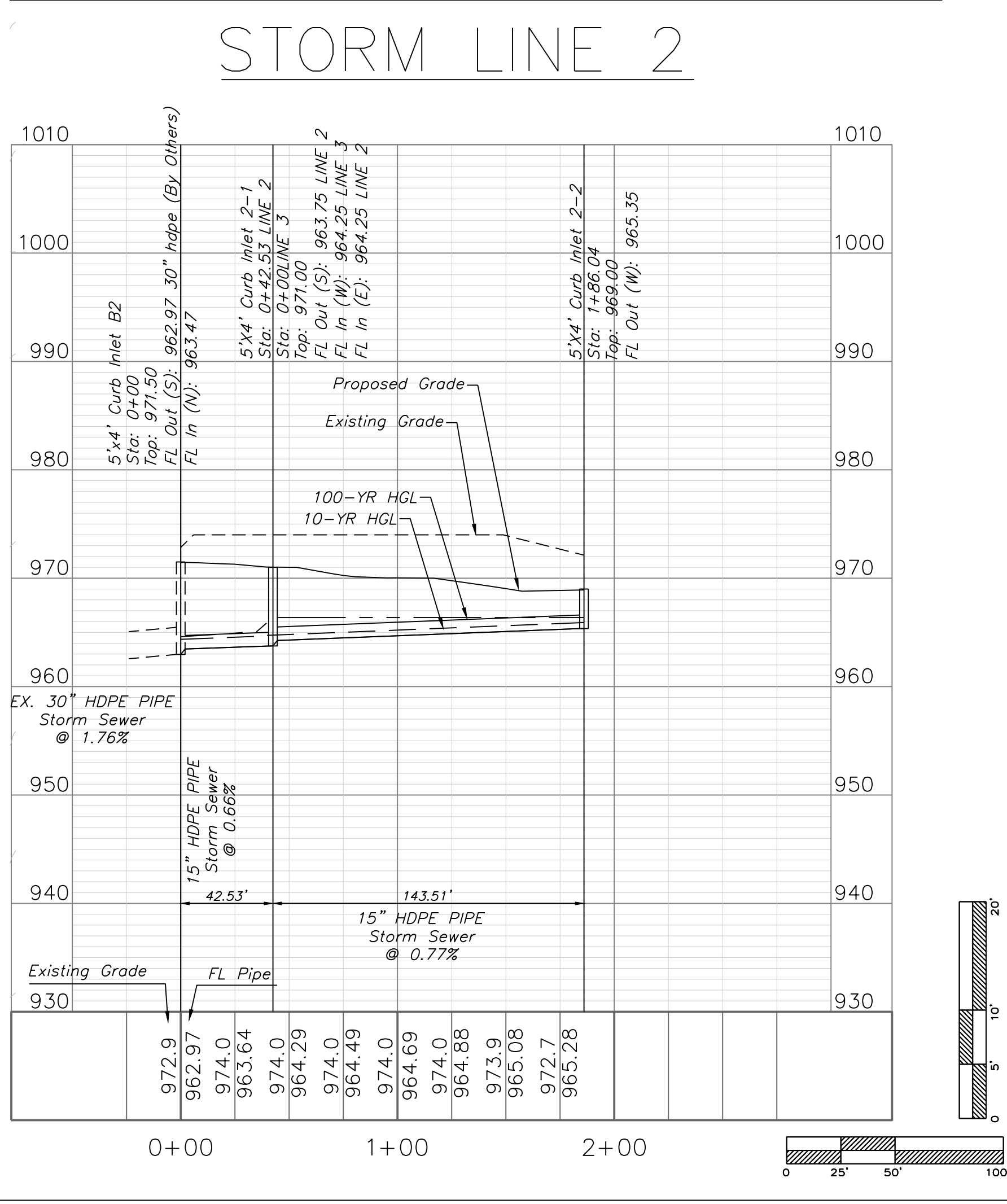
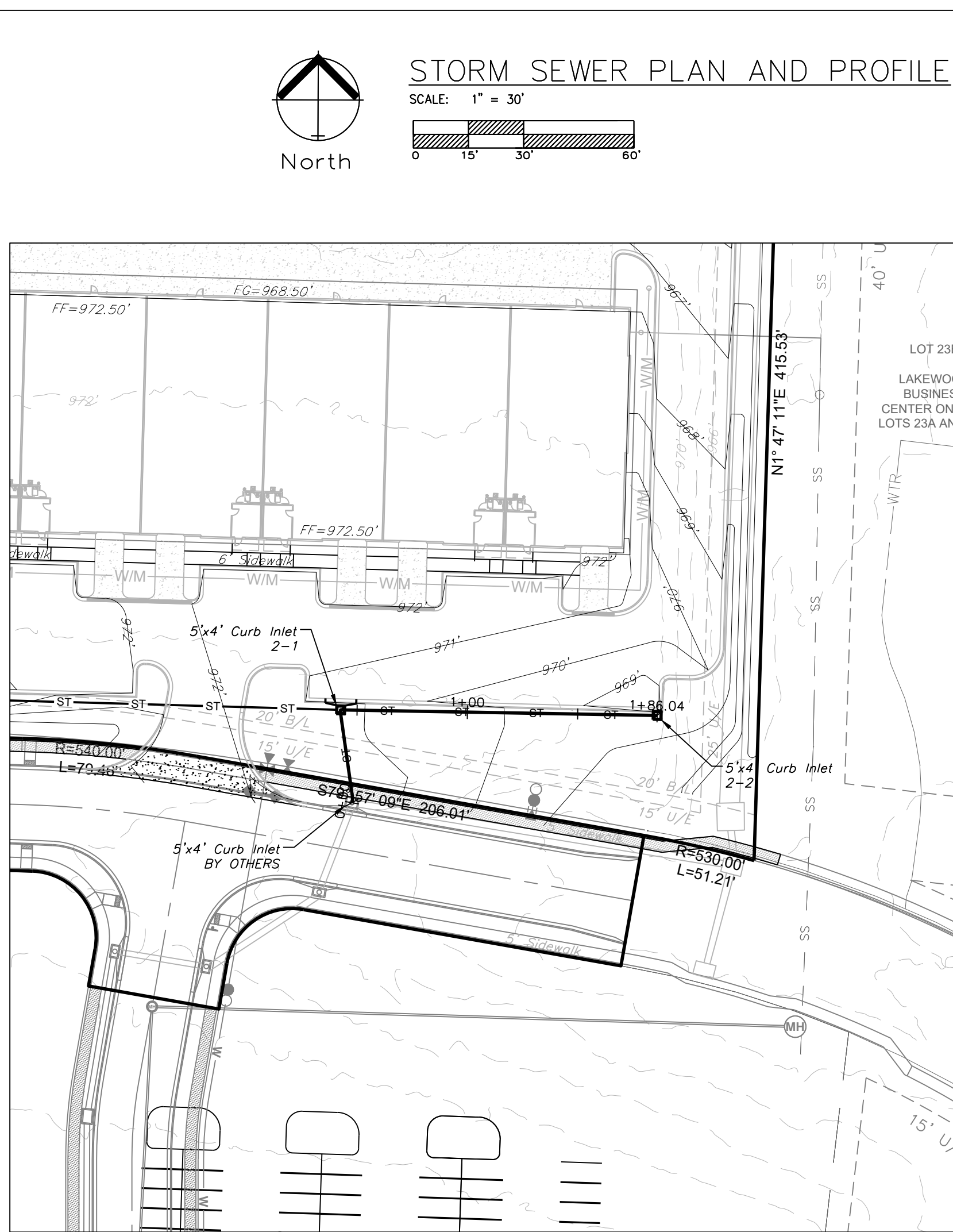
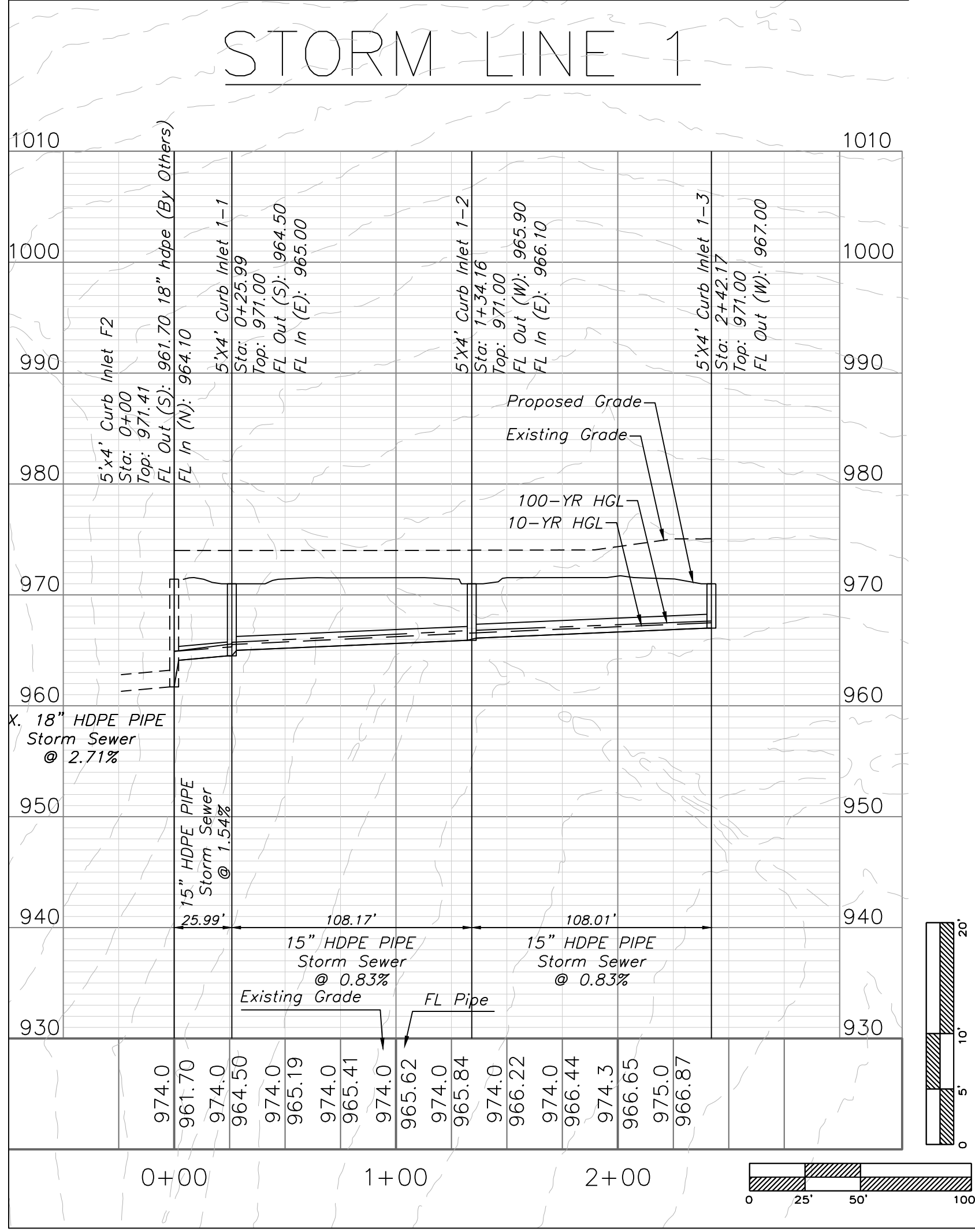
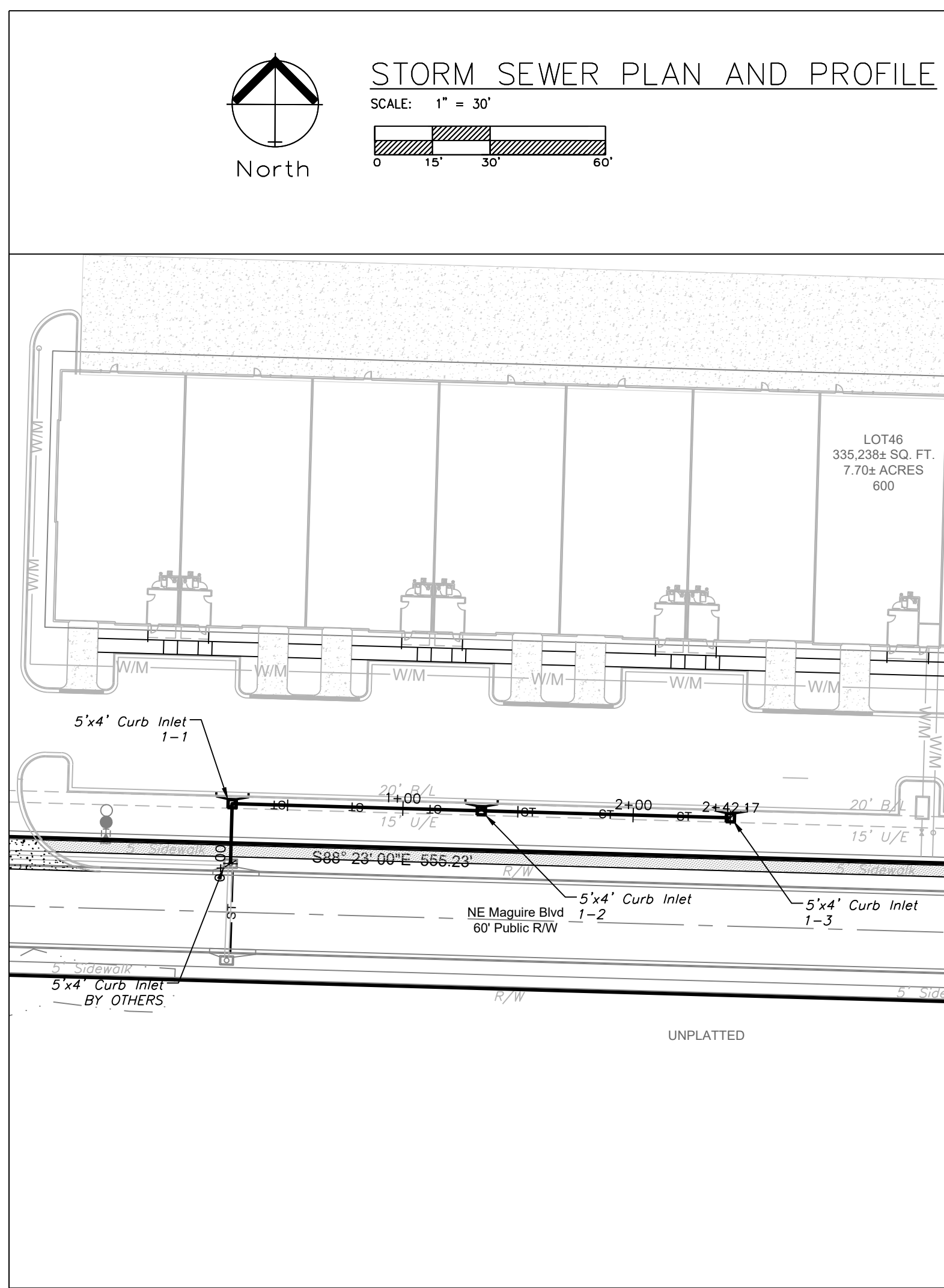
REVISIONS

- REV. 12/6/2023
- REV. 1/19/2024
- REV. 2/8/2024

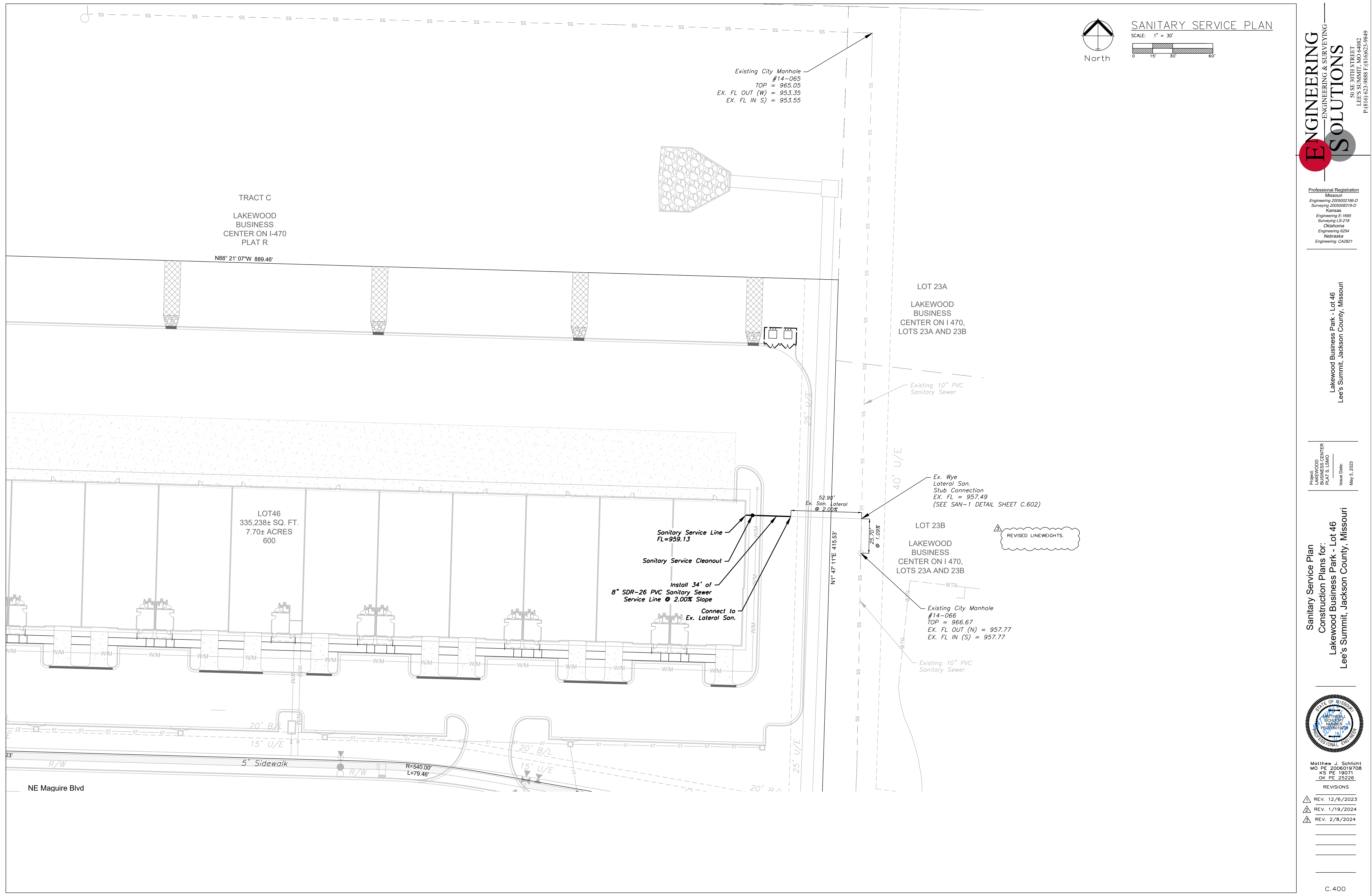




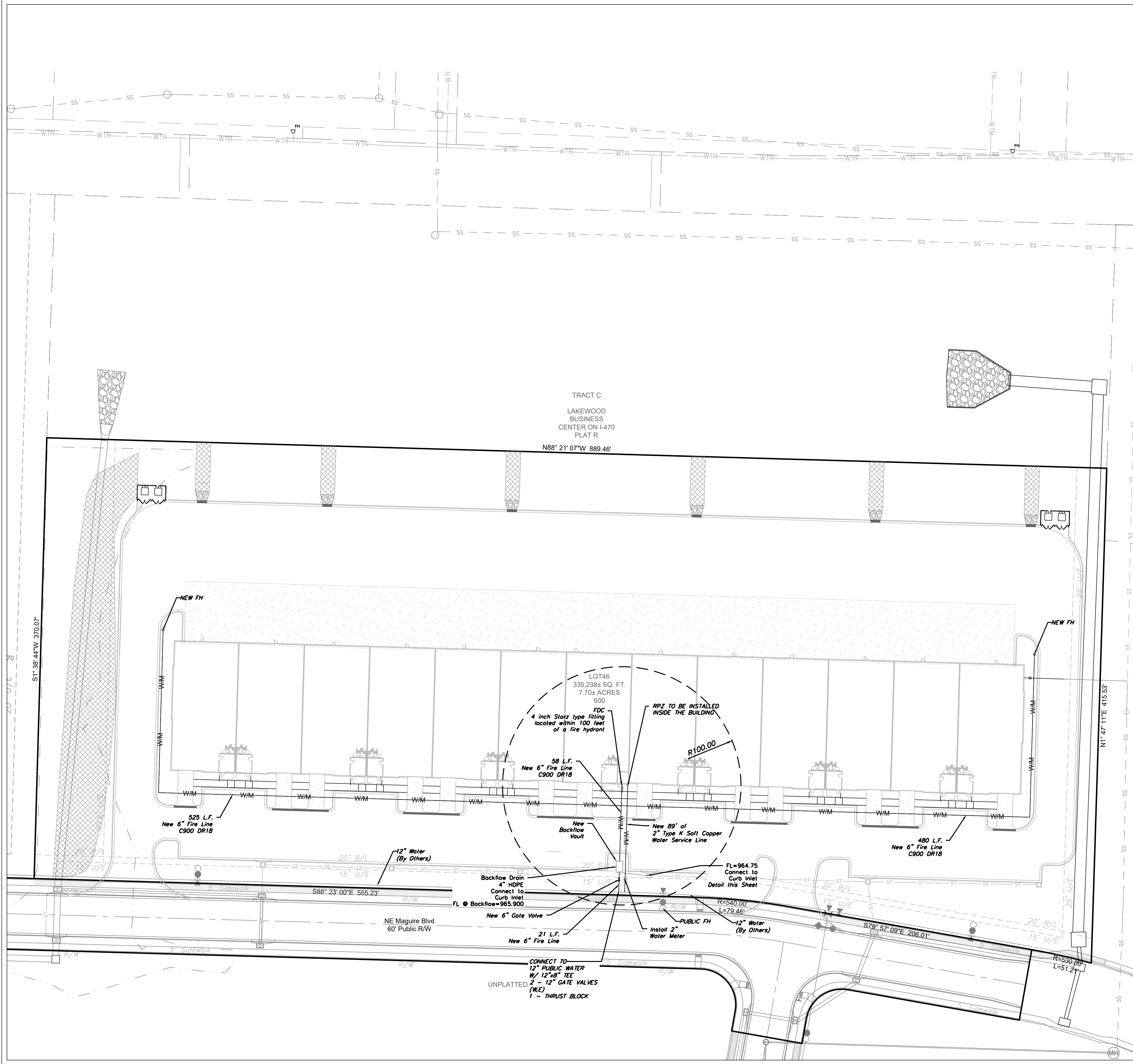










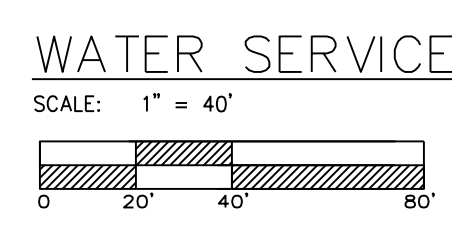


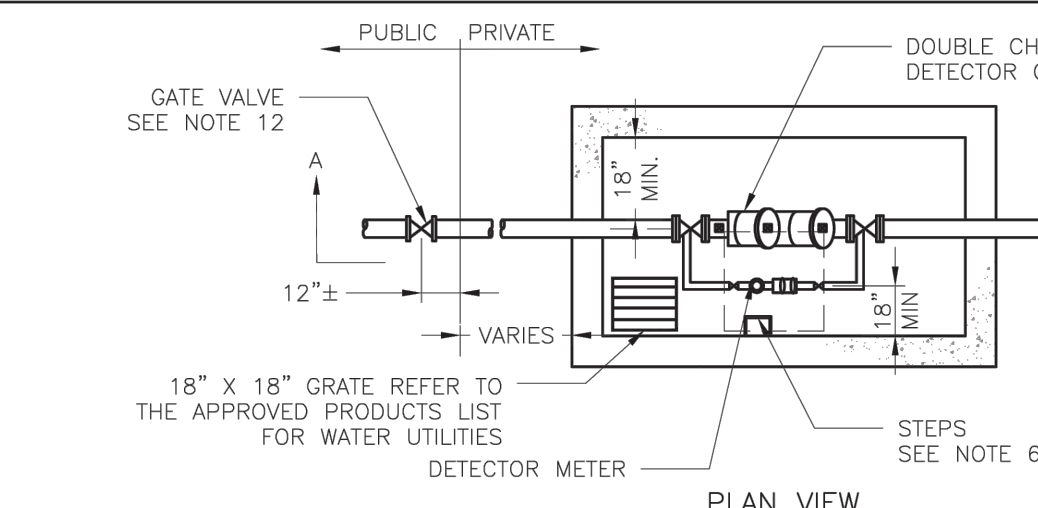


North

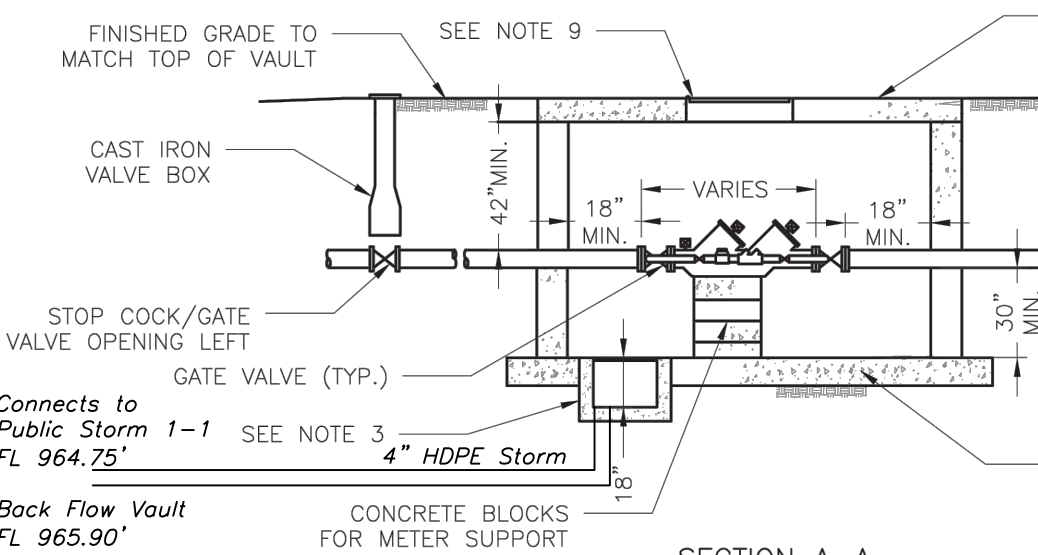
WATER SERVICE PLAN

SCALE: 1" = 40'





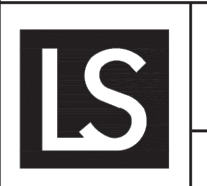
PLAN VIEW  
NOT TO SCALE



SECTION A-A  
NOT TO SCALE

**GENERAL NOTES:**

- METER VAULT WALLS TO BE POURED OR PRECAST CONCRETE.
- METER VAULT ROOF TO BE REINFORCED CONCRETE OPENING CENTERED OVER DETECTOR METER.
- METER VAULT TO BE LOCATED, WHEN POSSIBLE, OUTSIDE TRAFFIC AREA WHERE SURFACE WATER WILL NOT DRAIN INTO IT. VAULT MUST BE KEPT FREE OF WATER. PROVIDE CONCRETE SUMP AS A MINIMUM. WHERE PRACTICAL, PROVIDE A 2" PIPE DRAIN WITH AN ABOVE-GROUND DISCHARGE POINT. PROJECT OWNER MAY DESIRE A PERMANENTLY INSTALLED SUMP PUMP.
- ALL PIPE SHALL BE DUCTILE IRON CLASS 50. ALL PIPE FITTINGS FROM THE CITY WATER MAIN THROUGH THE VAULT SHALL BE PROVIDED WITH RESTRAINED JOINT FITTINGS.
- ALL FITTINGS TO BE BRASS.
- STEPS SHALL BE IN ACCORDANCE WITH THE APPROVED PRODUCTS LIST FOR WATER UTILITIES AND SHALL BE ON 16" CENTERS.
- A DEPARTMENT OF NATURAL RESOURCES APPROVED DOUBLE CHECK DETECTOR CHECK BACKFLOW PREVENTION MUST BE USED. FOR A COPY OF THE MISSOURI DEPARTMENT OF NATURAL RESOURCES APPROVED BACKFLOW PREVENTION ASSEMBLIES, CONTACT THE WATER UTILITIES OPERATIONS DIVISION AT 816-969-1940. AS OF JANUARY 1, 1987, THE DNR REQUIRES FIRE SPRINKLER SYSTEMS USING CHEMICALS TO HAVE A DNR APPROVED PRESSURE BACKFLOW PREVENTER INSTALLED PRIOR TO THE MIXING POINT.
- ALL VALVES SHALL HAVE RISING STEMS.
- FOR MANHOLE COVERS, SELECT A MANHOLE FOUND ON THE APPROVED PRODUCTS LIST FOR WATER UTILITIES SUITABLE FOR EITHER TRAFFIC OR NON-TRAFFIC CONDITIONS.
- A MINIMUM OF 18" CLEARANCE SHALL BE PROVIDED AROUND ALL PIPING, VALVES, APPURTENANCES, ETC.
- METER SHALL BE OWNED AND MAINTAINED BY THE WATER UTILITIES DEPARTMENT.
- IF PUBLIC WATER IS LOCATED ON THE OPPOSITE SIDE OF THE STREET, THEN THE PUBLIC WATER MAIN RESPONSIBILITY OF THE WATER UTILITIES DEPARTMENT ENDS AT THE GATE VALVE NEAREST THE VAULT.



**LEE'S SUMMIT**  
MISSOURI  
PUBLIC WORKS ENGINEERING DIVISION | 1202 SE GREEN STREET | LEE'S SUMMIT, MO 64082

DATE: 02/20/16  
DRAWN BY: JN  
CHECKED BY: DL

**WAT-12**

**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 2005005189-D

Kansas  
Engineering E-1695  
Surveying LS-218

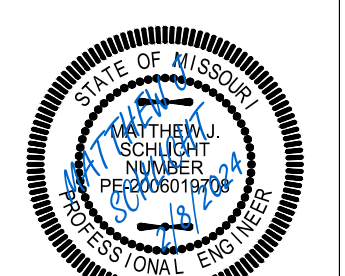
Oklahoma  
Engineering 6254

Nebraska  
Engineering CA2821

Project: LAKWOOD BUSINESS CENTER  
PLAT 5, L&MO

Issue Date: May 5, 2023

Water Service Plan  
Construction Plans for:  
Lakewood Business Park - Lot 46  
Lee's Summit, Jackson County, Missouri



Matthew J. Schlicht  
MO PE 2006019708  
KS PE 19071  
OK PE 252526

REVISIONS

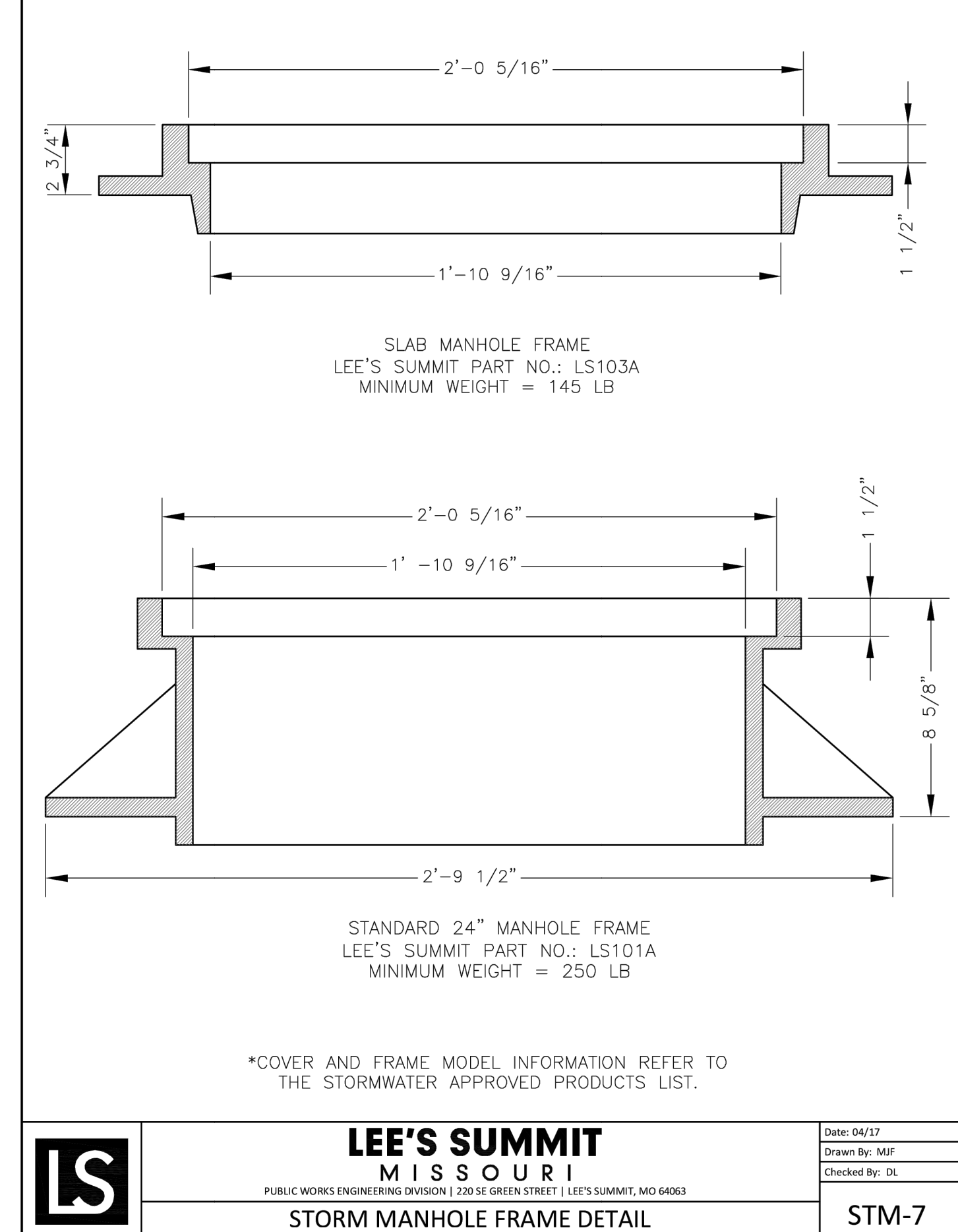
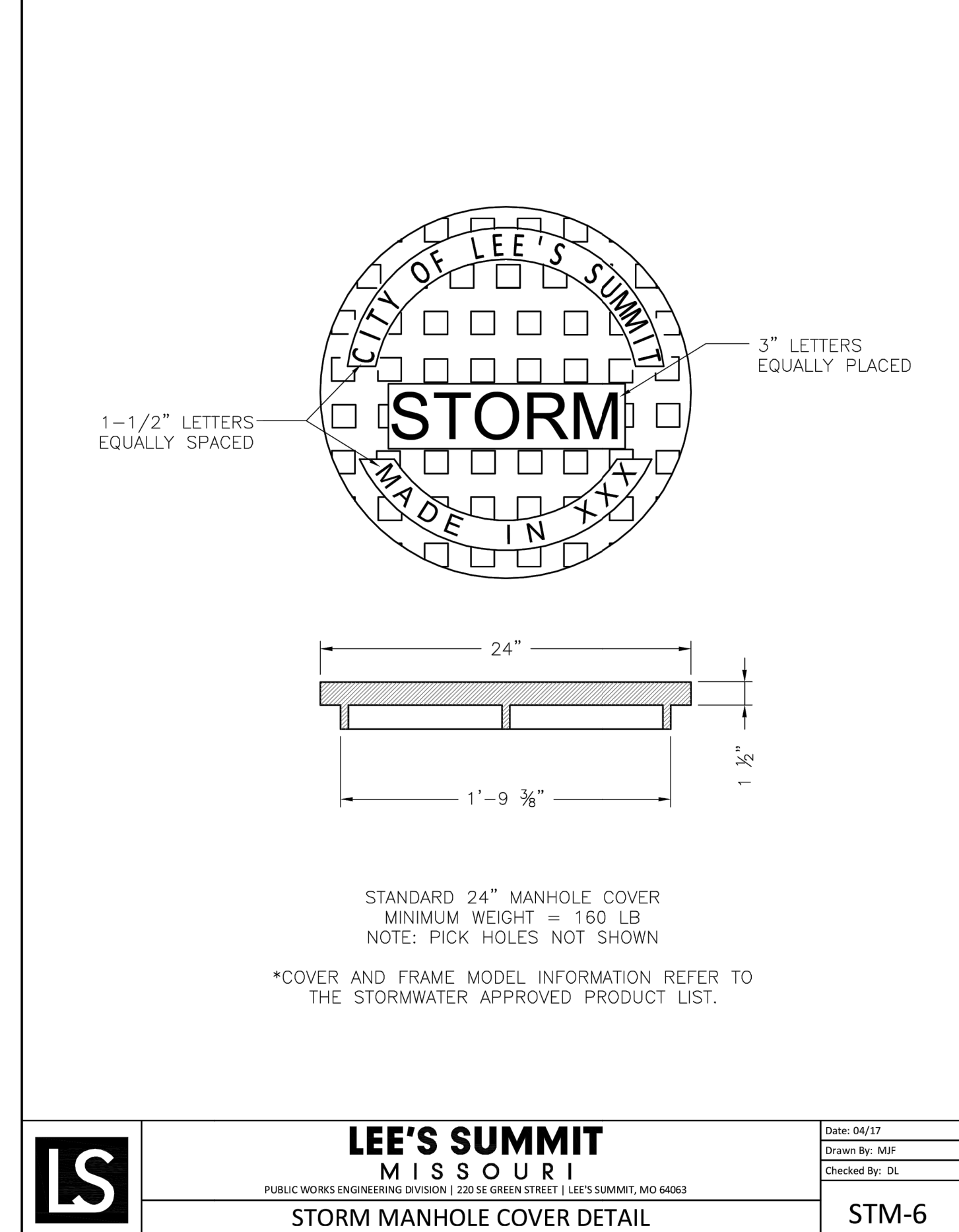
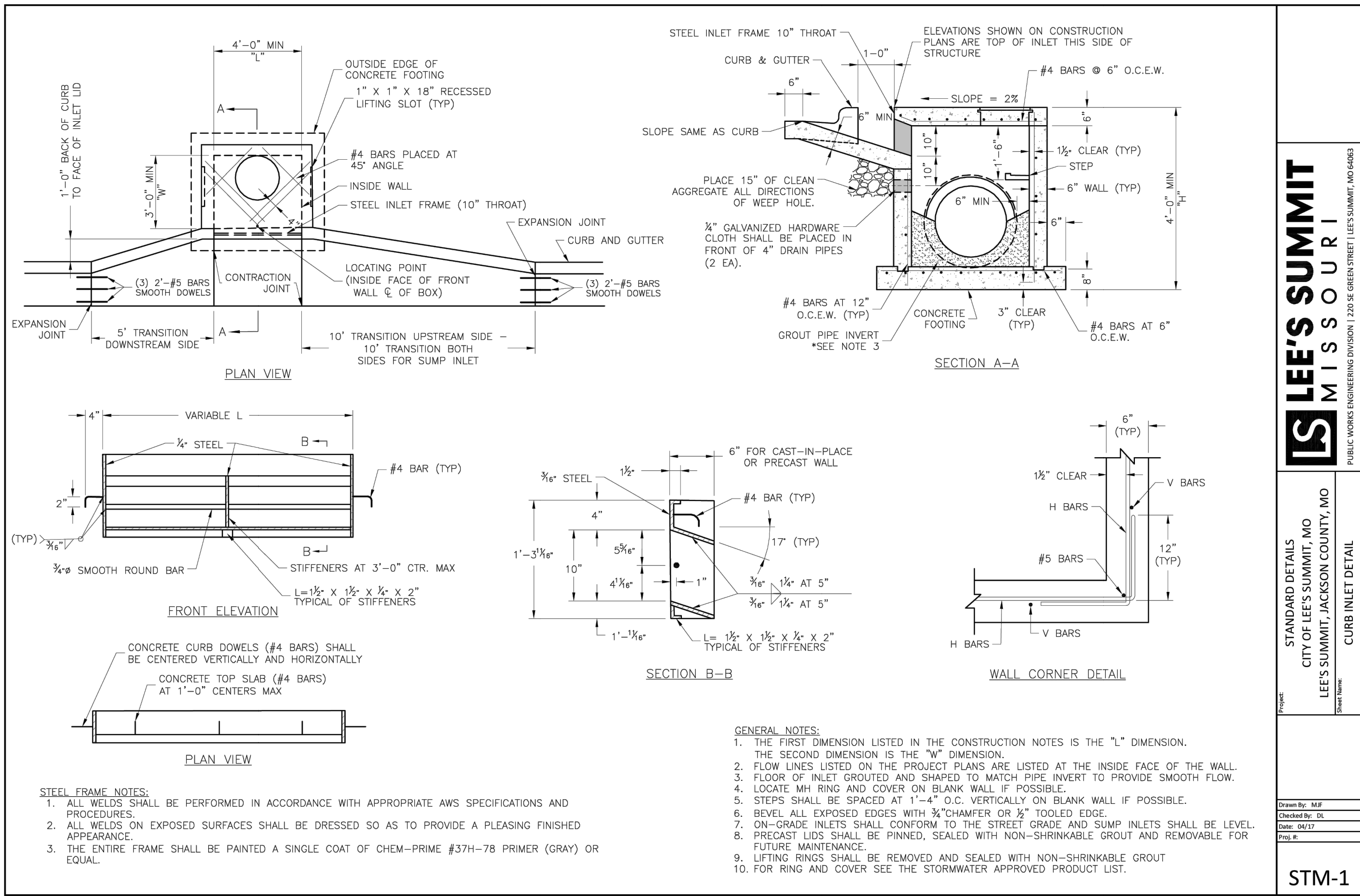
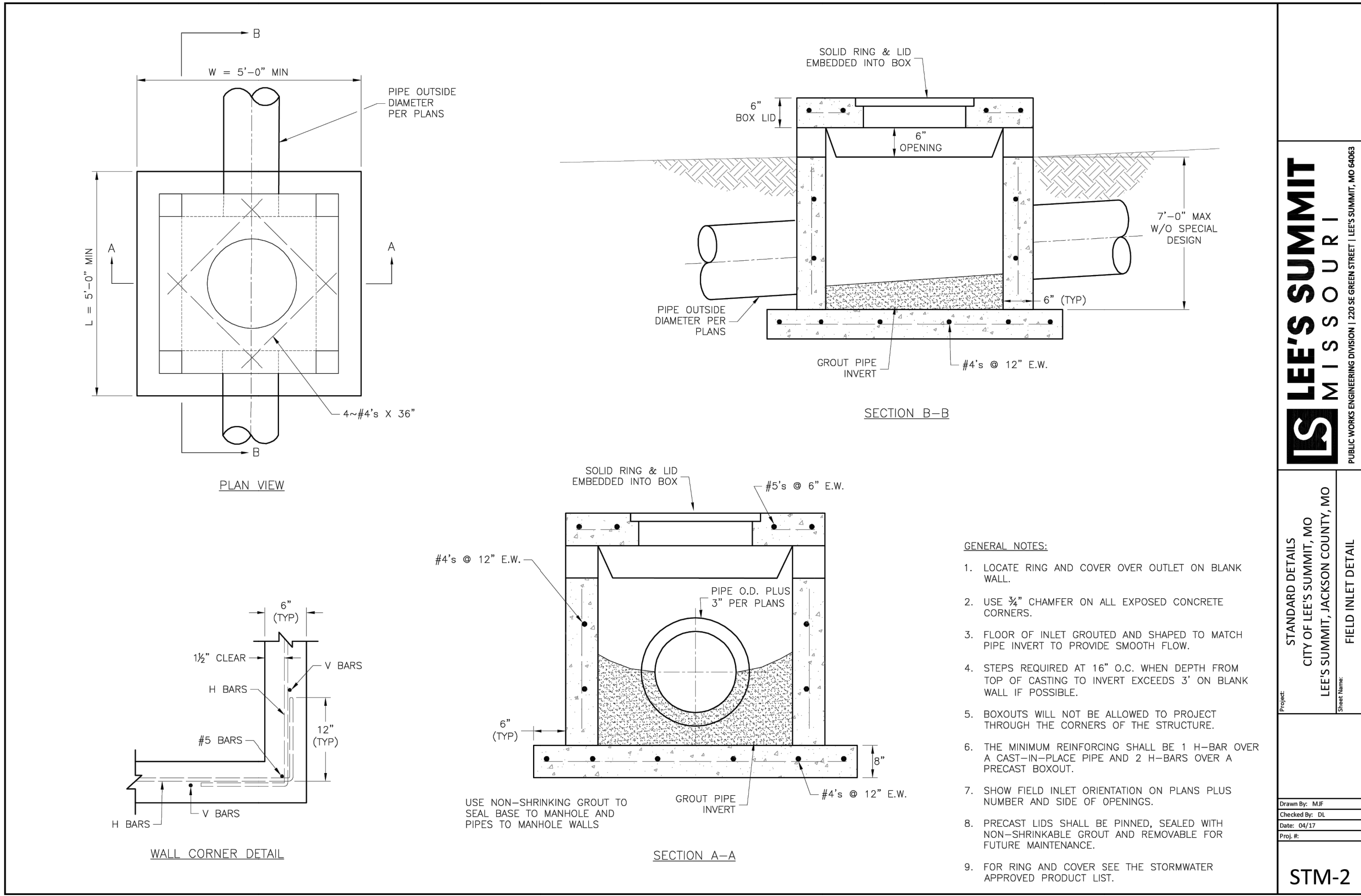
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| REV. 12/6/2023 |
| REV. 1/19/2024 |
| REV. 2/8/2024  |

C.500







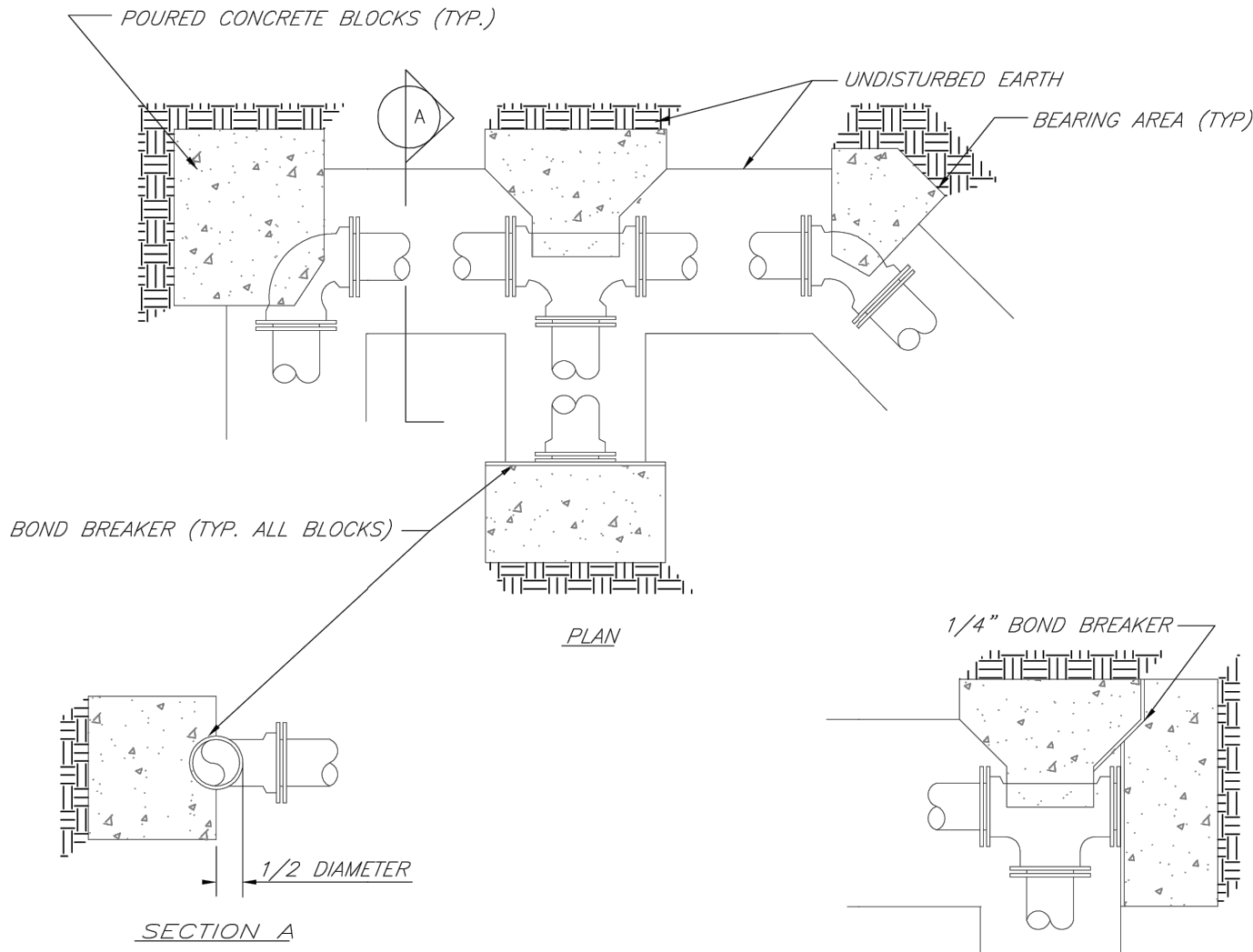


**GENERAL NOTE:**  
1 - ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.



| REQUIRED CONCRETE BEARING AREA (SQUARE FEET - SF) |           |            |            |              |               |
|---------------------------------------------------|-----------|------------|------------|--------------|---------------|
| NOM. DIA.<br>(INCHES)                             | TEE, PLUG | 90<br>BEND | 45<br>BEND | 22.5<br>BEND | 11.25<br>BEND |
| 6                                                 | 4.7       | 6.7        | 4.0        | 4.0          | 4.0           |
| 8                                                 | 8.4       | 11.8       | 6.4        | 4.0          | 4.0           |
| 10                                                | 13.1      | 18.5       | 10.0       | 5.1          | 4.0           |
| 12                                                | 18.8      | 26.7       | 14.4       | 7.4          | 4.0           |
| 14                                                | 25.7      | 36.3       | 19.6       | 10.0         | 5.0           |
| 16                                                | 33.5      | 47.4       | 25.6       | 13.1         | 6.6           |
| 18                                                | 42.4      | REST. JT.  | 32.5       | 16.5         | 8.3           |
| 20                                                | REST. JT. | REST. JT.  | 40.1       | 20.4         | 10.3          |
| 24                                                | REST. JT. | REST. JT.  | REST. JT.  | 29.4         | 14.8          |

- NOTES:
1. ALL BENDS WITHOUT RESTRAINED JOINTS SHALL HAVE CONCRETE THRUST BLOCKS INSTALLED FOR RESTRAINT.
  2. MEGA LUGS MAY BE USED ONLY IN CONJUNCTION WITH CONCRETE THRUST BLOCKING.
  3. BEARING AREA MUST BE AGAINST UNDISTURBED SOIL.
  4. DO NOT COVER JOINTS OR BOLTS (WHERE APPLICABLE) WITH CONCRETE.



**LEE'S SUMMIT  
MISSOURI**

PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

HORIZONTAL THRUST BLOCKS

Date: 02/13

Drawn By: JN

Checked By: DL

FILE: WAT-1

Rev: 1/14

Rev:



**LEE'S SUMMIT  
MISSOURI**

PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

SERVICE CONNECTION WITH METER WELL

Date: 06/2015

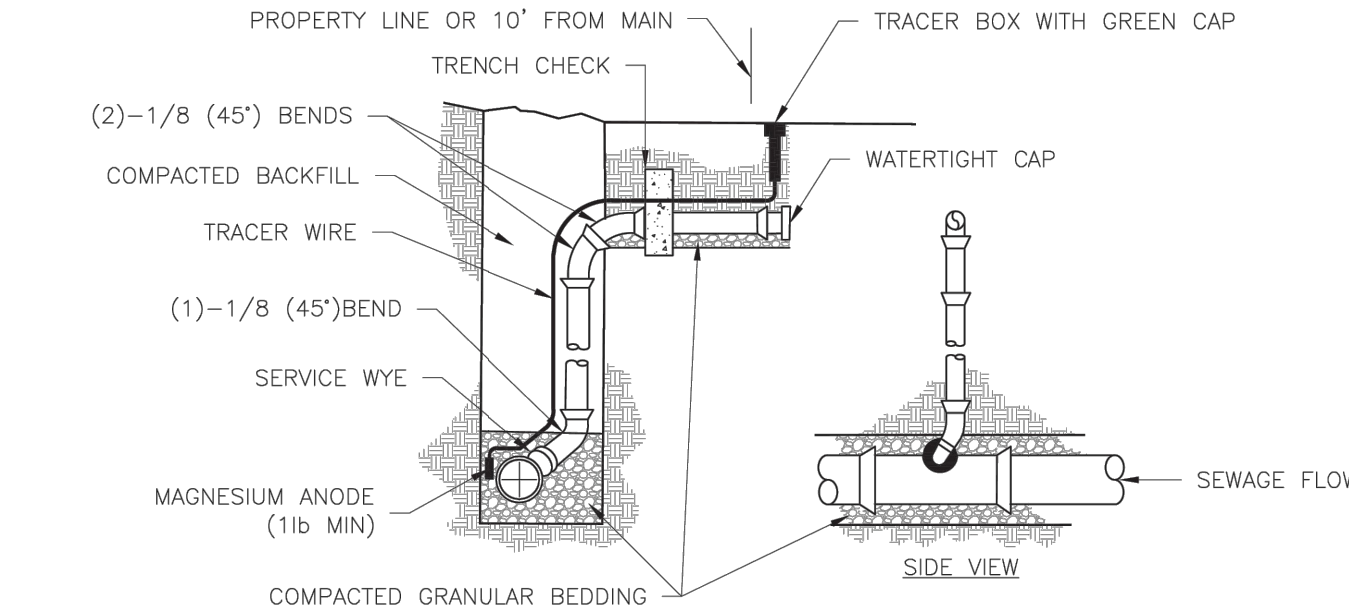
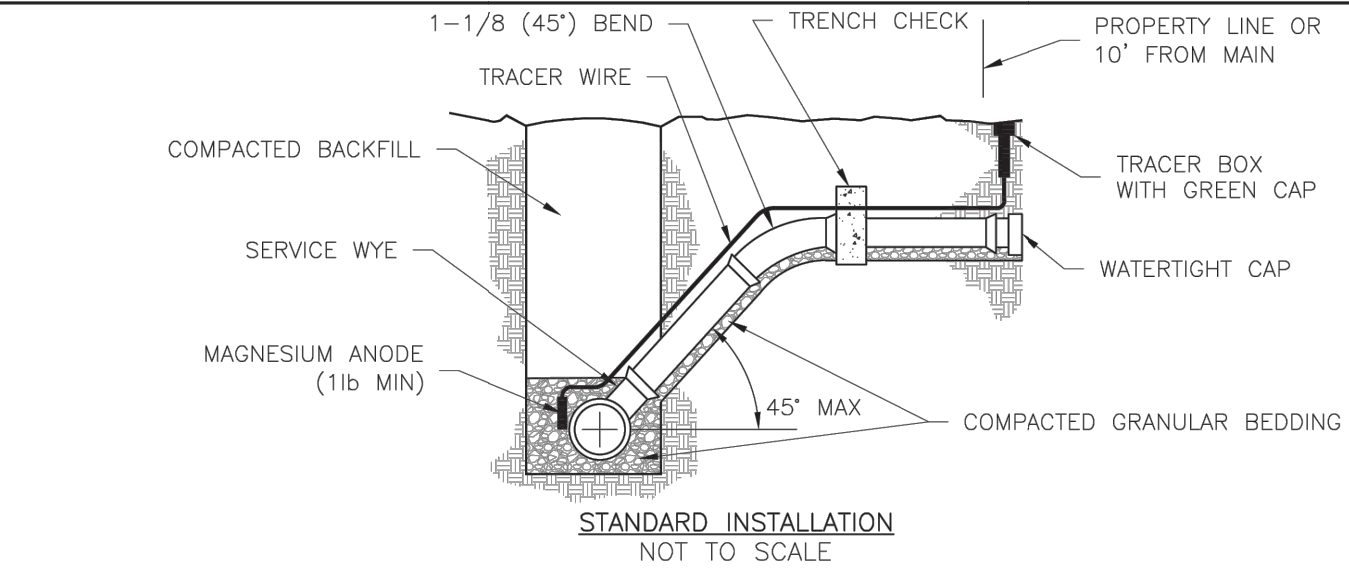
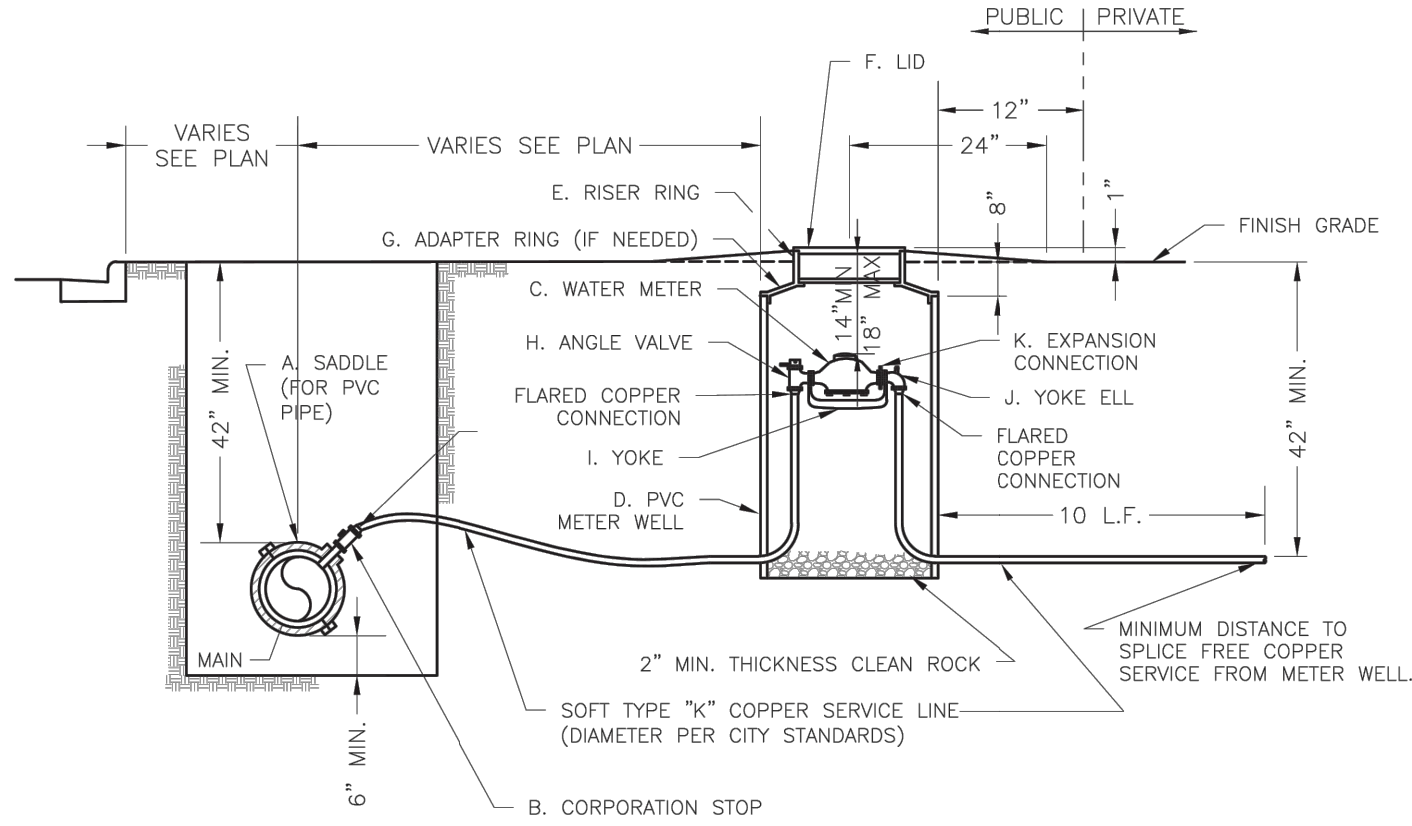
Drawn By: JN

Checked By: DL

WAT-11

NOTES:

1. METER INSTALLATION SHALL NOT BE LOCATED IN AREAS SUBJECT TO VEHICULAR TRAFFIC OR IN CONCRETE PAVEMENT WITHOUT CITY APPROVAL.
2. IF METER IS TO BE LOCATED OTHER THAN IN FRONT OF PROPERTY LINE, CITY APPROVAL SHALL BE OBTAINED.
3. CITY TO FURNISH ITEMS A-K.
4. NO OTHER EQUIPMENT SHALL BE INSTALLED IN THIS PIT.
5. 42" MINIMUM BURY DEPTH FOR ALL SERVICE LINES.
6. EXCAVATION FOR TAP TO EXPOSE 4 LINEAR FEET OF MAIN.
7. NO SPLICES ALLOWED BETWEEN METER AND MAIN.
8. SERVICE CONNECTION TAP AT APPROXIMATELY 45 DEGREES.
9. LID AND RISER RING SHALL BE SET SO THAT GROUND WATER WILL DRAIN AWAY FROM THE WELL.
10. CONTACT WATER UTILITIES, 816-969-1900, FOR REQUIREMENTS OF A METER LARGER THAN 2"



NOTES:

1. ALL SEWER STUBS SHALL BE CONSTRUCTED TO PROPERTY LINE OR 10' MINIMUM FROM THE MAIN, WHICHEVER IS GREATER. WHERE SIDEWALKS ARE PRESENT, CONTRACTOR SHALL EXTEND SERVICE LINE UNDER EXISTING SIDEWALK TO TWO FEET BEYOND.
2. IMPERVIOUS TRENCH CHECKS SHALL BE PLACED ON BUILDING SEWER STUBS (AT LEAST 5' AWAY FROM THE SANITARY SEWER MAIN).
3. TRENCH CHECKS ON THE BUILDING SEWER STUBS SHALL EXTEND 6" BELOW THE BOTTOM OF THE PIPE. LENGTH SHALL BE A MINIMUM OF 12". THE HEIGHT OF THE TRENCH CHECK SHALL EXTEND 12" ABOVE THE TOP OF THE PIPE. THE WIDTH OF THE TRENCH CHECK SHALL BE THE WIDTH OF THE TRENCH.
4. SEE SPECIFICATION SECTION 2100 FOR SEWER MAIN BEDDING AND BACKFILL.
5. #12 GAUGE GREEN INSULATED COPPER TRACER WIRE SHALL BE INSTALLED. TRACER WIRE TERMINAL BOXES SHALL BE INSTALLED DIRECTLY ABOVE THE SEWER SERVICE OR AS DETERMINED BY THE ENGINEER.
6. FOR SERVICES, TRACER WIRE SHALL RUN FROM THE WYE AND TERMINATE IN A FLUSH MOUNTED TRACER BOX WITH A GREEN CAST IRON LOCKABLE TOP. WIRE SHALL BE TAPED OR TIED TO THE PIPE AT 5' INTERVALS.
7. TRACER WIRE BOX SHALL BE INSTALLED WITHIN 1.0' OF PROPERTY LINE.
8. THE TRACER WIRE SHALL REMAIN CONTINUOUS TO THE GREATEST EXTENT POSSIBLE. SPLICES IN THE TRACER WIRE SHOULD BE MADE WITH SPLIT BOLT CONNECTORS. WIRE NUTS SHALL NOT BE USED. A WATER-PROOF CONNECTION IS NECESSARY TO PREVENT CORROSION.



**LEE'S SUMMIT  
MISSOURI**

PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

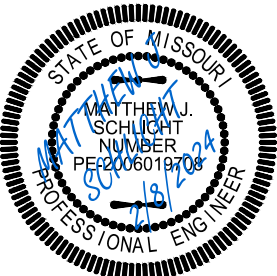
SANITARY SEWER STUB DETAIL

Date: 12/2015

Drawn By: MIF

Checked By: DL

SAN-1



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

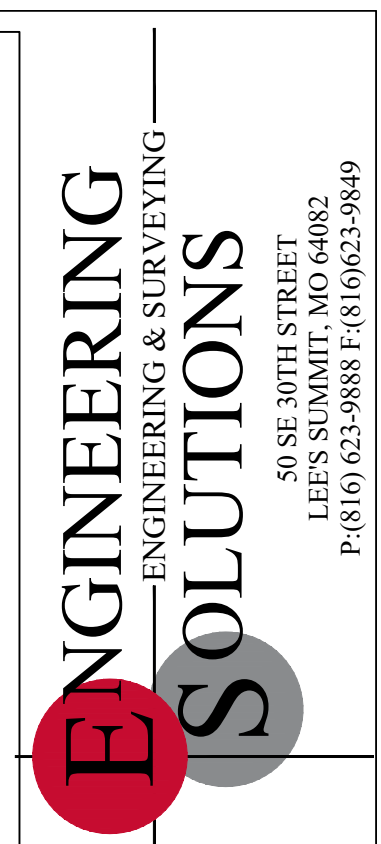
REVISIONS

REV. 12/6/2023

REV. 1/19/2024

REV. 2/8/2024





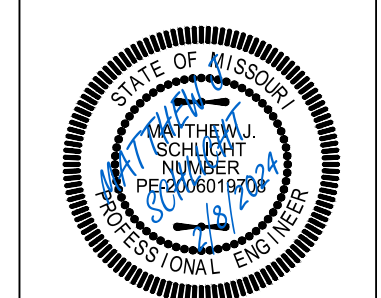
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Missouri  
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*Surveying 2005008319-D*  
Kansas  
*Engineering E-1695*  
*Surveying LS-218*  
Oklahoma  
*Engineering 6254*  
Nebraska  
*Engineering CA2821*

Lakewood Business Park - Lot 46  
Lee's Summit, Jackson County, Missouri

Project: LAKEWOOD  
BUSINESS CENTER  
PLAT S, LSMO

Issue Date:  
May 5, 2023

*LANDSCAPE PLAN*  
Construction Plans for:  
Lakewood Business Park - Lot 46  
Lee's Summit, Jackson County, Missouri



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

 REV. 12/6/2023  
 REV. 1/19/2024  
 REV. 2/8/2024

L.100



1. ALL PLANT MATERIAL SHALL BE FIRST CLASS REPRESENTATIVES OF SPECIFIED SPECIES, VARIETY OR CULTIVAR, IN HEALTHY CONDITION WITH NORMAL WELL DEVELOPED BRANCHES AND ROOT PATTERNS. PLANT MATERIAL SHALL FIRST BE INSPECTED AND APPROVED BY THE CITY OF CHICAGO'S ARBORICULTURE DIVISION. PLANT MATERIAL STANDARDS AS SET FORTH IN THE AMERICAN ASSOCIATION OF NURSERYMEN'S "AMERICAN STANDARD OF NURSERY STOCK", ANSI Z603.1-2004.
2. ALL PLANT MATERIALS CONTAINER GROWN AND WILL BE FREE OF DISEASE AND PESTS. NO BARE ROOT. ALL PLANT BEDS TO BE MULCHED TO A DEPTH OF 3" WITH DARK BROWN, HARDWOOD MULCH. PLANTING BEDS ARE TO BE FREE OF WEEDS AND GRASS. TREAT BEDS WITH A PRE-EMERGENT HERBICIDE PRIOR TO PLANTING AND MULCH TO A MINIMUM OF 2" DEEP.
3. HOLE AREA FOR TREE TO BE TWICE (2X) THE DIAMETER OF THE ROOT BALL AND ROOT BALL SHALL BE SUFFICIENTLY MOUNDED FOR WATER RUN-OFF.
4. ALL PLANT MATERIALS SHALL BE PROTECTED FROM THE DRYING ACTION OF THE SUN AND WIND AFTER PLANTING. TWIGS, BRANCHES AND WHOLE AWAITING PLANTING. BALLS OF PLANTS WHICH CANNOT BE PLANTED IMMEDIATELY SHALL BE PROTECTED FROM DRYING ACTION BY COVERING THEM WITH MOIST MULCH. PERIODICALLY, APPLY WATER TO MULCH-COVERED BALLS TO KEEP MOIST. IF PLANTING SHOULD OCCUR DURING PERIODS OF DRY WEATHER, LEAVES OF PLANTS SHOULD BE COVERED WITH MULCH TO PREVENT EXCESSIVE WILDBURN. REAPPLY ANTI-DESCSANT AFTER PLANTING TO REDUCE TRANSPIRATION. REMOVE TWINE AND BURLAP FROM ROOT BALLS. SOIL ON TOP OF CONTAINERED OR BALLED PLANTS IS TO BE REMOVED UNTIL ALL PLANTS' ROOT PATTERNS ARE EXPOSED. SOIL TO BE REPLACED WITH MULCH.
5. AFTER PLANTING IS COMPLETED, PRUNE MINIMALLY TO REMOVE DEAD OR INJURED TWIGS AND BRANCHES. PRUNE IN SUCH A MANNER AS NOT TO CHANGE THE NATURAL HABIT OR SHAPE OF THE PLANT. MAKE CUTS BACK TO NEARLY HORIZONTAL, BUT NOT FLUSH. DO NOT PAINT ANY CUTS WITH TREE PAINT. CENTRAL LEADERS SHALL NOT BE REMOVED.
6. GUARANTEE TREES, SHRUBS, GROUND COVER PLANTS FOR ONE CALENDAR YEAR FOLLOWING PROVISIONAL ACCEPTANCE OF THE PLANTING. ANY PLANTING MATERIALS THAT DIE OR ARE DAMAGED FOR ANY REASON, OTHER CAUSES OR THAT ARE UNHEALTHY OR UNSUITABLE IN CONDITION, SHALL BE REPLACED BY THE CONTRACTOR.

7. ALL LAWN AREAS TO BE SODDED AS SHOWN ON PLANS. SOD SHALL COMPLY WITH US DEPT. OF AGRICULTURE RULES AND REGULATIONS UNDER THE FEDERAL SEED ACT AND EQUAL IN QUALITY TO STANDARDS FOR CERTIFIED SEED. SOD SHALL BE HEALTHY, THICK TURF HAVING UNDERGONE A PROGRAM OF REGULAR FERTILIZING, MOWING AND WEED CONTROL. SEED AND SOD SHALL BE A TURF-TYPE TALL FESCUE (3 WAY) BLEND. SEED BLEND SHALL CONSIST OF THE FOLLOWING:

9. THE INSTALLATION OF ALL PLANT MATERIALS SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF THE CITY OF CHICAGO, ILLINOIS, AND THE ILLINOIS PLANTING STANDARDS.
10. ALL LANDSCAPE AREAS TO BE FREE OF ALL BUILDING DEBRIS AND TRASH, BACK FILLED WITH CLEAN FILL SOIL AND TOP DRESSED WITH 4" OF TOPSOIL. TOPSOIL SHALL HAVE A pH RANGE OF 5.5 TO 7 AND A 4% ORGANIC MATTER CONTENT.
11. PLANT BEDS TO BE "MOUND"ED. PLANT MATERIAL, PLANT BEDS, MULCH AND DUG EDGE ARE TO BE INSTALLED PER LANDSCAPE PLANS, DETAILS, AND MANUFACTURER'S RECOMMENDATIONS.
12. MULCH SHALL BE 3" DEEP, UNIFORM, AND ALTERNATELY LAYERED WITH 3" OF SOIL AND 3" OF MULCH IN PLANT BEDS. HAND RAKE ALL AREAS TO SMOOTH EVEN SURFACES FREE OF DEBRIS, CLOS, ROCKS, AND VEGETATIVE, WATER GREATER THAN 1".
13. PLANT BEDS TO BE MULCHED WITH 3" OF DARK BROWN, HARDWOOD MULCH. HARDWOOD MULCH, EXCEPT IF NOTED AS ROCK. DARK BROWN, HARDWOOD MULCH SHALL BE INSTALLED OVER DEWIT 30 W/EEC CONTROL FABRIC IN PLANT BEDS ONLY.
14. CONTRACTOR IS RESPONSIBLE FOR INITIAL WATERING UPON INSTALLATION.
15. DUG EDGES ARE TO BE DUG WHERE MULCH BEDS ARE ADJACENT TO TURF AREAS. NO ERODING IS REQUIRED TO ADJACENT AREAS.
16. THE EXACT LOCATION OF ALL UTILITIES, STRUCTURES, AND UNDERGROUND UTILITIES SHALL BE DETERMINED AND VERIFIED ON SITE BY THE LANDSCAPE CONTRACTOR PRIOR TO INSTALLATION OF THE MATERIALS. DAMAGE TO EXISTING UTILITIES AND/OR STRUCTURES SHALL BE REPLACED TO THEIR ORIGINAL CONDITION BY THE LANDSCAPE CONTRACTOR.
17. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR OBTAINING NECESSARY PERMITS AND APPROVALS AND READ INSPECTIONS BY LEGAL AUTHORITIES.
18. CONTRACTOR SHALL PROVIDE EASILY ACCESSIBLE IRRIGATION WITHIN 100' MAX. OF ALL LANDSCAPED AREAS INCLUDING ALL PLANT BEDS, INDIVIDUAL TREES, AND TURF AREAS. ALL LAWN AREAS (AS SHOWN ON PLANS) SHALL BE SPRINKLERED. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF ALL IRRIGATION COMPONENTS, SLEEPING, PIPE AND CONTROL. DESIGN DRAWINGS OF IRRIGATION SYSTEM SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT AND OWNER FOR REVIEW.
19. ANY SUBSTITUTIONS OR DEVIATIONS SHALL BE REQUESTED IN WRITING BY THE CONTRACTOR FOR APPROVAL BY THE ARCHITECT PRIOR TO INSTALLATION OF PLANT MATERIALS. ALL PLANTS ARE TO BE SPECIFIED AS SPECIFIED ON DRAWINGS.

20. ALL SHRUBS ARE TO BE MAINTAINED IN THEIR NATURAL SHAPE TO ALLOW EVENTUAL GROWTH INTO A HEDGE.
21. MAINTAIN NATURAL HABIT OF ALL SPECIFIED PLANT MATERIAL.
22. NEW SOD TO BE THOROUGHLY WATERED UNTIL ROOTS "TAKE HOLD" OF SOD BED. CONTINUE WATERING AS REQUIRED, UNTIL COMPLETELY ESTABLISHED.

THE FOLLOWING CRITERIA SHALL BE CONSIDERED MINIMUM STANDARDS FOR DESIGN AND INSTALLATION OF LANDSCAPE IRRIGATION SYSTEM:

- SUBMIT AS-BUILT DRAWING IN FULL SIZE DRAWING FORM AS WELL AS PDF ELECTRONIC FORMAT. (SCANNING FULL SIZE COPY OF PLAN IS ACCEPTABLE IF IT CAN BE PRINTED TO SCALE.

***NTS***

**N.T.S.**

***N.T.S.***

***NTS***