

AUSTIN HOMES INFRASTRUCTURE IMPROVEMENTS

KNOXVILLE, KNOX COUNTY, TN

PREPARED FOR:
KNOXVILLE'S COMMUNITY
DEVELOPMENT CORPORATION
FEBRUARY 2020

LIST OF IMPROVEMENTS

THE FOLLOWING IMPROVEMENTS ARE REQUIRED AND PROPOSED.

S BELL STREET

PROPOSED REALIGNMENT
PAVEMENT RESURFACING AND NEW ASPHALT
CURB AND GUTTER
10' SIDEWALKS ON BOTH SIDES OF REALIGNED STREET
ON-STREET PARKING
WATER MAIN
STORM DRAINAGE
SANITARY SEWER

BURGE DRIVE

PROPOSED NEW ROAD
CURB AND GUTTER
SIDEWALKS ON BOTH SIDES OF STREET
ON-STREET PARKING
WATER MAIN
STORM DRAINAGE
SANITARY SEWER

ROAD A & ROAD B

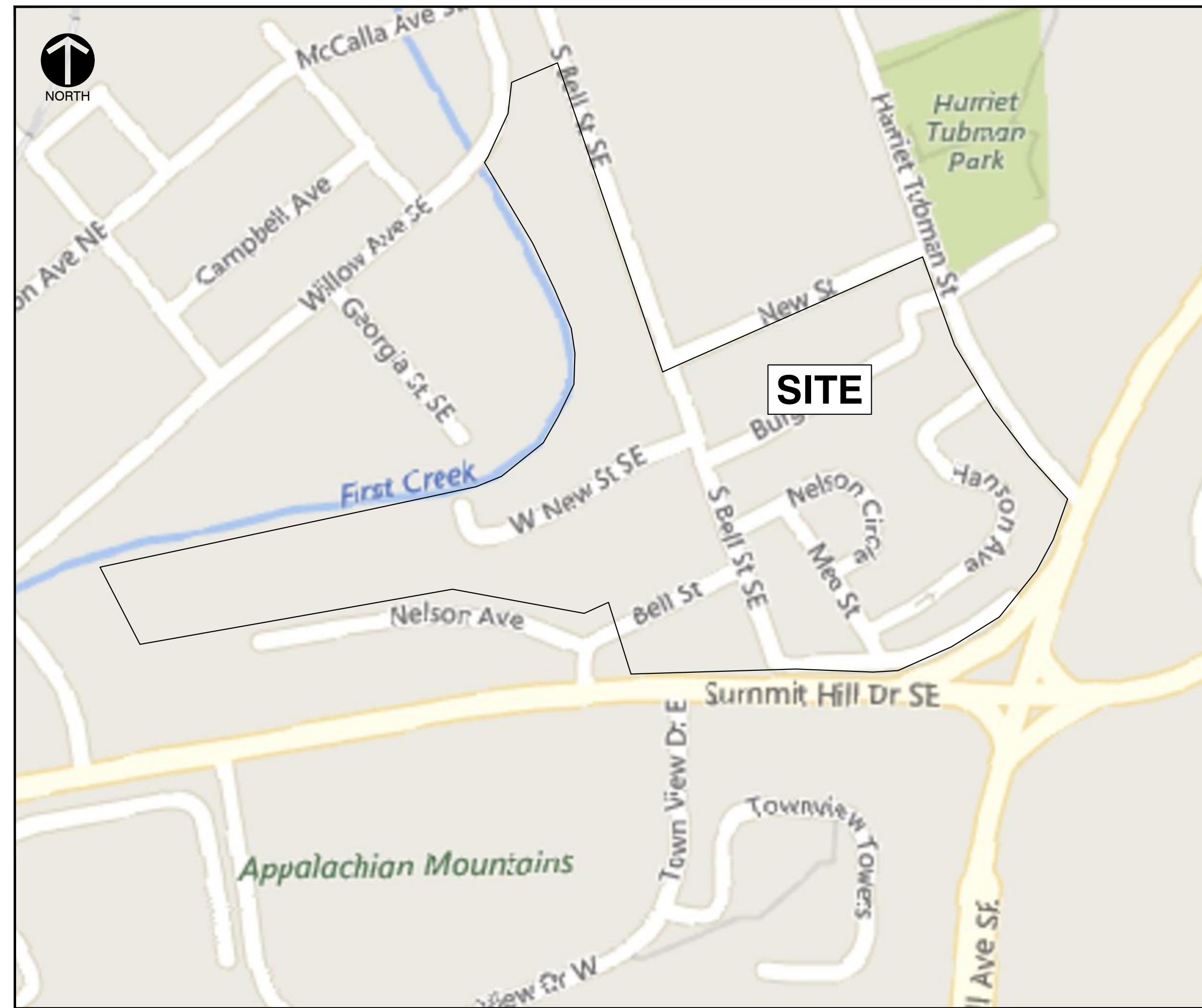
PROPOSED NEW BOULEVARD STYLE ROADS
22' CENTER MEDIAN
CURB AND GUTTER
6' SIDEWALKS ON BOTH SIDES OF STREET
ON-STREET PARKING
WATER MAIN
STORM DRAINAGE
SANITARY SEWER

HARRIET TUBMAN STREET

PROPOSED NEW 10' SIDEWALK ON WEST SIDE OF STREET

INTERSECTION OF MARTIN LUTHER KING JR AVE & E SUMMIT HILL DR

REMOVE EXISTING SLIP RAMP AND RESTRIPE EXISTING LANES
NEW 10' SIDEWALK TO CONNECT TO SIDEWALK ON HARRIET TUBMAN STREET
NEW 25' CURB RADIUS AT EDGE OF PROPOSED RIGHT TURN LANE



SITE LOCATION MAP

IMAGE TAKEN FROM BING MAPS
N.T.S.

PROPERTY INFORMATION

TOTAL ACREAGE: ± 23.0 ACRES
ZONING: R-2 RESIDENTIAL
PROPOSED USE: MULTI-FAMILY RESIDENTIAL
PARCEL ID'S: 095AJ007, 095HC003, 095AH025, 095GA013, 095GA014, 095HC001, 095HC002
ADDRESSES: 231 S. BELL ST., 205 OLD VINE AVE., 0 S. BELL ST., 1124 WEST NEW ST., & 331 HARRIET TUBMAN ST.
CITY BLOCK: 12021, 07327

Sheet List Table

| Sheet Number | Sheet Title |
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| C000 | COVER SHEET |
| C001 | GENERAL NOTES SHEET |
| C100 | DEMOLITION PLAN |
| C200 | SITE LAYOUT SHEET |
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| C202 | SITE LAYOUT PLAN |
| C203 | SITE LAYOUT PLAN |
| C300 | SITE GRADING SHEET |
| C301 | SITE GRADING PLAN |
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| C303 | SITE GRADING PLAN |
| C400 | SITE DRAINAGE SHEET |
| C401 | SITE DRAINAGE PLAN |
| C402 | SITE DRAINAGE PLAN |
| C403 | SITE DRAINAGE PLAN |
| C404 | SITE DRAINAGE PROFILES |
| C405 | SITE DRAINAGE PROFILES |
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| C501 | SITE UTILITY PLAN |
| C502 | SITE UTILITY PLAN |
| C503 | SITE UTILITY PLAN |
| C504 | SITE UTILITY PROFILES |
| C505 | SITE UTILITY PROFILES |
| C800 | DETAILS |
| C801 | DETAILS |
| C802 | DETAILS |
| C803 | DETAILS |
| C804 | DETAILS |
| C900 | INITIAL EPSC PLAN |
| C901 | INTERIM EPSC PLAN |
| C901 | FINAL EPSC PLAN |
| C903 | EPSC DETAILS |
| C904 | EPSC DETAILS |

OWNER/DEVELOPER

KNOXVILLE'S COMMUNITY DEVELOPMENT CORPORATION
901 N. BROADWAY
KNOXVILLE, TN 37917
PH: (865) 403-1117

ENGINEER

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
2704 CHEROKEE FARM WAY, STE. 101
KNOXVILLE, TN 37920
PH: (865) 977-9997
CONTACT: MATT BRAZILLE, PE

UTILITY COMPANY

WATER & SANITARY SEWER SERVICE
KNOXVILLE UTILITIES BOARD
4505 MIDDLEBROOK PIKE
KNOXVILLE, TN 37921
865-524-2911

WATER AND SEWER SERVICES
ARE AVAILABLE TO ALL LOTS



REVISION RECORD
DATE DESCRIPTION

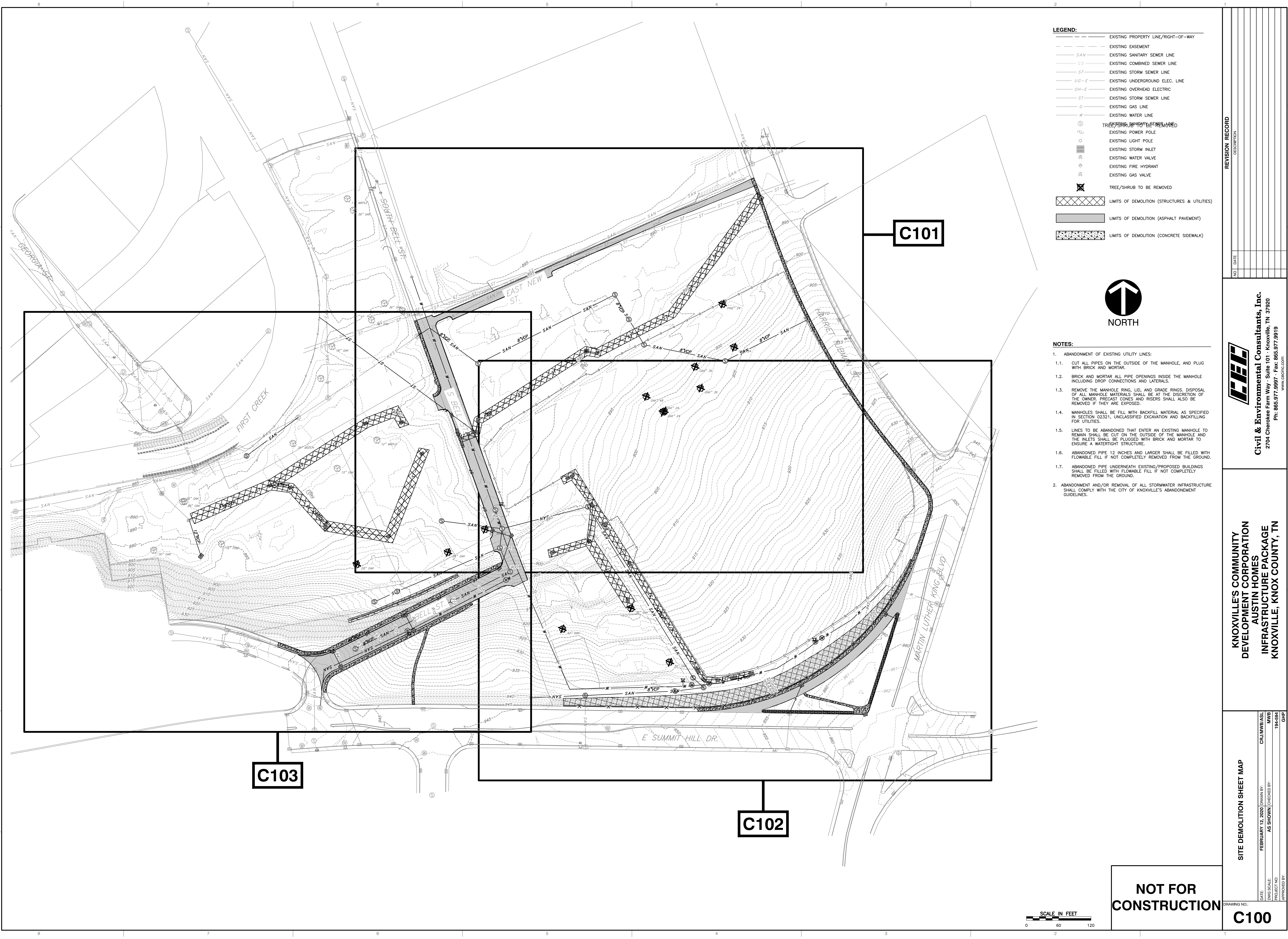
Civil & Environmental Consultants, Inc.
2704 Cherokee Farm Way - Suite 101 - Knoxville, TN 37920
Ph: 865.977.9997 - Fax: 865.977.9919
www.ccecinc.com

KNOXVILLE'S COMMUNITY DEVELOPMENT CORPORATION
AUSTIN HOMES
INFRASTRUCTURE PACKAGE
KNOXVILLE, KNOX COUNTY, TN

COVER
DATE: FEBRUARY 12, 2020
DRAWN BY: CRJ/MWB/ASL
DWG SCALE: AS SHOWN
PROJECT NO.: 184-594
CHECKED BY: MWB
GHP

NOT FOR CONSTRUCTION

DRAWING NO.: **C000**



- LEGEND:**
- EXISTING PROPERTY LINE/RIGHT-OF-WAY
 - EXISTING EASEMENT
 - EXISTING SANITARY SEWER LINE
 - EXISTING COMBINED SEWER LINE
 - EXISTING STORM SEWER LINE
 - EXISTING UNDERGROUND ELEC. LINE
 - EXISTING OVERHEAD ELECTRIC
 - EXISTING STORM SEWER LINE
 - EXISTING GAS LINE
 - EXISTING WATER LINE
 - TREE/SHRUB TO BE REMOVED
 - EXISTING POWER POLE
 - EXISTING LIGHT POLE
 - EXISTING STORM INLET
 - EXISTING WATER VALVE
 - EXISTING FIRE HYDRANT
 - EXISTING GAS VALVE
 - TREE/SHRUB TO BE REMOVED
 - LIMITS OF DEMOLITION (STRUCTURES & UTILITIES)
 - LIMITS OF DEMOLITION (ASPHALT PAVEMENT)
 - LIMITS OF DEMOLITION (CONCRETE SIDEWALK)



- NOTES:**
1. ABANDONMENT OF EXISTING UTILITY LINES:
 - 1.1. CUT ALL PIPES ON THE OUTSIDE OF THE MANHOLE, AND PLUG WITH BRICK AND MORTAR.
 - 1.2. BRICK AND MORTAR ALL PIPE OPENINGS INSIDE THE MANHOLE INCLUDING DROP CONNECTIONS AND LATERALS.
 - 1.3. REMOVE THE MANHOLE RING, LID, AND GRADE RINGS. DISPOSAL OF ALL MANHOLE MATERIALS SHALL BE AT THE DISCRETION OF THE OWNER. PRECAST CONES AND RISERS SHALL ALSO BE REMOVED IF THEY ARE EXPOSED.
 - 1.4. MANHOLES SHALL BE FILL WITH BACKFILL MATERIAL AS SPECIFIED IN SECTION 02321, UNCLASSIFIED EXCAVATION AND BACKFILLING FOR UTILITIES.
 - 1.5. LINES TO BE ABANDONED THAT ENTER AN EXISTING MANHOLE TO REMAIN SHALL BE CUT ON THE OUTSIDE OF THE MANHOLE AND THE INLETS SHALL BE FLOUGED WITH BRICK AND MORTAR TO ENSURE A WATERTIGHT STRUCTURE.
 - 1.6. ABANDONED PIPE 12 INCHES AND LARGER SHALL BE FILLED WITH FLOWABLE FILL IF NOT COMPLETELY REMOVED FROM THE GROUND.
 - 1.7. ABANDONED PIPE UNDERNEATH EXISTING/PROPOSED BUILDINGS SHALL BE FILLED WITH FLOWABLE FILL IF NOT COMPLETELY REMOVED FROM THE GROUND.
 2. ABANDONMENT AND/OR REMOVAL OF ALL STORMWATER INFRASTRUCTURE SHALL COMPLY WITH THE CITY OF KNOXVILLE'S ABANDONMENT GUIDELINES.

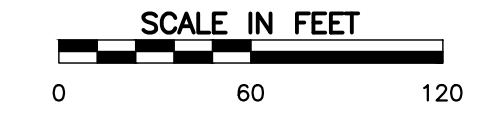
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| KNOXVILLE COMMUNITY DEVELOPMENT CORPORATION AUSTIN HOMES INFRASTRUCTURE PACKAGE KNOXVILLE, KNOX COUNTY, TN | |
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|----------------------------------|-------------------------|
| SITE DEMOLITION SHEET MAP | DRAWING NO. C100 |
| DATE: FEBRUARY 12, 2020 | DRAWN BY: CRJ/MMB/ASL |
| DWG SCALE: AS SHOWN | CHECKED BY: MMB |
| PROJECT NO. 194-594 | APPROVED BY: GHP |

**NOT FOR
CONSTRUCTION**

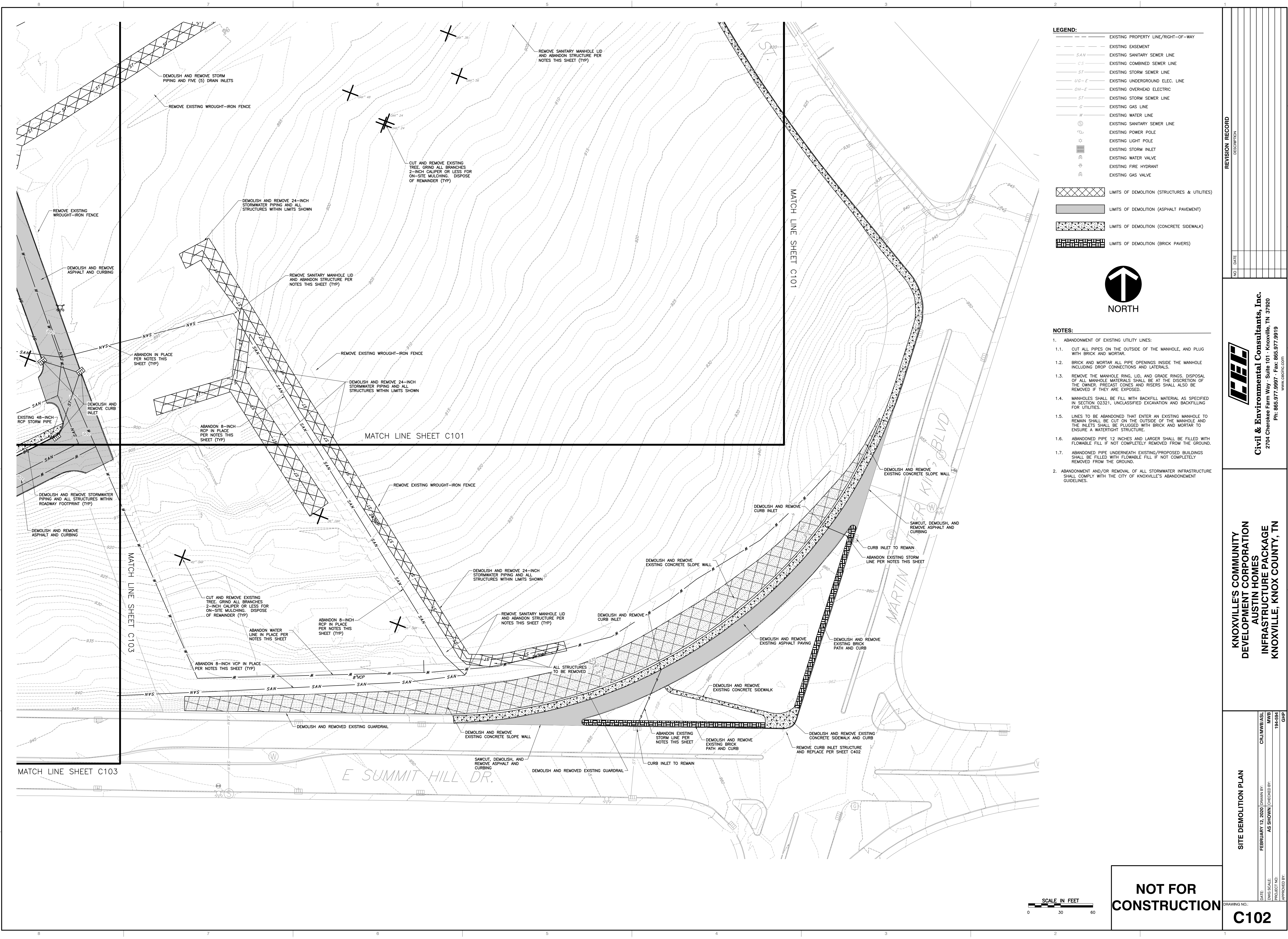


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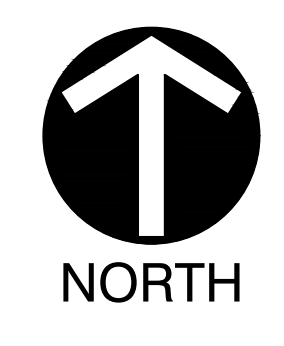
C101

C102

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- LEGEND:**
- EXISTING PROPERTY LINE/RIGHT-OF-WAY
 - EXISTING EASEMENT
 - SAN EXISTING SANITARY SEWER LINE
 - CS EXISTING COMBINED SEWER LINE
 - ST EXISTING STORM SEWER LINE
 - UG-E EXISTING UNDERGROUND ELEC. LINE
 - OH-E EXISTING OVERHEAD ELECTRIC
 - ST EXISTING STORM SEWER LINE
 - G EXISTING GAS LINE
 - W EXISTING WATER LINE
 - EXISTING SANITARY SEWER LINE
 - EXISTING LIGHT POLE
 - EXISTING STORM INLET
 - EXISTING WATER VALVE
 - EXISTING FIRE HYDRANT
 - EXISTING GAS VALVE
- [Hatched Box] LIMITS OF DEMOLITION (STRUCTURES & UTILITIES)
 - [Solid Grey Box] LIMITS OF DEMOLITION (ASPHALT PAVEMENT)
 - [Dotted Box] LIMITS OF DEMOLITION (CONCRETE SIDEWALK)
 - [Brick Pattern Box] LIMITS OF DEMOLITION (BRICK PAVERS)



- NOTES:**
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 AUSTIN HOMES
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 KNOXVILLE, KNOX COUNTY, TN**

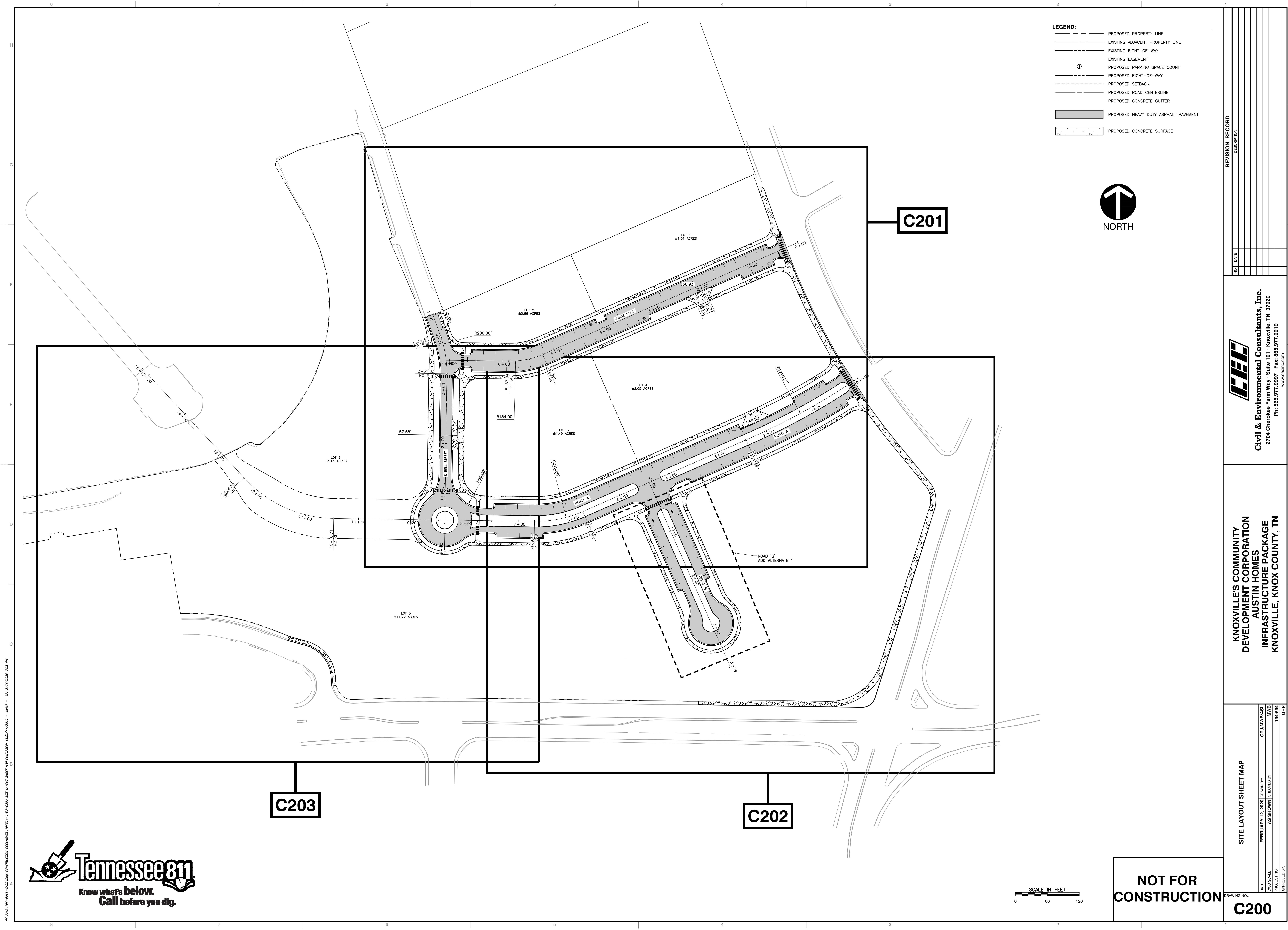
| SITE DEMOLITION PLAN | |
|----------------------|-------------------|
| DATE: | FEBRUARY 12, 2020 |
| DWG SCALE: | AS SHOWN |
| PROJECT NO.: | 194-594 |
| APPROVED BY: | GHP |
| CR/MWB/ASL: | MWB |
| DATE: | FEBRUARY 12, 2020 |
| DRAWN BY: | AS SHOWN |
| CHECKED BY: | AS SHOWN |

NOT FOR CONSTRUCTION

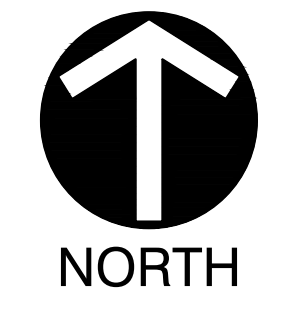


C102

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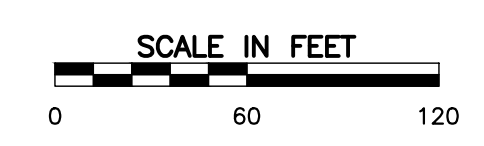
- LEGEND:**
- PROPOSED PROPERTY LINE
 - EXISTING ADJACENT PROPERTY LINE
 - EXISTING RIGHT-OF-WAY
 - - - EXISTING EASEMENT
 - ⊙ PROPOSED PARKING SPACE COUNT
 - PROPOSED RIGHT-OF-WAY
 - PROPOSED SETBACK
 - PROPOSED ROAD CENTERLINE
 - - - PROPOSED CONCRETE GUTTER
 - ▨ PROPOSED HEAVY DUTY ASPHALT PAVEMENT
 - ▨ PROPOSED CONCRETE SURFACE



C201

C203

C202



NOT FOR CONSTRUCTION

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SITE LAYOUT SHEET MAP

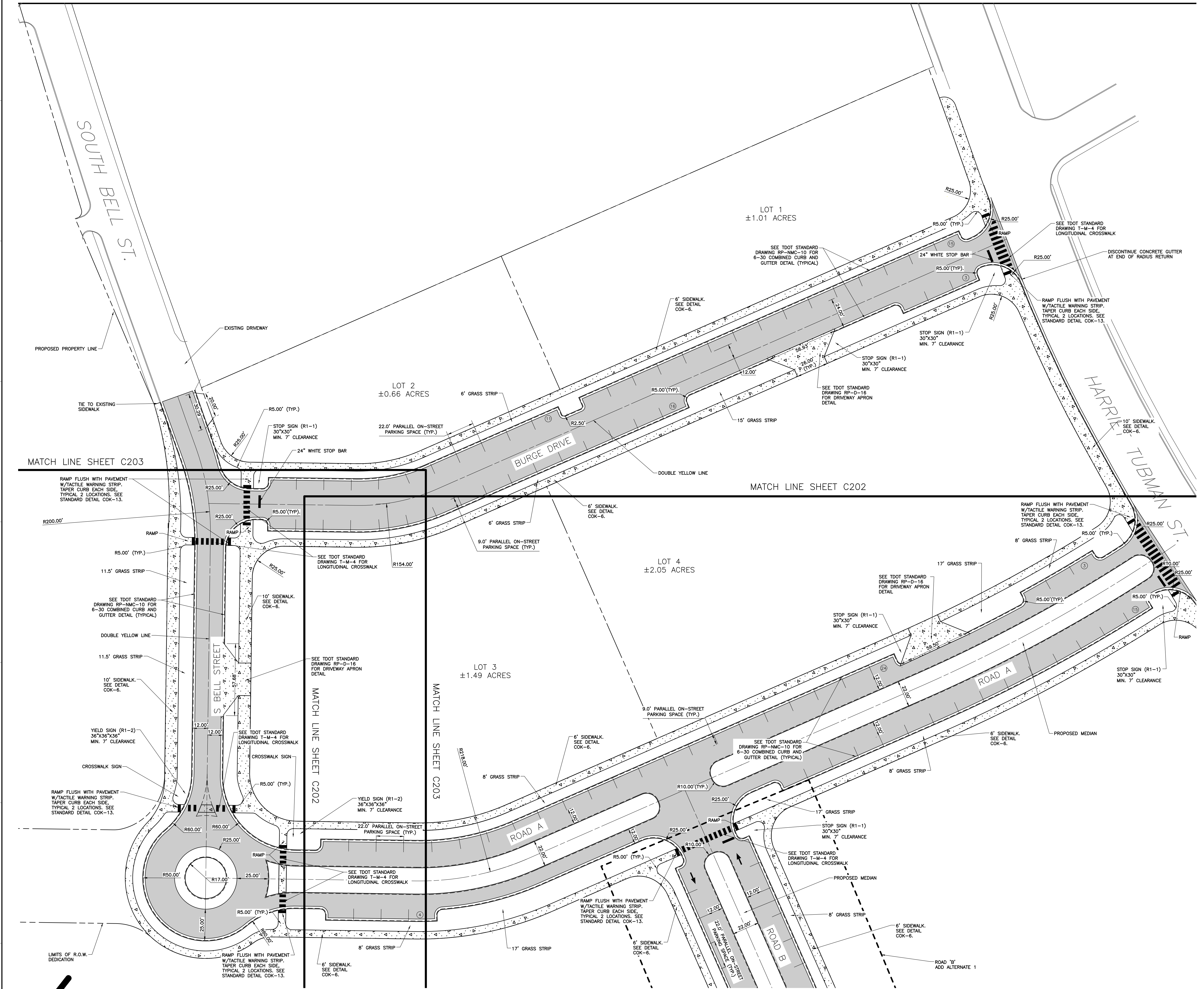
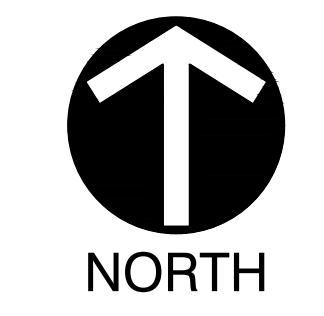
DATE: FEBRUARY 12, 2020 | DRAWN BY: CRJ/MWB/ASL | PROJECT NO.: 194-594 | APPROVED BY: GHP

DWG SCALE: AS SHOWN | CHECKED BY: MWB

DRAWING NO.: **C200**

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- LEGEND:**
- PROPOSED PROPERTY LINE
 - - - EXISTING ADJACENT PROPERTY LINE
 - - - EXISTING RIGHT-OF-WAY
 - - - EXISTING EASEMENT
 - ⊙ PROPOSED PARKING SPACE COUNT
 - - - PROPOSED RIGHT-OF-WAY
 - - - PROPOSED SETBACK
 - - - PROPOSED ROAD CENTERLINE
 - - - PROPOSED CONCRETE GUTTER
 - ▨ PROPOSED HEAVY DUTY ASPHALT PAVEMENT
 - ▨ PROPOSED CONCRETE SURFACE



REVISION RECORD

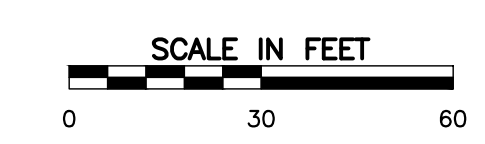
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AUSTIN HOMES
INFRASTRUCTURE PACKAGE
KNOXVILLE, KNOX COUNTY, TN

SITE LAYOUT PLAN

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| DATE: | FEBRUARY 12, 2020 | DRAWN BY: | CRJ/MWB/ASL |
| DWG SCALE: | AS SHOWN | CHECKED BY: | MWB |
| PROJECT NO.: | 194-594 | APPROVED BY: | GHP |

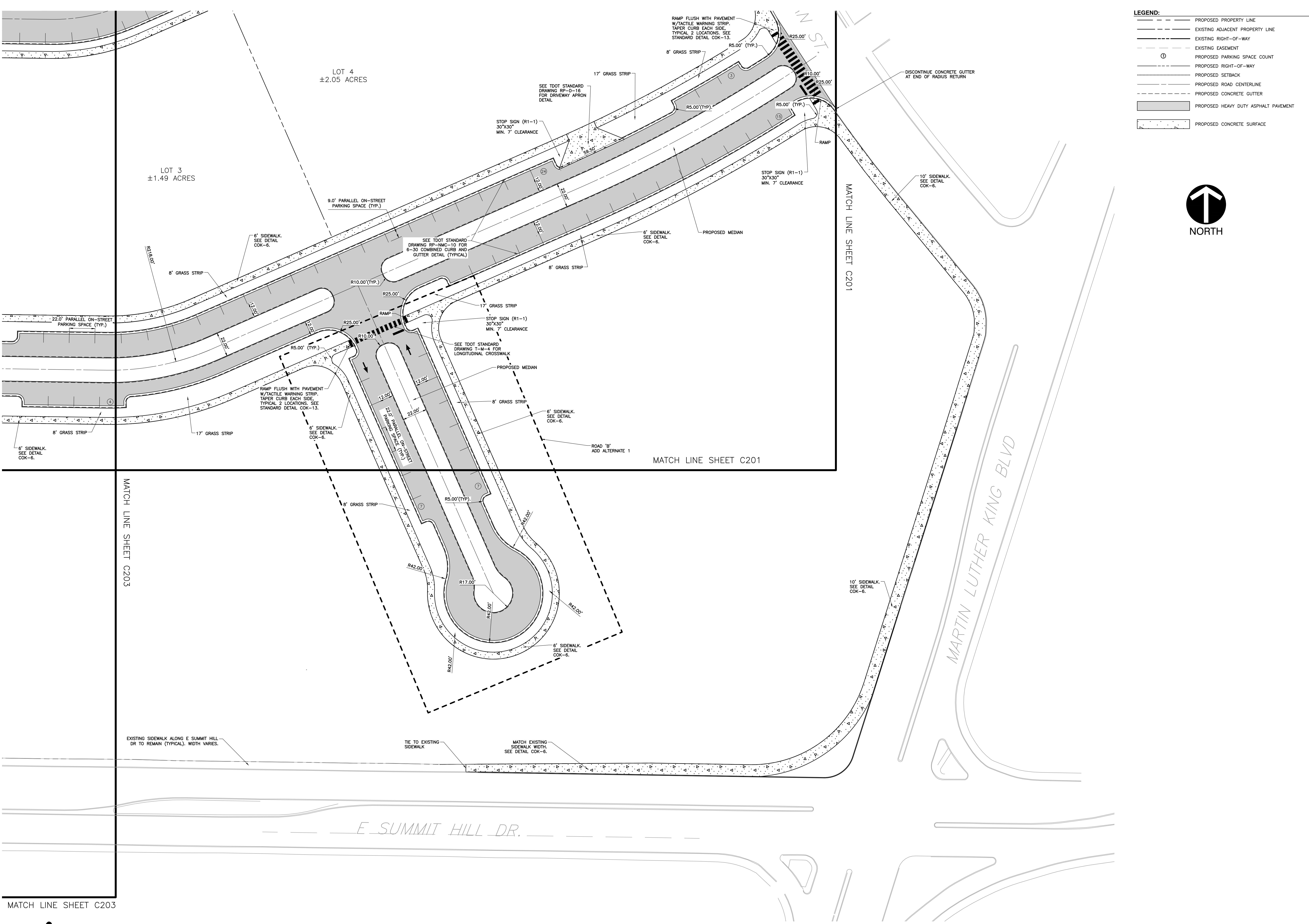


NOT FOR CONSTRUCTION

DRAWING NO. **C201**



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| | PROPOSED PROPERTY LINE |
| | EXISTING ADJACENT PROPERTY LINE |
| | EXISTING RIGHT-OF-WAY |
| | EXISTING EASEMENT |
| | PROPOSED PARKING SPACE COUNT |
| | PROPOSED RIGHT-OF-WAY |
| | PROPOSED SETBACK |
| | PROPOSED ROAD CENTERLINE |
| | PROPOSED CONCRETE GUTTER |
| | PROPOSED HEAVY DUTY ASPHALT PAVEMENT |
| | PROPOSED CONCRETE SURFACE |



REVISION RECORD

| NO. | DATE | DESCRIPTION |
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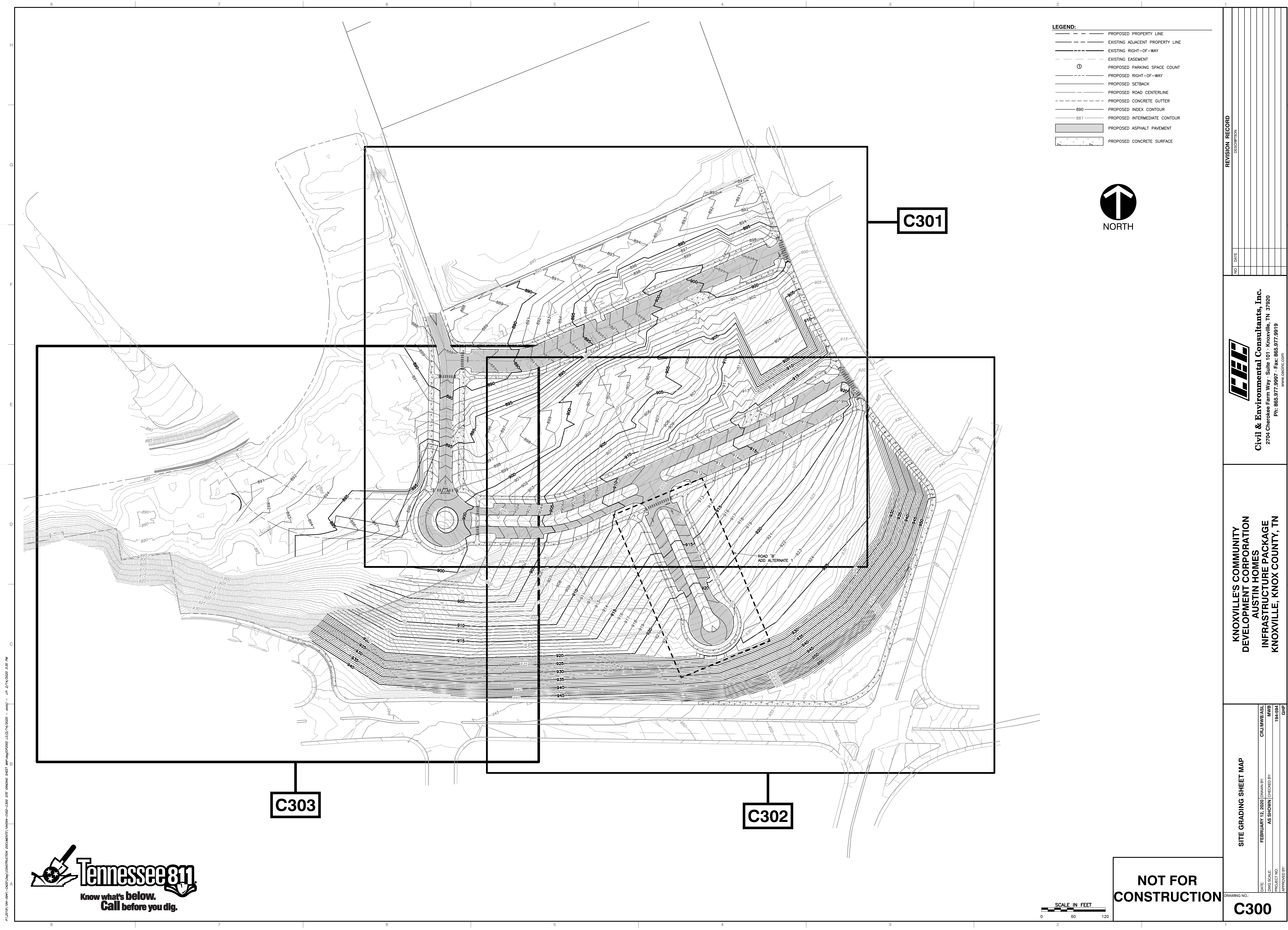
**KNOXVILLE'S COMMUNITY DEVELOPMENT CORPORATION
 AUSTIN HOMES
 INFRASTRUCTURE PACKAGE
 KNOXVILLE, KNOX COUNTY, TN**

SITE LAYOUT PLAN
 DATE: FEBRUARY 12, 2020
 DWG SCALE: AS SHOWN
 PROJECT NO.: 194-594
 DRAWN BY: CRJ/MWB/ASL
 CHECKED BY: MWB
 APPROVED BY: GHP

NOT FOR CONSTRUCTION

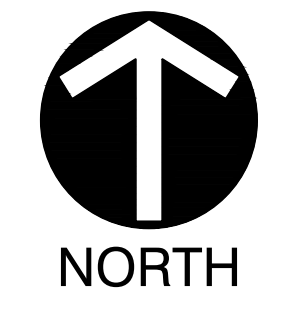


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LEGEND:

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| --- | PROPOSED PROPERTY LINE |
| --- | EXISTING ADJACENT PROPERTY LINE |
| --- | EXISTING RIGHT-OF-WAY |
| --- | EXISTING EASEMENT |
| ⊙ | PROPOSED PARKING SPACE COUNT |
| --- | PROPOSED RIGHT-OF-WAY |
| --- | PROPOSED SETBACK |
| --- | PROPOSED ROAD CENTERLINE |
| --- | PROPOSED CONCRETE GUTTER |
| --- | PROPOSED INDEX CONTOUR |
| --- | PROPOSED INTERMEDIATE CONTOUR |
| --- | PROPOSED ASPHALT PAVEMENT |
| --- | PROPOSED CONCRETE SURFACE |

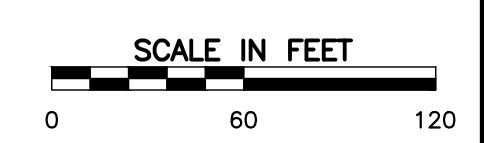


C301

C303

C302

NOT FOR CONSTRUCTION



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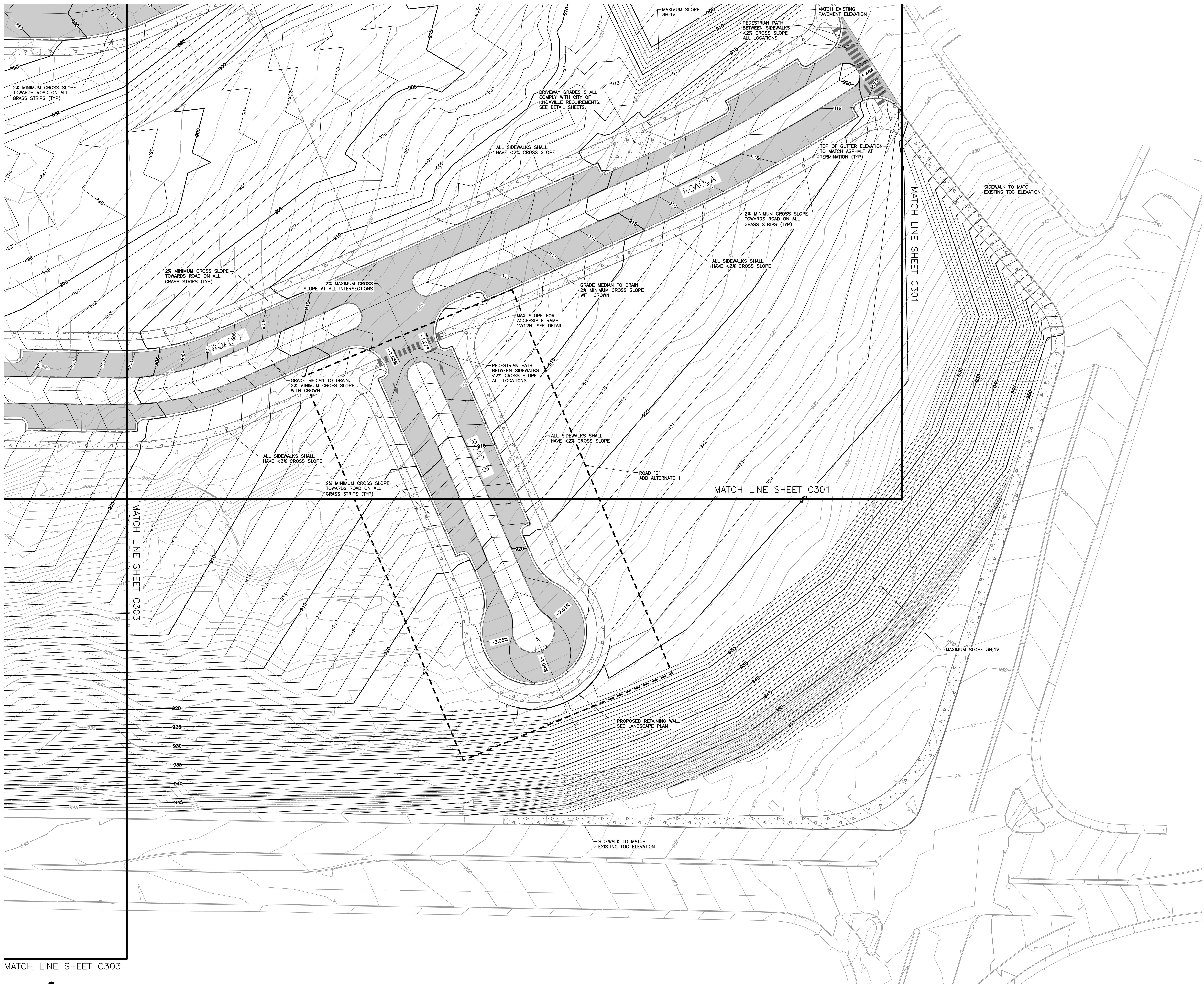

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AUSTIN HOMES
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KNOXVILLE, KNOX COUNTY, TN

SITE GRADING SHEET MAP

| | | | |
|--------------|-------------------|--------------|-------------|
| DATE: | FEBRUARY 12, 2020 | DRAWN BY: | CRJ/MWB/ASL |
| DWG SCALE: | AS SHOWN | CHECKED BY: | MWB |
| PROJECT NO.: | 194-594 | APPROVED BY: | GHP |

DRAWING NO. **C300**



- LEGEND:**
- PROPOSED PROPERTY LINE
 - - - EXISTING ADJACENT PROPERTY LINE
 - - - EXISTING RIGHT-OF-WAY
 - - - EXISTING EASEMENT
 - ⊙ PROPOSED PARKING SPACE COUNT
 - - - PROPOSED RIGHT-OF-WAY
 - - - PROPOSED SETBACK
 - - - PROPOSED ROAD CENTERLINE
 - - - PROPOSED CONCRETE GUTTER
 - 880 PROPOSED INDEX CONTOUR
 - 887 PROPOSED INTERMEDIATE CONTOUR
 - ▒ PROPOSED ASPHALT PAVEMENT
 - ▒ PROPOSED CONCRETE SURFACE



REVISION RECORD

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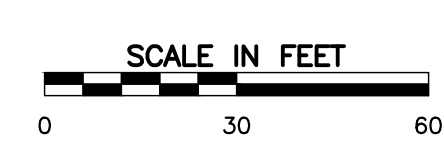
Civil & Environmental Consultants, Inc.
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**KNOXVILLE COMMUNITY DEVELOPMENT CORPORATION
 AUSTIN HOMES
 INFRASTRUCTURE PACKAGE
 KNOXVILLE, KNOX COUNTY, TN**

SITE GRADING PLAN

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|--------------|-------------------|--------------|-------------|
| DATE: | FEBRUARY 12, 2020 | DRAWN BY: | CRJ/MWB/ASL |
| DWG SCALE: | AS SHOWN | CHECKED BY: | MWB |
| PROJECT NO.: | 194-594 | APPROVED BY: | GHP |

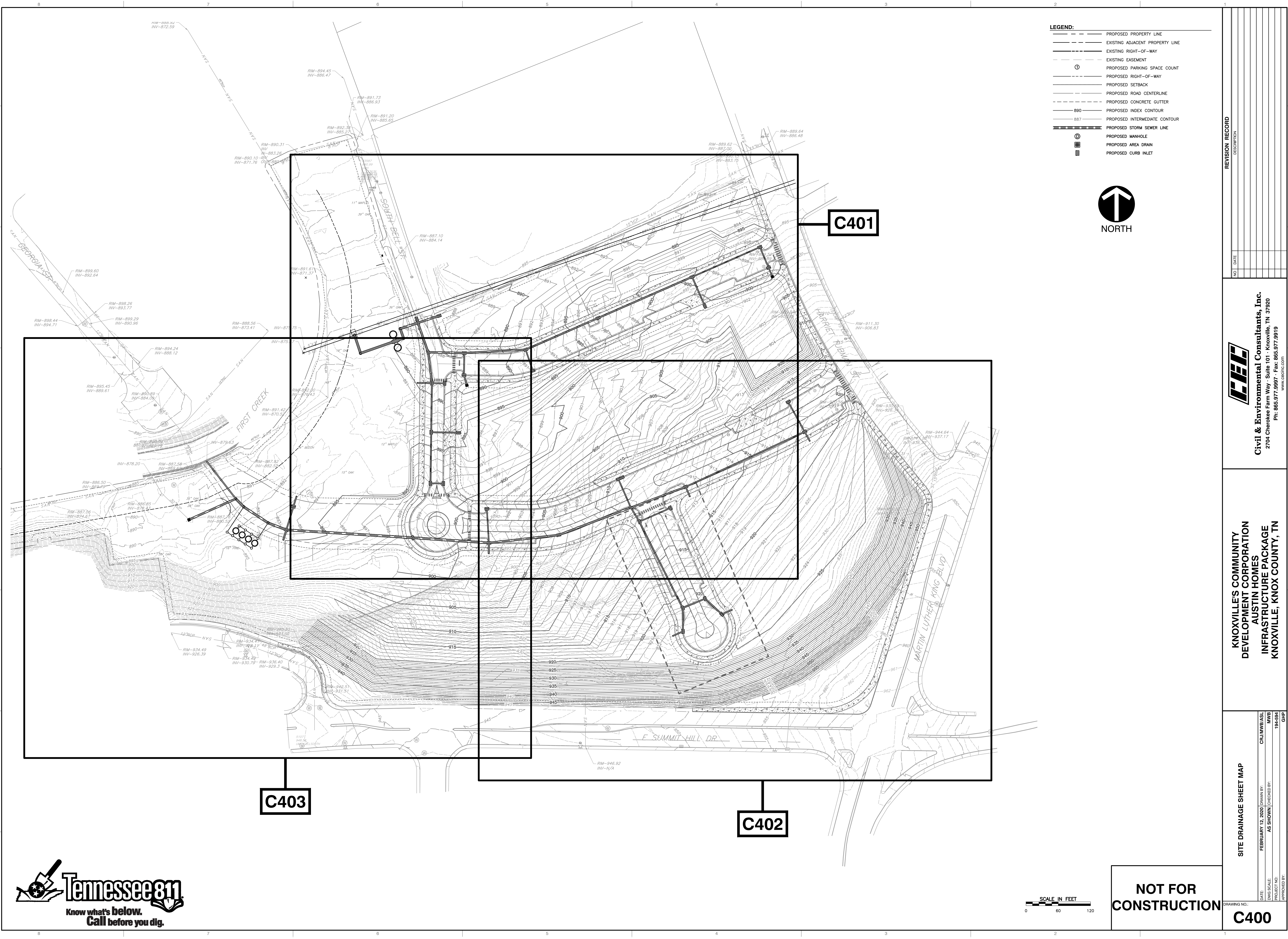
MATCH LINE SHEET C303



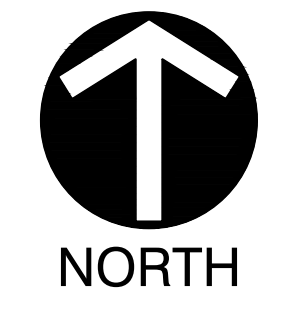
NOT FOR CONSTRUCTION

DRAWING NO. **C302**

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- LEGEND:**
- PROPOSED PROPERTY LINE
 - EXISTING ADJACENT PROPERTY LINE
 - - - EXISTING RIGHT-OF-WAY
 - - - EXISTING EASEMENT
 - ⊙ PROPOSED PARKING SPACE COUNT
 - PROPOSED RIGHT-OF-WAY
 - PROPOSED SETBACK
 - PROPOSED ROAD CENTERLINE
 - PROPOSED CONCRETE GUTTER
 - PROPOSED INDEX CONTOUR
 - PROPOSED INTERMEDIATE CONTOUR
 - PROPOSED STORM SEWER LINE
 - ⊕ PROPOSED MANHOLE
 - ▣ PROPOSED AREA DRAIN
 - ▣ PROPOSED CURB INLET



C401

C403

C402

REVISION RECORD

| NO. | DATE | DESCRIPTION |
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 KNOXVILLE, KNOX COUNTY, TN**

SITE DRAINAGE SHEET MAP

DATE: FEBRUARY 12, 2020 | DRAWN BY: CRJ/MWB/ASL | MWB
 DWS SCALE: AS SHOWN | CHECKED BY: AS SHOWN | 194-594
 PROJECT NO. 194-594 | GHP
 APPROVED BY:

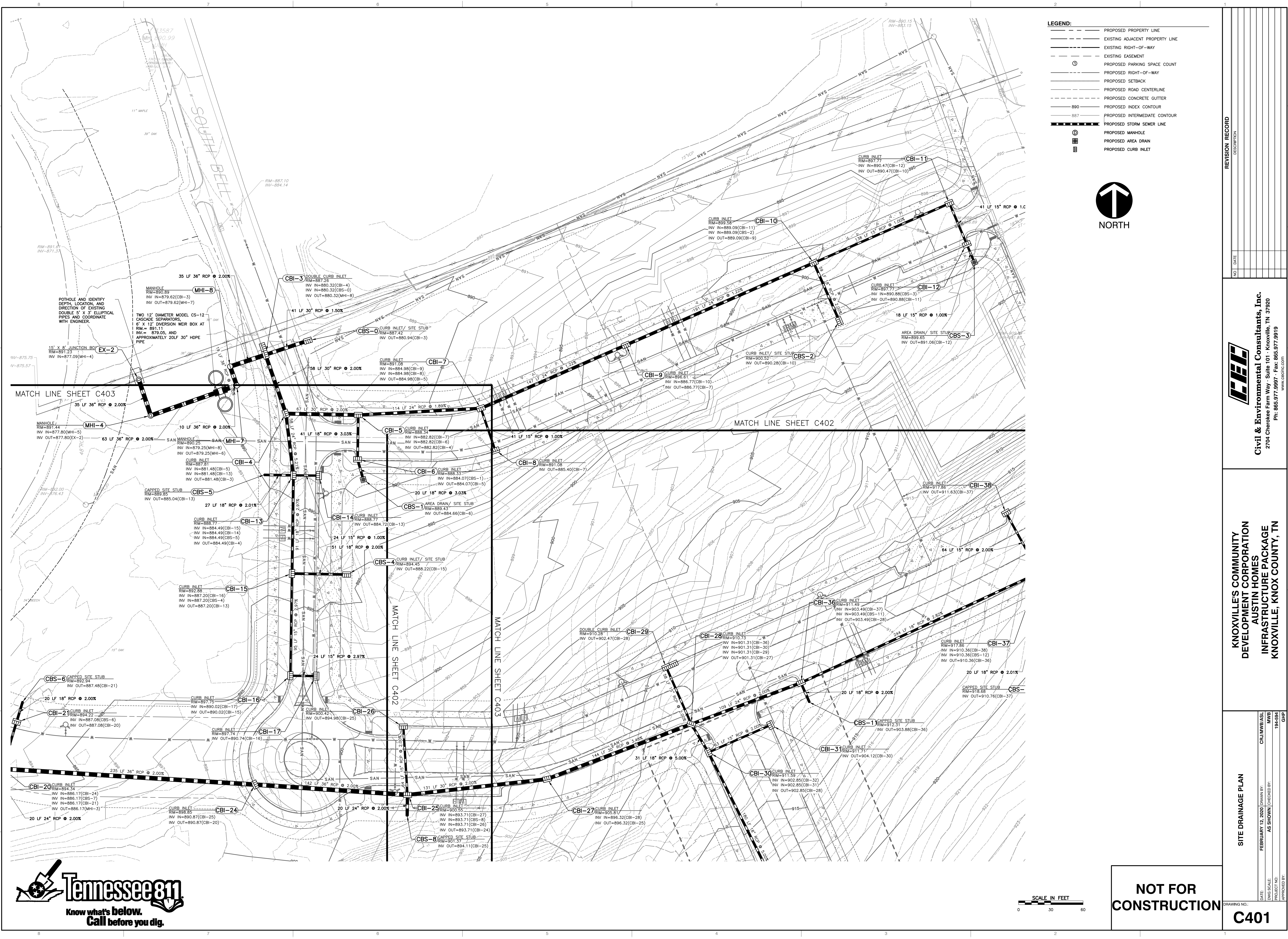
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DRAWING NO.: **C400**



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- LEGEND:**
- PROPOSED PROPERTY LINE
 - - - EXISTING ADJACENT PROPERTY LINE
 - - - EXISTING RIGHT-OF-WAY
 - - - EXISTING EASEMENT
 - ⊙ PROPOSED PARKING SPACE COUNT
 - - - PROPOSED RIGHT-OF-WAY
 - - - PROPOSED SETBACK
 - - - PROPOSED ROAD CENTERLINE
 - - - PROPOSED CONCRETE GUTTER
 - 890 PROPOSED INDEX CONTOUR
 - 887 PROPOSED INTERMEDIATE CONTOUR
 - PROPOSED STORM SEWER LINE
 - ⊕ PROPOSED MANHOLE
 - ⊕ PROPOSED AREA DRAIN
 - ⊕ PROPOSED CURB INLET



SCALE IN FEET
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NOT FOR CONSTRUCTION

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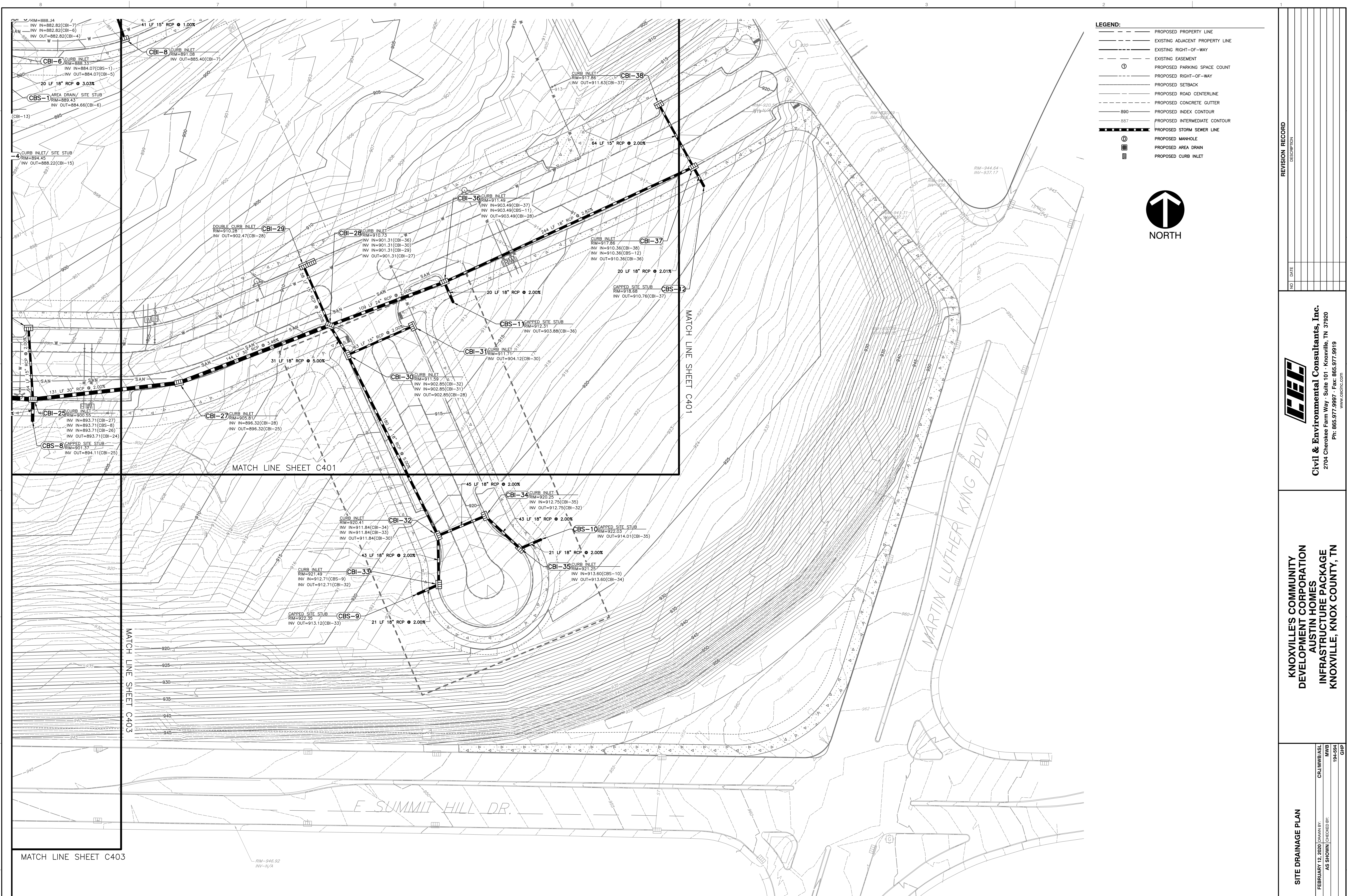
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AUSTIN HOMES
INFRASTRUCTURE PACKAGE
KNOXVILLE, KNOX COUNTY, TN

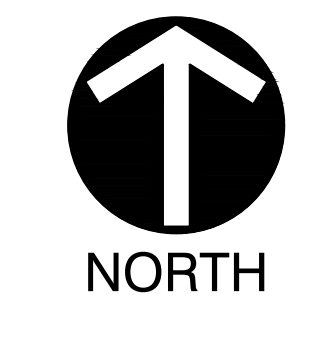
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FEBRUARY 12, 2020
DATE: CRJ/MWB/ASL
DRAWN BY: MWB
PROJECT NO.: 194-594
AS SHOWN
CHECKED BY: GHP
APPROVED BY: GHP



C401



- LEGEND:**
- PROPOSED PROPERTY LINE
 - - - EXISTING ADJACENT PROPERTY LINE
 - - - EXISTING RIGHT-OF-WAY
 - - - EXISTING EASEMENT
 - ⊙ PROPOSED PARKING SPACE COUNT
 - - - PROPOSED RIGHT-OF-WAY
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 - ▣ PROPOSED AREA DRAIN
 - ▣ PROPOSED CURB INLET



REVISION RECORD

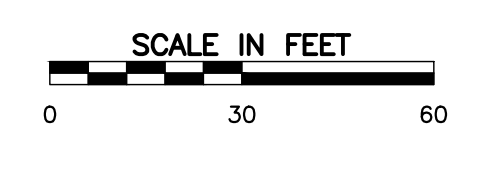
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SITE DRAINAGE PLAN

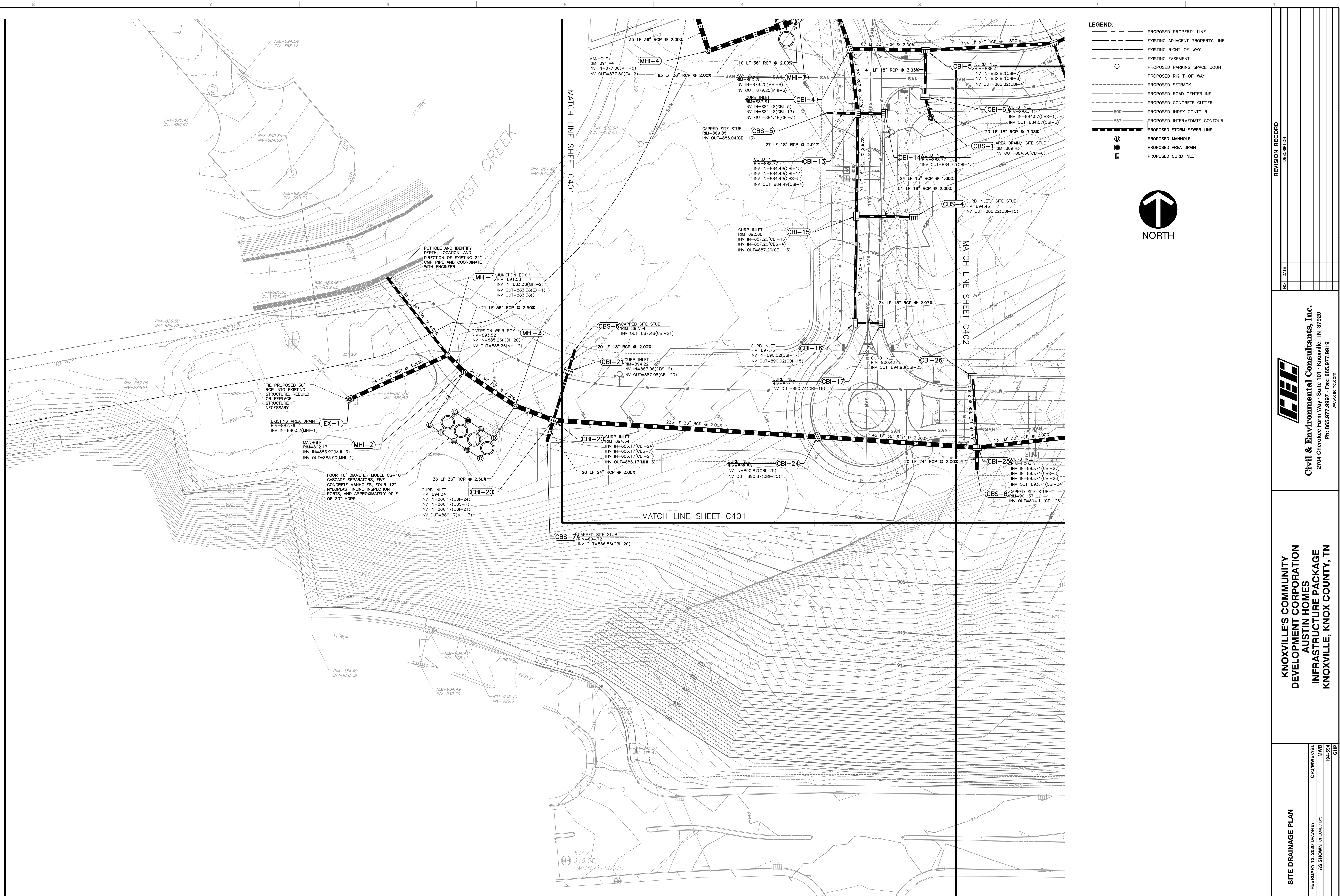
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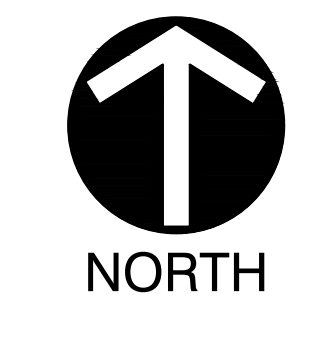
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DRAWING NO. **C402**

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 - - - EXISTING ADJACENT PROPERTY LINE
 - - - EXISTING RIGHT-OF-WAY
 - - - EXISTING EASEMENT
 - PROPOSED PARKING SPACE COUNT
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 - 890 PROPOSED INDEX CONTOUR
 - 887 PROPOSED INTERMEDIATE CONTOUR
 - PROPOSED STORM SEWER LINE
 - PROPOSED MANHOLE
 - PROPOSED AREA DRAIN
 - PROPOSED CURB INLET



| NO. | DATE | REVISION RECORD | DESCRIPTION |
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 KNOXVILLE, KNOX COUNTY, TN**

| SITE DRAINAGE PLAN | |
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| DATE: | FEBRUARY 12, 2020 |
| DWG SCALE: | AS SHOWN |
| PROJECT NO.: | 194-594 |
| APPROVED BY: | GHP |
| CRJ/MWB/ASL | MWB |
| DATE: | FEBRUARY 12, 2020 |
| DRAWN BY: | AS SHOWN |
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| DATE: | FEBRUARY 12, 2020 |
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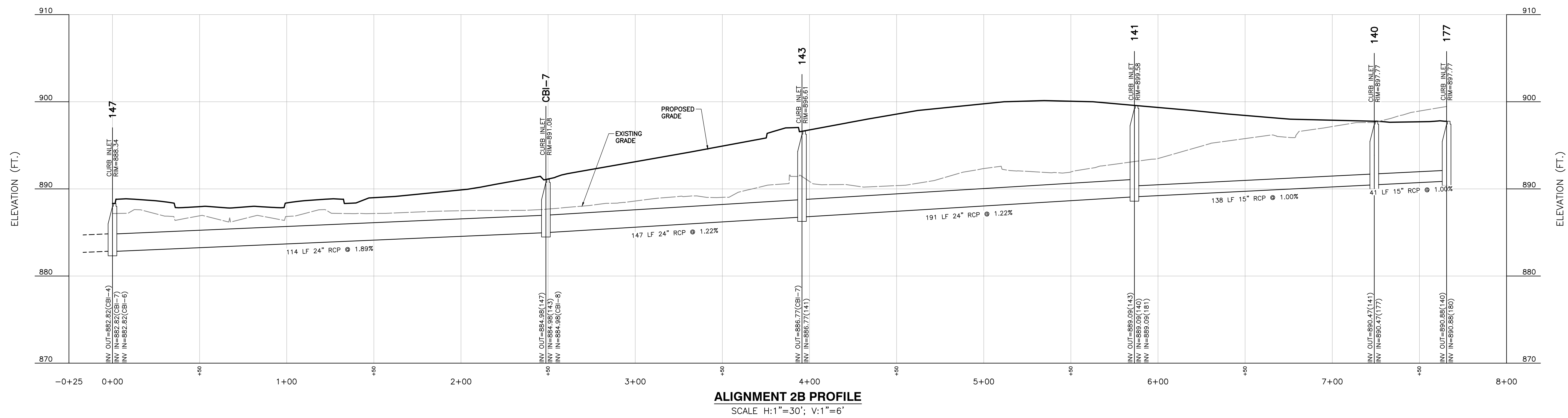
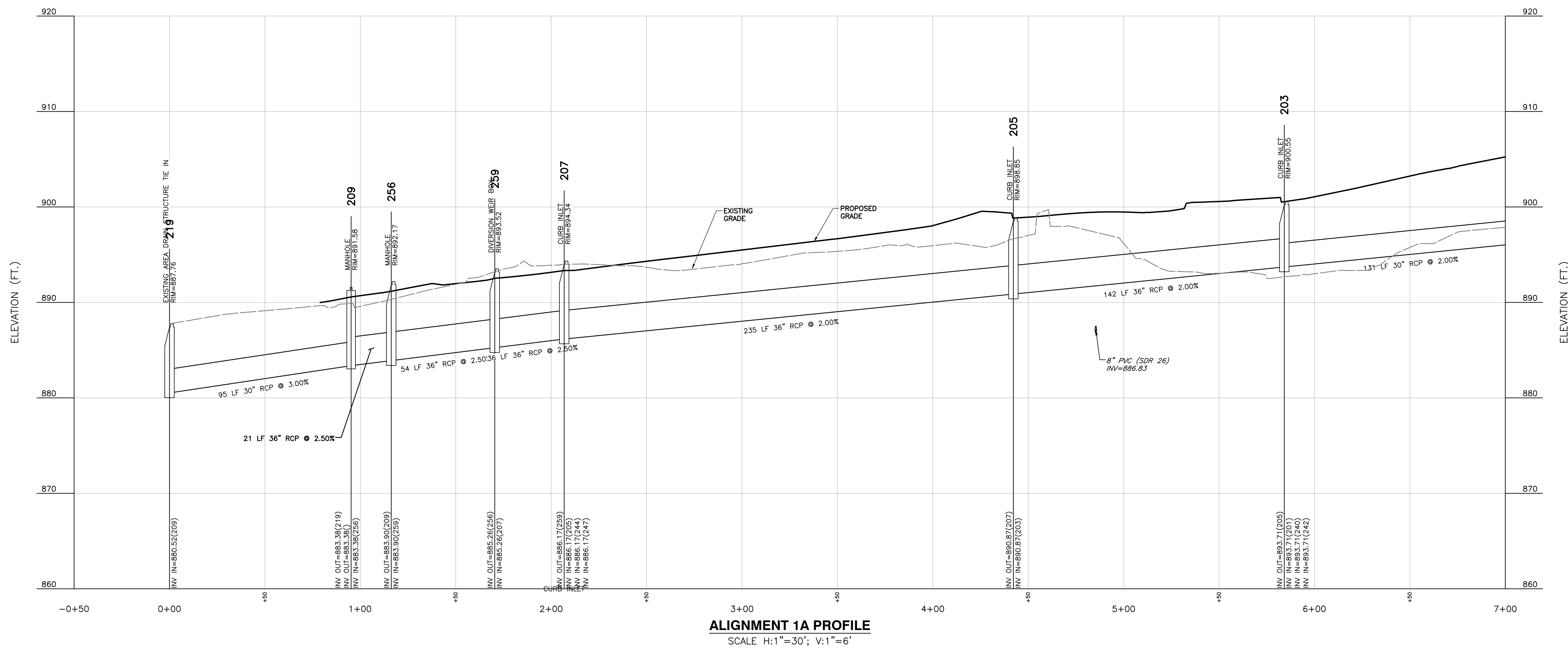
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C403



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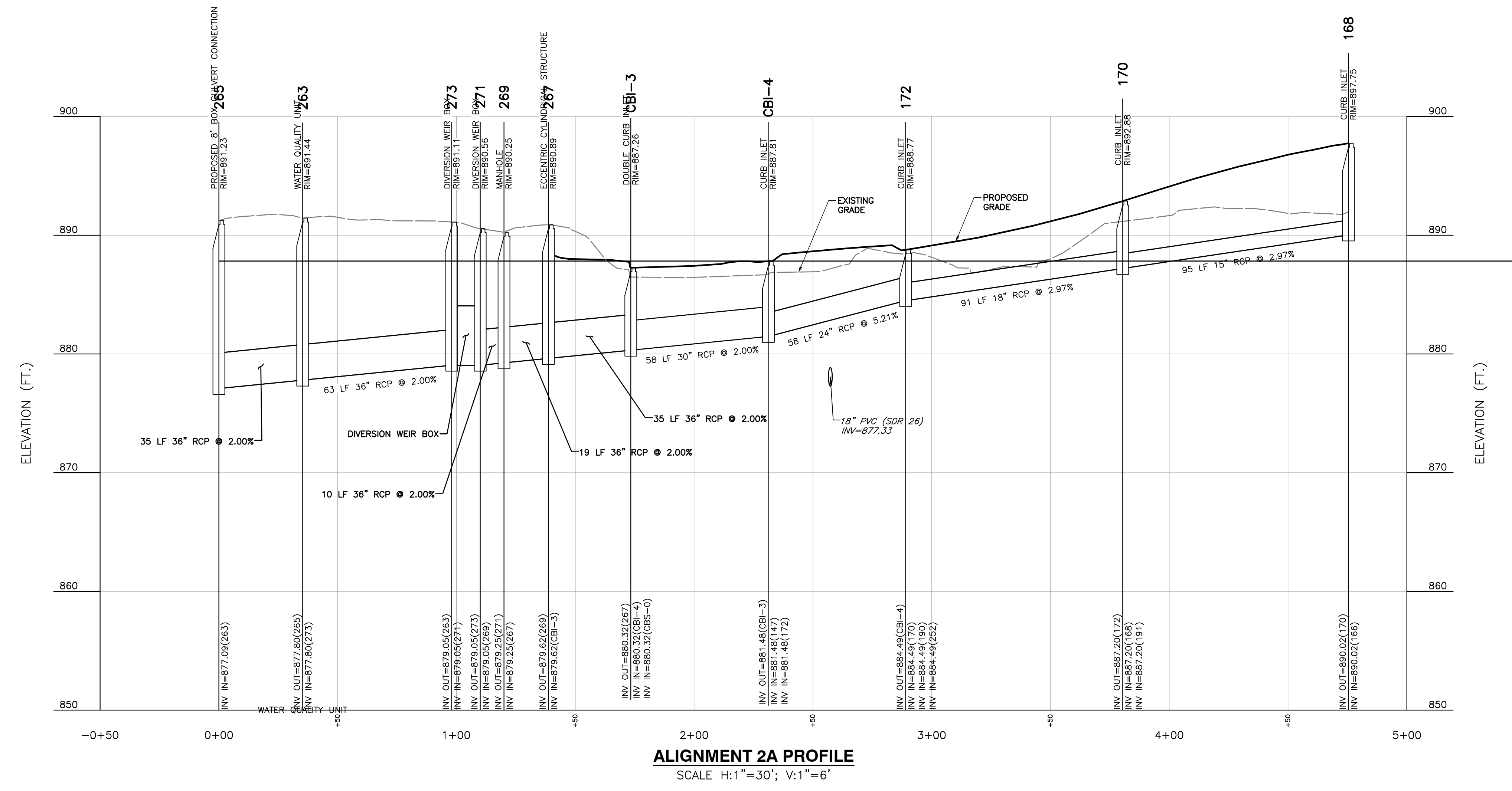
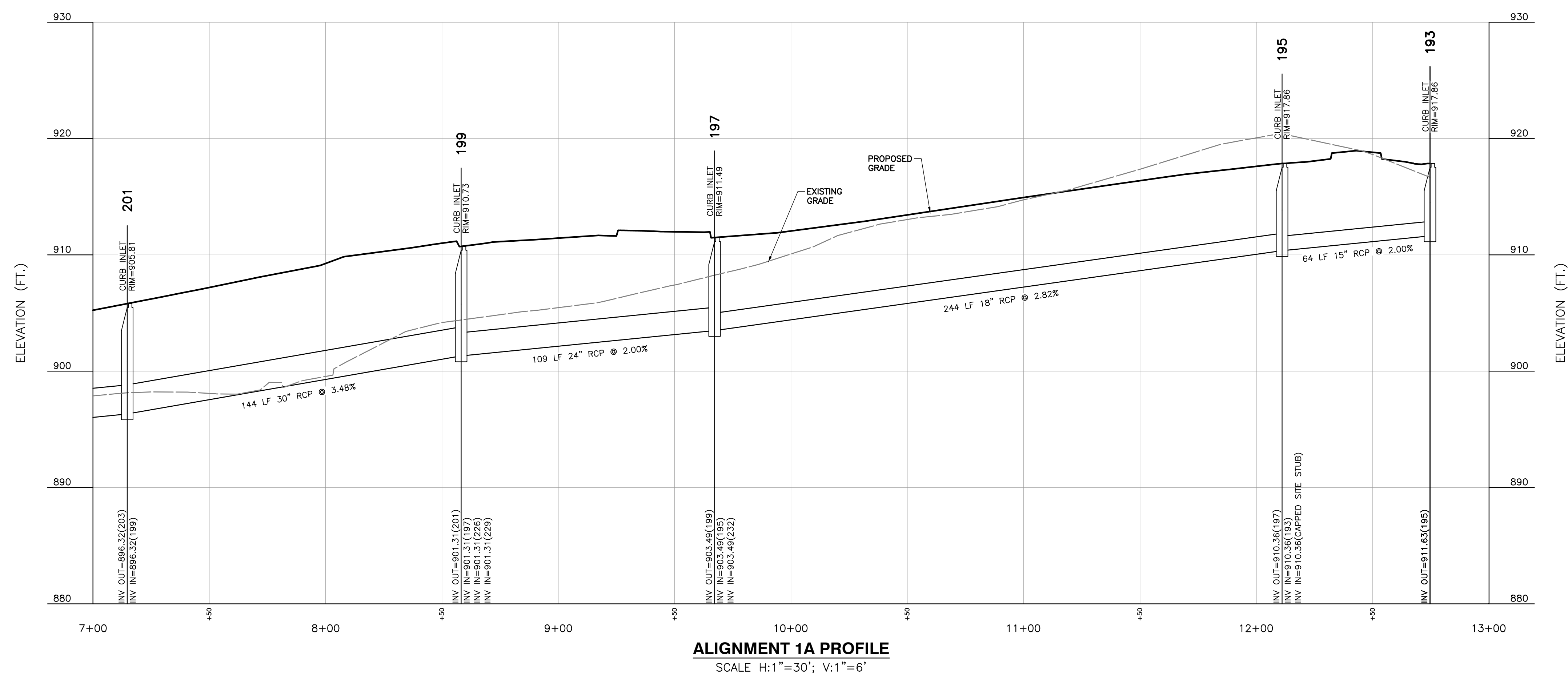
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KNOXVILLE, KNOX COUNTY, TN

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| DRAINAGE PROFILES | |
| DATE: | FEBRUARY 12, 2020 |
| DWG SCALE: | AS SHOWN |
| PROJECT NO.: | 194-594 |
| APPROVED BY: | GHP |
| CRJ/MWB/ASL | MWB |

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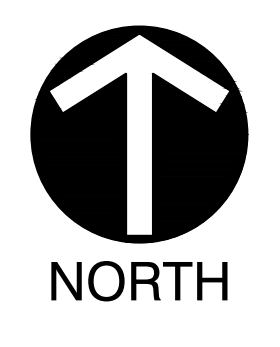
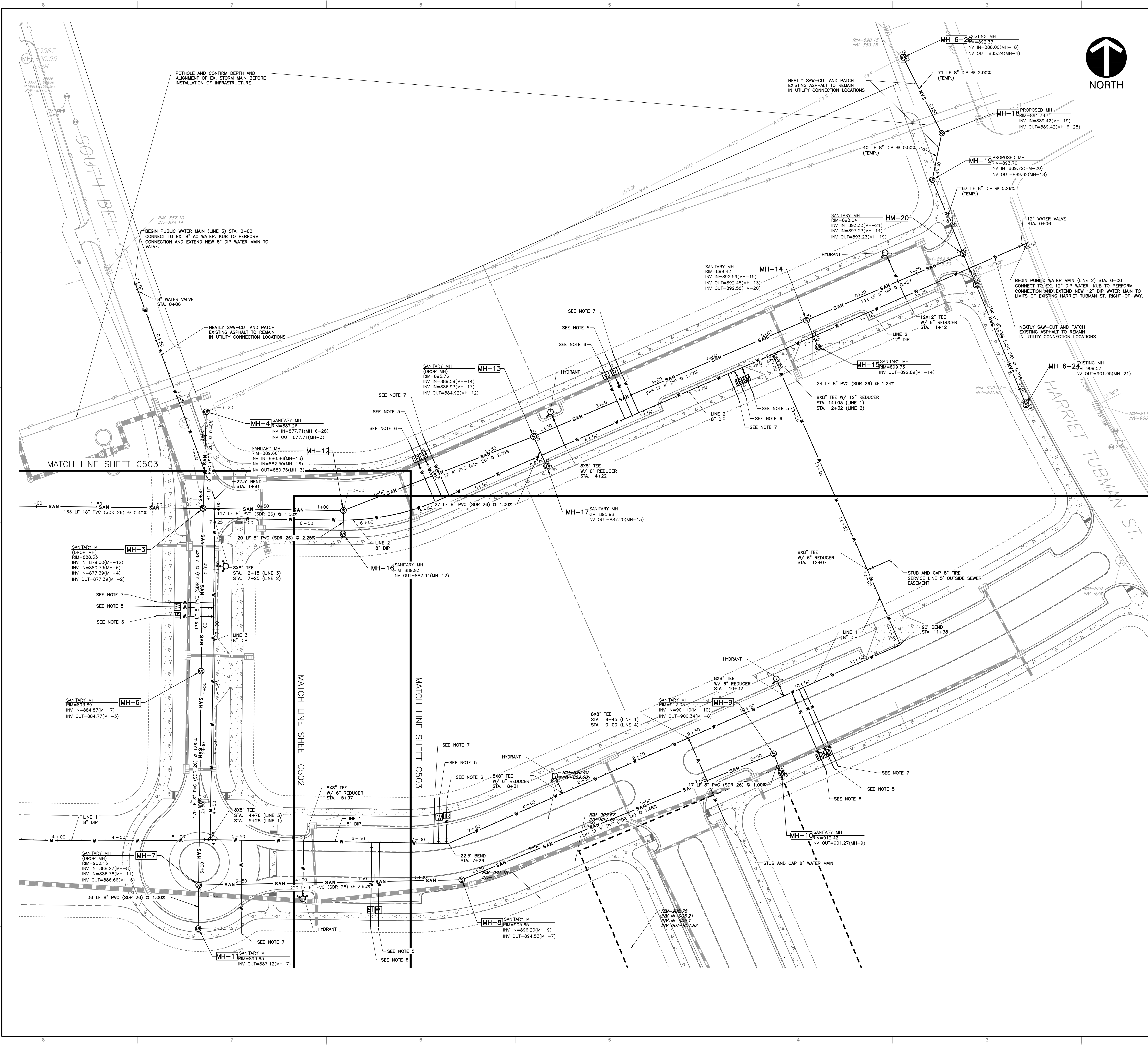
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| <p>DRAINAGE PROFILES</p> <p>DATE: FEBRUARY 12, 2020 DRAWN BY: CRJ/MWB/ASL DWG SCALE: AS SHOWN CHECKED BY: MWB PROJECT NO.: 194-594 APPROVED BY: GHP</p> | <p>KNOXVILLE COMMUNITY DEVELOPMENT CORPORATION AUSTIN HOMES INFRASTRUCTURE PACKAGE KNOXVILLE, KNOX COUNTY, TN</p> | | | | | | | | | |
|---|--|----------|------|----------|--|--|--|--|--|--|
| <p>Civil & Environmental Consultants, Inc. 2704 Cherokee Farm Way - Suite 101 - Knoxville, TN 37920 Ph: 865.977.9997 - Fax: 865.977.9919 www.cechnc.com</p> | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">NO.</th> <th style="width: 10%;">DATE</th> <th style="width: 80%;">REVISION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> | | NO. | DATE | REVISION | | | | | | |
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| --- | EXISTING ADJACENT PROPERTY LINE |
| --- | EXISTING RIGHT-OF-WAY |
| --- | EXISTING EASEMENT |
| --- | PROPOSED RIGHT-OF-WAY |
| --- | PROPOSED SETBACK |
| --- | PROPOSED ROAD CENTERLINE |
| --- | PROPOSED CONCRETE GUTTER |
| --- | PROPOSED INDEX CONTOUR |
| --- | PROPOSED INTERMEDIATE CONTOUR |
| --- | EXISTING WATER LINE |
| --- | EXISTING SANITARY LINE |
| --- | EXISTING OVERHEAD LINE |
| --- | EXISTING UNDERGROUND LINE |
| --- | EXISTING STORM LINE |
| --- | EXISTING PUBLIC STORM LINE |
| --- | PROPOSED WATER VALVE |
| --- | PROPOSED DOMESTIC WATERLINE |
| --- | PROPOSED FIRE WATERLINE |
| --- | PROPOSED SANITARY LINE |
| --- | PROPOSED UTILITY EASEMENT |
| --- | PROPOSED DOMESTIC WATER METER |
| --- | PROPOSED IRRIGATION WATER METER |
| --- | PROPOSED BACKFLOW PREVENTER |
| --- | PROPOSED SANITARY MANHOLE |

- NOTES:**
1. GRADE RINGS SHALL BE USED TO RAISE MANHOLES ONLY IF PERMITTED BY KUB.
 2. POT HOLE AND CONFIRM SANITARY INVERT ELEVATIONS AT CONNECTION POINTS TO EXISTING SANITARY SEWER.
 3. SANITARY SEWER AND WATER UTILITY WORK SHALL CONFORM TO ALL KUB SPECIFICATIONS AND STANDARD DETAILS WHICH ARE AVAILABLE UPON REQUEST.
 4. ALL WATER TAPPING AND CONNECTION FEES SHALL BE PAID BY CONTRACTOR AND INCLUDED IN BID AMOUNT.
 5. INSTALL 4" DOMESTIC WATER METER AT EDGE OF SIDEWALK. STUB AND CAP 4" DOMESTIC SERVICE LINE 5' BEYOND R.O.W.
 6. INSTALL 4" IRRIGATION WATER METER AT EDGE OF SIDEWALK. STUB AND CAP 4" IRRIGATION SERVICE LINE 5' BEYOND R.O.W.
 7. STUB AND CAP 8" FIRE SERVICE LINE 5' BEYOND R.O.W.



NOT FOR CONSTRUCTION



REVISION RECORD

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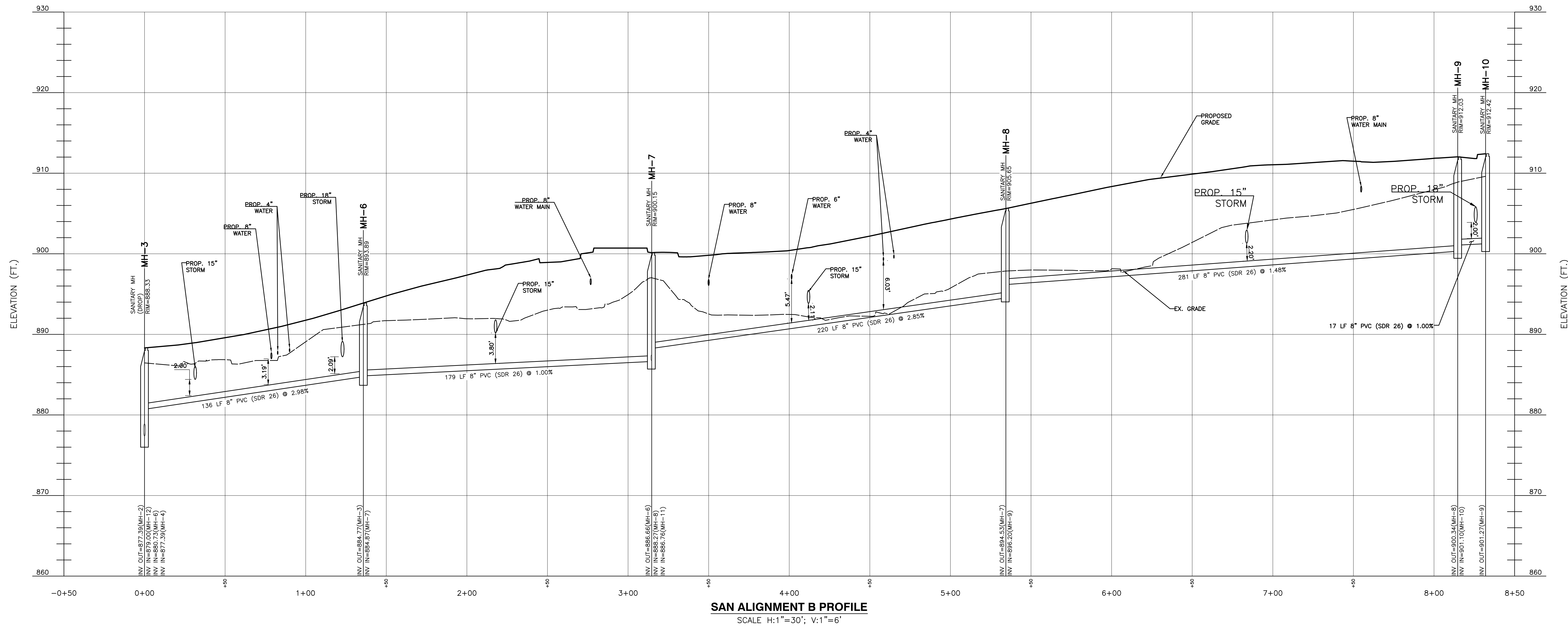
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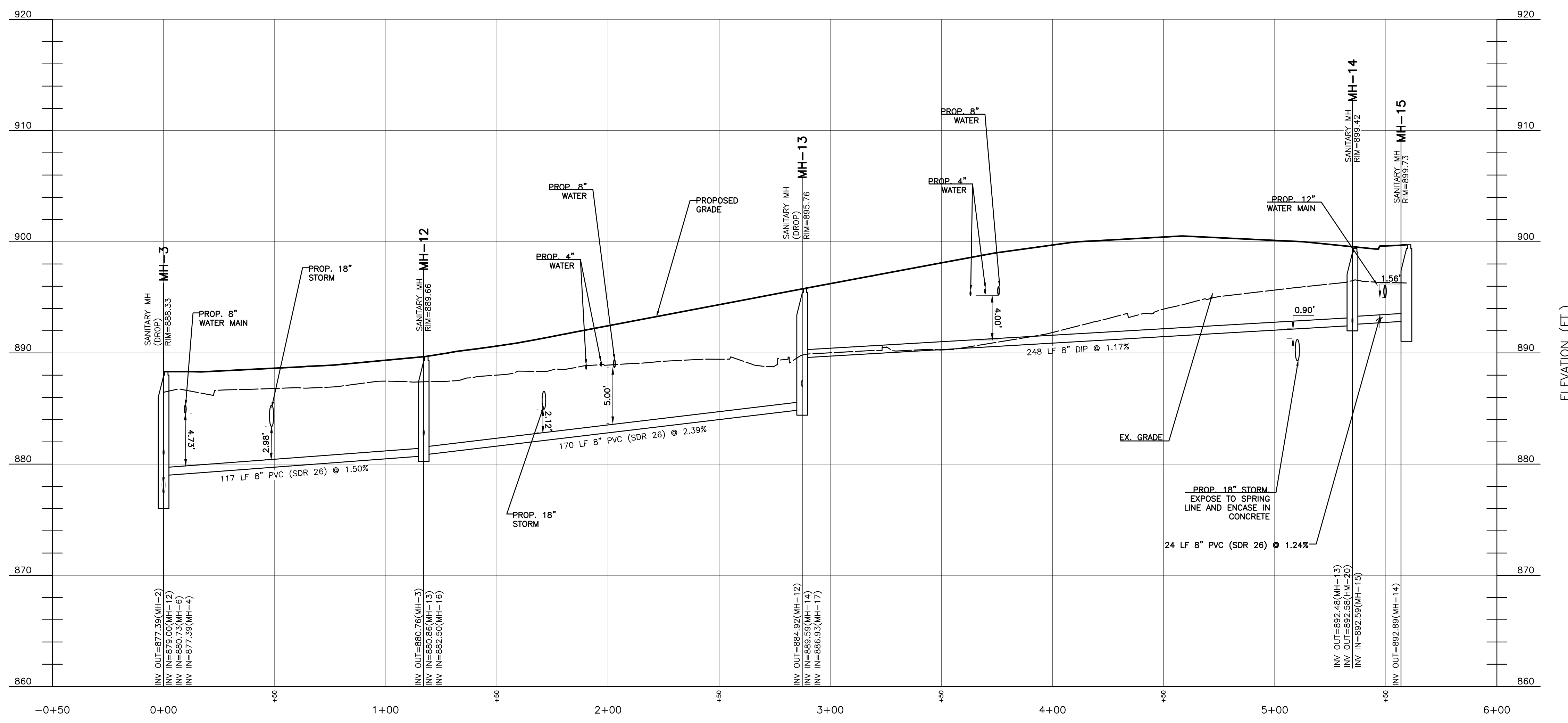
SITE UTILITY PLAN

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| DATE: | FEBRUARY 12, 2020 | DRAWN BY: | CRJ/MWB/ASL |
| DWG SCALE: | AS SHOWN | CHECKED BY: | MWB |
| PROJECT NO.: | 194-594 | APPROVED BY: | GHP |

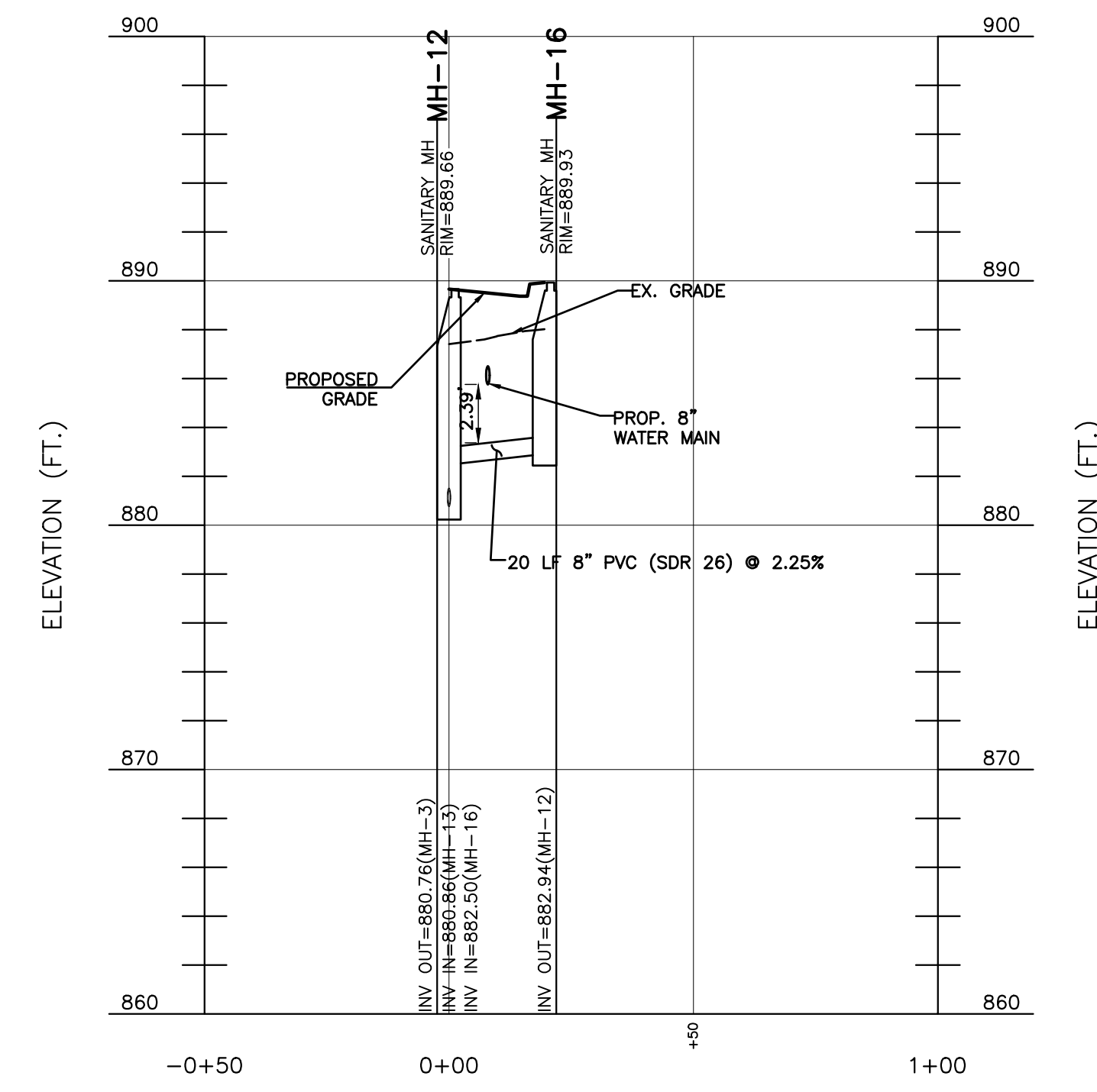
C501



SAN ALIGNMENT B PROFILE
SCALE H:1"=30'; V:1"=6'



SAN ALIGNMENT C PROFILE
SCALE H:1"=30'; V:1"=6'



SAN ALIGNMENT D PROFILE
SCALE H:1"=30'; V:1"=6'

| NO. | DATE | DESCRIPTION |
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| UTILITIES PLAN | |
|----------------|-------------------|
| DATE: | FEBRUARY 12, 2020 |
| DWG SCALE: | AS SHOWN |
| PROJECT NO.: | 194-594 |
| APPROVED BY: | GHP |
| CRJ/MWB/ASL | MWB |
| 194-594 | GHP |

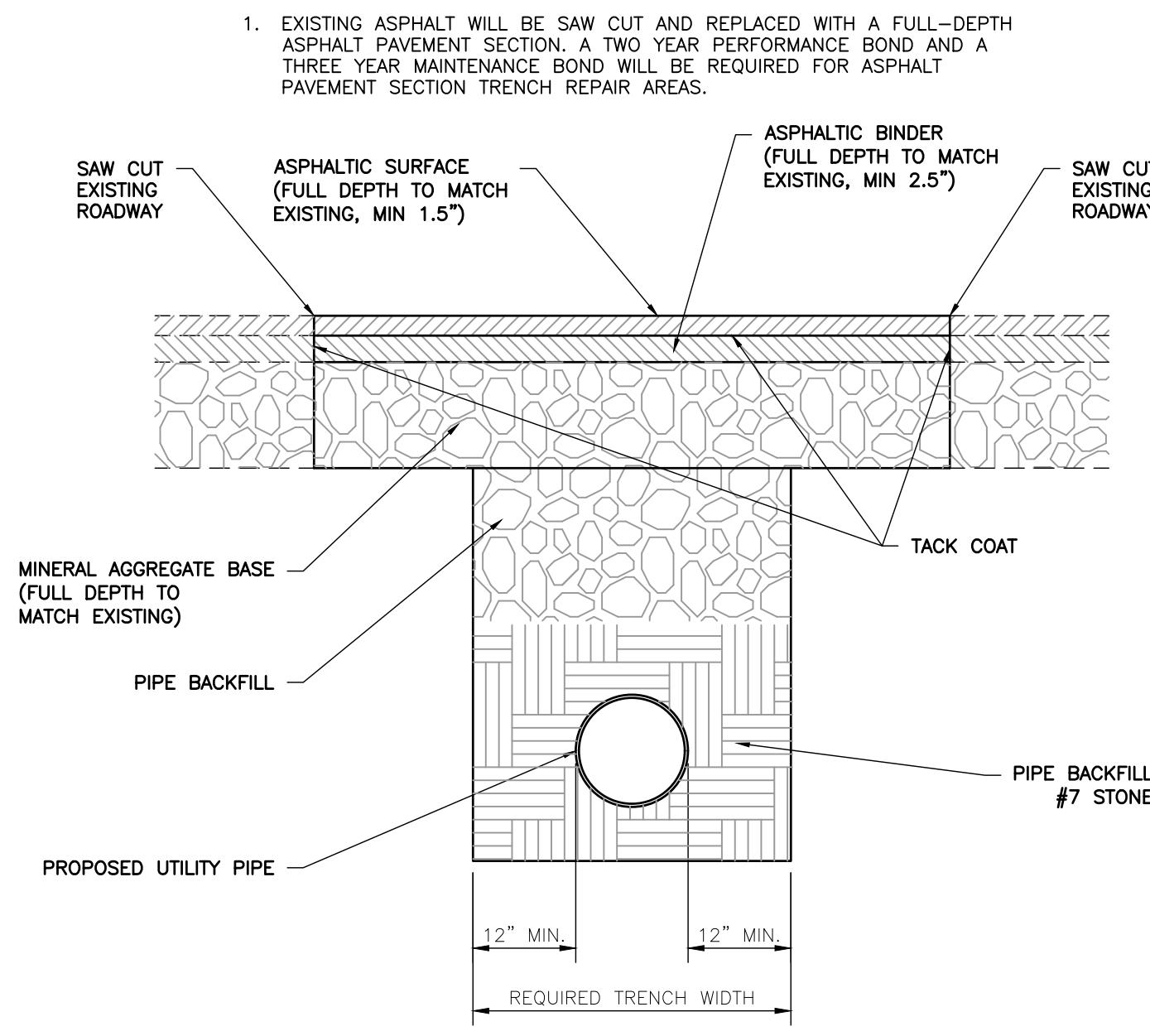


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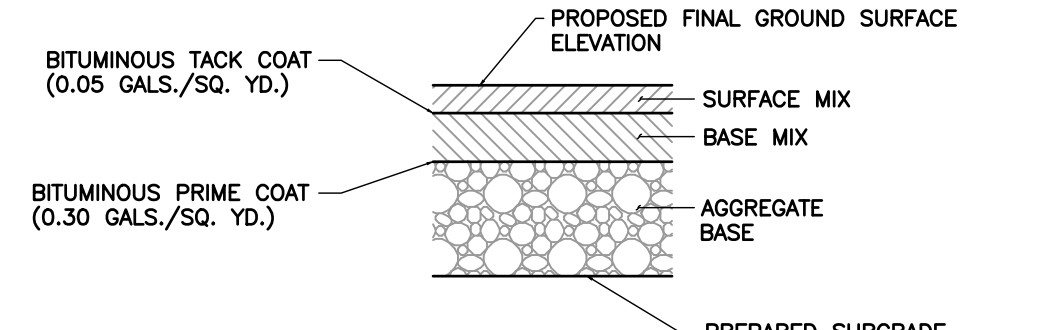
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NOTE



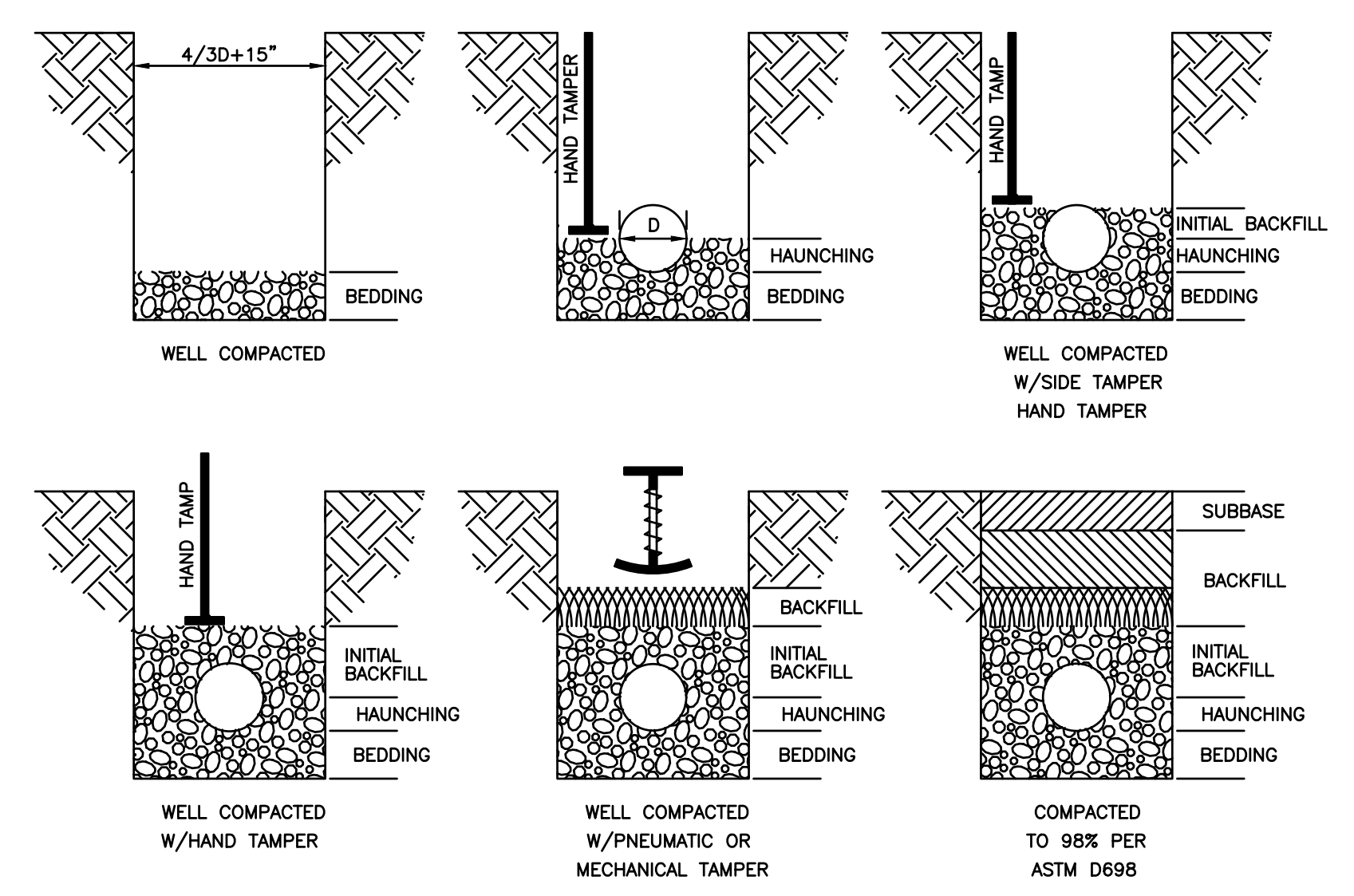
ASPHALT PAVEMENT SECTION TRENCH REPAIR
NOT TO SCALE



| TDOT SPECIFICATION | ITEM | ASPHALT PAVEMENT SECTIONS | |
|---|----------------------------------|---------------------------|------------|
| | | LIGHT-DUTY | HEAVY-DUTY |
| SECTION 411, GRADING "2" | BITUMINOUS ASPHALT SURFACE MIX | 1.5" | 1.5" |
| SECTION 307, GRADING "BM" | BITUMINOUS ASPHALT BASE MIX | 2" | 2.5" |
| SECTION 803.05, TYPE A, CLASS A GRADING D | COMPACTED CRUSHED AGGREGATE BASE | 6" | 8" |

- NOTES:**
- PAVEMENT DESIGN PER TDOT SPECIFICATIONS FOR ASPHALT PAVEMENT.
 - THE PAVEMENT SUBGRADE SHALL BE PREPARED AS FOLLOWS:
 - A. PAVEMENT SUBGRADE SHALL BE PROFFERED AND COMPACTED TO AT LEAST 100% OF ITS MAXIMUM DRY DENSITY AND WITHIN ± 3% OF ITS OPTIMUM MOISTURE CONTENT, AS DETERMINED BY ASTM D1557 (MODIFIED PROCTOR). ANY SOFT AREAS SHALL BE OVEREXCAVATED TO A FIRM AND COMPETENT MATERIAL AND BACKFILLED AS DESCRIBED IN 1B.
 - B. ALL APPROVED FILL SHALL BE PLACED IN MAXIMUM 8" THICK, LOOSE LIFTS AND COMPACTED TO 100% OF ITS MAXIMUM DRY DENSITY AND WITHIN ± 3% OF ITS OPTIMUM MOISTURE CONTENT. THE FILL MATERIAL'S MAXIMUM DRY DENSITY AND OPTIMUM MOISTURE CONTENT SHALL BE DETERMINED BY ASTM D1557 (MODIFIED PROCTOR).
 - C. AFTER COMPACTION, THE PAVEMENT SUBGRADE SHALL PROVIDE A FIRM UNYIELDING FOUNDATION WITH NO SUDDEN, SHARP OR ABRUPT CHANGES OR BREAKS IN GRADES. NO STANDING WATER OR EXCESS MOISTURE SHALL BE PRESENT. ALL SOFT AND YIELDING AREAS SHALL BE REWORKED BY OVEREXCAVATING TO A FIRM AND COMPETENT MATERIAL, AND BACKFILLED AS DESCRIBED IN 1B.
 - D. THE SUBGRADE SHALL BE GRADED AND SHAPED AS REQUIRED TO CONSTRUCT THE AGGREGATE BASE COURSE IN CONFORMANCE WITH THE GRADES, LINES AND THICKNESSES SHOWN ON THE DRAWINGS.
 - THE BITUMINOUS COURSES SHALL BE TAPERED INTO THE STORM SEWER INLETS WHILE MAINTAINING FULL PAVEMENT SECTION DEPTH.

PAVEMENT SECTIONS
NOT TO SCALE



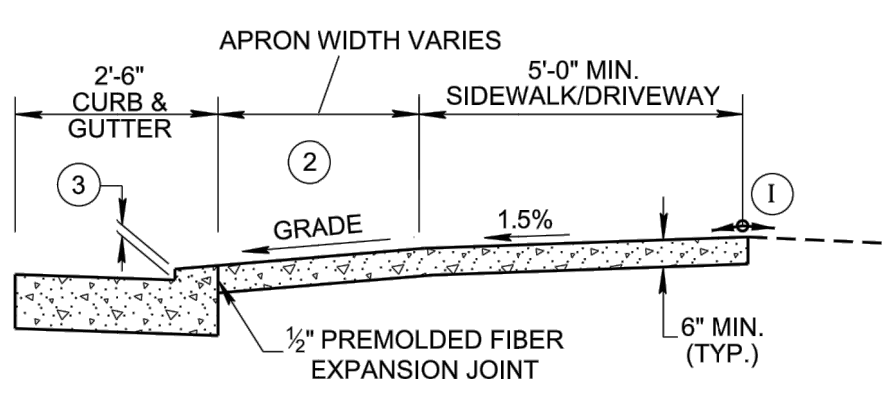
| LAYER | DEPTH | MATERIAL |
|------------------|---------|--|
| BEDDING | 6" MIN. | CLASS I FOR FLEXIBLE PIPE, CLASS I-IV FOR RIGID PIPE |
| HAUNCHING | VARIES | CLASS I FOR FLEXIBLE PIPE, CLASS I-IV FOR RIGID PIPE, TAMPED IN 6" MAXIMUM LAYERS. |
| INITIAL BACKFILL | VARIES | CLASS I FOR FLEXIBLE PIPE, CLASS I-IV FOR RIGID PIPE |
| BACKFILL | VARIES | CLASS I-IV FOR ALL PIPE, 75% OF BACKFILL MATERIAL MAY CONTAIN BROKEN STONES NOT EXCEEDING 6" IN DIAMETER - TAMPED IN 6" MAXIMUM LAYERS |
| SUBBASE | 12" | CLASS I-IV FOR ALL PIPE - EXCEPT USE T.D.O.T. MINERAL AGGREGATE BASE TYPE A, ACROSS OR ALONG EXISTING PAVEMENT |

TRENCH BEDDING & COMPACTION IN UNIMPROVED AND IMPROVED AREAS
NOT TO SCALE

FOOTNOTES

- SIDE FLARE WIDTH SHOULD BE A MINIMUM 7'-0" FOR COMMERCIAL DRIVEWAYS. SIDE FLARE WIDTH SHOULD BE A MINIMUM 3'-6" FOR RESIDENTIAL DRIVEWAYS.
- DRIVEWAY RAMP GRADE VARIES, 15% MAX. (10% RECOMMENDED) APRON GRADE FOR RESIDENTIAL DRIVEWAYS, 8% MAX. (5% RECOMMENDED) APRON GRADE FOR COMMERCIAL DRIVEWAYS.
- HEIGHT OF LOWERED CURB SHALL BE 2.25 INCHES. SEE STD DWG RP-VC-10 & RP-VC-11.
- THE SLOPE OF THE SIDEWALK AND/OR CURB HEIGHT TRANSITION VARIES TO A MAXIMUM OF 8.33% LENGTH OF TRANSITION IS RELATIVE TO THE LONGITUDINAL ROADWAY GRADE.
- COMMERCIAL DRIVEWAY ENTRANCE TYPICALLY (MAX. 40' WIDE) MAY REQUIRE DETECTABLE WARNING SURFACES IF ENTRANCE SERVES MORE THAN 400 VEHICLES PER DAY. SEE STD. DWG. NOS. MM-CR-SERIES FOR DETAILS.
- 3R PROJECTS MAY REQUIRE SLOPE CORRECTION, PARALLEL CROSS-WALK MARKINGS (ESPECIALLY AT TWO WAY DRIVEWAY ENTRANCES), AND DETECTABLE DOME SURFACE TO MAINTAIN CONTINUITY AT COMMERCIAL DRIVEWAY ENTRANCES. ADDITIONAL SIGNS (WATCH FOR PED) MAY BE ADDED AT DRIVEWAYS BY THE DIRECTION OF AN ENGINEER IF NEEDED.

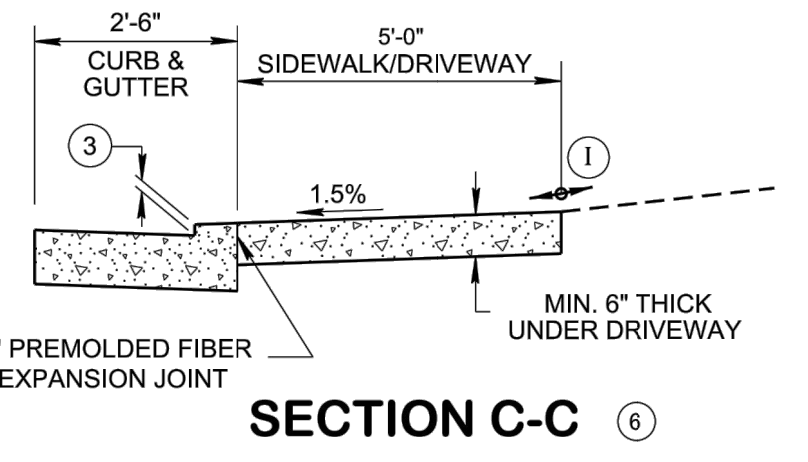
REV. 7-15-08: UPDATED SIDEWALK DIMENSIONS.
REV. 4-8-16: ADDED ITEM NUMBERS, UPDATED SLOPES AND DIMENSIONS. UPDATED NOTES.
REV. 07-16-18: ADDED NOTES TO CONC. FLARE AND GRASS FLARE IN ISOMETRIC VIEW. ADDED GENERAL NOTE (N) & (S).
REV. 01-07-19: ADDED LIMITS FOR ITEM NO. 701-02. ADJUSTED LOCATION OF GENERAL NOTE NOS. (J) & (K) ON DETAILS. REDESIGN SHEET.



SECTION A-A

GENERAL NOTES

- DUE TO THE ELEVATION CHANGE FOR PEDESTRIANS ON THE SIDEWALK, THIS APPLICATION IS UNDESIRABLE AND IS TO BE USED IN LIMITED APPLICATIONS. SEE RP-D-15 FOR THE PREFERRED DRIVEWAY TYPE.
- 5'-0" MINIMUM SIDEWALK WITH A MAXIMUM CROSS SLOPE OF 1.5% THROUGH DRIVEWAYS.
- DESIGNER TO CHECK GUTTER FLOW DEPTH AT DRIVEWAY LOCATIONS TO ASSURE THAT THE DESIGN FLOW DOES NOT OVERTOP THE SIDEWALK AREA. IF OVERTOPPING OCCURS, PLACE AN INLET AT THE UPSTREAM SIDE OF THE DRIVEWAY OR PERFORM OTHER DESIGN MITIGATION.
- THE SLOPE OF THE LANDING AREA SHALL NOT EXCEED 1.5% IN THE SIDEWALK AREA.
- DRIVEWAYS TO BE BUILT COMPLETE OR IN PART AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- ALL CONCRETE DRIVEWAYS TO BE 6" UNIFORM THICKNESS, UNLESS OTHERWISE SHOWN ON PLANS.
- EXPANSION JOINTS TO BE PLACED AS INDICATED ON THE PLANS EXCEPT JOINT AT BACK OF DRIVEWAY WHICH WILL BE PLACED WHEN DRIVEWAY ABUTS A RIGID DRIVEWAY OR BUILDING.
- THE ROADWAY DESIGNER SHALL CONSIDER THE USE OF A CATCH BASIN ON EITHER SIDE OF DRIVEWAY. CAREFUL CONSIDERATION TO THE PLACEMENT OF CATCH BASINS SHALL BE TAKEN IF THE DRIVEWAY IS IN A VERTICAL SAG CURVE.
- ALGEBRAIC DIFFERENCE NOT TO EXCEED 10.0%.
- PAY ITEMS:
 - ITEM NO: 701-01.01, CONCRETE SIDEWALK (4"), PER SF.
 - ITEM NO: 701-02, CONCRETE DRIVEWAY, S.F.
 - ITEM NO: 702-03, CONCRETE COMBINED CURB & GUTTER, C.C.
- WHEN MORE THAN 2 DRIVEWAYS ARE PROPOSED, USE TYPE "A" DRIVEWAY AS SHOWN ON STANDARD DRAWING RP-D-15 TO REDUCE ROLLER COASTER EFFECT FOR PEDESTRIANS.
- TYPICAL DRIVEWAY WIDTHS ARE 12' (4' TWO WAY) FOR RESIDENTIAL AND 24' (40' MAX.) FOR COMMERCIAL.
- REFER TO SECTION 5.1.3. IN THE MANUAL FOR CONSTRUCTING DRIVEWAY ENTRANCES ON STATE HIGHWAYS (2015) FOR CURVATURE GUIDANCE.
- ALL SIDEWALKS SHALL HAVE A MINIMUM CONCRETE THICKNESS OF 4".



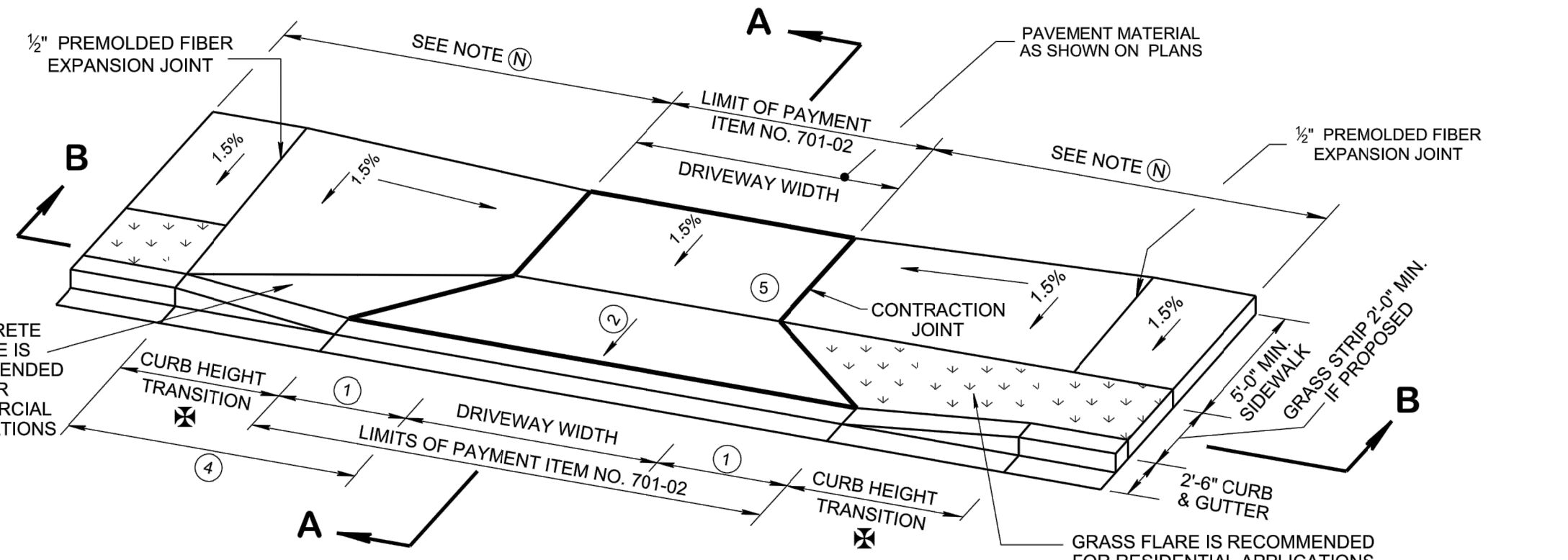
SECTION C-C

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED

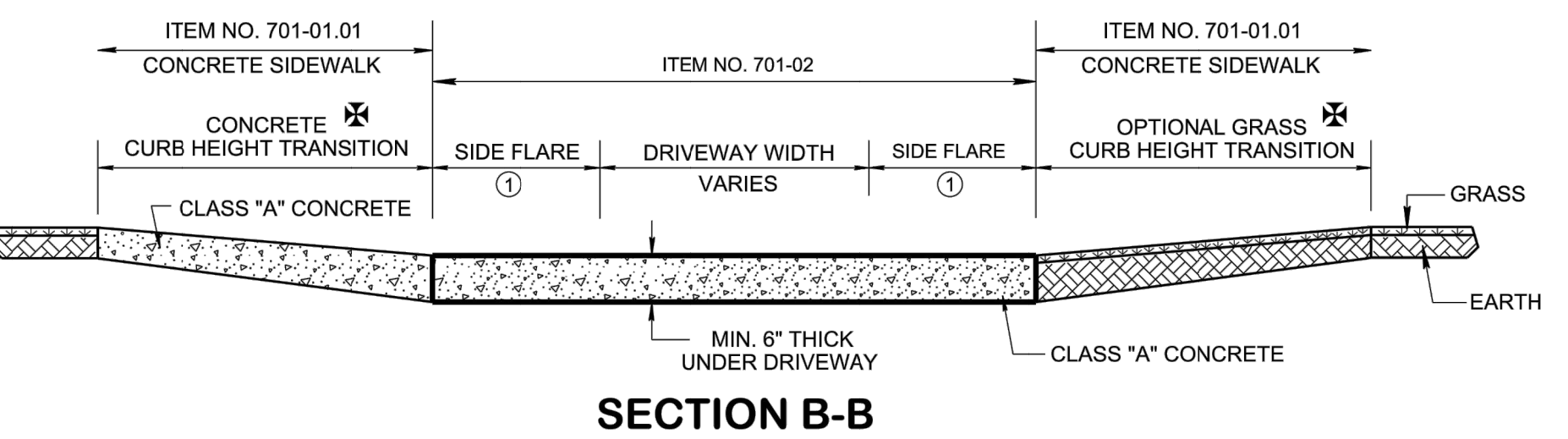
STATE OF TENNESSEE
STANDARD DRAWING
DEPARTMENT OF TRANSPORTATION

DETAILS OF LOWERED STANDARD CONCRETE DRIVEWAYS

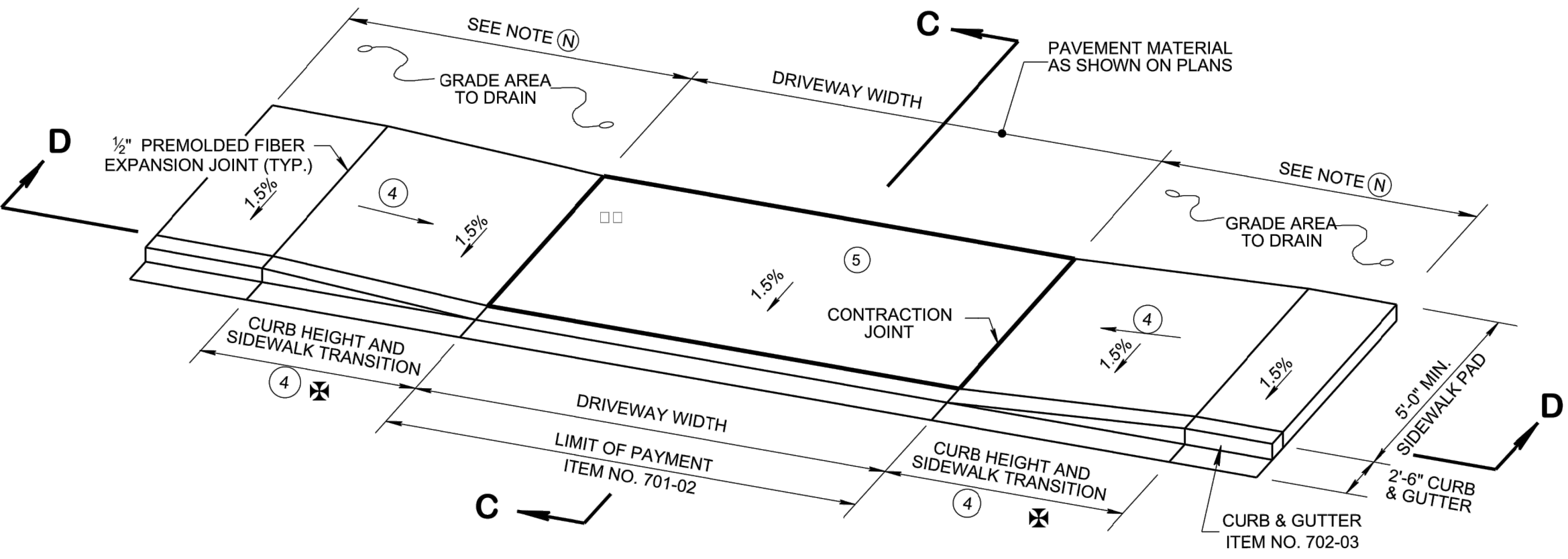
02-15-2007 RP-D-16



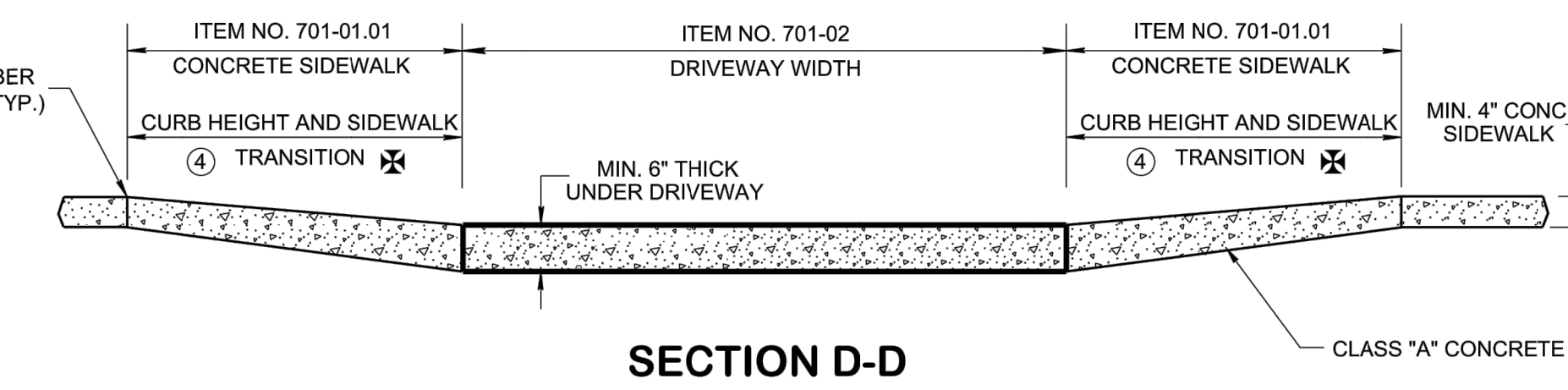
TYPE "B" DRIVEWAY ACROSS LOWERED SIDEWALK (WITH GRASS STRIP)



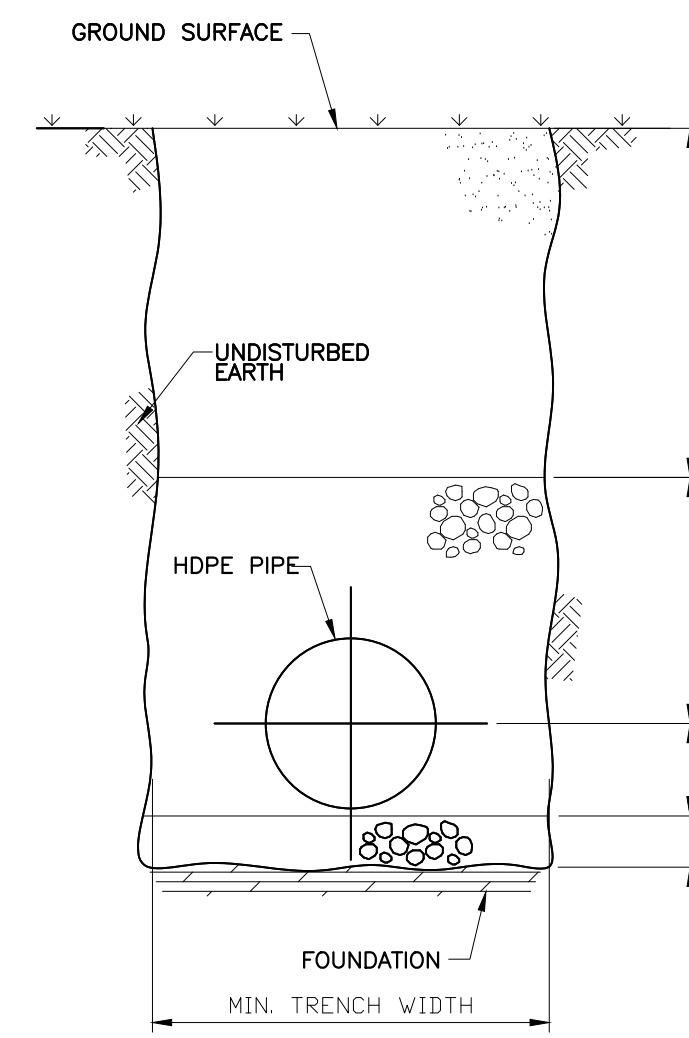
SECTION B-B



TYPE "C" DRIVEWAY ACROSS LOWERED SIDEWALK



SECTION D-D



- FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH A FOUNDATION OF CLASS I OR II MATERIAL AS INSTALLED IN ASTM D2321, "STANDARD PRACTICE FOR DEFINITION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY-FLOW APPLICATIONS," LATEST EDITION; AS AN ALTERNATIVE AND AT THE DISCRETION OF THE ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A WOVEN GEOTEXTILE FABRIC.
- BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III AND INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION. UNLESS OTHERWISE SPECIFIED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100-600mm) CORRUGATED POLYETHYLENE PIPE (CPEP); 6" (150mm) FOR 30"-60" (750-1500mm) CPEP.
- HAUNCHING AND INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III AND INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION. UNLESS OTHERWISE SPECIFIED BY THE ENGINEER, MINIMUM TRENCH WIDTHS SHALL BE AS FOLLOWS:

| NOMINAL Ø in. (mm) | MIN. RECOMMENDED TRENCH WIDTH in. (mm) |
|--------------------|--|
| 4 (100) | 21 (530) |
| 6 (150) | 23 (580) |
| 8 (200) | 25 (630) |
| 10 (250) | 28 (710) |
| 12 (300) | 31 (790) |
| 15 (375) | 34 (860) |
| 18 (450) | 38 (960) |
| 24 (600) | 48 (1220) |
| 30 (750) | 66 (1680) |
| 36 (900) | 76 (1980) |
| 42 (1050) | 83 (2110) |
| 48 (1200) | 89 (2260) |
| 60 (1500) | 102 (2590) |
- MINIMUM COVER: MINIMUM RECOMMENDED DEPTHS OF COVER FOR VARIOUS LIVE LOADING CONDITIONS ARE SUMMARIZED IN THE FOLLOWING TABLE. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TAKEN FROM THE TOP OF PIPE TO THE GROUND SURFACE.

| SURFACE LIVE LOADING CONDITION | MINIMUM RECOMMENDED COVER in. (mm) |
|--------------------------------|--|
| H25 (FLEXIBLE PAVEMENT) | 12 (300), 24 (600) FOR 60" (1500) PIPE |
| H25 (RIGID PAVEMENT) | 12 (300), 24 (600) FOR 60" (1500) PIPE |
| E80 RAILWAY | 24 (600) |
| HEAVY CONSTRUCTION | 48 (1200) |

TRENCH INSTALLATION DETAIL
NOT TO SCALE

REVISION RECORD

| NO. | DATE | DESCRIPTION |
|-----|------|-------------|
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Civil & Environmental Consultants, Inc.
2704 Cherokee Farm Way Suite 101 - Knoxville, TN 37920
Ph: 865.977.9997 - Fax: 865.977.9919
www.cesinc.com

KNOXVILLES COMMUNITY DEVELOPMENT CORPORATION
AUSTIN HOMES
INFRASTRUCTURE PACKAGE
KNOXVILLE, KNOX COUNTY, TN

DETAILS

| DATE | DWG SCALE | PROJECT NO. | APPROVED BY |
|-------------------|-----------|-------------|-------------|
| FEBRUARY 12, 2020 | AS SHOWN | 194-594 | GHP |

CRJ/MWB/ASL
MWB
CHECKED BY:

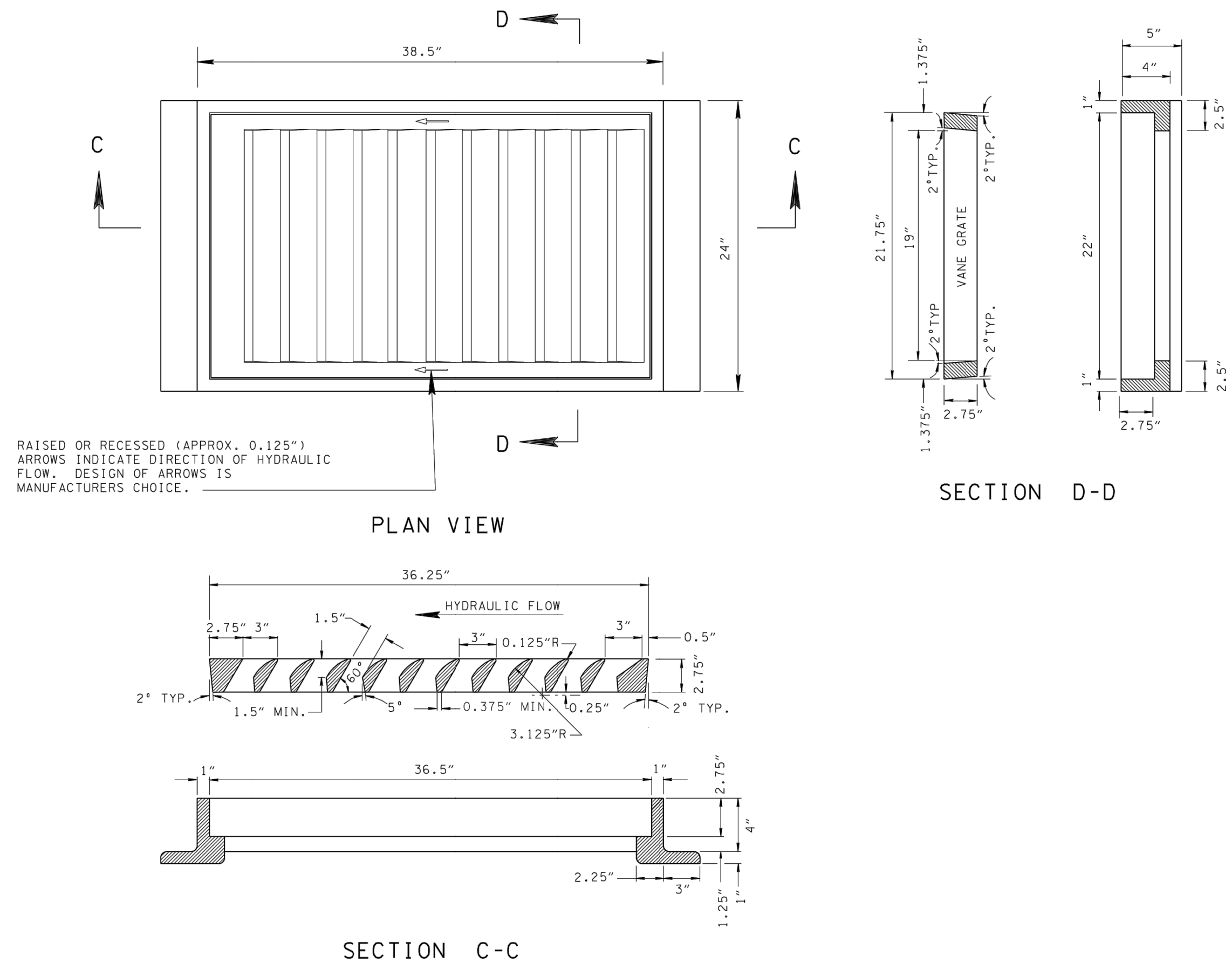


NOT FOR CONSTRUCTION

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GRATE AND FRAME DETAILS

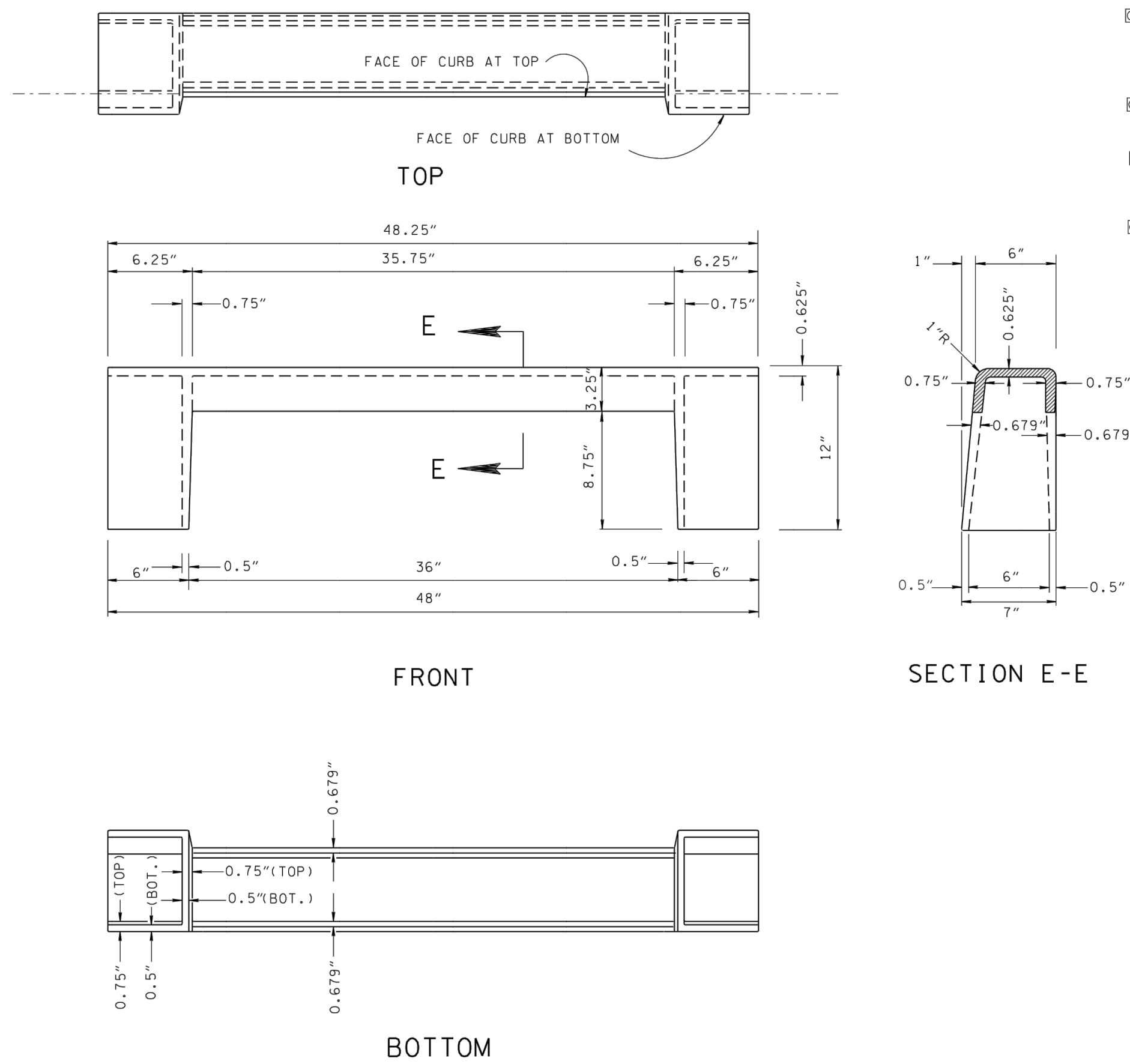


RAISED OR RECESSED (APPROX. 0.125") ARROWS INDICATE DIRECTION OF HYDRAULIC FLOW. DESIGN OF ARROWS IS MANUFACTURERS CHOICE.

GENERAL NOTES

- A WHEN A SIX (6) INCH NONMOUNTABLE CURB IS REQUIRED USE THIS DRAWING ON ALL VARIATIONS OF NUMBER 10, 12, 14, 16, AND 17 CATCH BASINS CONTAINED IN THIS SECTION OF THE STANDARD DRAWINGS.
- B FOR CLEARNESS, ALL CORNERS ARE SHOWN ON THIS DRAWING BY STRAIGHT LINES WITH THE EXCEPTION OF THE 1" RADIUS AT THE TOP OF FACE OF CURB. ALL INSIDE CORNERS SHOULD BE MADE WITH 1/2" x 1/2" FILLETS OR 3/4" RADIUS FILLETS FOR EASE IN MOULDING.
- C IF PAID FOR SEPARATELY CAST IRON USED IN CASTINGS IS TO BE PAID FOR UNDER ITEM NO. 611-03.04 GRAY IRON CASTINGS (CATCH BASIN) PER POUND.
- D IF CATCH BASIN IS PAID FOR UNDER EACH, THEN COST OF CAST IRON USED IN CASTINGS IS TO BE PAID FOR UNDER THE SPECIFIC ITEM BID FOR THAT CATCH BASIN. SEE STANDARD DRAWINGS FOR TYPE 10, 12, 14, 16, AND 17 CATCH BASINS FOR APPLICABLE PAY ITEMS FOR EACH TYPE OF CATCH BASIN.

CURB INLET CASTING



- REV. 10-26-93: REDREW SHEET, REORGANIZED SHEET AND UPDATED TO 1993 POLICY.
- REV. 9-05-94: MODIFIED CURB INLET CASTING DETAIL.
- REV. 1-19-95: CHANGED WEIGHT OF CURB INLET CASTING FROM 150 TO 155 POUNDS.
- REV. 5-27-95: CHANGED GENERAL NOTE (A).
- REV. 5-27-97: CHANGED GENERAL NOTE (A). DELETED OLD GENERAL NOTE (C). CHANGED DESCRIPTION IN RIGHT LOWER CORNER BLOCK.
- REV. 1-19-98: CHANGED GENERAL NOTE (A).
- REV. 12-18-99: CHANGED LOWER RIGHT HAND CORNER BLOCK DESCRIPTION.
- REV. 5-27-01: CHANGED GENERAL NOTE (A).

WEIGHTS

| |
|---|
| (SINGLE GRATE CATCH BASIN) |
| FRAME ----- 265 LBS. |
| GRATE ----- 250 LBS. |
| CURB INLET --- 155 LBS. |
| TOTAL ----- 670 LBS. |
| * NOTE: WEIGHT OF TWO GRATES = 1,340 LBS. |
| * NOTE: FOR NO. 10 CATCH BASIN, DEDUCT 155 LBS. PER " GRATE ", SINCE NO CURB INLET IS REQUIRED. |

FRACTION TABLE

| | |
|------|--------|
| 1/8" | 0.125" |
| 1/4" | 0.250" |
| 3/8" | 0.375" |
| 1/2" | 0.500" |
| 5/8" | 0.625" |
| 3/4" | 0.750" |

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

TYPE 'B' CAST IRON FRAME, GRATE & NONMOUNTABLE INLET DETAILS FOR NOS. 10, 12, 14, 16 & 17 TYPE CATCH BASINS
1-20-84 D-CBB-12A



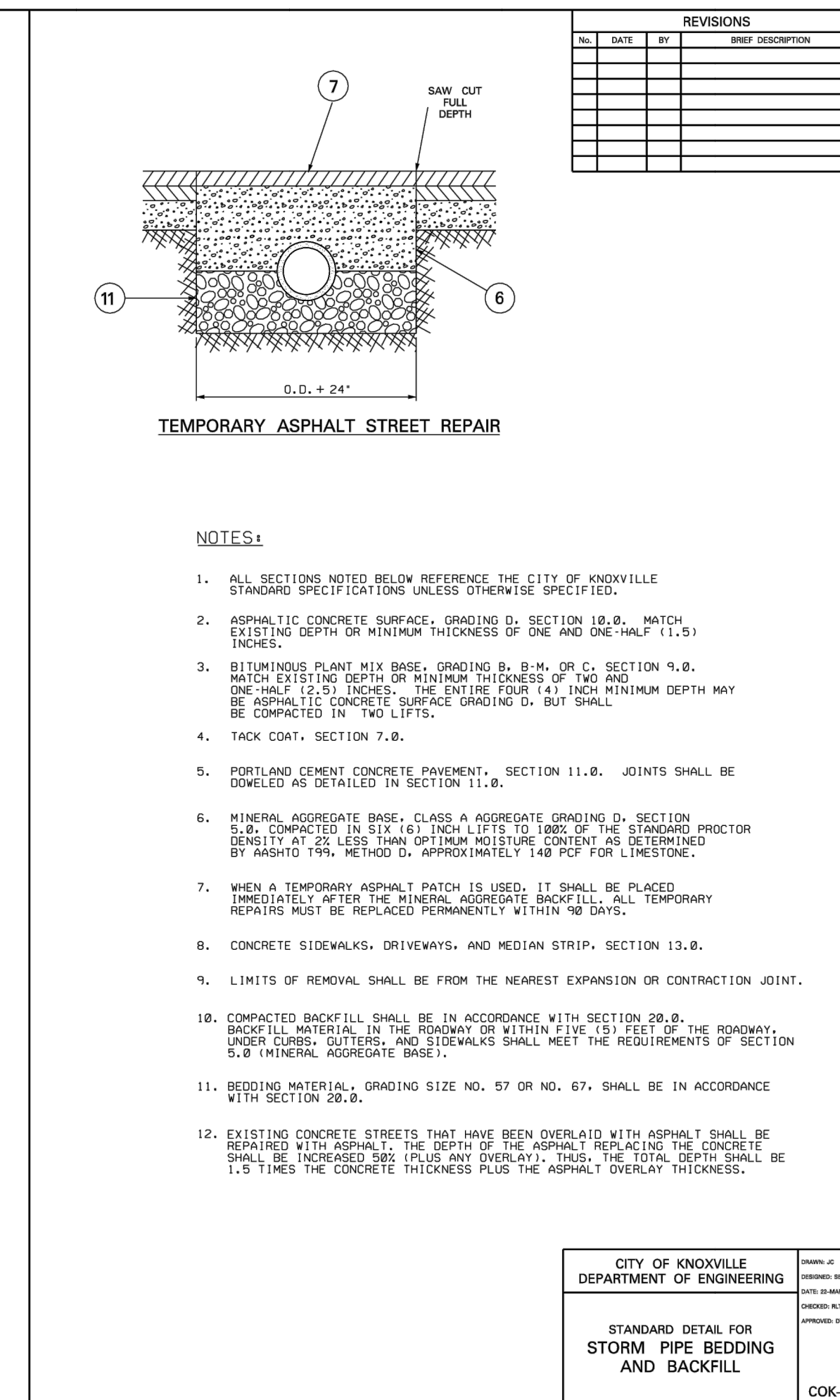
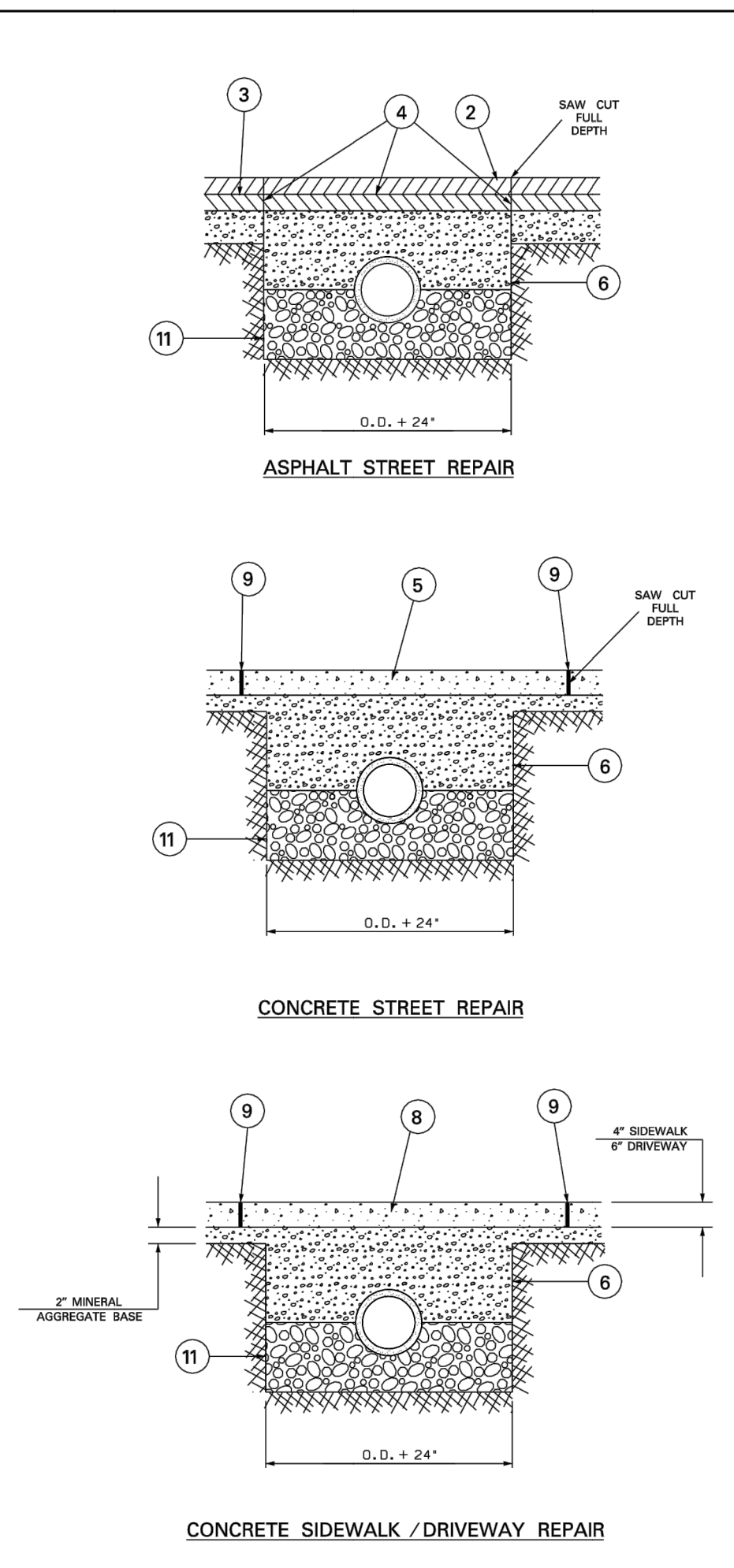
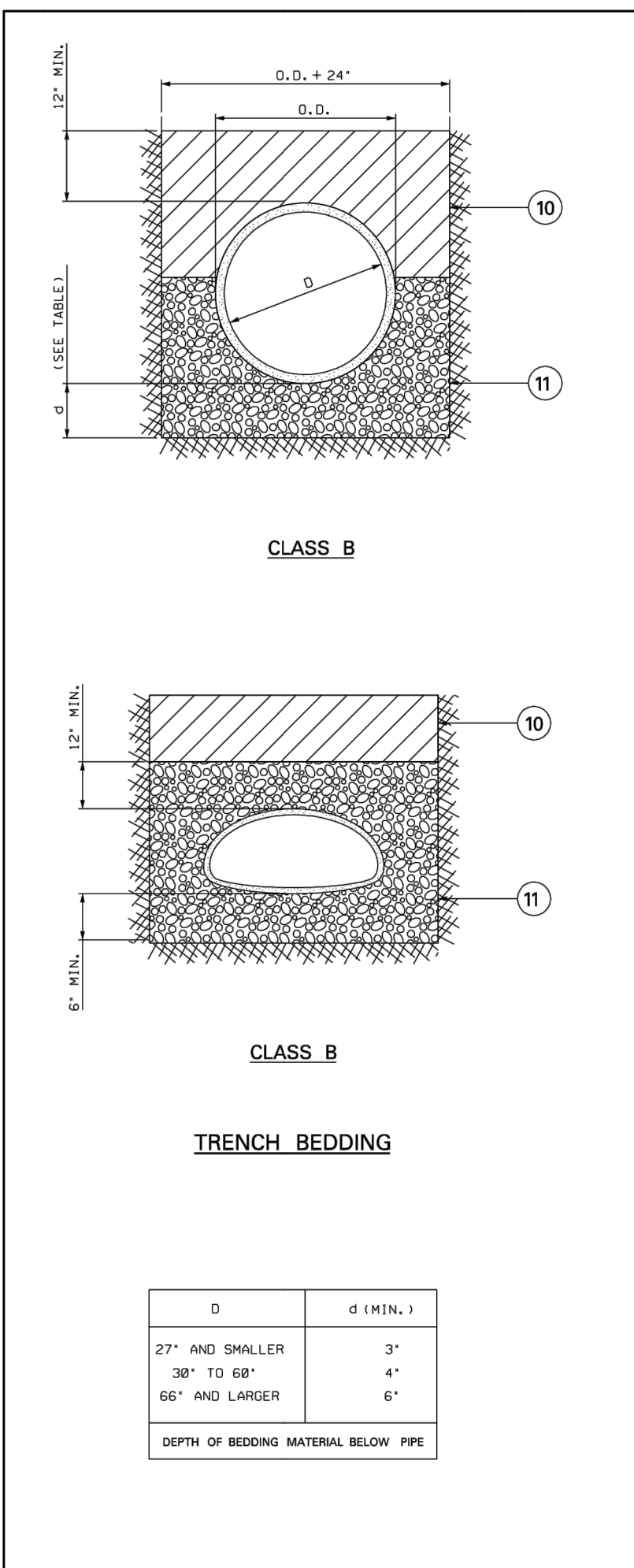
Civil & Environmental Consultants, Inc.
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Ph: 865.977.9997 - Fax: 865.977.9919
www.cesinc.com

KNOXVILLES COMMUNITY DEVELOPMENT CORPORATION
AUSTIN HOMES INFRASTRUCTURE PACKAGE
KNOXVILLE, KNOX COUNTY, TN

DATE: FEBRUARY 12, 2020
DRAWN BY: CRJ/MWB/ASL
DWG SCALE: MWB
PROJECT NO.: AS SHOWN
CHECKED BY: 194-594
APPROVED BY: GHP

NOT FOR CONSTRUCTION
DRAWING NO.: C801

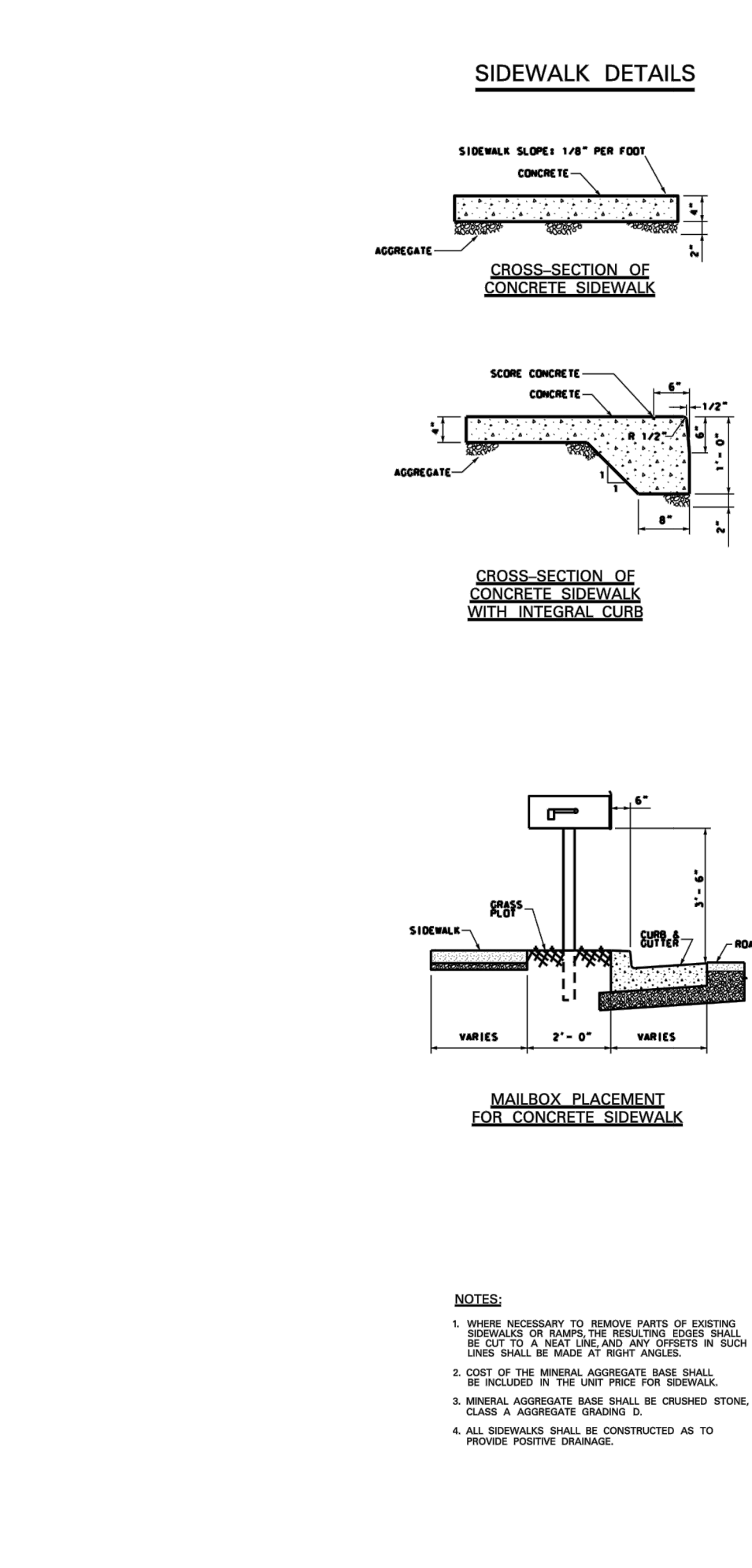
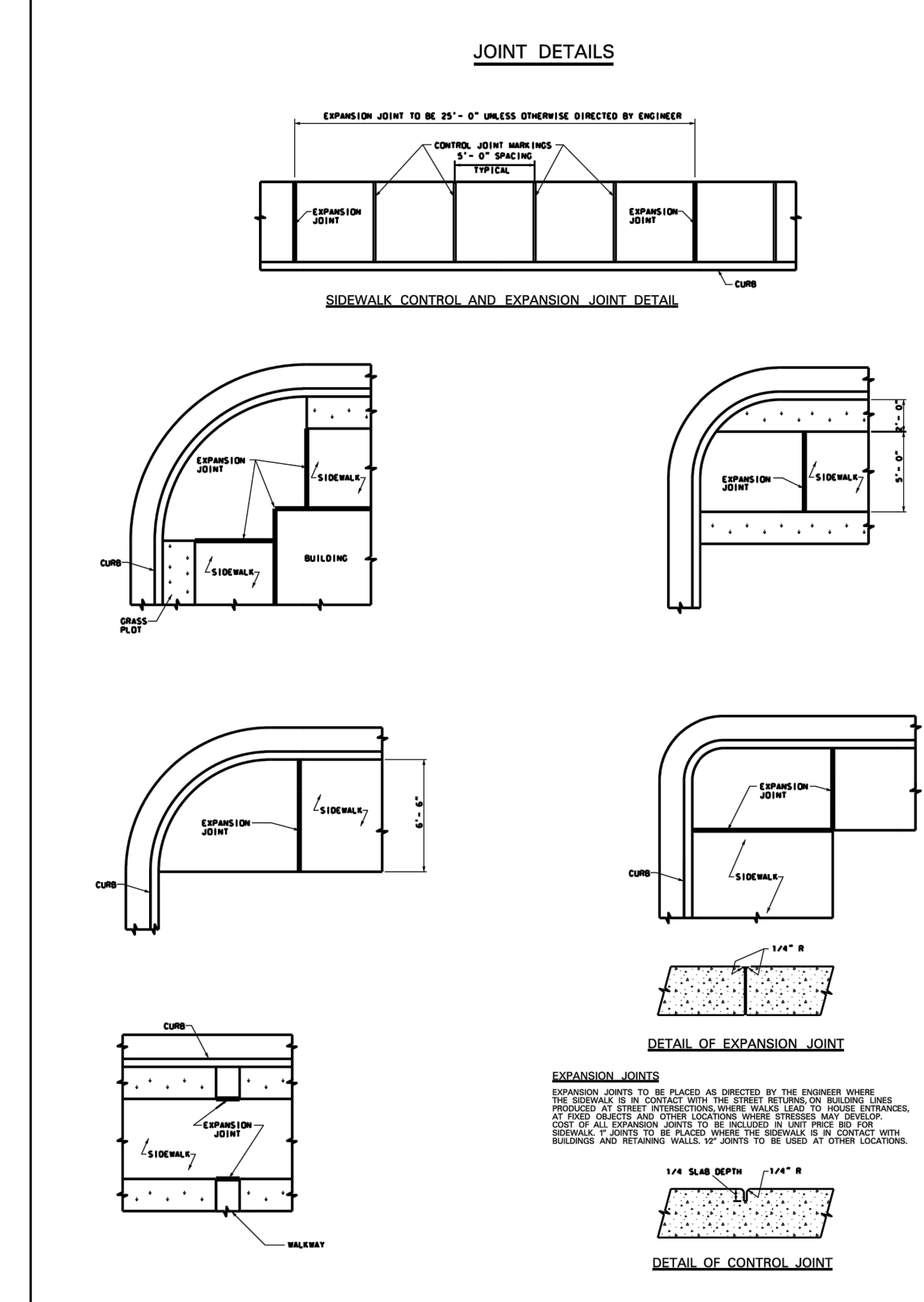
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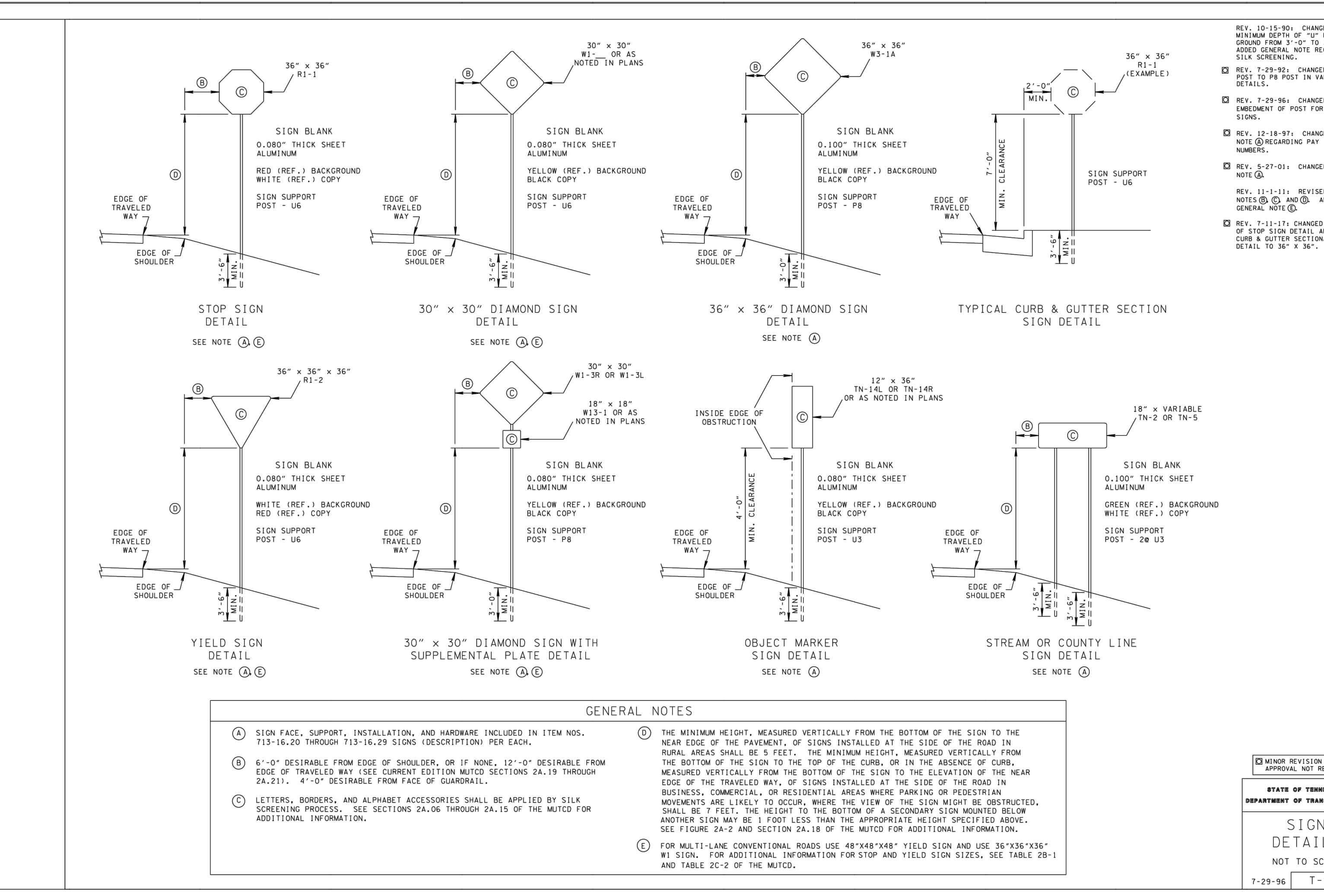
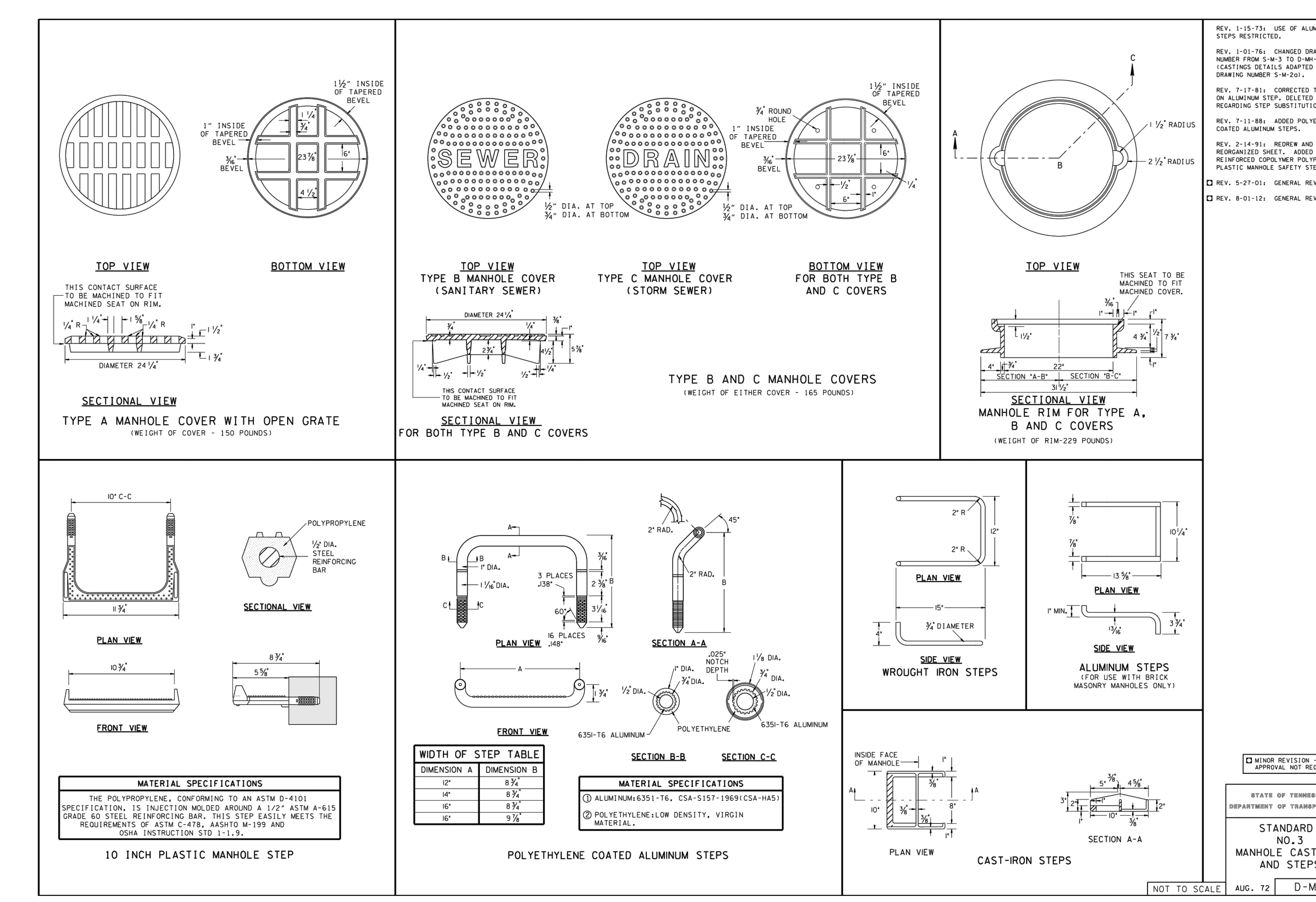
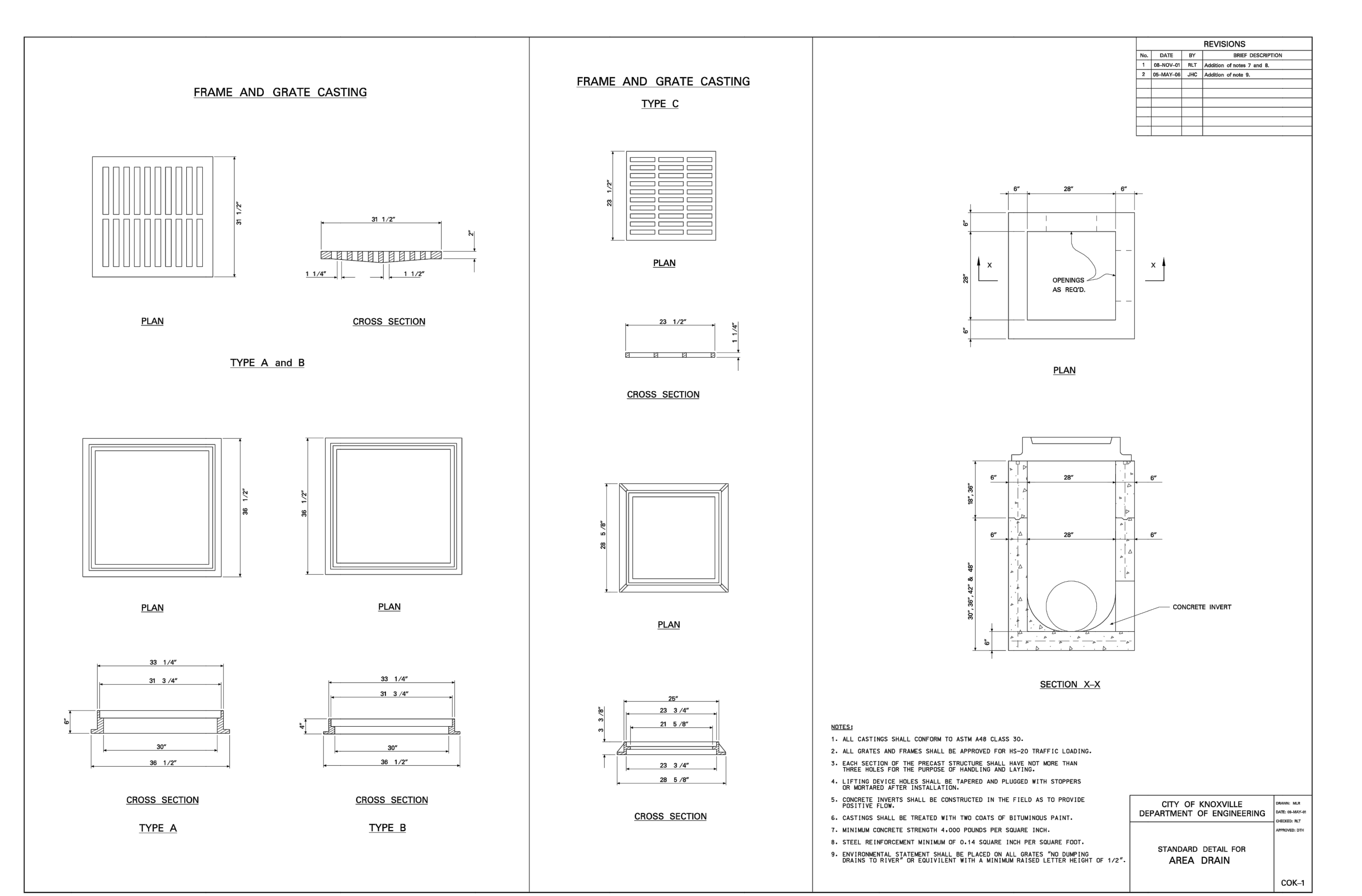
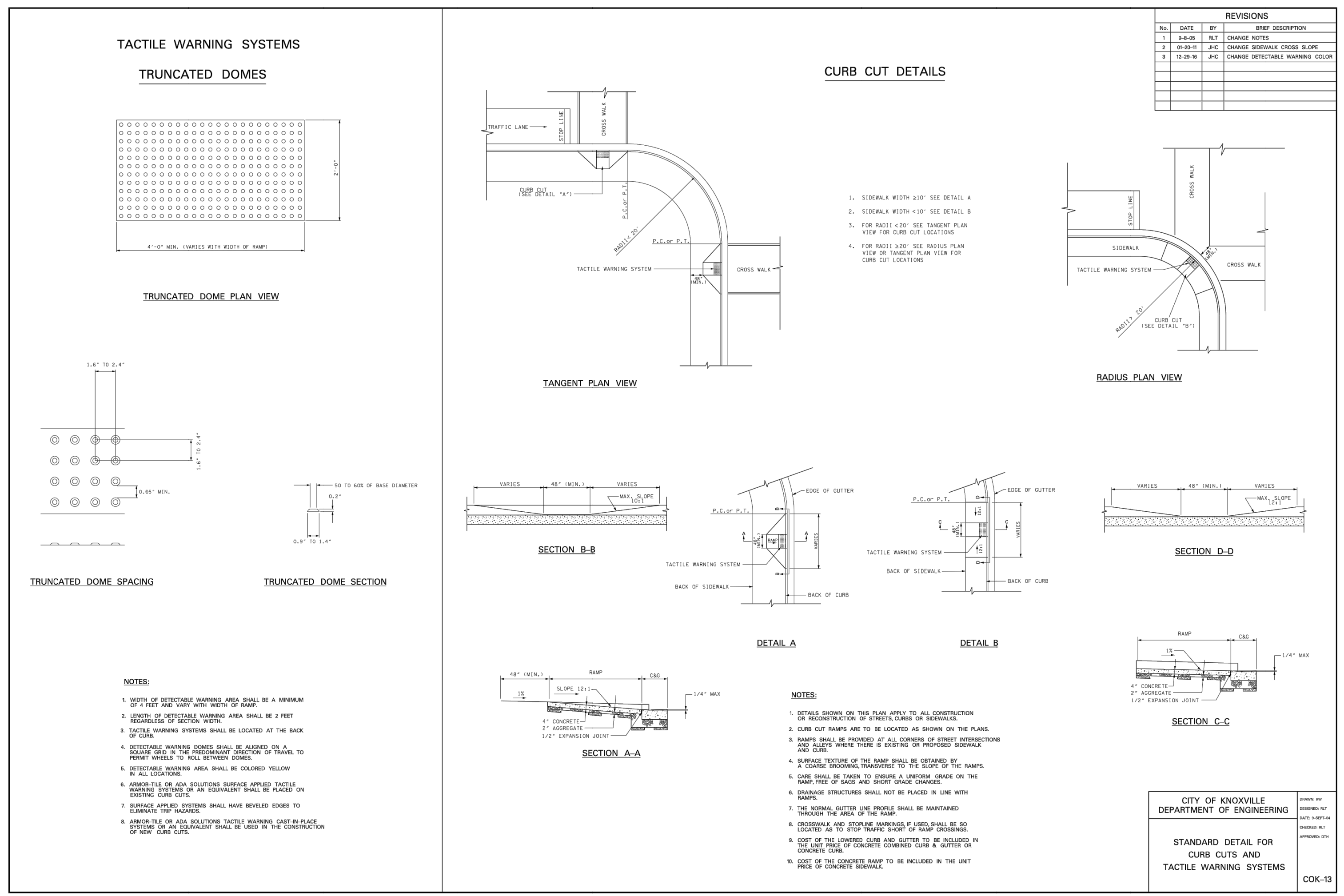
1. ALL SECTIONS NOTED BELOW REFERENCE THE CITY OF KNOXVILLE STANDARD SPECIFICATIONS UNLESS OTHER IS SPECIFIED.
2. ASPHALTIC CONCRETE SURFACE, GRADING D, SECTION 10.8, MATCH THE DEPTH OF MINIMUM THICKNESS OF ONE AND ONE-HALF (1.5) INCHES.
3. BITUMINOUS PLANT MIX BASE, GRADING D, SECTION 10.9, MATCH THE DEPTH OF MINIMUM THICKNESS OF ONE AND ONE-HALF (1.5) INCHES.
4. TACK COAT, SECTION 7.8.
5. PORTLAND CEMENT CONCRETE PAVEMENT, SECTION 11.8, JOINTS SHALL BE DEVELOPED AS DETAILED IN SECTION 11.8.
6. MINERAL AGGREGATE BASE, CLASS A AGGREGATE GRADING D, SECTION 10.6, COMPACTED TO 95% (±) TYPICAL TO 100% OF THE STANDARD PROCTOR DENSITY AT 2.000 TAMP EFFORT. FUTURE CONSTRUCTION AS DETERMINED BY AASHTO 194, METHOD D, APPROXIMATELY 148 PCF FOR LIMESTONE.
7. WHEN A TEMPORARY ASPHALT PATCH IS USED, IT SHALL BE PLACED IMMEDIATELY AFTER THE MINERAL AGGREGATE BASE/FILL. ALL TEMPORARY REPAIRS MUST BE REPLACED PERMANENTLY WITHIN 90 DAYS.
8. CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIAN STRIP, SECTION 13.8.
9. LIMITS OF REMOVAL SHALL BE FROM THE NEAREST EXPANSION OR CONTRACTION JOINT.
10. COMPACTED BACKFILL SHALL BE IN ACCORDANCE WITH SECTION 20.8.
11. BEDDING MATERIAL, GRADING SIZE NO. 57 OR NO. 67, SHALL BE IN ACCORDANCE WITH SECTION 20.8.
12. EXISTING CONCRETE STREETS THAT HAVE BEEN OVERLIFT WITH ASPHALT SHALL BE REPAIRED WITH ASPHALT. THE DEPTH OF THE ASPHALT INCLUDING THE CONCRETE SHALL BE INCREASED ONE (1) PLUS ANY OVERLIFT. THAT IS, THE TOTAL DEPTH SHALL BE 1.5 TIMES THE CONCRETE THICKNESS PLUS THE ASPHALT OVERLIFT THICKNESS.

CITY OF KNOXVILLE DEPARTMENT OF ENGINEERING
STANDARD DETAIL FOR STORM PIPE BEDDING AND BACKFILL
COK-6



- NOTES:
1. MINERAL AGGREGATE BASE (MATCH DEPTH OF ASPHALT) SPECIFIED OR MATCH THE EXISTING DEPTH WHICH SHALL BE AS SHOWN IN THIS DRAWING.
 2. CURB SHALL BE 1/4" ABOVE FINISHED GRADE.
 3. TOP OF THE ASPHALT AGGREGATE SHALL BE 1/4" ABOVE FINISHED GRADE.
 4. ALL SIDEWALKS SHALL BE CONSTRUCTED AS TO PREVENT POSITIVE DRAINAGE.

CITY OF KNOXVILLE DEPARTMENT OF ENGINEERING
STANDARD DETAIL FOR CONCRETE SIDEWALKS
COK-4



REVISION RECORD

| NO. | DATE | DESCRIPTION |
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KNOXVILLES COMMUNITY DEVELOPMENT CORPORATION
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KNOXVILLE, KNOX COUNTY, TN

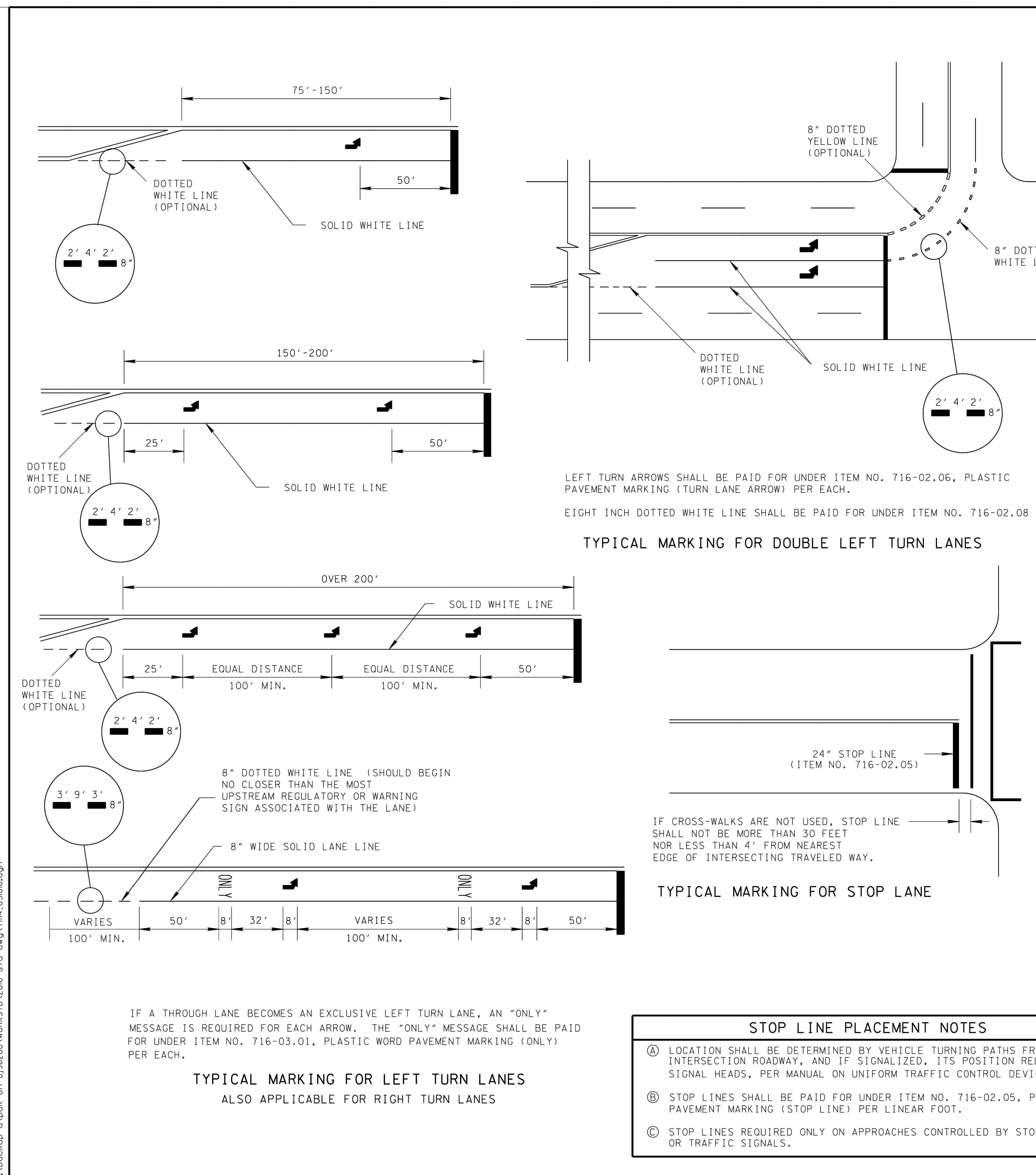
DETAILS

DATE: FEBRUARY 12, 2020
DRAWN BY: CRJ/MWB/ASL
AS SHOWN
CHECKED BY: MWB
PROJECT NO.: 194-594
APPROVED BY: GHP

NOT FOR CONSTRUCTION

C803





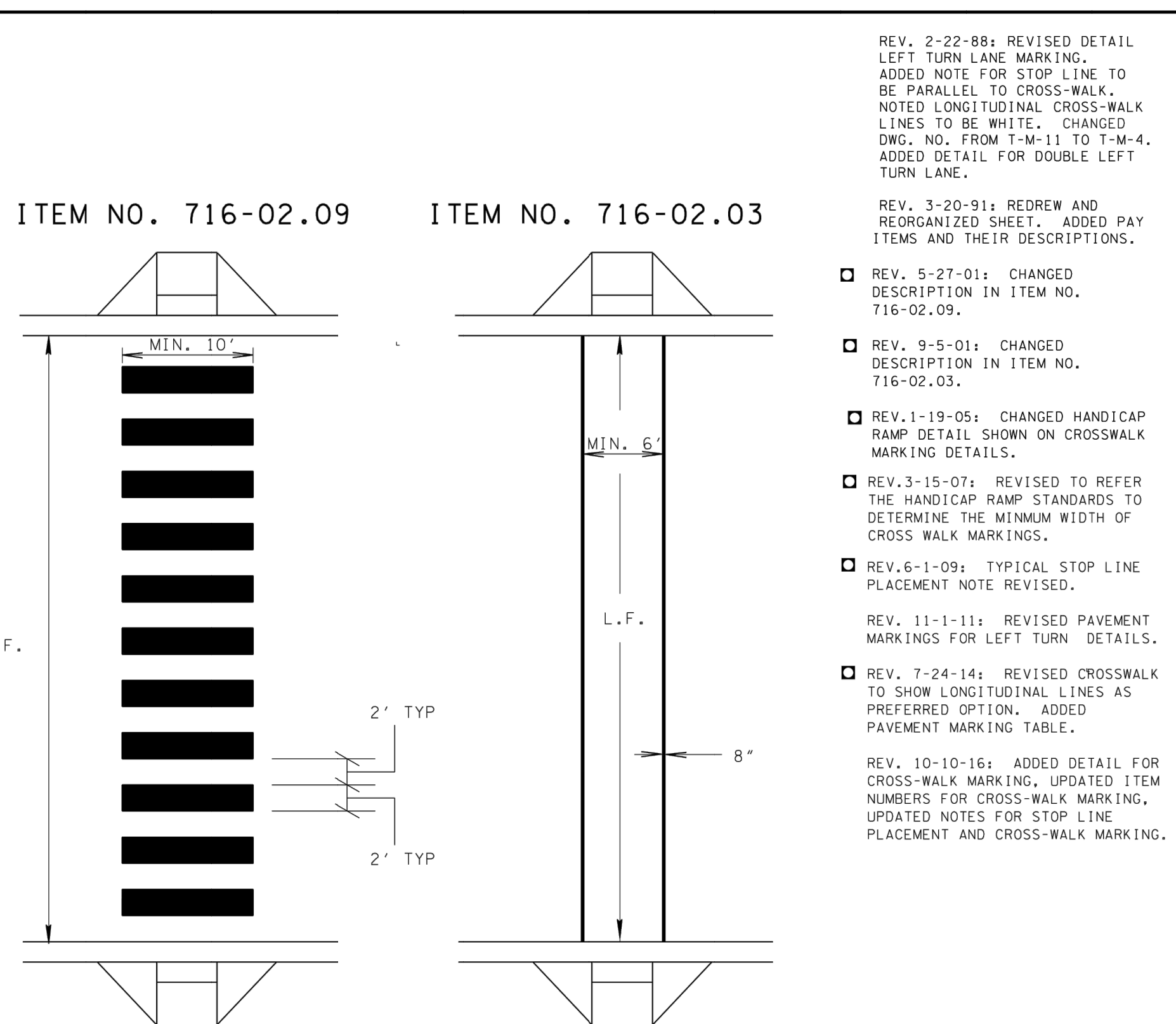
LEFT TURN ARROWS SHALL BE PAID FOR UNDER ITEM NO. 716-02.06, PLASTIC PAVEMENT MARKING (TURN LANE ARROW) PER EACH.

EIGHT INCH DOTTED WHITE LINE SHALL BE PAID FOR UNDER ITEM NO. 716-02.08

TYPICAL MARKING FOR STOP LANE

STOP LINE PLACEMENT NOTES

- LOCATION SHALL BE DETERMINED BY VEHICLE TURNING PATHS FROM INTERSECTION ROADWAY, AND IF SIGNALIZED, ITS POSITION RELATIVE TO SIGNAL HEADS, PER MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- STOP LINES SHALL BE PAID FOR UNDER ITEM NO. 716-02.05, PLASTIC PAVEMENT MARKING (STOP LINE) PER LINEAR FOOT.
- STOP LINES REQUIRED ONLY ON APPROACHES CONTROLLED BY STOP SIGNS OR TRAFFIC SIGNALS.



PAVEMENT MARKINGS SHALL BE PAID FOR UNDER ITEM NO. 716-02.09 PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK) PER LINEAR FOOT. MEASUREMENT IS CALCULATED AS THE FULL WIDTH OF PAVEMENT.

PAVEMENT MARKINGS SHALL BE PAID FOR UNDER ITEM NO. 716-02.03, PLASTIC PAVEMENT MARKING (CROSS-WALK) PER LINEAR FOOT. MEASUREMENT IS CALCULATED AS THE FULL WIDTH OF PAVEMENT.

CROSS-WALK NOTES

- SPECIAL PAVERS AND PAVEMENT TEXTURES ALONE ARE NOT ACCEPTABLE CROSS-WALK MARKINGS. THEREFORE, SPECIAL PAVERS AND PAVEMENT TEXTURES SHALL ONLY BE USED IN CONJUNCTION WITH TRANSVERSE CROSS-WALK MARKINGS.
- IF SPECIAL PAVERS, PAVEMENT TEXTURES, OR ANY OTHER ARCHITECTURAL PAVEMENT MATERIALS ARE USED, THE ARCHITECTURAL PAVEMENT MATERIALS SHALL PROVIDE A WALKABLE, DURABLE, STABLE, FIRM AND SLIP-RESISTANT SURFACE PER ADA STANDARDS.

PAVEMENT MARKING TABLE

| DESIGN SPEED | EDGE LINE | LANE LINE |
|--------------|-----------|-----------|
| V ≥ 45 MPH | 6" * | 6" |
| V < 45 MPH | 4" | 4" |

* IF SHOULDER IS LESS THAN 2' WIDE USE 4" LINE

REV. 2-22-88: REVISED DETAIL LEFT TURN LANE MARKING. ADDED NOTE FOR STOP LINE TO BE PARALLEL TO CROSS-WALK. NOTED LONGITUDINAL CROSS-WALK LINES TO BE WHITE. CHANGED DWG. NO. FROM T-4-11 TO T-4-4. ADDED DETAIL FOR DOUBLE LEFT TURN LANE.

REV. 3-20-91: REDREW AND REORGANIZED SHEET. ADDED PAY ITEMS AND THEIR DESCRIPTIONS.

REV. 5-27-01: CHANGED DESCRIPTION IN ITEM NO. 716-02.09.

REV. 9-5-01: CHANGED DESCRIPTION IN ITEM NO. 716-02.03.

REV. 1-19-05: CHANGED HANDICAP RAMP DETAIL SHOWN ON CROSSWALK MARKING DETAILS.

REV. 3-15-07: REVISED TO REFER THE HANDICAP RAMP STANDARDS TO DETERMINE THE MINIMUM WIDTH OF CROSS WALK MARKINGS.

REV. 6-1-09: TYPICAL STOP LINE PLACEMENT NOTE REVISED.

REV. 11-1-11: REVISED PAVEMENT MARKINGS FOR LEFT TURN DETAILS.

REV. 7-24-14: REVISED CROSSWALK TO SHOW LONGITUDINAL LINES AS PREFERRED OPTION. ADDED PAVEMENT MARKING TABLE.

REV. 10-10-16: ADDED DETAIL FOR CROSS-WALK MARKING. UPDATED ITEM NUMBERS FOR CROSS-WALK MARKING. UPDATED NOTES FOR STOP LINE PLACEMENT AND CROSS-WALK MARKING.

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

STANDARD INTERSECTION PAVEMENT MARKINGS

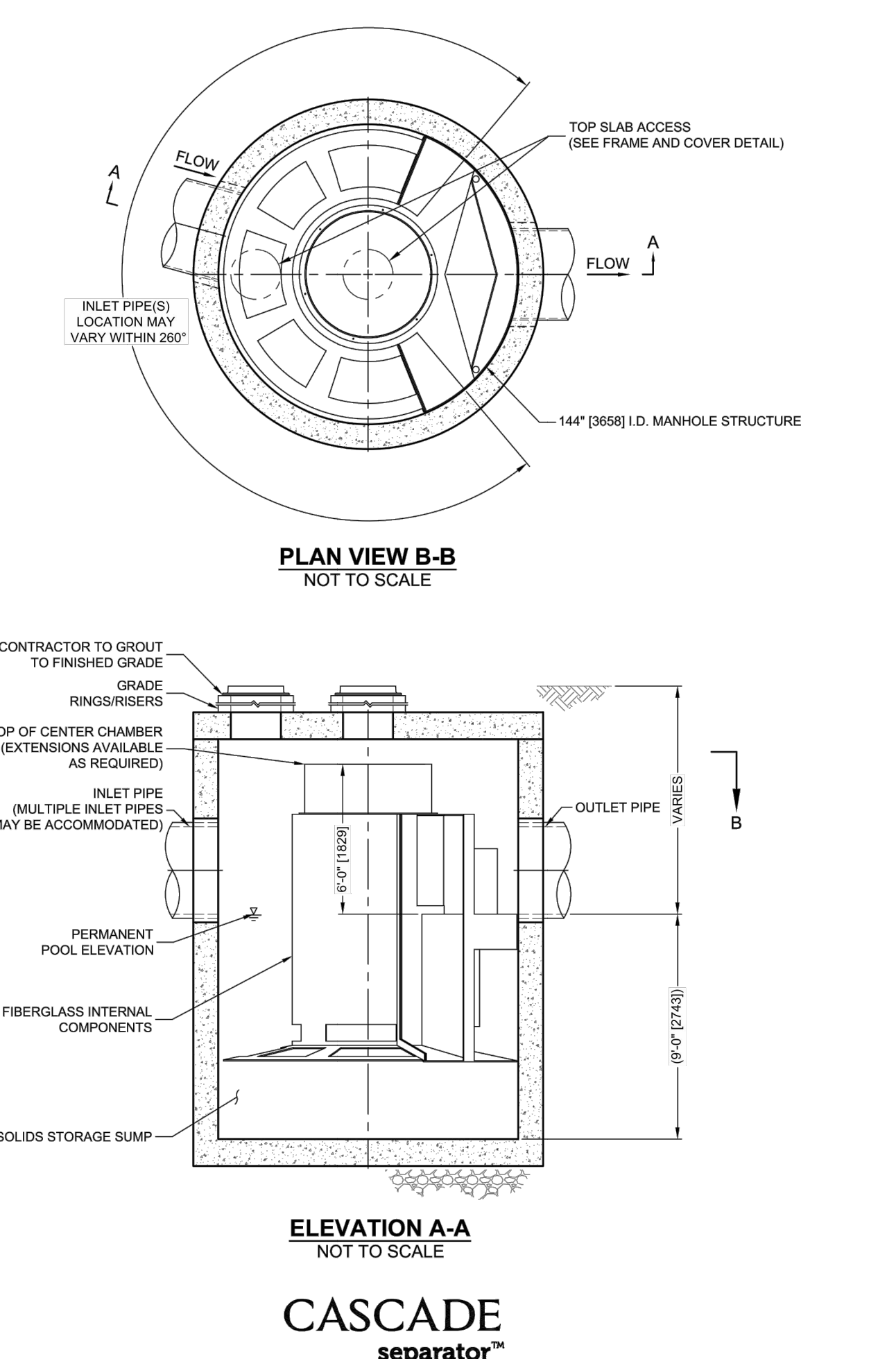
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REVISION RECORD

| NO. | DATE | DESCRIPTION |
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KNOXVILLE COMMUNITY DEVELOPMENT CORPORATION
AUSTIN HOMES
INFRASTRUCTURE PACKAGE
KNOXVILLE, KNOX COUNTY, TN



CASCADE SEPARATOR DESIGN NOTES

THE STANDARD CS-12 CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

INTERNAL COMPONENTS WILL BE FIELD INSTALLED. CONTACT YOUR CONTECH REPRESENTATIVE FOR ADDITIONAL INFORMATION.

CONFIGURATION DESCRIPTION

GRATED INLET ONLY (NO INLET PIPE)

GRATED INLET WITH INLET PIPE OR PIPES

CURB INLET ONLY (NO INLET PIPE)

CURB INLET WITH INLET PIPE OR PIPES

SITE SPECIFIC DATA REQUIREMENTS

| STRUCTURE ID | WATER QUALITY FLOW RATE (cfs [L/s]) | PEAK FLOW RATE (cfs [L/s]) | RETURN PERIOD OF PEAK FLOW (yrs) | RIM ELEVATION |
|--------------|-------------------------------------|----------------------------|----------------------------------|---------------|
| | | | | |

| PIPE DATA | INVERT | MATERIAL | DIAMETER |
|--------------|--------|----------|----------|
| INLET PIPE 1 | | | |
| INLET PIPE 2 | | | |
| OUTLET PIPE | | | |

NOTES/SPECIAL REQUIREMENTS:

GENERAL NOTES

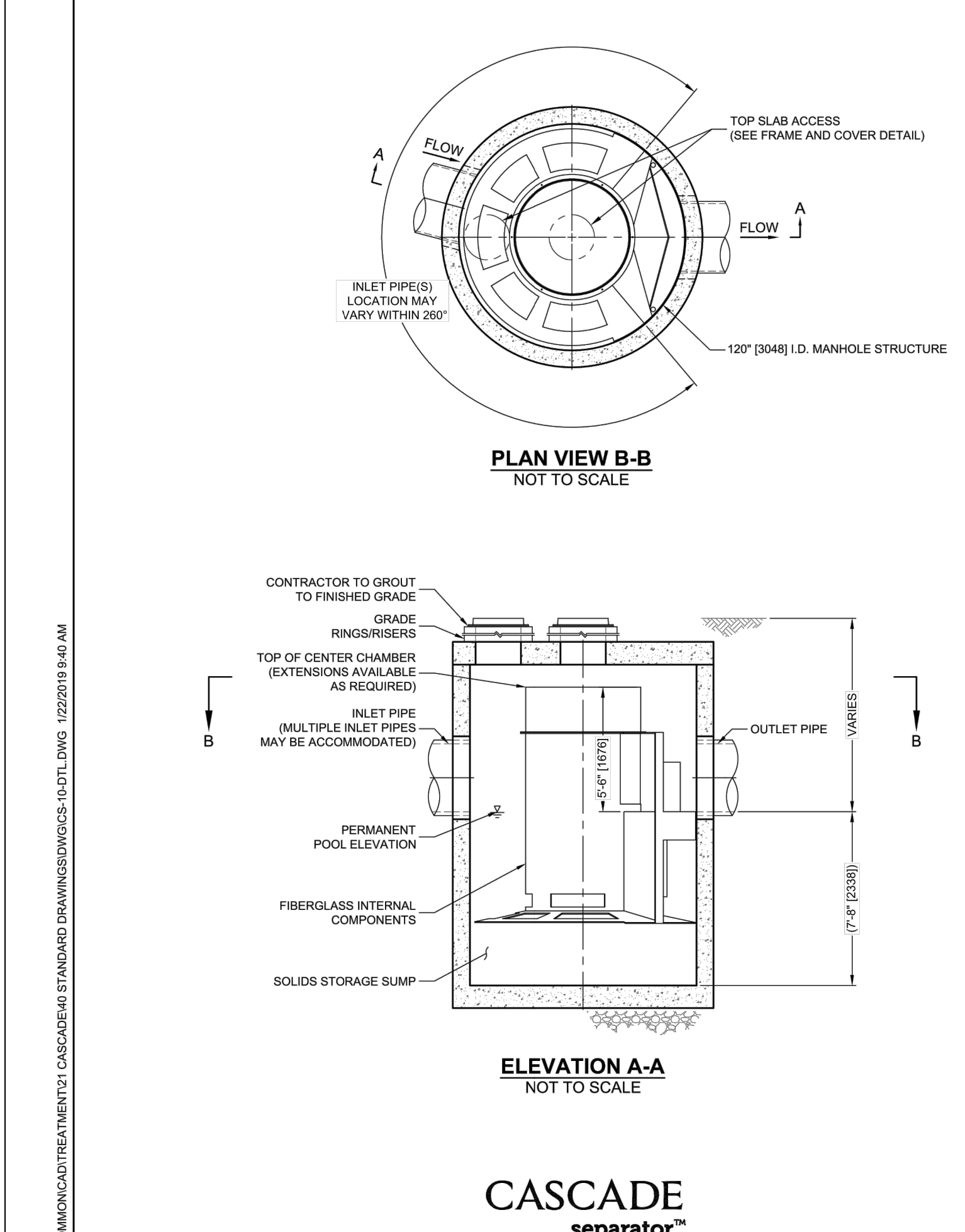
- CONTECH PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.conteches.com
- CASCADE SEPARATOR WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
- CASCADE SEPARATOR STRUCTURE SHALL MEET AASHTO H20D LOAD RATING, ASSUMING EARTH COVER OF 0'-2' (610) AND GROUNDWATER ELEVATION AT OR BELOW THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M208 AND BE CAST WITH THE CONTECH LOGO.
- CASCADE SEPARATOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 AND AASHTO LOAD FACTOR DESIGN METHOD.
- ALTERNATE UNITS ARE SHOWN IN MILLIMETERS (mm).

INSTALLATION NOTES

- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CASCADE SEPARATOR MANHOLE STRUCTURE.
- CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
- CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH ENGINEERED SOLUTIONS LLC
9023 Centre Pointe Dr., Suite 400, West Chester, OH 45399
800.338.1122 513.645.7000 513.645.7893 FAX

CS-12 CASCADE SEPARATOR STANDARD DETAIL



CASCADE SEPARATOR DESIGN NOTES

THE STANDARD CS-10 CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

INTERNAL COMPONENTS WILL BE FIELD INSTALLED. CONTACT YOUR CONTECH REPRESENTATIVE FOR ADDITIONAL INFORMATION.

CONFIGURATION DESCRIPTION

GRATED INLET ONLY (NO INLET PIPE)

GRATED INLET WITH INLET PIPE OR PIPES

CURB INLET ONLY (NO INLET PIPE)

CURB INLET WITH INLET PIPE OR PIPES

SITE SPECIFIC DATA REQUIREMENTS

| STRUCTURE ID | WATER QUALITY FLOW RATE (cfs [L/s]) | PEAK FLOW RATE (cfs [L/s]) | RETURN PERIOD OF PEAK FLOW (yrs) | RIM ELEVATION |
|--------------|-------------------------------------|----------------------------|----------------------------------|---------------|
| | | | | |

| PIPE DATA | INVERT | MATERIAL | DIAMETER |
|--------------|--------|----------|----------|
| INLET PIPE 1 | | | |
| INLET PIPE 2 | | | |
| OUTLET PIPE | | | |

NOTES/SPECIAL REQUIREMENTS:

GENERAL NOTES

- CONTECH PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.conteches.com
- CASCADE SEPARATOR WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
- CASCADE SEPARATOR STRUCTURE SHALL MEET AASHTO H20D LOAD RATING, ASSUMING EARTH COVER OF 0'-2' (610) AND GROUNDWATER ELEVATION AT OR BELOW THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M208 AND BE CAST WITH THE CONTECH LOGO.
- CASCADE SEPARATOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 AND AASHTO LOAD FACTOR DESIGN METHOD.
- ALTERNATE UNITS ARE SHOWN IN MILLIMETERS (mm).

INSTALLATION NOTES

- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CASCADE SEPARATOR MANHOLE STRUCTURE.
- CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
- CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

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9023 Centre Pointe Dr., Suite 400, West Chester, OH 45399
800.338.1122 513.645.7000 513.645.7893 FAX

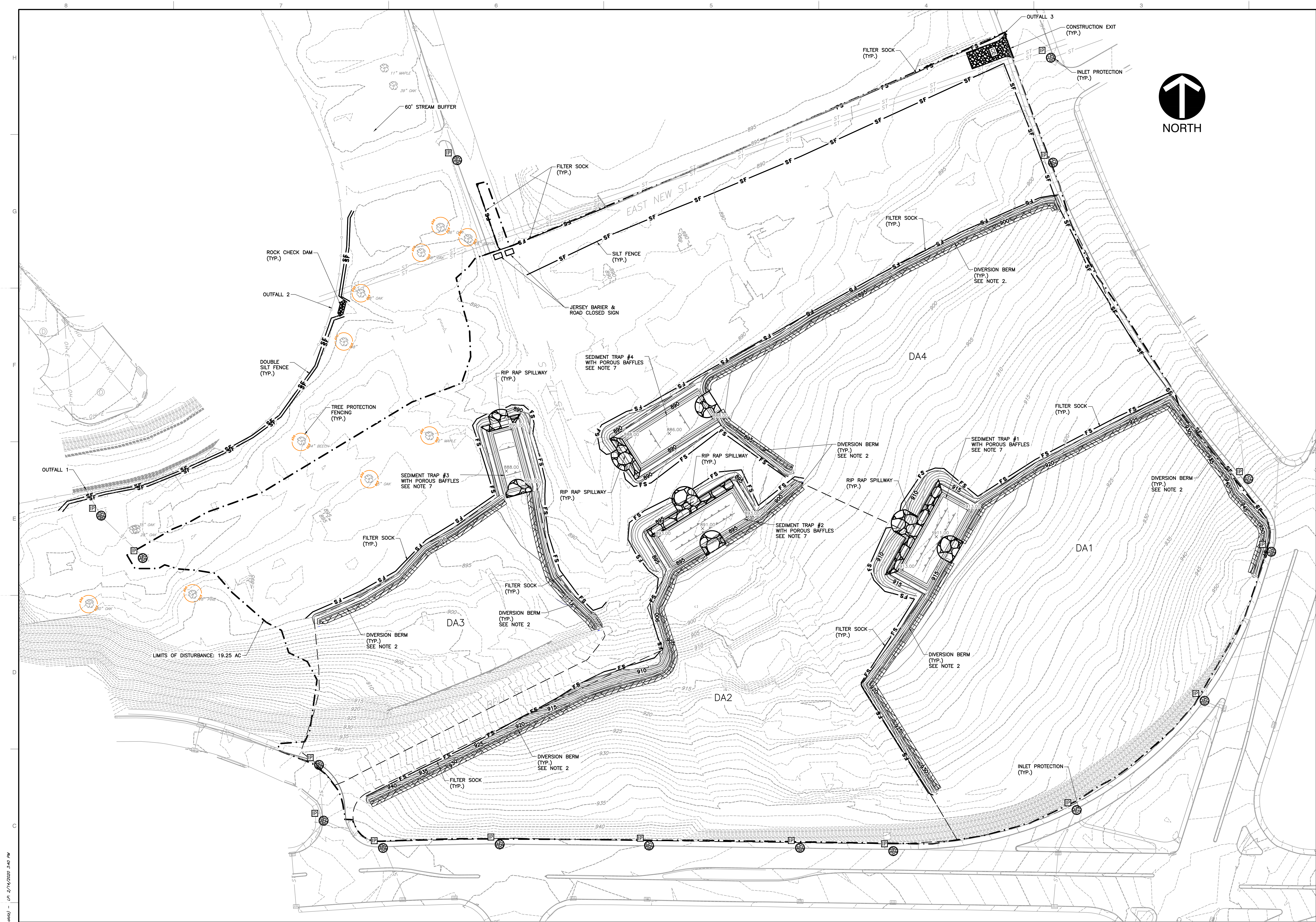
CS-10 CASCADE SEPARATOR STANDARD DETAIL

NOT FOR CONSTRUCTION

DETAILS

DATE: FEBRUARY 12, 2020 DRAWN BY: CRJ/MWB/ASL
DWG NO.: AS SHOWN CHECKED BY: MWB
PROJECT NO.: 194-594
APPROVED BY: GHP

DRAWING NO.: **C804**

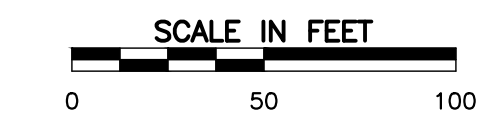


- LEGEND:**
- EXISTING PROPERTY LINE/RIGHT-OF-WAY
 - EXISTING STORM SEWER LINE
 - EXISTING STORM INLET
 - EXISTING INDEX CONTOUR
 - EXISTING INTERMEDIATE CONTOUR
 - 60' STREAM BUFFER
 - - - 870
 - - - PROPOSED INDEX CONTOUR
 - - - PROPOSED INTERMEDIATE CONTOUR
 - - - PROPOSED LIMITS OF DISTURBANCE
 - - - SF
 - - - PROPOSED SILT FENCE
 - - - FS
 - - - PROPOSED DIVERSION SWALE
 - - - PROPOSED FILTER SOCK
 - - - SEDIMENT TRAP DRAINAGE AREA
 - - - PROPOSED RIP RAP
 - - - PROPOSED SLOPE EROSION CONTROL BLANKET
 - - - PROPOSED CHANNEL EROSION CONTROL MATTING
 - PROPOSED CONSTRUCTION EXIT
 - PROPOSED ROCK CHECK DAM
 - TS
 - IP
 - PROPOSED TEMPORARY SEEDING
 - PROPOSED INLET PROTECTION
 - TREE PROTECTION FENCING

- GENERAL NOTES**
- TOTAL LIMITS OF DISTURBANCE = 19.25 ACRES
 - DIVERSION BERM FLOWLINES ARE TO BE LINED WITH EROSION CONTROL MATTING (TENSAR NORTH AMERICAN GREEN S1250 OR APPROVED EQUAL)
 - SLOPES LESS THAN 3:1 ARE TO BE STABILIZED WITH TEMPORARY SEEDING.
 - SLOPES GREATER THAN 3:1 ARE TO BE STABILIZED WITH EROSION CONTROL BLANKETS (TENSAR NORTH AMERICAN GREEN S150 OR APPROVED EQUAL).
 - DISTURBANCE WITHIN THE RIPARIAN STREAM BUFFER SHALL BE LIMITED TO THE MINIMUM NECESSARY. NATIVE RIPARIAN VEGETATION MUST BE REESTABLISHED AFTER WORK IS COMPLETED.
 - INSTALL INITIAL EPSC MEASURES AS SHOWN ON PLANS BEFORE CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING, FILLING, OR ANY OTHER EARTHWORK OCCURS, EXCEPT AS SUCH WORK MAY BE NECESSARY TO INSTALL EPSC MEASURES.
 - REMOVE ALL EXISTING SURFACE AND SUBSURFACE DEMOLITION ITEMS SHOWN BENEATH THE PROPOSED SEDIMENT TRAPS AND BERMS PRIOR TO THEIR INSTALLATION.
 - STABILIZE DISTURBED AREAS WITHIN 14 DAYS OF COMPLETING ANY STAGE AND/OR PHASE OF ACTIVITY.
 - MAINTAIN EROSION AND SEDIMENT CONTROL DEVICES THROUGHOUT THE LIFE OF THE PROJECT.

DRAINAGE AREA/SEDIMENT TRAP DETAILS:

| DRAINAGE AREA | ACRES | OUTFALL # | SED TRAP # | WET STORAGE VOLUME (CF.) | DRY STORAGE VOLUME (CF.) | TOTAL DEPTH OF WET AND DRY STORAGE (FT.) | TOP OF EMBANKMENT ELEVATION | EMERGENCY SPILLWAY ELEVATION | BOTTOM WIDTH OF EMERGENCY SPILLWAY (FT.) |
|---------------|-------|-----------|------------|--------------------------|--------------------------|--|-----------------------------|------------------------------|--|
| DA1 | 3.85 | 1 | 1 | 6970 | 8245 | 4 | 916.5 | 915 | 20 |
| DA2 | 4.06 | 1 | 2 | 7350 | 8655 | 4 | 896.5 | 895 | 20 |
| DA3 | 1.73 | 1 | 3 | 3220 | 4103 | 4 | 893.5 | 892 | 15 |
| DA4 | 3.12 | 1 | 4 | 6970 | 8245 | 4 | 891.5 | 890 | 20 |



NOT FOR CONSTRUCTION

REVISION RECORD
 NO. DATE DESCRIPTION

Civil & Environmental Consultants, Inc.
 2704 Cherokee Farm Way Suite 101 - Knoxville, TN 37920
 Ph: 865.977.9997 - Fax: 865.977.9919
 www.cenric.com

KNOXVILLES COMMUNITY DEVELOPMENT CORPORATION
AUSTIN HOMES INFRASTRUCTURE PACKAGE
KNOXVILLE, KNOX COUNTY, TN

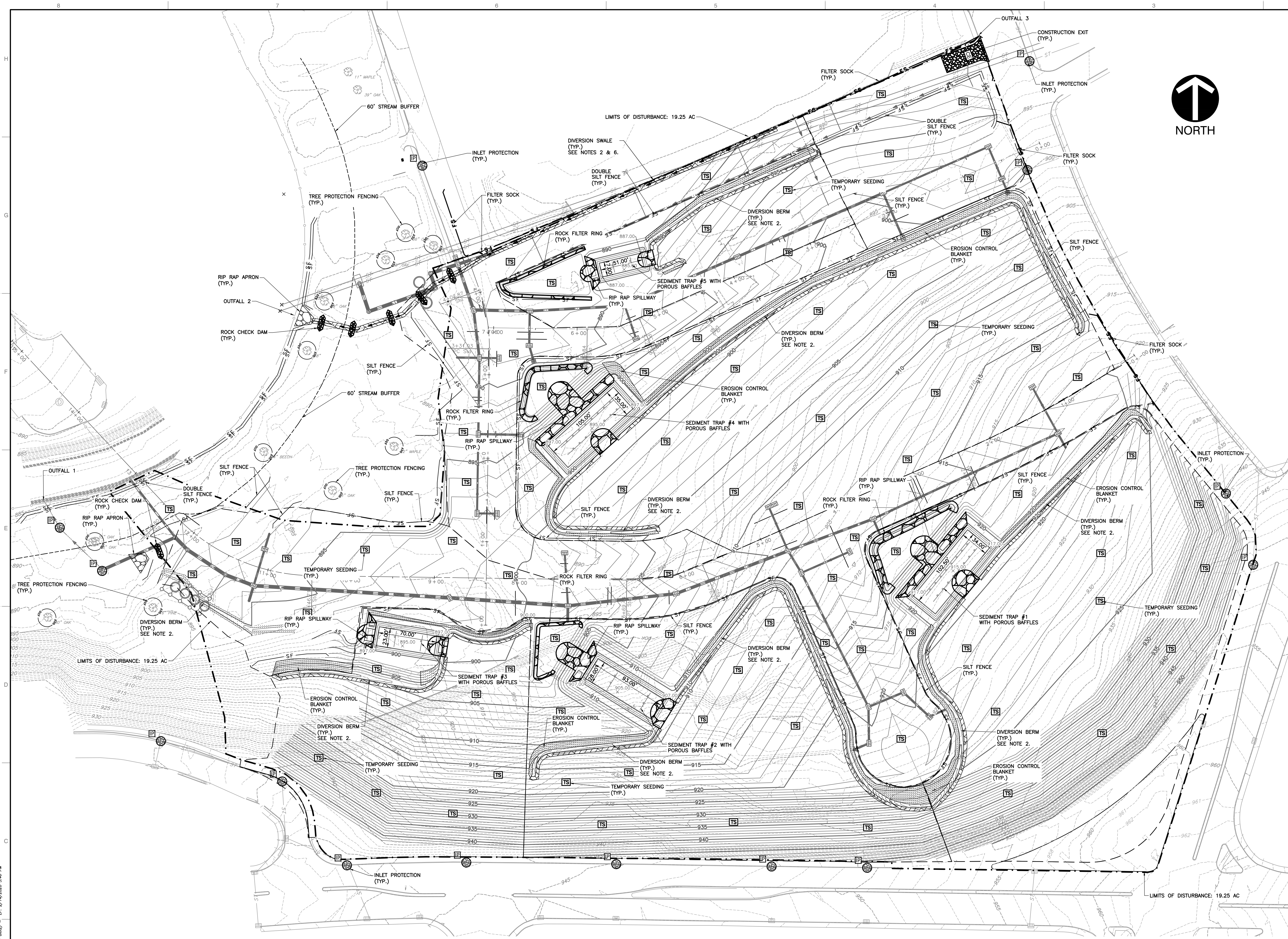
INITIAL EROSION AND SEDIMENTATION CONTROL PLAN

DATE: FEBRUARY 12, 2020
 DRAWN BY: CRJ/MWB/ASL
 DWG SCALE: AS SHOWN
 PROJECT NO: 194-594
 CHECKED BY: MWB
 APPROVED BY: GHP

C900



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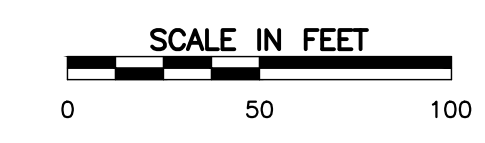
LEGEND:

- EXISTING PROPERTY LINE/RIGHT-OF-WAY
- EXISTING STORM SEWER LINE
- EXISTING STORM INLET
- EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- 60' STREAM BUFFER
- 870 --- PROPOSED INDEX CONTOUR
- PROPOSED INTERMEDIATE CONTOUR
- PROPOSED LIMITS OF DISTURBANCE
- SF --- PROPOSED SILT FENCE
- FS --- PROPOSED DIVERSION SWALE
- FS --- PROPOSED FILTER SOCK
- SEDIMENT TRAP DRAINAGE AREA
- PROPOSED RIP RAP
- PROPOSED SLOPE EROSION CONTROL BLANKET
- PROPOSED CHANNEL EROSION CONTROL MATTING
- PROPOSED CONSTRUCTION EXIT
- PROPOSED ROCK CHECK DAM
- TS --- PROPOSED TEMPORARY SEEDING
- IP --- PROPOSED INLET PROTECTION
- TREE PROTECTION FENCING

- GENERAL NOTES**
- TOTAL LIMITS OF DISTURBANCE = 19.25 ACRES
 - DIVERSION SWALES AND BERM FLOWLINES ARE TO BE LINED WITH EROSION CONTROL MATTING (TENSAR NORTH AMERICAN GREEN S3500 OR APPROVED EQUAL).
 - SLOPES LESS THAN 3:1 ARE TO BE STABILIZED WITH TEMPORARY SEEDING.
 - SLOPES GREATER THAN 3:1 ARE TO BE STABILIZED WITH EROSION CONTROL BLANKETS (TENSAR NORTH AMERICAN GREEN S3500 OR APPROVED EQUAL).
 - UTILIZE FILTER LOGS ON GRADED ROADWAYS AS NEEDED AS A TEMPORARY MEASURE TO REDUCE RUNOFF VELOCITY.
 - DIVERSION SWALES ARE TO BE A MINIMUM OF 1.5' DEEP WITH 3:1 SIDE SLOPES. UTILIZE FILTER SOCKS AT LEAST EVERY 75' WITHIN THE DIVERSION SWALES IN ADDITION TO THE EROSION CONTROL MATTING.
 - DISTURBANCE WITHIN THE RIPARIAN STREAM BUFFER SHALL BE LIMITED TO THE MINIMUM NECESSARY. NATIVE RIPARIAN VEGETATION MUST BE REESTABLISHED AFTER WORK IS COMPLETED.
 - STABILIZE DISTURBED AREAS WITHIN 14 DAYS OF COMPLETING ANY STAGE AND/OR PHASE OF ACTIVITY
 - MAINTENANCE EROSION AND SEDIMENT CONTROL DEVICES THROUGHOUT THE LIFE OF THE PROJECT.

DRAINAGE AREA/SEDIMENT TRAP DETAILS:

| DRAINAGE AREA | ACRES | OUTFALL # | SED TRAP # | WET STORAGE VOLUME (CF) | DRY STORAGE VOLUME (CF) | TOTAL DEPTH OF WET AND DRY STORAGE (FT.) | TOP OF EMBANKMENT ELEVATION | EMERGENCY SPILLWAY ELEVATION | BOTTOM WIDTH OF EMERGENCY SPILLWAY (FT.) |
|---------------|-------|-----------|------------|-------------------------|-------------------------|--|-----------------------------|------------------------------|--|
| DA1 | 3.85 | 1 | 1 | 6870 | 8245 | 4 | 920.5 | 919 | 20 |
| DA2 | 2.70 | 1 | - | - | - | - | - | - | - |
| DA3 | 2.85 | 1 | 2 | 5208 | 6472 | 4 | 910.5 | 909 | 15 |
| DA4 | 1.75 | 1 | 3 | 3220 | 4103 | 4 | 900.5 | 899 | 20 |
| DA5 | 4.06 | 2 | 4 | 7350 | 8655 | 4 | 900.5 | 899 | 15 |
| DA6 | 1.74 | 2 | - | - | - | - | - | - | - |
| DA7 | 0.95 | 2 | 5 | 1734 | 2391 | 4 | 890.5 | 889 | 10 |
| DA8 | 0.9 | 3 | - | - | - | - | - | - | - |



NOT FOR CONSTRUCTION

REVISION RECORD

| NO. | DATE | DESCRIPTION |
|-----|------|-------------|
| | | |
| | | |
| | | |

**KNOWLLES COMMUNITY DEVELOPMENT CORPORATION
AUSTIN HOMES
INFRASTRUCTURE PACKAGE
KNOXVILLE, KNOX COUNTY, TN**

Civil & Environmental Consultants, Inc.
2704 Cherokee Farm Way - Suite 101 - Knoxville, TN 37920
Ph: 865.977.9997 - Fax: 865.977.9919
www.cenric.com

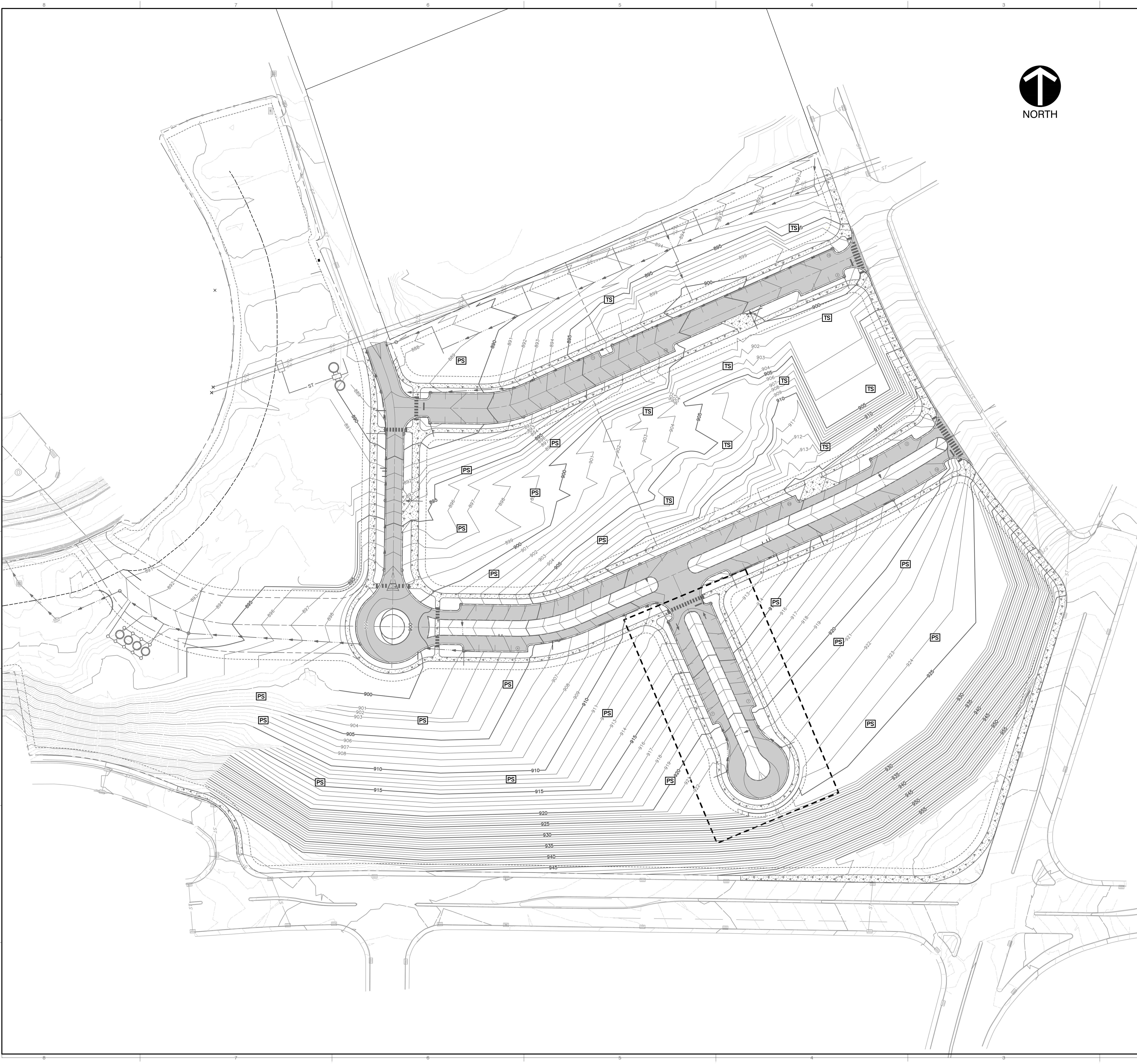
INTERIM EPSC PLAN

DATE: FEBRUARY 12, 2020 | DRAWN BY: CRJ/MWB/ASL | MWB | GHP
DWG SCALE: AS SHOWN | CHECKED BY: AS SHOWN | PROJECT NO: 194-594 | APPROVED BY: GHP

C901

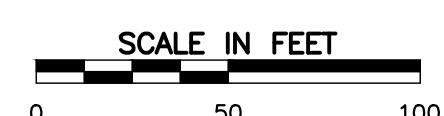


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- LEGEND:**
- - - - - LIMITS OF DISTURBANCE
 - EXISTING PROPERTY LINE/RIGHT-OF-WAY
 - CS --- EXISTING COMBINED SEWER LINE
 - ST --- EXISTING STORM SEWER LINE
 - UG-E --- EXISTING UNDERGROUND ELEC. LINE
 - OH-E --- EXISTING OVERHEAD ELECTRIC LINE
 - ST --- EXISTING STORM SEWER LINE
 - G --- EXISTING GAS LINE
 - W --- EXISTING WATER LINE
 - --- EXISTING POWER POLE
 - --- EXISTING LIGHT POLE
 - --- EXISTING STORM INLET
 - --- EXISTING WATER VALVE
 - --- EXISTING FIRE HYDRANT
 - --- EXISTING GAS VALVE
 - IP --- INLET PROTECTION
 - CE --- CONSTRUCTION EXIT
 - ▨ --- BUILDINGS TO BE REMOVED
 - FS --- FILTER SOCK
 - --- ROCK CHECK DAM
 - --- TEMPORARY DIVERSION DIKE
 - --- TREE PROTECTION FENCING
 - SF --- SILT FENCE

NOTE:
 1. INLET PROTECTION DEVICES SHOWN ON SHEET C901 SHALL BE MAINTAINED UNTIL SITE HAS BEEN FULLY STABILIZED.



NOT FOR CONSTRUCTION

| | |
|--|-------------------|
| REVISION RECORD | |
| NO. | DATE |
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| Civil & Environmental Consultants, Inc. 2704 Cherokee Farm Way - Suite 101 - Knoxville, TN 37920 Ph: 865.977.9997 - Fax: 865.977.9919 www.cenric.com | |
| KNOXVILLE COMMUNITY DEVELOPMENT CORPORATION AUSTIN HOMES INFRASTRUCTURE PACKAGE KNOXVILLE, KNOX COUNTY, TN | |
| DATE: | CRJ/MWB/ASL |
| DATE: | FEBRUARY 12, 2020 |
| DWG SCALE: | AS SHOWN |
| PROJECT NO.: | 194-594 |
| APPROVED BY: | GHP |
| FINAL EROSION AND SEDIMENTATION CONTROL PLAN | |
| C902 | |

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PERMANENT SEEDING MIXTURES

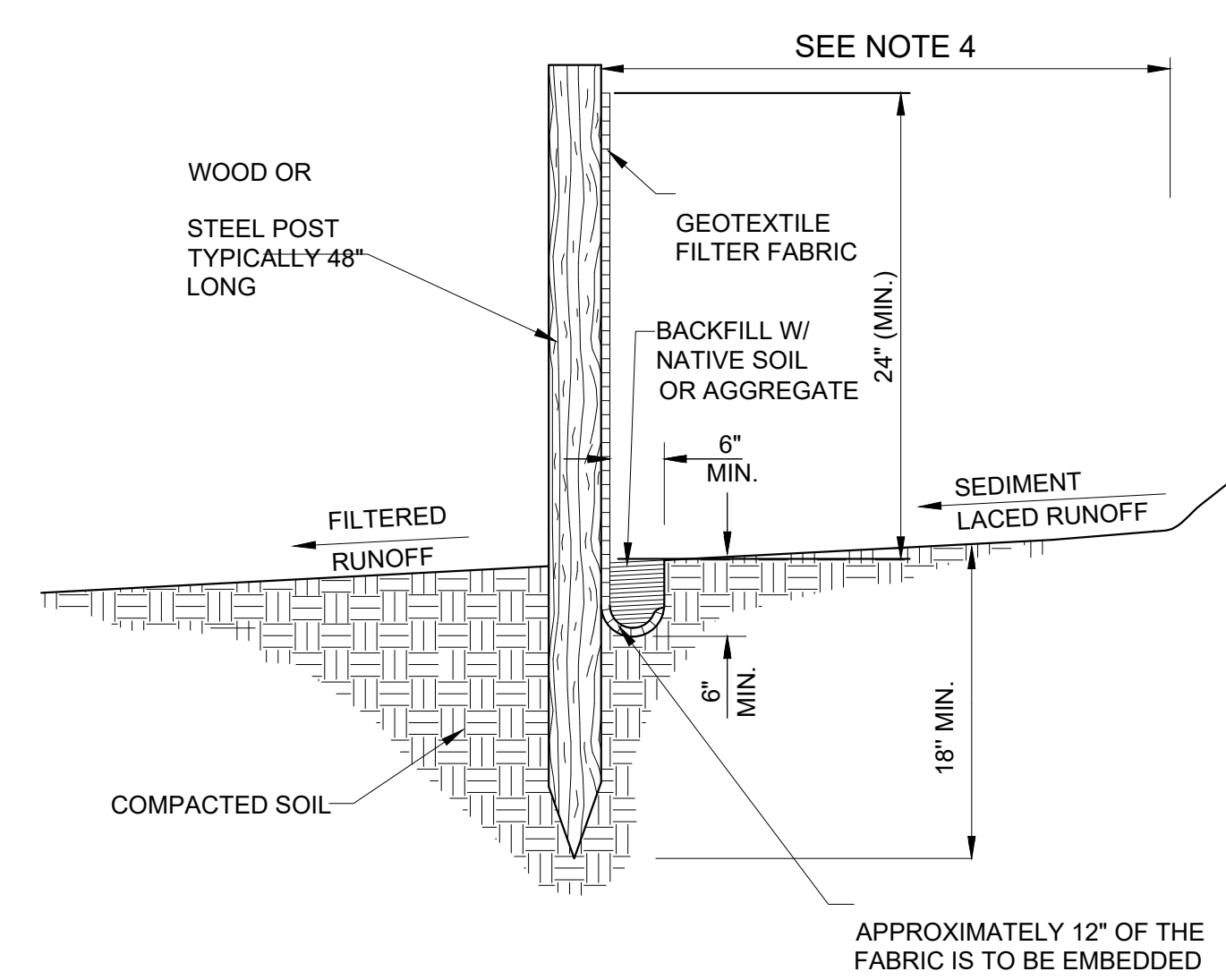
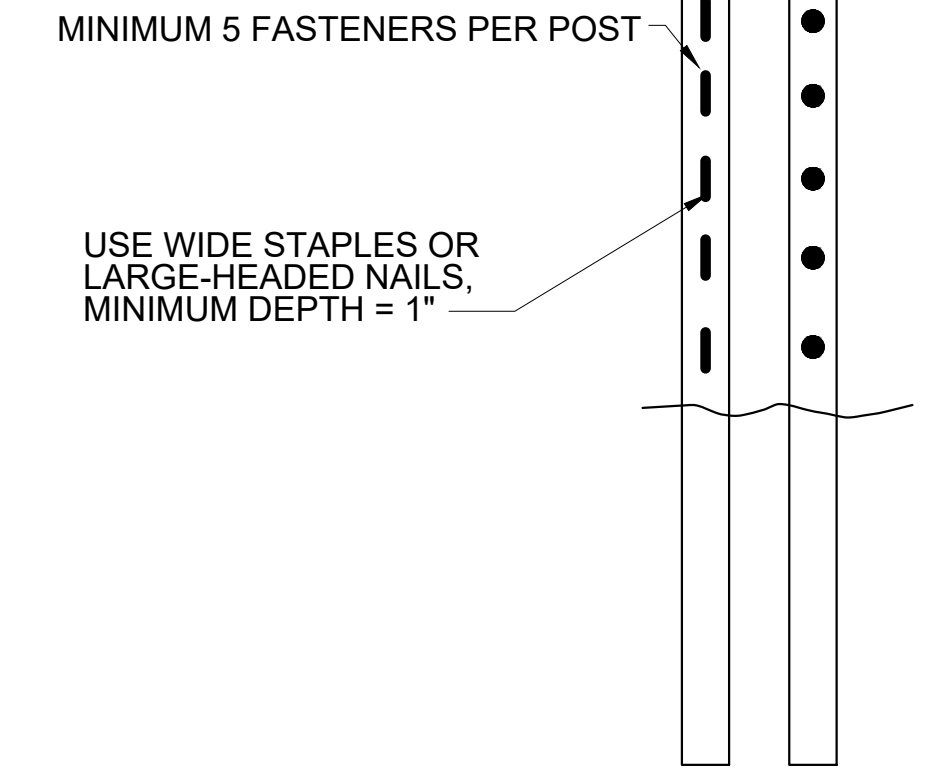
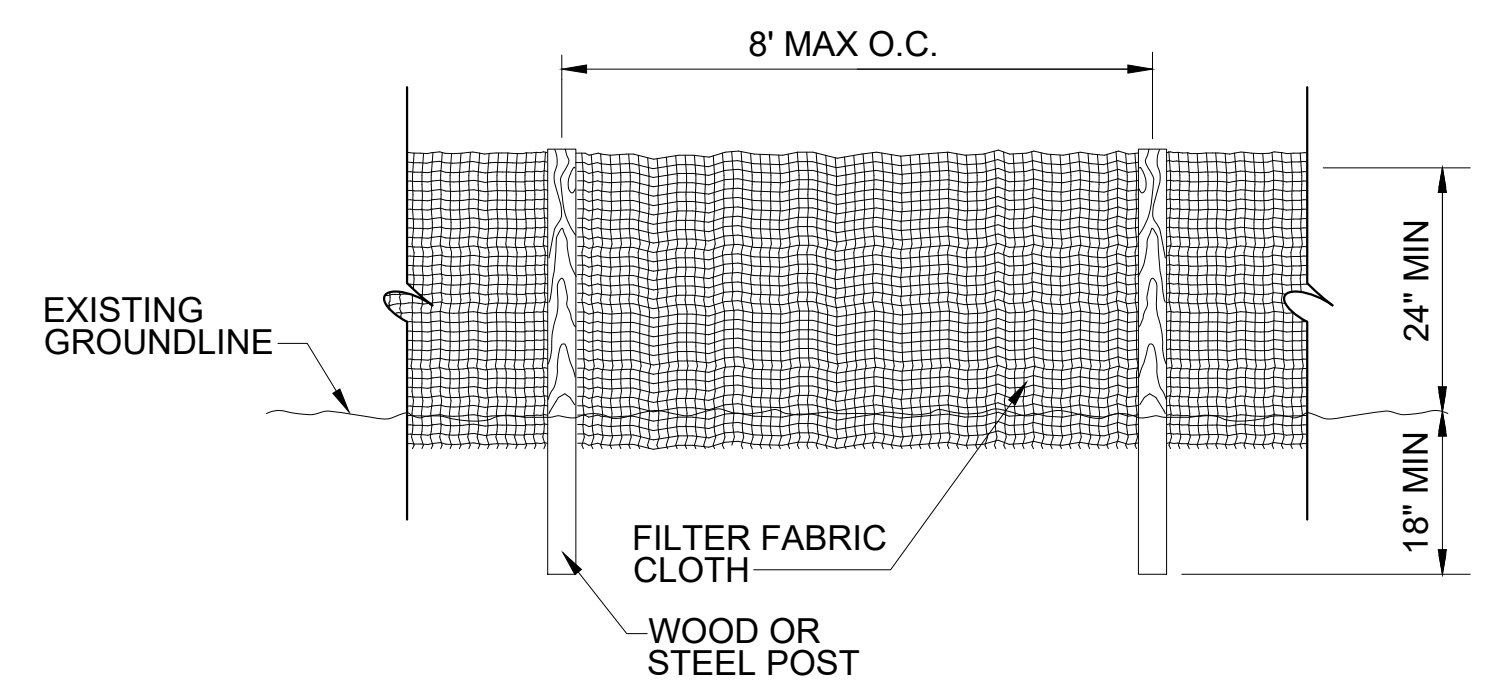
| SEEDING DATES | GRASS SEED | PERCENTAGES |
|--------------------------|--------------------|-------------|
| FEBRUARY 1 TO JULY 1 | KENTUCKY 31 FESCUE | 88% |
| | ENGLISH RYE | 12% |
| JUNE 1 TO AUGUST 15 | KENTUCKY 31 FESCUE | 60% |
| | ENGLISH RYE | 25% |
| | GERMAN MILLET | 15% |
| AUGUST 1 TO DECEMBER 1 | KENTUCKY 31 FESCUE | 70% |
| | ENGLISH RYE | 20% |
| | WHITE CLOVER | 10% |
| DECEMBER 1 TO FEBRUARY 1 | KENTUCKY 31 FESCUE | 83% |
| | ENGLISH RYE | 17% |

SOURCE TDOT STANDARDS SPECIFICATIONS

TEMPORARY SEEDING MIXTURES

| SEEDING DATES | GRASS SEED | PERCENTAGES |
|----------------------|---------------|-------------|
| JANUARY 1 TO MAY 1 | ITALIAN RYE | 50% |
| | SUMMER OATS | 50% |
| MAY 1 TO JULY 15 | SUDAN-SORGHUM | 100% |
| MAY 1 TO JULY 15 | STARR MILLET | 100% |
| JULY 15 TO JANUARY 1 | BALBOA RYE | 67% |
| | ITALIAN RYE | 33% |

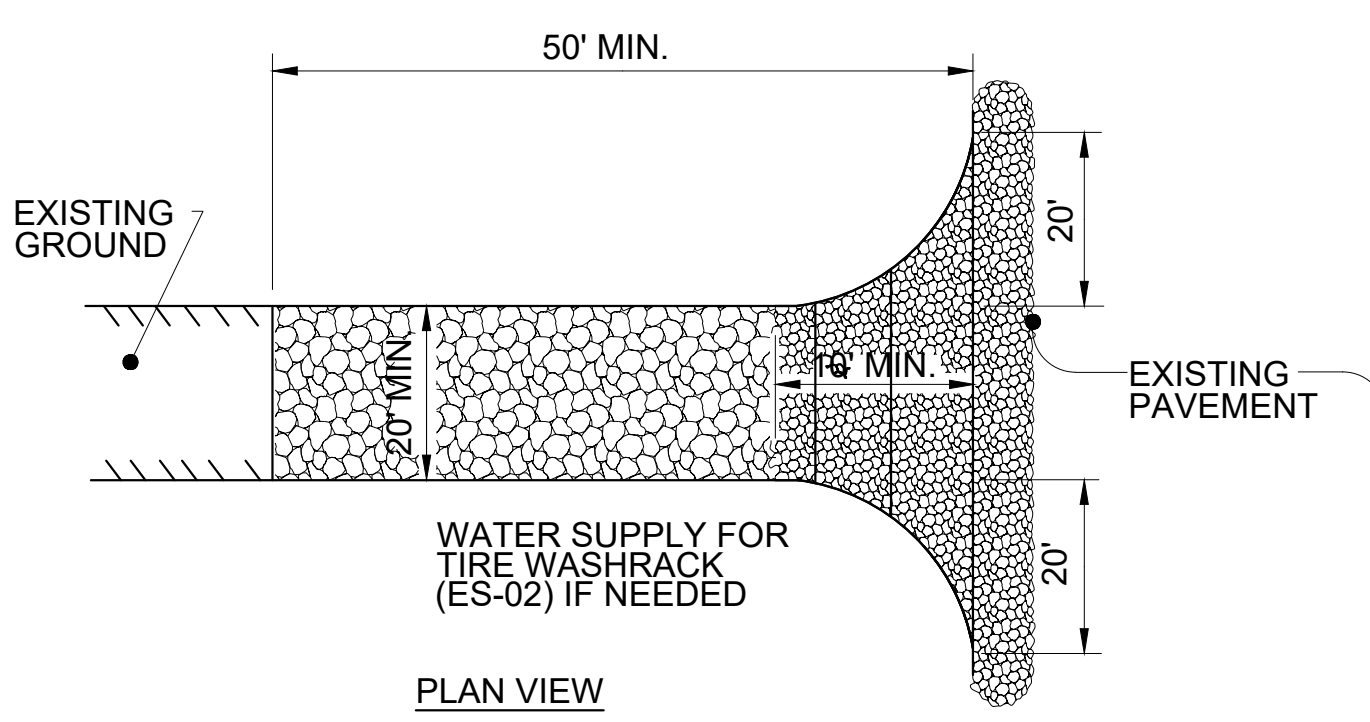
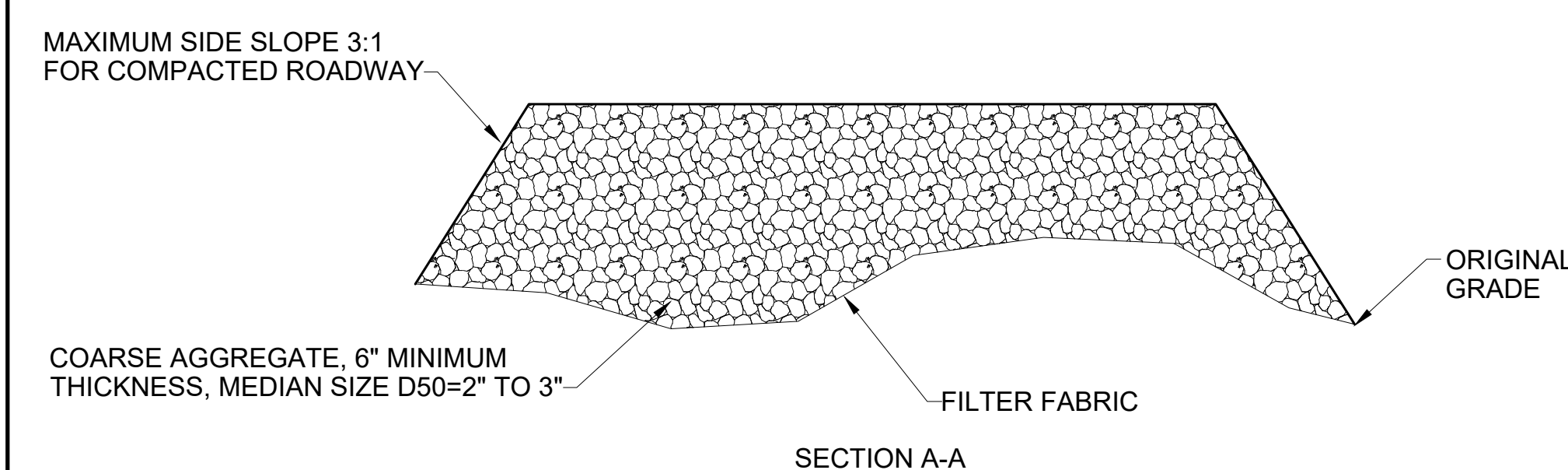
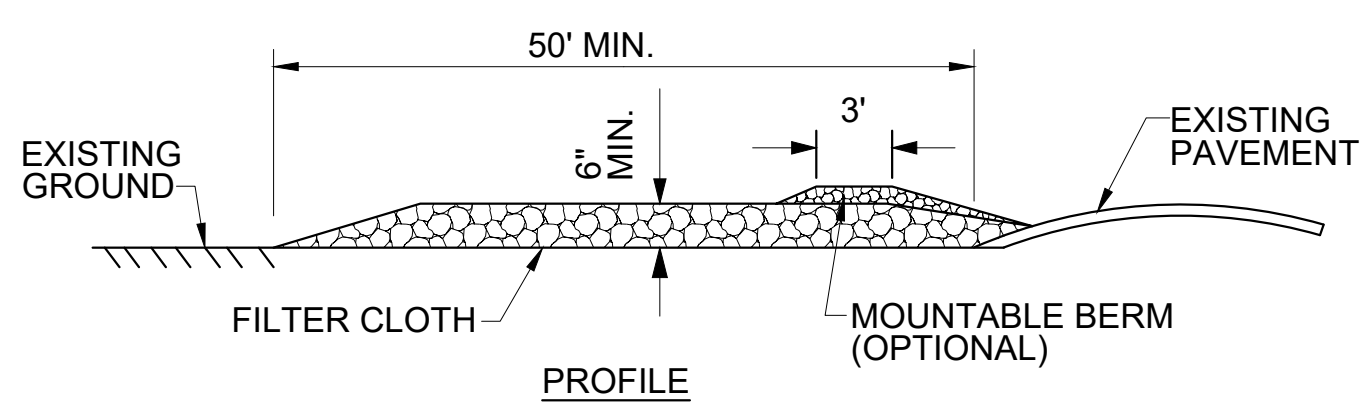
SOURCE TDOT STANDARDS SPECIFICATIONS



- NOTES:**
- FILTER CLOTH SHALL MEET THE REQUIREMENTS OF THE STANDARD SPECIFICATION FOR GEOTEXTILES AASHTO DESIGNATION: M288, SEDIMENT CONTROL, SELF SUPPORTED.
 - WOOD POSTS ARE TYPICALLY 2\"X2\" OAK AND OTHER HARD WOODS. A LARGER POST IS NECESSARY FOR SOFT WOODS (4\"X4\").
 - FASTENERS FOR WOOD POSTS SHOULD BE EITHER WIRE STAPLES OR NAILS. THERE SHALL BE A MINIMUM OF 5 FASTENERS FOR EACH WOOD POST. USE MINIMUM SIZE 17-GAUGE STAPLES WITH A MINIMUM EMBEDDED LENGTH OF 1 INCH INTO THE WOOD AND A MINIMUM WIDTH OF 3/4 INCH ACROSS. TYPICAL NAIL SIZE IS 1 INCH LONG WITH OVERSIZED NAIL HEAD. FABRIC SHALL NOT BE ATTACHED TO EXISTING TREES.
 - PLACE SILT FENCE AT LEAST 5 TO 7 FEET AWAY FROM STEEP OR LONG SLOPES TO IMPOUND STORMWATER RUNOFF.

SEEDING SCHEDULE
N.T.S.

TS



- CONSTRUCTION SPECIFICATIONS**
- THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50 FEET.
 - THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.
 - THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS OR 20 FEET, WHICH EVER IS GREATER.
 - GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE.
 - ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
 - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.

CONSTRUCTION EXIT DETAIL
N.T.S.

CE

STORM INLET INSERT DETAIL
N.T.S.

IP

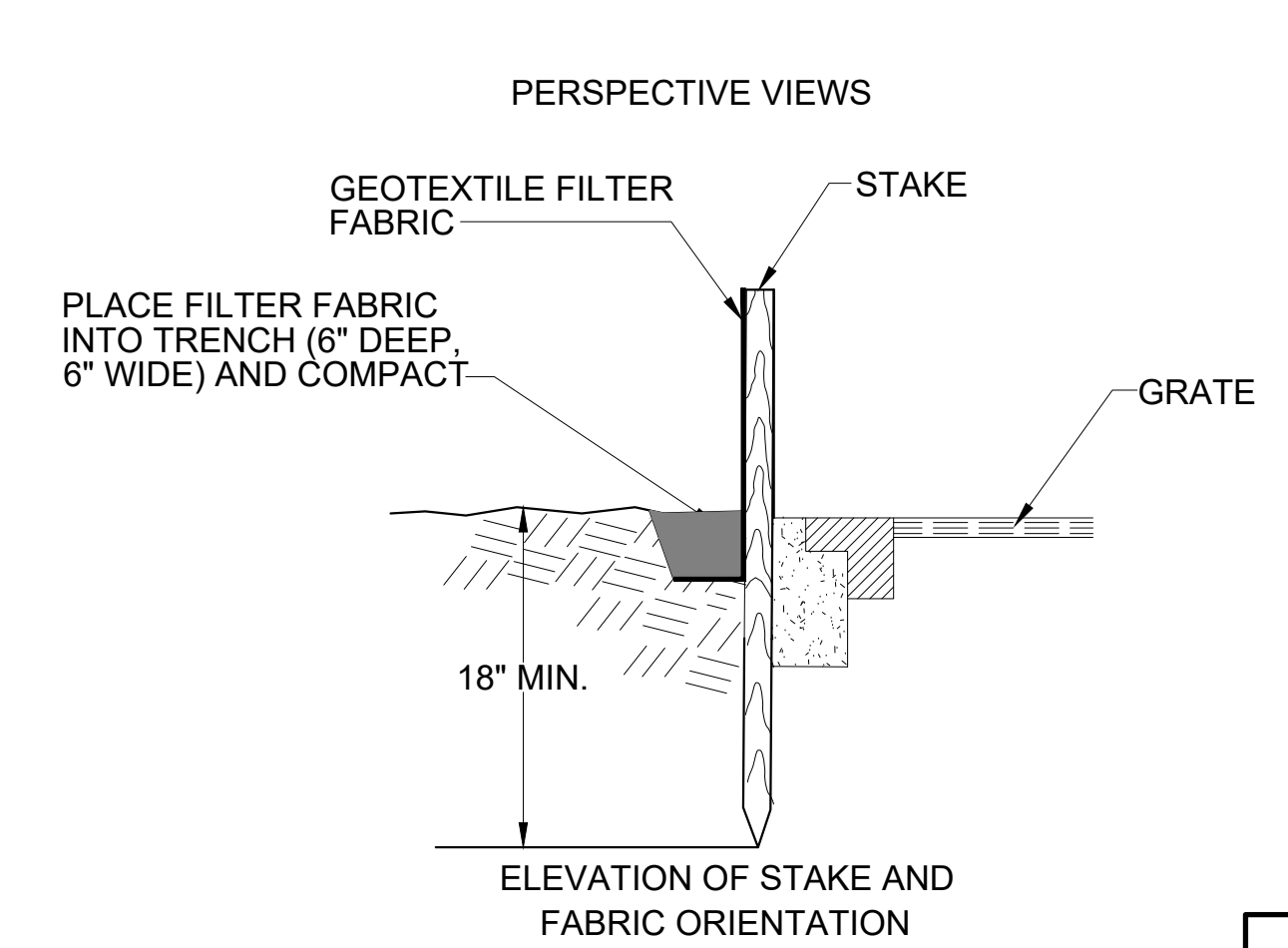
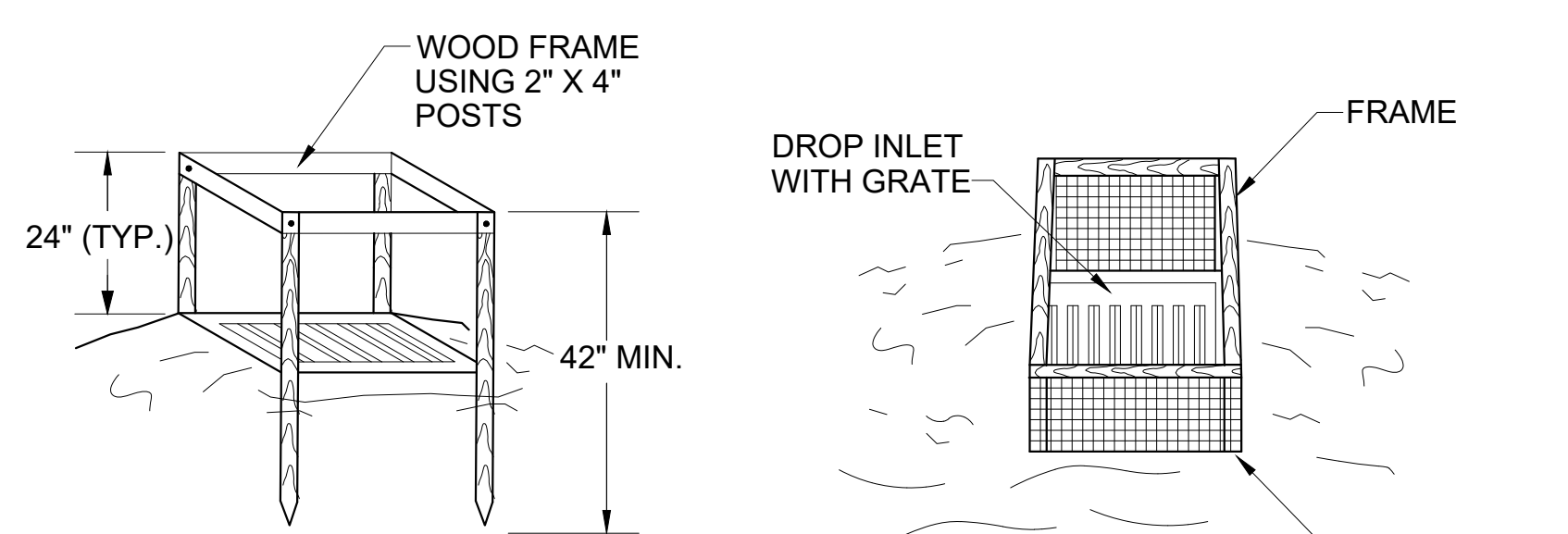
FLEXSTORM CATCH-IT FILTERS FOR TEMPORARY INLET PROTECTION
PRODUCT SELECTION AND SPECIFICATION DRAWING

| Product selection for FLEXSTORM CATCH-IT Filters (Temporary Inlet Protection) | | | | | | | |
|---|----------------|----------------|------------------|---------------------|---------------|-----------------------------|-------------|
| TDOT Standard | JR HOE Catalog | JBS Catalog # | Inlet Type | Grate Size | Opening Size | Bag Cap. (ft ³) | ADS P/N |
| TDOT std. #12, #10, #25, #41 | | 3123 | Curb Box (CB) | 36.25 x 21.75 | 32.0 x 17.75 | 3.4 | 62LCBFX |
| TDOT std. #18 | | 3061 | Square/Rect (SQ) | 24.875 x 26.25 (x2) | 48 x 24 | 6.2 | 62XLSQFX |
| | HOE 518 | 4254 | Square/Rect (SQ) | 24 x 36 | 22 x 34 | 3.5 | 62LSQ2436FX |
| | HOE 525 | 3080 | Curb Box (CB) | 35.5 x 17.5 | 33.0 x 16.0 | 3.8 | 62LCBEXFX |
| Nashville, TN std. CB | | 3300 | Curb Box (CB) | 31.375 x 21.375 | 29.5 x 19.0 | 3.3 | 62LCBFX |
| | HOE 280 | 4075 | Square/Rect (SQ) | 24 x 24 | 22 x 22 | 2.2 | 62MS22QFX |
| Memphis TN std. #10 | HOE 320 | 4190 | Square/Rect (SQ) | 25.75 x 25.75 | 23.75 x 23.75 | 3.1 | 62MSQFX |
| | | 4220/4330 | Square/Rect (SQ) | 27.75 x 27.75 | 26 x 26 | 5.0 | 62LSQFX |
| Metro Nashville std. | HOE 568 | 4300/4310/4315 | Square/Rect (SQ) | 31.5 x 31.5 | 30.0 x 30.0 | 5.4 | 62XLSQFX |
| TDOT std. #42 | HOE 595 | 4200/4260 | Square/Rect (SQ) | 35.5 x 35.5 | 33.25 x 33.25 | 6.1 | 62XLSQFX |

INSTALLATION:

- REMOVE GRATE
- DROP FLEXSTORM INLET FILTER INTO LOAD BEARING LIP OF CASTING OR CONCRETE STRUCTURE
- REPLACE GRATE

ALL PRODUCTS MANUFACTURED BY INLET & PIPE PROTECTION, INC A DIVISION OF ADS, INC. WWW.INLETFILTERS.COM (636) 287-8655 PH (630) 355-3477 FX INFO@INLETFILTERS.COM



SILT FENCE DROP INLET DETAIL
N.T.S.

IP

- EROSION AND SEDIMENT CONTROL NOTES:**
- A SPECIFIC INDIVIDUAL SHALL BE DESIGNATED TO BE RESPONSIBLE FOR EROSION AND SEDIMENT CONTROLS ON PROJECT SITE. THIS INDIVIDUAL MUST HAVE COMPLETED THE "FUNDAMENTALS OF EROSION PREVENTION AND SEDIMENT CONTROL" COURSE OR AN EQUIVALENT COURSE.
 - REFER TO THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK FOR DESIGN CRITERIA AND GUIDELINES FOR EROSION CONTROL MEASURES.
 - CLEARING AND GRUBBING MUST BE HELD TO THE MINIMUM NECESSARY FOR GRADING AND EQUIPMENT OPERATION.
 - CONSTRUCTION MUST BE SEQUENCED TO MINIMIZE THE EXPOSURE TIME OF CLEARED SURFACE AREA.
 - CONSTRUCTION STAGING AND PHASING IS CRITICAL TO REDUCING SEDIMENT RUNOFF FROM SITE.
 - EROSION CONTROL MEASURES MUST BE IN PLACE AND FUNCTIONAL BEFORE EARTH MOVING OPERATIONS BEGIN, AND MUST BE PROPERLY CONSTRUCTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
 - ALL EROSION CONTROL MEASURES SHALL BE CHECKED TWICE WEEKLY AND AFTER EACH RAINFALL. CHECK DAILY DURING PROLONGED RAINFALL.
 - CONSTRUCTION DEBRIS MUST BE KEPT FROM ENTERING THE STORM MANAGEMENT SYSTEM.
 - STOCKPILED SOIL SHALL BE PROTECTED AND LOCATED FAR ENOUGH FROM STREAMS AND DRAINAGEWAYS SO THAT RUNOFF CANNOT CARRY SEDIMENT DOWNSTREAM.
 - VEGETATIVE GROUND COVER SHALL NOT BE DESTROYED, REMOVED OR DISTURBED MORE THAN 10 CALENDAR DAYS PRIOR TO GRADING.
 - TEMPORARY SOIL STABILIZATION WITH APPROPRIATE ANNUAL VEGETATION IS REQUIRED WHEN GRADING OPERATIONS ARE TEMPORARILY HALTED FOR OVER 14 DAYS AND ON SOIL STOCKPILES.
 - PERMANENT SOIL STABILIZATION WITH PERENNIAL VEGETATION IS REQUIRED WHEN GRADING OPERATIONS ARE COMPLETE AND/OR CONSTRUCTION OPERATIONS WILL NOT IMPACT THE DISTURBED AREA. CONTRACTOR SHALL INSPECT THE SITE PERIODICALLY TO REPAIR AND RE-ESTABLISH VEGETATION TO DAMAGED AREAS.
 - STAKED AND ENTRENCHED SILT FENCE MUST BE INSTALLED ALONG THE BASE OF ALL FILLS AND CUTS, ON THE DOWNHILL SIDES OF STOCKPILED SOIL, AND ALONG STREAM BANKS IN CLEARED AREAS TO PREVENT EROSION INTO STREAMS. SILT FENCE MAY BE REMOVED AT THE BEGINNING OF THE WORK DAY, BUT MUST BE REPLACED AT THE END OF THE WORK DAY OR PRIOR TO FORECASTING RAIN EVENTS.
 - WHERE APPROPRIATE, SURFACE WATER FLOWING TOWARD CONSTRUCTION AREA SHALL BE DIVERTED AROUND THE CONSTRUCTION AREA USING DIKES, TO REDUCE EROSION POTENTIAL.
 - ALL ROCK SHALL BE CLEAN, HARD ROCK CONTAINING NO SAND, DUST, OR ORGANIC MATERIAL.
 - CONTRACTOR SHALL MAINTAIN SILT FENCES AND OTHER EROSION CONTROL DEVICES FOR THE DURATION OF THE PROJECT, TO ENSURE EFFECTIVENESS, UNTIL ACCEPTED

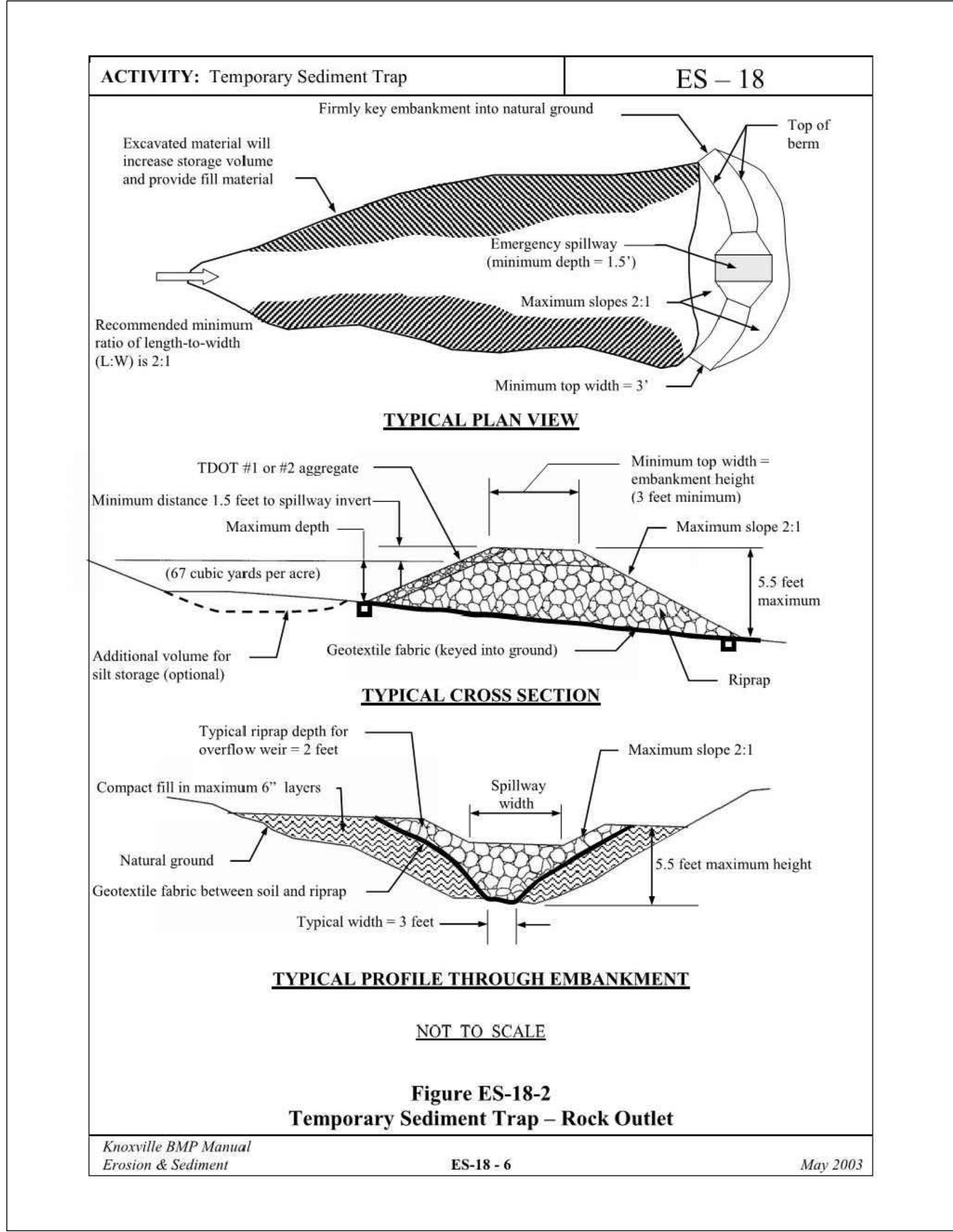
- CONSTRUCTION EXIT - CONTRACTOR SHALL INSTALL TEMPORARY CONSTRUCTION EXIT PRIOR TO ANY EARTHWORK OPERATIONS. CONSTRUCTION EXIT SHALL BE LOCATED AS SHOWN. CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD TO PUBLIC RIGHTS-OF-WAYS. ALL MATERIAL SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES OR SITE ONTO ADJACENT ROADWAYS SHALL BE REMOVED IMMEDIATELY FROM THE ROADWAY.
- CONTRACTOR IS RESPONSIBLE FOR CLEANING OUT AND PROPER DISPOSAL OF ALL DEBRIS WITHIN THE STORM DRAINAGE STRUCTURES, INCLUDING SILT FROM FLUMES, PIPES, ECT., PRIOR TO COMPLETION OF THE PROJECT.
- MEASURES SHOWN FOR SEDIMENT AND EROSION CONTROL REPRESENT THE MINIMUM ANTICIPATED. ADDITIONAL PROTECTION SHALL BE PROVIDED AS NECESSARY THAT WILL PREVENT SEDIMENT FROM LEAVING THE SITE DUE TO UNFORESEEN CONDITIONS OR ACCIDENTS.
- THE GRADING CONTRACTOR AND BUILDING CONTRACTOR WILL REFRAIN FROM DOING ANY WORK OUTSIDE OF THE DELINEATED LIMITS OF DISTURBANCE.
- ROADS SHALL BE STABILIZED BY APPLYING STONE ONCE SUBGRADE ELEVATION IS ACHIEVED.
- ALL SILT FENCE IS TO BE TYPE A EXCEPT WHERE SPECIFIED DIFFERENTLY.
- EROSION CONTROL MATTING TO BE JUTE MESH (OR APPROVED EQUAL) AND INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

KNOXVILLES COMMUNITY DEVELOPMENT CORPORATION
AUSTIN HOMES
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KNOXVILLE, KNOX COUNTY, TN

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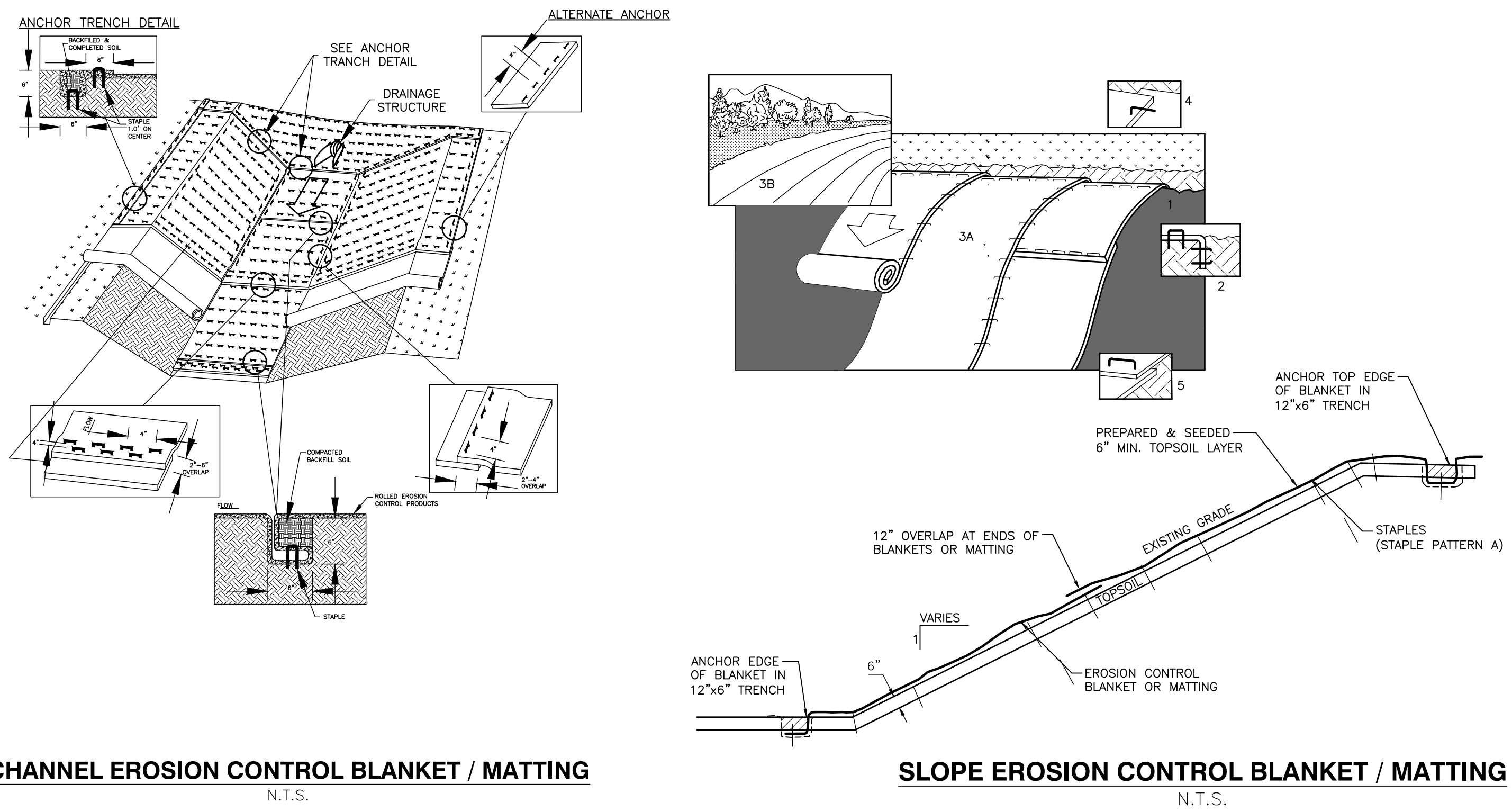
EPSC DETAILS
DATE: FEBRUARY 12, 2020
DRAWN BY: CRJ/MWB/ASL
DWG SCALE: MWB
PROJECT NO.: AS SHOWN
CHECKED BY: MWB
194-594
APPROVED BY: GHP

NOT FOR CONSTRUCTION
DRAWING NO.: **C903**

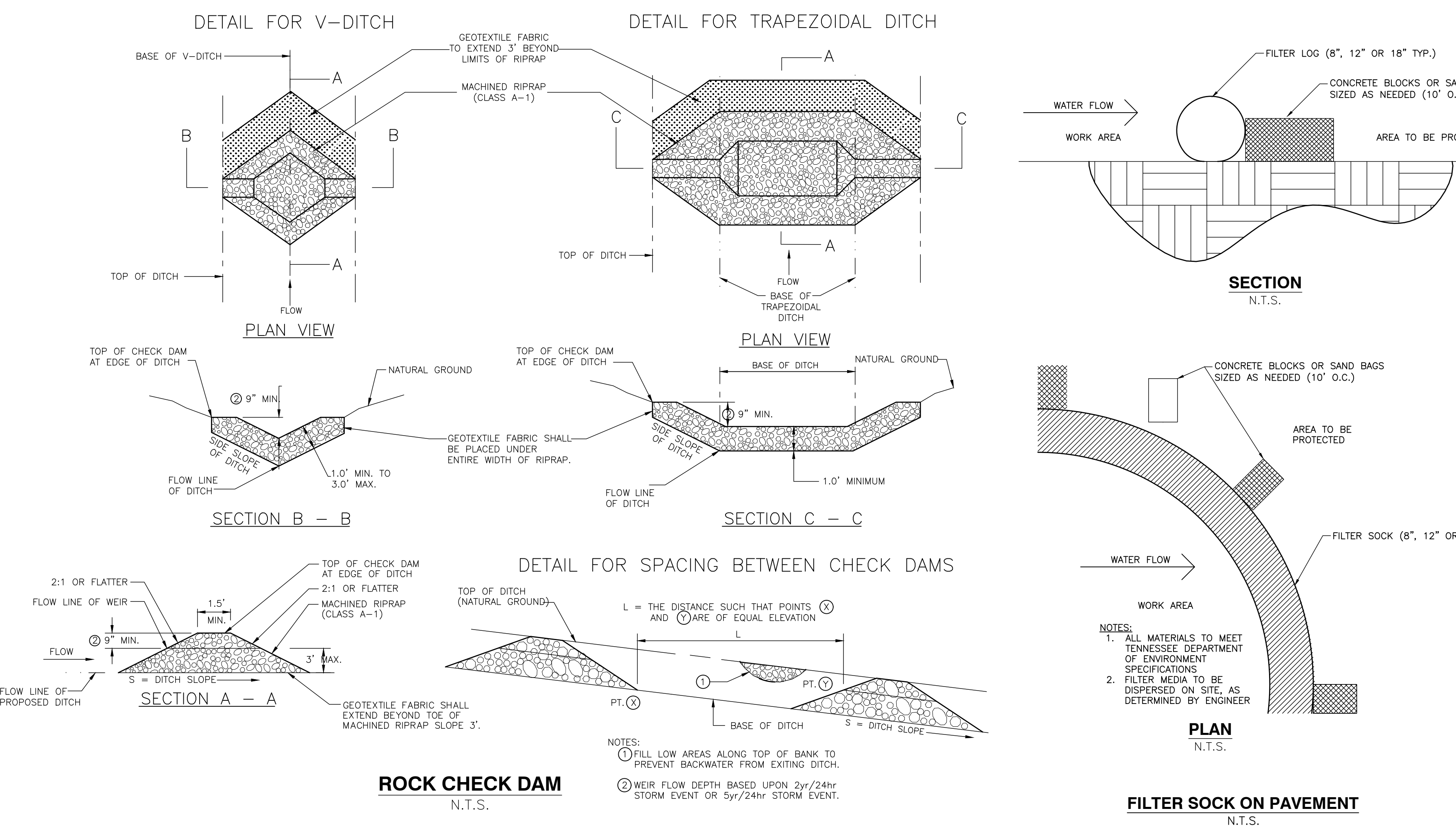
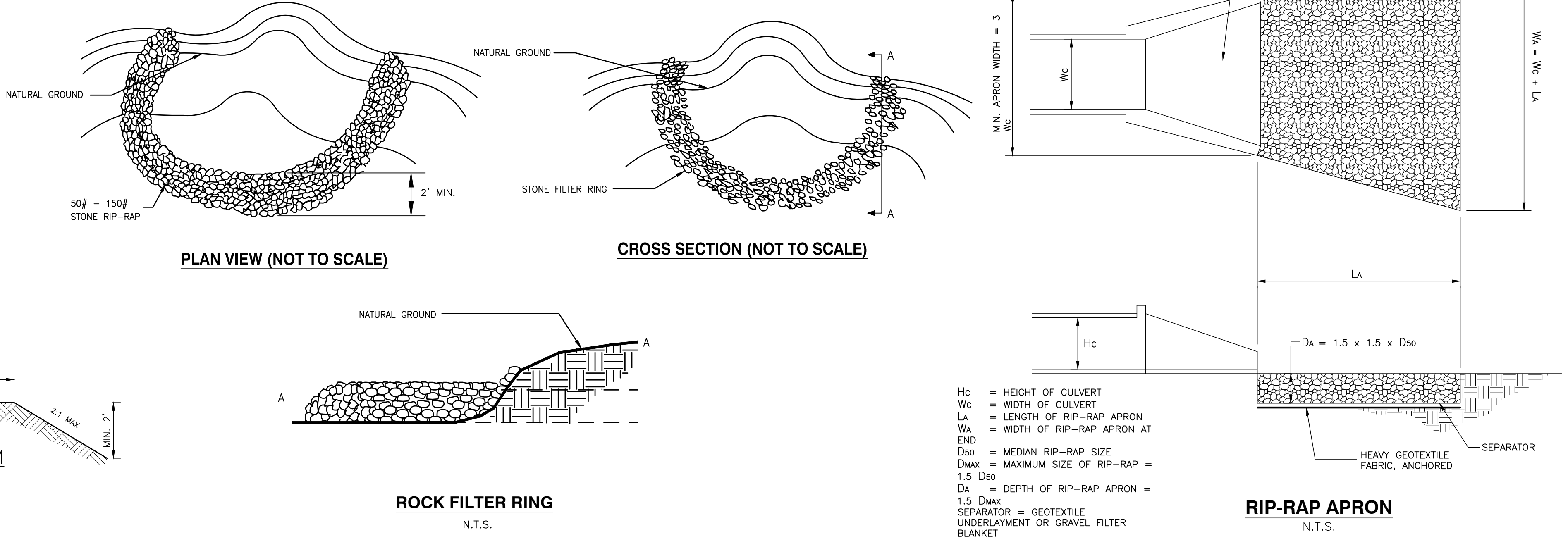
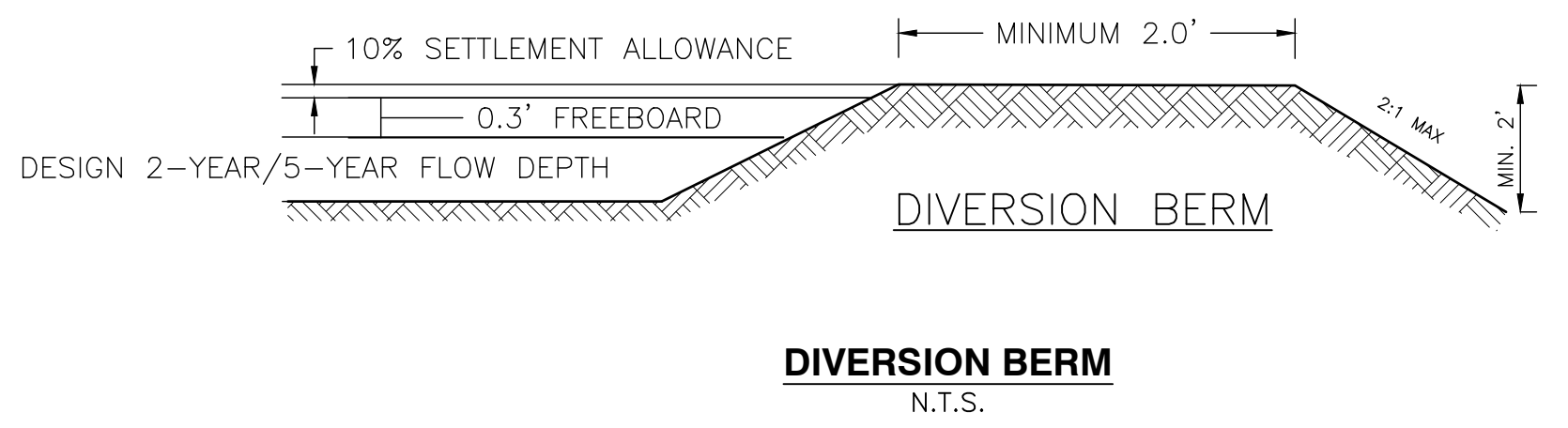


- SEDIMENT TRAP CONSTRUCTION SPECIFICATIONS**
- CLEAR, GRUB, AND STRIP THE AREA UNDER THE EMBANKMENT OF ALL VEGETATION AND ROOT MAT. REMOVE ALL SURFACE SOIL CONTAINING HIGH AMOUNTS OF ORGANIC MATTER, AND STOCKPILE IT OR DISPOSE OF IT PROPERLY. HAUL ALL OBJECTIONABLE MATERIAL TO THE DESIGNATED DISPOSAL AREA.
 - ENSURE THAT FILL MATERIAL FOR THE EMBANKMENT IS FREE OF ROOTS, WOODY VEGETATION, ORGANIC MATTER, AND OTHER OBJECTIONABLE MATERIAL. PLACE THE FILL IN LIFTS NOT TO EXCEED 9 INCHES, AND MACHINE COMPACT IT. OVERFILL THE EMBANKMENT 6 INCHES TO ALLOW FOR SETTLEMENT.
 - CONSTRUCT THE OUTLET SECTION IN THE EMBANKMENT. PROTECT THE CONNECTION BETWEEN THE RIPRAP AND THE SOIL FROM PILING UP USING GEOTEXTILE FABRIC BETWEEN THE RIP RAP AND SOIL. PLACE THE FILTER FABRIC BETWEEN THE SOIL AND RIP RAP. EXTEND THE FABRIC ACROSS THE SPILLWAY FOUNDATION AND SIDES TO THE TOP OF THE DAM.
 - CLEAR THE SEDIMENT TRAP STORAGE ZONE AREA BELOW THE ELEVATION OF THE CREST OF THE SPILLWAY TO FACILITATE CLEANOUT.
 - ALL CUT AND FILL SLOPES MUST BE 2:1 OR FLATTER.
 - ENSURE THAT THE STONE SECTION OF THE EMBANKMENT HAS A MINIMUM BOTTOM WIDTH OF 3 FEET AND MAXIMUM SIDE SLOPES OF 1:1 THAT EXTEND TO THE BOTTOM OF THE SPILLWAY SECTION.
 - CONSTRUCT THE MINIMUM FINISHED STONE SPILLWAY BOTTOM WIDTH, AS SHOWN ON THE PLANS, WITH 2:1 SIDE SLOPES EXTENDING TO THE TOP OF THE OVER FILLED EMBANKMENT. THE WEIR MUST BE LEVEL AND CONSTRUCTED TO THE WIDTH NOTED ON THE PLANS.
 - MATERIAL USED IN THE STONE SECTION SHOULD BE A WELL GRADED MIXTURE OF STONE WITH A D50 SIZE OF 9 INCHES (CLASS A-1). THE STONE CAN BE MACHINE PLACED AND THE SMALLER STONES WORKED INTO THE VOIDS OF THE LARGER STONES.
 - RUNOFF SHOULD BE DISCHARGED INTO THE TRAP IN A MANNER TO PREVENT EROSION. USE TEMPORARY SLOPE DRAINS OR DIVERSIONS WITH OUTLET PROTECTION TO DIVERT RUNOFF TO THE UPPER END OF THE STORAGE AREA TO IMPROVE TRAP EFFICIENCY. AVOID DISCHARGING RUNOFF OVER UNPROTECTED STEEP SIDE SLOPES.
 - ENSURE THAT THE STONE SPILLWAY OUTLET SECTION EXTENDS DOWNSTREAM PAST THE TOE OF THE EMBANKMENT UNTIL STABLE CONDITIONS ARE REACHED AND OUTLET VELOCITY IS ACCEPTABLE FOR THE RECEIVING SYSTEM. KEEP THE EDGES OF THE STONE SECTION FLUSH WITH THE SURROUNDING GROUND.
 - STABILIZE THE EMBANKMENT AND ALL DISTURBED AREAS ABOVE THE SEDIMENT POOL AND DOWNSTREAM FROM THE TRAP IMMEDIATELY AFTER CONSTRUCTION.
 - INSTALL AT LEAST TWO POROUS BAFFLES AS SPECIFIED IN SECTION 7.3.3.

- SEDIMENT TRAP MAINTENANCE AND INSPECTION POINTS**
- SEDIMENT TRAPS MUST BE MAINTAINED AND FUNCTION AS DESIGNED UNTIL ALL AREAS DRAINING TO THE TRAP HAVE BEEN STABILIZED. THE STRUCTURE SHOULD BE CHECKED REGULARLY TO INSURE THAT IT IS STRUCTURALLY SOUND AND HAS NOT BEEN DAMAGED BY EROSION OR CONSTRUCTION EQUIPMENT. THE HEIGHT OF THE STONE OUTLET SHOULD BE CHECKED TO ENSURE THAT ITS CENTER IS AT LEAST 1 FOOT BELOW THE TOP OF THE EMBANKMENT.
 - ANY RIP RAP DISPLACED FROM THE SPILLWAY MUST BE REPLACED IMMEDIATELY.
 - FILTER STONE SHOULD BE CHECKED TO ENSURE THAT FILTRATION PERFORMANCE IS MAINTAINED. REPLACE STONE CAKED WITH SEDIMENT.
 - SEDIMENT SHALL BE REMOVED WHEN IT HAS ACCUMULATED TO ONE HALF THE DESIGN VOLUME OF THE NET STORAGE. SEDIMENT REMOVED FROM THE TRAP SHOULD BE DEPOSITED IN AN AREA UP GRADIENT FROM THE SEDIMENT TRAP AND OTHER MEASURES AND STABILIZED OR REMOVED FROM THE SITE. DO NOT PLACE REMOVED SEDIMENT BELOW SEDIMENT CONTROLS.
 - ONCE THE AREAS DRAINING TO THE SEDIMENT TRAP HAVE BEEN STABILIZED, REMOVE THE STONE AND RIP RAP SPILLWAY AND BACKFILL THE SEDIMENT STORAGE AREA. STABILIZE THE AREA.



- NOTES:**
- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED.
 - GRADE THE SURFACE BEFORE INSTALLATION SO THE GROUND IS SMOOTH AND SOIL LOOSE. ALL GULLIES, RILLS, AND OTHER DISTURBED AREAS MUST BE FINE GRADED PRIOR TO INSTALLATION.
 - SPREAD SEED BEFORE BLANKET INSTALLATION.
 - REMOVE ALL LARGE ROCKS, DIRT CLODS, STUMPS, ROOTS, GRASS CLUMPS, TRASH, AND OTHER OBSTRUCTIONS FROM THE SOIL SURFACE TO ALLOW DIRECT CONTACT BETWEEN THE SOIL AND BLANKET.
 - PLACE BLANKET 2-3 FEET OVER THE TOP OF THE SLOPE AND INTO AN EXCAVATED END TRENCH 12" DEEP* WIDE BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
 - ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE.
 - OVERLAP ADJACENT ROLLS A MINIMUM OF 3 INCHES.
 - PIN THE BLANKET TO THE GROUND USING STAPLES OR PINS IN A 3' CENTER-TO-CENTER PATTERN, OR AS RECOMMENDED BY THE MANUFACTURER.
 - WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, WITH APPROXIMATELY 12" OVERLAP, STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART.
 - EROSION CONTROL BLANKETS SHALL BE INSTALLED ON ALL 5:1 SLOPES WITH A MINIMUM OF 6 INCHES OF TOPSOIL.
 - FOR ALL SLOPES 3:1 OR STEEPER, TEMPORARY EROSION CONTROL BLANKET (TENSAR NORTH AMERICAN GREEN S150 OR APPROVED EQUAL) INSTALLED PER MANUFACTURER'S RECOMMENDATIONS SHALL BE USED IN PLACE OF STRAW MULCH.
 - FOR PERMANENT STABILIZATION OF DRAINAGE DITCHES, INSTALL TURF REINFORCEMENT MATTING (TENSAR NORTH AMERICAN GREEN S250 OR APPROVED EQUAL) INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
 - REFER TO MANUFACTURER'S INSTRUCTIONS FOR SPECIFIC INSTALLATION PROCEDURES.



6" CONCRETE COMBINED CURB AND GUTTER

LOWERED CONCRETE CURB

6" DETACHED CONCRETE CURB

| TYPE | TOTAL WIDTH (W) IN INCHES | WIDTH OF GUTTER (WG) IN INCHES | VERTICAL DEPTH (D) IN INCHES | VERTICAL DEPTH (D) OF GUTTER AT FLOW LINE |
|------|---------------------------|--------------------------------|------------------------------|---|
| 6-30 | 36 | 25 1/2 | 2 | AS NOTED ON TYPICAL X-SECTIONS |
| 6-36 | 36 | 25 1/2 | 2 1/2 | D: 1.5" |
| 6-42 | 42 | 35 1/2 | 3 | D: 2.5" |

LOWERED CONCRETE CURB NOTES:

- TO BE BUILT AS COMBINED CURB AND GUTTER, DETACHED CURB OR RETAINING CURB AS NOTED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- FOR DETACHED CURB, CURB RADIUS AT FLOW LINE.
- TO BE USED FOR PROPOSED RAMP OPENINGS.

| HEIGHT OF CURB | DEPTH (D) OF GUTTER (WG) IN INCHES | TOTAL WIDTH (W) IN INCHES | CUBIC YARDS PER LINEAR FOOT | DEPTH (D) OF GUTTER (WG) IN INCHES | TOTAL WIDTH (W) IN INCHES | CUBIC YARDS PER LINEAR FOOT | DEPTH (D) OF GUTTER (WG) IN INCHES | TOTAL WIDTH (W) IN INCHES | CUBIC YARDS PER LINEAR FOOT |
|----------------|------------------------------------|---------------------------|-----------------------------|------------------------------------|---------------------------|-----------------------------|------------------------------------|---------------------------|-----------------------------|
| LOWERED CURB | 6 | 36 | 0.09711 | 9 | 36 | 0.09640 | 10 | 36 | 0.09724 |
| 6" | 6 | 36 | 0.09786 | 9 | 36 | 0.09811 | 10 | 36 | 0.09834 |
| | 6 | 42 | 0.09841 | 9 | 42 | 0.09841 | 11 | 42 | 0.11791 |
| | 6 | 36 | 0.09849 | 9 | 36 | 0.09793 | 11 | 36 | 0.09793 |
| | 6 | 36 | 0.09790 | 9 | 36 | 0.09706 | 10 | 36 | 0.09632 |
| | 6 | 42 | 0.10029 | 9 | 42 | 0.10029 | 10 | 42 | 0.11489 |

QUANTITIES FOR COMBINED CURB AND GUTTER

GENERAL NOTES:

- FOR SPECIFICATIONS SEE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION SECTION 02060 CONCRETE CURB, GUTTER AND COMBINED CURB AND GUTTER.
- THE FRONT FACE OF THE CONCRETE CURBS FOR ALL SIZES OF CURBS SHALL CONFORM TO THE CONTOUR OF THE CURB AND NO ROUND CORNERS WILL BE PERMITTED.
- CONCRETE EXPANSION JOINT MATERIAL IS TO BE 3/4" PRE-ANNEALED FIBER IN ACCORDANCE WITH SECTION 02060 JOINT MATERIALS OF THE STANDARD SPECIFICATIONS.
- EXPANSION JOINTS ARE TO BE PLACED AS FOLLOWS:
 - AT TANGENT POINTS OF CURVED CURBS.
 - BETWEEN CURBS AND ADJUTING ROAD OBJECTS.
 - AT OTHER PLACES WHERE SPACINGS MAY DEVELOP.
- TO LINE UP WITH ADJUTING JOINTS WHERE THE ADJUTING IS CONCRETE.
- THE MAXIMUM SPACING IS TO BE 10 FEET.
- CONSTRUCTION JOINTS ARE TO BE SPACED AT 15 FEET. THE SPACING OF 15 FEET MAY BE REDUCED FOR CLOSURES, BUT NOT LESS THAN 10 FEET.

LEGEND:

- D - VERTICAL DEPTH OF GUTTER
- V - VERTICAL DEPTH OF GUTTER FROM FRONT EDGE TO FACE OF CURB
- W - VERTICAL DEPTH OF GUTTER AT FLOW LINE
- W - TOTAL WIDTH OF COMBINED CURB AND GUTTER
- WG - WIDTH OF GUTTER

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

VERTICAL CONCRETE CURBS AND GUTTERS

10-16-18 RFP-VG-10

REVISION RECORD

| NO. | DATE | DESCRIPTION |
|-----|------|-------------|
| | | |

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KNOXVILLE COMMUNITY DEVELOPMENT CORPORATION
AUSTIN HOMES INFRASTRUCTURE PACKAGE
KNOXVILLE, KNOX COUNTY, TN

EPSC DETAILS

FEBRUARY 12, 2020 DRAWN BY: CRJ/MWB/ASL
 DWG SCALE: AS SHOWN CHECKED BY: MWB
 PROJECT NO: 194-594
 APPROVED BY: GHP

NOT FOR CONSTRUCTION

C904