

CID-23-05 / Construction Infrastructure Drawing
/ Frazier Farm Driveways/Streets A&B

APPROVED

Date: September 16, 2024



Town of Rolesville Planning Department

FRAZIER FARM PARK

11624 LOUISBURG ROAD
ROLESVILLE, NORTH CAROLINA, 27282

CONSTRUCTION DRAWINGS PHASE 1A

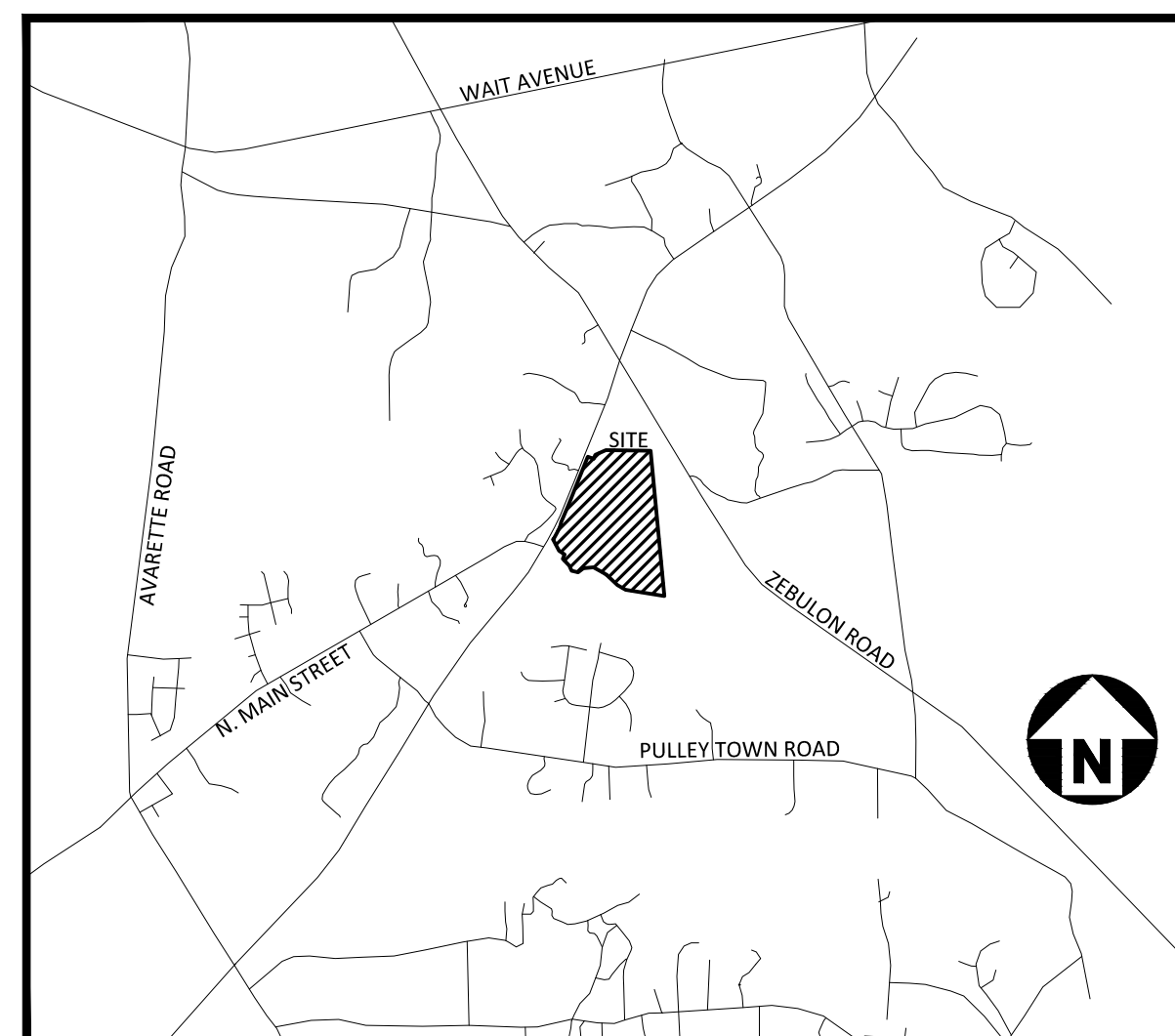
PROJECT NUMBER: 2020110039

DATE: JUNE 6, 2024

UPDATED: SEPTEMBER 23, 2024

SITE DATA

| | |
|---|---|
| OWNER: | TOWN OF ROLESVILLE 502 SOUTHTOWN CIRCLE ROLESVILLE, NORTH CAROLINA 27571 |
| PREPARED BY: | MCADAMS COMPANY 2905 MERIDIAN PARKWAY DURHAM, NORTH CAROLINA 27713 919.361.5000 NANEKAR@MCADAMSCO.COM |
| PARCEL ID NUMBER: | 1779076610 |
| TOTAL SITE ACREAGE: | +116.56 AC |
| LAND AREA OF PARCEL: | +105.00 AC |
| SITE ACREAGE AS PART OF THIS DEVELOPMENT: | +8.00 AC |
| CURRENT ZONING: | RL |
| PROPOSED PARKING: | 69 SPACES |
| CURRENT LAND USE: | VACANT |
| PROPOSED LAND USE: | PUBLIC RECREATION FACILITY |
| ADJOINING PROPERTY OWNERS: | PIN: 1779083669, 1779263965, 1779190357 |
| DISTURBED AREA: | +8.50 AC |
| FEMA REGULATIONS: | |
| PRE-DEVELOPMENT IMPERVIOUS AREA: | 0.14 AC |
| POST-DEVELOPMENT IMPERVIOUS AREA: | 1.92 AC |
| WATERSHED(S): | NEUSE |



VICINITY MAP
N.T.S.



Know what's below.
Call before you dig.

CONTRACTOR SHALL NOTIFY "NC811" (811) OR (1-800-632-4949) AT LEAST 3 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NC811". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.

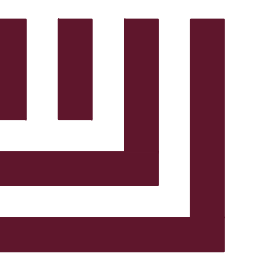
SHEET INDEX

| | |
|-------|--|
| C1.00 | EXISTING CONDITIONS |
| C1.01 | EXISTING CONDITIONS |
| C1.10 | DEMOLITION PLAN |
| C2.00 | OVERALL SITE PLAN |
| C2.01 | SITE PLAN 'AREA A' |
| C2.02 | SITE PLAN 'AREA B' |
| C2.03 | SITE PLAN 'AREA C' |
| C3.00 | OVERALL GRADING & DRAINAGE PLAN |
| C3.01 | GRADING & DRAINAGE PLAN: 'AREA A' |
| C3.02 | GRADING & DRAINAGE PLAN: 'AREA B' |
| C3.03 | GRADING & DRAINAGE PLAN: 'AREA C' |
| C5.00 | PLAN AND PROFILE STREET "A", STA. 10+00 THRU STA. 22+95.10 |
| C5.01 | PLAN AND PROFILE STREET "B", STA. 10+00 THRU STA. 16+35 |
| C6.00 | EROSION CONTROL NOTES |
| C6.01 | OVERALL EROSION CONTROL PLAN - STAGE 1 |
| C6.02 | OVERALL EROSION CONTROL PLAN - STAGE 2 |
| C6.10 | EROSION CONTROL DETAILS |
| C6.11 | EROSION CONTROL DETAILS |
| C6.12 | EROSION CONTROL DETAILS |
| C6.13 | EROSION CONTROL DETAILS |
| C7.00 | LOUISBURG RD WIDENING PLAN |
| C7.01 | LOUISBURG RD STRIPING PLAN |
| C7.10 | LOUISBURG RD WIDENING CROSS SECTIONS |
| C7.11 | LOUISBURG RD WIDENING CROSS SECTIONS |
| C7.12 | LOUISBURG RD WIDENING CROSS SECTIONS |
| C7.13 | DRIVEWAY STEM PROFILES |
| C8.00 | SITE DETAILS |
| C8.01 | SITE DETAILS |
| C8.02 | STORM DRAINAGE & UTILITY DETAILS |
| C8.03 | STORM DRAINAGE & UTILITY DETAILS |

GENERAL NOTES:

- ANY STRUCTURE TO BE REMOVED SHALL REQUIRE A DEMOLITION PERMIT FROM BUILDING INSPECTIONS.

CID-23-05



MCADAMS

The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713

phone 919.361.5000
fax 919.361.2269
license number: C-0293, C-187

www.mcadamsco.com

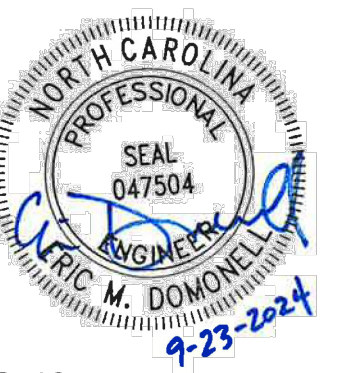
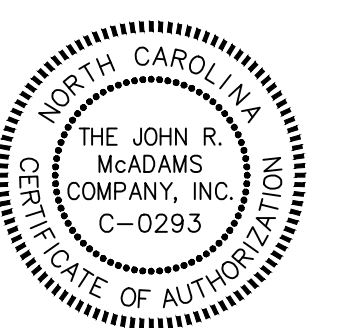
CONTACT

ERIC DOMONELL
domonell@mcadamsco.com
PHONE: 919.287.0765

CLIENT

TOWN OF ROLESVILLE
502 SOUTHTOWN CIRCLE
ROLESVILLE, NORTH CAROLINA 27571
PHONE: 919.554.6582

PROJECT DIRECTORY



REVISIONS

| NO. | DATE |
|-----|---|
| 1 | 09.23.2024 - TOWN STAMP OF APPROVAL ADDED |

CONSTRUCTION DRAWINGS FOR:

FRAZIER FARM PARK
PHASE 1A
11624 LOUISBURG ROAD
ROLESVILLE, NC 27282
PROJECT NUMBER: 2020110039



NC GRID NAD 83 (2011)



McADAMS

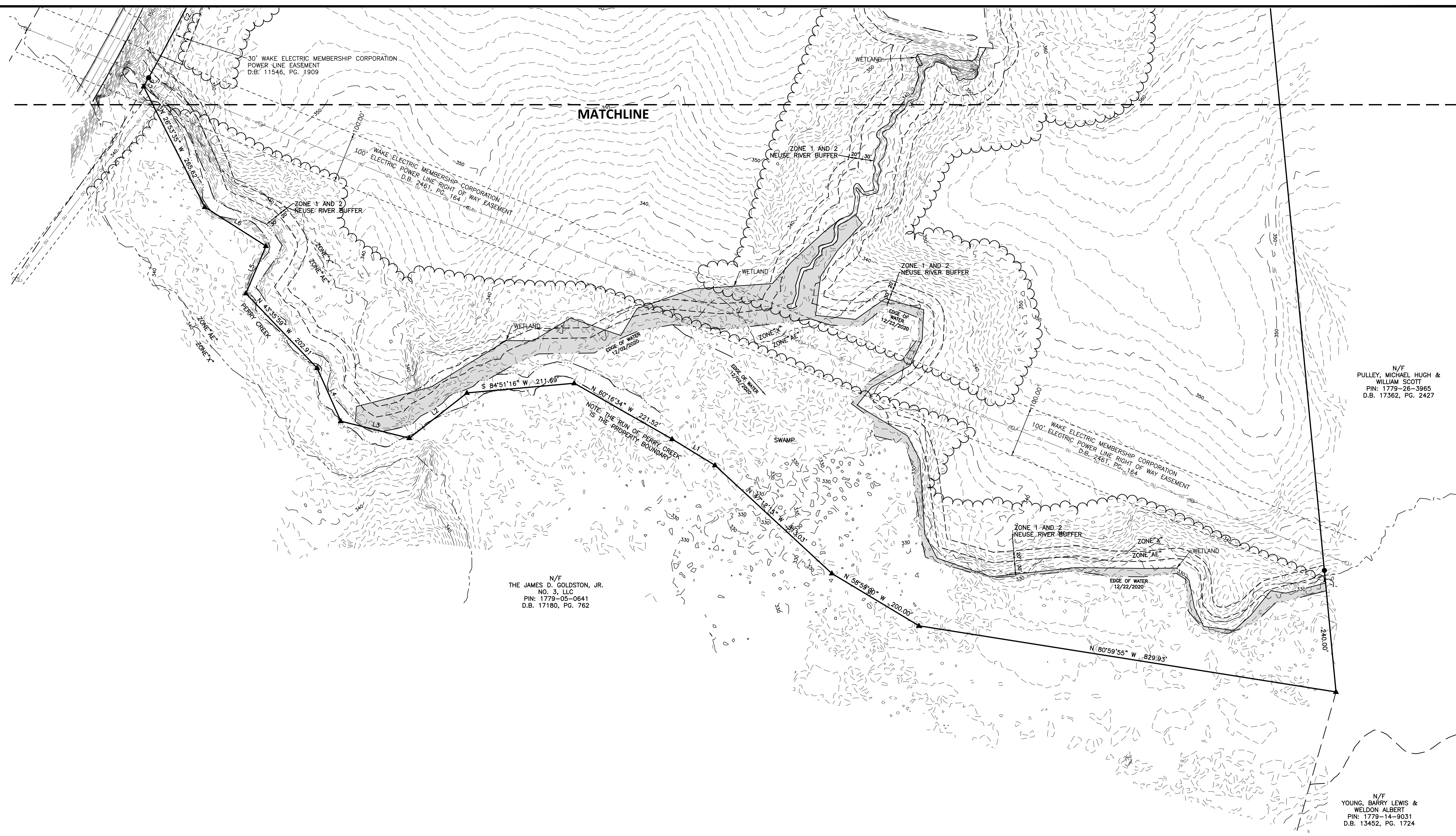
The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713

phone 919. 361. 5000
fax 919. 361. 2269
license number: C-0293, C-187

www.mcadamsco.com

CLIENT
TOWN OF ROLESVILLE
502 SOUTHTOWN CIRCLE
ROLESVILLE, NC 27571

FRAZIER FARM PARK
EXISTING CONDITIONS SURVEY
11624 LOUISBURG ROAD
TOWN OF ROLESVILLE, WAKE COUNTY, NORTH CAROLINA



N/F
THE JAMES D. GOLDSTON, JR.
NO. 3, LLC
PIN: 1779-05-0641
D.B. 17180, PG. 762

N/F
PULLEY, MICHAEL HUGH &
WILLIAM SCOTT
PIN: 1779-26-3965
D.B. 17362, PG. 2427

N/F
YOUNG, BARRY LEWIS &
WELDON ALBERT
PIN: 1779-14-9031
D.B. 13452, PG. 1724

- LEGEND**
- — — — — PROPERTY BOUNDARY
 - — — — — ADJOINING PARCEL GIS SHAPEFILE
 - — — — — OVERHEAD UTILITY
 - — — — — UNDERGROUND TELEPHONE
 - — — — — STORM SEWER
 - — — — — WOODLINE
 - — — — — NEUSE RIVER BUFFER
 - — — — — FLOODPLAIN
 - — — — — CREEK BANK
 - — — — — TIE LINE
 - — — — — WETLAND
 - — — — — POWER EASEMENT
 - — — — — PERMANENT UTILITY EASEMENT
 - IRON PIPE/REBAR FOUND
 - IRON PIPE/REBAR SET
 - CONCRETE MONUMENT
 - ▲ CALCULATED POINT NOT FOUND OR SET
 - GEODETIC MONUMENT
 - ◆ TEMPORARY BENCHMARK
 - ⊙ LIGHT POLE
 - ⊙ UTILITY POLE
 - ⊙ TELEPHONE PEDESTAL
 - ⊙ OAK
 - ⊙ DOGWOOD
 - ⊙ PECAN

| CURVE | RADIUS | CURVE TABLE | | |
|-------|----------|-------------|---------------|--------------|
| | | ARC LENGTH | CHORD BEARING | CHORD LENGTH |
| C1 | 405.81' | 20.00' | N 29°03'28" E | 20.00' |
| C2 | 5724.30' | 282.14' | N 27°38'45" E | 282.12' |
| C3 | 1907.59' | 320.51' | N 45°25'21" E | 320.13' |
| C4 | 5900.00' | 175.71' | S 26°19'02" W | 175.70' |
| C5 | 6306.80' | 39.71' | S 28°12'58" W | 39.71' |

| LINE TABLE | | |
|------------|---------------|----------|
| LINE | BEARING | DISTANCE |
| L1 | N 58°32'29" W | 98.85' |
| L2 | S 51°53'26" W | 144.12' |
| L3 | N 73°07'14" W | 138.75' |
| L4 | N 24°04'09" W | 114.42' |
| L5 | N 22°55'41" E | 101.10' |
| L6 | N 57°26'24" W | 142.63' |
| L7 | N 15°00'06" E | 104.53' |
| L8 | S 67°19'35" E | 132.44' |
| L9 | N 19°08'18" E | 95.82' |
| L10 | S 25°00'42" W | 18.54' |
| L11 | S 45°13'02" W | 82.40' |
| L12 | N 50°24'20" W | 34.98' |
| L13 | N 66°46'16" W | 23.34' |
| L14 | N 56°12'03" W | 20.02' |

SURVEY NOTES

- THIS EXISTING CONDITIONS SURVEY WAS COMPLETED ON APRIL 22, 2021.
- BEARINGS FOR THIS SURVEY ARE BASED ON NC STATE PLANE GRID NAD 83 (2011).
- ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES UNLESS NOTED OTHERWISE.
- AREA BY COORDINATE GEOMETRY.
- THIS PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD ZONE, PORTIONS OF THE SOUTHERN PROPERTY BOUNDARY ALONG PERRY CREEK ARE IN ZONE AE (1% ANNUAL CHANCE FLOOD) PER FEMA FIRM MAP 3720177900K, MAP DATE MAY 2, 2006.
- ELEVATIONS FOR THIS SURVEY ARE BASED ON NAVD 88 DERIVED FROM NGS "PERRY CREEK". THE CONTOUR INTERVAL IS 1-FOOT.

UTILITY STATEMENT

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

GPS METADATA

- CLASS OF SURVEY: A
- POSITIONAL ACCURACY: 0.06'
- TYPE OF GPS FIELD PROCEDURE: VRS
- DATES OF SURVEY: DECEMBER 10, 2020
- DATUM/EPOCH: NAD 83 (2011)
- PUBLISHED/FIXED-CONTROL USE: NCGS "GARY"
- GEOD MODEL: 12B
- COMBINED GRID FACTOR(S): 0.99993507
- UNITS: U.S. SURVEY FEET



I, E. MATTHEW CASH, CERTIFY THAT THIS PROJECT WAS COMPLETED UNDER MY DIRECT AND RESPONSIBLE CHARGE FROM AN ACTUAL SURVEY PERFORMED UNDER MY SUPERVISION; THAT THIS GROUND/AERIAL SURVEY WAS PERFORMED AT THE 95 PERCENT CONFIDENCE LEVEL TO MEET FEDERAL GEOGRAPHIC DATA COMMITTEE STANDARDS; THAT THIS SURVEY WAS PERFORMED TO MEET THE REQUIREMENTS FOR A TOPOGRAPHIC/PLANIMETRIC SURVEY TO THE ACCURACY OF CLASS 3 AND VERTICAL ACCURACY WHEN APPLICABLE TO THE CLASS & STANDARD, AND THAT THE SURVEY WAS COMPLETED ON APRIL 22, 2021; AND ALL COORDINATES ARE BASED ON NAD 83 (2011) AND ALL ELEVATIONS ARE BASED ON NAVD 88.

E. MATTHEW CASH, PROFESSIONAL LAND SURVEYOR L-5045 APRIL 28, 2021

REVISIONS

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

PLAN INFORMATION

| | |
|-------------|---------------|
| PROJECT NO. | 2020110039 |
| FILENAME | 2020110039-C1 |
| CHECKED BY | EMC |
| DRAWN BY | EMC |
| SCALE | 1"=100' |
| DATE | 04.22.2021 |

EXISTING CONDITIONS

C1.00

M:\Projects\Towns\Rolesville\2020110039 Frazier Farm Park\02_Geomatics\Survey\Topographic\2020110039-C1.dwg, 4/28/2021 12:46:57 AM, Chh, Matthew



NC GRID NAD 83 (2011)

SURVEY NOTES

1. SEE SHEET C1.00 FOR SURVEY NOTES, GPS METADATA, AND SURVEYORS CERTIFICATION.

| LINE | BEARING | DISTANCE |
|------|---------------|----------|
| L1 | N 58°32'29" W | 98.85' |
| L2 | S 51°53'26" W | 144.12' |
| L3 | N 76°07'14" W | 138.75' |
| L4 | N 24°04'09" W | 114.42' |
| L5 | N 22°55'41" E | 101.10' |
| L6 | N 57°26'24" W | 142.63' |
| L7 | N 15°00'06" E | 104.53' |
| L8 | S 67°19'35" E | 132.44' |
| L9 | N 19°08'18" E | 95.82' |
| L10 | S 25°00'42" W | 18.54' |
| L11 | S 45°13'02" W | 82.40' |
| L12 | N 50°24'20" W | 34.98' |
| L13 | N 66°48'16" W | 23.34' |
| L14 | N 56°12'03" W | 20.02' |

| CURVE | RADIUS | ARC LENGTH | CHORD BEARING | CHORD LENGTH |
|-------|----------|------------|---------------|--------------|
| C1 | 405.81' | 20.00' | N 29°03'28" E | 20.00' |
| C2 | 5724.30' | 282.14' | N 27°38'45" E | 282.12' |
| C3 | 1907.59' | 320.51' | N 45°25'21" E | 320.13' |
| C4 | 5900.00' | 175.71' | S 28°19'02" W | 175.70' |
| C5 | 6306.80' | 39.71' | S 28°12'58" W | 39.71' |

UTILITY STATEMENT

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

LEGEND

- PROPERTY BOUNDARY
- - - ADJOINING PARCEL GIS SHAPEFILE
- OVERHEAD UTILITY
- - - UNDERGROUND TELEPHONE
- STORM SEWER
- WOODLINE
- NEUSE RIVER BUFFER
- FLOODPLAIN
- CREEK BANK
- TIE LINE
- WETLAND
- POWER EASEMENT
- PERMANENT UTILITY EASEMENT
- IRON PIPE/REBAR FOUND
- IRON PIPE/REBAR SET
- CONCRETE MONUMENT
- ▲ CALCULATED POINT NOT FOUND OR SET
- ◆ GEODETIC MONUMENT
- ◆ TEMPORARY BENCHMARK
- LIGHT POLE
- UTILITY POLE
- TELEPHONE PEDESTAL
- OAK
- DOGWOOD
- PECAN



McADAMS
The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713
phone 919.361.5000
fax 919.361.2269
license number: C-0293, C-187
www.mcadamsco.com

CLIENT
TOWN OF ROLESVILLE
502 SOUTHTOWN CIRCLE
ROLESVILLE, NC 27571

FRAZIER FARM PARK
EXISTING CONDITIONS SURVEY
11624 LOUISBURG ROAD
TOWN OF ROLESVILLE, WAKE COUNTY, NORTH CAROLINA

NORTH CAROLINA
REGISTERED PROFESSIONAL
SURVEYOR
SEAL
L. J. MATTHEW CASH
APRIL 28, 2021

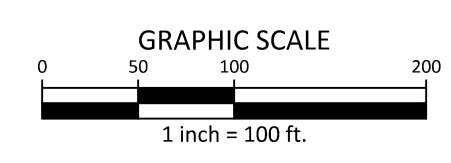
REVISIONS
NO. DATE

PLAN INFORMATION
PROJECT NO. 2020110039
FILENAME 2020110039-C1
CHECKED BY EMC
DRAWN BY EMC
SCALE 1"=100'
DATE 04.22.2021

EXISTING CONDITIONS

C1.01

M:\Projects\TownofRolesville\2020110039\Frazier Farm Park\02_Geomatics\Survey\Topographic\2020110039-C1.dwg, 4/28/2021 12:40:59 AM, Chih, Matthew



MATCHLINE



McADAMS

The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713

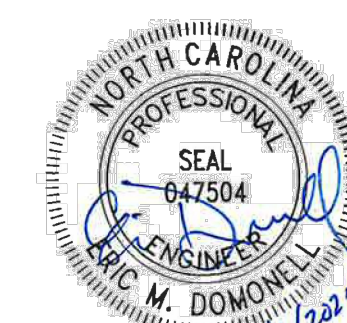
phone 919.361.5000
fax 919.361.2269
license number: C-0293

www.mcadamsco.com

CLIENT

NAME: TOWN OF ROLESVILLE
ADDRESS: 502 SOUTHTOWN CIRCLE
ADDRESS: ROLESVILLE NC 27571
PHONE: 919.554.6582

FRAZIER FARM PARK
CONSTRUCTION DRAWINGS
PHASE 1A
11624 LOUISBURG ROAD
ROLESVILLE, NORTH CAROLINA



REVISIONS

NO. DATE

PLAN INFORMATION

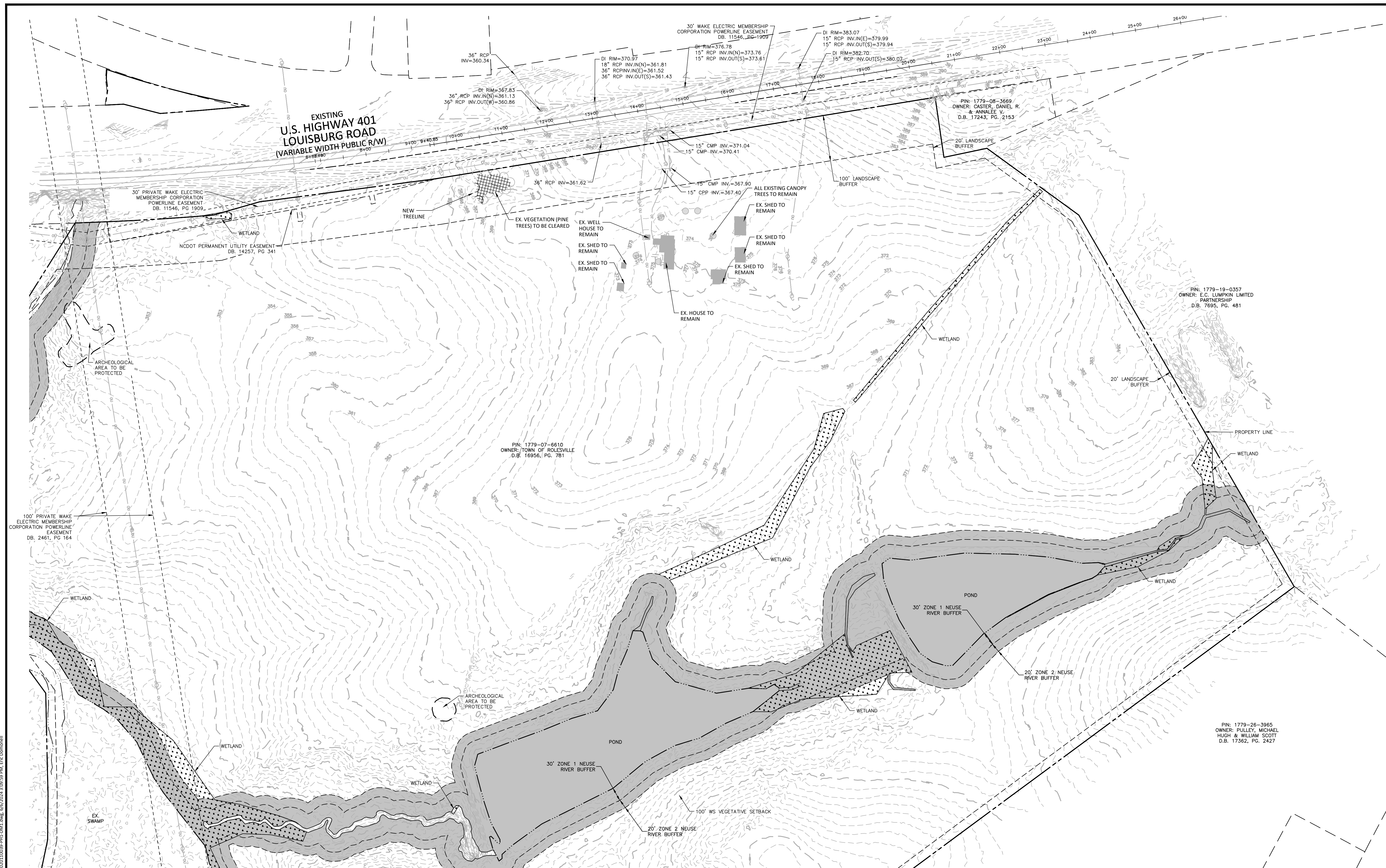
PROJECT NO. 202011039
FILENAME 2020110039-PH1-DM1
CHECKED BY EMD
DRAWN BY SME
SCALE 1"=100'
DATE 06.06.2024

SHEET

OVERALL DEMOLITION
PLAN

C1.10

CID-23-5

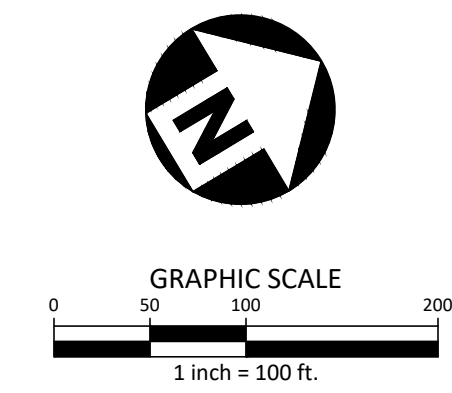


- DEMOLITION NOTES**
- UTILITY STATEMENT: THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED UNDERGROUND UTILITIES.
 - THE CONTRACTOR SHALL FIELD VERIFY AND LOCATE ALL EXISTING UTILITIES ON SITE PRIOR TO DEMOLITION.
 - THE CONTRACTOR SHALL PERFORM DEMOLITION ACTIVITIES AS NOTED AND SHOWN ON THESE PLANS AND SPECIFICATIONS AND AS DIRECTED BY THE OWNER.
 - IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ANY PERMITS AND PAY FEES REQUIRED FOR DEMOLITION AND HAUL-OFF FROM THE APPROPRIATE AUTHORITIES. THESE FEES ARE TO BE INCLUDED WITH THE BID. THE CONTRACTOR SHALL PREPARE ALL DOCUMENTS AND ACQUIRE APPROPRIATE PERMITS AS REQUIRED PRIOR TO THE COMMENCEMENT OF DEMOLITION.
 - THE DEMOLITION PLAN IS INTENDED TO DEPICT GENERAL DEMOLITION AND UTILITY WORK. IT IS NOT INTENDED TO IDENTIFY EACH ELEMENT OF DEMOLITION OR RELOCATION. CONTRACTOR SHALL COORDINATE WITH THE OWNER AND APPROPRIATE UTILITY COMPANY PRIOR TO WORK.
 - CONTRACTOR SHALL COMPLETELY DEMOLISH ALL EXISTING IMPROVEMENTS NOTED FOR REMOVAL ON THE APPROVED DEMOLITION PLAN. THIS INCLUDES, AS NECESSARY, FOUNDATIONS AND OTHER APPURTENANCES LOCATED ON AND AROUND THE IMPROVEMENTS SUCH AS SIGNS, CURBS, PAVEMENT, SIDEWALKS, LIGHT POLE BASES, HYDRANTS, BOLLARDS, ETC. ALL REMOVED MATERIAL SHALL BE DISPOSED OF OFFSITE IN A LAWFUL MANNER OR RECYCLED. IF POSSIBLE, CONTRACTOR SHALL MAKE EVERY ATTEMPT TO RECYCLE ANY DEBRIS AND RUBBISH THAT IS RECYCLABLE.
 - CONTRACTOR SHALL INSTALL ALL EROSION AND SEDIMENT CONTROL DEVICES AND TREE PROTECTION PRIOR TO BEGINNING DEMOLITION WORK. CONTRACTOR SHALL TAKE EXTRA PRECAUTIONS AND CARE TO PRESERVE TREES DURING CONSTRUCTION.
 - THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES TO REMAIN IN PLACE.
 - ALL EXISTING ITEMS TO REMAIN WHICH ARE DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT THE SOLE EXPENSE OF THE CONTRACTOR.
 - CONTRACTOR TO FLAG ALL TREES SLATED FOR REMOVAL AND SEEK APPROVAL FROM LANDSCAPE ARCHITECT PRIOR TO DEMOLISHING.

DEMOLITION LEGEND

AREA TO BE REMOVED (SIDEWALK, CURB AND GUTTER, STRUCTURES, ASPHALT, CONCRETE PAVING, ETC.)

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT TOWN OF ROLESVILLE ENGINEERING DESIGN AND CONSTRUCTION STANDARDS



M:\Projects\WOL\2020110039 Frazier Farm Park\04-Production\Engineering\Phase1A_CID\2020110039-PH1-DM1.dwg, 06/20/2024, 3:09:59 PM, Eric Donnell



McADAMS

The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713

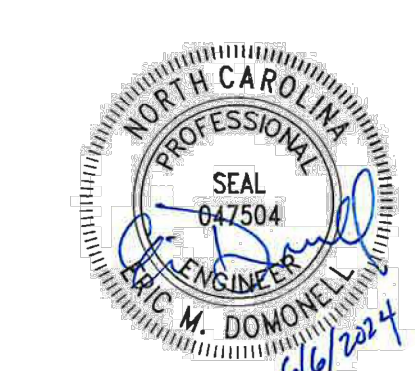
phone 919. 361. 5000
fax 919. 361. 2269
license number: C-0293

www.mcadamsco.com

CLIENT

NAME: TOWN OF ROLESVILLE
ADDRESS: 502 SOUTHTOWN CIRCLE
ADDRESS: ROLESVILLE NC 27571
PHONE: 919.554.6582

FRAZIER FARM PARK
CONSTRUCTION DRAWINGS
PHASE 1A
11624 LOUISBURG ROAD
ROLESVILLE, NORTH CAROLINA



REVISIONS

NO. DATE

PLAN INFORMATION

PROJECT NO. 202011039
FILENAME 2020110039-PH1-OAS1
CHECKED BY EMD
DRAWN BY SME
SCALE 1"=100'
DATE 06.06.2024

SHEET

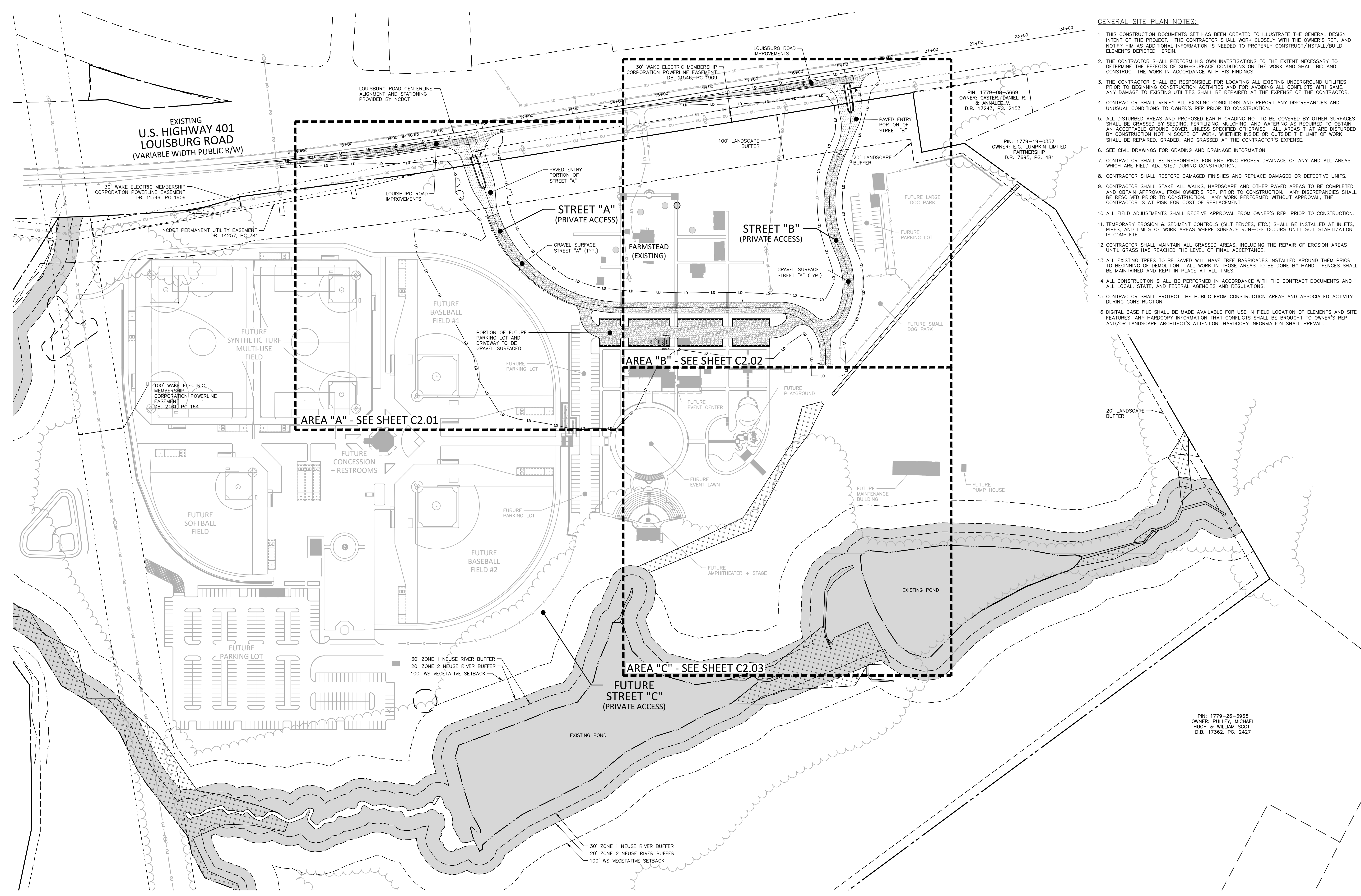
**OVERALL
SITE PLAN**

C2.00

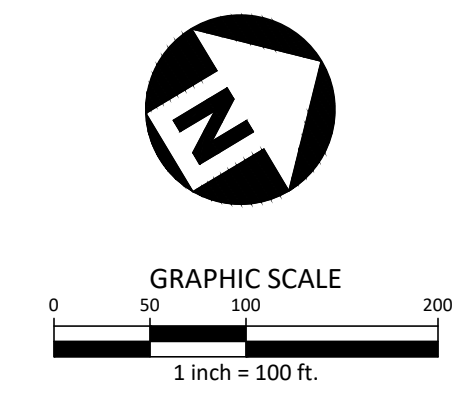
CID-23-5

GENERAL SITE PLAN NOTES:

1. THIS CONSTRUCTION DOCUMENTS SET HAS BEEN CREATED TO ILLUSTRATE THE GENERAL DESIGN INTENT OF THE PROJECT. THE CONTRACTOR SHALL WORK CLOSELY WITH THE OWNER'S REP. AND NOTIFY HIM AS ADDITIONAL INFORMATION IS NEEDED TO PROPERLY CONSTRUCT/INSTALL/BUILD ELEMENTS DEPICTED HEREIN.
2. THE CONTRACTOR SHALL PERFORM HIS OWN INVESTIGATIONS TO THE EXTENT NECESSARY TO DETERMINE THE EFFECTS OF SUB-SURFACE CONDITIONS ON THE WORK AND SHALL BID AND CONSTRUCT THE WORK IN ACCORDANCE WITH HIS FINDINGS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES AND FOR AVOIDING ALL CONFLICTS WITH SAME. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR.
4. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES AND UNUSUAL CONDITIONS TO OWNER'S REP PRIOR TO CONSTRUCTION.
5. ALL DISTURBED AREAS AND PROPOSED EARTH GRADING NOT TO BE COVERED BY OTHER SURFACES SHALL BE GRASSED BY SEEDING, FERTILIZING, MULCHING, AND WATERING AS REQUIRED TO OBTAIN AN ACCEPTABLE GROUND COVER, UNLESS SPECIFIED OTHERWISE. ALL AREAS THAT ARE DISTURBED BY CONSTRUCTION NOT IN SCOPE OF WORK, WHETHER INSIDE OR OUTSIDE THE LIMIT OF WORK SHALL BE REPAIRED, GRADED, AND GRASSED AT THE CONTRACTOR'S EXPENSE.
6. SEE CIVIL DRAWINGS FOR GRADING AND DRAINAGE INFORMATION.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING PROPER DRAINAGE OF ANY AND ALL AREAS WHICH ARE FIELD ADJUSTED DURING CONSTRUCTION.
8. CONTRACTOR SHALL RESTORE DAMAGED FINISHES AND REPLACE DAMAGED OR DEFECTIVE UNITS.
9. CONTRACTOR SHALL STAKE ALL WALKS, HARDSCAPE AND OTHER PAVED AREAS TO BE COMPLETED AND OBTAIN APPROVAL FROM OWNER'S REP. PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE RESOLVED PRIOR TO CONSTRUCTION. ANY WORK PERFORMED WITHOUT APPROVAL, THE CONTRACTOR IS AT RISK FOR COST OF REPLACEMENT.
10. ALL FIELD ADJUSTMENTS SHALL RECEIVE APPROVAL FROM OWNER'S REP. PRIOR TO CONSTRUCTION.
11. TEMPORARY EROSION & SEDIMENT CONTROLS (SILT FENCES, ETC.) SHALL BE INSTALLED AT INLETS, PIPES, AND LIMITS OF WORK AREAS WHERE SURFACE RUN-OFF OCCURS UNTIL SOIL STABILIZATION IS COMPLETE.
12. CONTRACTOR SHALL MAINTAIN ALL GRASSED AREAS, INCLUDING THE REPAIR OF EROSION AREAS UNTIL GRASS HAS REACHED THE LEVEL OF FINAL ACCEPTANCE.
13. ALL EXISTING TREES TO BE SAVED WILL HAVE TREE BARRICADES INSTALLED AROUND THEM PRIOR TO BEGINNING OF DEMOLITION. ALL WORK IN THOSE AREAS TO BE DONE BY HAND. FENCES SHALL BE MAINTAINED AND KEPT IN PLACE AT ALL TIMES.
14. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ALL LOCAL, STATE, AND FEDERAL AGENCIES AND REGULATIONS.
15. CONTRACTOR SHALL PROTECT THE PUBLIC FROM CONSTRUCTION AREAS AND ASSOCIATED ACTIVITY DURING CONSTRUCTION.
16. DIGITAL BASE FILE SHALL BE MADE AVAILABLE FOR USE IN FIELD LOCATION OF ELEMENTS AND SITE FEATURES. ANY HANDCOPED INFORMATION THAT CONFLICTS SHALL BE BROUGHT TO OWNER'S REP. AND/OR LANDSCAPE ARCHITECT'S ATTENTION. HANDCOPED INFORMATION SHALL PREVAIL.



ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT TOWN OF ROLESVILLE ENGINEERING DESIGN AND CONSTRUCTION STANDARDS



M:\Projects\W01_2020110039\Frazier Farm Park\04-Production\Engineering\Phase1A\CID-23-5\2020110039-PH1-OAS1.dwg, 6/16/2024, 3:10:02 PM, Eric Donnell



McADAMS

The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713

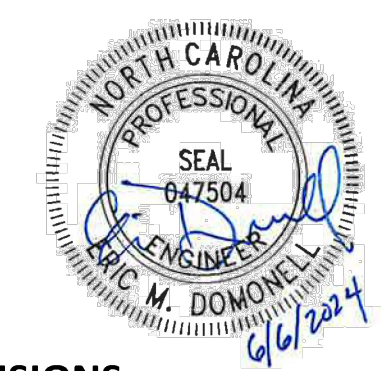
phone 919.361.5000
fax 919.361.2269
license number: C-0293

www.mcadamsco.com

CLIENT

NAME: TOWN OF ROLESVILLE
ADDRESS: 502 SOUTHTOWN CIRCLE
ADDRESS: ROLESVILLE NC 27571
PHONE: 919.554.6582

**FRAZIER FARM PARK
CONSTRUCTION DRAWINGS
PHASE 1A
11624 LOUISBURG ROAD
ROLESVILLE, NORTH CAROLINA**



REVISIONS

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

PLAN INFORMATION

| | |
|-------------|-------------------|
| PROJECT NO. | 202011039 |
| FILENAME | 2020110039-PH1-S1 |
| CHECKED BY | EMD |
| DRAWN BY | SME |
| SCALE | 1"=30' |
| DATE | 06.06.2024 |

SHEET

SITE PLAN: AREA 'A'

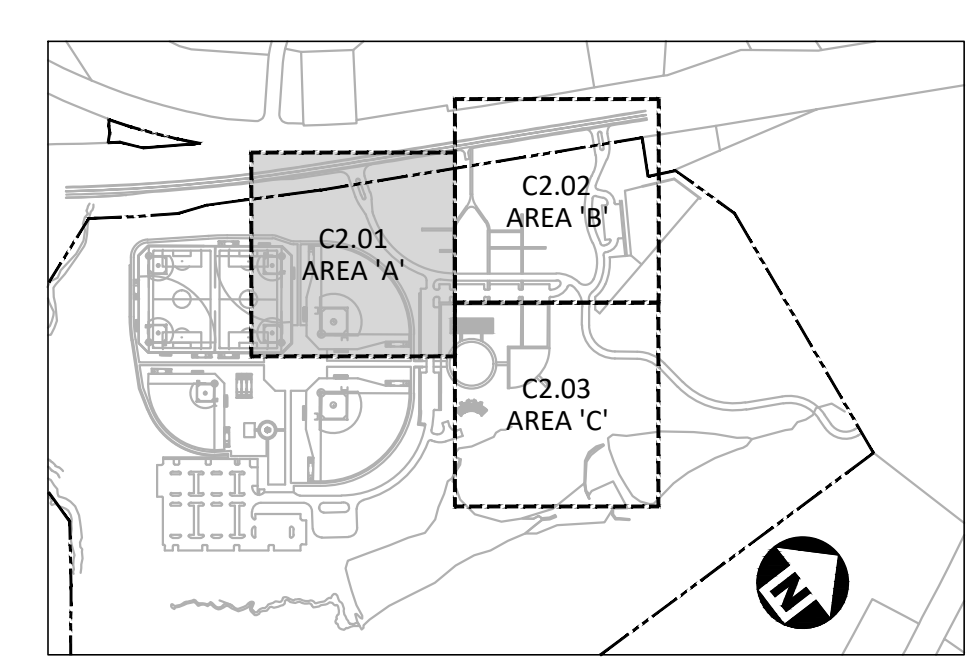
C2.01

SITE LEGEND

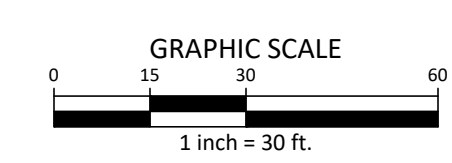
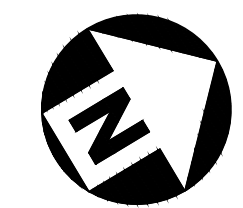
| | |
|--|--|
| | SIGNAGE |
| | YARD LIGHTS |
| | LIGHT POLE |
| | POWER POLE |
| | TRAFFIC DIRECTIONAL ARROW |
| | ACCESSIBLE PARKING STALL |
| | VAN ACCESSIBLE PARKING STALL |
| | PARKING SPACE COUNT |
| | ACCESSIBLE RAMPS |
| | ACCESSIBLE ROUTE |
| | PHASE LINE |
| | PROPERTY LINE |
| | RIGHT-OF-WAY LINE |
| | LOT LINE |
| | EASEMENT LINE |
| | CENTERLINE |
| | HEAVY DUTY ASPHALT PAVEMENT |
| | ABC TRAVEL SURFACE TO BE ASPHALT PAVED IN FUTURE PHASE |
| | US-401 PAVEMENT |

GENERAL SITE PLAN NOTES:

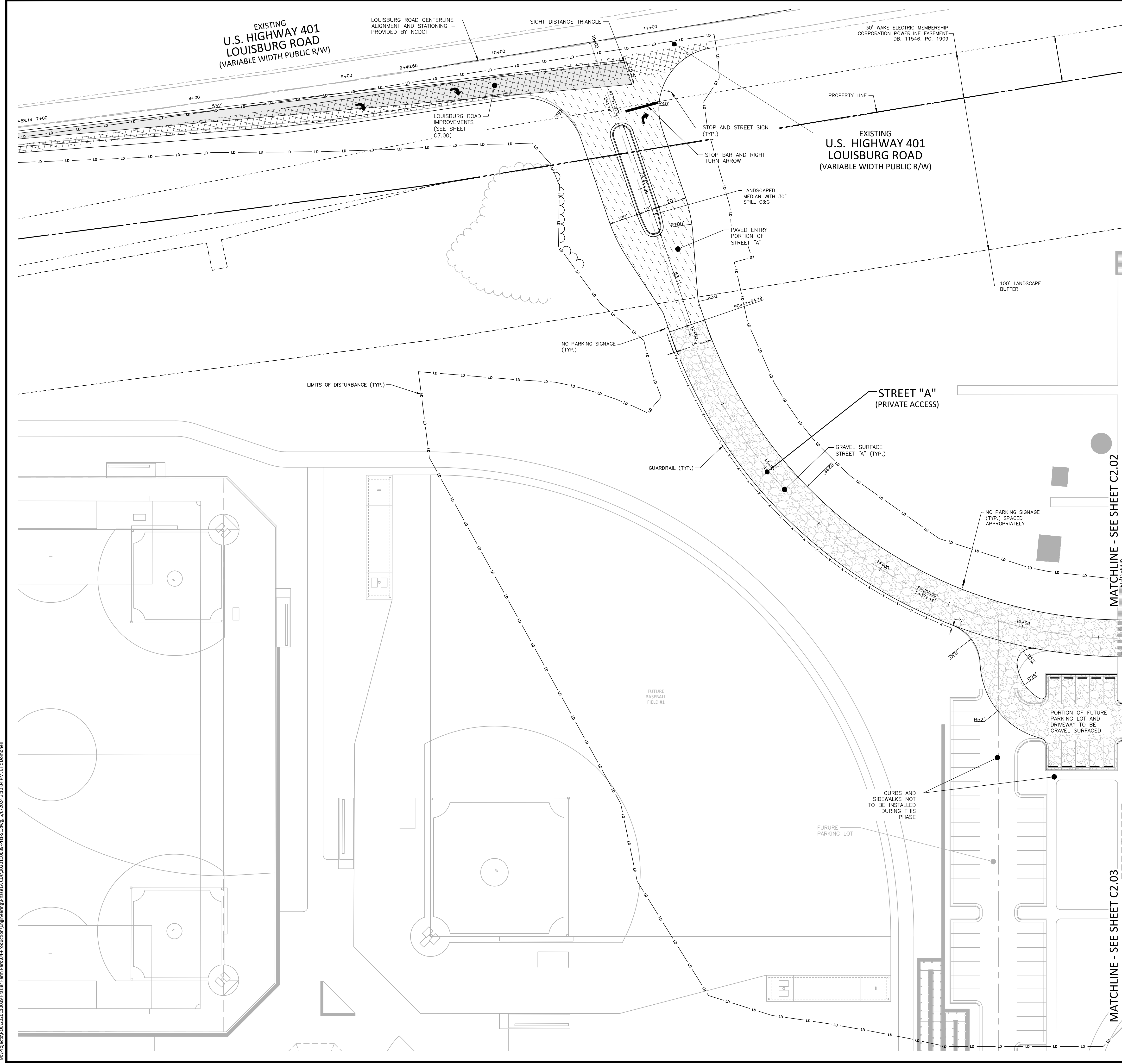
- THIS CONSTRUCTION DOCUMENTS SET HAS BEEN CREATED TO ILLUSTRATE THE GENERAL DESIGN INTENT OF THE PROJECT. THE CONTRACTOR SHALL WORK CLOSELY WITH THE OWNER'S REP. AND NOTIFY HIM AS ADDITIONAL INFORMATION IS NEEDED TO PROPERLY CONSTRUCT/INSTALL/BUILD ELEMENTS DEPICTED HEREIN.
- THE CONTRACTOR SHALL PERFORM HIS OWN INVESTIGATIONS TO THE EXTENT NECESSARY TO DETERMINE THE EFFECTS OF SUB-SURFACE CONDITIONS ON THE WORK AND SHALL BID AND CONSTRUCT THE WORK IN ACCORDANCE WITH HIS FINDINGS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES AND FOR AVOIDING ALL CONFLICTS WITH SAME. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR.
- CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES AND UNUSUAL CONDITIONS TO OWNER'S REP PRIOR TO CONSTRUCTION.
- ALL DISTURBED AREAS AND PROPOSED EARTH GRADING NOT TO BE COVERED BY OTHER SURFACES SHALL BE GRASSED BY SEEDING, FERTILIZING, MULCHING, AND WATERING AS REQUIRED TO OBTAIN AN ACCEPTABLE GROUND COVER, UNLESS SPECIFIED OTHERWISE. ALL AREAS THAT ARE DISTURBED BY CONSTRUCTION NOT IN SCOPE OF WORK, WHETHER INSIDE OR OUTSIDE THE LIMIT OF WORK SHALL BE REPAIRED, GRADED, AND GRASSED AT THE CONTRACTOR'S EXPENSE.
- SEE CIVIL DRAWINGS FOR GRADING AND DRAINAGE INFORMATION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING PROPER DRAINAGE OF ANY AND ALL AREAS WHICH ARE FIELD ADJUSTED DURING CONSTRUCTION.
- CONTRACTOR SHALL RESTORE DAMAGED FINISHES AND REPLACE DAMAGED OR DEFECTIVE UNITS.
- CONTRACTOR SHALL STAKE ALL WALKS, HARDSCAPE AND OTHER PAVED AREAS TO BE COMPLETED AND OBTAIN APPROVAL FROM OWNER'S REP. PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE RESOLVED PRIOR TO CONSTRUCTION. ANY WORK PERFORMED WITHOUT APPROVAL, THE CONTRACTOR IS AT RISK FOR COST OF REPLACEMENT.
- ALL FIELD ADJUSTMENTS SHALL RECEIVE APPROVAL FROM OWNER'S REP. PRIOR TO CONSTRUCTION.
- TEMPORARY EROSION & SEDIMENT CONTROLS (SILT FENCES, ETC.) SHALL BE INSTALLED AT INLETS, PIPES, AND LIMITS OF WORK AREAS WHERE SURFACE RUN-OFF OCCURS UNTIL SOIL STABILIZATION IS COMPLETE.
- ALL EXISTING TREES TO BE SAVED WILL HAVE TREE BARRICADES INSTALLED AROUND THEM PRIOR TO BEGINNING OF DEMOLITION. ALL WORK IN THOSE AREAS TO BE DONE BY HAND. FENCES SHALL BE MAINTAINED AND KEPT IN PLACE AT ALL TIMES.
- ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ALL LOCAL, STATE, AND FEDERAL AGENCIES AND REGULATIONS.
- CONTRACTOR SHALL PROTECT THE PUBLIC FROM CONSTRUCTION AREAS AND ASSOCIATED ACTIVITY DURING CONSTRUCTION.
- DIGITAL BASE FILE SHALL BE MADE AVAILABLE FOR USE IN FIELD LOCATION OF ELEMENTS AND SITE FEATURES. ANY HARDCOPY INFORMATION THAT CONFLICTS SHALL BE BROUGHT TO OWNER'S REP. AND/OR LANDSCAPE ARCHITECT'S ATTENTION. HARDCOPY INFORMATION SHALL PREVAIL.



INDEX MAP
N.T.S.



ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT TOWN OF ROLESVILLE ENGINEERING DESIGN AND CONSTRUCTION STANDARDS



M:\Projects\WOL\2020110039 Frazier Farm Park\04-Production\Engineering\Phase1A\CD\2020110039-PH1-S1.dwg, 6/6/2024, 3:10:04 PM, Eric Donnell



McADAMS

The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713

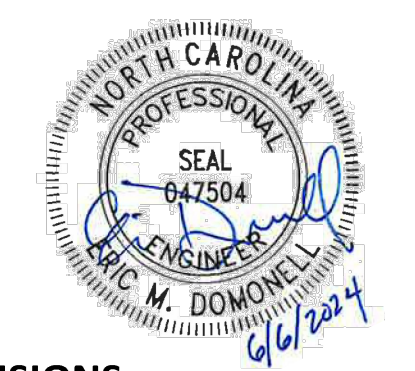
phone 919.361.5000
fax 919.361.2269
license number: C-0293

www.mcadamsco.com

CLIENT

NAME: TOWN OF ROLESVILLE
ADDRESS: 502 SOUTHTOWN CIRCLE
ADDRESS: ROLESVILLE NC 27571
PHONE: 919.554.6582

**FRAZIER FARM PARK
CONSTRUCTION DRAWINGS
PHASE 1A
11624 LOUISBURG ROAD
ROLESVILLE, NORTH CAROLINA**



REVISIONS

NO. DATE

PLAN INFORMATION

PROJECT NO. 202011039
FILENAME 2020110039-PH1-S1
CHECKED BY EMD
DRAWN BY SME
SCALE 1"=30'
DATE 06.06.2024

SHEET

SITE PLAN: AREA 'B'

C2.02

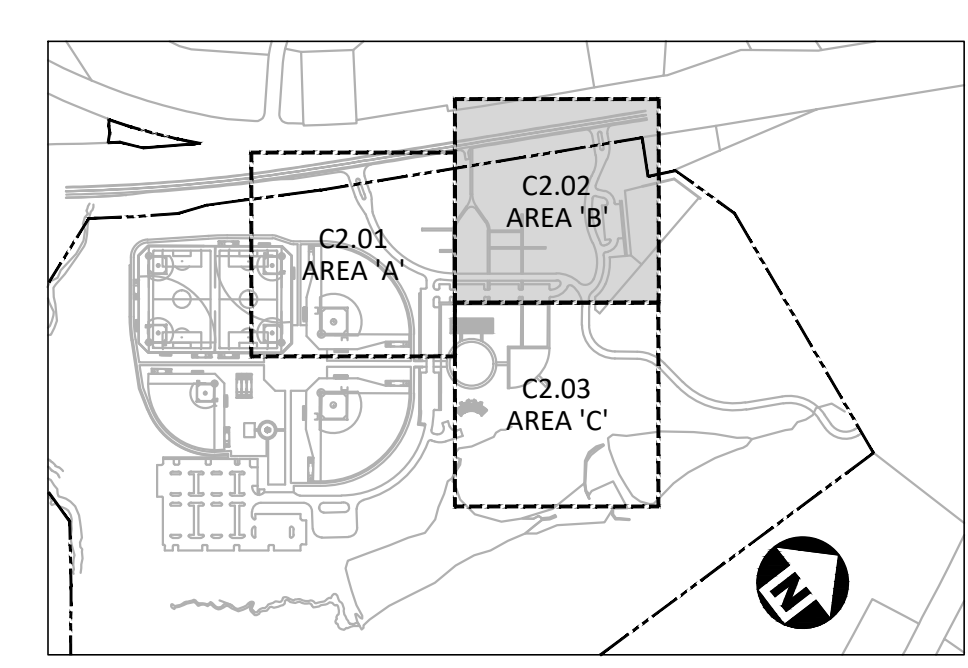
CID-23-5

SITE LEGEND

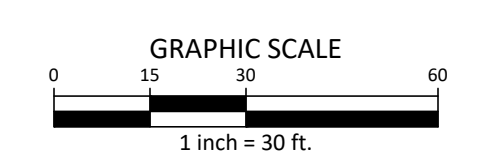
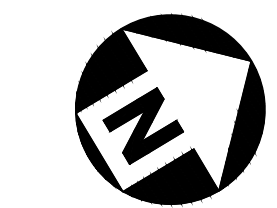
| | |
|--|---|
| | SIGNAGE |
| | YARD LIGHTS |
| | LIGHT POLE |
| | POWER POLE |
| | TRAFFIC DIRECTIONAL ARROW |
| | ACCESSIBLE PARKING STALL |
| | VAN ACCESSIBLE PARKING STALL |
| | PARKING SPACE COUNT |
| | ACCESSIBLE RAMPS |
| | ACCESSIBLE ROUTE |
| | PHASE LINE |
| | PROPERTY LINE |
| | RIGHT-OF-WAY LINE |
| | LOT LINE |
| | EASEMENT LINE |
| | CENTERLINE |
| | HEAVY DUTY ASPHALT PAVEMENT |
| | ABC TRAVEL SURFACE TO BE ASPHALT PAVEMENT IN FUTURE PHASE |
| | US-401 PAVEMENT |

GENERAL SITE PLAN NOTES:

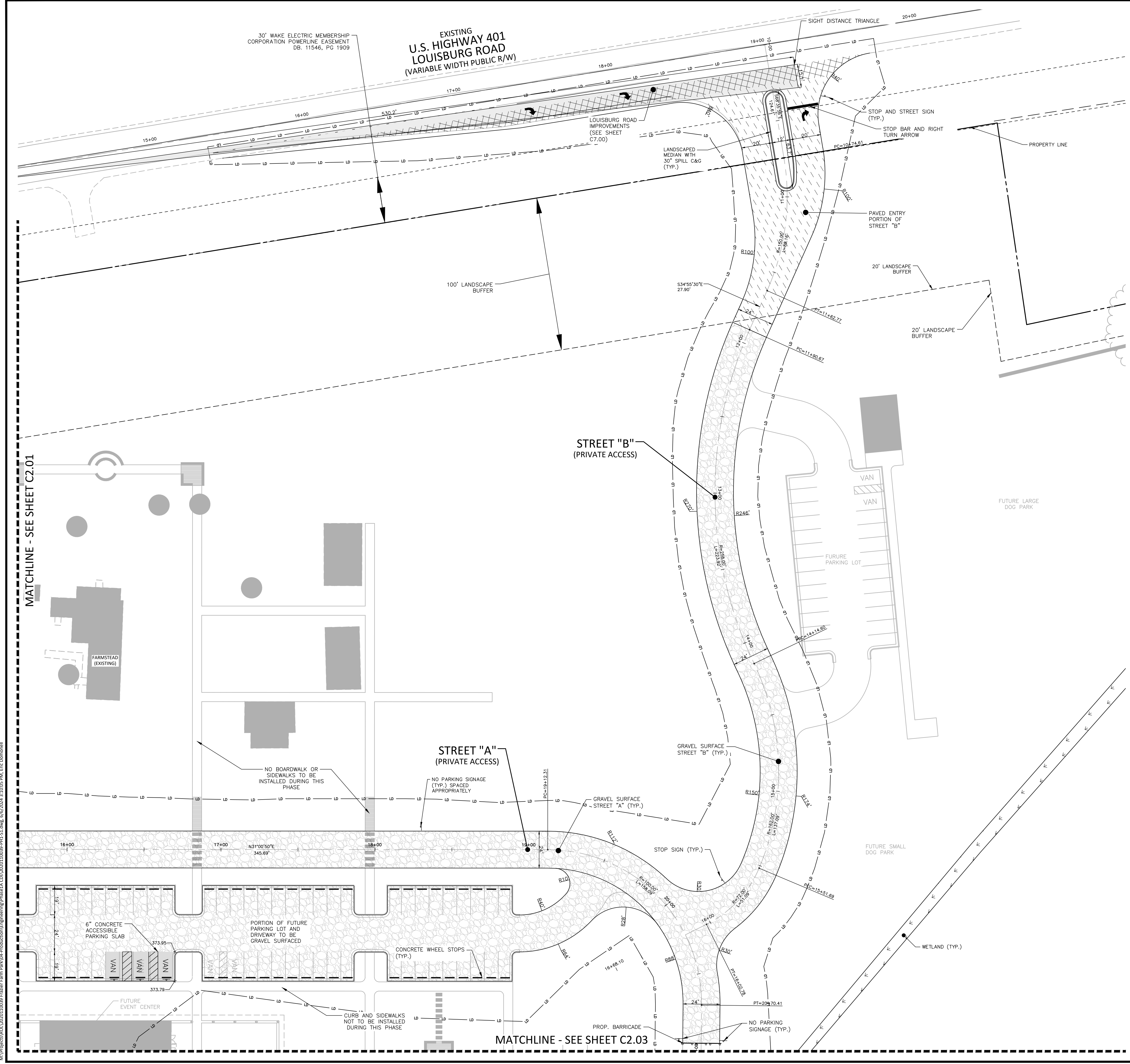
- THIS CONSTRUCTION DOCUMENTS SET HAS BEEN CREATED TO ILLUSTRATE THE GENERAL DESIGN INTENT OF THE PROJECT. THE CONTRACTOR SHALL WORK CLOSELY WITH THE OWNER'S REP. AND NOTIFY HIM AS ADDITIONAL INFORMATION IS NEEDED TO PROPERLY CONSTRUCT/INSTALL/BUILD ELEMENTS DEPICTED HEREIN.
- THE CONTRACTOR SHALL PERFORM HIS OWN INVESTIGATIONS TO THE EXTENT NECESSARY TO DETERMINE THE EFFECTS OF SUB-SURFACE CONDITIONS ON THE WORK AND SHALL BID AND CONSTRUCT THE WORK IN ACCORDANCE WITH HIS FINDINGS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES AND FOR AVOIDING ALL CONFLICTS WITH SAME. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR.
- CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES AND UNUSUAL CONDITIONS TO OWNER'S REP PRIOR TO CONSTRUCTION.
- ALL DISTURBED AREAS AND PROPOSED EARTH GRADING NOT TO BE COVERED BY OTHER SURFACES SHALL BE GRASSED BY SEEDING, FERTILIZING, MULCHING, AND WATERING AS REQUIRED TO OBTAIN AN ACCEPTABLE GROUND COVER, UNLESS SPECIFIED OTHERWISE. ALL AREAS THAT ARE DISTURBED BY CONSTRUCTION NOT IN SCOPE OF WORK, WHETHER INSIDE OR OUTSIDE THE LIMIT OF WORK SHALL BE REPAIRED, GRADED, AND GRASSED AT THE CONTRACTOR'S EXPENSE.
- SEE CIVIL DRAWINGS FOR GRADING AND DRAINAGE INFORMATION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING PROPER DRAINAGE OF ANY AND ALL AREAS WHICH ARE FIELD ADJUSTED DURING CONSTRUCTION.
- CONTRACTOR SHALL RESTORE DAMAGED FINISHES AND REPLACE DAMAGED OR DEFECTIVE UNITS.
- CONTRACTOR SHALL STAKE ALL WALKS, HARDSCAPE AND OTHER PAVED AREAS TO BE COMPLETED AND OBTAIN APPROVAL FROM OWNER'S REP. PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE RESOLVED PRIOR TO CONSTRUCTION. ANY WORK PERFORMED WITHOUT APPROVAL, THE CONTRACTOR IS AT RISK FOR COST OF REPLACEMENT.
- ALL FIELD ADJUSTMENTS SHALL RECEIVE APPROVAL FROM OWNER'S REP. PRIOR TO CONSTRUCTION.
- TEMPORARY EROSION & SEDIMENT CONTROLS (SILT FENCES, ETC.) SHALL BE INSTALLED AT INLETS, PIPES, AND LIMITS OF WORK AREAS WHERE SURFACE RUN-OFF OCCURS UNTIL SOIL STABILIZATION IS COMPLETE.
- CONTRACTOR SHALL MAINTAIN ALL GRASSED AREAS, INCLUDING THE REPAIR OF EROSION AREAS UNTIL GRASS HAS REACHED THE LEVEL OF FINAL ACCEPTANCE.
- ALL EXISTING TREES TO BE SAVED WILL HAVE TREE BARRICADES INSTALLED AROUND THEM PRIOR TO BEGINNING OF DEMOLITION. ALL WORK IN THOSE AREAS TO BE DONE BY HAND. FENCES SHALL BE MAINTAINED AND KEPT IN PLACE AT ALL TIMES.
- ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ALL LOCAL, STATE, AND FEDERAL AGENCIES AND REGULATIONS.
- CONTRACTOR SHALL PROTECT THE PUBLIC FROM CONSTRUCTION AREAS AND ASSOCIATED ACTIVITY DURING CONSTRUCTION.
- DIGITAL BASE FILE SHALL BE MADE AVAILABLE FOR USE IN FIELD LOCATION OF ELEMENTS AND SITE FEATURES. ANY HARD COPY INFORMATION THAT CONFLICTS SHALL BE BROUGHT TO OWNER'S REP. AND/OR LANDSCAPE ARCHITECT'S ATTENTION. HARD COPY INFORMATION SHALL PREVAIL.



INDEX MAP
N.T.S.



ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT TOWN OF ROLESVILLE ENGINEERING DESIGN AND CONSTRUCTION STANDARDS



MATCHLINE - SEE SHEET C2.01

MATCHLINE - SEE SHEET C2.03

M:\Projects\WOL\2020110039 Frazier Farm Park\04-Production\Engineering\Phase1A\CID\2020110039-PH1-S1.dwg, 6/6/2024, 3:10:05 PM, Eric Donnell



McADAMS

The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713

phone 919. 361. 5000
fax 919. 361. 2269
license number: C-0293

www.mcadamsco.com

CLIENT

NAME: TOWN OF ROLESVILLE
ADDRESS: 502 SOUTHTOWN CIRCLE
ADDRESS: ROLESVILLE NC 27571
PHONE: 919.554.6582

FRAZIER FARM PARK
CONSTRUCTION DRAWINGS
PHASE 1A
11624 LOUISBURG ROAD
ROLESVILLE, NORTH CAROLINA



REVISIONS

NO. DATE

PLAN INFORMATION

PROJECT NO. 202011039
FILENAME 2020110039-PH1-S1
CHECKED BY EMD
DRAWN BY SME
SCALE 1"=30'
DATE 06.06.2024

SHEET

SITE PLAN: AREA 'C'

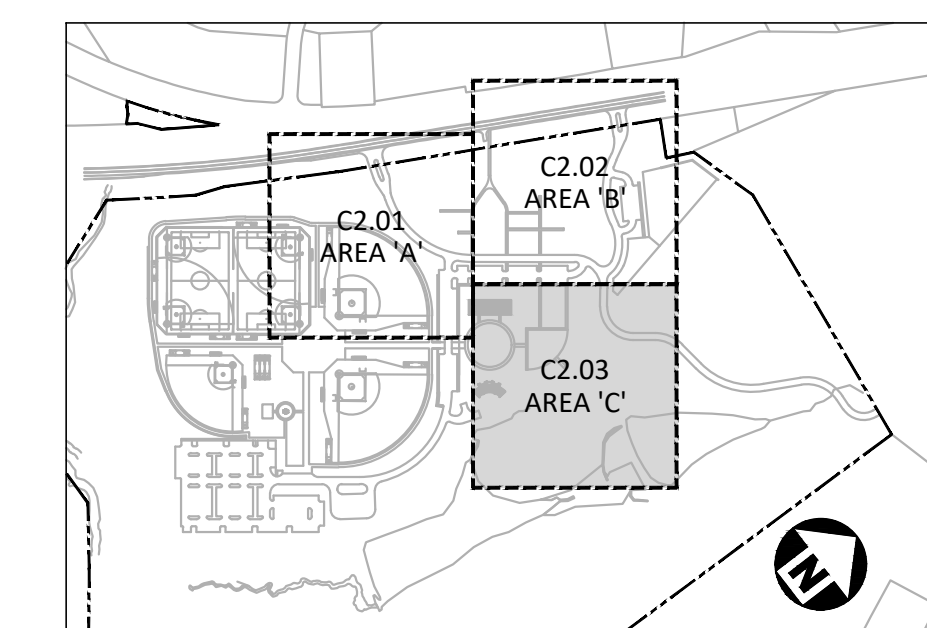
C2.03

SITE LEGEND

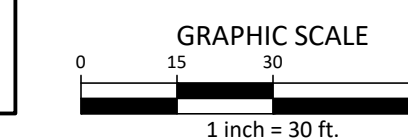
| | |
|--|--|
| | SIGNAGE |
| | YARD LIGHTS |
| | LIGHT POLE |
| | POWER POLE |
| | TRAFFIC DIRECTIONAL ARROW |
| | ACCESSIBLE PARKING STALL |
| | VAN ACCESSIBLE PARKING STALL |
| | PARKING SPACE COUNT |
| | ACCESSIBLE RAMPS |
| | ACCESSIBLE ROUTE |
| | PHASE LINE |
| | PROPERTY LINE |
| | RIGHT-OF-WAY LINE |
| | LOT LINE |
| | EASEMENT LINE |
| | CENTERLINE |
| | HEAVY DUTY ASPHALT PAVEMENT |
| | ABC TRAVEL SURFACE TO BE ASPHALT PAVED IN FUTURE PHASE |
| | US-401 PAVEMENT |

GENERAL SITE PLAN NOTES:

1. THIS CONSTRUCTION DOCUMENTS SET HAS BEEN CREATED TO ILLUSTRATE THE GENERAL DESIGN INTENT OF THE PROJECT. THE CONTRACTOR SHALL WORK CLOSELY WITH THE OWNER'S REP. AND NOTIFY HIM AS ADDITIONAL INFORMATION IS NEEDED TO PROPERLY CONSTRUCT/INSTALL/BUILD ELEMENTS DEPICTED HEREIN.
2. THE CONTRACTOR SHALL PERFORM HIS OWN INVESTIGATIONS TO THE EXTENT NECESSARY TO DETERMINE THE EFFECTS OF SUB-SURFACE CONDITIONS ON THE WORK AND SHALL BID AND CONSTRUCT THE WORK IN ACCORDANCE WITH HIS FINDINGS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES AND FOR AVOIDING ALL CONFLICTS WITH SAME. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR.
4. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES AND UNUSUAL CONDITIONS TO OWNER'S REP PRIOR TO CONSTRUCTION.
5. ALL DISTURBED AREAS AND PROPOSED EARTH GRADING NOT TO BE COVERED BY OTHER SURFACES SHALL BE GRASSED BY SEEDING, FERTILIZING, MULCHING, AND WATERING AS REQUIRED TO OBTAIN AN ACCEPTABLE GROUND COVER, UNLESS SPECIFIED OTHERWISE. ALL AREAS THAT ARE DISTURBED BY CONSTRUCTION NOT IN SCOPE OF WORK, WHETHER INSIDE OR OUTSIDE THE LIMIT OF WORK SHALL BE REPAIRED, GRADED, AND GRASSED AT THE CONTRACTOR'S EXPENSE.
6. SEE CIVIL DRAWINGS FOR GRADING AND DRAINAGE INFORMATION.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING PROPER DRAINAGE OF ANY AND ALL AREAS WHICH ARE FIELD ADJUSTED DURING CONSTRUCTION.
8. CONTRACTOR SHALL RESTORE DAMAGED FINISHES AND REPLACE DAMAGED OR DEFECTIVE UNITS.
9. CONTRACTOR SHALL STAKE ALL WALKS, HARDSCAPE AND OTHER PAVED AREAS TO BE COMPLETED AND OBTAIN APPROVAL FROM OWNER'S REP. PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE RESOLVED PRIOR TO CONSTRUCTION. ANY WORK PERFORMED WITHOUT APPROVAL, THE CONTRACTOR IS AT RISK FOR COST OF REPLACEMENT.
10. ALL FIELD ADJUSTMENTS SHALL RECEIVE APPROVAL FROM OWNER'S REP. PRIOR TO CONSTRUCTION.
11. TEMPORARY EROSION & SEDIMENT CONTROLS (SILT FENCES, ETC.) SHALL BE INSTALLED AT INLETS, PIPES, AND LIMITS OF WORK AREAS WHERE SURFACE RUN-OFF OCCURS UNTIL SOIL STABILIZATION IS COMPLETE.
12. CONTRACTOR SHALL MAINTAIN ALL GRASSED AREAS, INCLUDING THE REPAIR OF EROSION AREAS UNTIL GRASS HAS REACHED THE LEVEL OF FINAL ACCEPTANCE.
13. ALL EXISTING TREES TO BE SAVED WILL HAVE TREE BARRICADES INSTALLED AROUND THEM PRIOR TO BEGINNING OF DEMOLITION. ALL WORK IN THOSE AREAS TO BE DONE BY HAND. FENCES SHALL BE MAINTAINED AND KEPT IN PLACE AT ALL TIMES.
14. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ALL LOCAL, STATE, AND FEDERAL AGENCIES AND REGULATIONS.
15. CONTRACTOR SHALL PROTECT THE PUBLIC FROM CONSTRUCTION AREAS AND ASSOCIATED ACTIVITY DURING CONSTRUCTION.
16. DIGITAL BASE FILE SHALL BE MADE AVAILABLE FOR USE IN FIELD LOCATION OF ELEMENTS AND SITE FEATURES. ANY HARD COPY INFORMATION THAT CONFLICTS SHALL BE BROUGHT TO OWNER'S REP. AND/OR LANDSCAPE ARCHITECT'S ATTENTION. HARD COPY INFORMATION SHALL PREVAIL.



INDEX MAP
N.T.S.



ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT TOWN OF ROLESVILLE ENGINEERING DESIGN AND CONSTRUCTION STANDARDS

CID-23-5

MATCHLINE - SEE SHEET C2.02

LIMITS OF DISTURBANCE

FUTURE CONDITION - NOT TO BE BUILT PER THIS PHASE

FUTURE PLAYGROUND

FUTURE MAINTENANCE BUILDING

100' WS VEGETATIVE SETBACK

30' ZONE 1 NEUSE RIVER BUFFER

20' ZONE 2 NEUSE RIVER BUFFER

EXISTING POND

FUTURE EVENT CENTER

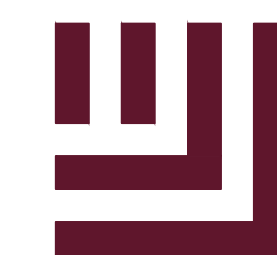
FUTURE EVENT LAWN

FUTURE AMPHITHEATER + STAGE

WETLAND

MATCHLINE - SEE SHEET C2.01

M:\Projects\WOL\2020110039 Frazier Farm PHA1\04-Production\Engineering\Phase1A\CID\2020110039-PH1-S1.dwg, 6/6/2024, 3:10:08 PM, Eric Domoneal



McADAMS

The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713

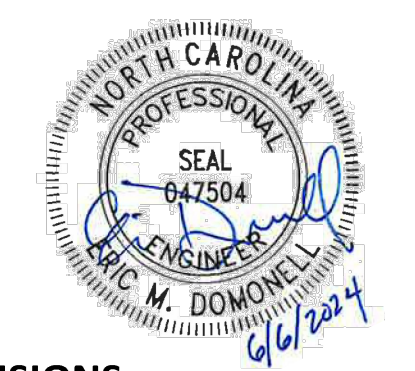
phone 919. 361. 5000
fax 919. 361. 2269
license number: C-0293

www.mcadamsco.com

CLIENT

NAME: TOWN OF ROLESVILLE
ADDRESS: 502 SOUTHTOWN CIRCLE
ADDRESS: ROLESVILLE NC 27571
PHONE: 919.554.6582

FRAZIER FARM PARK
CONSTRUCTION DRAWINGS
PHASE 1A
11624 LOUISBURG ROAD
ROLESVILLE, NORTH CAROLINA



REVISIONS

NO. DATE

PLAN INFORMATION

PROJECT NO. 202011039
FILENAME 202011039-PH1-0A61
CHECKED BY EMD
DRAWN BY SME
SCALE 1"=100'
DATE 06.06.2024

SHEET

OVERALL GRADING & DRAINAGE PLAN

C3.00

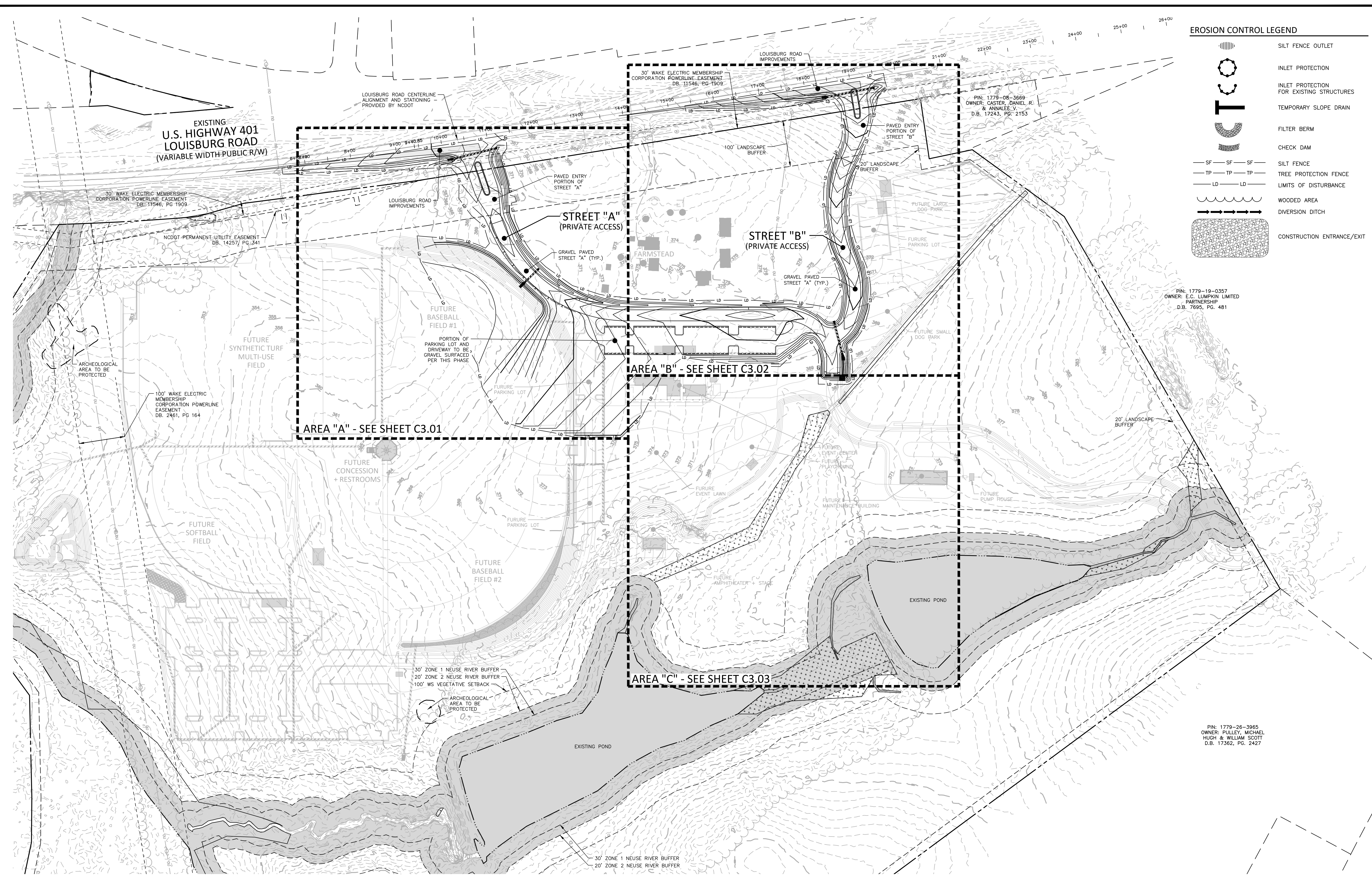
CID-23-5

EROSION CONTROL LEGEND

- SILT FENCE OUTLET
- INLET PROTECTION FOR EXISTING STRUCTURES
- TEMPORARY SLOPE DRAIN
- FILTER BERM
- CHECK DAM
- SILT FENCE
- TREE PROTECTION FENCE
- LIMITS OF DISTURBANCE
- WOODED AREA
- DIVERSION DITCH
- CONSTRUCTION ENTRANCE/EXIT

PIN: 1779-19-0357
OWNER: E.C. LUMPKIN LIMITED PARTNERSHIP
D.B. 7695, PG. 481

PIN: 1779-26-3665
OWNER: PULLEY, MICHAEL HUGH & WILLIAM SCOTT
D.B. 17362, PG. 2427



GRADING LEGEND

- FLARED END SECTION
- ENDWALL SECTION
- CATCH BASIN
- DROP INLET
- STORM SERVICE INLET
- STORM SERVICE ROOF-RAIN
- JUNCTION BOX
- DRAINAGE FLOW ARROW
- LINE BREAK SYMBOL
- TOP & BOTTOM CURB ELEVATIONS
- TOP OF WALL ELEVATION
- BOTTOM OF WALL ELEVATION
- SPOT ELEVATION
- STORM DRAINAGE
- STORM SERVICE LINE
- ROOF DRAIN, 8" ADS NON-PERFORATED TUBING OR EQUAL 1.0% MIN. SLOPE 3" MIN. COVER PVC SCHEDULE 40 IN TRAFFIC AREAS
- TREE PROTECTION FENCE
- LIMITS OF DISTURBANCE
- WOODED AREA
- MAJOR CONTOUR
- MINOR CONTOUR
- EXISTING MINOR CONTOUR
- EASEMENT LINE

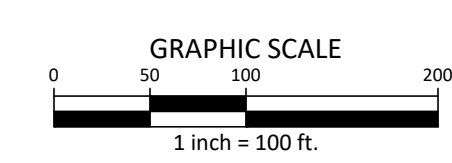
GRADING NOTES

- ALL DIMENSIONS AND GRADES SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION, FOR NECESSARY PLAN OR GRADE CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR ANY WORK DONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
- OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS FOR EXCAVATIONS; FINAL RULE 29CFR PART 1926, SUBPART "P" APPLIES TO ALL EXCAVATIONS EXCEEDING FIVE (5) FEET IN DEPTH. EXCAVATION EXCEEDING TWENTY (20) FEET IN DEPTH REQUIRES THE DESIGN OF A TRENCH SAFETY SYSTEM BY A REGISTERED PROFESSIONAL ENGINEER, PROVIDED BY CONTRACTOR RESPONSIBLE FOR EXCAVATION.
- CONTRACTOR SHALL NOTIFY "NC811" (811) OR (1-800-632-4849) AT LEAST 3 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NC811". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
- A PRE-CONSTRUCTION CONFERENCE WILL BE HELD PRIOR TO ANY LAND DISTURBING ACTIVITY. AS DEEMED NECESSARY, THE OWNER, ENGINEER, CONTRACTOR, AND REPRESENTATIVES FROM NCDOT WILL BE INVITED TO ATTEND THE MEETING. FOR NCDOT REPRESENTATIVES, CONTACT DIVISION OF LAND QUALITY AT (910) 433-3300 PRIOR TO START OF CONSTRUCTION.
- CONSTRUCTION, MAINTENANCE AND REMOVAL OF ALL EROSION CONTROL DEVICES ARE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. TIMING OF REMOVAL SHALL BE COORDINATED WITH THE EROSION CONTROL INSPECTOR.
- EXISTING UTILITIES AND STRUCTURES SHOWN, BOTH UNDERGROUND AND ABOVE GROUND, ARE BASED ON A FIELD SURVEY AND THE BEST AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY FIELD CONDITIONS PRIOR TO BEGINNING RELATED CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
- SOIL UNDER BUILDINGS, PAVED AREAS AND WITHIN SLOPES LESS THAN 4:1 (H:V) SHALL BE APPROVED, PLACED AND COMPACTED AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.

STORM DRAINAGE NOTES:

- ALL STORM DRAINAGE PIPES SHOWN SHALL BE CORRUGATED HDPE UNLESS NOTED OTHERWISE. CONTRACTOR TO COORDINATE WITH THE GEOTECH TO VERIFY TYPE OF BEDDING REQUIRED BASED ON SOIL CONDITIONS.
- ALL STORM DRAINAGE CONSTRUCTION SHALL BE IN ACCORDANCE WITH TOWN OF ROLESVILLE STANDARDS.
- ALL CONCRETE SHALL MEET A MINIMUM 3000 PSI COMPRESSIVE STRENGTH.
- ALL PIPE JOINTS SHALL BE MADE WITH PREFORMED JOINT SEALER, WHICH CONFORMS TO AASHTO SPECIFICATION M-198 FOR TYPE B FLEXIBLE PLASTIC GASKETS UNLESS OTHERWISE NOTED.
- ALL BACKFILL SHALL BE NON-PLASTIC IN NATURE, FREE FROM ROOTS, VEGETATION MATTER, WASTE CONSTRUCTION MATERIAL OR OTHER OBJECTIONABLE MATERIAL. SAID MATERIAL SHALL BE CAPABLE OF BEING COMPACTED BY MECHANICAL MEANS AND SHALL HAVE NO TENDENCY TO FLOW OR BEHAVE IN A PLASTIC MANNER UNDER THE TAMPING BLOWS OR PROOF ROLLING.
- MATERIALS DEEMED BY THE OWNER'S REPRESENTATIVE AS UNSUITABLE FOR BACKFILL PURPOSES SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL.
- BACKFILLING OF TRENCHES SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PIPE IS LAID. THE FILL AROUND THE PIPE SHALL BE THOROUGHLY COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY OBTAINABLE WITH THE STANDARD PROCTOR TEST. THE TOP EIGHT (8) INCHES SHALL BE COMPACTED TO 100 PERCENT STANDARD PROCTOR.
- UNDER NO CIRCUMSTANCES SHALL WATER BE ALLOWED TO RISE IN UNBACKFILLED TRENCHES AFTER PIPE HAS BEEN PLACED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING ALL PIPE AND STRUCTURES FOR CRACKS OR BREAKS, PRIOR TO INSTALLATION. ANY DAMAGED ITEMS SHALL NOT BE INSTALLED.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT TOWN OF ROLESVILLE ENGINEERING DESIGN AND CONSTRUCTION STANDARDS



M:\Projects\NC\202011039 Frazier Farm PH1\04-Production\Engineering\Phase1A_CID\202011039-PH1-0A61.dwg, 6/6/2024 3:10:22 PM, Eric Domonielli



McADAMS

The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713

phone 919. 361. 5000
fax 919. 361. 2269
license number: C-0293

www.mcadamsco.com

CLIENT

NAME: TOWN OF ROLESVILLE
ADDRESS: 502 SOUTHTOWN CIRCLE
ADDRESS: ROLESVILLE NC 27571
PHONE: 919.554.6582

**FRAZIER FARM PARK
CONSTRUCTION DRAWINGS
PHASE 1A
11624 LOUISBURG ROAD
ROLESVILLE, NORTH CAROLINA**



REVISIONS

NO. DATE

PLAN INFORMATION

PROJECT NO. 202011039
FILENAME 2020110039-PH1-G1
CHECKED BY EMD
DRAWN BY SME
SCALE 1"=30'
DATE 06.06.2024

SHEET

**GRADING & DRAINAGE
PLAN: AREA 'A'**

C3.01

CID-23-5

GRADING LEGEND

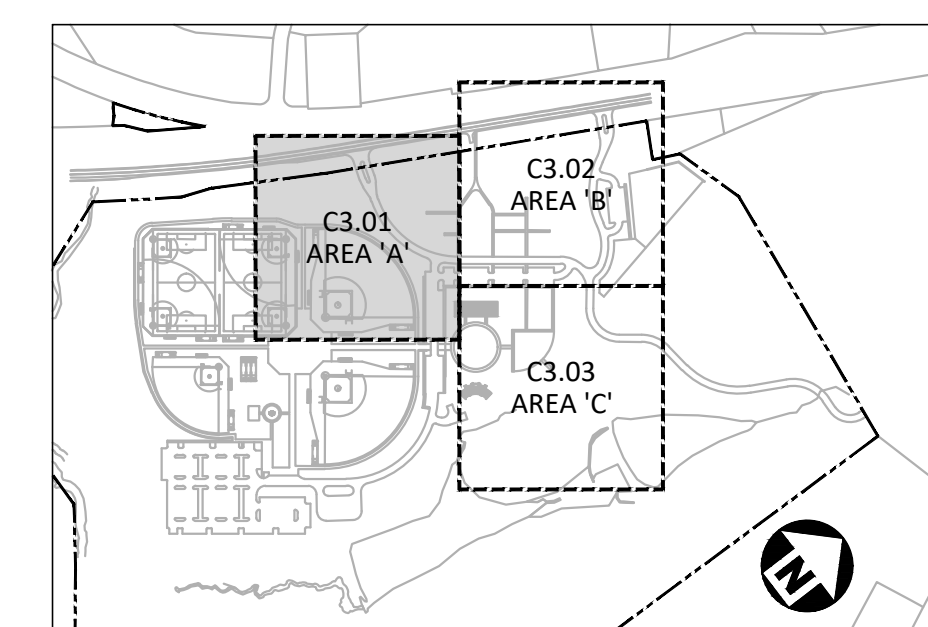
- FLARED END SECTION
- ENDWALL SECTION
- CATCH BASIN
- DROP INLET
- JUNCTION BOX
- DRAINAGE FLOW ARROW
- TOP & BOTTOM CURB ELEVATIONS
- SPOT ELEVATION
- STORM DRAINAGE
- TREE PROTECTION FENCE
- LIMITS OF DISTURBANCE
- WOODED AREA
- MAJOR CONTOUR
- MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EASEMENT LINE
- ACCESSIBLE PARKING AREA
(2% MAX. SLOPE IN ALL DIRECTIONS)

GRADING NOTES

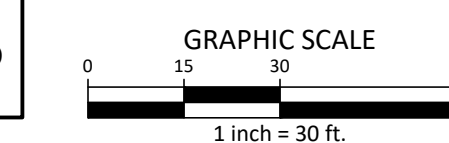
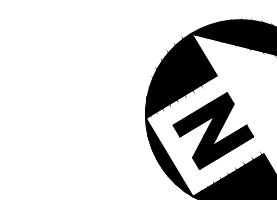
- ALL DIMENSIONS AND GRADES SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. FOR NECESSARY PLAN OR GRADE CHANGES, NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR ANY WORK DONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
- OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS FOR EXCAVATIONS; FINAL RULE 29CFR PART 1926, SUBPART "P" APPLIES TO ALL EXCAVATIONS EXCEEDING FIVE (5) FEET IN DEPTH. EXCAVATION EXCEEDING TWENTY (20) FEET IN DEPTH REQUIRES THE DESIGN OF A TRENCH SAFETY SYSTEM BY A REGISTERED PROFESSIONAL ENGINEER, PROVIDED BY CONTRACTOR RESPONSIBLE FOR EXCAVATION.
- CONTRACTOR SHALL NOTIFY "NC811" (811) OR (1-800-632-4949) AT LEAST 3 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NC811". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
- A PRE-CONSTRUCTION CONFERENCE WILL BE HELD PRIOR TO ANY LAND DISTURBING ACTIVITY. AS DEEMED NECESSARY, THE OWNER, ENGINEER, CONTRACTOR, AND REPRESENTATIVES FROM NCDCEQ WILL BE INVITED TO ATTEND THE MEETING. FOR NCDCEQ REPRESENTATIVES, CONTACT DIVISION OF LAND QUALITY AT (910) 433-3300 PRIOR TO START OF CONSTRUCTION.
- CONSTRUCTION, MAINTENANCE AND REMOVAL OF ALL EROSION CONTROL DEVICES ARE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. TIMING OF REMOVAL SHALL BE COORDINATED WITH THE EROSION CONTROL INSPECTOR.
- EXISTING UTILITIES AND STRUCTURES SHOWN, BOTH UNDERGROUND AND ABOVE GROUND, ARE BASED ON A FIELD SURVEY AND THE BEST AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY FIELD CONDITIONS PRIOR TO BEGINNING RELATED CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
- SOIL UNDER BUILDINGS, PAVED AREAS AND WITHIN SLOPES LESS THAN 4:1 (H:V) SHALL BE APPROVED, PLACED AND COMPACTED AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.

STORM DRAINAGE NOTES:

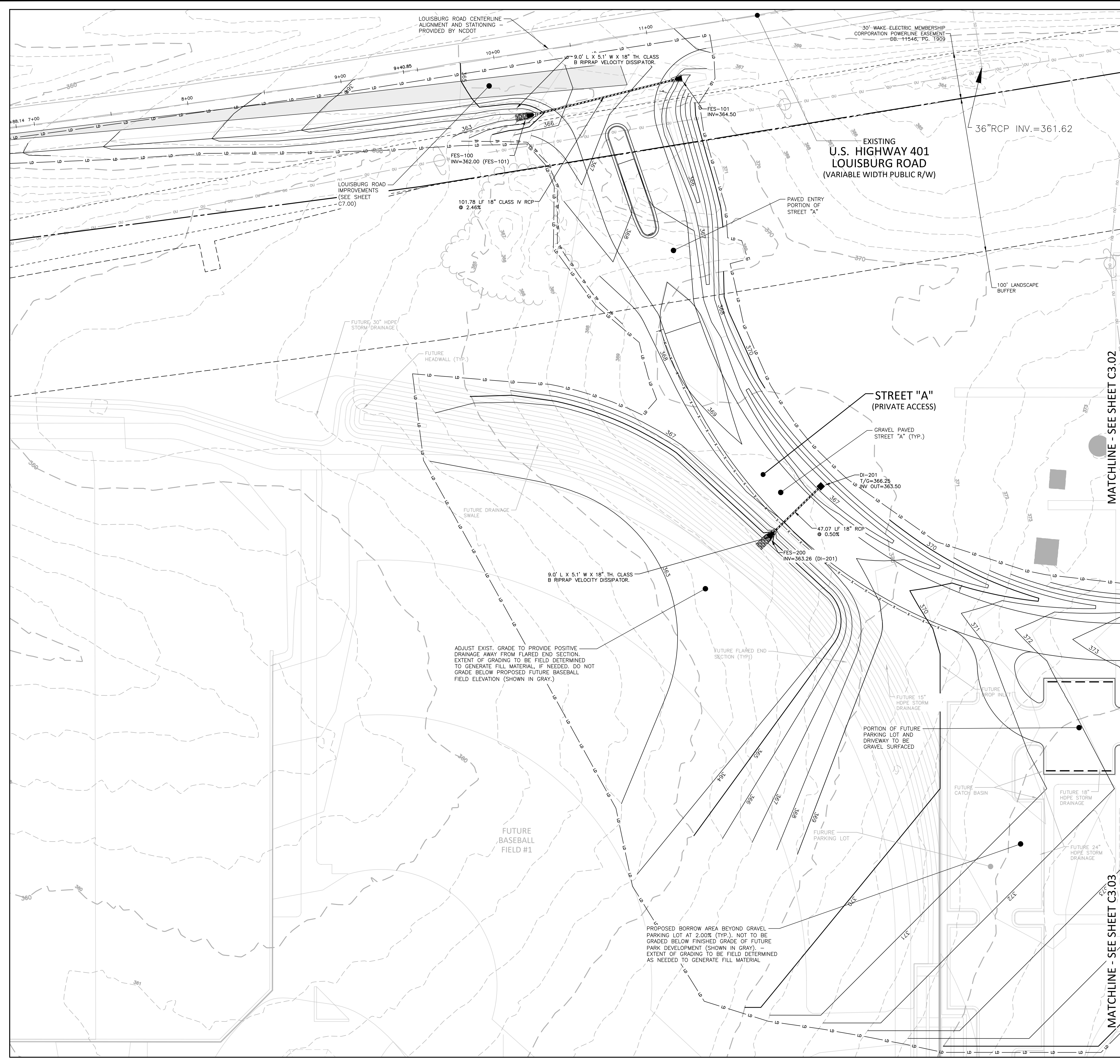
- ALL STORM DRAINAGE PIPES SHOWN SHALL BE CORRUGATED HDPE UNLESS NOTED OTHERWISE. CONTRACTOR TO COORDINATE WITH THE GEOTECH TO VERIFY TYPE OF BEDDING REQUIRED BASED ON SOIL CONDITIONS.
- ALL STORM DRAINAGE CONSTRUCTION SHALL BE IN ACCORDANCE WITH TOWN OF ROLESVILLE STANDARDS.
- ALL CONCRETE SHALL MEET A MINIMUM 3000 PSI COMPRESSIVE STRENGTH.
- ALL PIPE JOINTS SHALL BE MADE WITH PREFORMED JOINT SEALER, WHICH CONFORMS TO AASHTO SPECIFICATION M-198 FOR TYPE B. FLEXIBLE PLASTIC GASKETS UNLESS OTHERWISE NOTED.
- ALL BACKFILL SHALL BE NON-PLASTIC IN NATURE, FREE FROM ROOTS, VEGETATION MATTER, WASTE CONSTRUCTION MATERIAL OR OTHER OBJECTIONABLE MATERIAL. SAID MATERIAL SHALL BE CAPABLE OF BEING COMPACTED BY MECHANICAL MEANS AND SHALL HAVE NO TENDENCY TO FLOW OR BEHAVE IN A PLASTIC MANNER UNDER THE TAMPING BLOWS OR PROOF ROLLING.
- MATERIALS DEEMED BY THE OWNER'S REPRESENTATIVE AS UNSUITABLE FOR BACKFILL PURPOSES SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL.
- BACKFILLING OF TRENCHES SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PIPE IS LAID. THE FILL AROUND THE PIPE SHALL BE THOROUGHLY COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY OBTAINABLE WITH THE STANDARD PROCTOR TEST. THE TOP EIGHT (8) INCHES SHALL BE COMPACTED TO 100 PERCENT STANDARD PROCTOR.
- UNDER NO CIRCUMSTANCES SHALL WATER BE ALLOWED TO RISE IN UNBACKFILLED TRENCHES AFTER PIPE HAS BEEN PLACED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING ALL PIPE AND STRUCTURES FOR CRACKS OR BREAKS, PRIOR TO INSTALLATION. ANY DAMAGED ITEMS SHALL NOT BE INSTALLED.



INDEX MAP
N.T.S.



ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT TOWN OF ROLESVILLE ENGINEERING DESIGN AND CONSTRUCTION STANDARDS



M:\Projects\WOL\2020110039 Frazier Farm Park\04-Production\Engineering\Phase1A\CD\2020110039-PH1-G1.dwg, 6/6/2024 3:10:38 PM, Eric Donnell



McADAMS

The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713

phone 919. 361. 5000
fax 919. 361. 2269
license number: C-0293

www.mcadamsco.com

CLIENT

NAME: TOWN OF ROLESVILLE
ADDRESS: 502 SOUTHTOWN CIRCLE
ADDRESS: ROLESVILLE NC 27571
PHONE: 919.554.6582

**FRAZIER FARM PARK
CONSTRUCTION DRAWINGS
PHASE 1A
11624 LOUISBURG ROAD
ROLESVILLE, NORTH CAROLINA**



REVISIONS

NO. DATE

PLAN INFORMATION

PROJECT NO. 202011039
FILENAME 2020110039-PH1-G1
CHECKED BY EMD
DRAWN BY SME
SCALE 1"=30'
DATE 06.06.2024

SHEET

**GRADING & DRAINAGE
PLAN: AREA 'B'**

C3.02

CID-23-5

GRADING LEGEND

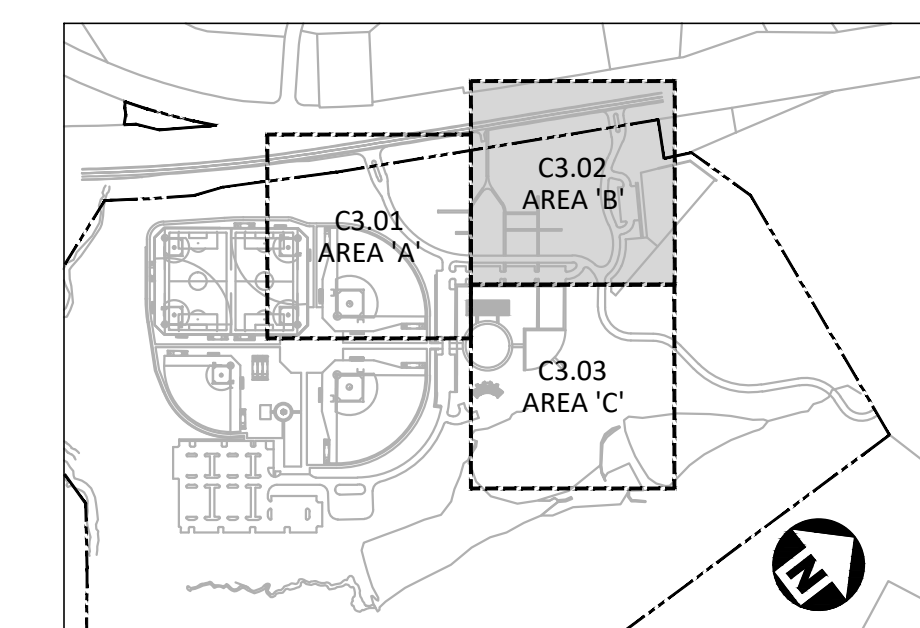
- FLARED END SECTION
- ENDWALL SECTION
- CATCH BASIN
- DROP INLET
- JUNCTION BOX
- DRAINAGE FLOW ARROW
- TOP & BOTTOM CURB ELEVATIONS
- SPOT ELEVATION
- STORM DRAINAGE
- TREE PROTECTION FENCE
- LIMITS OF DISTURBANCE
- WOODED AREA
- MAJOR CONTOUR
- MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EASEMENT LINE
- ACCESSIBLE PARKING AREA
(2% MAX. SLOPE IN ALL DIRECTIONS)

GRADING NOTES

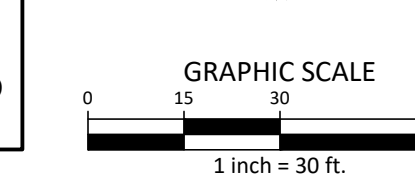
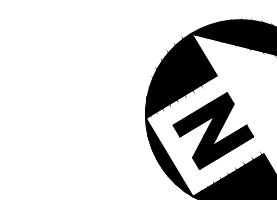
- ALL DIMENSIONS AND GRADES SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. FOR NECESSARY PLAN OR GRADE CHANGES, NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR ANY WORK DONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
- OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS FOR EXCAVATIONS; FINAL RULE 29CFR PART 1926, SUBPART "P" APPLIES TO ALL EXCAVATIONS EXCEEDING FIVE (5) FEET IN DEPTH. EXCAVATION EXCEEDING TWENTY (20) FEET IN DEPTH REQUIRES THE DESIGN OF A TRENCH SAFETY SYSTEM BY A REGISTERED PROFESSIONAL ENGINEER, PROVIDED BY CONTRACTOR RESPONSIBLE FOR EXCAVATION.
- CONTRACTOR SHALL NOTIFY "NC811" (811) OR (1-800-632-4949) AT LEAST 3 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NC811". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
- A PRE-CONSTRUCTION CONFERENCE WILL BE HELD PRIOR TO ANY LAND DISTURBING ACTIVITY. AS DEEMED NECESSARY, THE OWNER, ENGINEER, CONTRACTOR, AND REPRESENTATIVES FROM NCDEQ WILL BE INVITED TO ATTEND THE MEETING. FOR NCDEQ REPRESENTATIVES, CONTACT DIVISION OF LAND QUALITY AT (910) 433-3300 PRIOR TO START OF CONSTRUCTION.
- CONSTRUCTION, MAINTENANCE AND REMOVAL OF ALL EROSION CONTROL DEVICES ARE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. TIMING OF REMOVAL SHALL BE COORDINATED WITH THE EROSION CONTROL INSPECTOR.
- EXISTING UTILITIES AND STRUCTURES SHOWN, BOTH UNDERGROUND AND ABOVE GROUND, ARE BASED ON A FIELD SURVEY AND THE BEST AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY FIELD CONDITIONS PRIOR TO BEGINNING RELATED CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
- SOIL UNDER BUILDINGS, PAVED AREAS AND WITHIN SLOPES LESS THAN 4:1 (H:V) SHALL BE APPROVED, PLACED AND COMPACTED AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.

STORM DRAINAGE NOTES:

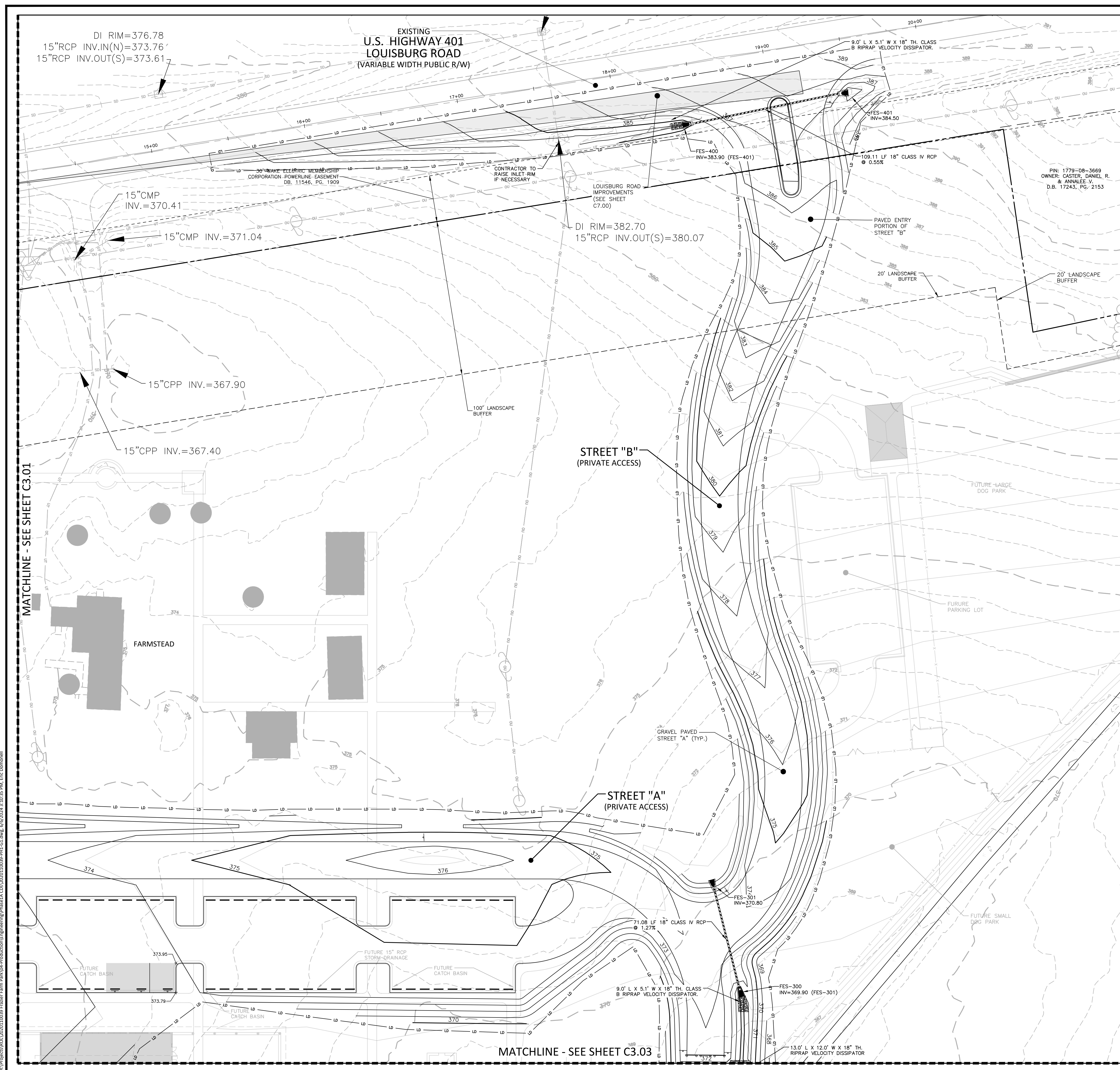
- ALL STORM DRAINAGE PIPES SHOWN SHALL BE CORRUGATED HDPE UNLESS NOTED OTHERWISE. CONTRACTOR TO COORDINATE WITH THE GEOTECH TO VERIFY TYPE OF BEDDING REQUIRED BASED ON SOIL CONDITIONS.
- ALL STORM DRAINAGE CONSTRUCTION SHALL BE IN ACCORDANCE WITH TOWN OF ROLESVILLE STANDARDS.
- ALL CONCRETE SHALL MEET A MINIMUM 3000 PSI COMPRESSIVE STRENGTH.
- ALL PIPE JOINTS SHALL BE MADE WITH PREFORMED JOINT SEALER, WHICH CONFORMS TO AASHTO SPECIFICATION M-198 FOR TYPE B FLEXIBLE PLASTIC GASKETS UNLESS OTHERWISE NOTED.
- ALL BACKFILL SHALL BE NON-PLASTIC IN NATURE, FREE FROM ROOTS, VEGETATION MATTER, WASTE CONSTRUCTION MATERIAL OR OTHER OBJECTIONABLE MATERIAL. SAID MATERIAL SHALL BE CAPABLE OF BEING COMPACTED BY MECHANICAL MEANS AND SHALL HAVE NO TENDENCY TO FLOW OR BEHAVE IN A PLASTIC MANNER UNDER THE TAMPING BLOWS OR PROOF ROLLING.
- MATERIALS DEEMED BY THE OWNER'S REPRESENTATIVE AS UNSUITABLE FOR BACKFILL PURPOSES SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL.
- BACKFILLING OF TRENCHES SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PIPE IS LAID. THE FILL AROUND THE PIPE SHALL BE THOROUGHLY COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY OBTAINABLE WITH THE STANDARD PROCTOR TEST. THE TOP EIGHT (8) INCHES SHALL BE COMPACTED TO 100 PERCENT STANDARD PROCTOR.
- UNDER NO CIRCUMSTANCES SHALL WATER BE ALLOWED TO RISE IN UNBACKFILLED TRENCHES AFTER PIPE HAS BEEN PLACED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING ALL PIPE AND STRUCTURES FOR CRACKS OR BREAKS, PRIOR TO INSTALLATION. ANY DAMAGED ITEMS SHALL NOT BE INSTALLED.



INDEX MAP
N.T.S.



ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT TOWN OF ROLESVILLE ENGINEERING DESIGN AND CONSTRUCTION STANDARDS



MATCHLINE - SEE SHEET C3.03

MATCHLINE - SEE SHEET C3.01

M:\Projects\10039-Frazier Farm Park\104-Production\Engineering\Phase1A_CD\2020110039-PH1-G1.dwg, 6/6/2024, 3:10:35 PM, Eric Donnell



McADAMS

The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713

phone 919. 361. 5000
fax 919. 361. 2269
license number: C-0293

www.mcadamsco.com

CLIENT

NAME: TOWN OF ROLESVILLE
ADDRESS: 502 SOUTHTOWN CIRCLE
ADDRESS: ROLESVILLE NC 27571
PHONE: 919.554.6582

**FRAZIER FARM PARK
CONSTRUCTION DRAWINGS
PHASE 1A
11624 LOUISBURG ROAD
ROLESVILLE, NORTH CAROLINA**



REVISIONS

NO. DATE

PLAN INFORMATION

PROJECT NO. 202011039
FILENAME 2020110039-PH1-G1
CHECKED BY EMD
DRAWN BY SME
SCALE 1"=30'
DATE 06.06.2024

SHEET

**GRADING & DRAINAGE
PLAN: AREA 'C'**

C3.03

CID-23-5

GRADING LEGEND

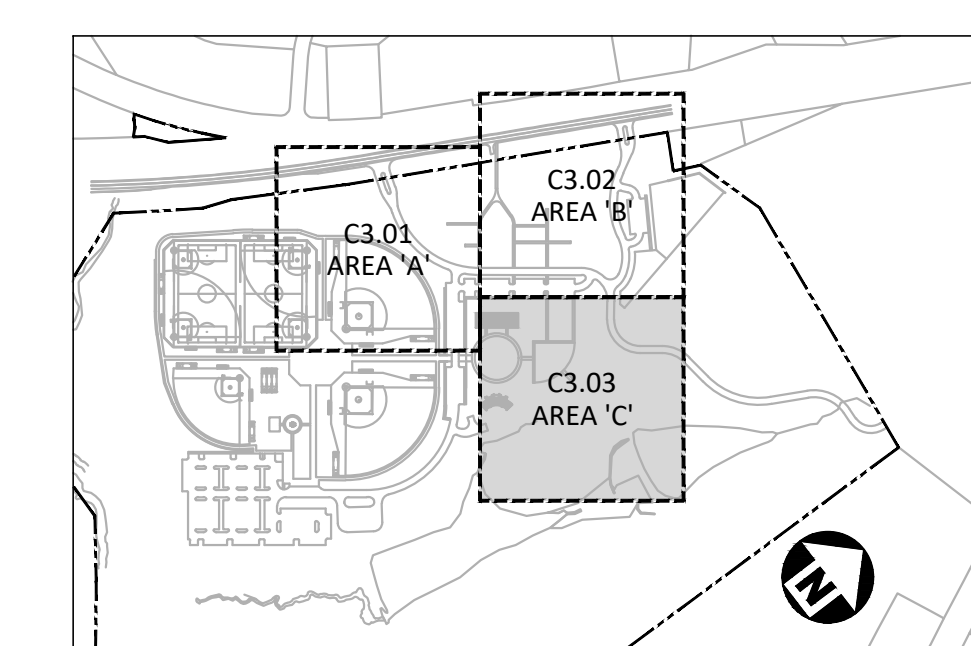
| | |
|--|--|
| | FLARED END SECTION |
| | ENDWALL SECTION |
| | CATCH BASIN |
| | DROP INLET |
| | JUNCTION BOX |
| | DRAINAGE FLOW ARROW |
| | TOP & BOTTOM CURB ELEVATIONS |
| | SPOT ELEVATION |
| | STORM DRAINAGE |
| | TREE PROTECTION FENCE |
| | LIMITS OF DISTURBANCE |
| | WOODED AREA |
| | MAJOR CONTOUR |
| | MINOR CONTOUR |
| | EXISTING MAJOR CONTOUR |
| | EXISTING MINOR CONTOUR |
| | EASEMENT LINE |
| | ACCESSIBLE PARKING AREA (2% MAX. SLOPE IN ALL DIRECTIONS) |

GRADING NOTES

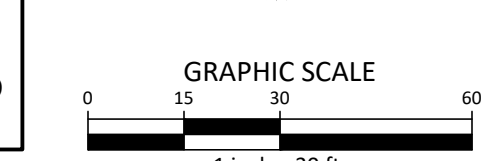
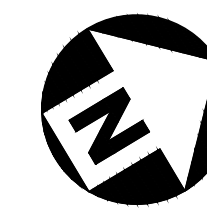
1. ALL DIMENSIONS AND GRADES SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. FOR NECESSARY PLAN OR GRADE CHANGES, NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR ANY WORK DONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
2. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS FOR EXCAVATIONS; FINAL RULE 29CFR PART 1926, SUBPART "P" APPLIES TO ALL EXCAVATIONS EXCEEDING FIVE (5) FEET IN DEPTH. EXCAVATION EXCEEDING TWENTY (20) FEET IN DEPTH REQUIRES THE DESIGN OF A TRENCH SAFETY SYSTEM BY A REGISTERED PROFESSIONAL ENGINEER, PROVIDED BY CONTRACTOR RESPONSIBLE FOR EXCAVATION.
3. CONTRACTOR SHALL NOTIFY "NC811" (811) OR (1-800-632-4949) AT LEAST 3 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NC811". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
4. A PRE-CONSTRUCTION CONFERENCE WILL BE HELD PRIOR TO ANY LAND DISTURBING ACTIVITY. AS DEEMED NECESSARY, THE OWNER, ENGINEER, CONTRACTOR, AND REPRESENTATIVES FROM NCDOT WILL BE INVITED TO ATTEND THE MEETING. FOR NCDOT REPRESENTATIVES, CONTACT DIVISION OF LAND QUALITY AT (910) 433-3300 PRIOR TO START OF CONSTRUCTION.
5. CONSTRUCTION, MAINTENANCE AND REMOVAL OF ALL EROSION CONTROL DEVICES ARE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. TIMING OF REMOVAL SHALL BE COORDINATED WITH THE EROSION CONTROL INSPECTOR.
6. EXISTING UTILITIES AND STRUCTURES SHOWN, BOTH UNDERGROUND AND ABOVE GROUND, ARE BASED ON A FIELD SURVEY AND THE BEST AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY FIELD CONDITIONS PRIOR TO BEGINNING RELATED CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
7. SOIL UNDER BUILDINGS, PAVED AREAS AND WITHIN SLOPES LESS THAN 4:1 (H:V) SHALL BE APPROVED, PLACED AND COMPACTED AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.

STORM DRAINAGE NOTES:

1. ALL STORM DRAINAGE PIPES SHOWN SHALL BE CORRUGATED HDPE UNLESS NOTED OTHERWISE. CONTRACTOR TO COORDINATE WITH THE GEOTECH TO VERIFY TYPE OF BEDDING REQUIRED BASED ON SOIL CONDITIONS.
2. ALL STORM DRAINAGE CONSTRUCTION SHALL BE IN ACCORDANCE WITH TOWN OF ROLESVILLE STANDARDS.
3. ALL CONCRETE SHALL MEET A MINIMUM 3000 PSI COMPRESSIVE STRENGTH.
4. ALL PIPE JOINTS SHALL BE MADE WITH PREFORMED JOINT SEALER, WHICH CONFORMS TO AASHTO SPECIFICATION M-198 FOR TYPE B. FLEXIBLE PLASTIC GASKETS UNLESS OTHERWISE NOTED.
5. ALL BACKFILL SHALL BE NON-PLASTIC IN NATURE, FREE FROM ROOTS, VEGETATION MATTER, WASTE CONSTRUCTION MATERIAL OR OTHER OBJECTIONABLE MATERIAL. SAID MATERIAL SHALL BE CAPABLE OF BEING COMPACTED BY MECHANICAL MEANS AND SHALL HAVE NO TENDENCY TO FLOW OR BEHAVE IN A PLASTIC MANNER UNDER THE TAMPING BLOWS OR PROOF ROLLING.
6. MATERIALS DEEMED BY THE OWNER'S REPRESENTATIVE AS UNSUITABLE FOR BACKFILL PURPOSES SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL.
7. BACKFILLING OF TRENCHES SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PIPE IS LAID. THE FILL AROUND THE PIPE SHALL BE THOROUGHLY COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY OBTAINABLE WITH THE STANDARD PROCTOR TEST. THE TOP EIGHT (8) INCHES SHALL BE COMPACTED TO 100 PERCENT STANDARD PROCTOR.
8. UNDER NO CIRCUMSTANCES SHALL WATER BE ALLOWED TO RISE IN UNBACKFILLED TRENCHES AFTER PIPE HAS BEEN PLACED.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING ALL PIPE AND STRUCTURES FOR CRACKS OR BREAKS, PRIOR TO INSTALLATION. ANY DAMAGED ITEMS SHALL NOT BE INSTALLED.

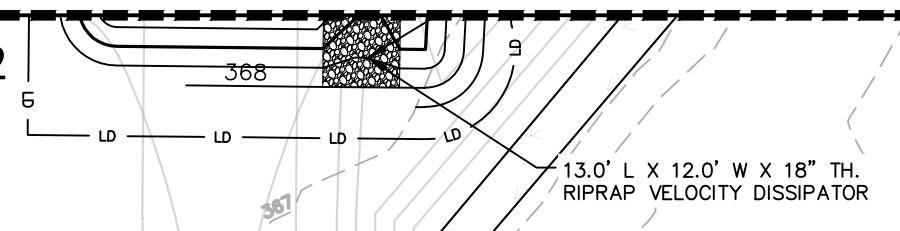


INDEX MAP
N.T.S.



ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT TOWN OF ROLESVILLE ENGINEERING DESIGN AND CONSTRUCTION STANDARDS

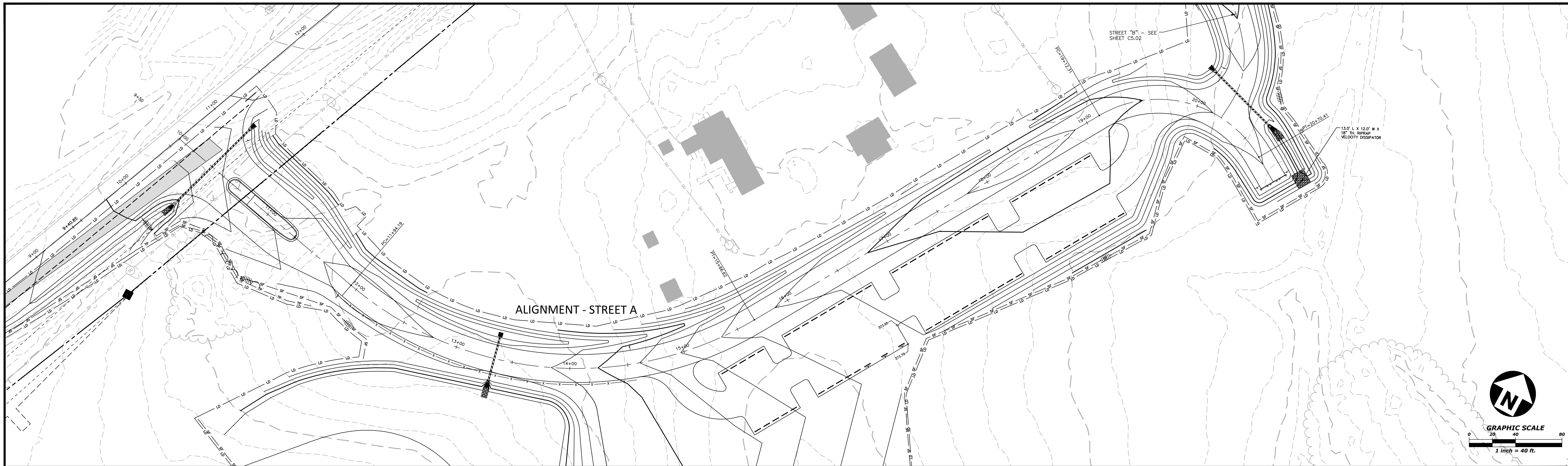
MATCHLINE - SEE SHEET C3.02



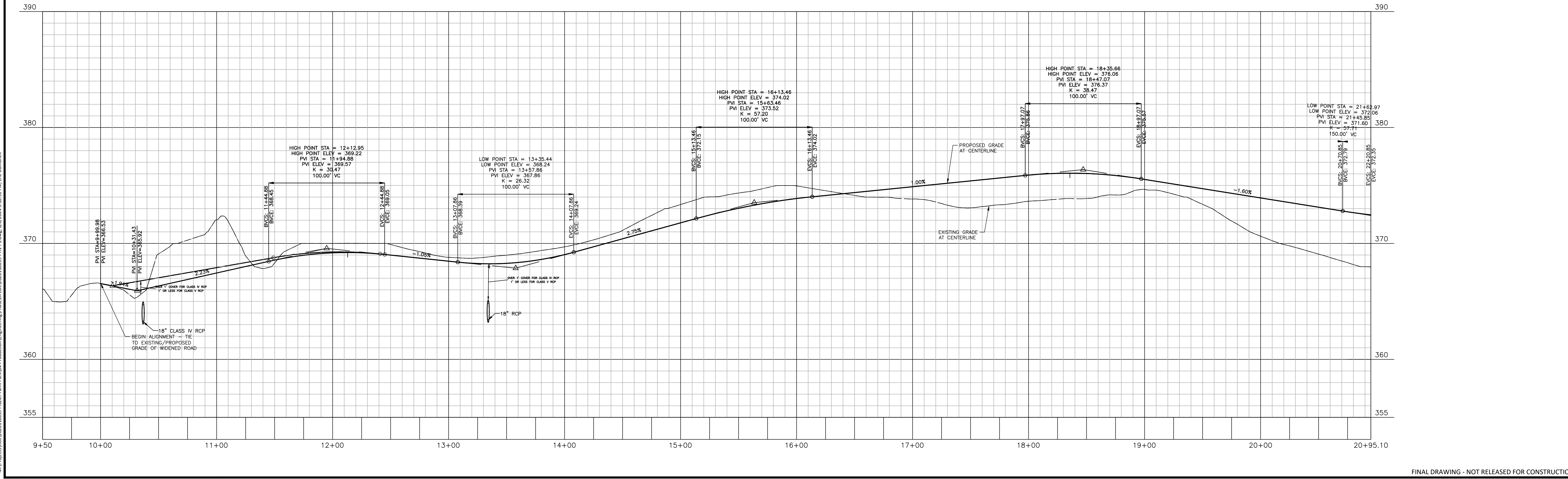
PROPOSED BORROW AREA BEYOND GRAVEL PARKING LOT AT 2.00% (TYP.), NOT TO BE GRADED BELOW FINISHED GRADE OF FUTURE PARK DEVELOPMENT (SHOWN IN GRAY). - EXTENT OF GRADING TO BE FIELD DETERMINED AS NEEDED TO GENERATE FILL MATERIAL

MATCHLINE - SEE SHEET C3.01

M:\Projects\WOL_2020110039 Frazier Farm PH1-G1-Production\Engineering\Phase1A\CD\2020110039-PH1-G1.dwg, 6/6/2024 3:10:38 PM, Eric Donnell



ALIGNMENT - STREET A



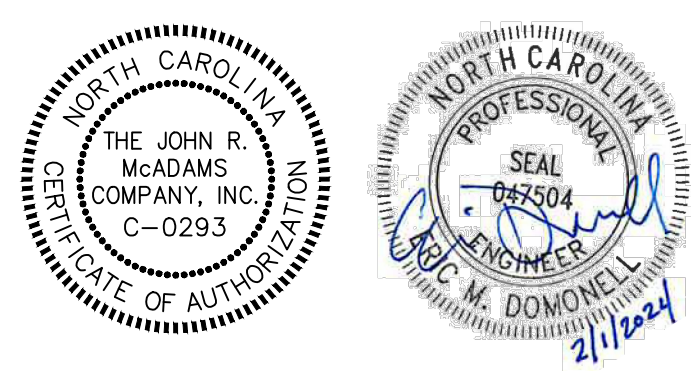
FINAL DRAWING - NOT RELEASED FOR CONSTRUCTION



The John R. McAdams Company, Inc.
621 Hillsborough Street
Suite 500
Raleigh, NC 27603
phone 919. 361. 5000
fax 919. 361. 2269
license number: C-0293, C-187
www.mcadamsco.com

CLIENT
TOWN OF ROLESVILLE
502 SOUTHTOWN CIRCLE
ROLESVILLE, NC 27571
PHONE: 919. 554. 6582

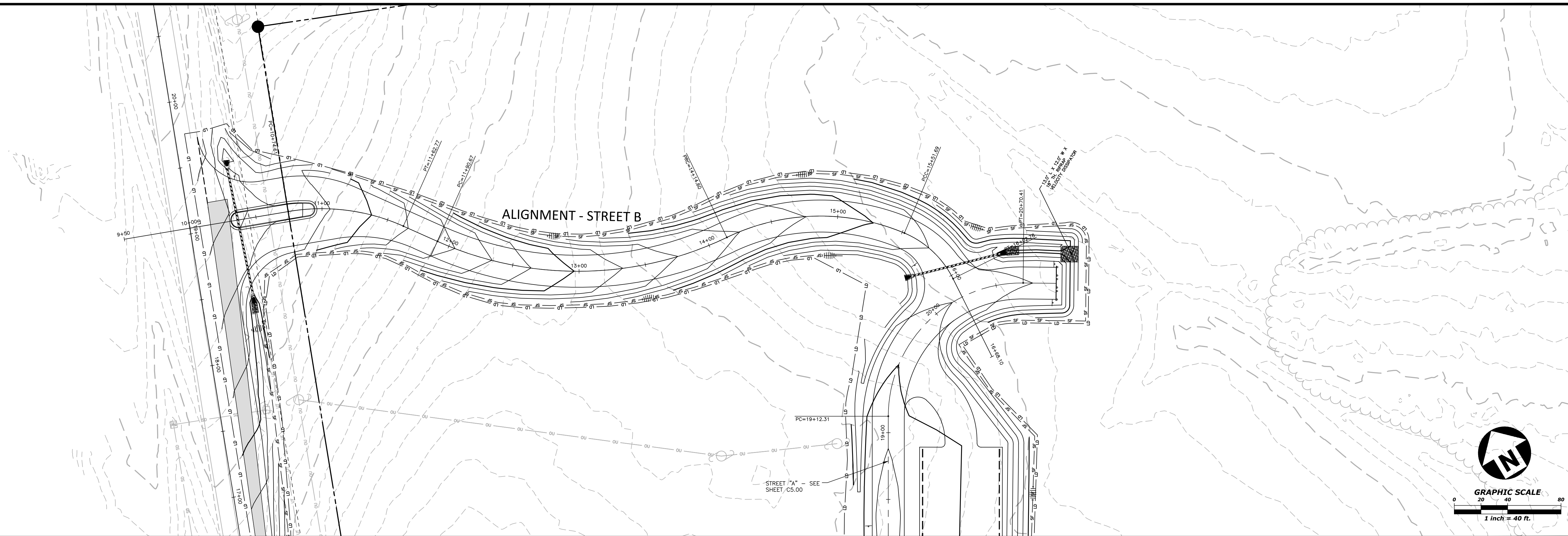
REVISIONS
NO. DATE



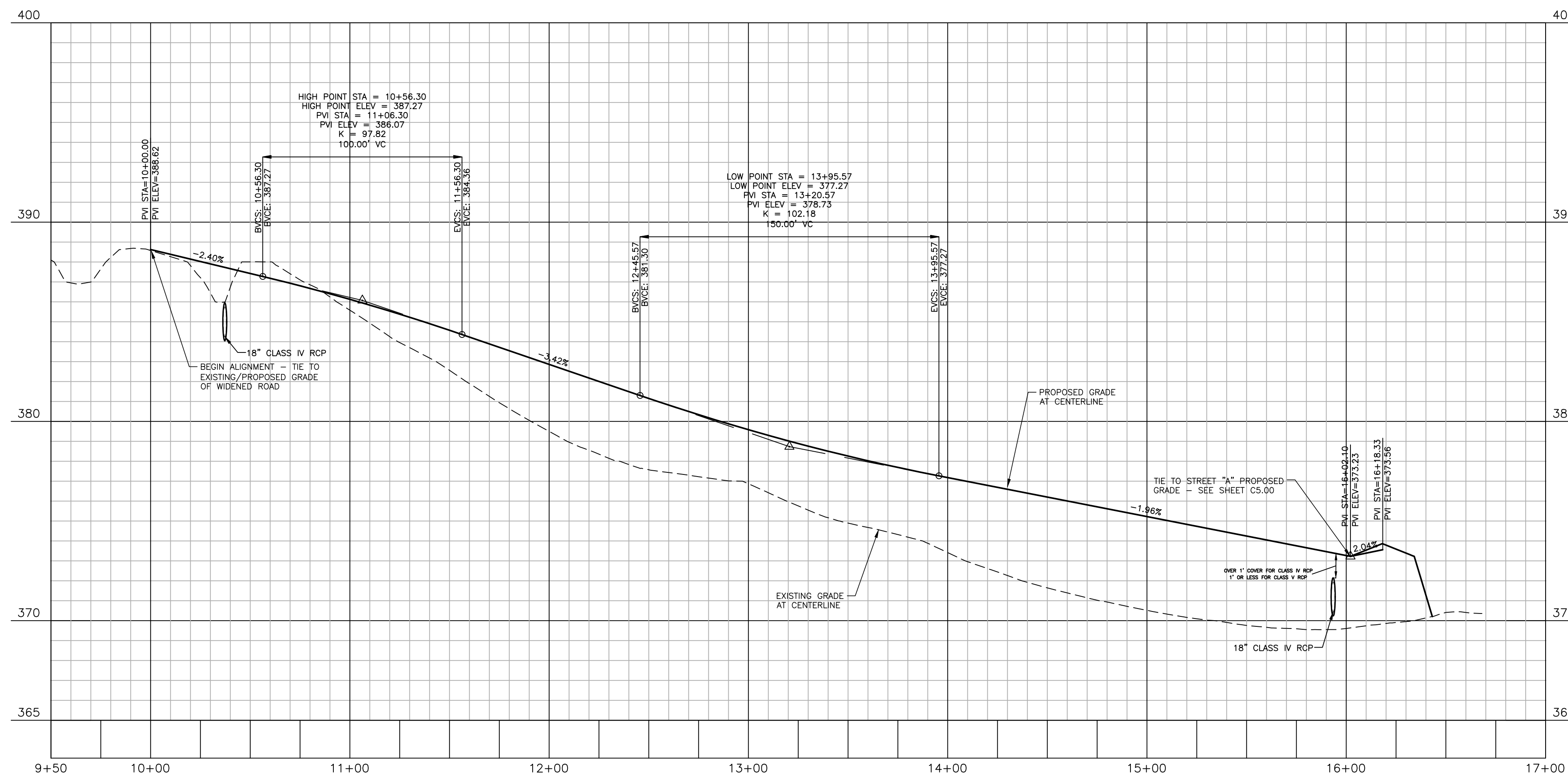
FRAZIER FARM PARK
CONSTRUCTION DRAWINGS - PHASE 1A
11624 LOUISBURG ROAD
ROLESVILLE, NORTH CAROLINA

PLAN INFORMATION
PROJECT NO. 2020110039
FILENAME 2020110039-PH1-P1
CHECKED BY EMD
DRAWN BY SME
SCALE H:1"=40' / V:1"=4'
DATE 02.01.2024

PLAN AND PROFILE
STREET "A", STA. 10+00 THRU STA. 20+95.10
C5.00



ALIGNMENT - STREET B



FINAL DRAWING - NOT RELEASED FOR CONSTRUCTION

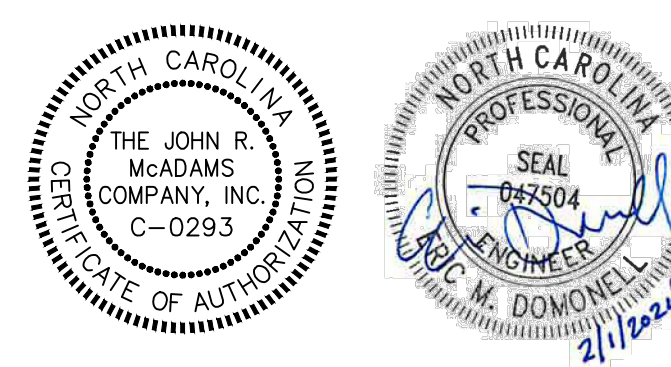
M:\Projects\B0110039\Frazer Farm\Phase1A\CD\202110039-PH1-P1.dwg, 6/6/2024 3:10:33 PM, LFC Domonell



The John R. McAdams Company, Inc.
621 Hillsborough Street
Suite 500
Raleigh, NC 27603
phone 919. 361. 5000
fax 919. 361. 2269
license number: C-0293, C-187
www.mcadamsco.com

CLIENT
TOWN OF ROLESVILLE
502 SOUTHTOWN CIRCLE
ROLESVILLE, NC 27571
PHONE: 919. 554. 6582

REVISIONS
NO. DATE



FRAZIER FARM PARK
CONSTRUCTION DRAWINGS - PHASE 1A
11624 LOUISBURG ROAD
ROLESVILLE, NORTH CAROLINA

PLAN INFORMATION
PROJECT NO. 2020110039
FILENAME 2020110039-PH1-P1
CHECKED BY EMD
DRAWN BY SME
SCALE H:1"=40' / V:1"=4'
DATE 02.01.2024

PLAN AND PROFILE
STREET "B", STA. 10+00 THRU STA. 16+35

C5.01

CITY OF RALEIGH PUBLIC UTILITIES STANDARD UTILITY NOTES (AS APPLICABLE)

- 1. ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS, DETAILS & SPECIFICATIONS (REFERENCE: CORPUD HANDBOOK, CURRENT EDITION)
2. UTILITY SEPARATION REQUIREMENTS:
a. A DISTANCE OF 100' SHALL BE MAINTAINED BETWEEN SANITARY SEWER & ANY PRIVATE OR PUBLIC WATER SUPPLY SOURCE SUCH AS AN IMPOUNDED RESERVOIR USED AS A SOURCE OF DRINKING WATER.
b. WHEN INSTALLING WATER &/OR SEWER MAINS, THE HORIZONTAL SEPARATION BETWEEN UTILITIES SHALL BE 10'.
c. WHERE IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANITARY SEWER PASSES OVER A WATERMAIN, DIP MATERIALS OR STEEL ENCASEMENT EXTENDED 10' ON EACH SIDE OF CROSSING MUST BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS.
d. 5.0' MINIMUM HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL SANITARY SEWER & STORM SEWER FACILITIES, UNLESS DIP MATERIAL IS SPECIFIED FOR SANITARY SEWER.
e. MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL WATERMAIN & RCP STORM DRAIN CROSSINGS; MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL SANITARY SEWER & RCP STORM DRAIN CROSSINGS.
f. ALL OTHER UNDERGROUND UTILITIES SHALL CROSS WATER & SEWER FACILITIES WITH 18" MIN. VERTICAL SEPARATION REQUIRED.
3. ANY NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW & APPROVAL OF AN AMENDED PLAN &/OR PROFILE BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PRIOR TO CONSTRUCTION.
4. CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER & SEWER SERVICE TO EXISTING RESIDENCES & BUSINESSES THROUGHOUT CONSTRUCTION OF PROJECT.
5. 3.0' MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCEMAINS. 4.0' MINIMUM COVER IS REQUIRED ON ALL REUSE MAINS.
6. IT IS THE DEVELOPER'S RESPONSIBILITY TO ABANDON OR REMOVE EXISTING WATER & SEWER SERVICES NOT BEING USED IN REDEVELOPMENT OF A SITE UNLESS OTHERWISE DIRECTED BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT.
7. INSTALL 3/4" COPPER WATER SERVICES WITH METERS LOCATED AT ROW OR WITHIN A 2'X2' WATERLINE EASEMENT IMMEDIATELY ADJACENT.
8. INSTALL 4" PVC SEWER SERVICES @ 1.0% MINIMUM GRADE WITH CLEANOUTS LOCATED AT ROW OR EASEMENT LINE & SPACED EVERY 75 LINEAR FEET MAXIMUM.
9. PRESSURE REDUCING VALVES ARE REQUIRED ON ALL WATER SERVICES EXCEEDING 80 PSI; BACKWATER VALVES ARE REQUIRED ON ALL SANITARY SEWER SERVICES HAVING BUILDING DRAINS LOWER THAN 1.0' ABOVE THE NEXT UPSTREAM MANHOLE.
10. ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM NCDM/Q, USACE &/OR FEMA FOR ANY RIPARIAN BUFFER, WETLAND &/OR FLOODPLAIN IMPACTS (RESPECTIVELY) PRIOR TO CONSTRUCTION.
11. NCDOT / RAILROAD ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK (INCLUDING MAIN EXTENSIONS & SERVICE TAPS) WITHIN STATE OR RAILROAD ROW PRIOR TO CONSTRUCTION.
12. GREASE INTERCEPTOR / OIL WATER SEPARATOR SIZING CALCULATIONS & INSTALLATION SPECIFICATIONS SHALL BE APPROVED BY THE CORPUD FOG PROGRAM COORDINATOR PRIOR TO ISSUANCE OF A BUILDING PERMIT.
13. CROSS-CONNECTION CONTROL PROTECTION DEVICES ARE REQUIRED BASED ON DEGREE OF HEALTH HAZARD INVOLVED AS LISTED IN APPENDIX-B OF THE RULES GOVERNING PUBLIC WATER SYSTEMS IN NORTH CAROLINA.

NOTES:

DEEDS OF EASEMENT FOR SANITARY SEWER PURPOSES TO CITY OF RALEIGH RECORDED IN BOOK 12249, PAGE 864 AND BOOK 12466, PAGE 1149 AND AS SHOWN ON RECORDED PLAT IN BOOK OF MAPS 2006, PAGES 2216 AND 2217, WAKE COUNTY REGISTRY.

(DEED OF EASEMENT SUPERSEDED BY BM 2008 PG 480 & 481)

RIGHT OF WAY AND UTILITY EASEMENTS RECORDED IN BOOK 13736, PAGES 1287 AND 1294 AND AS SHOWN ON RECORDED PLAT IN BOOK OF MAPS 2009, PAGE 1091, WAKE COUNTY REGISTRY.

(AS SHOWN ON SURVEY)

DEEDS OF EASEMENT FOR SANITARY SEWER PURPOSES TO CITY OF RALEIGH RECORDED IN BOOK 12249, PAGE 860 AND BOOK 12466, PAGE 1171 AND AS SHOWN ON RECORDED PLAT IN BOOK OF MAPS 2006, PAGES 2216 AND 2217, WAKE COUNTY REGISTRY.

BY-PASS PUMPING NOTES:

- 1. DEVELOPER SHALL PROVIDE 30 DAYS ADVANCE WRITTEN NOTICE TO PROPERTY OWNER FOR ANY WORK REQUIRED WITHIN AN EXISTING CITY OF RALEIGH UTILITY EASEMENT TRAVERSING PRIVATE PROPERTY.
2. A BYPASS PLAN SEALED BY A PE PROFESSIONAL ENGINEER MUST BE SUBMITTED TO CITY OF RALEIGH PUBLIC UTILITIES PRIOR TO PUMPING OPERATIONS TO COORDINATE WITH ENGINEERING STAFF. PUMPS SHOULD BE SIZED TO HANDLE THE PEAK FLOW (2.5 TIMES THE AVERAGE DAILY FLOW) FOR THE LINE OR AREA OF WORK.

TRAFFIC CONTROL:

- 1. ALL EXISTING DRIVES, ROADS, SIDEWALKS, PAVED AREAS IMPACTED BY CONSTRUCTION OPERATIONS, SHALL BE REPLACED TO EXISTING CONDITION OR BETTER.

TEMPORARY SKIMMER BASIN SPECIFICATIONS:

- 1. 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 OR DISPOSE OF IT PROPERLY.
2. ENSURE THAT FILL MATERIAL FOR THE EMBANKMENT IS FREE OF ROOTS, WOODY VEGETATION, ORGANIC MATTER, AND OTHER OBJECTIONABLE MATERIAL.
3. SHAPE THE BASIN TO THE SPECIFIED DIMENSIONS. PREVENT THE SKIMMING DEVICE FROM SETTLING INTO THE MUD BY EXCAVATING A SETTLEMENT PIT UNDER THE SKIMMER OR PROVIDING A LOW SURFACE OF STONE OR TIMBER.
4. PLACE THE BARREL (TYPICALLY 4-INCH SCHEDULE 40 PVC PIPE) ON A FIRM, SMOOTH FOUNDATION OF IMPERVIOUS SOIL.
5. PLACE A MINIMUM DEPTH OF 2 FEET OF COMPACTED BACKFILL OVER THE PIPE SILLWALL BEFORE CROSSING IT WITH CONSTRUCTION EQUIPMENT.
6. ASSEMBLE THE SKIMMER FOLLOWING THE MANUFACTURER'S INSTRUCTIONS, OR AS DESIGNED.
7. LAY THE ASSEMBLED SKIMMER ON THE BOTTOM OF THE BASIN WITH THE FLEXIBLE JOINT AT THE INLET OF THE BARREL PIPE.
8. EARTHEN SPILLWAYS - INSTALL THE SPILLWAY IN UNDISTURBED SOIL TO THE GREATEST EXTENT POSSIBLE.
9. INLETS - DISCHARGE WATER INTO THE BASIN IN A MANNER TO PREVENT EROSION.
10. EROSION CONTROL - CONSTRUCT THE STRUCTURE SO THAT THE DISTURBED AREA IS MINIMIZED.
11. INSTALL POROUS BAFFLES AS SPECIFIED IN PRACTICE 6.65, POROUS BAFFLES.
12. AFTER ALL THE SEDIMENT-PRODUCING AREAS HAVE BEEN PERMANENTLY STABILIZED, FOLLOW THE BASIN REMOVAL SEQUENCE.

CONSTRUCTION SEQUENCE - STAGE 1

- 1. REQUEST PRE-CONSTRUCTION MEETING WITH DEMLR RALEIGH REGIONAL OFFICE AT LEAST 72 HOURS PRIOR TO COMMENCING THE PROJECT.
2. EROSION AND SEDIMENT CONTROL (E&S) PERMIT AND A CERTIFICATE OF COVERAGE (COC) MUST BE OBTAINED BEFORE ANY LAND DISTURBING ACTIVITIES INCLUDING TIMBERING AND DEMOLITION OCCUR.
3. INSTALL TREE PROTECTION FENCE AT FINAL LOCATIONS SHOWN. CALL NCDOT TO INSPECT TREE PROTECTION FENCE.
4. ATTEND PRE-CONSTRUCTION MEETING WITH NCDCEQ EROSION CONTROL INSPECTOR.
5. OBTAIN GRADING PERMIT.
6. INSTALL CONSTRUCTION ENTRANCE, SILT FENCE WITH OUTLETS, AND TEMPORARY STREAM CROSSING AS SHOWN ON THIS EROSION CONTROL PLAN STAGE 1.
7. INSTALL ALL REMAINING PERIMETER EROSION CONTROL MEASURES AS SHOWN TO PREVENT EROSION AND SEDIMENTATION FROM OCCURRING WHEN GENERAL GRADING COMMENCES.
8. OBTAIN CERTIFICATE OF COMPLIANCE THROUGH ON-SITE INSPECTION BY NCDCEQ EROSION CONTROL INSPECTOR.
9. PROCEED WITH CLEARING OF SITE.
10. ALL EROSION AND SEDIMENTATION CONTROL PRACTICES SHALL BE CHECKED BY CONTRACTOR FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY WEEK.
11. CLEAN SEDIMENT BASINS WHEN ONE-HALF FULL.
12. ALL AREAS AND SLOPES DISTURBED DURING CONSTRUCTION AND EXPOSED SHALL BE STABILIZED WITH TEMPORARY SEEDING AND MULCHING WITHIN 14 CALENDAR DAYS.
13. MAINTAIN SOIL EROSION CONTROL MEASURES UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
14. WITH APPROVAL FROM NCDCEQ EROSION CONTROL INSPECTOR MOVE TO EROSION CONTROL PLAN STAGE 2.

CONSTRUCTION SEQUENCE - STAGE 2

- 1. PROCEED WITH GRADING/BUILDING CONSTRUCTION.
2. INSTALL STORM DRAINAGE SYSTEM AND DIVERT FLOW TO INLETS WITH EXCAVATED INLET PROTECTION.
3. DRAIN AND REDUCE THE SEDIMENT BASIN UTILIZING THE SEDIMENT FILTER BAG WHICH WILL BE CONTINUOUSLY MONITORED DURING OPERATION.
4. CLEAN SEDIMENT BASIN WHEN ONE-HALF FULL.
5. ALL EROSION AND SEDIMENTATION CONTROL PRACTICES SHALL BE CHECKED BY CONTRACTOR FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY WEEK.
6. ALL AREAS AND SLOPES DISTURBED DURING CONSTRUCTION AND EXPOSED SHALL BE STABILIZED WITH TEMPORARY SEEDING AND MULCHING WITHIN 14 CALENDAR DAYS.
7. CONTINUE INSTALLATION OF PAVEMENT, CURB AND GUTTER.
8. ALL EROSION AND SEDIMENTATION CONTROL PRACTICES SHALL BE CHECKED BY CONTRACTOR FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY WEEK.
9. ALL AREAS AND SLOPES DISTURBED DURING CONSTRUCTION AND EXPOSED SHALL BE STABILIZED WITH TEMPORARY SEEDING AND MULCHING WITHIN 14 CALENDAR DAYS.
10. PERIMETER MEASURES MUST BE LEFT IN PLACE UNTIL ALL UPLAND AREAS ARE PERMANENTLY STABILIZED.
11. FILL IN EXCAVATED STORAGE AREAS AND DEWATER USING SEDIMENT FILTER BAGS.
12. WHEN THE PROJECT IS COMPLETE, THE PERMITTEE SHALL CONTACT DEMLR TO CLOSE OUT THE E&S PLAN.

EROSION CONTROL NOTES:

- 1. EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSTALLED AND INSPECTED PRIOR TO ANY GRADING ON SITE.
2. REQUIRED TREE PROTECTION FENCING SHALL BE INSTALLED AND INSPECTED AND A PRE-CONSTRUCTION CONFERENCE SCHEDULED WITH THE TOWN'S URBAN FORESTER PRIOR TO BEGINNING LAND DISTURBANCE.
3. GRADING PERMIT WILL NOT BE ISSUED UNTIL NCDCEQ HAS RECEIVED NOTIFICATION FROM THE ECOSYSTEM ENHANCEMENT PROGRAM OR AN APPROVED NUTRIENT OFFSET BANK THAT A RECEIPT HAS BEEN ISSUED TO THE DEVELOPER AND THE LOCAL GOVERNMENT STATING THE NITROGEN BUY DOWN HAS BEEN COMPLETED.
4. SEDIMENT/EROSION CONTROL DEVICES MUST BE CHECKED AFTER EACH STORM EVENT.
5. IN ADDITION TO THE REQUIREMENT DURING CONSTRUCTION FOR THE INSPECTION OF EROSION CONTROL DEVICES AFTER EVERY RAINFALL, THE CONTRACTOR SHALL INSPECT THE EROSION AND SEDIMENT CONTROL DEVICES AND OFFSITE ROADWAYS DAILY.
6. A COPY OF THE APPROVED EROSION CONTROL PLAN MUST BE ON FILE AT THE JOB SITE AT ALL TIMES.
7. CONSTRUCTION, MAINTENANCE, AND REMOVAL OF ALL EROSION CONTROL DEVICES ARE THE RESPONSIBILITY OF THE GRADING CONTRACTOR UNLESS OTHERWISE NOTED.
8. ANY GRADING BEYOND THE DENOTED LIMITS SHOWN ON THE PLAN IS A VIOLATION OF THE COUNTY EROSION CONTROL ORDINANCE AND IS SUBJECT TO A FINE.
9. NO DEBRIS SHALL BE TRACKED ONTO ANY EXISTING PAVED AREAS OR PUBLIC RIGHT OF WAY.
10. DURING THE CONSTRUCTION PHASE, ADDITIONAL EROSION AND SEDIMENT CONTROLS MAY BE REQUIRED IF THE PROPOSED MEASURES DO NOT CONTAIN THE SEDIMENT ON SITE.
11. PROTECTION OF EXISTING VEGETATION: AT THE START OF GRADING INVOLVING THE STRIPPING OF TOPSOIL OR LOWERING OF EXISTING GRADE AROUND A TREE, A CLEAN, SHARP, VERTICAL CUT SHALL BE MADE AT THE EDGE OF THE TREE SAVE AREA AT THE SAME TIME AS OTHER EROSION CONTROL MEASURES ARE INSTALLED.
12. A CONSTRUCTION SEQUENCE HAS BEEN PROVIDED.
13. CUT AND FILL SLOPE THAT IS TWO TO ONE (2:1) OR GREATER SHALL BE STABILIZED WITH PERMANENT SLOPE RETENTION DEVICES OR A SUITABLE COMBINATION OF PLANTINGS AND RETENTION DEVICES.
14. PROVIDE INLET PROTECTION AROUND ALL SITE STORAGE INLETS.
15. CONTRACTOR TO VERIFY SILT FENCE OUTLET PLACEMENT AT LOW POINTS AS THEY EXIST OR DEVELOP.
16. TEMPORARY DIVERSIONS SHALL BE MAINTAINED DAILY BY CONTRACTOR SO THAT THEY ARE FUNCTIONAL AT THE END OF EACH WORKDAY AND WHEN STOPPING WORK FOR RAIN.
17. THE TREE PROTECTION FENCE SHALL BE MAINTAINED ON THE SITE UNTIL ALL SITE WORK IS COMPLETED AND THE FINAL SITE INSPECTION IS SCHEDULED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY (CO).
18. THE STREETS IN FRONT OF THE PROJECT AREA WILL BE KEPT CLEAN AT ALL TIMES OR A WASH STATION WILL BE REQUIRED.
19. THE PROJECT MAY REQUIRE A PRE-CONSTRUCTION CONFERENCE BEFORE THE GRADING PERMIT IS ISSUED.
20. THE SKIMMER AND SEDIMENT BASIN OUTLET PIPE MUST BE ON SITE BEFORE THE GRADING PERMIT IS ISSUED.
21. THE TREE PROTECTION FENCE SHALL BE MAINTAINED ON THE SITE UNTIL ALL SITE WORK IS COMPLETED AND THE FINAL SITE INSPECTION IS SCHEDULED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY (CO).
22. THE SKIMMER AND SEDIMENT BASIN OUTLET PIPE MUST BE ON SITE BEFORE THE GRADING PERMIT IS ISSUED.
23. THE TREE PROTECTION FENCING SHALL NOT BE MOVED AND THERE SHALL BE NO ENCROACHMENT INTO SUCH PROTECTED AREAS(S) WITHOUT WRITTEN AUTHORIZATION OF THE TOWN'S ZONING COMPLIANCE STAFF.
24. CONSTRUCTION ENTRANCES MUST BE MODIFIED TO ACHIEVE ADA COMPLIANCE WHERE APPLICABLE.
25. THE STREETS IN FRONT OF THE PROJECT AREA WILL BE KEPT CLEAN AT ALL TIMES OR A WASH STATION WILL BE REQUIRED.
26. THE SKIMMER AND SEDIMENT BASIN OUTLET PIPE MUST BE ON SITE BEFORE THE GRADING PERMIT IS ISSUED.
27. THE TREE PROTECTION FENCING SHALL NOT BE MOVED AND THERE SHALL BE NO ENCROACHMENT INTO SUCH PROTECTED AREAS(S) WITHOUT WRITTEN AUTHORIZATION OF THE TOWN'S ZONING COMPLIANCE STAFF.

STOCKPILE NOTES

- DESIGN CRITERIA
A. STOCKPILE FOOTPRINTS SHALL BE SETBACK A MINIMUM OF 25' FROM ADJACENT PROPERTY LINES.
B. STOCKPILE HEIGHT SHALL NOT EXCEED 35 FEET.
C. STOCKPILE SLOPES SHALL BE 2:1 OR FLATTER.
D. OFF-SITE SPILL OR BORROW AREAS MUST BE IN COMPLIANCE WITH WAKE COUNTY UDO AND STATE REGULATIONS.
E. SEEDING OR COVERING STOCKPILES WITH TARPS OR MULCH IS REQUIRED AND WILL REDUCE EROSION PROBLEMS.
F. IF A STOCKPILE IS TO REMAIN FOR FUTURE USE AFTER THE PROJECT IS COMPLETE (BUILDERS, ETC.), THE FINANCIAL RESPONSIBLE PARTY MUST NOTIFY WAKE COUNTY OF A NEW RESPONSIBLE PARTY FOR THAT STOCKPILE.
G. THE USE OF STAGED SEEDING AND MULCHING ON A CONTINUAL BASIS WHILE THE STOCKPILE IS IN USE IS REQUIRED.
H. ESTABLISH AND MAINTAIN A VEGETATIVE BUFFER AT THE TOE OF THE SLOPE (WHERE PRACTICAL).
I. STOCKPILE MUST HAVE SILT FENCE WRAPPED AROUND THE LOW SIDE(S) AND A SILT FENCE OUTLET AT ALL LOW POINTS.

TEMPORARY SEEDING SCHEDULE

Table with 3 columns: SEEDING DATE, SEEDING MIXTURE, APPLICATION RATE. Rows include JAN 1 - MAY 1, MAY 1 - AUG 15, and AUG 15 - DEC 30.

SOIL AMENDMENTS
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 4,000 LB/AC GROUND AGRICULTURE LIMESTONE AND 750 LB/AC 10-10-10 FERTILIZER (FROM AUG 15 - DEC 30, INCREASE 10-10-10 FERTILIZER TO 1000 LB/AC).

MULCH
APPLY 4000 LB/AC STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL.

MAINTENANCE
JAN 1 - AUG 15: REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE, AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

AUG 15 - DEC 30: REPAIR AND REFERTILIZE DAMAGED AREAS IMMEDIATELY. TOP DRESS WITH 50 LB/AC OF NITROGEN IN MARCH. IF IT IS NECESSARY TO EXTEND TEMPORARY COVER BEYOND JUNE 15, OVERSEED WITH 50 LB/AC KOBE LESPEDeza IN LATE FEBRUARY OR EARLY MARCH.

NOTE: USE THE TEMPORARY SEEDING SCHEDULE ONLY WHEN DATE IS NOT CORRECT TO USE THE PERMANENT SEEDING SCHEDULE.

PERMANENT SEEDING SCHEDULE

Table with 3 columns: SEEDING DATE, SEEDING MIXTURE, APPLICATION RATE. Rows include AUG 25 - OCT (BEST) and FEB - APR 15 (POSSIBLE).

SOIL AMENDMENTS
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 4,000 LB/AC GROUND AGRICULTURE LIMESTONE AND 1000 LB/AC 10-10-10 FERTILIZER.

MULCH
APPLY 4000 LB/AC STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL.

MAINTENANCE
INSPECT AND REPAIR MULCH FREQUENTLY. REFERTILIZE IN LATE WINTER OF THE FOLLOWING YEAR; USE SOIL TESTS OR APPLY 150 LB/AC 10-10-10 FERTILIZER. MOW REGULARLY TO A HEIGHT OF 2-4 INCHES.

TEMPORARY DIVERSION SPECIFICATIONS:

- 1. REMOVE AND PROPERLY DISPOSE OF ALL TREES, BRUSH, STUMPS, AND OTHER OBJECTIONABLE MATERIAL IN THE LOCATIONS OF TEMPORARY DIVERSIONS PRIOR TO CONSTRUCTION OF DIVERSION CHANNELS AND/OR RIDGES.
2. ENSURE THAT THE MINIMUM CONSTRUCTED CROSS SECTION MEETS ALL DESIGN REQUIREMENTS.
3. ENSURE THAT THE TOP OF THE DIKE IS NOT LOWER AT ANY POINT THAN THE REGULATIONS.
4. PROVIDE SUFFICIENT ROOM AROUND DIVERSIONS TO PERMIT MACHINE REGRADEING AND CLEANOUT.
5. VEGETATE THE RIDGE IMMEDIATELY AFTER CONSTRUCTION, UNLESS IT WILL REMAIN IN PLACE LESS THAN 30 WORKING DAYS.
6. MAINTENANCE - INSPECT TEMPORARY DIVERSIONS ONCE A WEEK AND AFTER EVERY RAINFALL.

SEEDBED PREPARATION

AREAS TO BE SEED TO BE SCARIFIED 4" DEEP. A FIRM, WELPULVERIZED, UNIFORM SEEDBED SHOULD BE PROVIDED. FERTILIZER SHALL BE PLACED DURING SCARIFICATION AS FOLLOWS:

LIME: 45 LBS / 1,000 SF
PHOSPHOROUS: 20 LBS / 1,000 SF
FERTILIZER: 17 LBS / 1,000 SF

REQUIRED GROUND STABILIZATION TIMEFRAMES

Table with 3 columns: SITE AREA DESCRIPTION, STABILIZE WITHIN THIS MANY CALENDAR DAYS AFTER CEASING LAND DISTURBANCE, TIMEFRAME VARIATIONS. Rows include PERIMETER DIKES, HIGH QUALITY WATER (HOW) ZONES, SLOPES STEEPER THAN 3:1, SLOPES 3:1 TO 4:1, and AREAS WITH SLOPES FLATTER THAN 4:1.

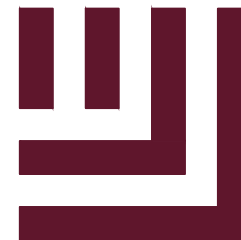
- BUILDING WASTES HANDLING
• NO PAINT OR LIQUID WASTES IN STREAM OR STORM DRAINS
• DEDICATED AREAS FOR DEMOLITION, CONSTRUCTION AND OTHER WASTES MUST BE LOCATED 50' FROM STORM DRAINS AND STREAMS UNLESS NO REASONABLE ALTERNATIVES AVAILABLE.
• EARTHEN-MATERIAL STOCKPILES MUST BE LOCATED 50' FROM STORM DRAINS AND STREAMS UNLESS NO REASONABLE ALTERNATIVES AVAILABLE.
• CONCRETE MATERIALS MUST BE CONTROLLED TO AVOID CONTACT WITH SURFACE WATER, WETLANDS, OR BUFFERS.

CONTRACTOR'S MAINTENANCE PLAN:

- 1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY WEEK.
2. SEDIMENT BASINS SHALL BE INSPECTED REGULARLY DURING LAND DISTURBING ACTIVITIES AND AFTER EACH RUNOFF-PRODUCING RAINFALL.
3. SEDIMENT FENCES SHALL BE INSPECTED AT LEAST ONCE A WEEK AND AFTER EACH RUNOFF PRODUCING RAINFALL.
4. DIVERSION DITCHES MUST REMAIN IN PLACE UNTIL PROJECT IS STABILIZED.
5. EROSION CONTROL DURING SITE CONSTRUCTION WILL BE ACCOMPLISHED BY USE OF SILT FENCING AND SILT FENCE OUTLETS.

BASIN REMOVAL SEQUENCE:

- 1. SCHEDULE A SITE MEETING WITH THE ENVIRONMENTAL CONSULTANT TO DETERMINE IF A BASIN CAN BE REMOVED.
2. CONTACT NCDCEQ - RALEIGH REGIONAL OFFICE (919) 791-4200 TO DETERMINE THE DIVISION OF ENERGY, MINERAL AND LAND RESOURCES CONTACT PERSON TO RECEIVE DEWATERING NOTIFICATIONS.
3. AFTER RECEIVING POSITIVE CONFIRMATION FROM NCDCEQ-DEMLR THAT YOU MAY REMOVE THE BASIN OR ON DAY 11, WHICHEVER IS SOONER.
4. PERFORM SEEDBED PREPARATION, SEED, MULCH AND ANCHOR ANY RESULTING BARE AREAS IMMEDIATELY.
5. INSTALL VELOCITY DISSIPATORS AND/OR LEVEL SPREADERS AS REQUIRED ON THE EROSION CONTROL PLAN.
6. WHEN SITE IS FULLY STABILIZED, CALL ENVIRONMENTAL CONSULTANT FOR APPROVAL OF REMOVING REMAINING TEMPORARY EROSION CONTROL MEASURES AND ADVISE ON WHEN SITE CAN BE ISSUED A CERTIFICATE OF COMPLETION.



McADAMS

The John R. McAdams Company, Inc. 2905 Meridian Parkway Durham, NC 27713

phone 919. 361. 5000 fax 919. 361. 2269 license number: C-0293

www.mcadamsco.com

CLIENT

TOWN OF ROLESVILLE ADDRESS: 502 SOUTHTOWN CIRCLE ADDRESS: ROLESVILLE NC 27571 PHONE: 919.554.6582

FRAZIER FARM PARK CONSTRUCTION DRAWINGS PHASE 1A 11624 LOUISBURG ROAD ROLESVILLE, NORTH CAROLINA



REVISIONS

NO. DATE

PLAN INFORMATION

PROJECT NO. 2020110039 FILENAME 2020110039-PH1-ECN1 CHECKED BY EMD DRAWN BY SME SCALE N/A DATE 06.06.2024

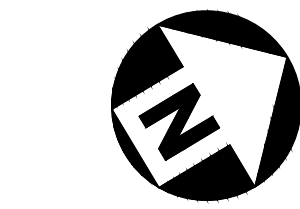
SHEET

EROSION CONTROL NOTES

C6.00

CID-23-5

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT TOWN OF ROLESVILLE ENGINEERING DESIGN AND CONSTRUCTION STANDARDS



GRAPHIC SCALE 0 50 100 200 1 inch = 100 ft.



McADAMS

The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713

phone 919.361.5000
fax 919.361.2269
license number: C-0293

www.mcadamsco.com

CLIENT

NAME: TOWN OF ROLESVILLE
ADDRESS: 502 SOUTHTOWN CIRCLE
ADDRESS: ROLESVILLE NC 27571
PHONE: 919.554.6582

FRAZIER FARM PARK
CONSTRUCTION DRAWINGS
PHASE 1A
11624 LOUISBURG ROAD
ROLESVILLE, NORTH CAROLINA



REVISIONS

NO. DATE

PLAN INFORMATION

PROJECT NO. 202011039
FILENAME 2020110039-PH1-EC1
CHECKED BY EMD
DRAWN BY SME
SCALE 1"=100'
DATE 06.06.2024

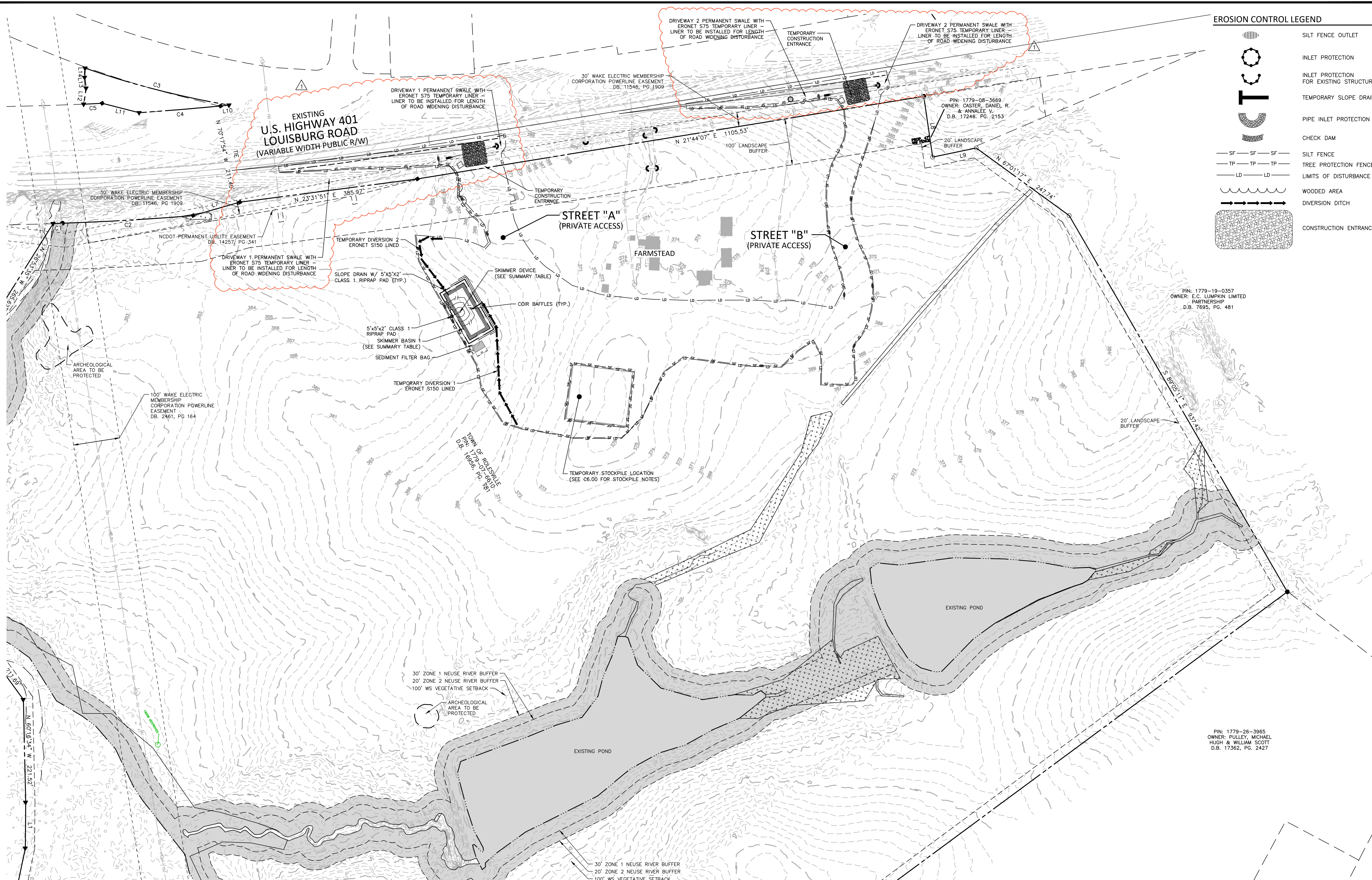
SHEET

OVERALL EROSION CONTROL PLAN-STAGE I

C6.01

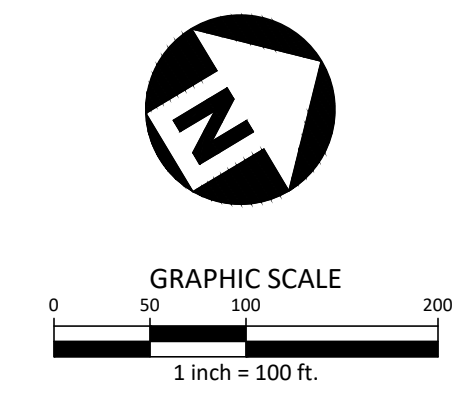
EROSION CONTROL LEGEND

- SILT FENCE OUTLET
- INLET PROTECTION FOR EXISTING STRUCTURES
- TEMPORARY SLOPE DRAIN
- PIPE INLET PROTECTION
- CHECK DAM
- SILT FENCE
- TREE PROTECTION FENCE
- LIMITS OF DISTURBANCE
- WOODED AREA
- DIVERSION DITCH
- CONSTRUCTION ENTRANCE/EXIT



| SEDIMENT BASIN SUMMARY TABLE | | | | |
|------------------------------|-----------------------|-----------------|----------------------------|------------|
| ID | BOTTOM LENGTH X WIDTH | SPILLWAY LENGTH | SKIMMER AND ORIFICE SIZE | SIDESLOPES |
| SB-1 | 100' X 37' | 15' | 2" SKIMMER W/ 1.4" ORIFICE | 2:1 |

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT TOWN OF ROLESVILLE ENGINEERING DESIGN AND CONSTRUCTION STANDARDS



M:\Projects\WOL\2020110039 Frazier Farm Park\04-Production\Engineering\Phase1A\CD\2020110039-PH1-EC1.dwg, 6/6/2024 3:11:06 PM, Eric Donnell



McADAMS

The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713

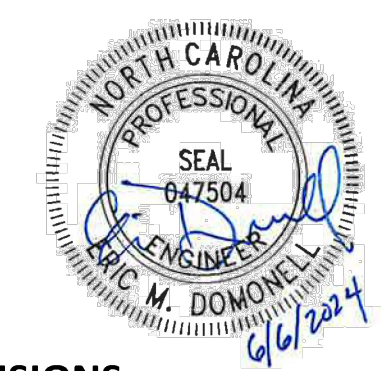
phone 919.361.5000
fax 919.361.2269
license number: C-0293

www.mcadamsco.com

CLIENT

NAME: TOWN OF ROLESVILLE
ADDRESS: 502 SOUTHTOWN CIRCLE
ADDRESS: ROLESVILLE NC 27571
PHONE: 919.554.6582

FRAZIER FARM PARK
CONSTRUCTION DRAWINGS
PHASE 1A
11624 LOUISBURG ROAD
ROLESVILLE, NORTH CAROLINA



REVISIONS

NO. DATE

PLAN INFORMATION

PROJECT NO. 202011039
FILENAME 2020110039-PH1-EC2
CHECKED BY EMD
DRAWN BY SME
SCALE 1"=100'
DATE 06.06.2024

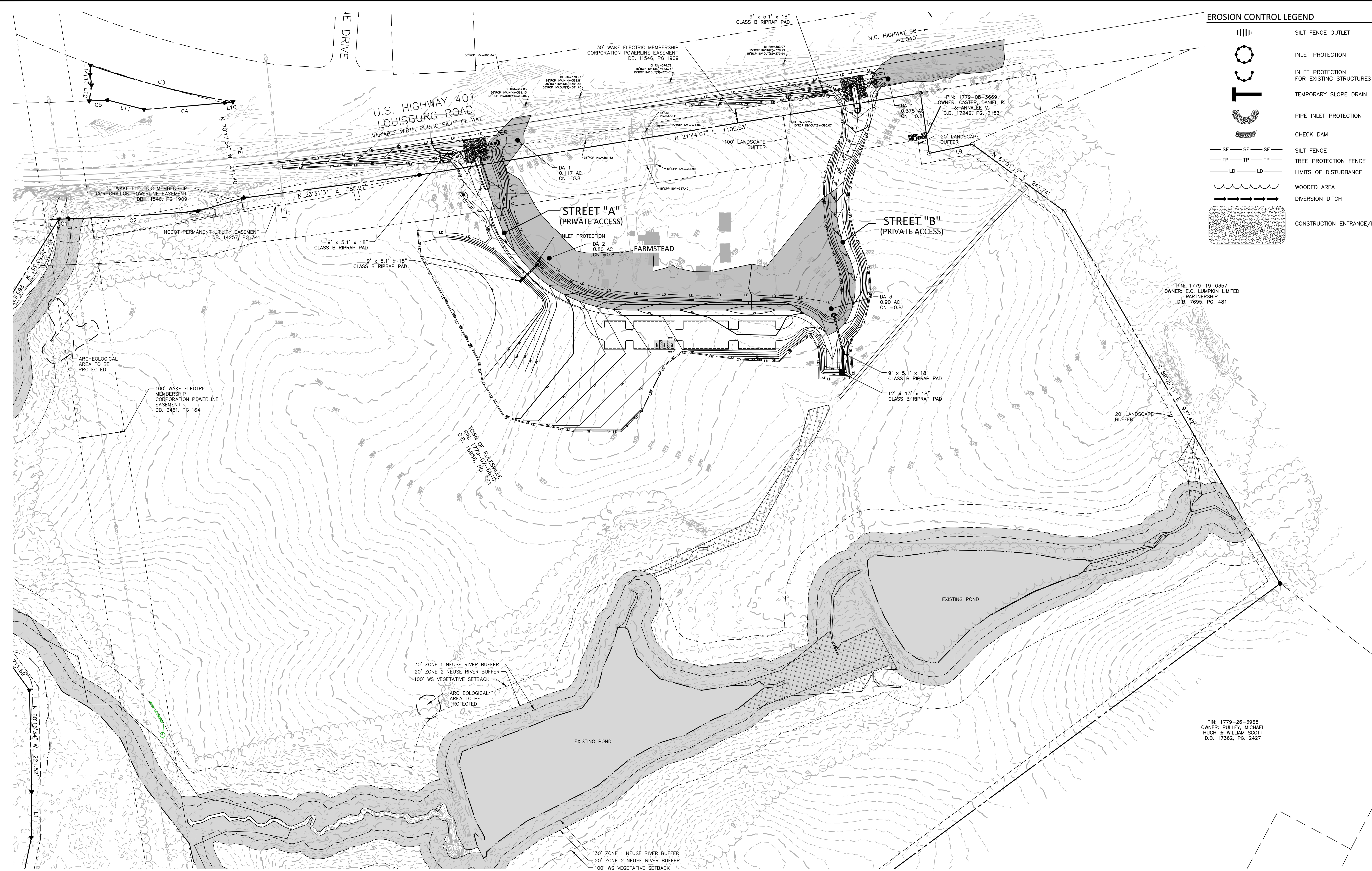
SHEET

OVERALL EROSION CONTROL PLAN-STAGE II

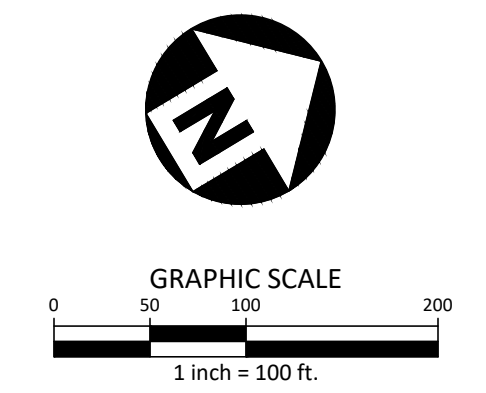
C6.02

EROSION CONTROL LEGEND

- SILT FENCE OUTLET
- INLET PROTECTION
- INLET PROTECTION FOR EXISTING STRUCTURES
- TEMPORARY SLOPE DRAIN
- PIPE INLET PROTECTION
- CHECK DAM
- SILT FENCE
- TREE PROTECTION FENCE
- LIMITS OF DISTURBANCE
- WOODED AREA
- DIVERSION DITCH
- CONSTRUCTION ENTRANCE/EXIT



ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT TOWN OF ROLESVILLE ENGINEERING DESIGN AND CONSTRUCTION STANDARDS



CID-23-5

M:\Projects\WOL_2020110039 Frazier Farm Park\04-Production\Engineering\Phase1A_CD\2020110039-PH1-EC2.dwg, 6/6/2024 3:11:15 PM, Eric Donnell



McADAMS

The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713

phone 919. 361. 5000
fax 919. 361. 2269
license number: C-0293

www.mcadamsco.com

CLIENT

NAME: TOWN OF ROLESVILLE
ADDRESS: 502 SOUTHTOWN CIRCLE
ADDRESS: ROLESVILLE NC 27571
PHONE: 919.554.6582

FRAZIER FARM PARK
CONSTRUCTION DRAWINGS
PHASE 1A
11624 LOUISBURG ROAD
ROLESVILLE, NORTH CAROLINA



REVISIONS

NO. DATE

PLAN INFORMATION

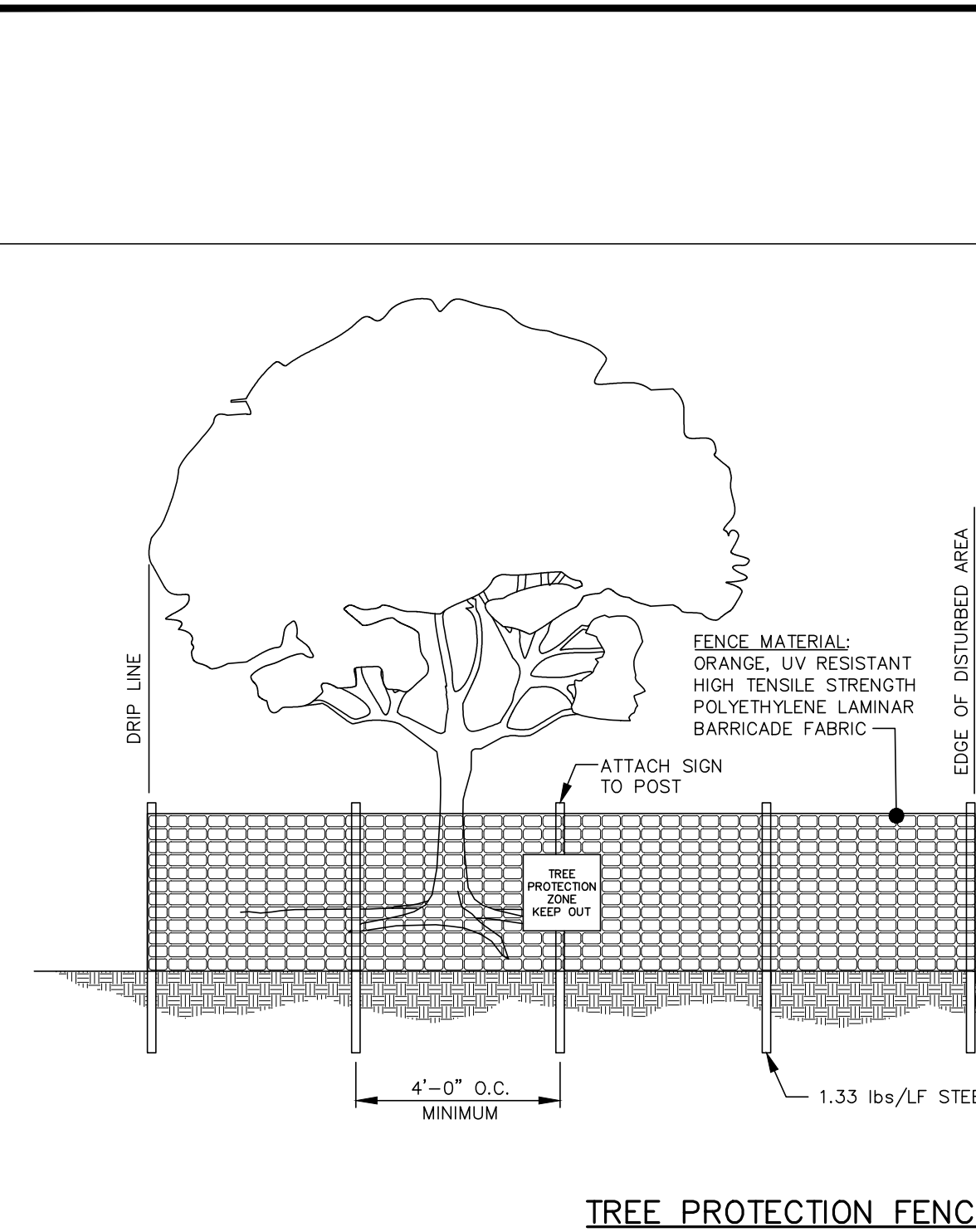
PROJECT NO. 202011039
FILENAME 2020110039-PH1-ECN3
CHECKED BY EMD
DRAWN BY SME
SCALE N/A
DATE 06.06.2024

SHEET

EROSION CONTROL
DETAILS

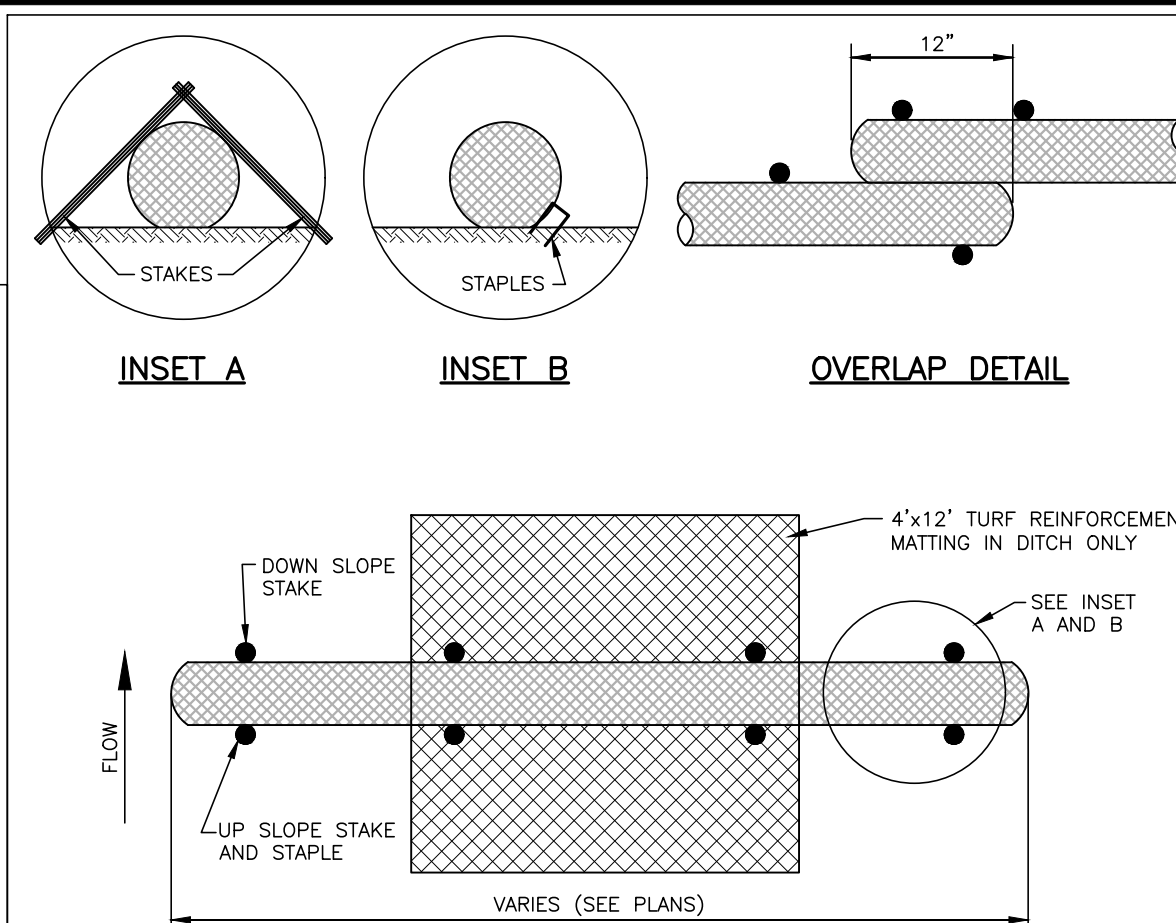
C6.10

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT TOWN OF ROLESVILLE ENGINEERING DESIGN AND CONSTRUCTION STANDARDS CID-2315



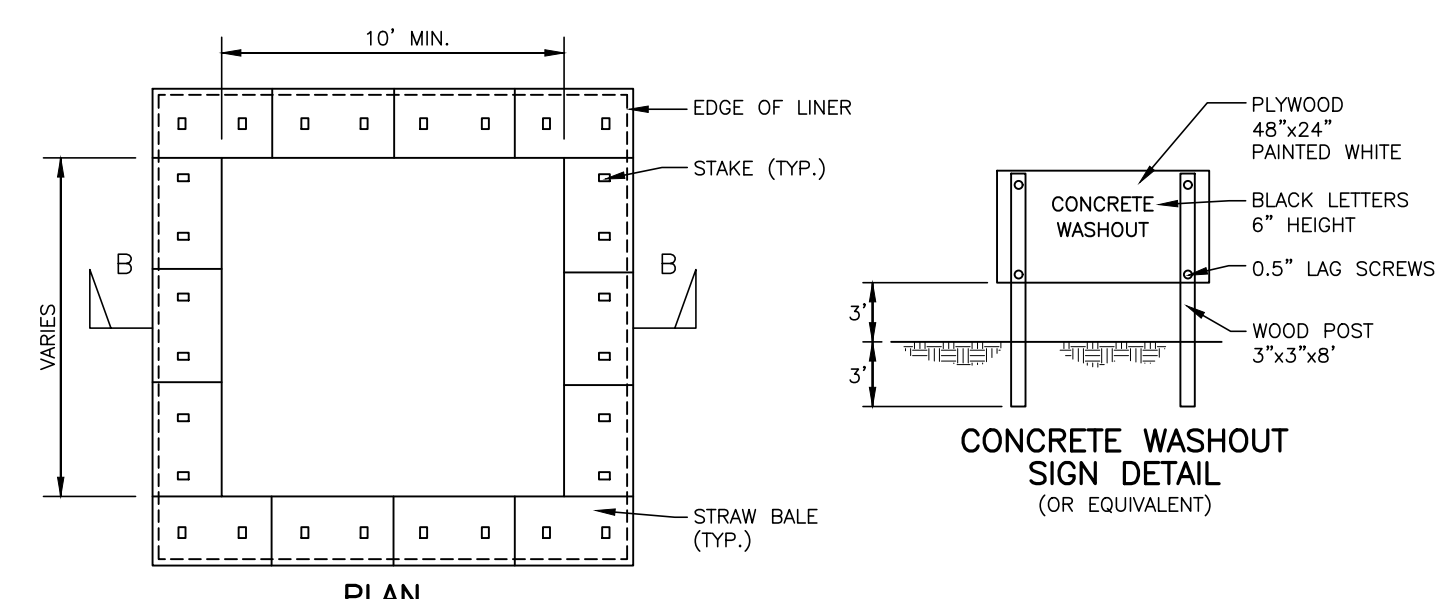
- NOTES:
1. ALL PLANTS DESIGNATED TO BE SAVED SHALL BE PROTECTED BY FENCING, AS ILLUSTRATED.
 2. INSTALL TREE PROTECTION FENCE AT TREE DRIP LINE OR AT EDGE OF DISTURBED AREA, AS SHOWN ON PLANS, PRIOR TO COMMENCEMENT OF CONSTRUCTION.
 3. SPACE TREE PROTECTION ZONE SIGNS A MINIMUM OF ONE EVERY 300 FEET. THE SIGN MUST BE MADE OF DURABLE, WEATHERPROOF MATERIAL. THE SIZE OF EACH SIGN MUST BE A MINIMUM OF 2' x 2' AND BE VISIBLE FROM BOTH SIDES OF THE FENCE. THE SIGN MUST CONTAIN THE FOLLOWING LANGUAGE IN BOTH ENGLISH & SPANISH:
"TREE PROTECTION ZONE, KEEP OUT"
"ZONA DE PROTECCION DEL ARBOL, MANTENER FUERA"
 4. THERE SHALL BE NO STORAGE OF MATERIAL WITHIN THE BOUNDARIES OF THE TREE PROTECTION FENCING.
 5. TREE PROTECTION FENCING SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.

TREE PROTECTION FENCE
N.T.S.



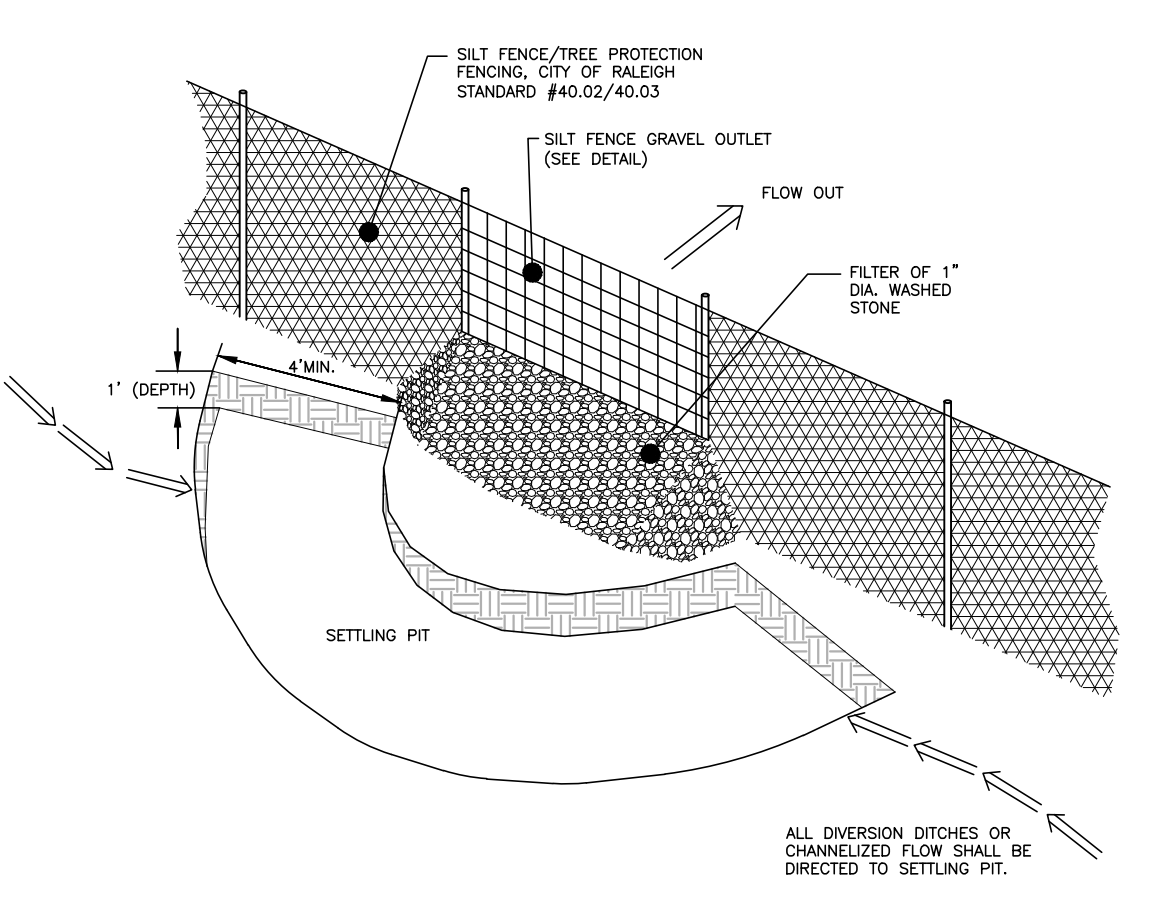
- NOTES:
1. USE MINIMUM 12" DIAMETER WATTLE (LARGER WATTLES MAY BE REQUIRED TO KEEP SEDIMENT ON SITE).
 2. USE 2" WOODEN STAKES WITH A 2" NOMINAL CROSS SECTION.
 3. INSTALL A MINIMUM OF TWO UP SLOPE STAKES AND 4 DOWN SLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO EXISTING GRADE.
 4. PROVIDE STAPLES OF 0.125" DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 6" IN LENGTH.
 5. INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON THE UP SLOPE SIDE OF THE WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.
- MAINTENANCE:
1. WATTLES SHOULD BE CHECKED AND CLEARED OF ACCUMULATED DEBRIS AND SEDIMENT.
 2. REPLACE AS REQUIRED.

TEMPORARY WATTLE DETAIL
N.T.S.



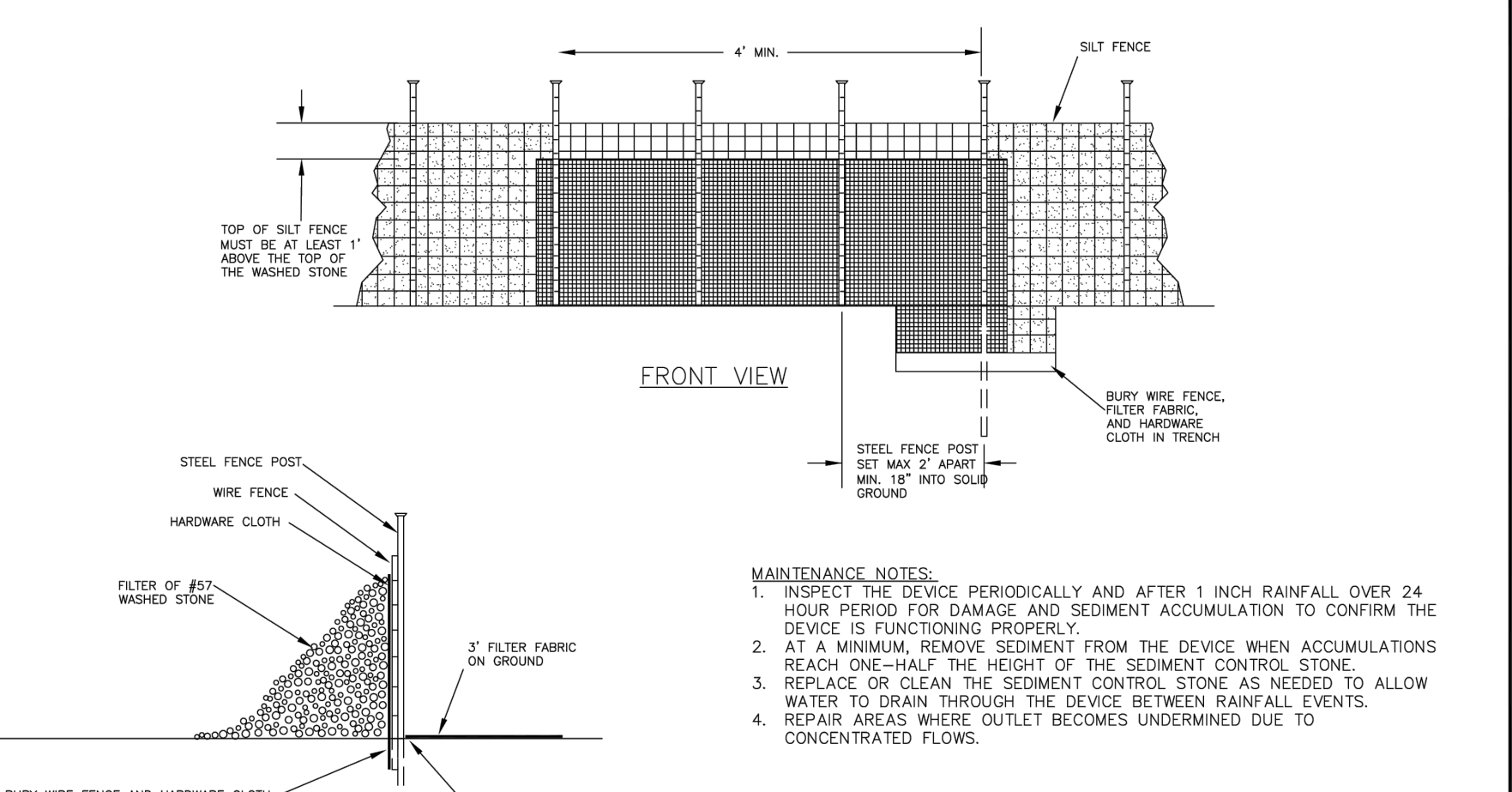
- NOTES:
1. ACTUAL LAYOUT DETERMINED IN THE FIELD.
 2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FEET OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
- INSPECTION/MAINTENANCE/REMOVAL:
1. TEMPORARY CONCRETE WASHOUT FACILITIES ARE TO BE INSPECTED BY THE CONTRACTOR DURING HIS/HER WEEKLY EROSION AND SEDIMENT CONTROL INSPECTION, AFTER A STORM EVENT OF 1/2" OR GREATER AND AT THE END OF ANY DAY WHEN CONCRETE HAS BEEN POURED ON THE CONSTRUCTION SITE. THE INSPECTOR IS TO ENSURE THAT THERE ARE NO LEAKS, NO SPILLS AND THAT THE FACILITIES CAPACITY HAS NOT YET BEEN COMPROMISED.
 2. ANY OVERFLOWING OF THE WASHOUT FACILITIES ONTO THE GROUND MUST BE CLEANED UP AND REMOVED WITHIN 24 HOURS OF DISCOVERY.
 3. IF A RAIN OR SNOW EVENT IS FORECASTED, A NON-COLLAPSING, NON-WATER COLLECTING COVER SHALL BE PLACED OVER THE WASHOUT FACILITY AND SECURED TO PREVENT ACCUMULATION AND OVERFLOW OF PRECIPITATION. CONTENTS OF EACH CONCRETE WASHOUT FACILITY ARE NOT TO EXCEED 75% OF ITS DESIGNED CAPACITY. IF THE CONTENTS REACH 75% CAPACITY, DISCONTINUE POURING CONCRETE INTO THE FACILITY UNTIL IT HAS BEEN CLEANED OUT.
 4. ALLOW SLURRY TO EVAPORATE OR REMOVE FROM SITE IN A SAFE MANNER (I.E. VACUUM TRUCK). ALL HARDENED MATERIAL CAN THEN BE REMOVED AND DISPOSED OF PROPERLY.
 5. IF A LINED BASIN IS USED, IMMEDIATELY REPLACE THE LINER IF IT BECOMES DAMAGED.
 6. REMOVE TEMPORARY CONCRETE WASHOUT FACILITIES WHEN THEY ARE NO LONGER NEEDED AND RESTORE THE DISTURBED AREAS TO THEIR ORIGINAL CONDITION.

CONCRETE WASHOUT PIT
N.T.S.



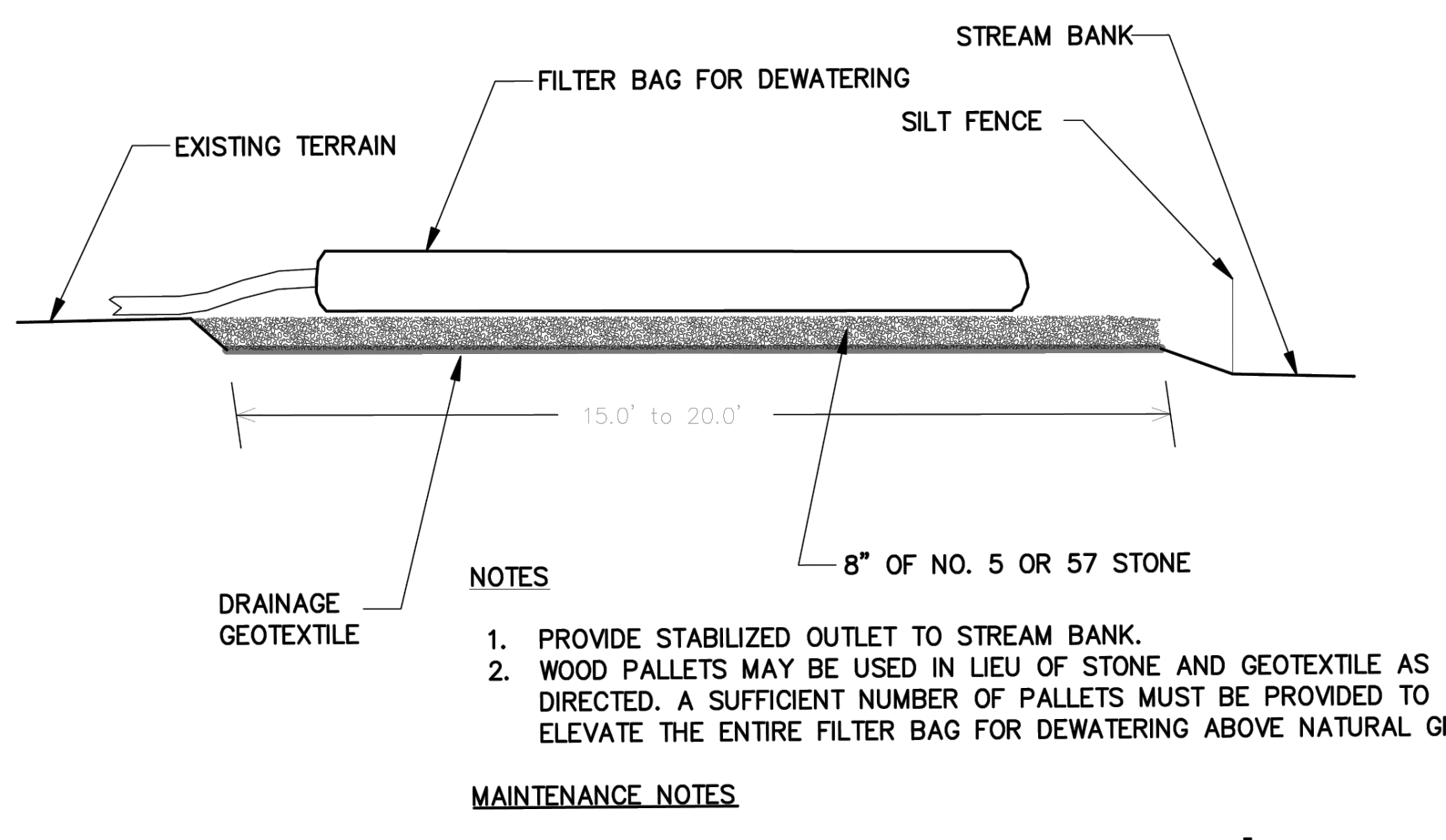
- NOTES:
1. CONTRACTOR SHALL ASSURE SETTLING PIT IS MAINTAINED ONCE WEEKLY AND AFTER EVERY RAINFALL - ACCUMULATED SILT SHALL BE REMOVED.
 2. CONTRACTOR SHALL REPAIR/REPLACE STONE WASHOUTS AS NECESSARY.

SILT FENCE OUTLET SETTLING PIT
N.T.S.



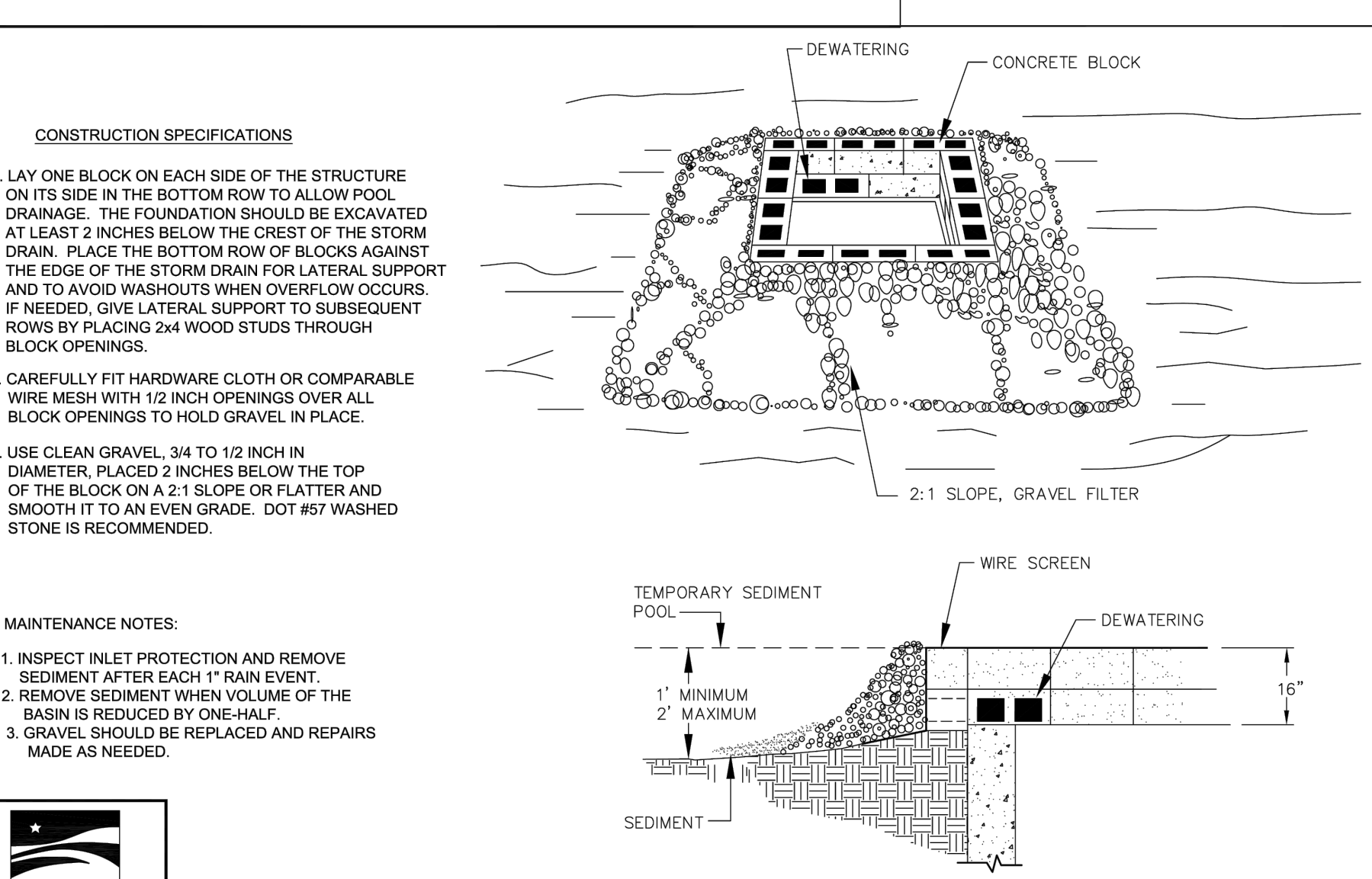
- MAINTENANCE NOTES:
1. INSPECT THE DEVICE PERIODICALLY AND AFTER 1 INCH RAINFALL OVER 24 HOUR PERIOD FOR DAMAGE AND SEDIMENT ACCUMULATION TO CONFIRM THE DEVICE IS FUNCTIONING PROPERLY.
 2. AT A MINIMUM, REMOVE SEDIMENT FROM THE DEVICE WHEN ACCUMULATIONS REACH ONE-HALF THE HEIGHT OF THE SEDIMENT CONTROL STONE.
 3. REPLACE OR CLEAN THE SEDIMENT CONTROL STONE AS NEEDED TO ALLOW WATER TO DRAIN THROUGH THE DEVICE BETWEEN RAINFALL EVENTS.
 4. REPAIR AREAS WHERE OUTLET BECOMES UNDERMINED DUE TO CONCENTRATED FLOWS.

STANDARD SILT FENCE OUTLET
EFFECTIVE: 01/31/08



- NOTES:
1. PROVIDE STABILIZED OUTLET TO STREAM BANK.
 2. WOOD PALLETS MAY BE USED IN LIEU OF STONE AND GEOTEXTILE AS DIRECTED. A SUFFICIENT NUMBER OF PALLETS MUST BE PROVIDED TO ELEVATE THE ENTIRE FILTER BAG FOR DEWATERING ABOVE NATURAL GROUND.
- MAINTENANCE NOTES:
1. REPLACE AND DISPOSE OF FILTER BAG(S) WHEN IT IS 3/4 FULL OF SEDIMENT OR WHEN IT IS IMPRACTICAL FOR BAG TO FILTER SEDIMENT.
 2. PROVIDE A SUFFICIENT QUANTITY OF FILTER BAGS TO CONTAIN SILT FROM PUMPED EFFLUENT.

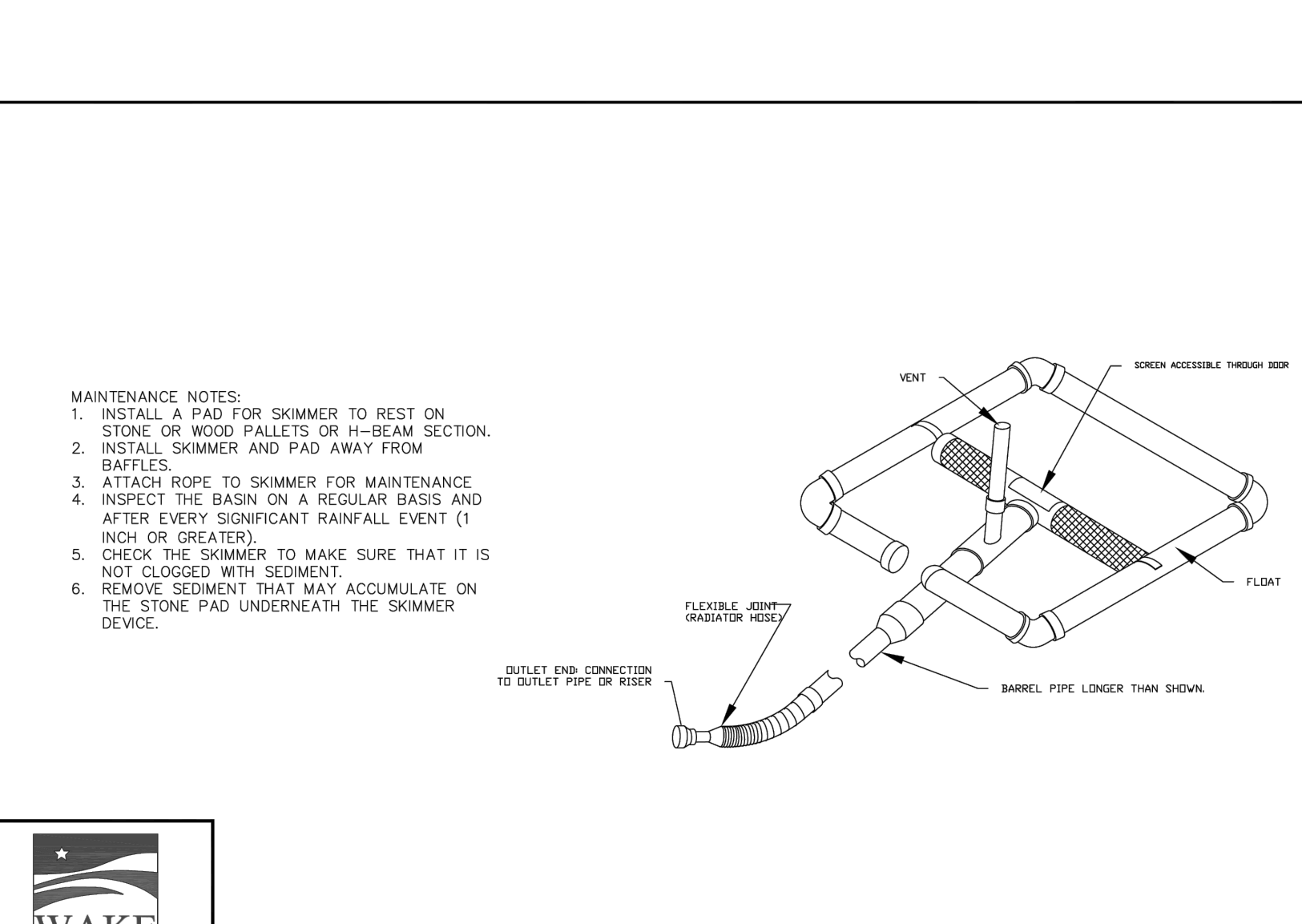
STANDARD FILTER BAG FOR DEWATERING ACTIVITIES
EFFECTIVE: 01/31/08



- CONSTRUCTION SPECIFICATIONS
1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE IN THE BOTTOM ROW TO ALLOW POOL DRAINAGE. THE FOUNDATION SHOULD BE EXCAVATED AT LEAST 2 INCHES BELOW THE CREST OF THE STORM DRAIN. PLACE THE BOTTOM ROW OF BLOCKS AGAINST THE EDGE OF THE STORM DRAIN FOR LATERAL SUPPORT AND TO AVOID WASHOUTS WHEN OVERFLOW OCCURS. IF NEEDED, GIVE LATERAL SUPPORT TO SUBSEQUENT ROWS BY PLACING 2x4 WOOD STUDS THROUGH BLOCK OPENINGS.
 2. CAREFULLY FIT HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2 INCH OPENINGS OVER ALL BLOCK OPENINGS TO HOLD GRAVEL IN PLACE.
 3. USE CLEAN GRAVEL 3/4 TO 1/2 INCH IN DIAMETER, PLACED 2 INCHES BELOW THE TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER AND SMOOTH IT TO AN EVEN GRADE. DOT #57 WASHED STONE IS RECOMMENDED.

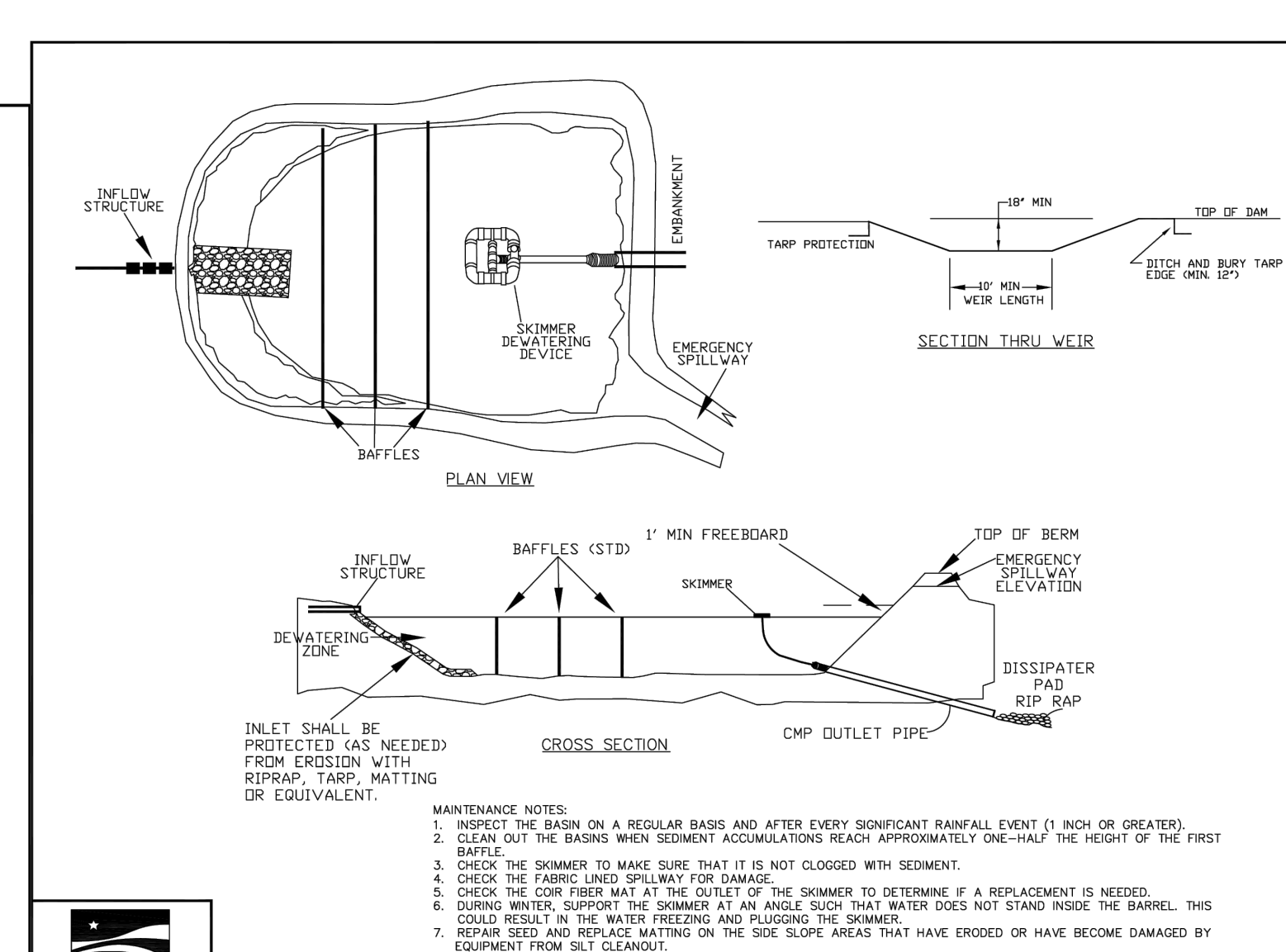
- MAINTENANCE NOTES:
1. INSPECT INLET PROTECTION AND REMOVE SEDIMENT AFTER EACH 1" RAIN EVENT.
 2. REMOVE SEDIMENT WHEN VOLUME OF THE BASIN IS REDUCED BY ONE-HALF.
 3. GRAVEL SHOULD BE REPLACED AND REPAIRS MADE AS NEEDED.

STANDARD BLOCK & GRAVEL DROP INLET PROTECTION
EFFECTIVE: 01/31/08



- MAINTENANCE NOTES:
1. INSTALL A PAD FOR SKIMMER TO REST ON STONE OR WOOD PALLETS OR IN-BEAM SECTION.
 2. INSTALL SKIMMER AND PAD AWAY FROM BAFFLES.
 3. ATTACH ROPE TO SKIMMER FOR MAINTENANCE.
 4. INSPECT THE BASIN ON A REGULAR BASIS AND AFTER EVERY SIGNIFICANT RAINFALL EVENT (1 INCH OR GREATER).
 5. CHECK THE SKIMMER TO MAKE SURE THAT IT IS NOT CLOGGED WITH SEDIMENT.
 6. REMOVE SEDIMENT THAT MAY ACCUMULATE ON THE STONE PAD UNDERNEATH THE SKIMMER DEVICE.

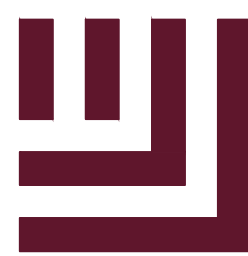
STANDARD SKIMMER DETAIL
EFFECTIVE: 01/31/08



- MAINTENANCE NOTES:
1. INSPECT THE BASIN ON A REGULAR BASIS AND AFTER EVERY SIGNIFICANT RAINFALL EVENT (1 INCH OR GREATER).
 2. CLEAN OUT THE BASIN WHEN SEDIMENT ACCUMULATIONS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE FIRST BAFFLE.
 3. CHECK THE SKIMMER TO MAKE SURE THAT IT IS NOT CLOGGED WITH SEDIMENT.
 4. CHECK THE FABRIC LINER SPILLWAY FOR DAMAGE.
 5. CHECK THE CORR FIBER MAT AT THE OUTLET OF THE SKIMMER TO DETERMINE IF A REPLACEMENT IS NEEDED.
 6. DURING WINTER, SUPPORT THE SKIMMER AT AN ANGLE SUCH THAT WATER DOES NOT STAND INSIDE THE BARREL. THIS COULD RESULT IN THE WATER FREEZING AND PLUGGING THE SKIMMER.
 7. REPAIR SEED AND REPLACE MATTING ON THE SIDE SLOPE AREAS THAT HAVE ERODED OR HAVE BECOME DAMAGED BY EQUIPMENT FROM OIL CLEANSING.
 8. REMOVE SEDIMENT THAT MAY ACCUMULATE ON THE STONE PAD UNDERNEATH THE SKIMMER DEVICE.
 9. INSPECT THE BAFFLES AFTER EACH RAIN EVENT FOR EROSION DAMAGE AND SEDIMENT ACCUMULATIONS.

STANDARD SKIMMER BASIN
EFFECTIVE: 01/31/08

M:\Projects\WOL\2020110039-Frazier Farm PH1A\04-Production\Engineering\Phase1A\CID-2315-12-PM-ERIC.Dornoni.dwg, 6/16/2024, 3:11:24 PM, ERIC.Dornoni



McAdams

The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713

phone 919. 361. 5000
fax 919. 361. 2269
license number: C-0293

www.mcadamsco.com

CLIENT

NAME: TOWN OF ROLESVILLE
ADDRESS: 502 SOUTHTOWN CIRCLE
ADDRESS: ROLESVILLE NC 27571
PHONE: 919.554.6582

FRAZIER FARM PARK
CONSTRUCTION DRAWINGS
PHASE 1A
11624 LOUISBURG ROAD
ROLESVILLE, NORTH CAROLINA



REVISIONS

NO. DATE

PLAN INFORMATION

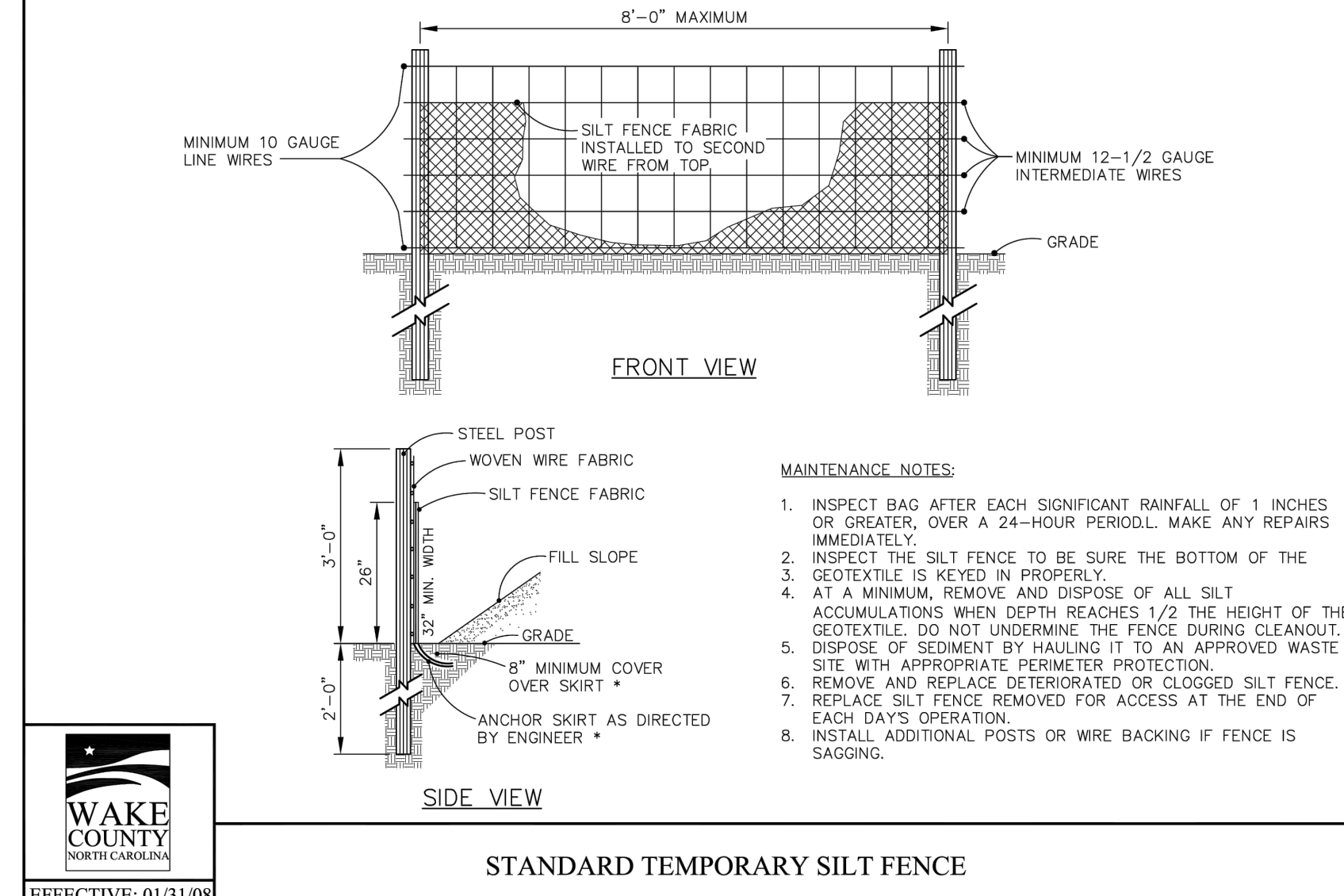
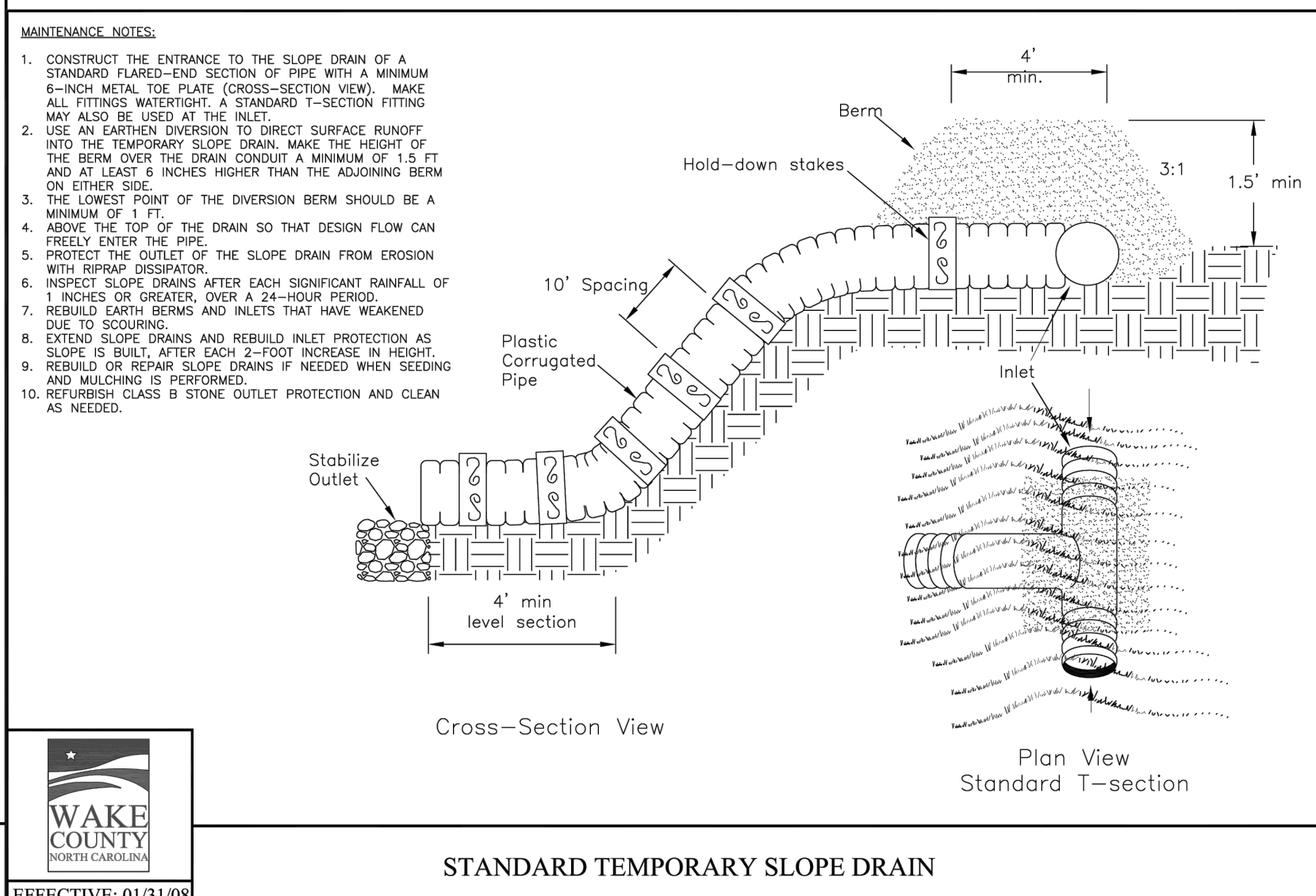
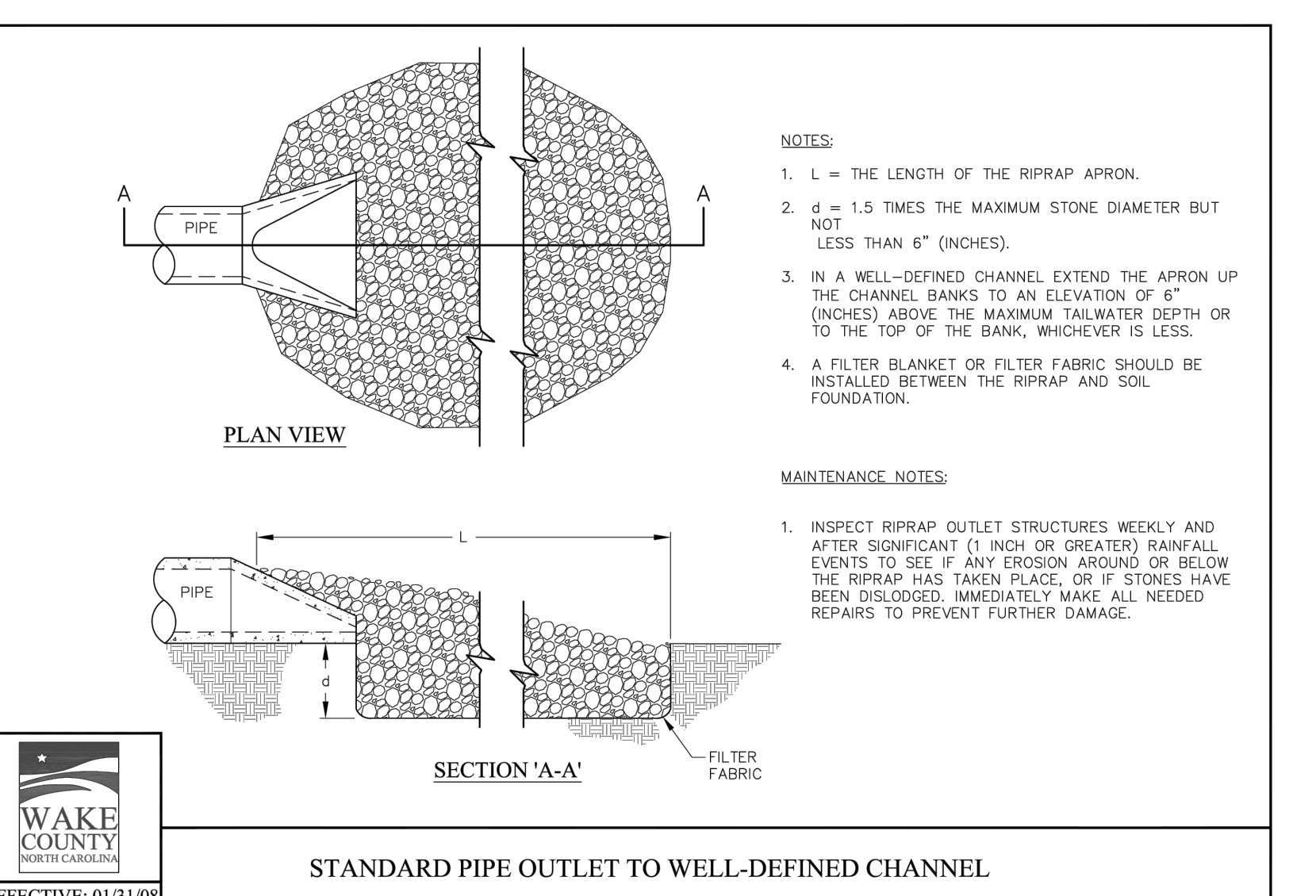
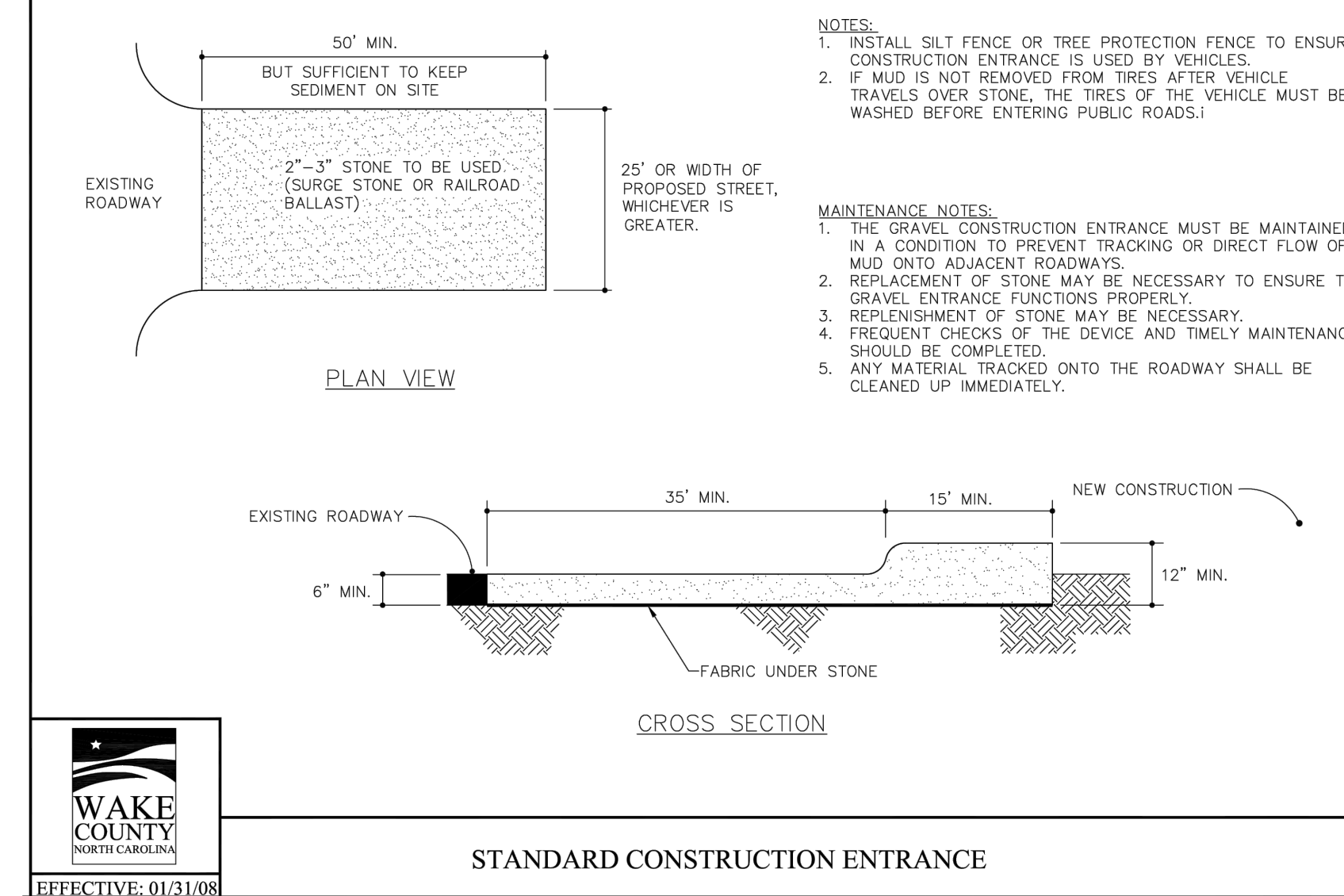
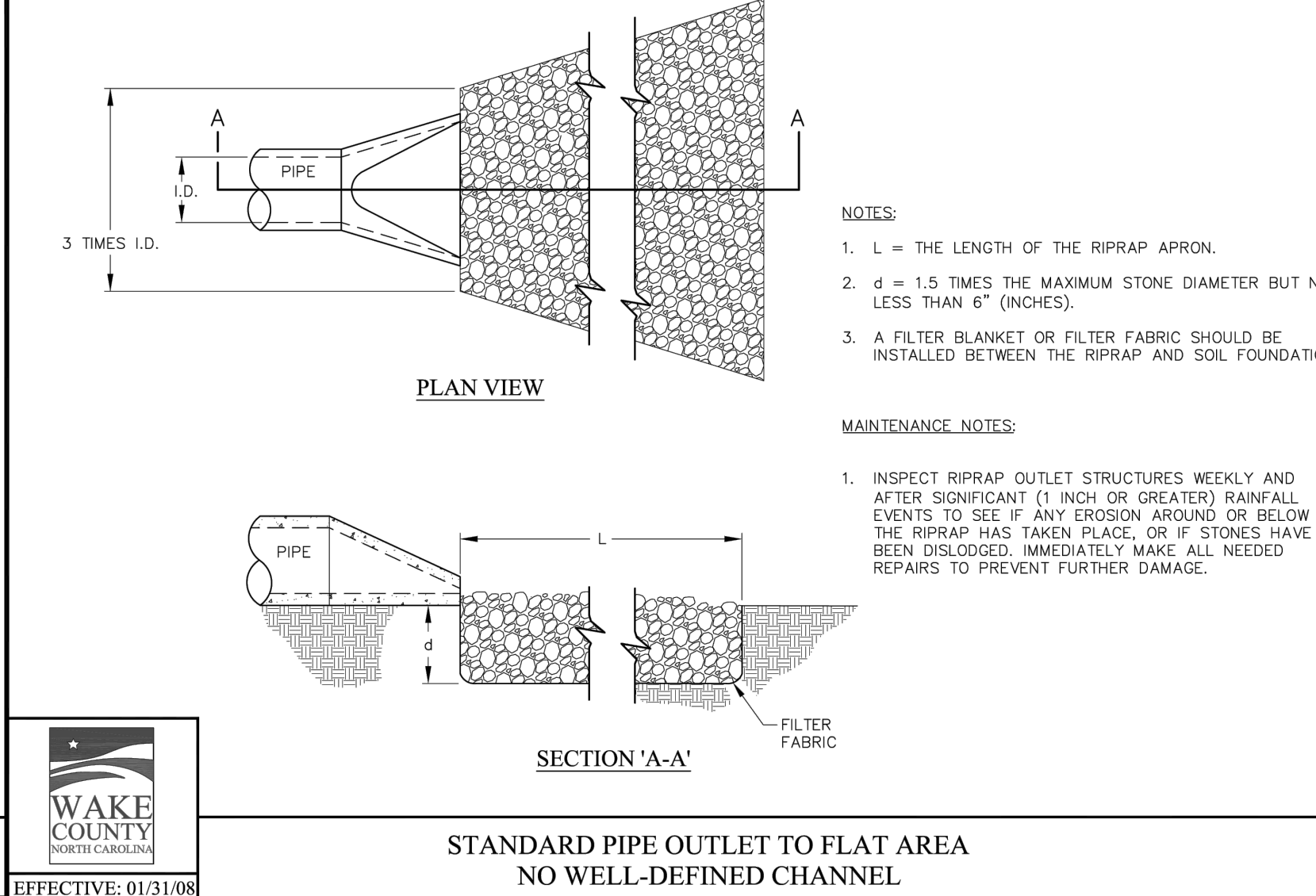
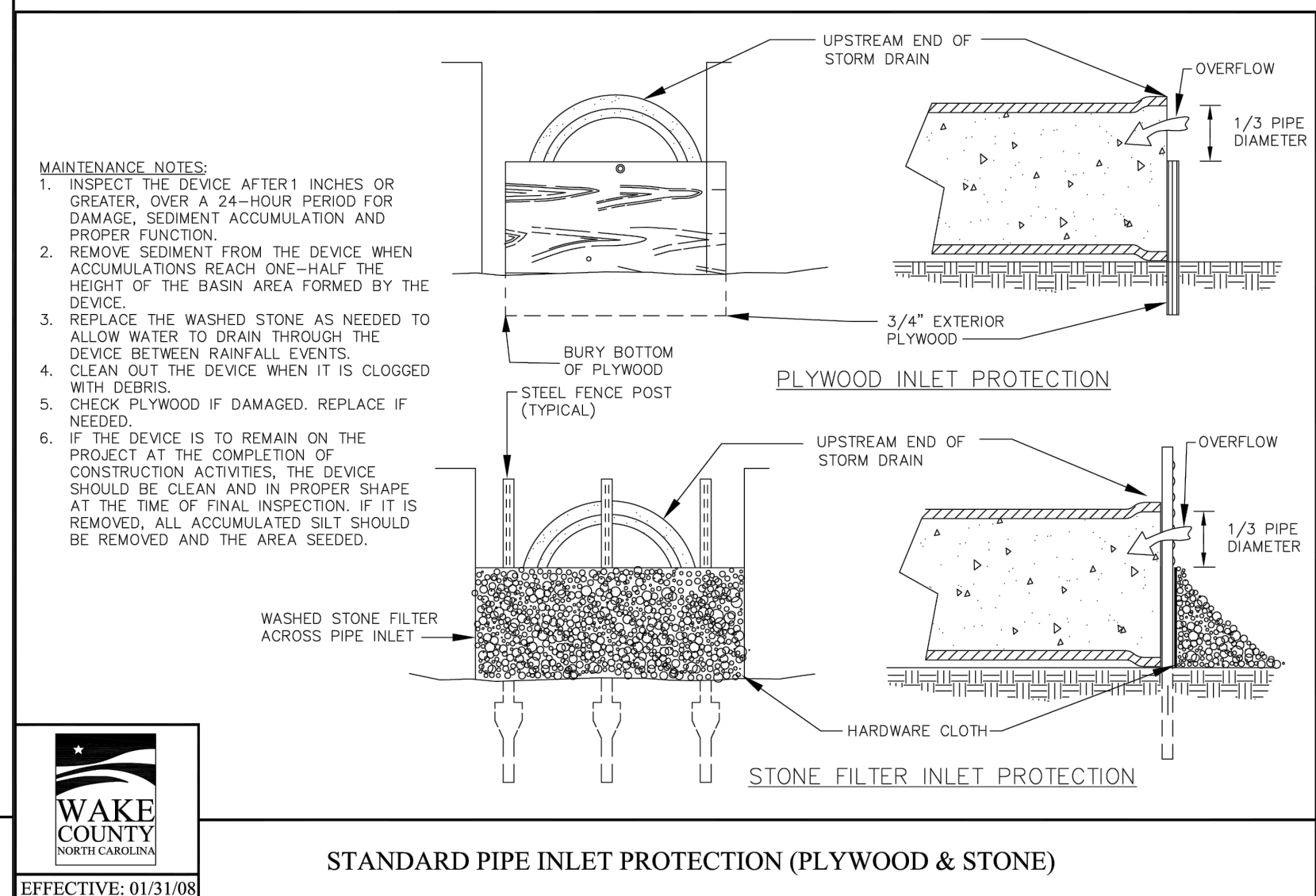
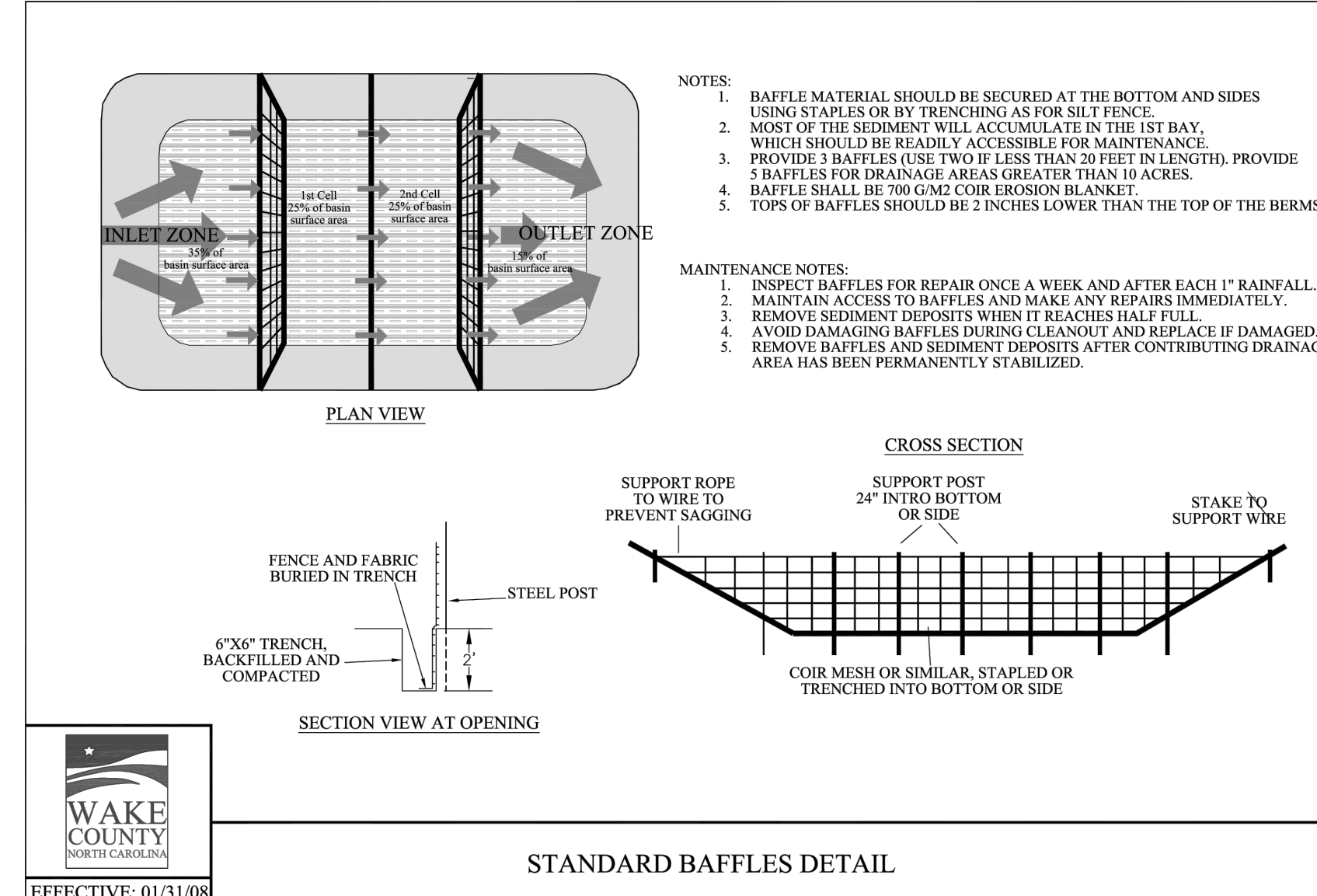
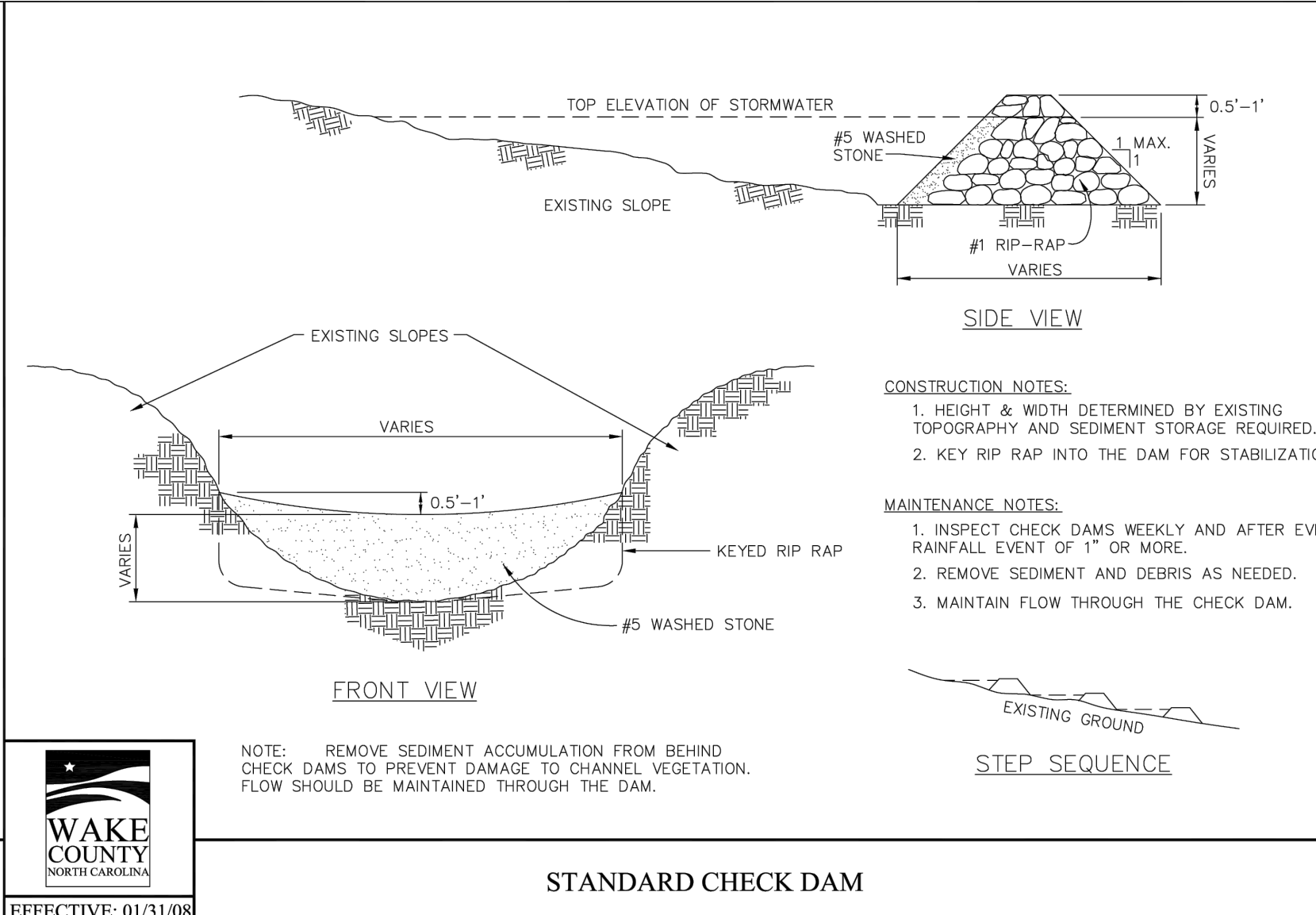
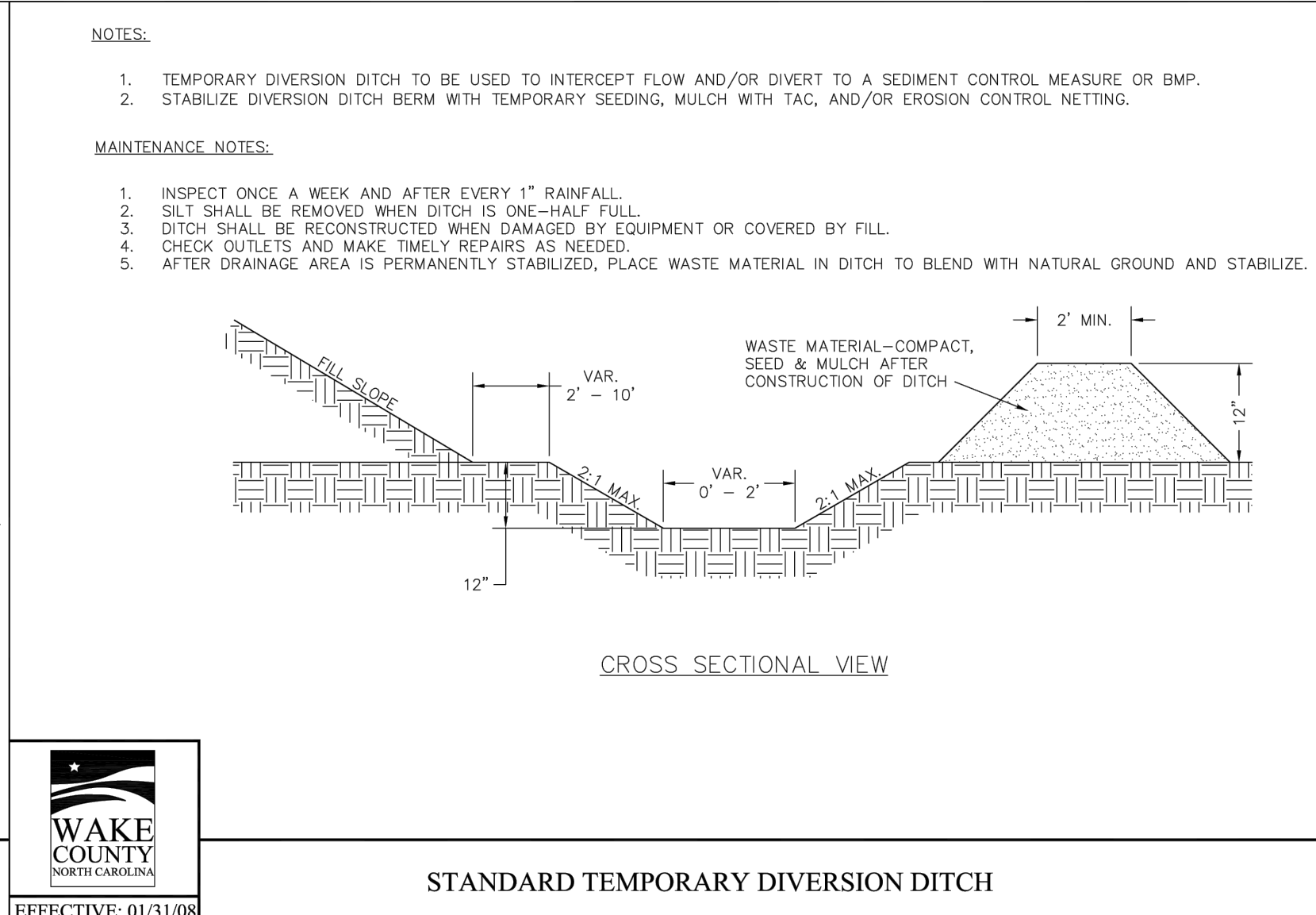
PROJECT NO. 202011039
FILENAME 2020110039-PH1-ECN3
CHECKED BY EMD
DRAWN BY SME
SCALE N/A
DATE 06.06.2024

SHEET

EROSION CONTROL
DETAILS

C6.11

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT TOWN OF ROLESVILLE ENGINEERING DESIGN AND CONSTRUCTION STANDARDS CID-23-5



M:\Projects\WOL\2020110039-Frazier Farm PH1-ECN3.dwg, 6/6/2024, 3:11:27 PM, Eric Domont



McADAMS

The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713

phone 919. 361. 5000
fax 919. 361. 2269
license number: C-0293

www.mcadamsco.com

CLIENT

NAME: TOWN OF ROLESVILLE
ADDRESS: 502 SOUTHTOWN CIRCLE
ADDRESS: ROLESVILLE NC 27571
PHONE: 919.554.6582

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

Temporary and Permanent Groundcover*

| STABILIZATION TIMEFRAMES (Effective Aug. 3, 2011) | | |
|--|---------------|--|
| SITE AREA DESCRIPTION | STABILIZATION | TIMEFRAME EXCEPTIONS |
| Perimeter dikes, swales, ditches, slopes | 7 days | None |
| High Quality Water (HQW) Zones | 7 days | None |
| Slopes steeper than 3:1 | 7 days | If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed. |
| Slopes 3:1 or flatter | 14 days | 7 days for slopes greater than 50' in length. |
| All other areas with slopes flatter than 4:1 | 14 days | None, except for perimeters and HQW Zones. |

*-For Falls Lake watershed, in disturbed areas where grading activities are incomplete, provide temporary groundcover no later than seven (7) days for slopes steeper than 3:1; ten (10) days for slopes equal to or flatter than 3:1; fourteen (14) days for areas with no slope.

GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

| Temporary Stabilization | Permanent Stabilization |
|---|---|
| <ul style="list-style-type: none"> Temporary grass seed covered with straw or other mulches and tackifiers Hydroseeding Roiled erosion control products with or without temporary grass seed Appropriately applied straw or other mulch Plastic sheeting | <ul style="list-style-type: none"> Permanent grass seed covered with straw or other mulches and tackifiers Geotextile fabrics such as permanent soil reinforcement matting Hydroseeding Shrubs or other permanent plantings covered with mulch Uniform and evenly distributed ground cover sufficient to restrain erosion Structural methods such as concrete, asphalt or retaining walls |

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

- Select flocculants that are appropriate for the soils being exposed during construction, selecting from the *NC DWR List of Approved PAMS/Flocculants*.
- Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
- Apply flocculants at the concentrations specified in the *NC DWR List of Approved PAMS/Flocculants* and in accordance with the manufacturer's instructions.
- Provide ponding area for containment of treated Stormwater before discharging offsite.
- Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.



EQUIPMENT AND VEHICLE MAINTENANCE

- Maintain vehicles and equipment to prevent discharge of fluids.
- Provide drip pans under any stored equipment.
- Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
- Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
- Remove leaking vehicles and construction equipment from service until the problem has been corrected.
- Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

- Never bury or burn waste. Place litter and debris in approved waste containers.
- Provide a sufficient number of waste containers on site to manage the quantity of waste produced.
- Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
- Cover waste containers at the end of each workday and before storm events. Repair or replace damaged waste containers.
- Anchor all lightweight items in waste containers during times of high winds.
- Empty waste containers as needed to prevent overflow.
- Dispose waste off-site at an approved disposal facility.

PAINT AND OTHER LIQUID WASTE

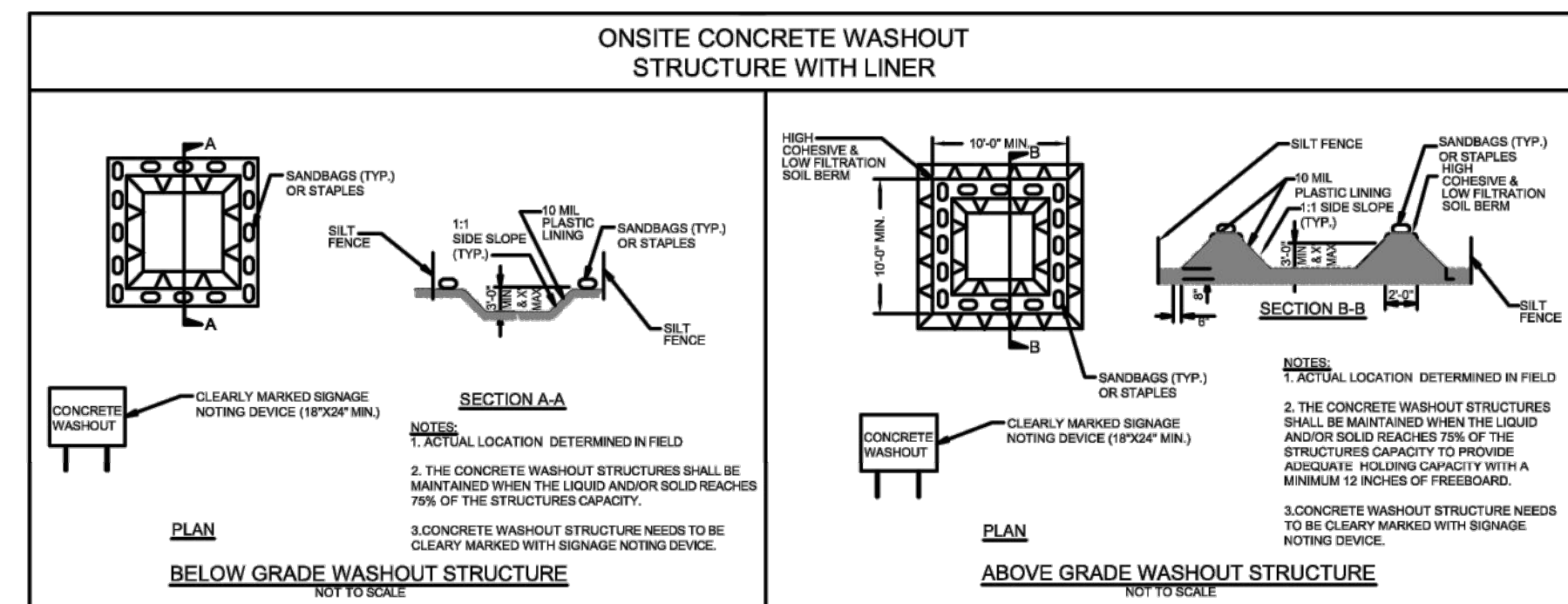
- Do not dump paint and other liquid waste into storm drains, streams or wetlands.
- Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Contain liquid wastes in a controlled area.
- Containment must be labeled, sized and placed appropriately for the needs of site.
- Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

PORTABLE TOILETS

- Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
- Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
- Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

EARTHEN STOCKPILE MANAGEMENT

- Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
- Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
- Provide stable stone access point when feasible.
- Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.



CONCRETE WASHOUTS

- Do not discharge concrete or cement slurry from the site.
- Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
- Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
- Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
- Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
- Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
- Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
- Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
- Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
- At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

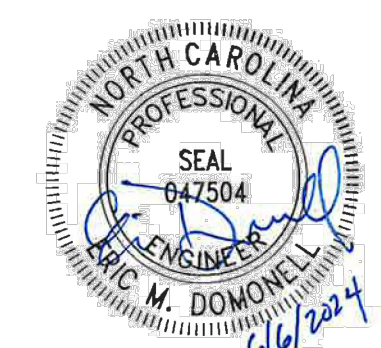
HERBICIDES, PESTICIDES AND RODENTICIDES

- Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
- Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
- Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
- Do not stockpile these materials onsite.

HAZARDOUS AND TOXIC WASTE

- Create designated hazardous waste collection areas on-site.
- Place hazardous waste containers under cover or in secondary containment.
- Do not store hazardous chemicals, drums or bagged materials directly on the ground.

FRAZIER FARM PARK
CONSTRUCTION DRAWINGS
PHASE 1A
11624 LOUISBURG ROAD
ROLESVILLE, NORTH CAROLINA



REVISIONS

NO. DATE

PLAN INFORMATION

PROJECT NO. 202011039
FILENAME 2020110039-PH1-ECN3
CHECKED BY EMD
DRAWN BY SME
SCALE N/A
DATE 06.06.2024

SHEET

EROSION CONTROL
DETAILS

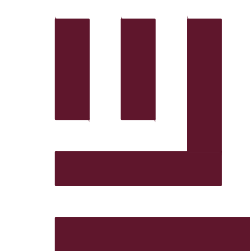
C6.12

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT TOWN OF ROLESVILLE ENGINEERING DESIGN AND CONSTRUCTION STANDARDS CID-2315

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

EFFECTIVE: 03/01/19

M:\Projects\WOL\2020110039 Frazier Farm Park\04-Production\Engineering\Phase1A_CD\2020110039-PH1-ECN3.dwg, 6/6/2024, 3:11:32 PM, Eric Donnell



McADAMS

The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713

phone 919. 361. 5000
fax 919. 361. 2269
license number: C-0293

www.mcadamsco.com

CLIENT

NAME: TOWN OF ROLESVILLE
ADDRESS: 502 SOUTHTOWN CIRCLE
ADDRESS: ROLESVILLE NC 27571
PHONE: 919.554.6582

FRAZIER FARM PARK
CONSTRUCTION DRAWINGS
PHASE 1A
11624 LOUISBURG ROAD
ROLESVILLE, NORTH CAROLINA



REVISIONS

NO. DATE

PLAN INFORMATION

PROJECT NO. 202011039
FILENAME 2020110039-PH1-ECN3
CHECKED BY EMD
DRAWN BY SME
SCALE N/A
DATE 06.06.2024

SHEET

EROSION CONTROL
DETAILS

C6.13

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT TOWN OF ROLESVILLE ENGINEERING DESIGN AND CONSTRUCTION STANDARDS CID-2315

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING

1. Occurrences that must be reported

Permittees shall report the following occurrences:

- (a) Visible sediment deposition in a stream or wetland.
- (b) Oil spills if:
 - They are 25 gallons or more,
 - They are less than 25 gallons but cannot be cleaned up within 24 hours,
 - They cause sheen on surface waters (regardless of volume), or
 - They are within 100 feet of surface waters (regardless of volume).
- (a) Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.
- (b) Anticipated bypasses and unanticipated bypasses.
- (c) Noncompliance with the conditions of this permit that may endanger health or the environment.

2. Reporting Timeframes and Other Requirements

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Division's Emergency Response personnel at (800) 662-7956, (800) 858-0368 or (919) 733-3300.

| Occurrence | Reporting Timeframes (After Discovery) and Other Requirements |
|--|---|
| (a) Visible sediment deposition in a stream or wetland | <ul style="list-style-type: none"> • Within 24 hours, an oral or electronic notification. • Within 7 calendar days, a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis. • If the stream is named on the NC 303(d) list as impaired for sediment-related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions. |
| (b) Oil spills and release of hazardous substances per Item 1(b)-(c) above | <ul style="list-style-type: none"> • Within 24 hours, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release. |
| (c) Anticipated bypasses [40 CFR 122.41(m)(3)] | <ul style="list-style-type: none"> • A report at least ten days before the date of the bypass, if possible. The report shall include an evaluation of the anticipated quality and effect of the bypass. |
| (d) Unanticipated bypasses [40 CFR 122.41(m)(3)] | <ul style="list-style-type: none"> • Within 24 hours, an oral or electronic notification. • Within 7 calendar days, a report that includes an evaluation of the quality and effect of the bypass. |
| (e) Noncompliance with the conditions of this permit that may endanger health or the environment [40 CFR 122.41(l)(7)] | <ul style="list-style-type: none"> • Within 24 hours, an oral or electronic notification. • Within 7 calendar days, a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. [40 CFR 122.41(l)(6). • Division staff may waive the requirement for a written report on a case-by-case basis. |

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&SC Plan Documentation

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be documented in the manner described:

| Item to Document | Documentation Requirements |
|---|---|
| (a) Each E&SC Measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC Plan. | Initial and date each E&SC Measure on a copy of the approved E&SC Plan or complete, date and sign an inspection report that lists each E&SC Measure shown on the approved E&SC Plan. This documentation is required upon the initial installation of the E&SC Measures or if the E&SC Measures are modified after initial installation. |
| (b) A phase of grading has been completed. | Initial and date a copy of the approved E&SC Plan or complete, date and sign an inspection report to indicate completion of the construction phase. |
| (c) Ground cover is located and installed in accordance with the approved E&SC Plan. | Initial and date a copy of the approved E&SC Plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications. |
| (d) The maintenance and repair requirements for all E&SC Measures have been performed. | Complete, date and sign an inspection report. |
| (e) Corrective actions have been taken to E&SC Measures. | Initial and date a copy of the approved E&SC Plan or complete, date and sign an inspection report to indicate the completion of the corrective action. |

2. Additional Documentation

In addition to the E&SC Plan documents above, the following items shall be kept on the site and available for agency inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

- (a) This general permit as well as the certificate of coverage, after it is received.
- (b) Records of inspections made during the previous 30 days. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.
- (c) All data used to complete the Notice of Intent and older inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

| Inspect | Frequency (during normal business hours) | Inspection records must include [40 CFR 122.41]: |
|--|--|--|
| (1) Rain gauge maintained in good working order | Daily | Daily rainfall amounts. If no daily rain gauge observations are made during weekend or holiday periods, and no individual-day rainfall information is available, record the cumulative rain measurement for those un-attended days (and this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "zero." The permittee may use another rain-monitoring device approved by the Division. |
| (2) E&SC Measures | At least once per 7 calendar days and within 24 hours of a rain event > 1.0 inch in 24 hours | 1. Identification of the measures inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Indication of whether the measures were operating properly, 5. Description of maintenance needs for the measure, 6. Corrective actions taken, and 7. Date of actions taken. |
| (3) Stormwater discharge outfalls (SDOs) | At least once per 7 calendar days and within 24 hours of a rain event > 1.0 inch in 24 hours | 1. Identification of the discharge outfalls inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, 5. Indication of visible sediment leaving the site, 6. Actions taken to correct/prevent sedimentation, and 7. Date of actions taken. |
| (4) Perimeter of site | At least once per 7 calendar days and within 24 hours of a rain event > 1.0 inch in 24 hours | If visible sedimentation is found outside site limits, then a record of the following shall be made: 1. Actions taken to clean up or stabilize the sediment that has left the site limits, 2. Date of actions taken, and 3. An explanation as to the actions taken to control future releases. |
| (5) Streams or wetlands onsite or offsite (where accessible) | At least once per 7 calendar days and within 24 hours of a rain event > 1.0 inch in 24 hours | If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Evidence and actions taken to reduce sediment contributions, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(a) of this permit of this permit. |

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.



NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

EFFECTIVE: 03/01/19



McADAMS

The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713

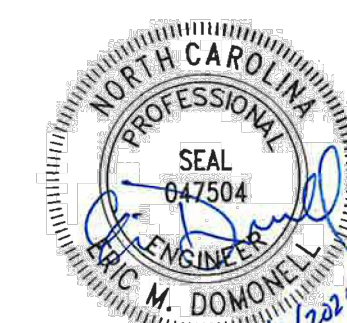
phone 919. 361. 5000
fax 919. 361. 2269
license number: C-0293

www.mcadamsco.com

CLIENT

NAME: TOWN OF ROLESVILLE
ADDRESS: 502 SOUTHTOWN CIRCLE
ADDRESS: ROLESVILLE NC 27571
PHONE: 919.554.6582

FRAZIER FARM PARK
CONSTRUCTION DRAWINGS
PHASE 1A
11624 LOUISBURG ROAD
ROLESVILLE, NORTH CAROLINA



REVISIONS

NO. DATE

PLAN INFORMATION

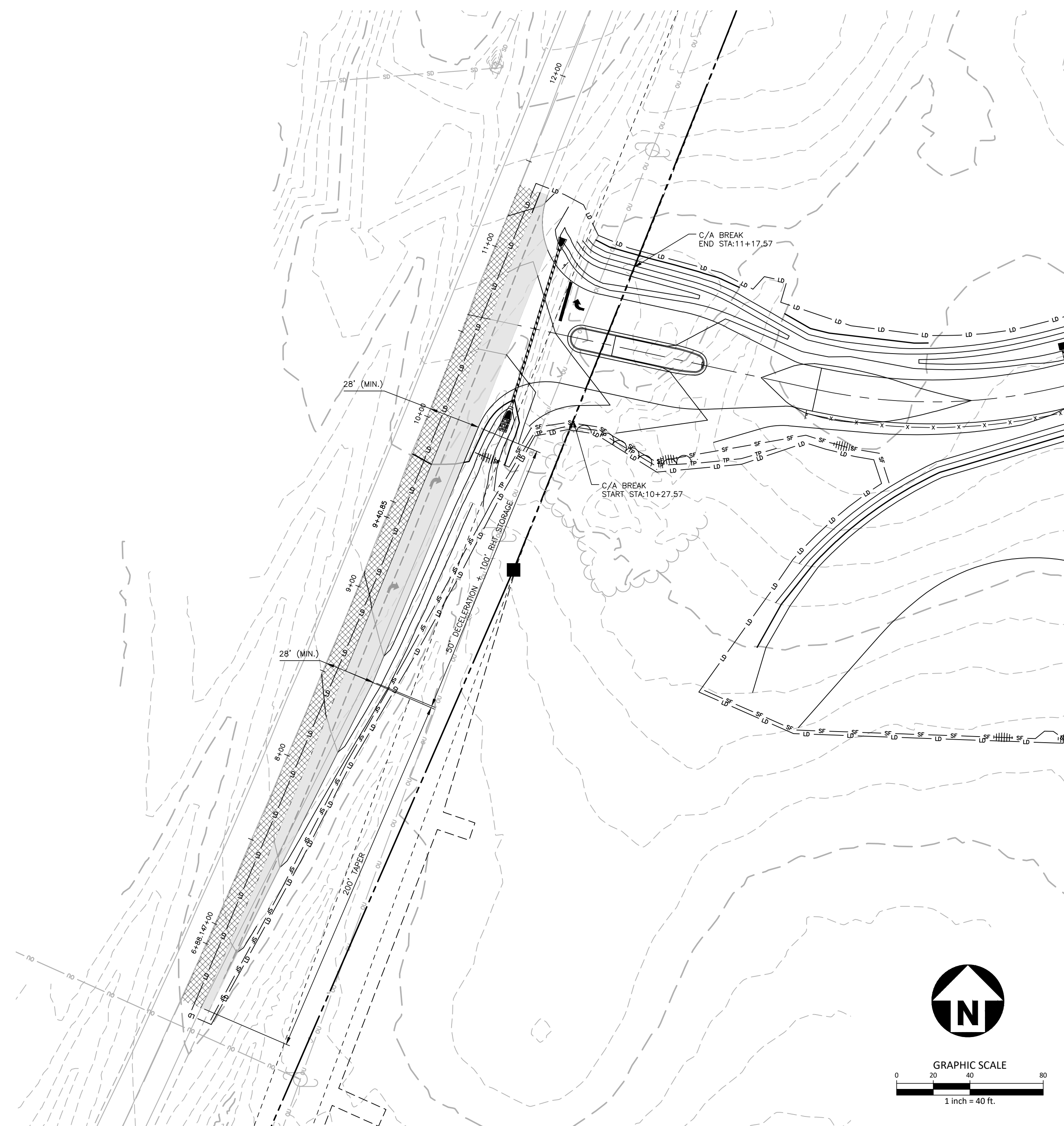
PROJECT NO. 202011039
FILENAME 2020110039-PH1-RW1
CHECKED BY EMD
DRAWN BY SME
SCALE 1"=40'
DATE 06.06.2024

SHEET

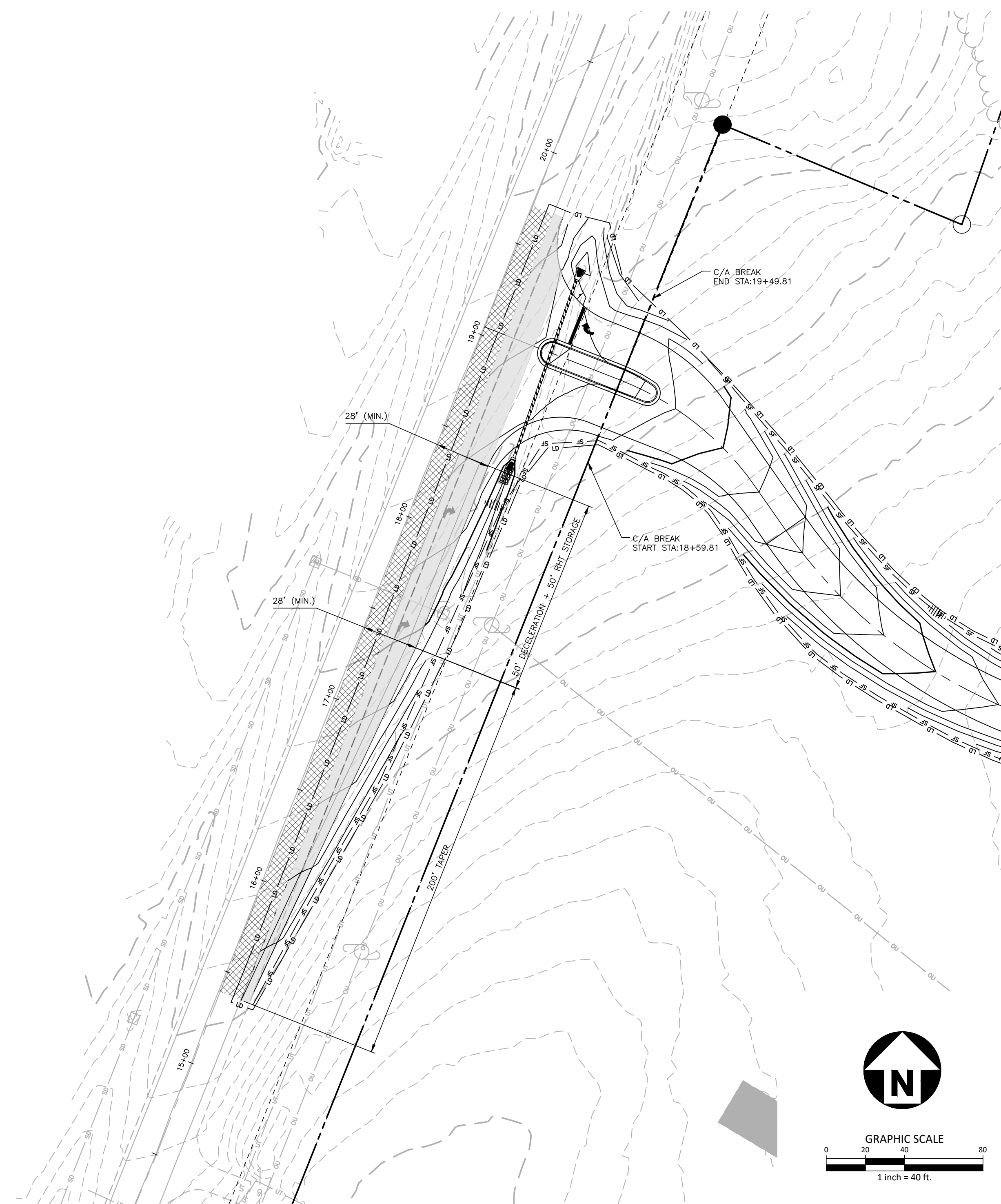
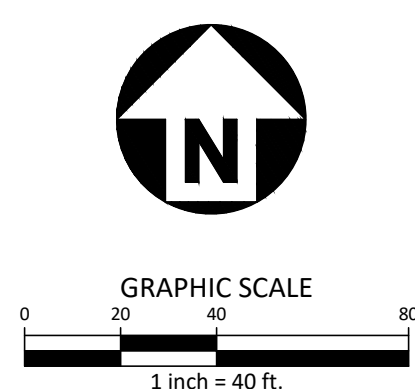
**LOUISBURG RD
WIDENING PLAN**

C7.00

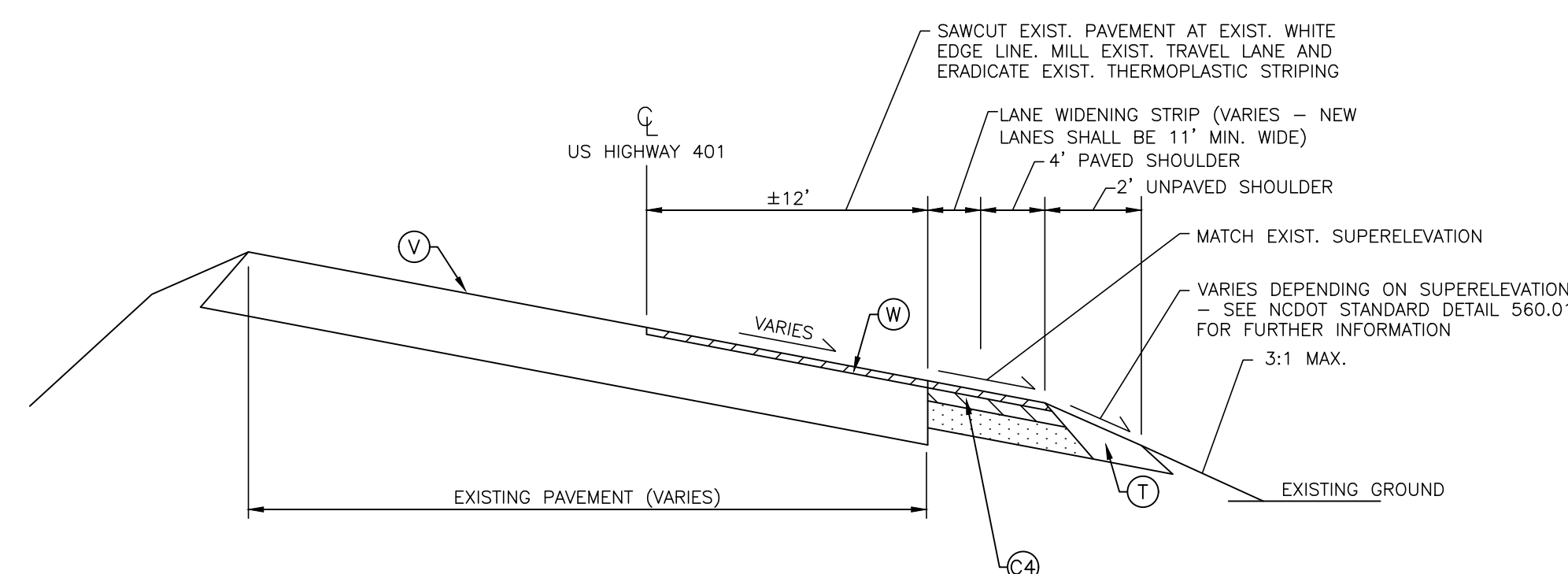
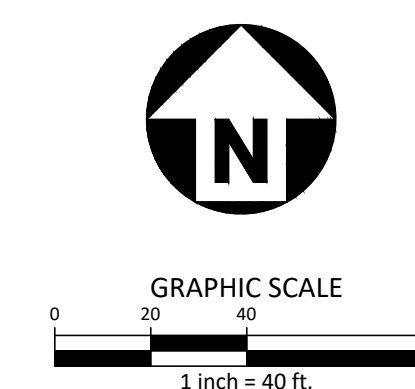
CID-23-5



PARK ENTRANCE "A"



PARK ENTRANCE "B"



TYPICAL SECTION NO. 1
US HIGHWAY 401 / LOUISBURG RD
STA. 6+88 TO 11+36
STA. 15+78 TO 19+71

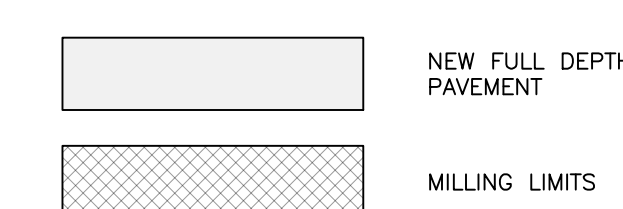
- Ⓢ SEE SHEET C8.00 FOR PAVEMENT SECTION
- Ⓣ COMPACTED EARTH
- Ⓦ WEDGING/OVERLAY (MIN. 1 1/2" S9.5C)
- Ⓥ EXISTING ROADWAY - SUPERELEVATION GRADE AND DIRECTION VARY

PAVEMENT MARKING LEGEND

| LANE LINES/MARKINGS | ARROWS/CHARACTERS |
|--|---|
| T1 16" WHITE LINE, RAILROAD CROSSBAR | UA LEFT TURN ARROW |
| T2 24" WHITE STOPBAR | UB RIGHT TURN ARROW |
| T3 24" WHITE CROSSWALK LINE (HIGH VISIBILITY) | UC STRAIGHT ARROW |
| T4 4" WHITE RUMBLE STRIP | UD COMBINATION STRAIGHT/LEFT TURN ARROW |
| T5 4" YELLOW RUMBLE STRIP | UE COMBINATION STRAIGHT/RIGHT TURN ARROW |
| T6 6" WHITE EDGE LINE | UF COMBINATION LEFT/RIGHT ARROW |
| T7 6" YELLOW EDGE LINE | UG COMBINATION LEFT/STRAIGHT/RIGHT ARROW |
| T8 4" WHITE MINISKIP (2' - 6' SP.) | UH HANDICAP PARKING |
| T9 4" YELLOW MINISKIP (2' - 6' SP.) | UI ALPHANUMERIC CHARACTER |
| T10 12" WHITE MINISKIP (3' - 3' SP.) (ROUNDBOUTS ONLY) | UJ BICYCLE STRAIGHT ARROW |
| T11 6" WHITE MINISKIP (2' - 6' SP.) | UL BICYCLE CHARACTER |
| T12 6" YELLOW MINISKIP (2' - 6' SP.) | UM 12" YIELD LINE TRIANGLE |
| T13 8" WHITE MINISKIP (3' - 9' SP.) | UN 24" YIELD LINE TRIANGLE |
| T14 12" WHITE MINISKIP (3' - 9' SP.) | UO BICYCLE LEFT ARROW |
| T15 6" YELLOW SINGLE CENTER | UP MERGE ARROW |
| T16 6" YELLOW DOUBLE CENTER | UQ RAMP ARROW SYMBOL |
| T17 8" WHITE MINISKIP (3' - 3' SP.) (ROUNDBOUTS ONLY) | UR SHARROW |
| TA 4" WHITE EDGE LINE | US BICYCLE LOOP DETECTOR |
| TB 4" YELLOW EDGE LINE | UT U-TURN ARROW |
| TC 4" WHITE SKIP (10' - 30' SP.) | UU FISH-HOOK STRAIGHT ARROW |
| TD 4" WHITE MINISKIP (3' - 9' SP.) | UV FISH-HOOK STRAIGHT/LEFT ARROW |
| TE 4" WHITE SOLID LANE LINE | UW FISH-HOOK STRAIGHT/RIGHT ARROW |
| TF 4" YELLOW SKIP (10' - 30' SP.) | UX FISH-HOOK LEFT/RIGHT ARROW |
| TH 4" YELLOW SINGLE CENTER | UY FISH-HOOK LEFT/STRAIGHT/RIGHT ARROW |
| TI 4" YELLOW DOUBLE CENTER | UZ FISH-HOOK W/CIRCLE STRAIGHT ARROW |
| TJ 6" WHITE SKIP (10' - 30' SP.) | WA FISH-HOOK W/CIRCLE LEFT ARROW |
| TK 6" WHITE MINISKIP (3' - 9' SP.) | WB FISH-HOOK W/CIRCLE STRAIGHT/LEFT ARROW |
| TL 6" WHITE SOLID LANE LINE | WC FISH-HOOK W/CIRCLE LEFT/STRAIGHT/RIGHT ARROW |
| TM 6" YELLOW SKIP (10' - 30' SP.) | |
| TN 8" WHITE GORELINE | |
| TO 8" WHITE DIAGONAL | |
| TP 8" YELLOW DIAGONAL | |
| TQ 8" WHITE CROSSWALK LINE | |
| TR 8" WHITE SOLID LANE LINE | |
| TS 12" WHITE GORELINE | |
| TT 12" WHITE SOLID LANE LINE | |
| TU 12" WHITE DIAGONAL (45MPH OR GREATER) | |
| TV 12" YELLOW DIAGONAL (45MPH OR GREATER) | |

NOTE:
ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC AND ARE TO BE PLACED PER NCDOT STANDARDS (REFERENCE NCDOT DETAILS (1205.01-1205.12)

ROAD WIDENING LEGEND



M:\Projects\WOL\2020110039 Frazier Farm PH1A\04-Production\Engineering\Phase1A\CID\2020110039-PH1-RW1.dwg, 6/6/2024 3:11:44 PM, Eric Domonell



McADAMS

The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713

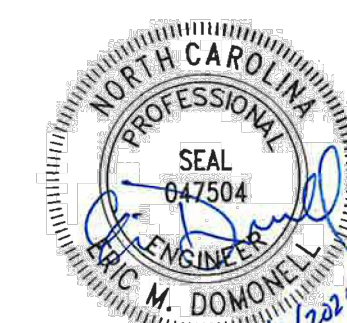
phone 919. 361. 5000
fax 919. 361. 2269
license number: C-0293

www.mcadamsco.com

CLIENT

NAME: TOWN OF ROLESVILLE
ADDRESS: 502 SOUTHTOWN CIRCLE
ADDRESS: ROLESVILLE NC 27571
PHONE: 919.554.6582

FRAZIER FARM PARK
CONSTRUCTION DRAWINGS
PHASE 1A
11624 LOUISBURG ROAD
ROLESVILLE, NORTH CAROLINA



REVISIONS

NO. DATE

PLAN INFORMATION

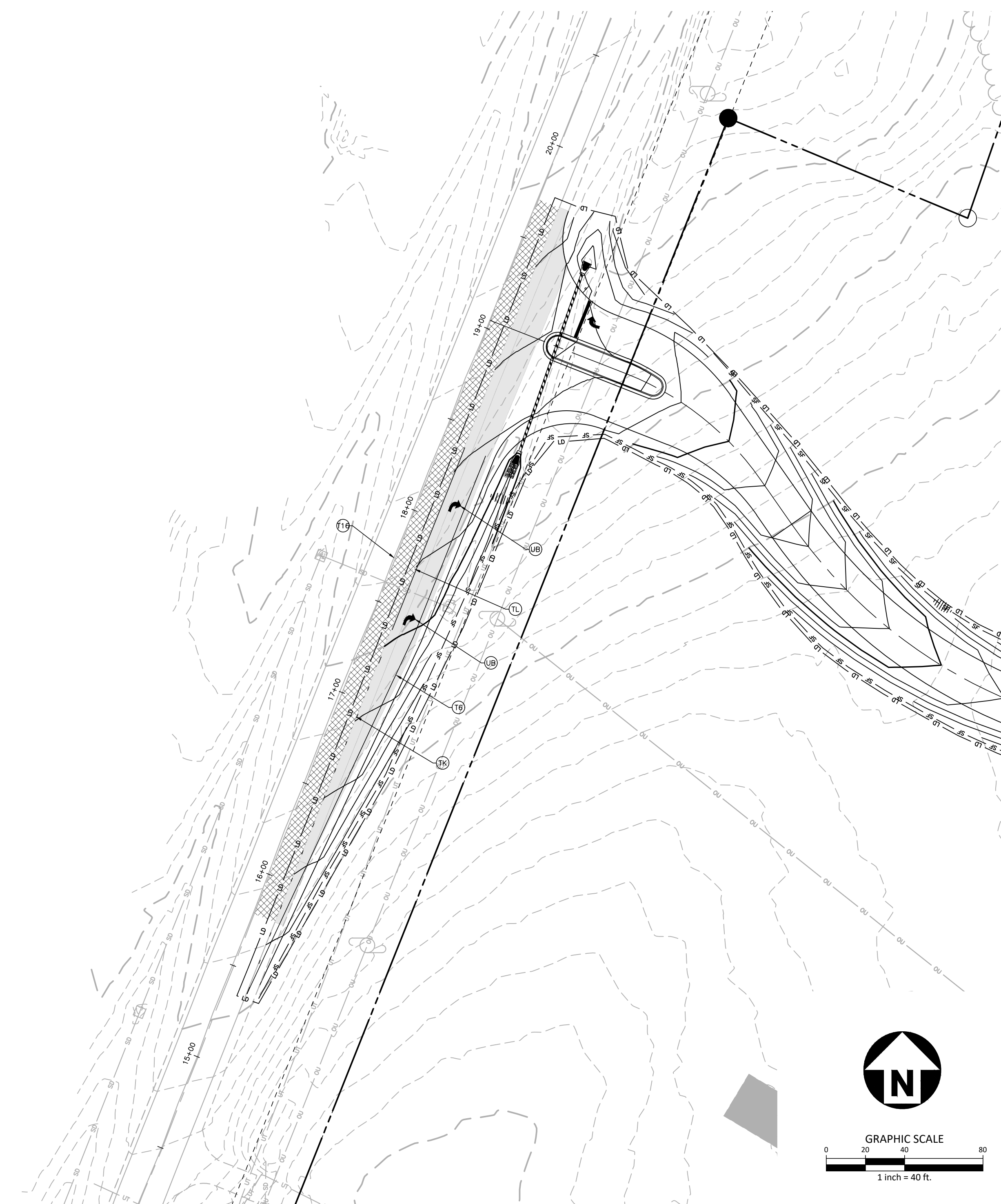
PROJECT NO. 202011039
FILENAME 2020110039-PH1-RW3
CHECKED BY EMD
DRAWN BY SME
SCALE 1"=40'
DATE 06.06.2024

SHEET

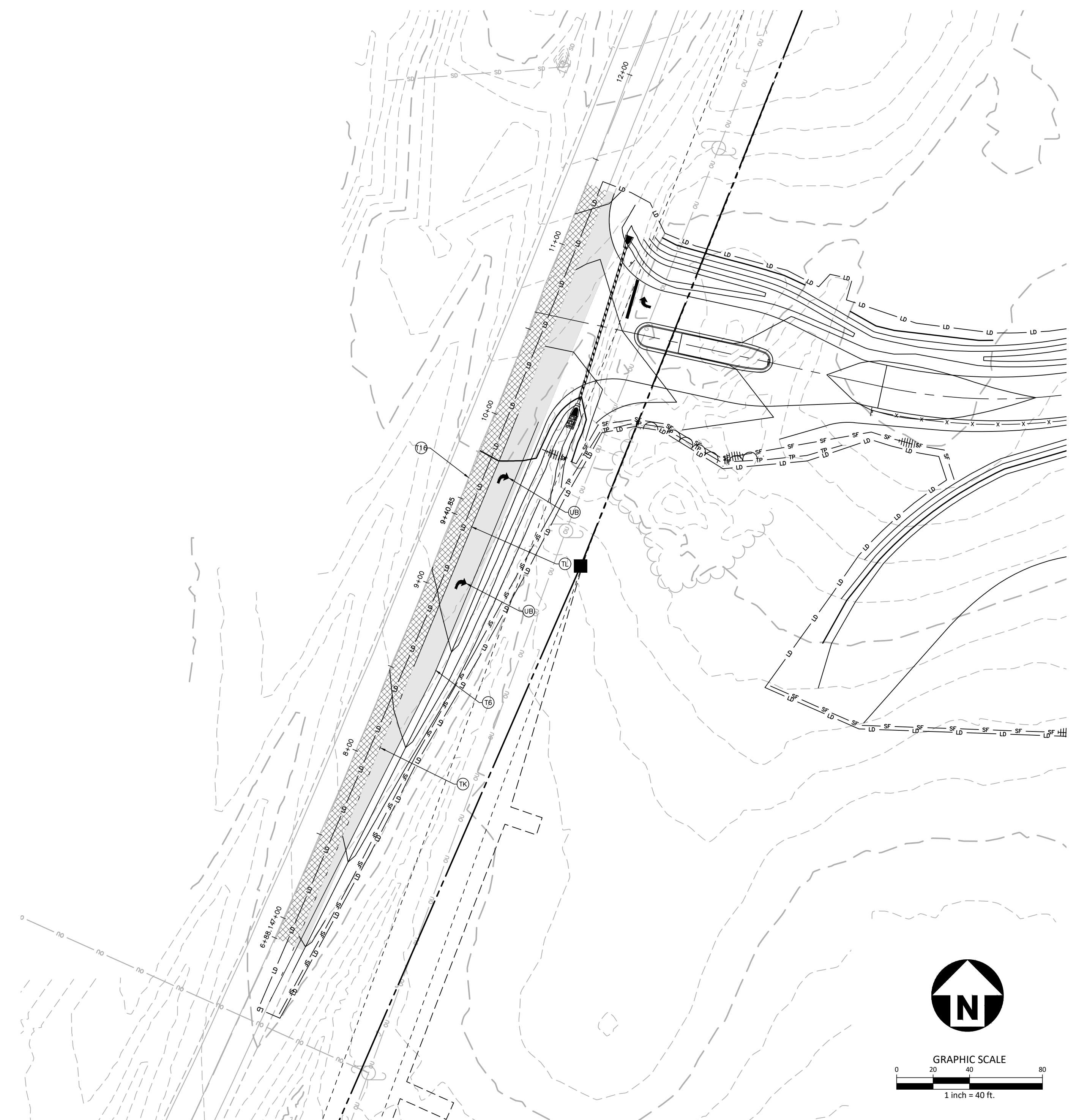
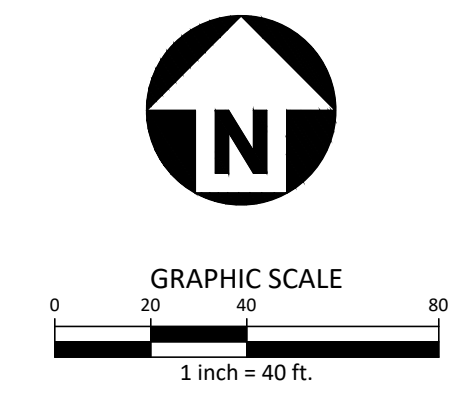
**LOUISBURG RD
STRIPING PLAN**

C7.01

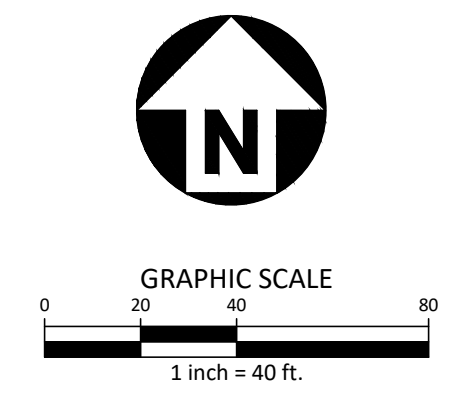
CID-23-5



PARK ENTRANCE "B"



PARK ENTRANCE "A"



PAVEMENT MARKING LEGEND

LANE LINES/MARKINGS

- T1 16" WHITE LINE, RAILROAD CROSSBAR
- T2 24" WHITE STOPBAR
- T3 24" WHITE CROSSWALK LINE (HIGH VISIBILITY)
- T4 4" WHITE RUMBLE STRIP
- T5 4" YELLOW RUMBLE STRIP
- T6 6" WHITE EDGELINE
- T7 6" YELLOW EDGELINE
- T8 4" WHITE MINISKIP (2' - 6' SP.)
- T9 4" YELLOW MINISKIP (2' - 6' SP.)
- T10 12" WHITE MINISKIP (3' - 3' SP.) (ROUNDBOUTS ONLY)
- T11 6" WHITE MINISKIP (2' - 6' SP.)
- T12 6" YELLOW MINISKIP (2' - 6' SP.)
- T13 8" WHITE MINISKIP (3' - 9' SP.)
- T14 12" WHITE MINISKIP (3' - 9' SP.)
- T15 6" YELLOW SINGLE CENTER
- T16 6" YELLOW DOUBLE CENTER
- T17 8" WHITE MINISKIP (3' - 3' SP.) (ROUNDBOUTS ONLY)
- TA 4" WHITE EDGELINE
- TB 4" YELLOW EDGELINE
- TC 4" WHITE SKIP (10' - 30' SP.)
- TD 4" WHITE MINISKIP (3' - 9' SP.)
- TE 4" WHITE SOLID LANE LINE
- TF 4" YELLOW SKIP (10' - 30' SP.)
- TH 4" YELLOW SINGLE CENTER
- TI 4" YELLOW DOUBLE CENTER
- TJ 6" WHITE SKIP (10' - 30' SP.)
- TK 6" WHITE MINISKIP (3' - 9' SP.)
- TL 6" WHITE SOLID LANE LINE
- TM 6" YELLOW SKIP (10' - 30' SP.)
- TN 8" WHITE GORELINE
- TO 8" WHITE DIAGONAL
- TP 8" YELLOW DIAGONAL
- TQ 8" WHITE CROSSWALK LINE
- TR 8" WHITE SOLID LANE LINE
- TS 12" WHITE GORELINE
- TT 12" WHITE SOLID LANE LINE
- TU 12" WHITE DIAGONAL (45MPH OR GREATER)
- TV 12" YELLOW DIAGONAL (45MPH OR GREATER)

ARROWS/CHARACTERS

- UA LEFT TURN ARROW
- UB RIGHT TURN ARROW
- UC STRAIGHT ARROW
- UD COMBINATION STRAIGHT/LEFT TURN ARROW
- UE COMBINATION STRAIGHT/RIGHT TURN ARROW
- UF COMBINATION LEFT/RIGHT ARROW
- UG COMBINATION LEFT/STRAIGHT/RIGHT ARROW
- UH HANDICAP PARKING
- UI ALPHANUMERIC CHARACTER
- UJ BICYCLE SYMBOL
- UK BICYCLE STRAIGHT ARROW
- UL BICYCLE CHARACTER
- UM 12" YIELD LINE TRIANGLE
- UN 24" YIELD LINE TRIANGLE
- UO BICYCLE LEFT ARROW
- UP MERGE ARROW
- UQ RAMP ARROW SYMBOL
- UR SHARROW
- US BICYCLE LOOP DETECTOR
- UT U-TURN ARROW
- UU FISH-HOOK STRAIGHT ARROW
- UV FISH-HOOK STRAIGHT/LEFT ARROW
- UW FISH-HOOK STRAIGHT/RIGHT ARROW
- UX FISH-HOOK LEFT/RIGHT ARROW
- UY FISH-HOOK LEFT/STRAIGHT/RIGHT ARROW
- UZ FISH-HOOK W/CIRCLE STRAIGHT ARROW
- WA FISH-HOOK W/CIRCLE LEFT ARROW
- WB FISH-HOOK W/CIRCLE STRAIGHT/LEFT ARROW
- WC FISH-HOOK W/CIRCLE LEFT/STRAIGHT/RIGHT ARROW

NOTE:
ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC
AND ARE TO BE PLACED PER NCDOT STANDARDS
(REFERENCE NCDOT DETAILS (1205.01-1205.12)

M:\Projects\WOL\2020110039 Frazier Farm PH1A\04-Production\Engineering\Phase1A\CID-23-5\2020110039-PH1-RW3.dwg, 6/6/2024 3:11:52 PM, Eric Domonell



McADAMS

The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713

phone 919. 361. 5000
fax 919. 361. 2269
license number: C-0293

www.mcadamsco.com

CLIENT

NAME: TOWN OF ROLESVILLE
ADDRESS: 502 SOUTHTOWN CIRCLE
ADDRESS: ROLESVILLE NC 27571
PHONE: 919.554.6582

**FRAZIER FARM PARK
CONSTRUCTION DRAWINGS
PHASE 1A
11624 LOUISBURG ROAD
ROLESVILLE, NORTH CAROLINA**



REVISIONS

NO. DATE

PLAN INFORMATION

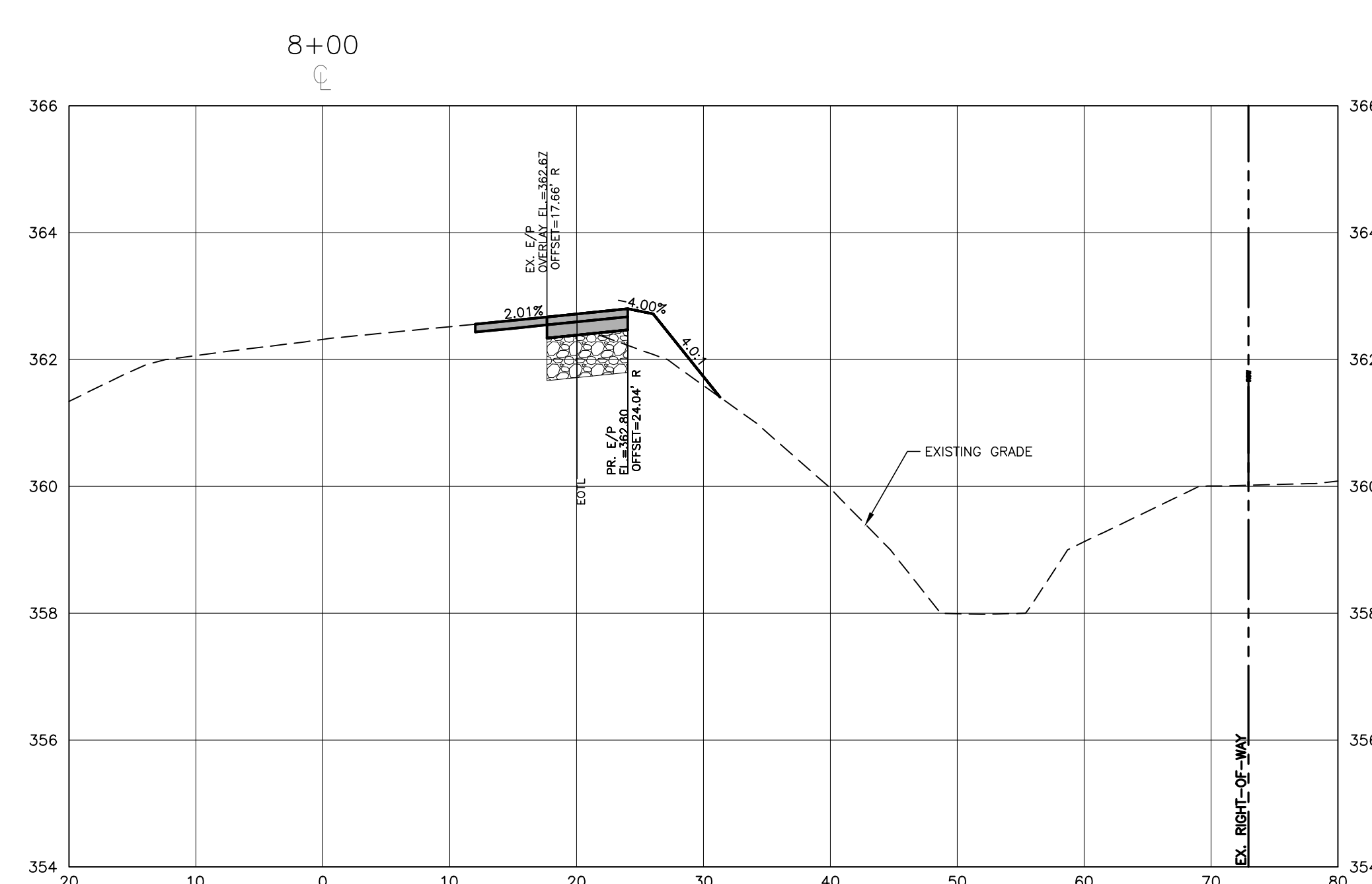
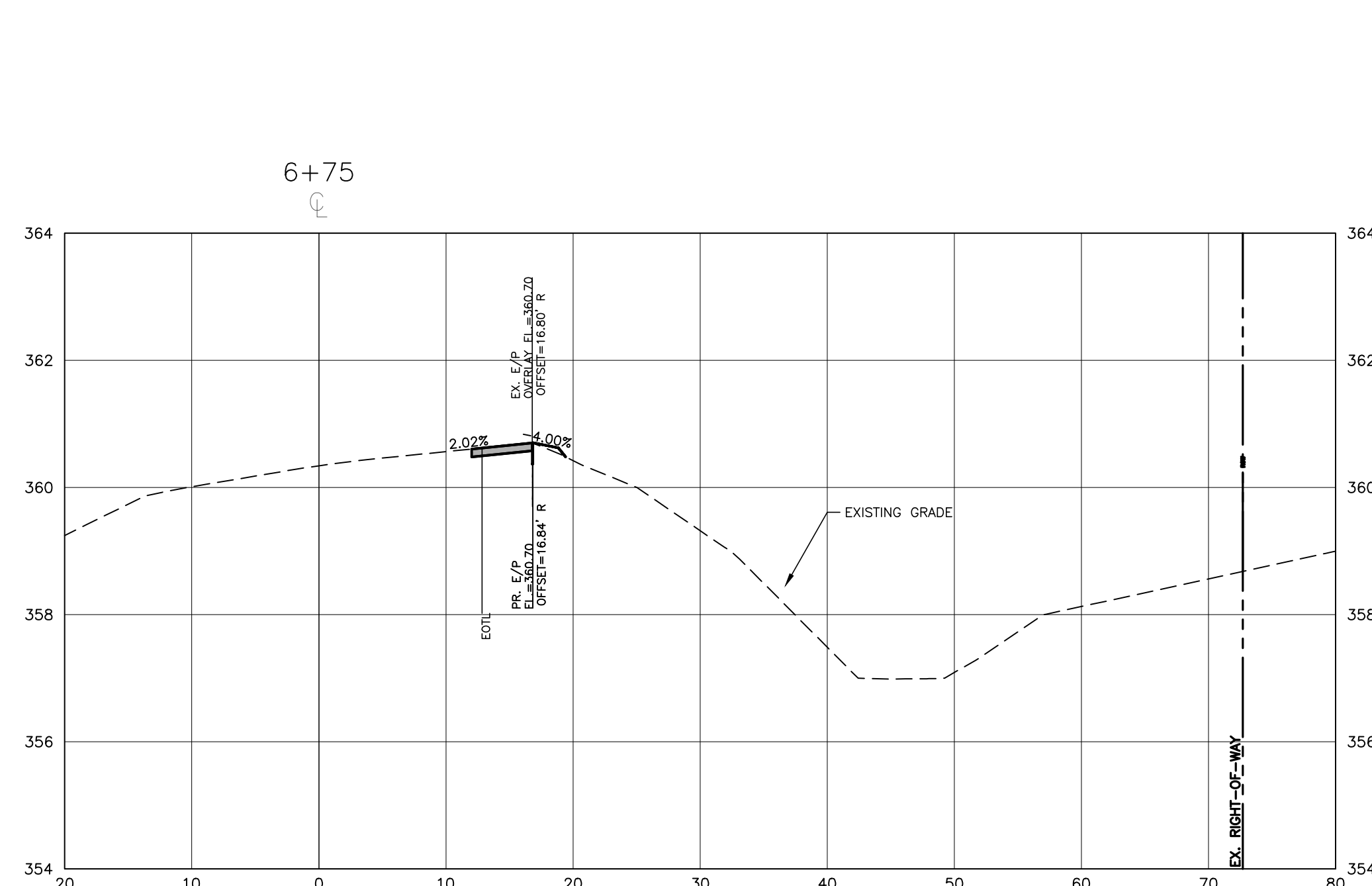
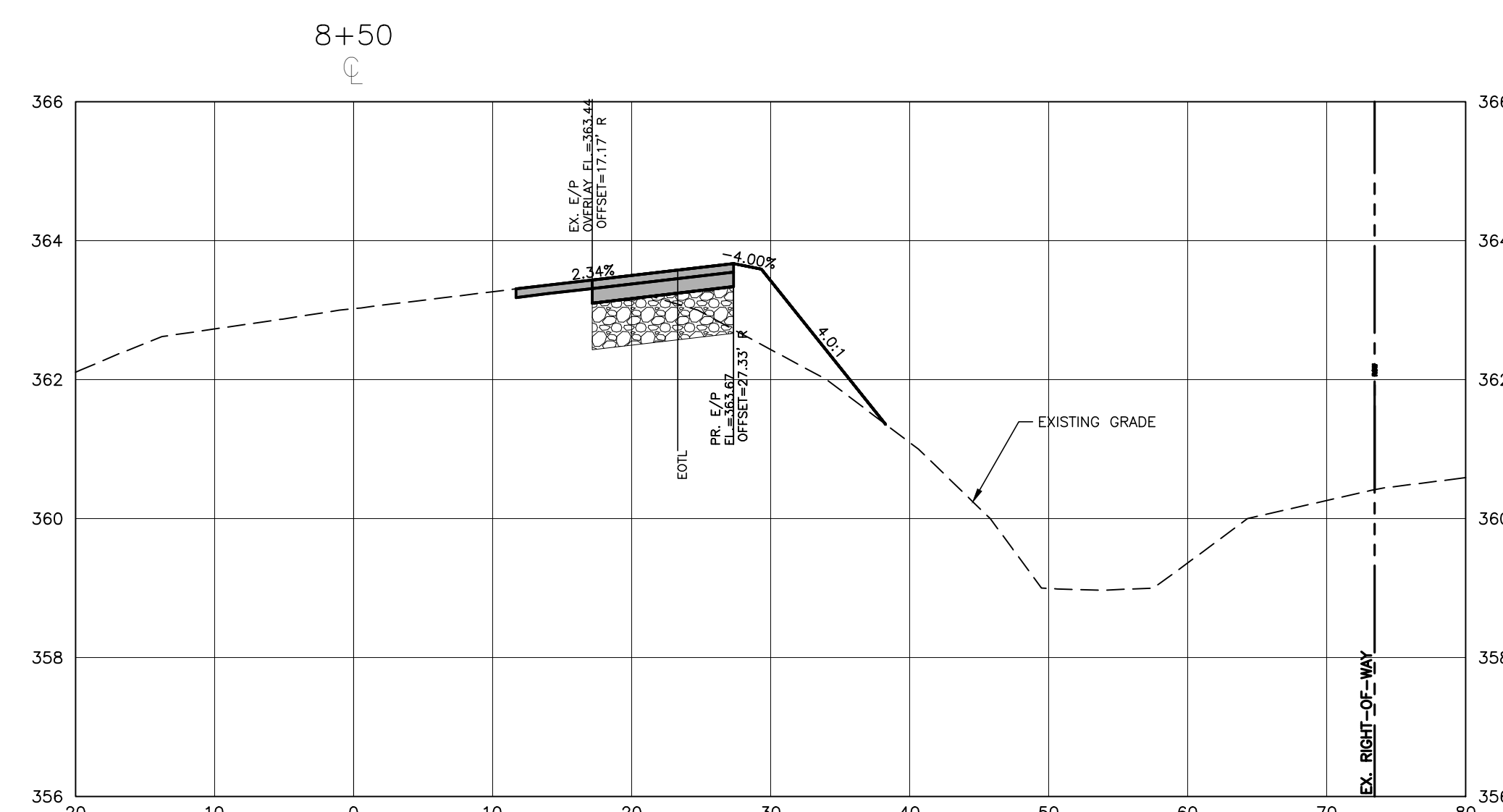
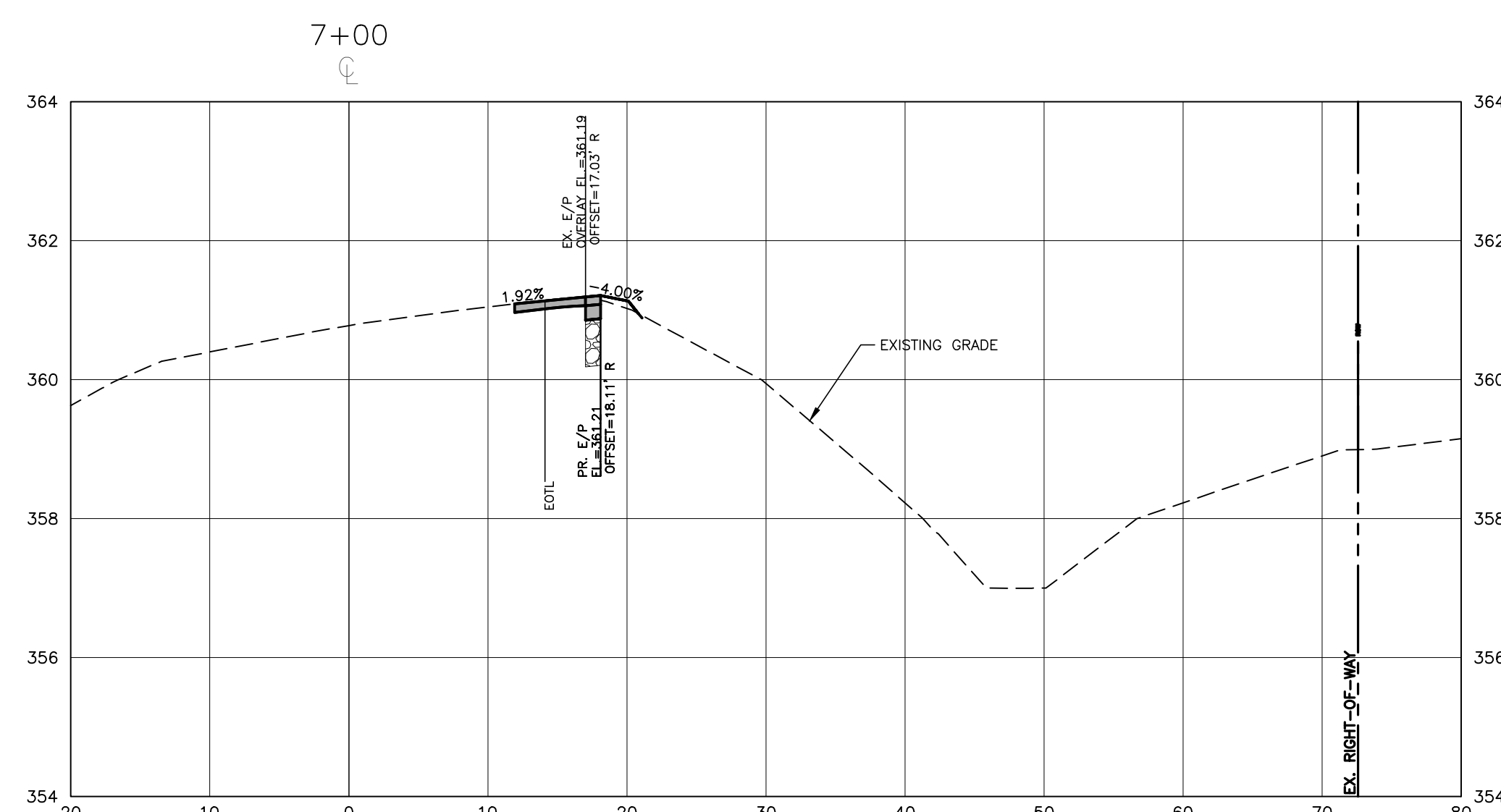
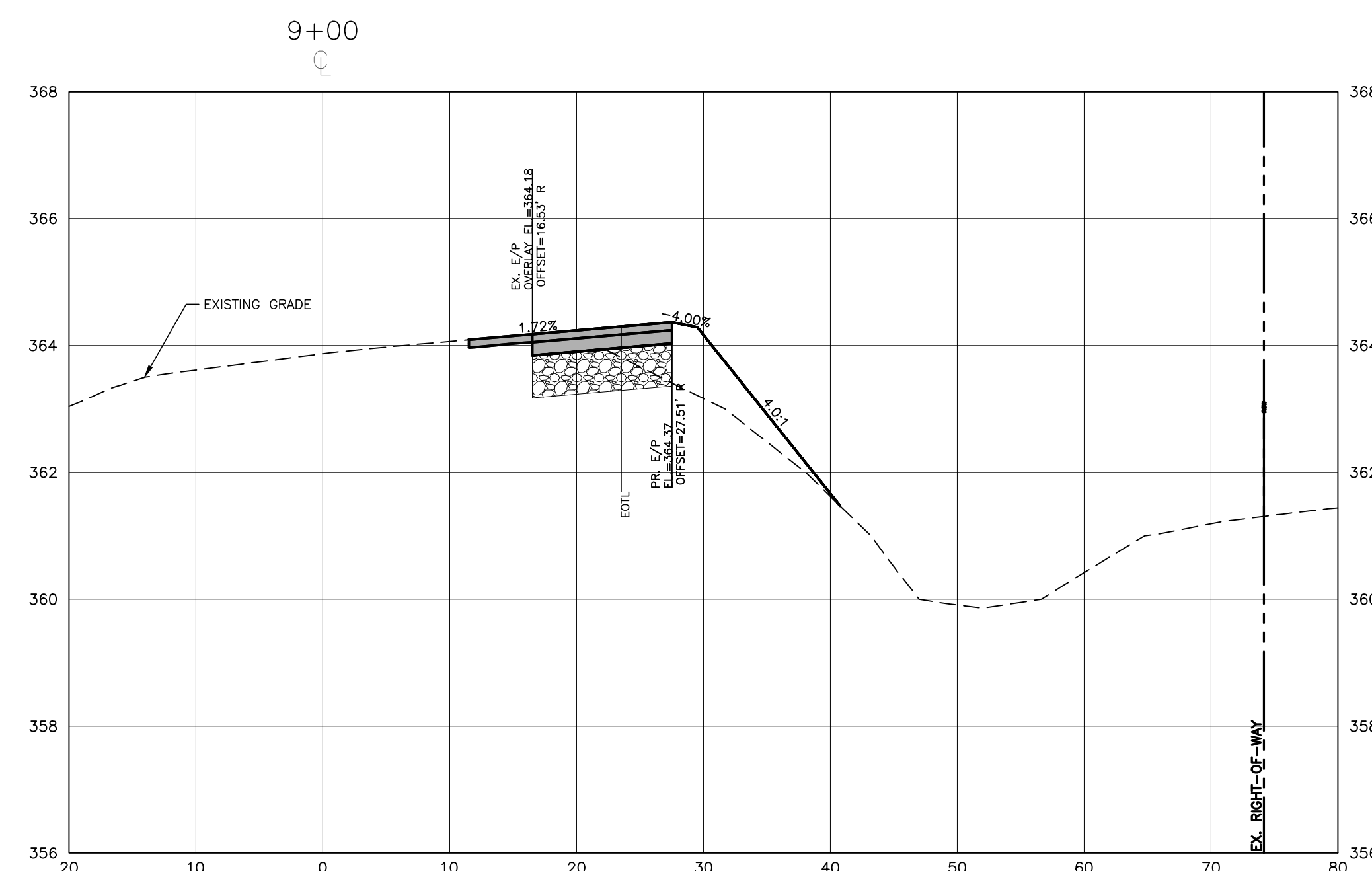
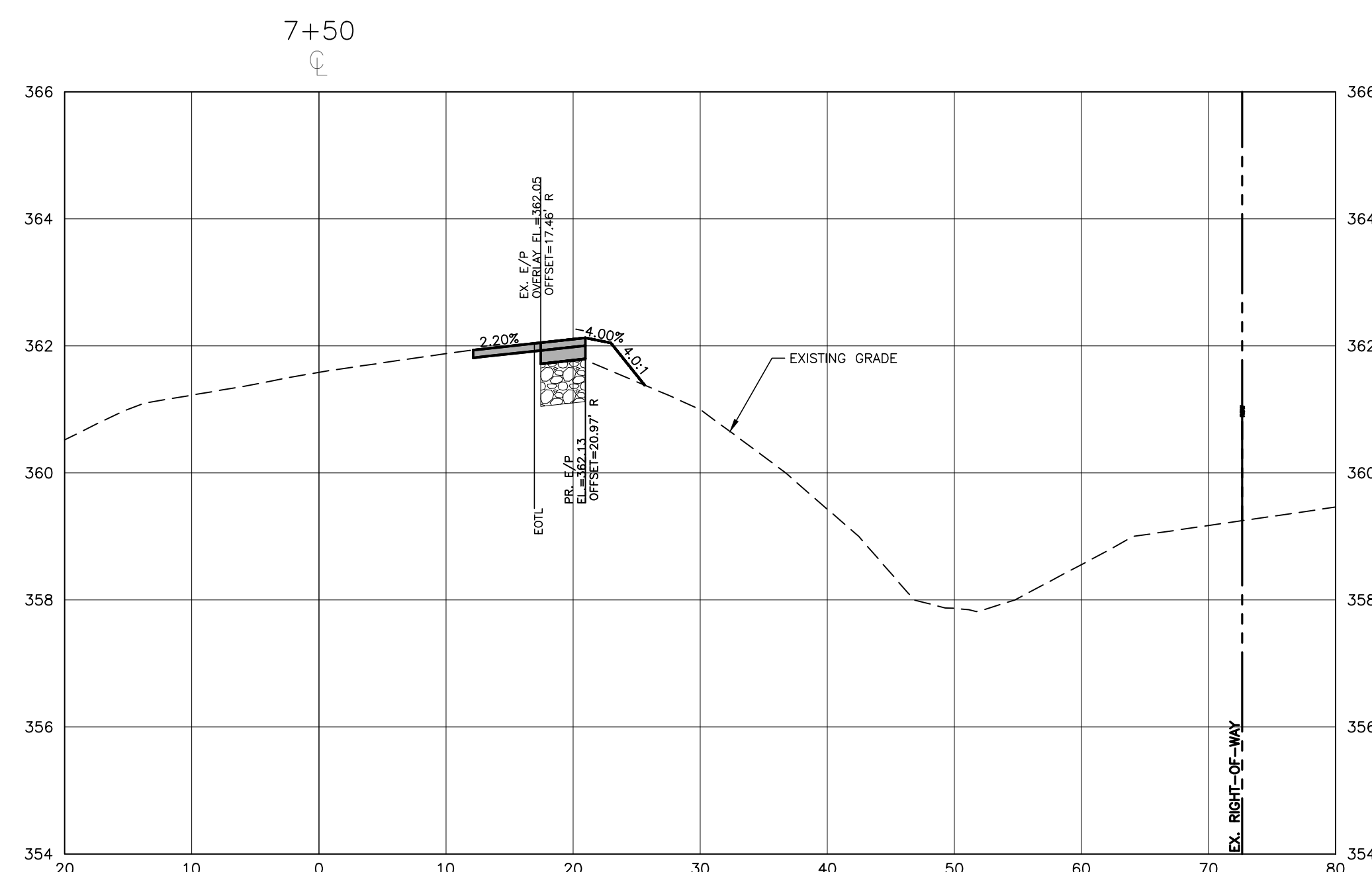
PROJECT NO. 202011039
FILENAME 202011039-PH1-RW2
CHECKED BY EMD
DRAWN BY SME
SCALE H:1"=10' / V:1"=2'
DATE 06.06.2024

SHEET

**LOUISBURG RD
WIDENING
CROSS SECTIONS**

C7.10

CID-23-5



M:\Projects\WOL\202011039 Frazier Farm PH1A\04-Production\Engineering\Phase1A\CID\202011039-PH1-RW2.dwg, 6/6/2024 3:12:06 PM, EIC Domonell



McADAMS

The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713

phone 919.361.5000
fax 919.361.2269
license number: C-0293

www.mcadamsco.com

CLIENT

NAME: TOWN OF ROLESVILLE
ADDRESS: 502 SOUTHTOWN CIRCLE
ADDRESS: ROLESVILLE NC 27571
PHONE: 919.554.6582

**FRAZIER FARM PARK
CONSTRUCTION DRAWINGS
PHASE 1A
11624 LOUISBURG ROAD
ROLESVILLE, NORTH CAROLINA**



REVISIONS

NO. DATE

PLAN INFORMATION

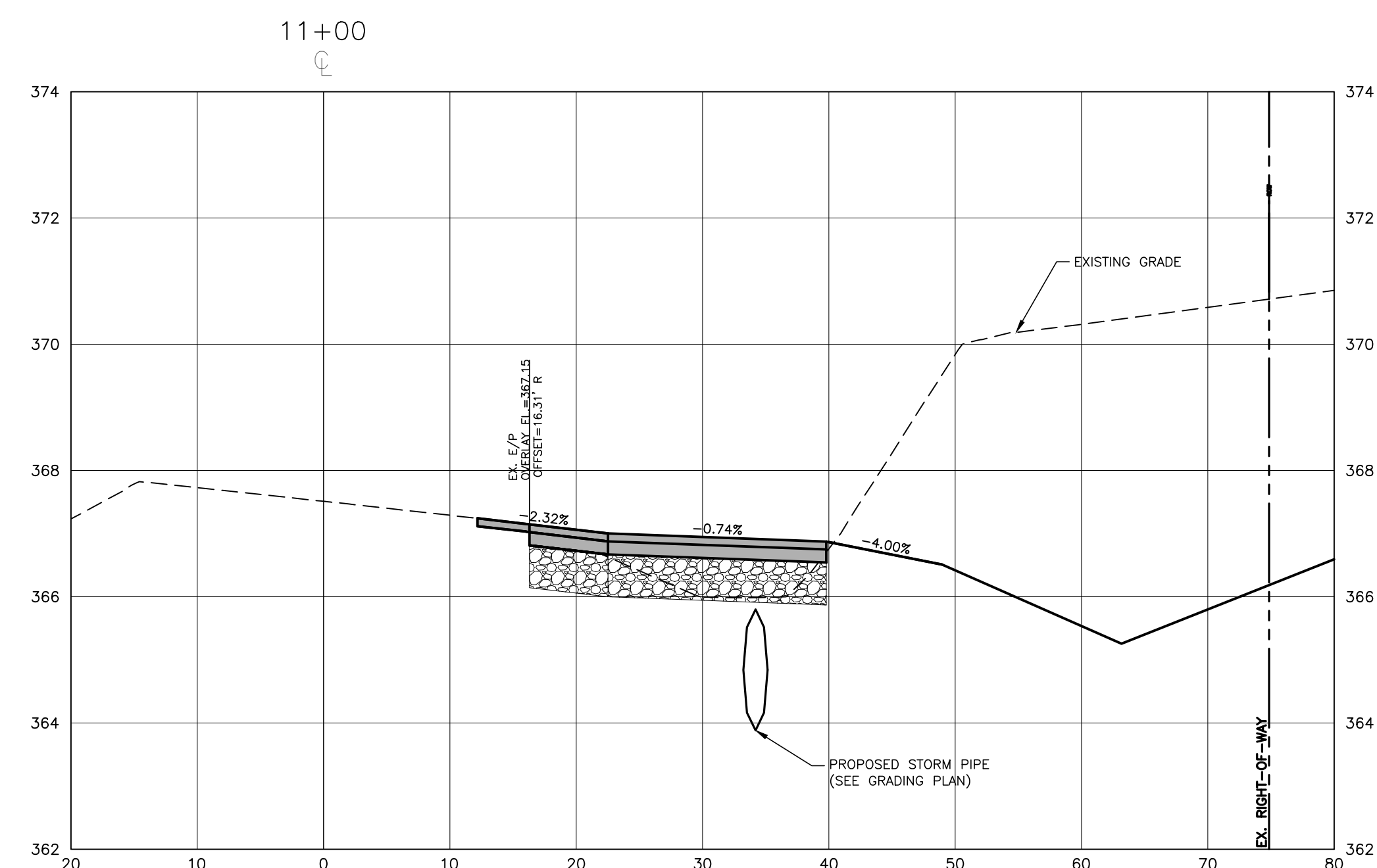
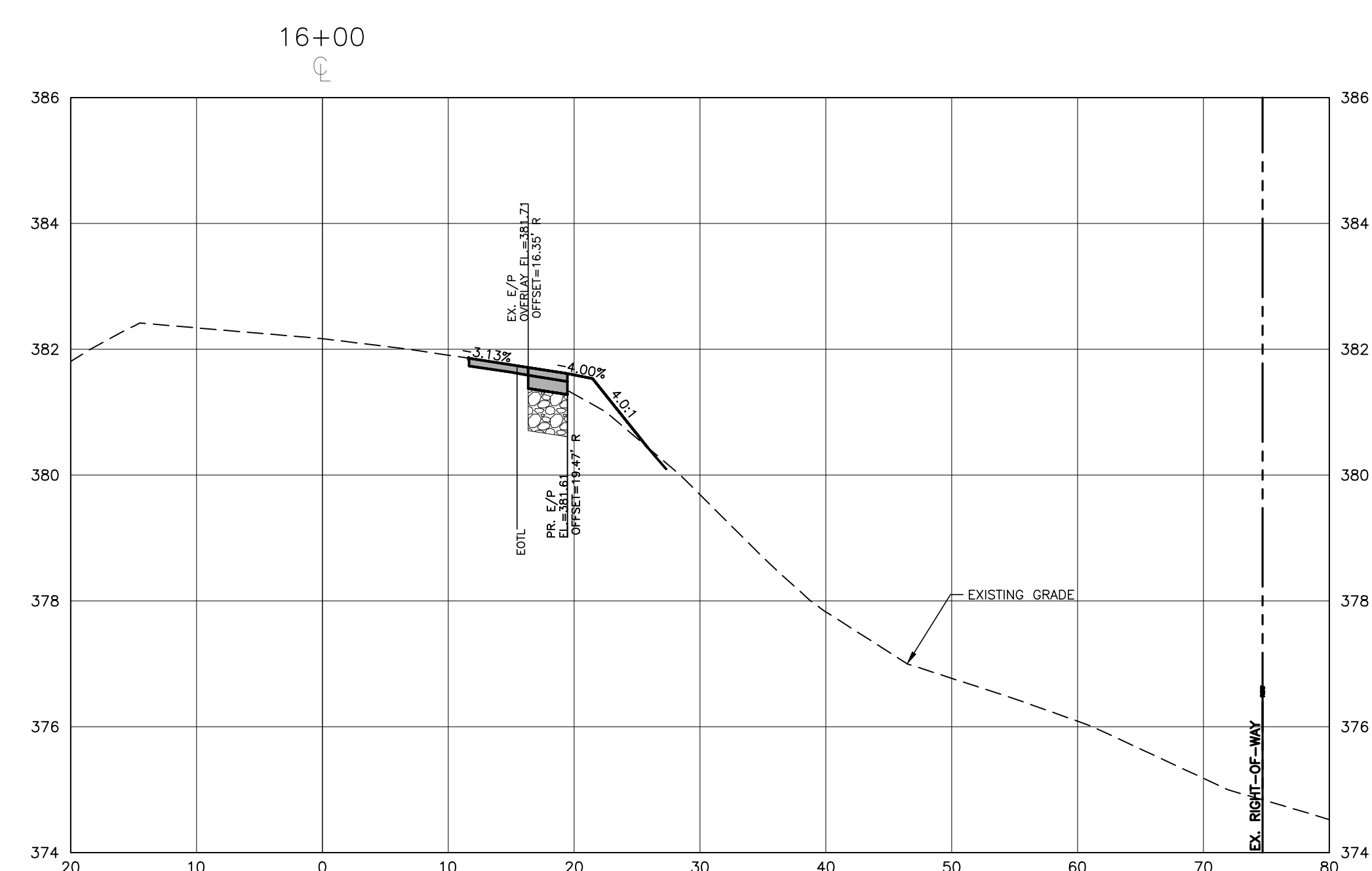
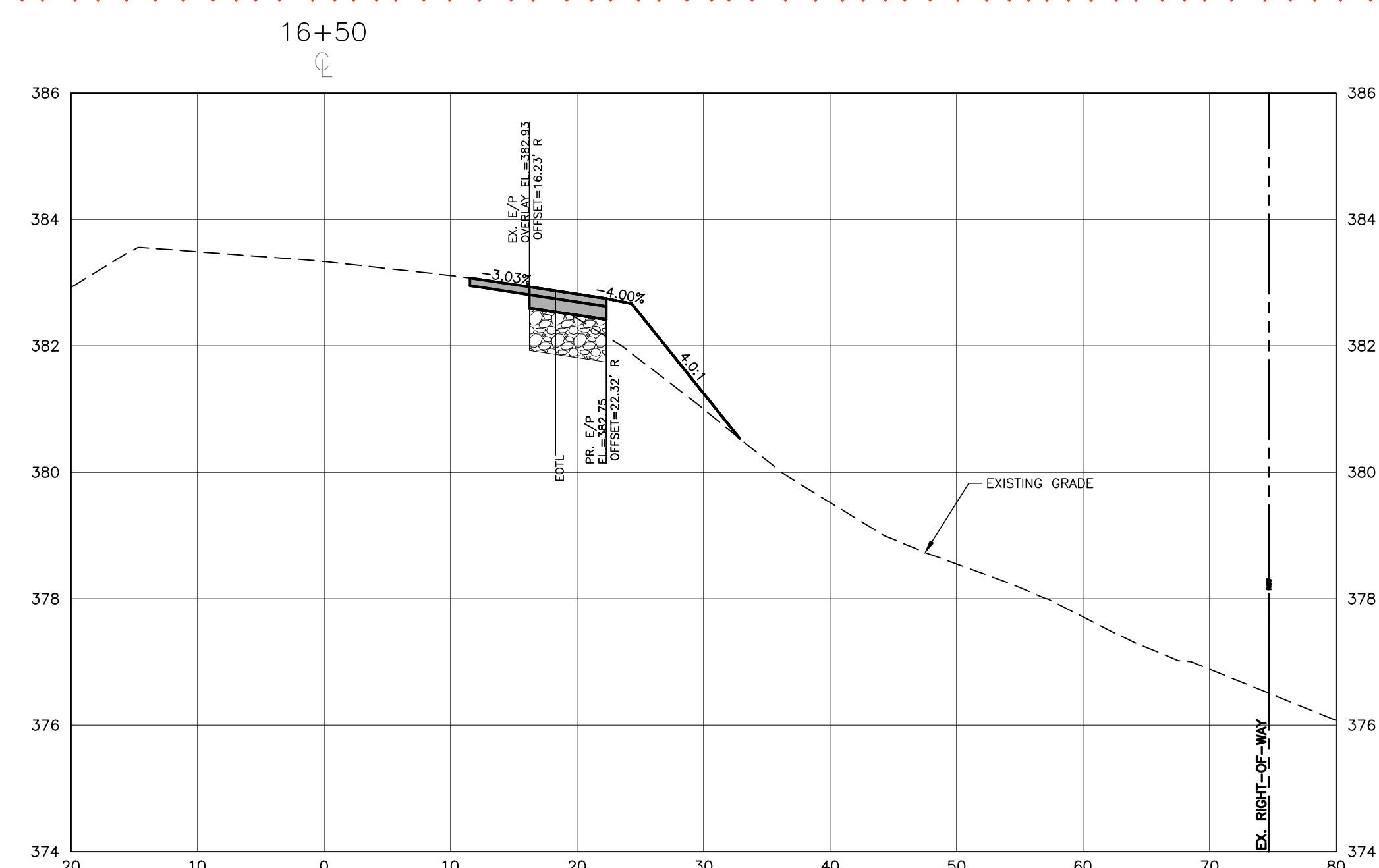
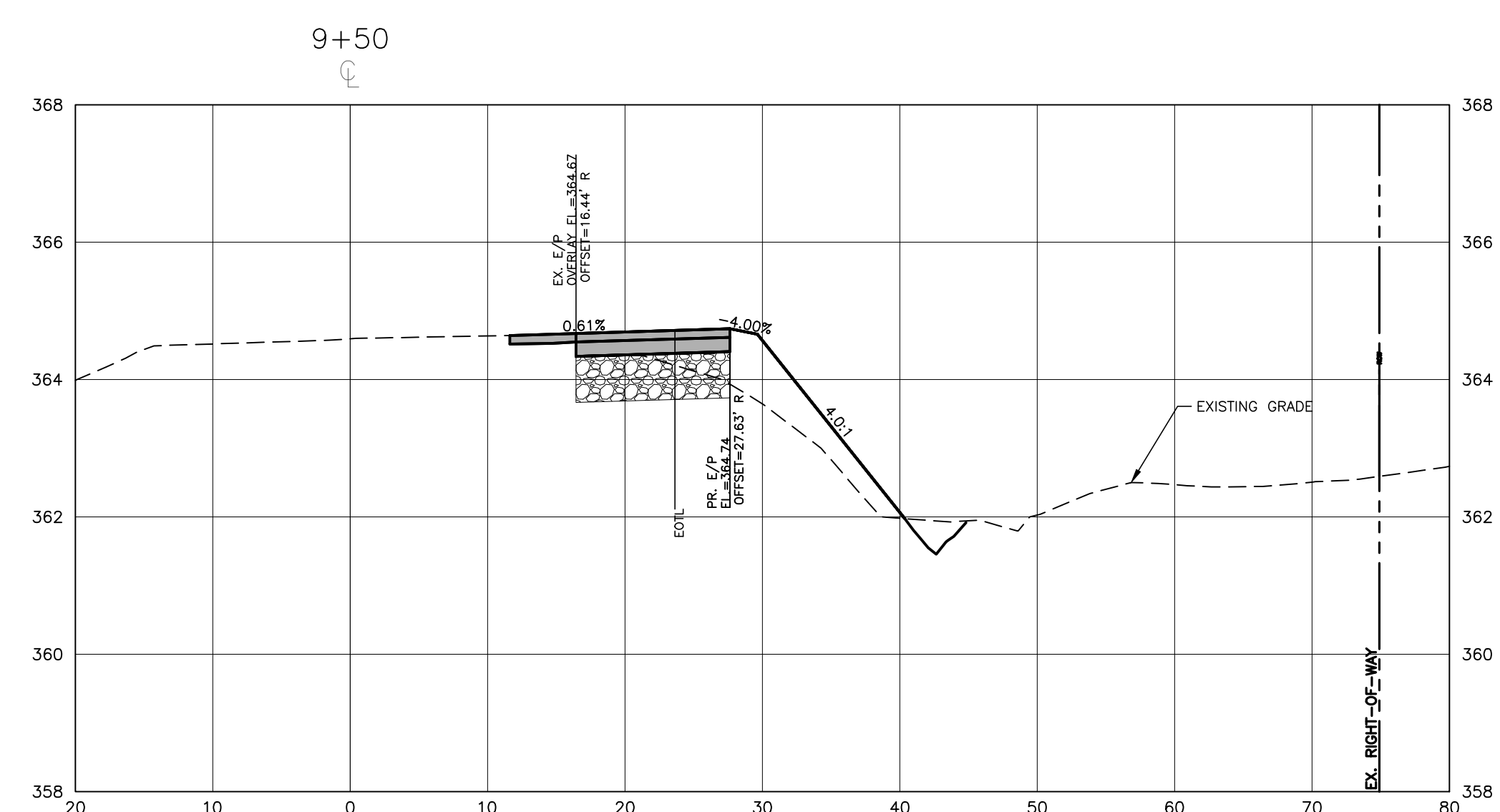
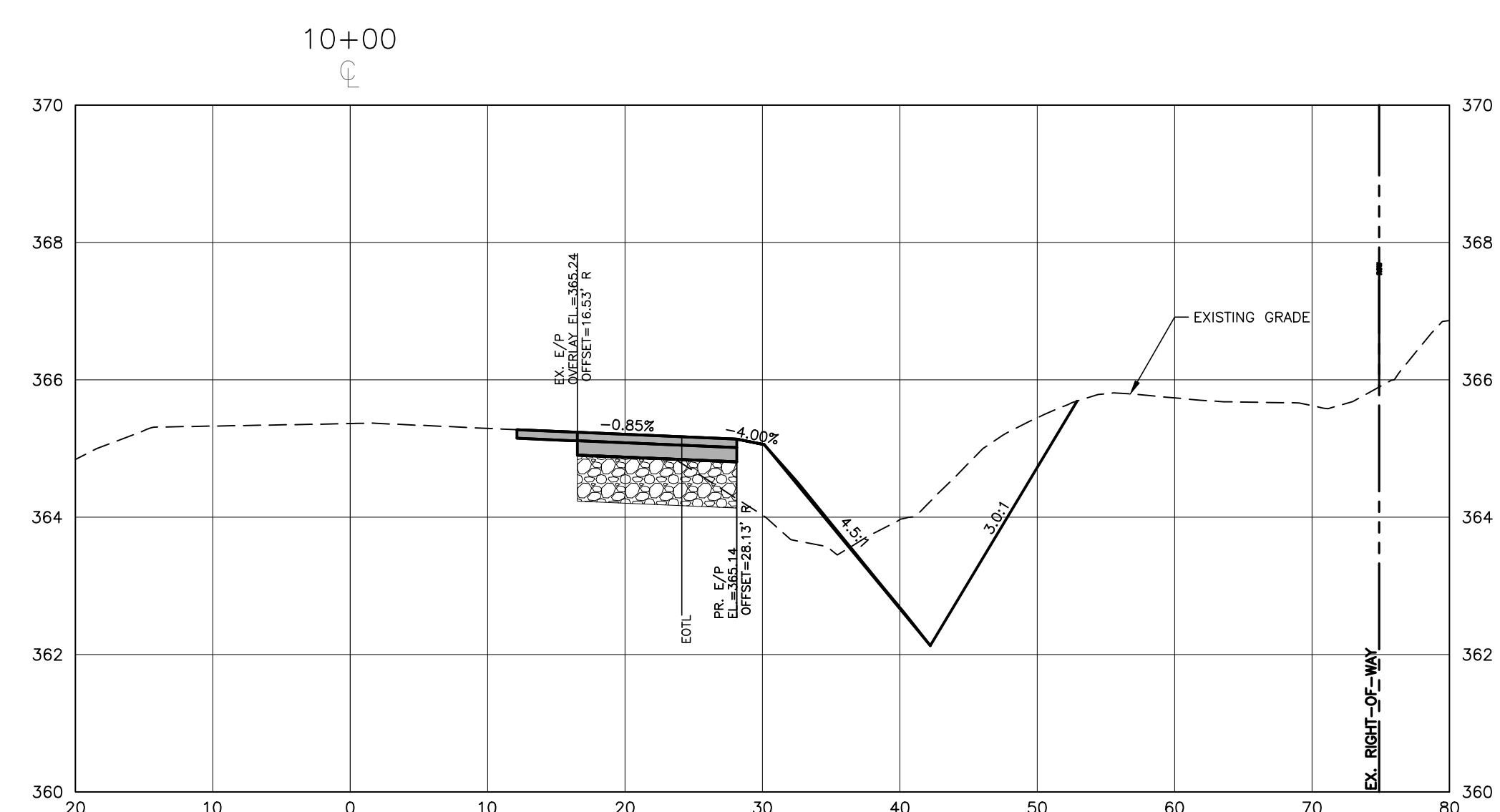
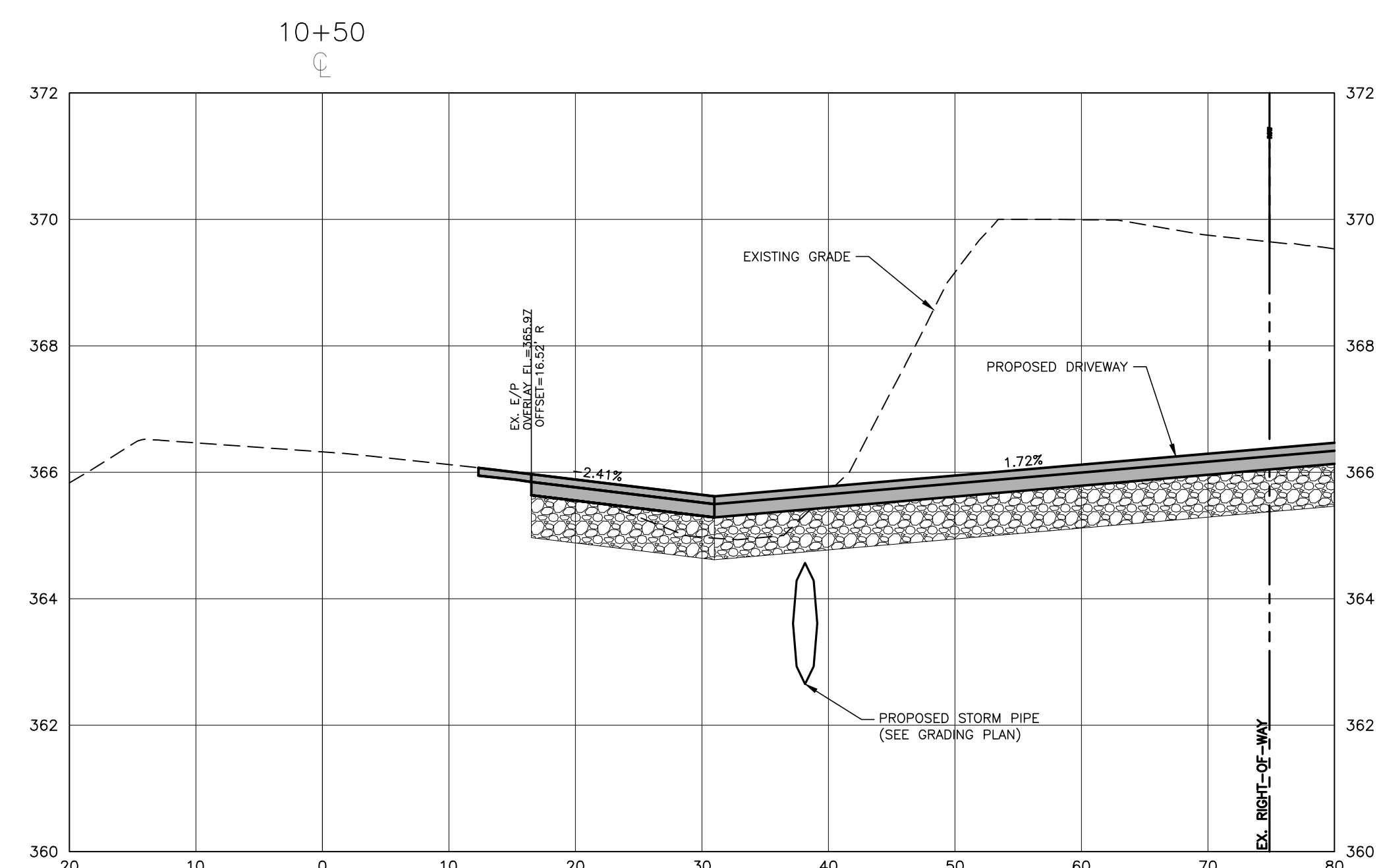
PROJECT NO. 202011039
FILENAME 202011039-PH1-RW2
CHECKED BY EMD
DRAWN BY SME
SCALE H:1"=10' / V:1"=2'
DATE 06.06.2024

SHEET

**LOUISBURG RD
WIDENING
CROSS SECTIONS**

C7.11

CID-23-5



M:\Projects\WOL\202011039 Frazier Farm PH1A\04-Production\Engineering\Phase1A\CID\202011039-PH1-RW2.dwg, 6/6/2024 3:12:08 PM, Eric Domonell



McADAMS

The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713

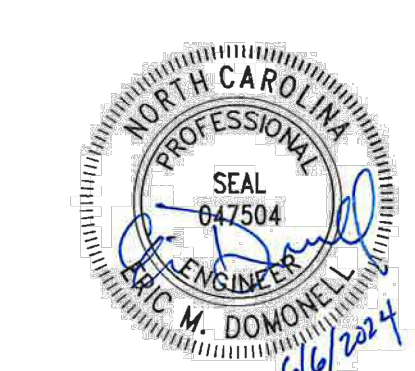
phone 919.361.5000
fax 919.361.2269
license number: C-0293

www.mcadamsco.com

CLIENT

NAME: TOWN OF ROLESVILLE
ADDRESS: 502 SOUTHTOWN CIRCLE
ADDRESS: ROLESVILLE NC 27571
PHONE: 919.554.6582

**FRAZIER FARM PARK
CONSTRUCTION DRAWINGS
PHASE 1A
11624 LOUISBURG ROAD
ROLESVILLE, NORTH CAROLINA**



REVISIONS

NO. DATE

PLAN INFORMATION

PROJECT NO. 202011039
FILENAME 2020110039-PH1-RW2
CHECKED BY EMD
DRAWN BY SME
SCALE H:1"=10' / V:1"=2'
DATE 06.06.2024

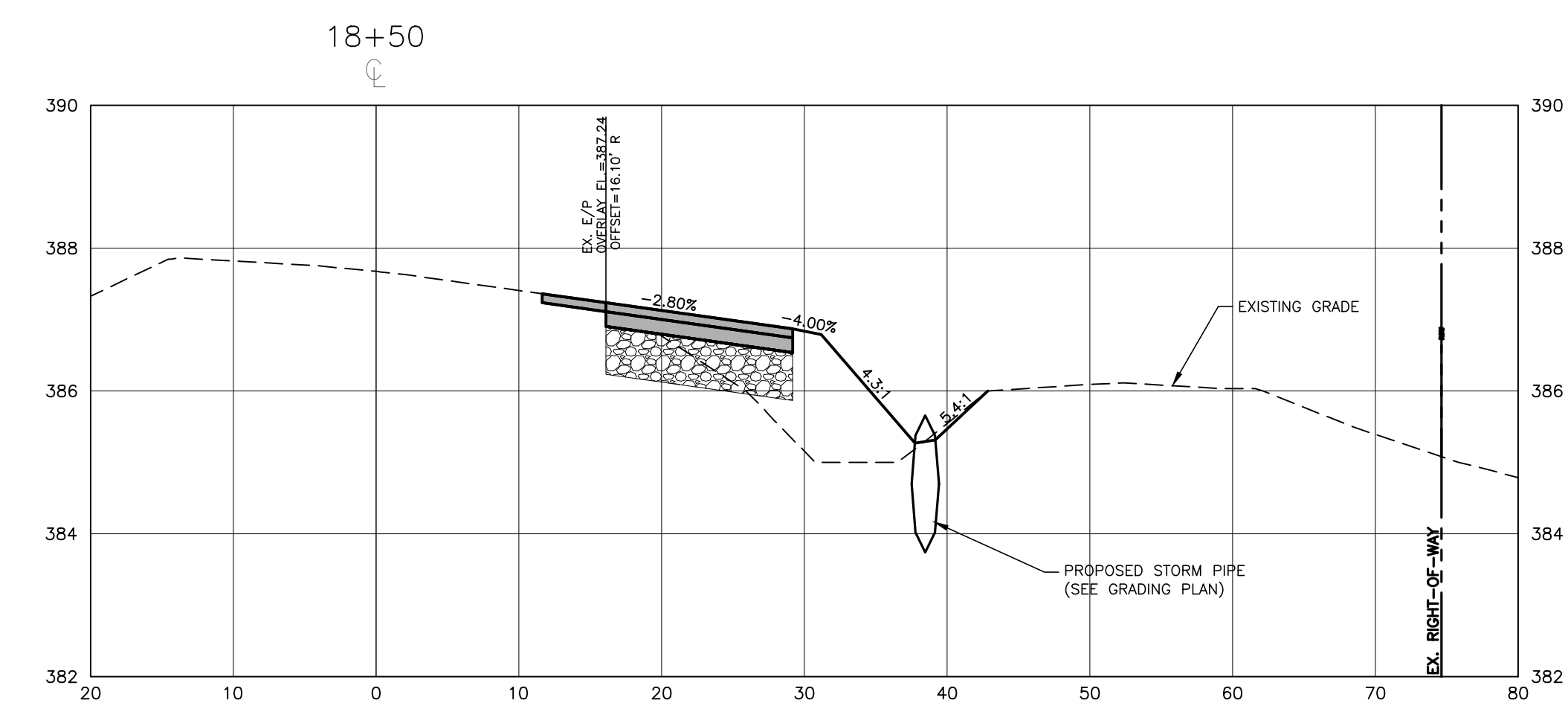
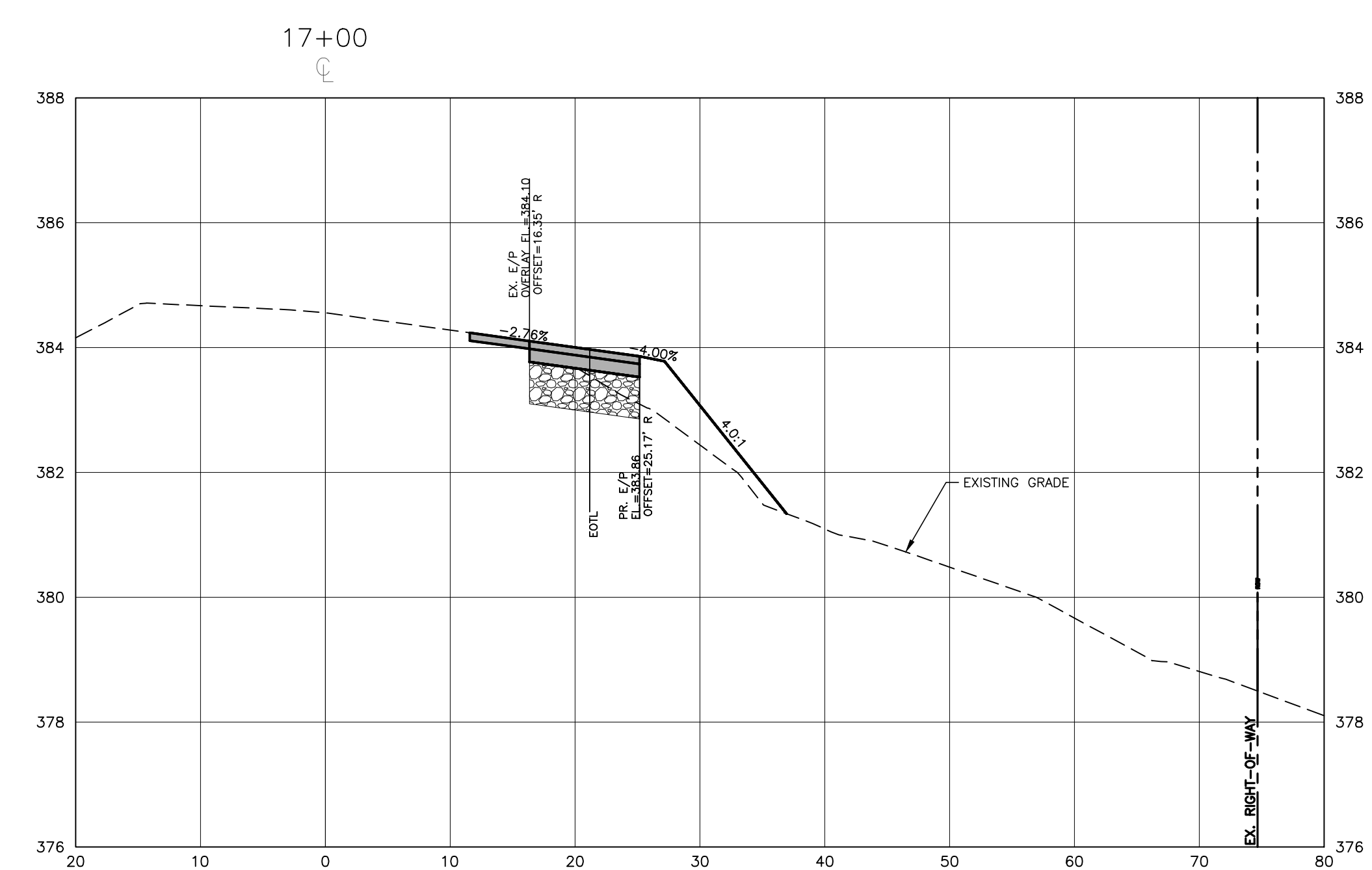
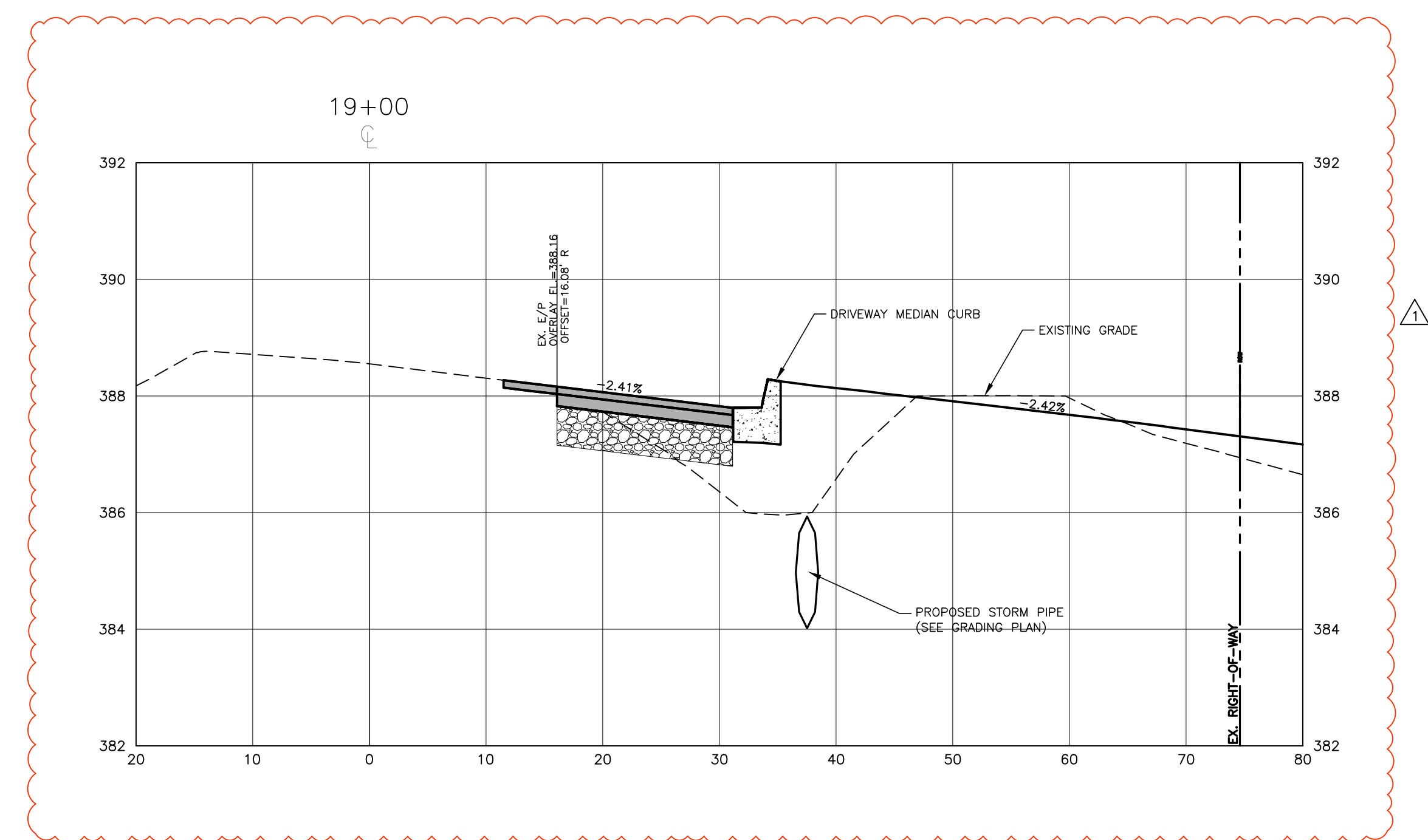
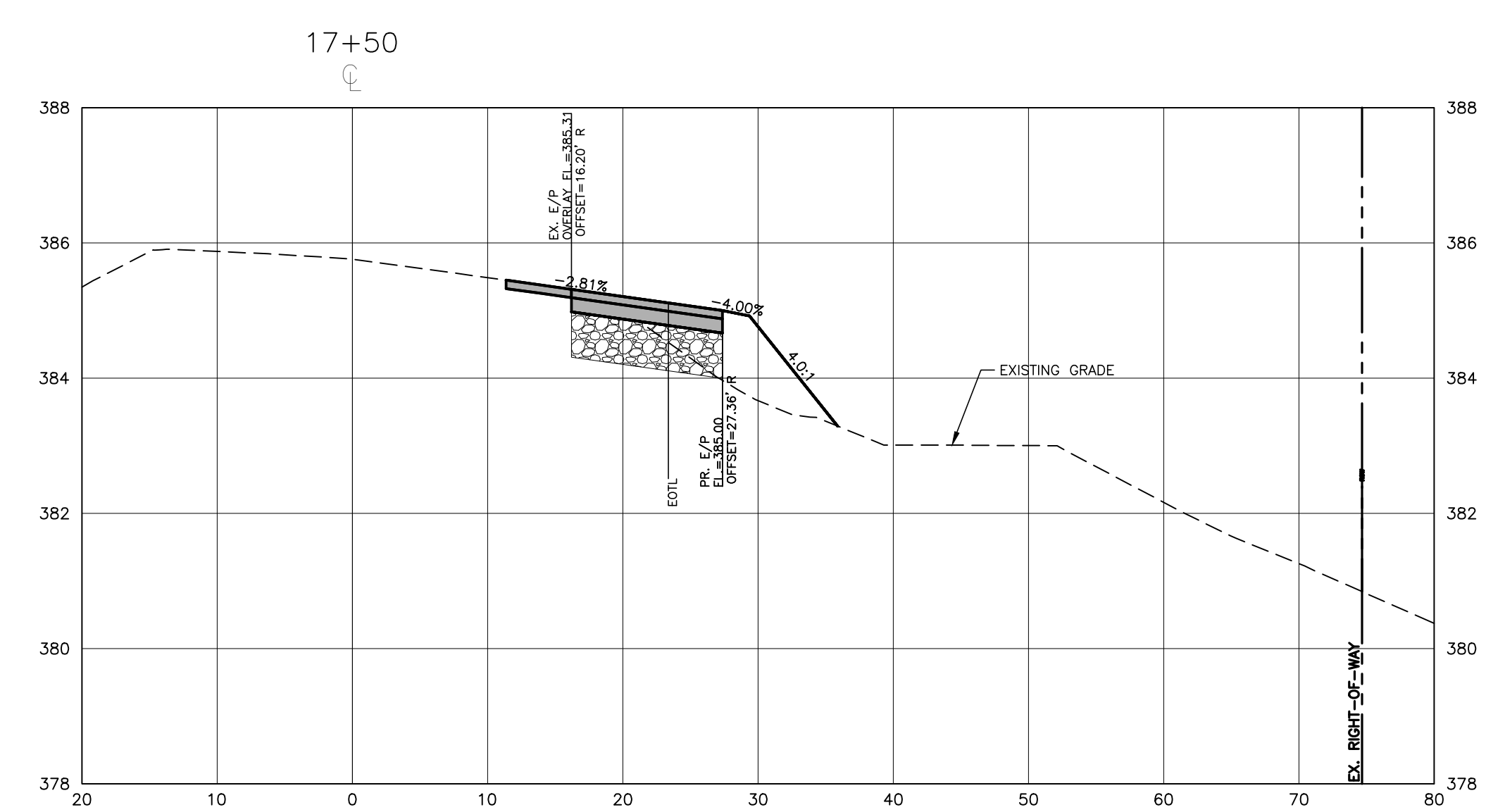
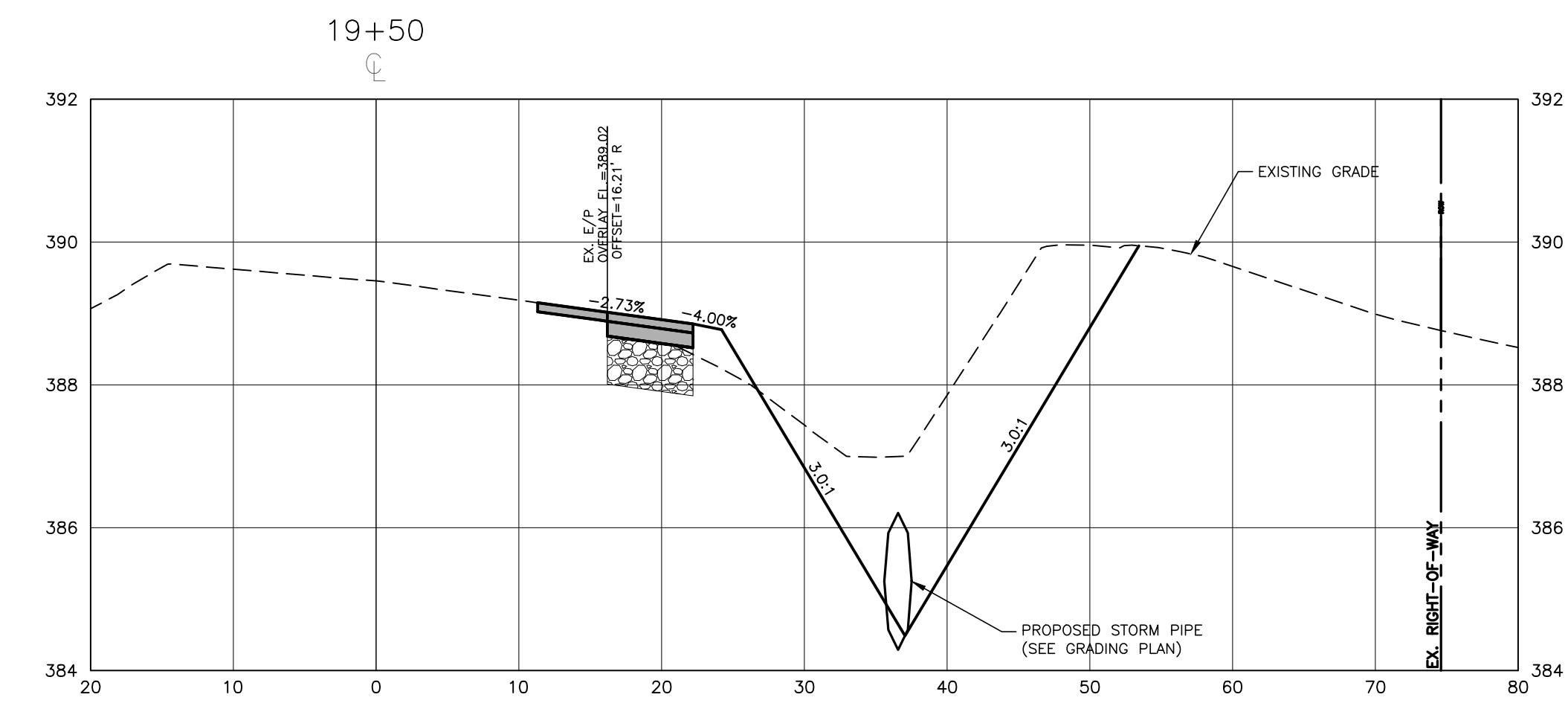
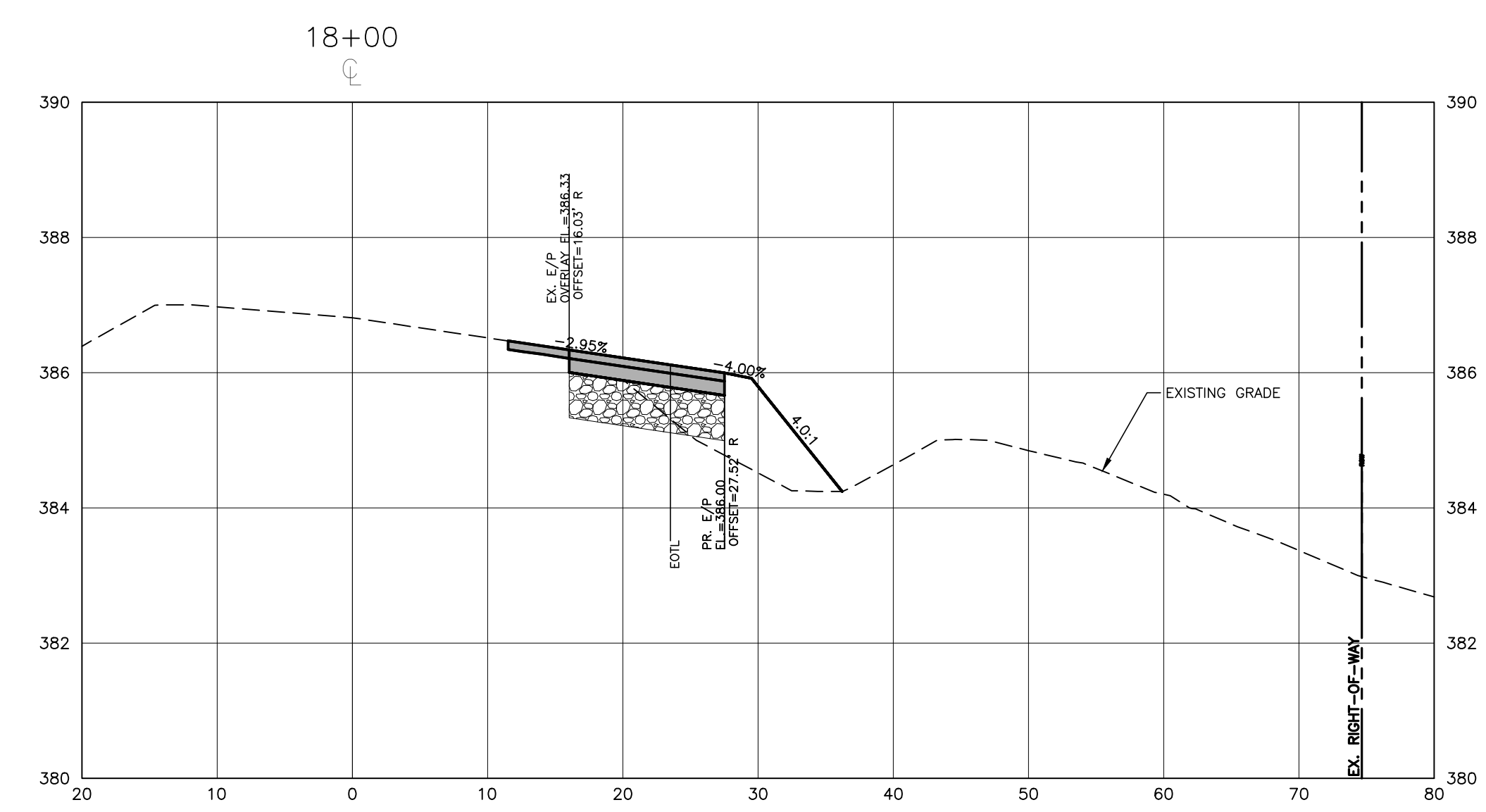
SHEET

**LOUISBURG RD
WIDENING
CROSS SECTIONS**

C7.12

CID-23-5

M:\Projects\WOL\2020110039 Frazier Farm Park\04-Production\Engineering\Phase1A\CID\2020110039-PH1-RW2.dwg, 6/6/2024 3:12:10 PM, Eric Domonell





McADAMS

The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713

phone 919.361.5000
fax 919.361.2269
license number: C-0293

www.mcadamsco.com

CLIENT

NAME: TOWN OF ROLESVILLE
ADDRESS: 502 SOUTHTOWN CIRCLE
ADDRESS: ROLESVILLE NC 27571
PHONE: 919.554.6582

FRAZIER FARM PARK
CONSTRUCTION DRAWINGS
PHASE 1A
11624 LOUISBURG ROAD
ROLESVILLE, NORTH CAROLINA



REVISIONS

NO. DATE

PLAN INFORMATION

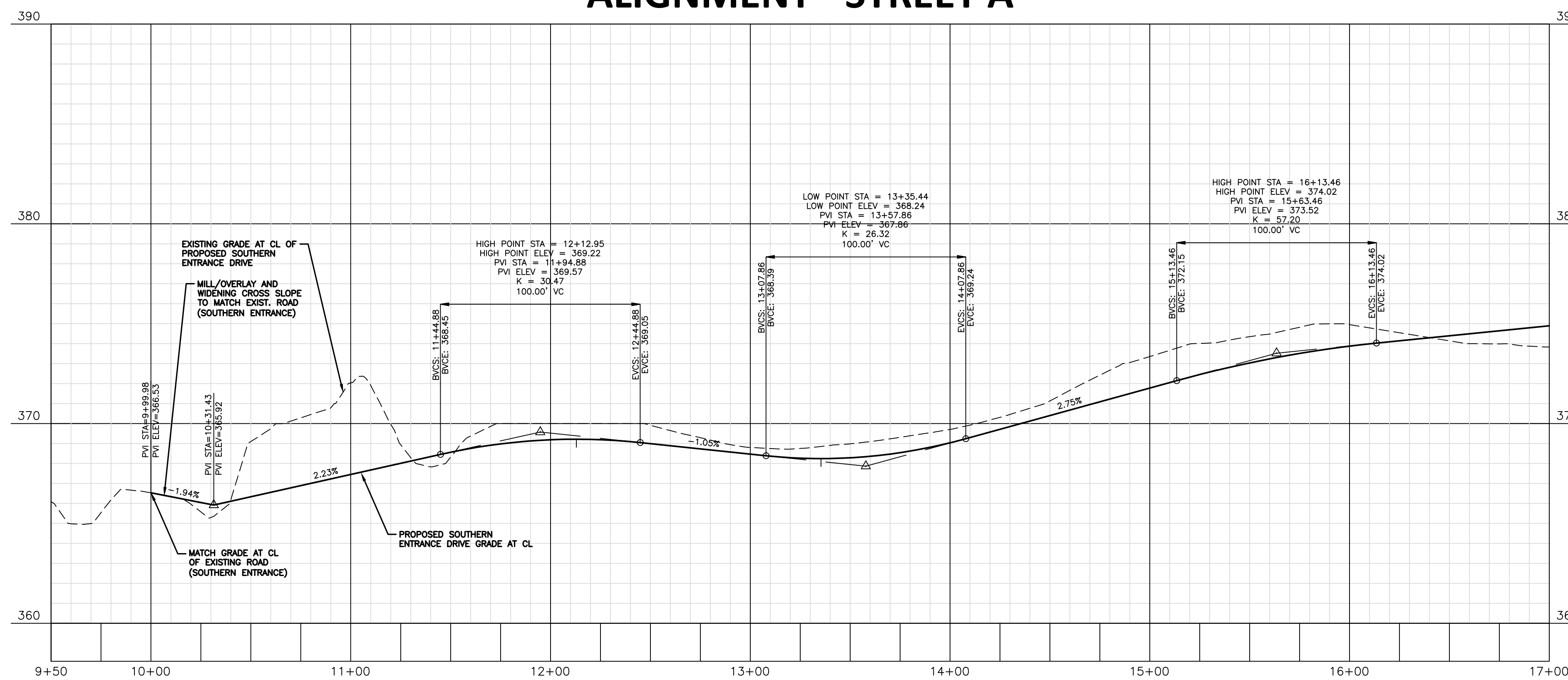
PROJECT NO. 202011039
FILENAME 202011039-PH1-RW2
CHECKED BY EMD
DRAWN BY SME
SCALE H:1"=40' / V:1"=4'
DATE 06.06.2024

SHEET

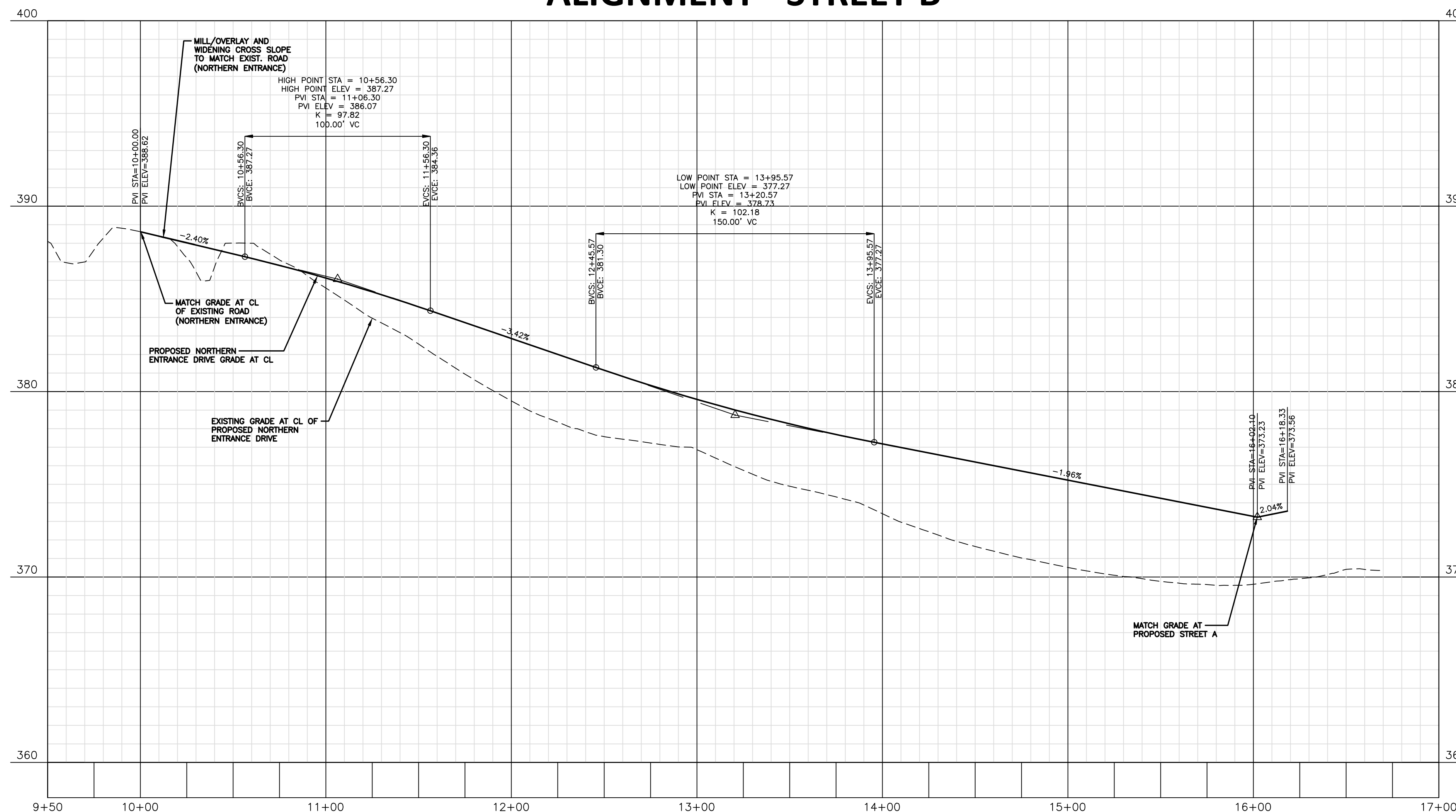
DRIVEWAY STEM PROFILES

C7.13

ALIGNMENT - STREET A



ALIGNMENT - STREET B



M:\Projects\WOL\202011039\Frazier Farm PH1\04-Production\Engineering\Phase1A\CAD\202011039-PH1-RW2.dwg, 6/6/2024, 3:12:13 PM, Eric Donnell



McADAMS

The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713

phone 919. 361. 5000
fax 919. 361. 2269
license number: C-0293

www.mcadamsco.com

CLIENT

NAME: TOWN OF ROLESVILLE
ADDRESS: 502 SOUTHTOWN CIRCLE
ADDRESS: ROLESVILLE NC 27571
PHONE: 919.554.6582

FRAZIER FARM PARK
CONSTRUCTION DRAWINGS
PHASE 1A
11624 LOUISBURG ROAD
ROLESVILLE, NORTH CAROLINA



REVISIONS

NO. DATE

PLAN INFORMATION

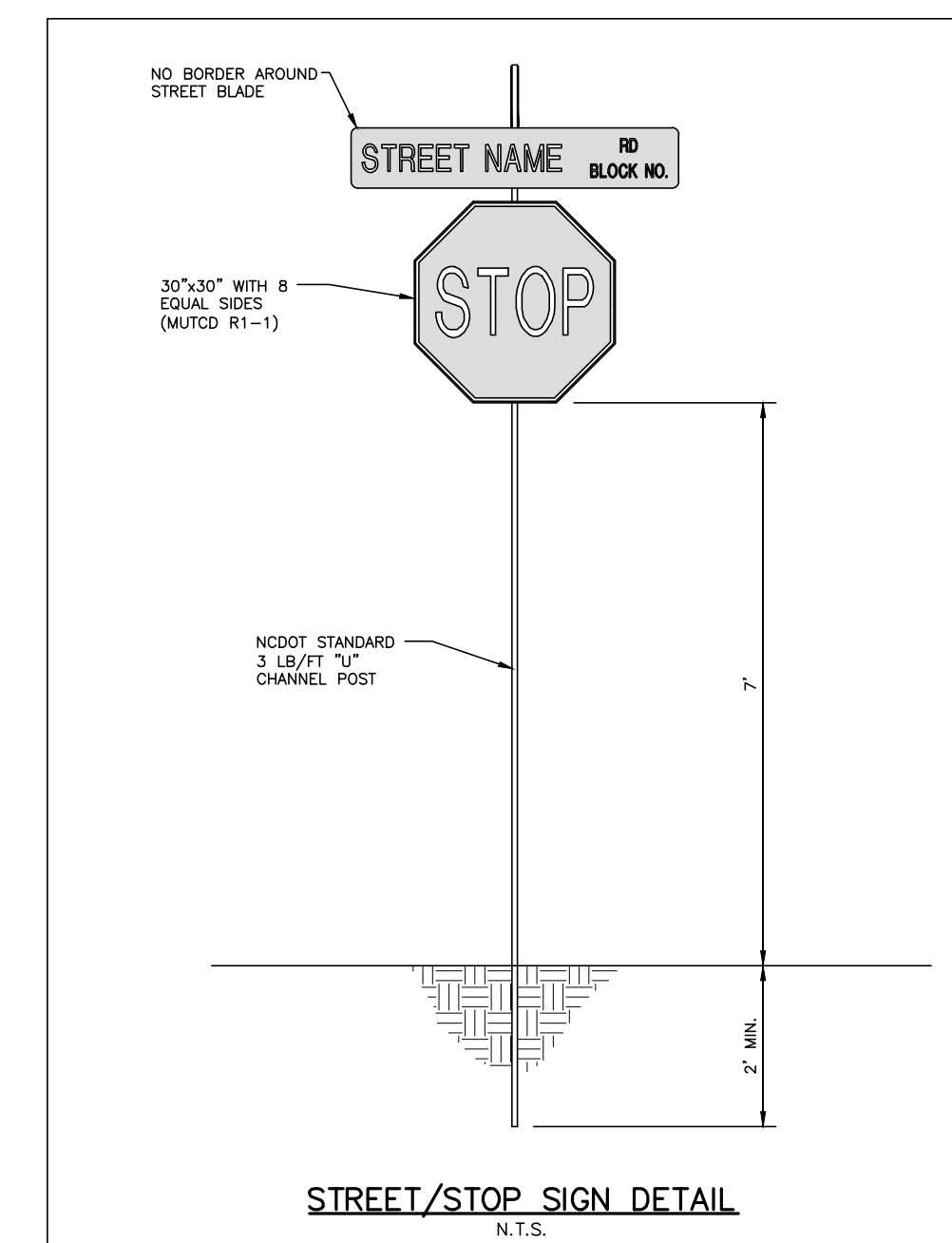
PROJECT NO. 202011039
FILENAME 2020110039-PH1-D1
CHECKED BY EMD
DRAWN BY SME
SCALE N/A
DATE 06.06.2024

SHEET

SITE DETAILS

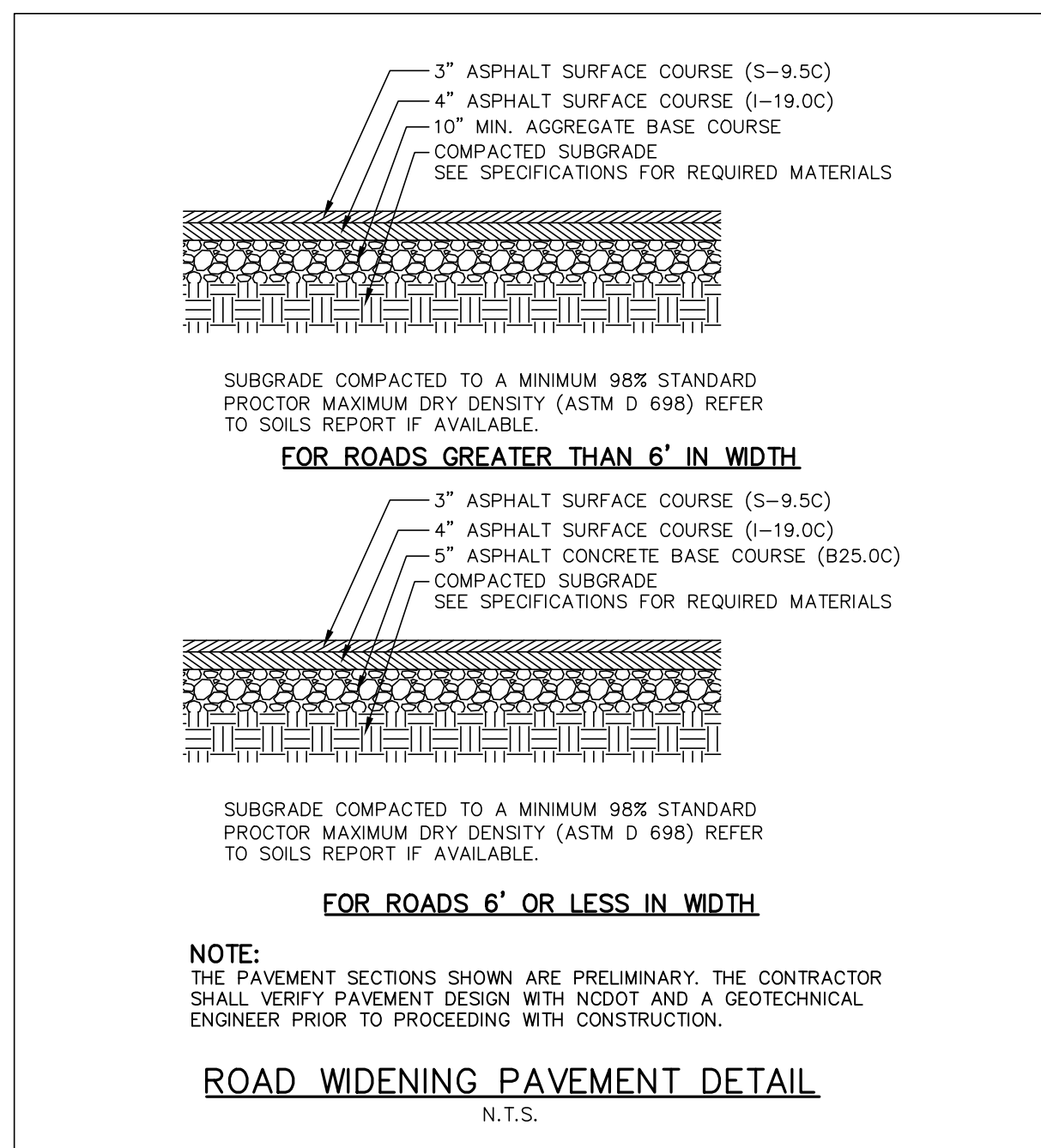
C8.00

CID-23-5



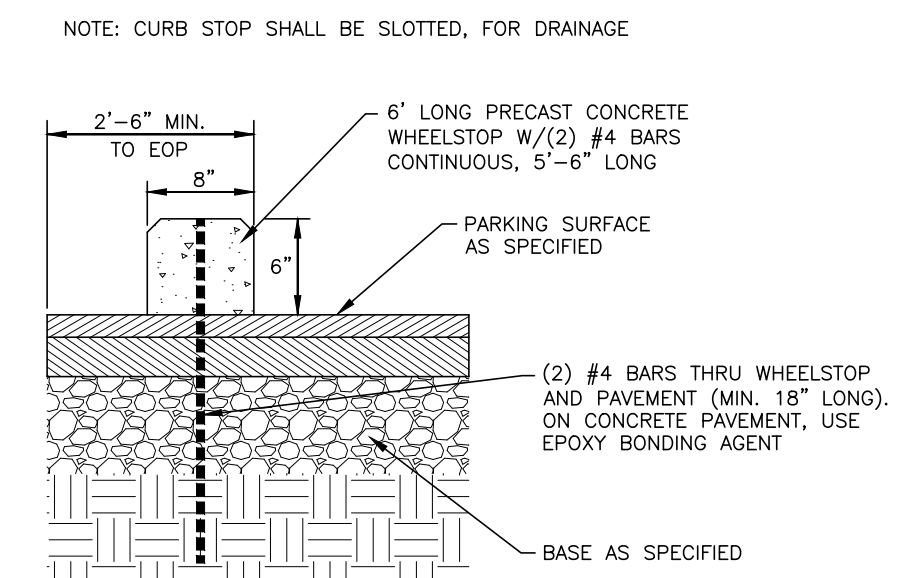
03 STOP AND STREET SIGN DETAIL

SCALE: N.T.S.



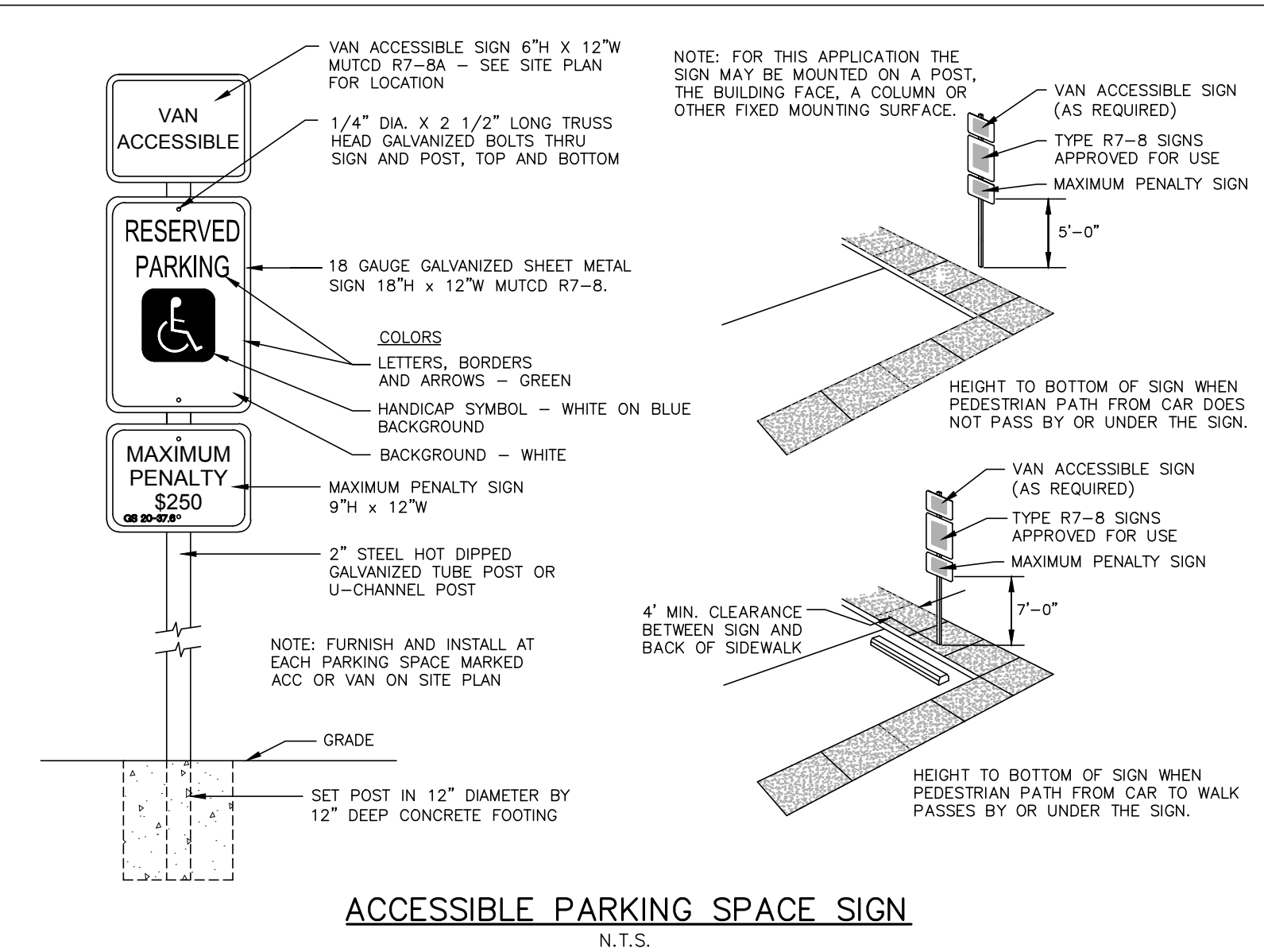
02 US-401 PAVEMENT SECTION

SCALE: N.T.S.



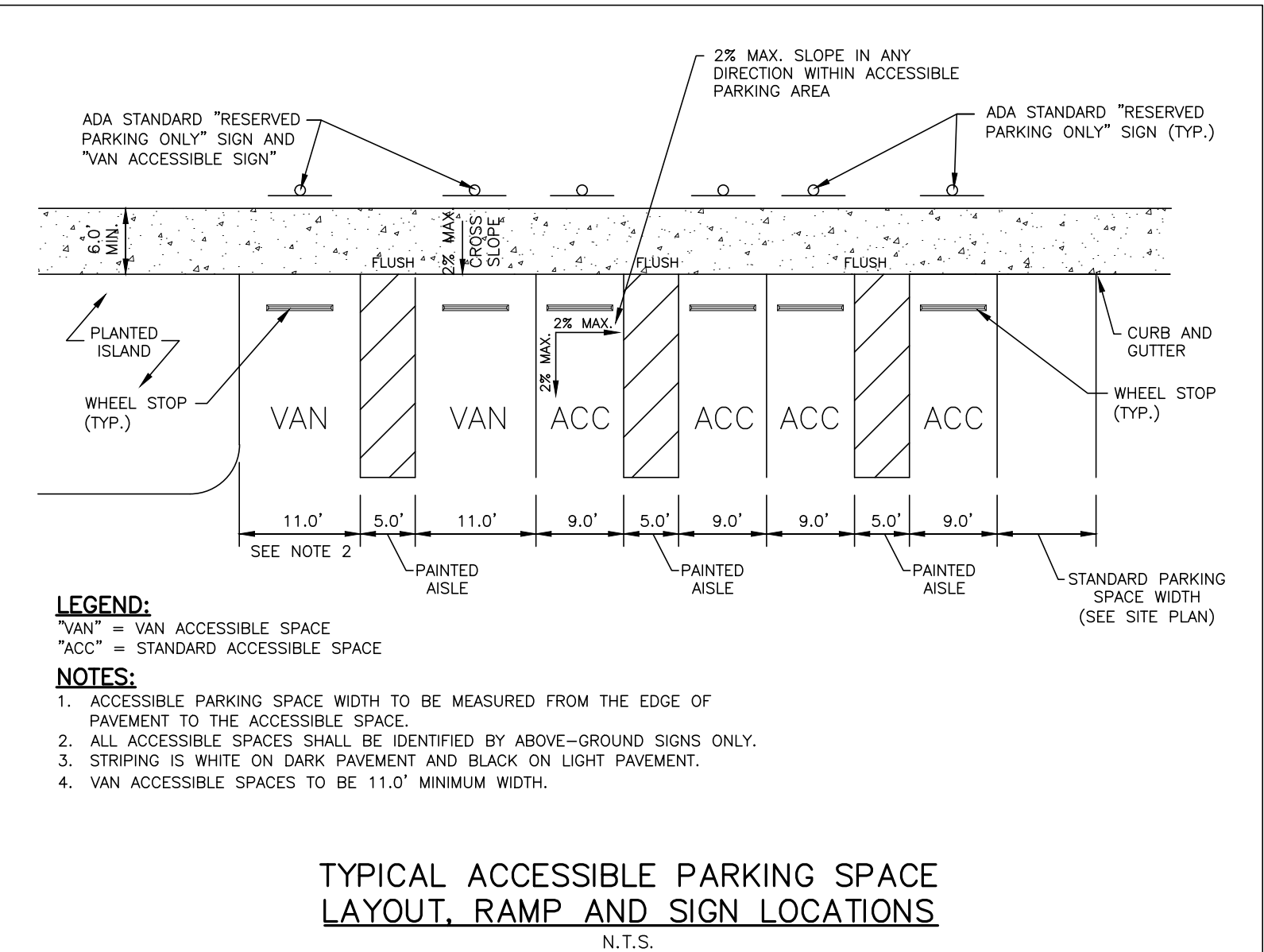
01 CONCRETE WHEEL STOP

SCALE: 1"=1'-0"



05 ACCESSIBLE PARKING SPACE SIGN

SCALE: N.T.S.

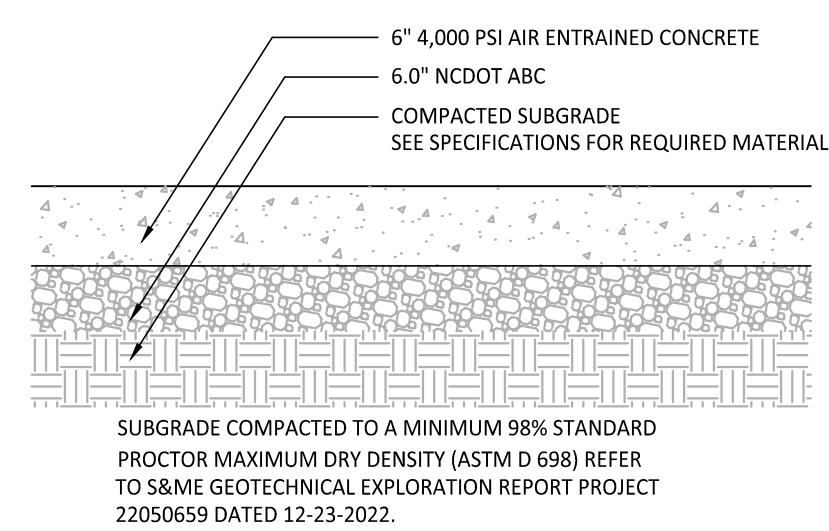


04 ACCESSIBLE PARKING AND STRIPING DETAIL

SCALE: N.T.S.

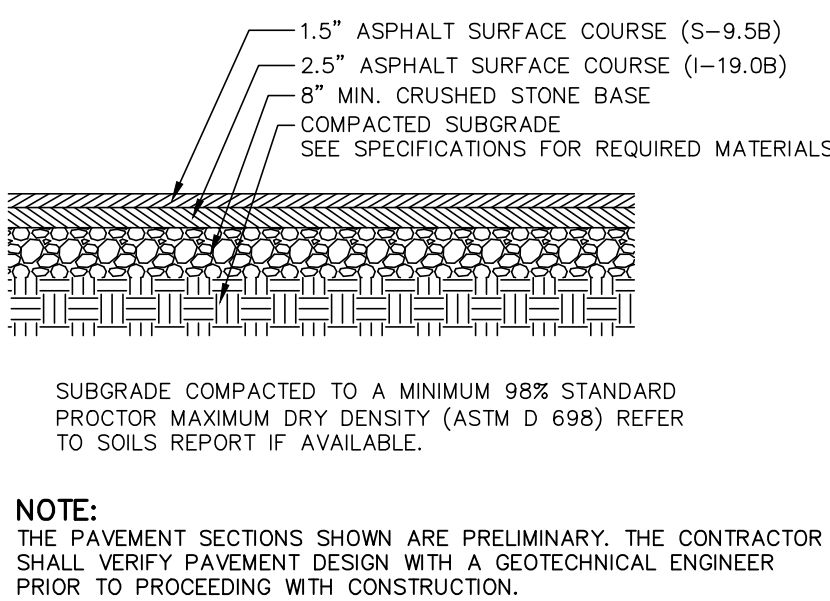
06 GRAVEL DRIVE AND PARKING LOT

SCALE: N.T.S.



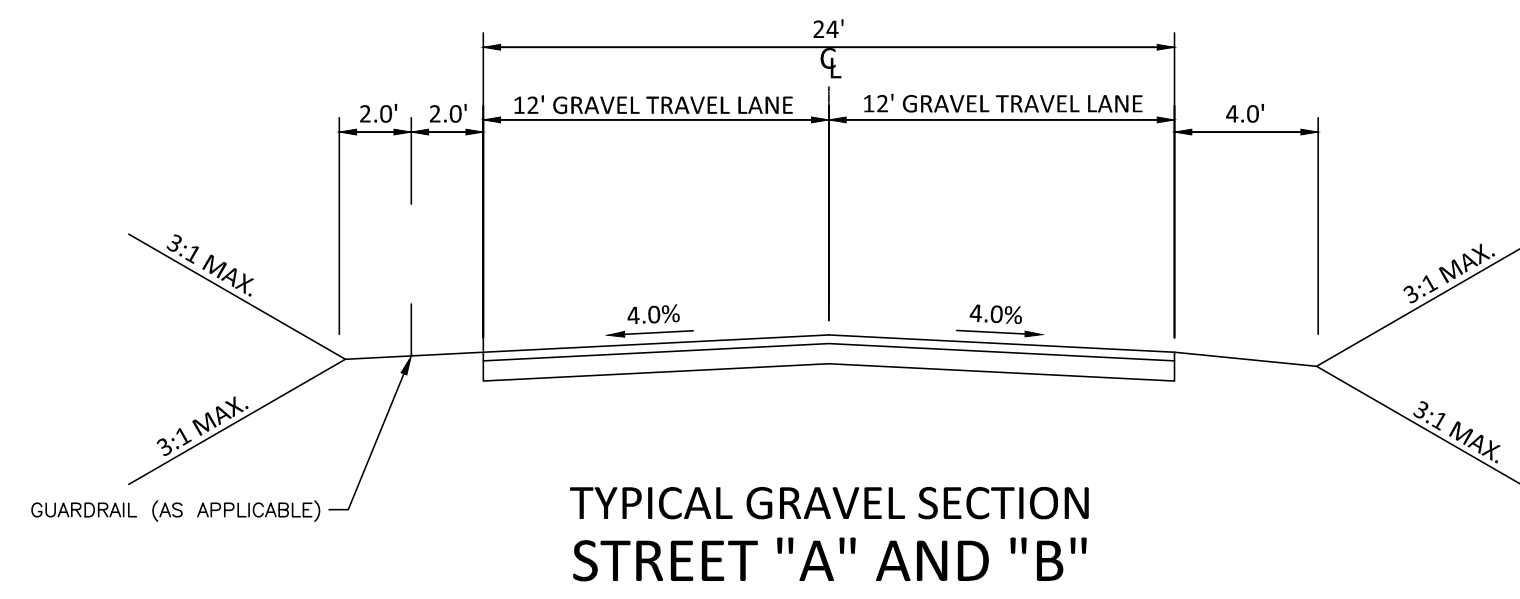
08 ON-SITE HEAVY-DUTY CONCRETE PAVEMENT DETAIL

SCALE: N.T.S.



07 ON-SITE HEAVY-DUTY ASPHALT PAVEMENT DETAIL

SCALE: N.T.S.



M:\Projects\WOL\2020110039-Frazier Farm Park\04-Production\Engineering\Phase1A\CID\2020110039-PH1-D1.dwg, 6/6/2024, 3:12:20 PM, Eric Donnell



McAdams

The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713

phone 919.361.5000
fax 919.361.2269
license number: C-0293

www.mcadamsco.com

CLIENT

NAME: TOWN OF ROLESVILLE
ADDRESS: 502 SOUTHTOWN CIRCLE
ADDRESS: ROLESVILLE NC 27571
PHONE: 919.554.6582

FRAZIER FARM PARK
CONSTRUCTION DRAWINGS
PHASE 1A
11624 LOUISBURG ROAD
ROLESVILLE, NORTH CAROLINA



REVISIONS

NO. DATE

PLAN INFORMATION

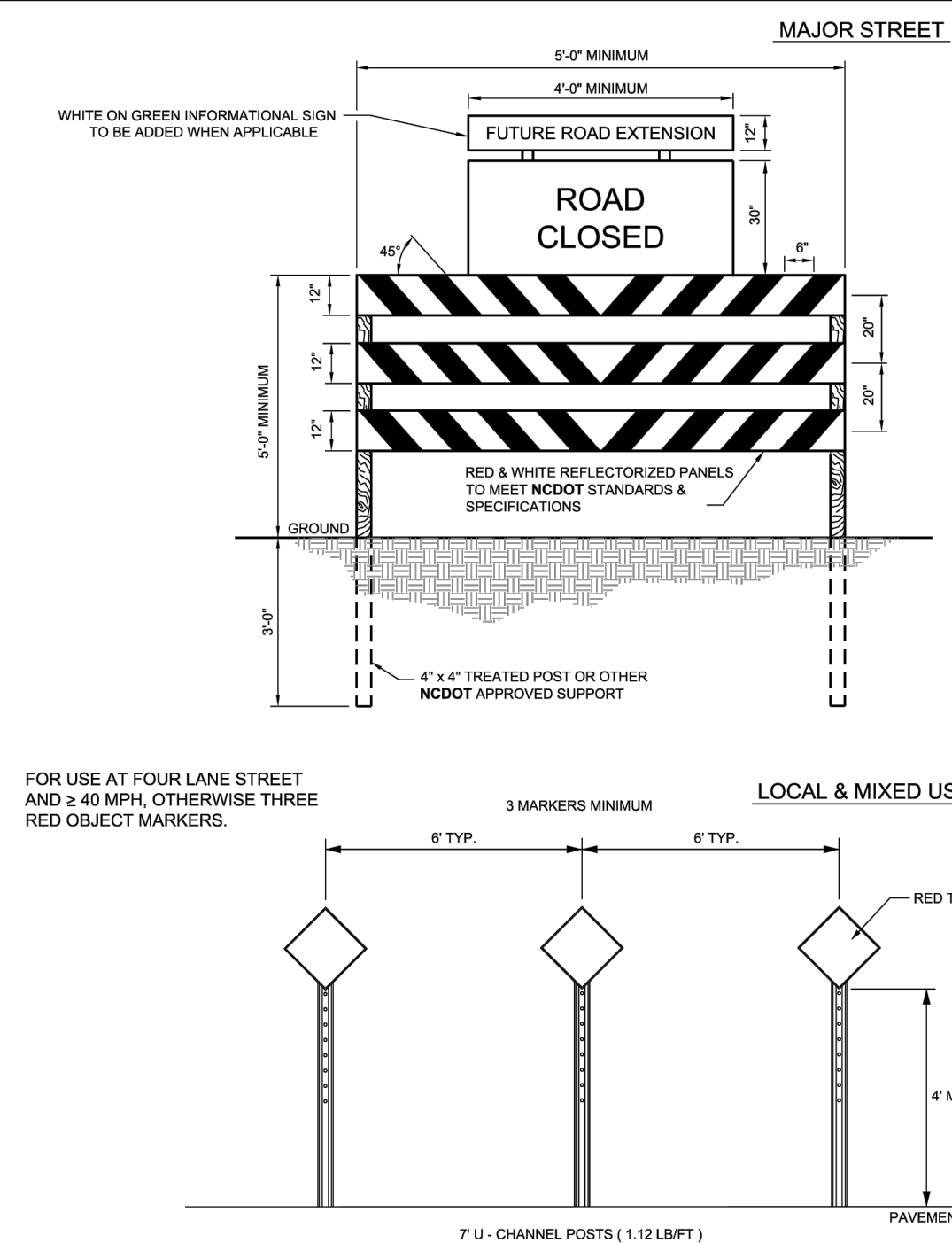
PROJECT NO. 202011039
FILENAME 2020110039-PH1-D1
CHECKED BY EMD
DRAWN BY SME
SCALE N/A
DATE 06.06.2024

SHEET

SITE DETAILS

C8.01

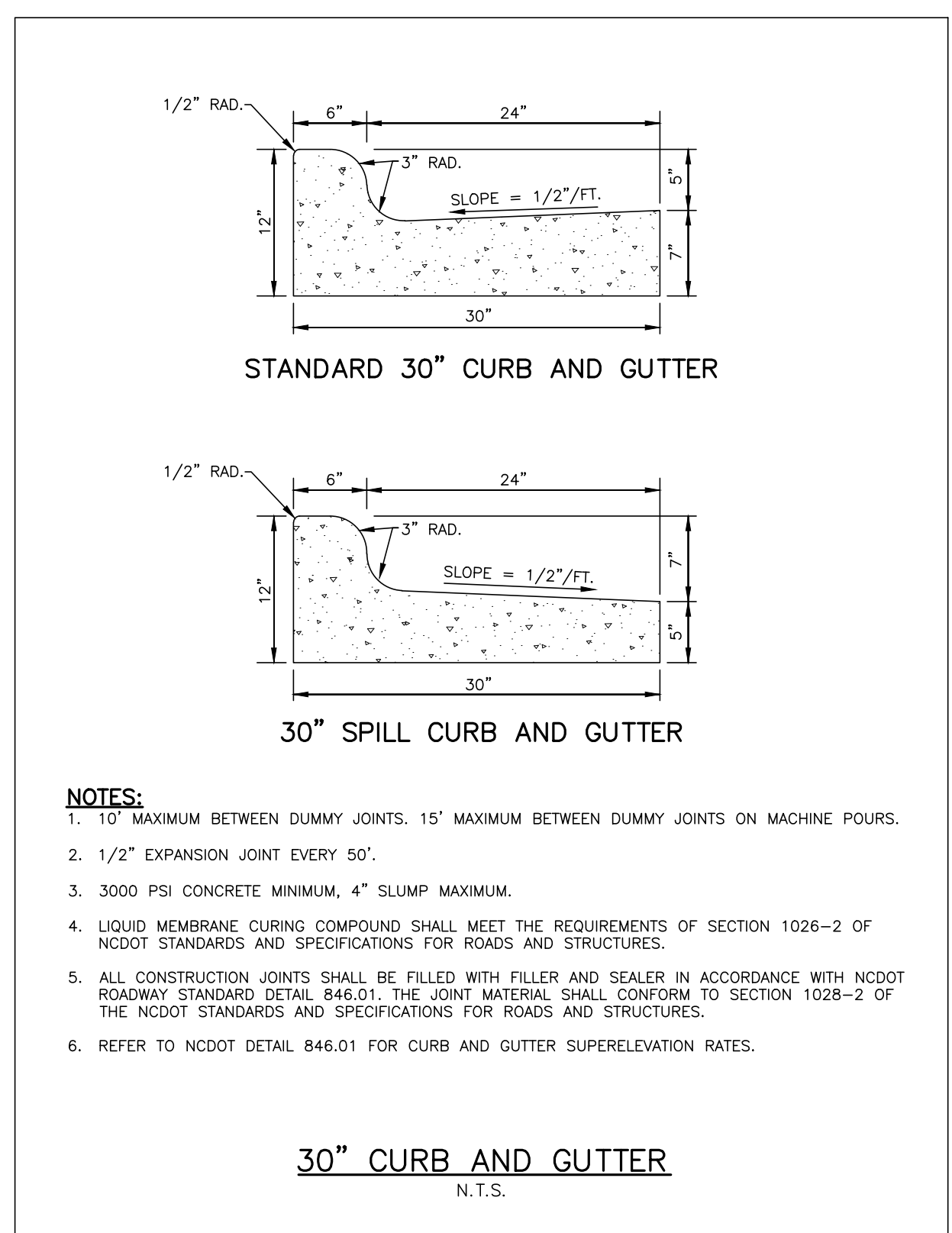
CID-23-5



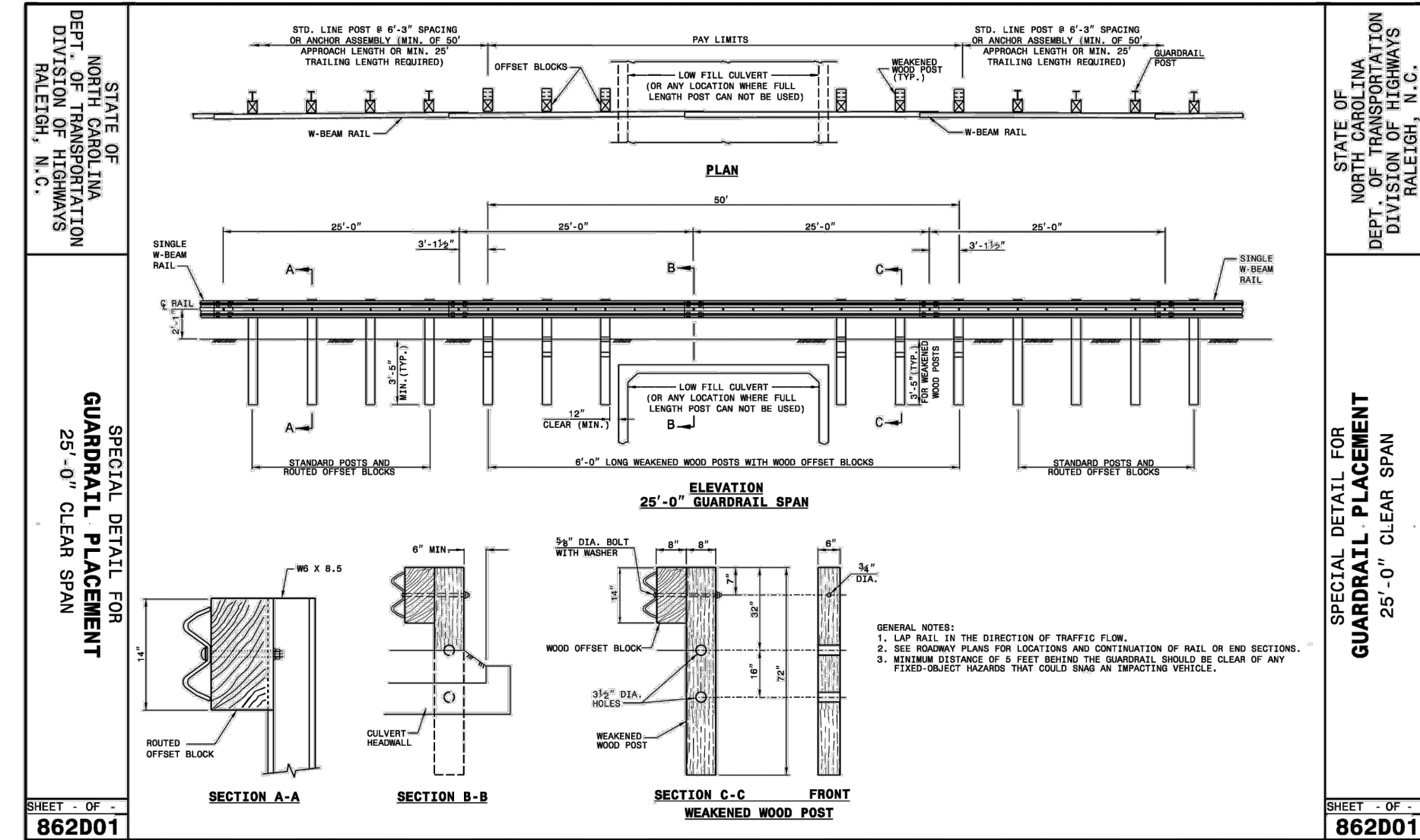
- NOTES:
1. BARRICADE(S) TO BE ERECTED ACROSS ENTIRE ROADWAY INCLUDING CURB & GUTTER.
 2. ADVANCE WARNING SIGN W14-1 (DEAD END) SHALL BE PLACED JUST AFTER LAST INTERSECTING STREET.
 3. MARKINGS FOR BARRICADE RAIS SHALL BE REFLECTIVE AND ALTERNATE RED & WHITE STRIPS.
 4. "ROAD CLOSED" SIGN SHALL MEET SPECIFICATIONS OF M.U.T.C.D. R11-2 AND BE REQUIRED ATOP EACH BARRICADE USED.
 5. CALL 811 FOR UNDERGROUND UTILITY LOCATE PRIOR TO INSTALLATION.

10 TEMPORARY BARRICADE FOR DEAD END ROAD
SCALE: N.T.S.

11
SCALE: N.T.S.

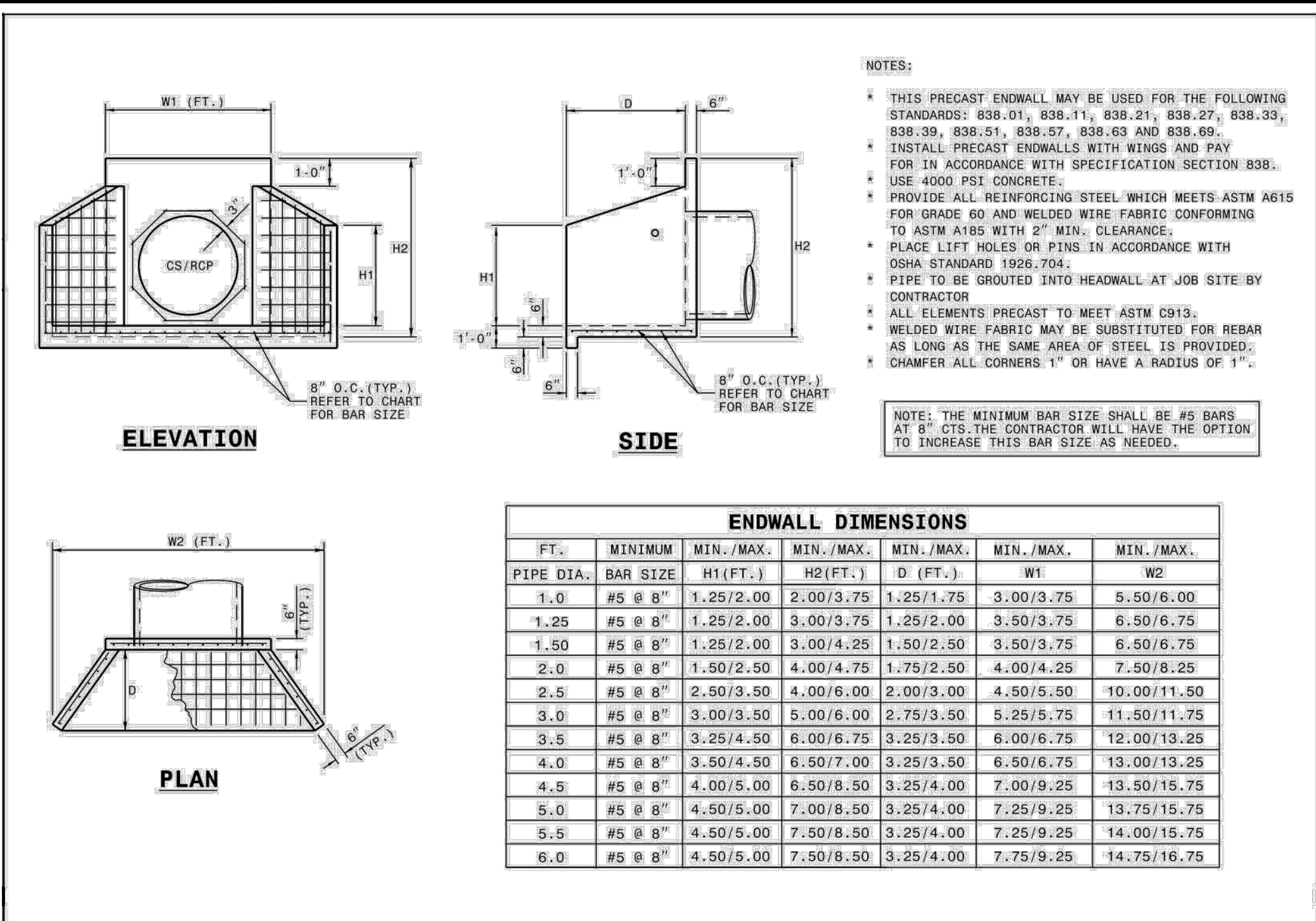


09 STANDARD 30" CURB AND GUTTER DETAILS
SCALE: N.T.S.



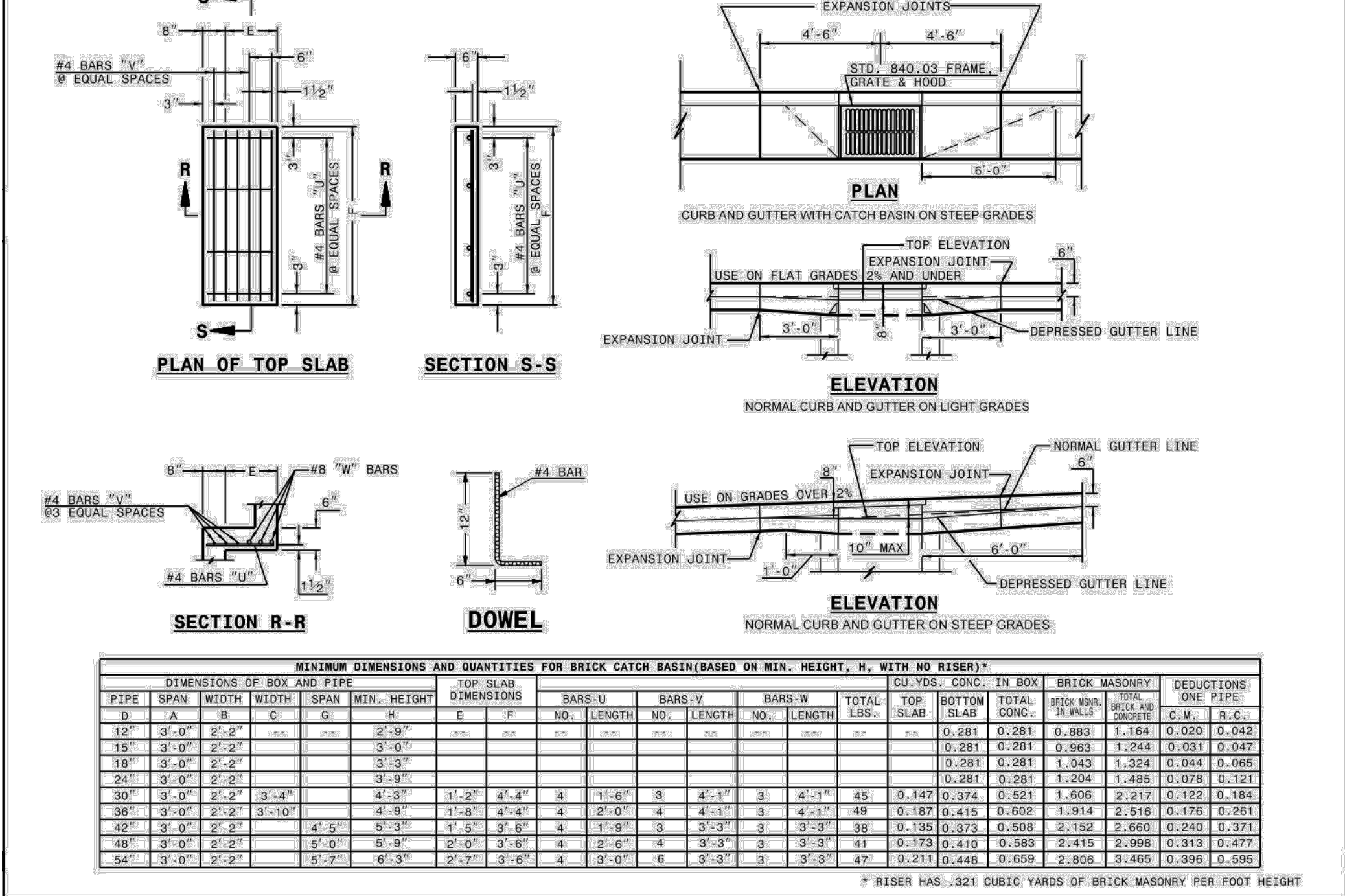
12 NCDOT GUARDRAIL
SCALE: N.T.S.

M:\Projects\WOL\2020110039 Frazier Farm Park\04-Production\Engineering\Phase1A\CID\2020110039-PH1-D1.dwg, 6/6/2024 3:12:21 PM, Eric Donnell



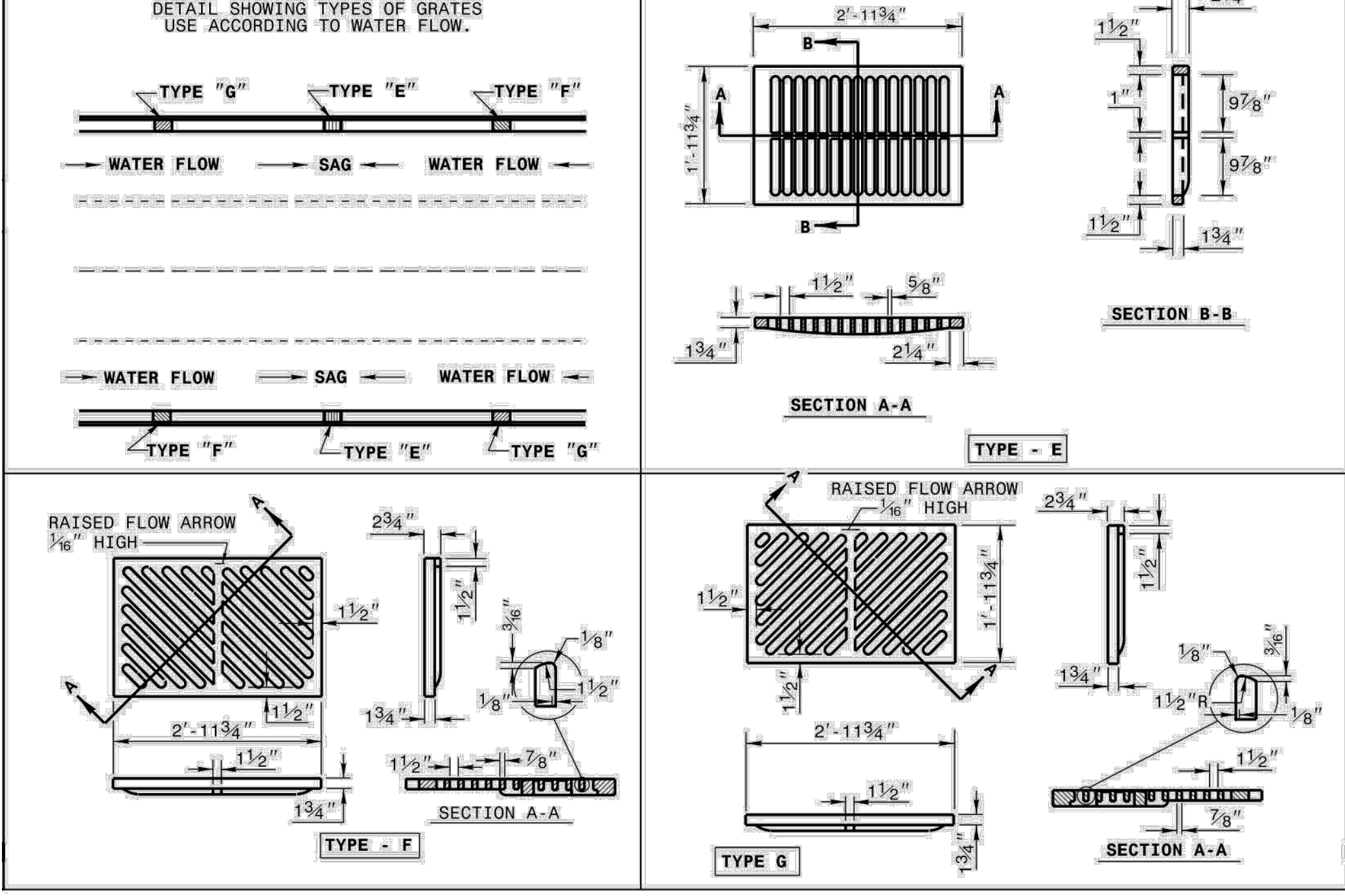
ROADWAY STANDARD DRAWING FOR PRECAST CONCRETE ENDWALL FOR SINGLE 12" THRU 72" PIPE - 90° SKEW

SHEET 1 OF 1
838.80



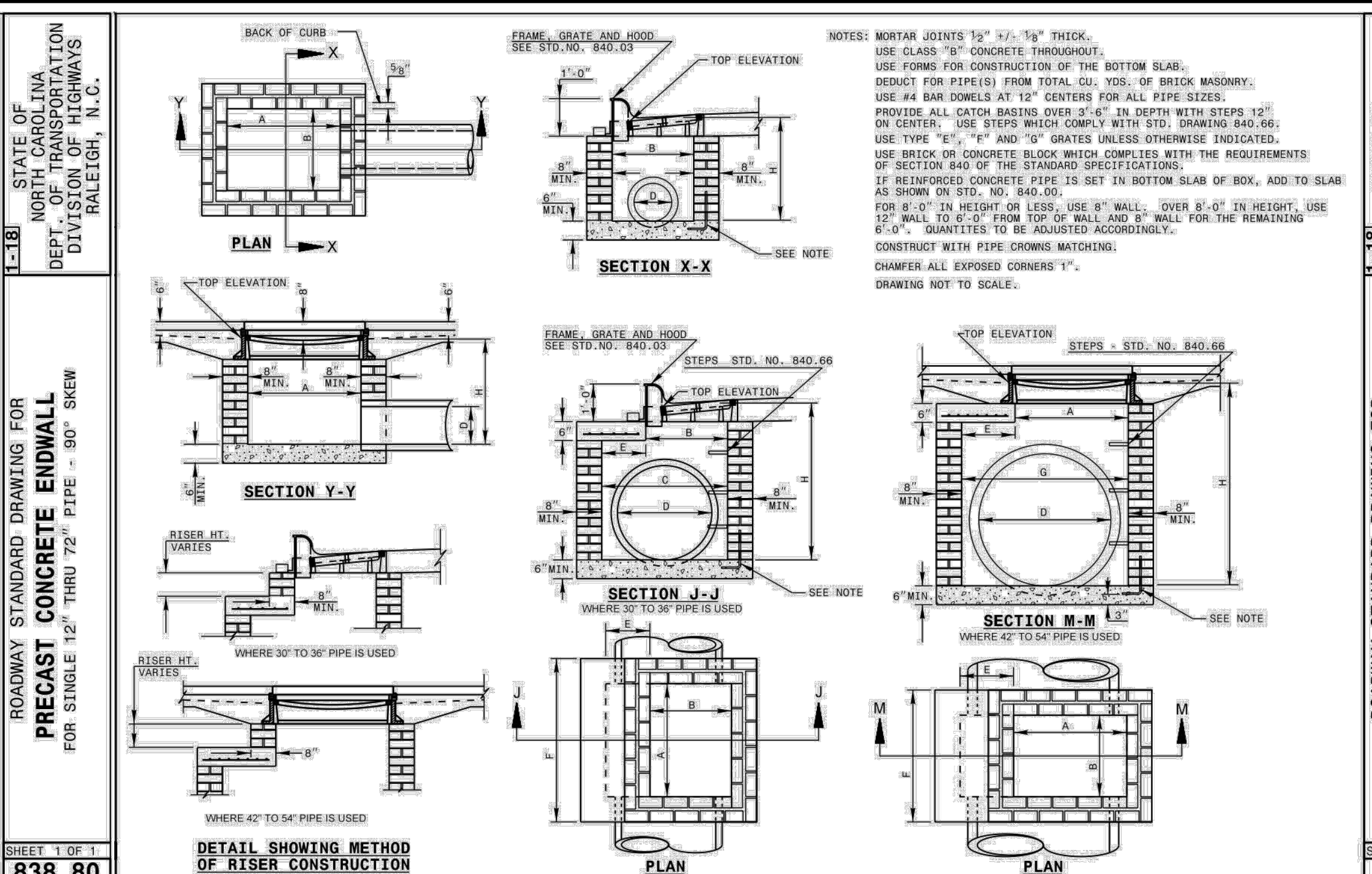
ROADWAY STANDARD DRAWING FOR BRICK CATCH BASIN 12" THRU 54" PIPE

SHEET 2 OF 2
840.01



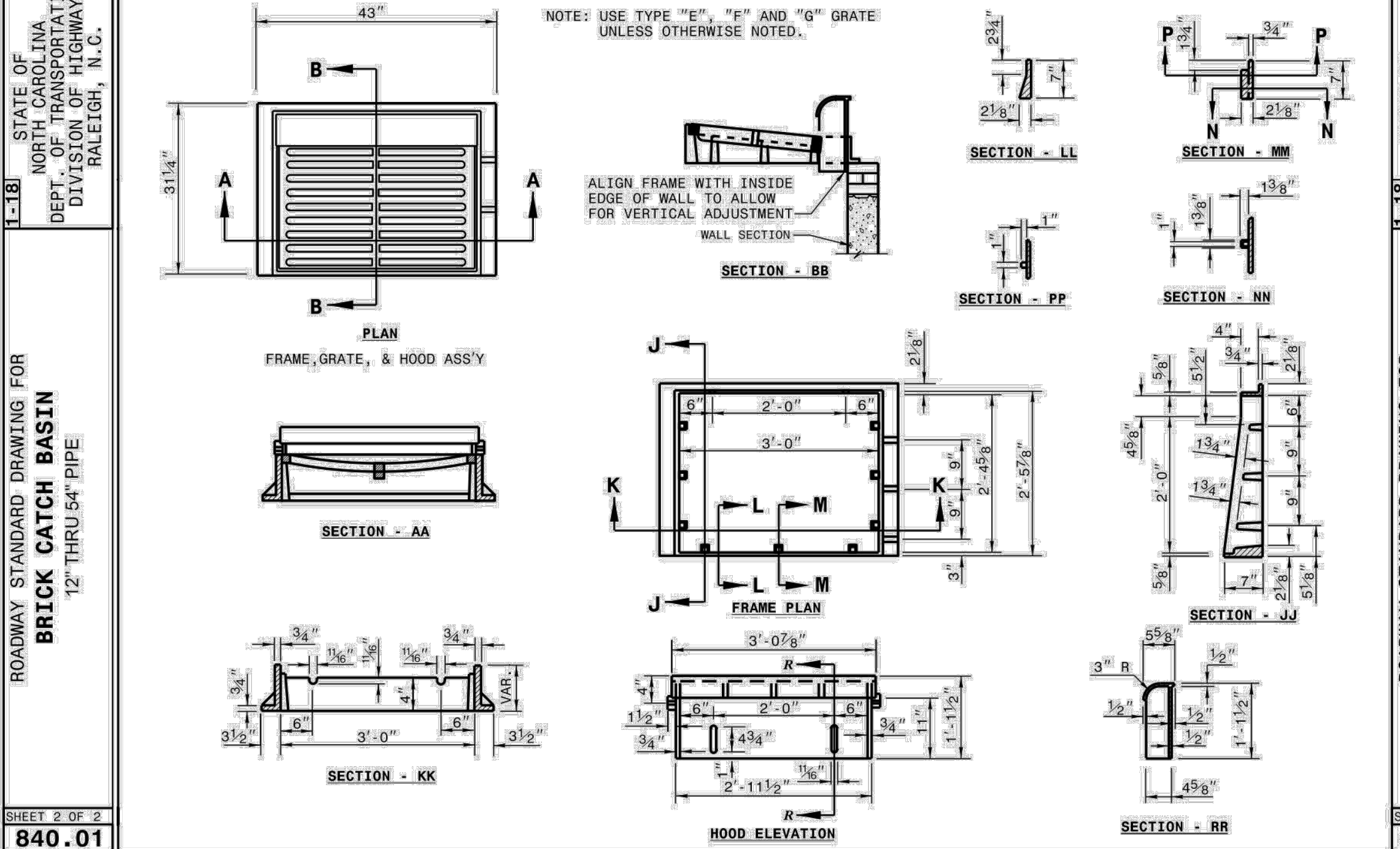
ROADWAY STANDARD DRAWING FOR CONCRETE BRIDGE APPROACH DROP INLET 12" THRU 24" PIPE

SHEET 1 OF 1
840.13



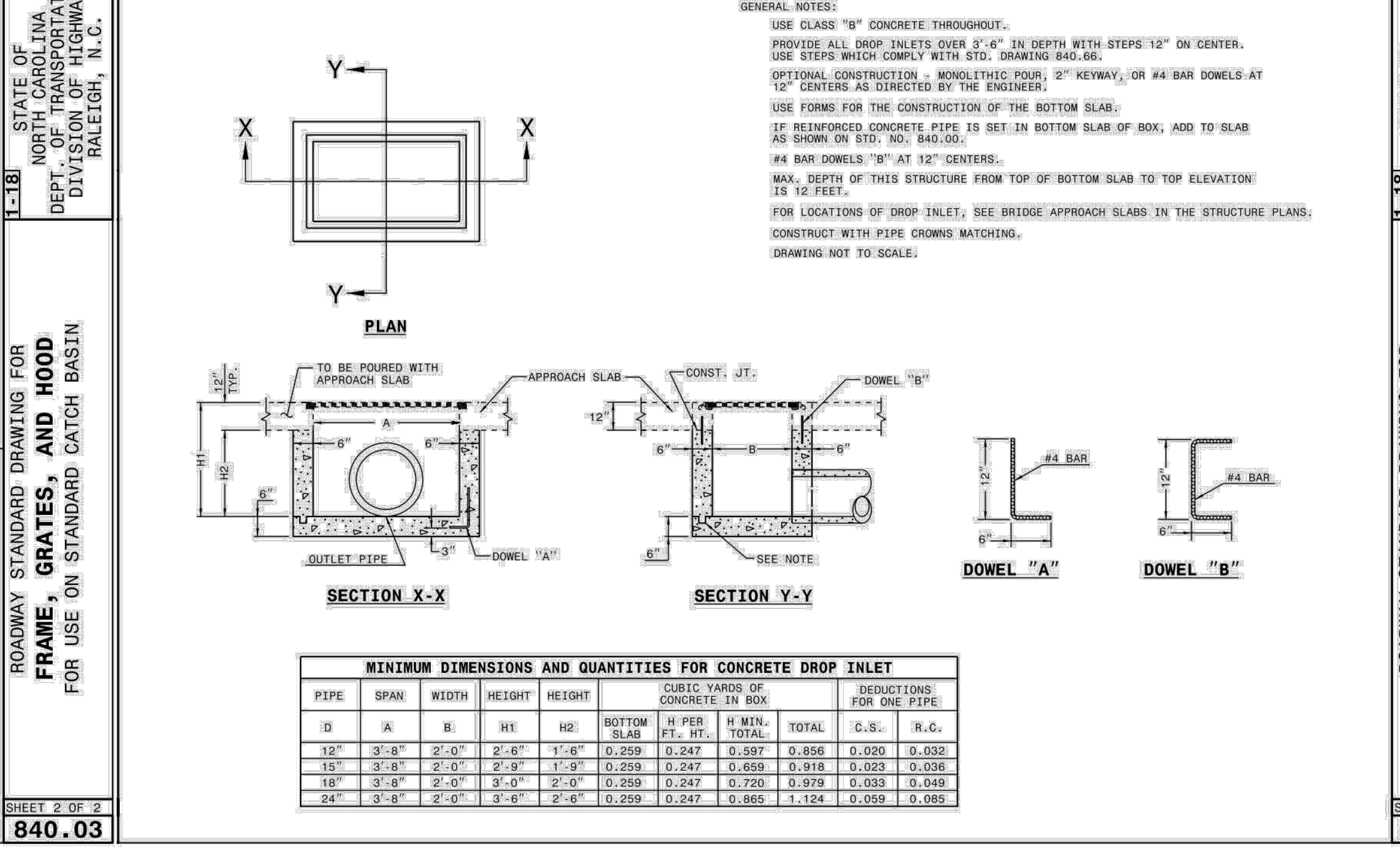
ROADWAY STANDARD DRAWING FOR BRICK CATCH BASIN 12" THRU 54" PIPE

SHEET 1 OF 2
840.01



ROADWAY STANDARD DRAWING FOR FRAME, GRATES, AND HOOD FOR USE ON STANDARD CATCH BASIN

SHEET 1 OF 2
840.03

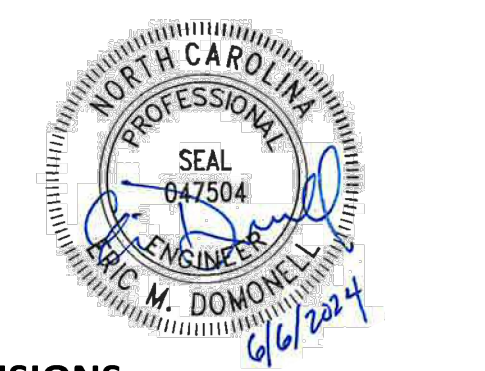


ROADWAY STANDARD DRAWING FOR CONCRETE BRIDGE APPROACH DROP INLET 12" THRU 24" PIPE

SHEET 1 OF 1
840.13

CLIENT
NAME: TOWN OF ROLESVILLE
ADDRESS: 502 SOUTHTOWN CIRCLE
ADDRESS: ROLESVILLE NC 27571
PHONE: 919.554.6582

FRAZIER FARM PARK
CONSTRUCTION DRAWINGS
PHASE 1A
11624 LOUISBURG ROAD
ROLESVILLE, NORTH CAROLINA



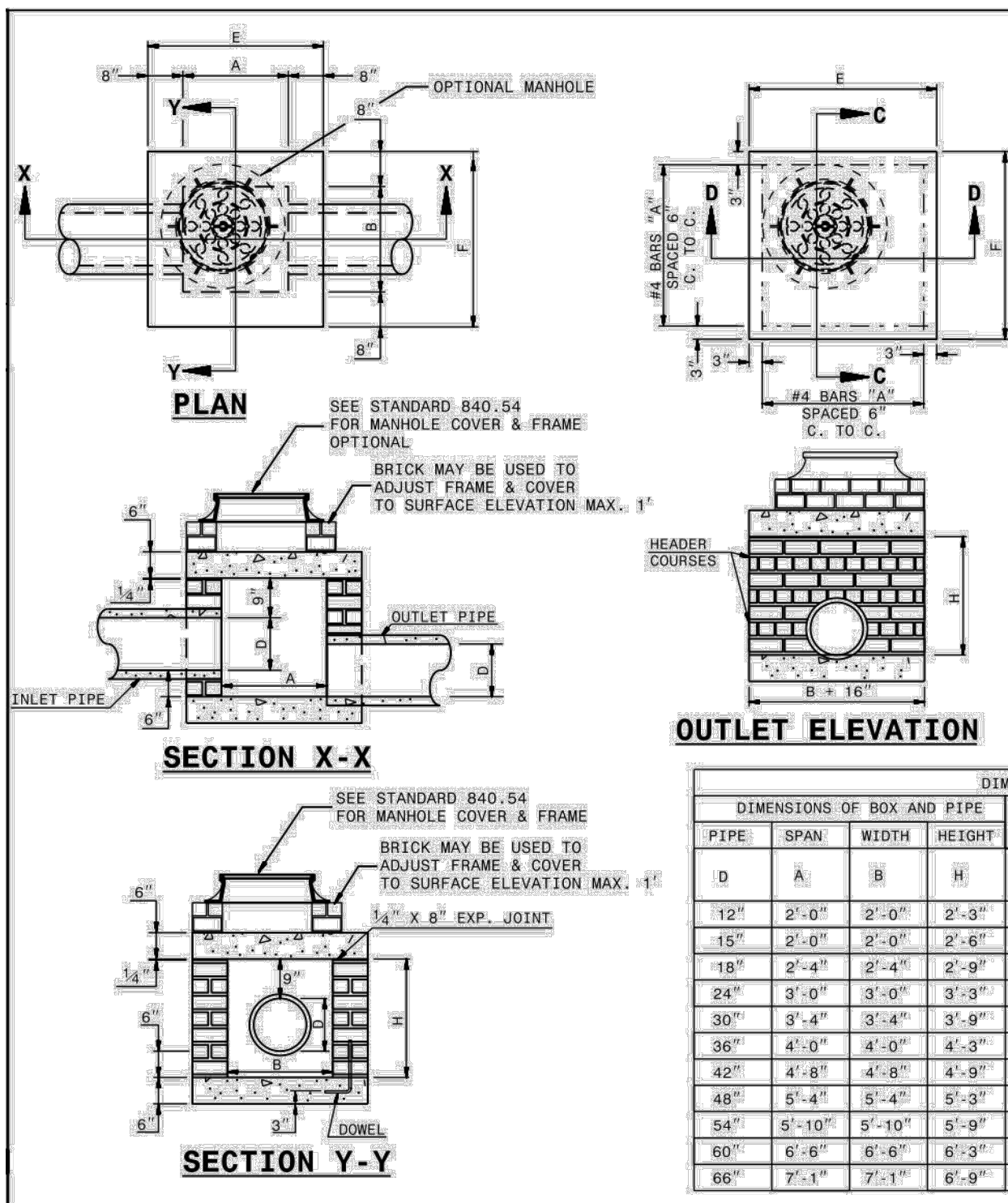
REVISIONS

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

PLAN INFORMATION

PROJECT NO. 202011039
FILENAME 2020110039-PH1-D1
CHECKED BY EMD
DRAWN BY SME
SCALE N/A
DATE 06.06.2024

STORM DRAINAGE & UTILITY DETAILS
C8.02



GENERAL NOTES:
 CHAMFER ALL EXPOSED CORNERS 1".
 USE CLASS "B" CONCRETE THROUGHOUT.
 USE #4 BAR DOWELS AT 12" CENTERS.
 MORTAR JOINTS 1/2" x 1/2" THICK.
 CONCAVE TOO ALL EXPOSED JOINTS.
 USE FORMS TO CONSTRUCT THE BOTTOM SLAB.
 JUMBO BRICK WILL BE PERMITTED. CONCRETE BRICK OR 4" SOLID CONCRETE BLOCKS MAY BE USED IN LIEU OF CLAY BRICK.
 IF REINFORCED CONCRETE PIPE IS SET IN BASE SLAB OF BOX, ADD TO BASE AS SHOWN ON STANDARD NO. 840.00.
 PROVIDE ALL JUNCTION BOXES OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTERS IN ACCORDANCE WITH STD. NO. 840.66.
 ADJUST THE STEEL, CONCRETE AND BRICK MASONRY QUANTITIES TO INCLUDE THE ADDITION OF THE MANHOLE 11.5" DIAMETER BARS SHORTENED AROUND OPENING IN TOP SLAB. ADDITIONAL VARIABLE HEIGHT BRICK MASONRY, OPENING IN TOP SLAB.
 MAX. DEPTH OF THIS STRUCTURE FROM TOP OF BOTTOM SLAB TO TOP ELEVATION IS 18 FEET.
 SEE STANDARD 840.54 FOR MANHOLE COVER & FRAME. BRICK MAY BE USED TO ADJUST FRAME & COVER TO SURFACE ELEVATION MAX. 1".
 SEE STANDARD 840.54 FOR MANHOLE COVER & FRAME. BRICK MAY BE USED TO ADJUST FRAME & COVER TO SURFACE ELEVATION MAX. 1".
 SEE STANDARD 840.54 FOR MANHOLE COVER & FRAME. BRICK MAY BE USED TO ADJUST FRAME & COVER TO SURFACE ELEVATION MAX. 1".

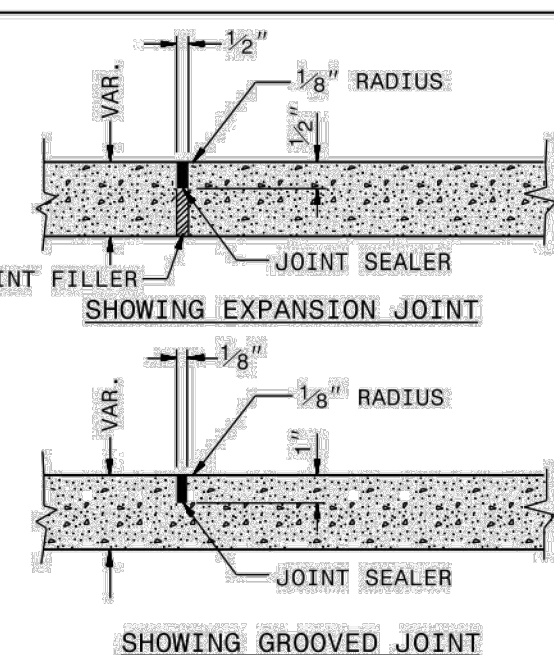
DIMENSIONS AND QUANTITIES FOR BRICK JUNCTION BOXES

| PIPE DIMENSIONS | DIMENSIONS OF BOX AND PIPE | | | | REINFORCEMENT BARS | | TOP SLAB DIMENSIONS | | CUBIC YARDS | | DEDUCTIONS FOR ONE PIPE (CU. YDS.) | | |
|-----------------|----------------------------|--------|-------|-------|--------------------|--------|---------------------|--------|----------------------|-------|------------------------------------|-------|-------|
| | D | A | B | H | NO. | LENGTH | E | F | TOP & BOTTOM CU. YD. | CONC. | BRICK MASONRY | C.S. | R.C. |
| 12" | 2'-0" | 2'-0" | 2'-3" | 2'-6" | 12 | 3'-1" | 3'-4" | 3'-4" | 0.412 | 0.591 | 0.263 | 0.020 | 0.032 |
| 15" | 2'-0" | 2'-0" | 2'-6" | 2'-6" | 12 | 3'-1" | 3'-4" | 3'-4" | 0.412 | 0.591 | 0.263 | 0.031 | 0.047 |
| 18" | 2'-4" | 2'-4" | 2'-9" | 2'-9" | 14 | 3'-5" | 3'-8" | 3'-8" | 0.488 | 0.614 | 0.296 | 0.044 | 0.063 |
| 24" | 3'-0" | 3'-0" | 3'-3" | 3'-3" | 16 | 4'-1" | 4'-4" | 4'-4" | 0.655 | 1.176 | 0.362 | 0.078 | 0.113 |
| 30" | 3'-4" | 3'-4" | 3'-9" | 3'-9" | 16 | 4'-5" | 4'-8" | 4'-8" | 0.807 | 1.481 | 0.395 | 0.122 | 0.170 |
| 36" | 4'-0" | 4'-0" | 4'-3" | 4'-3" | 20 | 5'-1" | 5'-4" | 5'-4" | 1.053 | 1.959 | 0.461 | 0.176 | 0.238 |
| 42" | 4'-6" | 4'-6" | 4'-9" | 4'-9" | 22 | 5'-9" | 6'-0" | 6'-0" | 1.333 | 2.503 | 0.527 | 0.240 | 0.323 |
| 48" | 5'-4" | 5'-4" | 5'-3" | 5'-3" | 26 | 6'-5" | 6'-8" | 6'-8" | 1.646 | 2.940 | 0.560 | 0.313 | 0.422 |
| 54" | 5'-10" | 5'-10" | 5'-9" | 5'-9" | 28 | 6'-11" | 7'-2" | 7'-2" | 1.902 | 3.502 | 0.609 | 0.396 | 0.535 |
| 60" | 6'-6" | 6'-6" | 6'-3" | 6'-3" | 30 | 7'-7" | 7'-10" | 7'-10" | 2.272 | 4.113 | 0.658 | 0.489 | 0.660 |
| 66" | 7'-1" | 7'-1" | 6'-9" | 6'-9" | 32 | 8'-2" | 8'-5" | 8'-5" | 2.624 | 4.778 | 0.708 | 0.591 | 0.798 |

STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N. C.

ROADWAY STANDARD DRAWING FOR
 BRICK JUNCTION BOX
 (WITH OPTIONAL MANHOLE)
 12" THRU 66" PIPE

SHEET 1 OF 1
 840.32



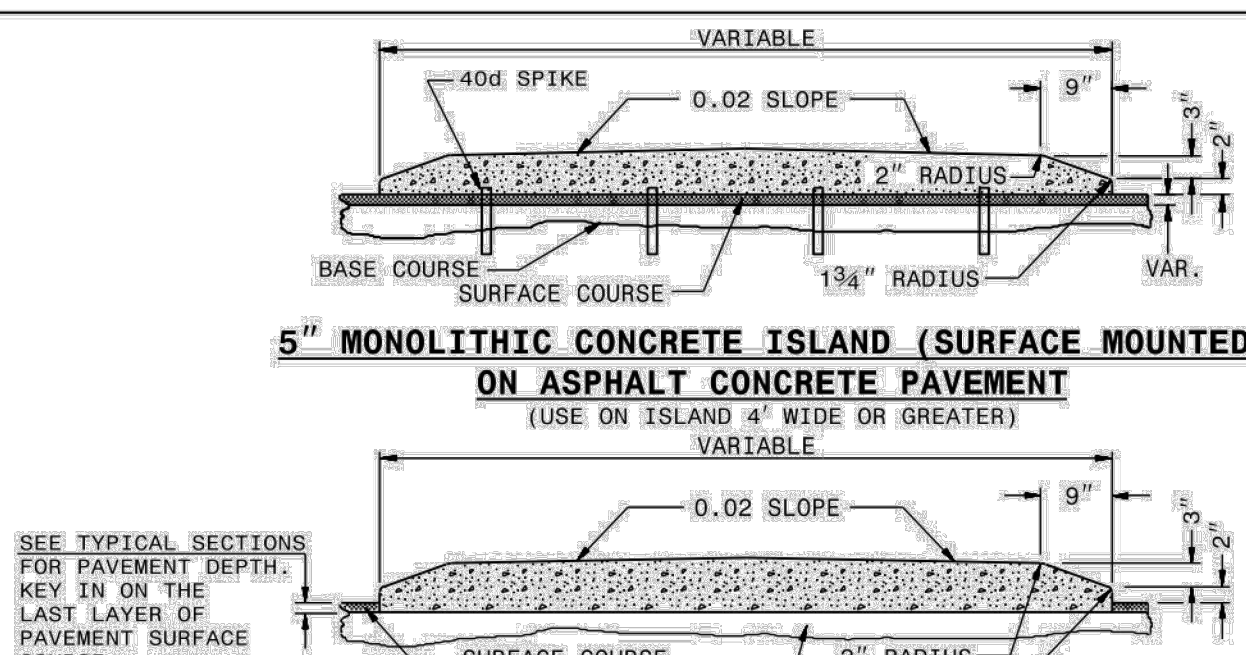
PARTIAL LONGITUDINAL SECTIONS OF PAVED ISLANDS

NOTE:
 WHEN MONOLITHIC CONCRETE ISLAND IS ON TOP OF SURFACE COURSE, DRIVE 40d SPIKES INTO SURFACE UNDER MONOLITHIC CONCRETE ISLAND. STAGGER SPIKES ON 2' CENTERS EACH WAY.

IN THE CONCRETE PAVEMENT (ISLAND) AND CONCRETE ISLAND (MONOLITHIC) PLACE 1/2" EXPANSION JOINTS AT 30' INTERVALS AND GROOVED JOINTS 1" DEEP AT 10' INTERVALS BETWEEN EXPANSION JOINTS.

LINE UP THE JOINTS IN THE CONCRETE PAVEMENT (ISLAND) WITH THE JOINTS IN THE CURB OR CURB AND GUTTER. FILL AND SEAL THE TOP 1/2" OF THE EXPANSION JOINTS AND THE ENTIRE DEPTH OF GROOVED JOINTS WITH JOINT SEALER.

FOR JOINTS IN THE CURB AND/OR CURB AND GUTTER, SEE STANDARD NO. 846.01

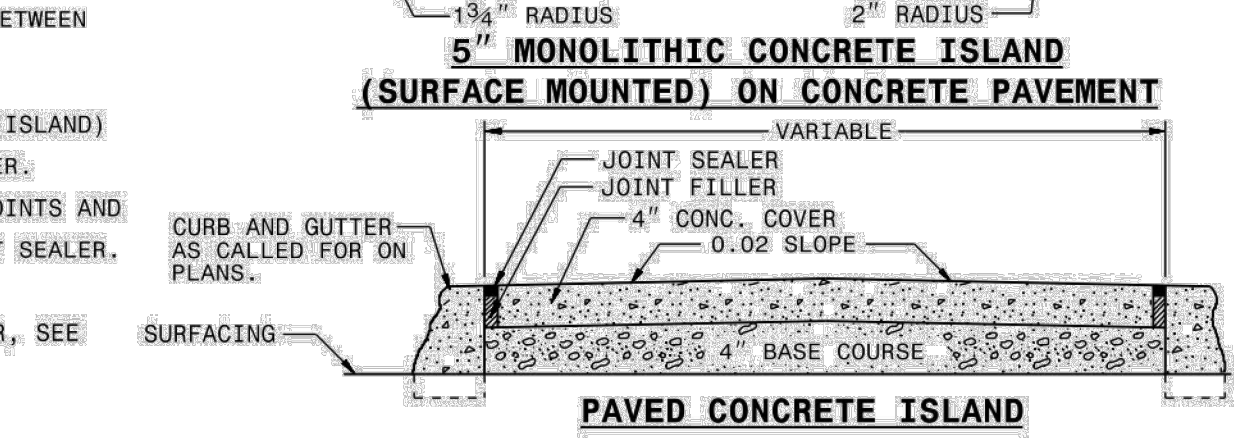


5" MONOLITHIC CONCRETE ISLAND (SURFACE MOUNTED) ON ASPHALT CONCRETE PAVEMENT

5" MONOLITHIC CONCRETE ISLAND (KEYED IN) ON ASPHALT CONCRETE PAVEMENT

5" MONOLITHIC CONCRETE ISLAND (SURFACE MOUNTED) ON CONCRETE PAVEMENT

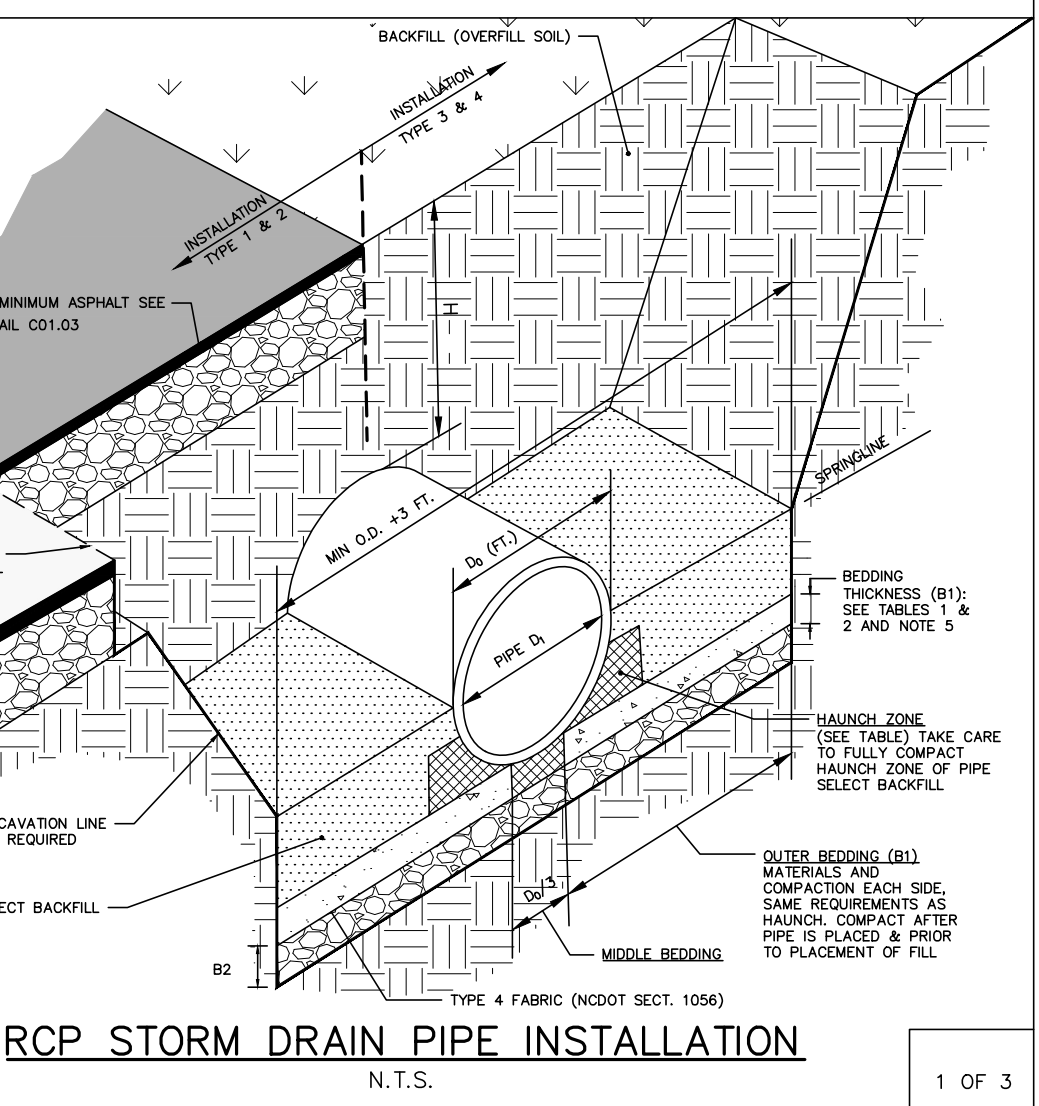
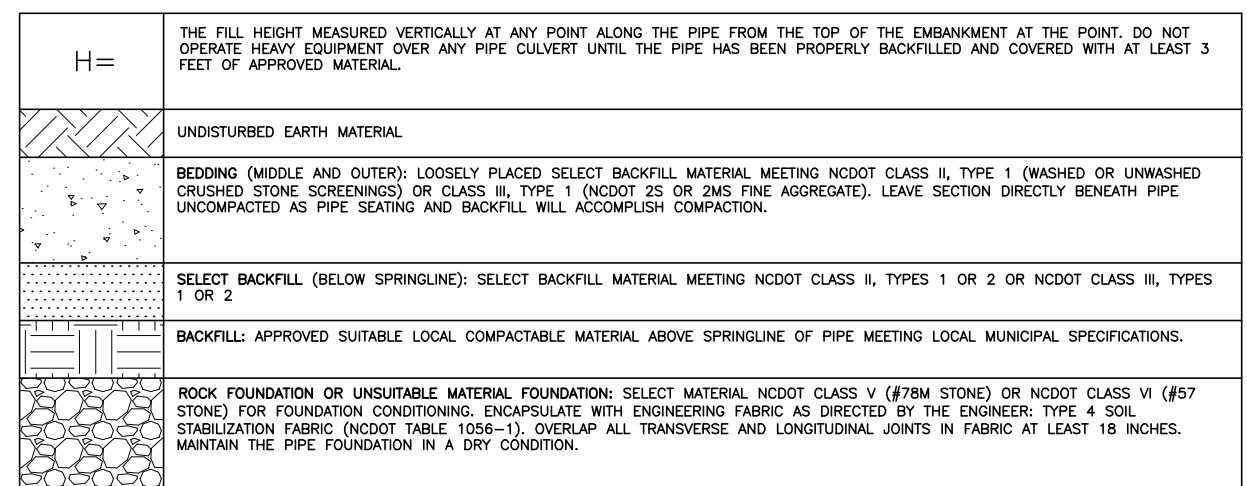
5" MONOLITHIC CONCRETE ISLAND (SURFACE MOUNTED) ON PAVED CONCRETE ISLAND



STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N. C.

ROADWAY STANDARD DRAWING FOR
 CONCRETE ISLANDS

SHEET 1 OF 1
 852.01



RCP STORM DRAIN PIPE INSTALLATION
 N.T.S.

1 OF 3

TABLE 1
 EQUIVALENT USCS¹ AND AASHTO SOIL CLASSIFICATION FOR SIDP² SOIL DESIGNATIONS

| SIDD | USCS | NCDDOT/AASHTO |
|----------------------------|---|---|
| GRAVELLY SAND (CATEGORY I) | SW, SP, OW, GP | -NCDDOT CLASS II-TYPE 1 (CRUSHED STONE SCREENINGS), LL<30; PI<6 -NCDDOT CLASS III, TYPE 1 (2S OR 2MS), LL<30; PI<6 |
| SANDY SILT (CATEGORY II) | GM, SM, ALSO GC, SC WITH LESS THAN 20% PASSING #200 SIEVE | -NCDDOT CLASS II-TYPE 2 (CRUSHED STONE SCREENINGS) AND CLASS II, TYPE 2 (ASHTO M145 FOR A-2-4 WITH MAX PI OF 6, A-4-W/ MAX ASS PASSING #200 SIEVE AND A MAX PI OF 6) -NCDDOT CLASS III, TYPE 1 (2S OR 2MS) OR CLASS II, TYPE 2 (ASHTO M145 FOR SOIL CLASSIFICATION A-1 OR A-3) |
| SILT CLAY (CATEGORY III) | CL, ML, GC, SC | AS, A6 |

TABLE 2
 STANDARD INSTALLATIONS SOILS AND MINIMUM COMPACTION REQUIREMENTS

| INSTALLATION TYPE | BEDDING THICKNESS | OUTER BEDDING (B1) SIDE S | HAUNCH ZONE & SELECT BACKFILL AREA (% COMPACTION/CATEGORY) | LOCATION |
|-------------------|---|---|--|---------------------------------------|
| TYPE 1 | B1 = 5/8" (6" MIN) FOUNDATION, F/FT OF 1/2" MIN/24" MAX | 90% CATEGORY I | 90% CATEGORY I OR 85% CATEGORY II | PAVED AREAS WITH 2" OR LESS BURY |
| TYPE 2 | B1 = 5/8" (6" MIN) FOUNDATION, F/FT OF 1/2" MIN/24" MAX | 90% CATEGORY I | 85% CATEGORY I OR 80% CATEGORY II | PAVED AREAS WITH GREATER THAN 2" BURY |
| TYPE 3 | B1 = 5/8" (6" MIN) FOUNDATION, F/FT OF 1/2" MIN/24" MAX | NO COMPACTION REQUIRED, EXCEPT IF CATEGORY II, USE 80% CATEGORY III | 85% CATEGORY I OR 80% CATEGORY II | IN 5" W/ OUTSIDE OF PAVEMENT |
| TYPE 4 | B1 = 5/8" (6" MIN) FOUNDATION, F/FT OF 1/2" MIN/24" MAX | NO COMPACTION REQUIRED, EXCEPT IF CATEGORY II, USE 80% CATEGORY III | 85% CATEGORY I OR 80% CATEGORY II | NATURAL AREAS |

NOTES:
 1. COMPACTION AND SOIL SYMBOLS - I.E. "95% CATEGORY I" - REFERS TO CATEGORY I SOIL MATERIAL WITH MINIMUM STANDARD PROCTOR COMPACTION OF 95%.
 2. SOIL IN THE OUTER BEDDING, HAUNCH, AND LOWER SIDE ZONES, EXCEPT UNDER THE MIDDLE 1' OF THE PIPE, SHALL BE COMPACTED TO AT LEAST THE SAME COMPACTION AS THE MAJORITY OF THE SOIL IN THE OVERFILL (BACKFILL) ZONE.
 3. FOR TRENCHES, THE TOP ELEVATION SHALL BE NO LOWER THAN 0.1H BELOW FINISHED GRADE OR, FOR ROADWAYS, ITS TOP SHALL BE NO LOWER THAN AN ELEVATION OF 1'-FOOT BELOW THE BOTTOM OF THE PAVEMENT BASE MATERIAL.
 4. FOR TRENCHES, THE WIDTH SHALL BE WIDER THAN SHOWN IF REQUIRED FOR ADEQUATE SPACE TO ATTAIN THE SPECIFIED COMPACTION IN THE HAUNCH AND BEDDING ZONES.
 5. COMPACT OUTER BEDDING AFTER PIPE IS PLACED AND PRIOR TO PLACEMENT OF SELECT FILL. MIDDLE BEDDING IS UNCOMPACTED.
 6. OVERFILL (BACKFILL) SOILS TO BE PLACED PER STANDARD SPECIFICATION 02700 STORM DRAINAGE FOR THE APPLICABLE BACKFILL TYPE AND BURY LIMITATIONS.
 7. THESE TWO TABLES WERE MODIFIED TO GENERALLY CONFORM TO THE NCDDOT STANDARDS AS SHOWN IN DETAIL 300.01 RIGID PIPE IN TRENCH CONDITION.

REFERENCE SOURCES:
 1. AMERICAN CONCRETE PIPE ASSOCIATION DESIGN STANDARDS
 2. 2012 NCDDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES AND NCDDOT STANDARD DETAILS 300.01 FOR RIGID PIPE, TRENCH CONDITIONS.

STORM DRAIN PIPE INSTALLATION

2 OF 3

FILL HEIGHT TABLE¹

| INSIDE PIPE DIAMETER DI (INCHES) | TYPE 3 (BEDDING) INSTALLATION (0.01 INCH CRACK) | | TYPE 4 (BEDDING) INSTALLATION (0.01 INCH CRACK) | |
|----------------------------------|---|-------------------------------------|---|-------------------------------------|
| | CLASS III PIPE MAXIMUM BURY H (FEET) | CLASS IV PIPE MAXIMUM BURY H (FEET) | CLASS III PIPE MAXIMUM BURY H (FEET) | CLASS IV PIPE MAXIMUM BURY H (FEET) |
| 12 | 2 MIN, 12 MAX | 1 MIN, 20 MAX | 3 MIN, 7 MAX | 2 MIN, 12 MAX |
| 18 | 2 MIN, 12 MAX | 1 MIN, 20 MAX | 3 MIN, 7 MAX | 1 MIN, 13 MAX |
| 24 | 1 MIN, 12 MAX | 1 MIN, 20 MAX | 2 MIN, 8 MAX | 1 MIN, 13 MAX |
| 30 | 1 MIN, 12 MAX | 1 MIN, 20 MAX | 1 MIN, 8 MAX | 1 MIN, 13 MAX |
| 36 | 1 MIN, 12 MAX | 1 MIN, 20 MAX | 1 MIN, 8 MAX | 1 MIN, 13 MAX |
| 42 | 1 MIN, 12 MAX | 1 MIN, 20 MAX | 1 MIN, 8 MAX | 1 MIN, 13 MAX |
| 48 | 1 MIN, 12 MAX | 1 MIN, 19 MAX | 1 MIN, 8 MAX | 1 MIN, 13 MAX |
| 54 | 1 MIN, 12 MAX | 1 MIN, 19 MAX | 1 MIN, 8 MAX | 1 MIN, 13 MAX |
| 60 | 1 MIN, 12 MAX | 1 MIN, 19 MAX | 1 MIN, 8 MAX | 1 MIN, 13 MAX |
| 72 | 1 MIN, 11 MAX | 1 MIN, 19 MAX | 1 MIN, 7 MAX | 1 MIN, 13 MAX |

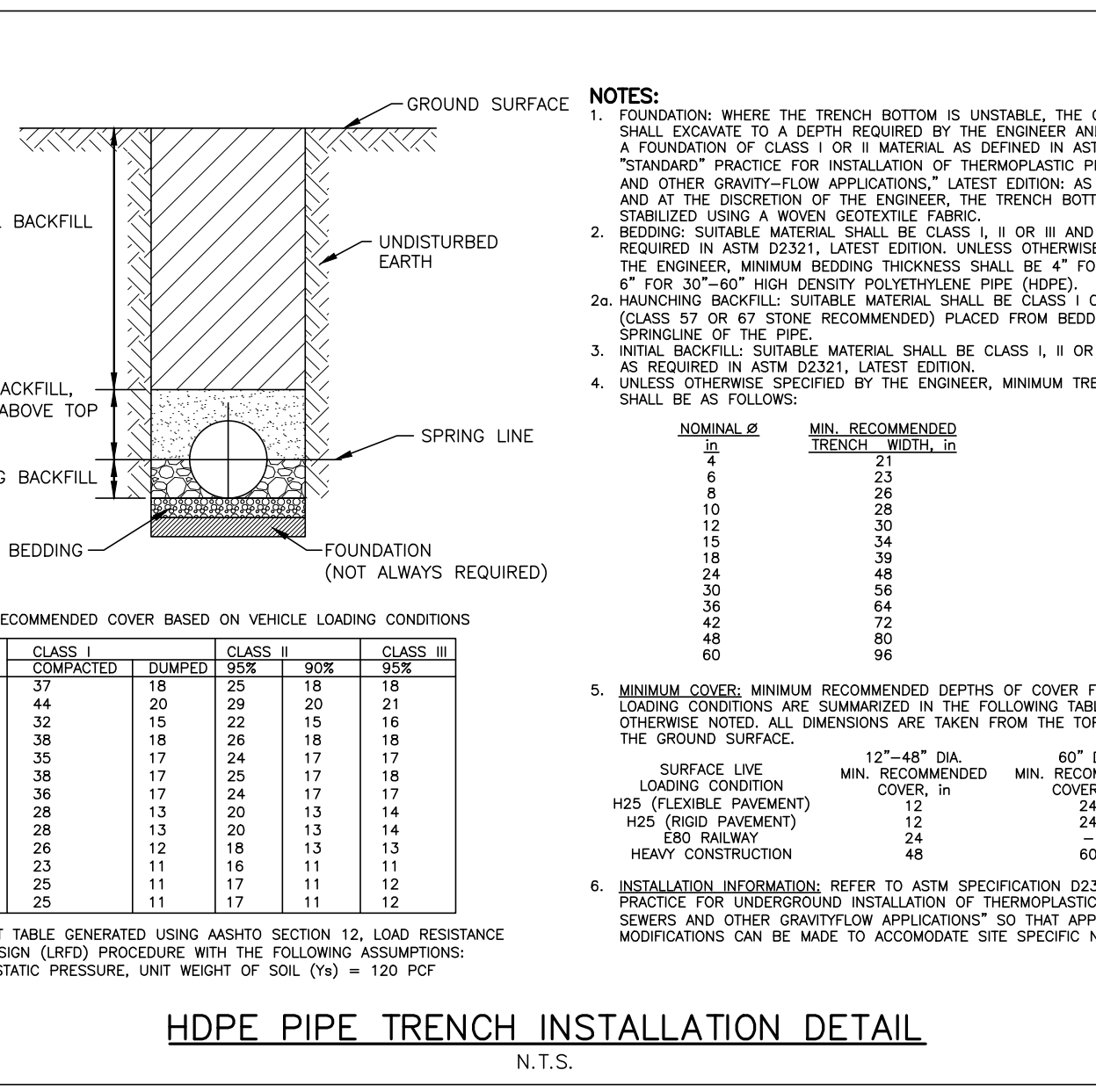
FILL HEIGHT TABLE BASE ON:
 1. Ys = 120 PCF (BACKFILL LOAD)
 2. ASHTO HL-93 LIVE LOAD
 3. POSITIVE PROJECTING EMBANKMENT CONDITION (THIS GIVES CONSERVATIVE RESULTS IN COMPARISON TO TRENCH CONDITIONS)
 4. PIPE = REINFORCED CONCRETE PIPE MEETING ASTM C76 (ASHTO M170), WALL C THICKNESS
 5. CONCRETE PIPE SHOULD BE INSTALLED IN ACCORDANCE WITH ASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS SECTION 27 OR ASTM C1479.

¹ FILL HEIGHT TABLES, THE PORTION EXCEPTED HERE, WAS DEVELOPED BY THE AMERICAN CONCRETE PIPE ASSOCIATION (ACPA) USING THE INDIRECT DESIGN METHOD IN ACCORDANCE WITH SECTION 12.10.4.3 OF THE ASHTO LRFD BRIDGE DESIGN SPECIFICATION, 4TH, 2007 WITH 2008 INTERIM.

NOTES:
 1. GREATER BURY DEPTHS THAN THOSE SHOWN ABOVE ARE ACHIEVABLE BY EITHER USING TYPE 1 OR 2 INSTALLATION, USING CLASS V PIPE, CONTROLLING BACKFILL TYPE, CALCULATING DEPTH USING A TRENCH CONDITION, OR BY SPECIAL DESIGN. SEE ALSO DESIGN DATA 9 PUBLISHED BY THE ACPA FOR DESIGN METHODOLOGY.
 2. IN LIEU OF CALCULATING BURY DEPTH FOR OTHER CONDITIONS, FIRST SEE "LRFD FILL HEIGHT TABLES FOR CONCRETE PIPE", LAST REVISED JULY 2009 OR LATER, PREPARED BY THE ACPA FOR OTHER BURY DEPTH POSSIBILITIES.
 3. SEE NCDDOT PIPE SELECTION TABLE

STORM DRAIN PIPE INSTALLATION

3 OF 3



NOTES:
 1. 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 DEFINED IN ASTM D2321.
 2. BEDDING: SUITABLE MATERIAL SHALL BE CLASS II OR III AND INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION, UNLESS OTHERWISE SPECIFIED BY THE ENGINEER. MINIMUM BEDDING THICKNESS SHALL BE 4" FOR 12"-24" AND 6" FOR 30"-60" HIGH DENSITY POLYETHYLENE PIPE (HDPE).
 3. HAUNCHING BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I OR II MATERIAL (CLASS 57 OR 67 STONE RECOMMENDED) PLACED FROM BEDDING TO THE SPRINGLINE OF THE PIPE.
 4. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III AND INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
 5. UNLESS OTHERWISE SPECIFIED BY THE ENGINEER, MINIMUM TRENCH WIDTHS SHALL BE AS FOLLOWS:

| NOMINAL ID | MIN. RECOMMENDED TRENCH WIDTH, IN |
|------------|-----------------------------------|
| 21 | 21 |
| 24 | 24 |
| 30 | 30 |
| 36 | 36 |
| 42 | 42 |
| 48 | 48 |
| 60 | 60 |

5. MINIMUM COVER: MINIMUM RECOMMENDED DEPTHS OF COVER FOR VARIOUS LIVE LOAD CONDITIONS ARE SUMMARIZED IN THE FOLLOWING TABLE, UNLESS OTHERWISE NOTED. ALL DIMENSIONS ARE TAKEN FROM THE TOP OF PIPE TO THE GROUND SURFACE.

| PIPE DIA. | CLASS I | CLASS II | CLASS III | CLASS IV | CLASS V |
|-----------|---------|----------|-----------|----------|---------|
| 4" | 37 | 15 | 25 | 18 | 18 |
| 6" | 44 | 20 | 29 | 20 | 21 |
| 8" | 52 | 25 | 33 | 22 | 23 |
| 10" | 58 | 28 | 36 | 24 | 25 |
| 12" | 65 | 32 | 40 | 26 | 27 |
| 15" | 75 | 37 | 45 | 29 | 30 |
| 18" | 82 | 41 | 49 | 31 | 32 |
| 24" | 95 | 48 | 57 | 36 | 37 |
| 30" | 108 | 55 | 65 | 41 | 42 |
| 36" | 122 | 62 | 73 | 46 | 47 |
| 42" | 135 | 69 | 81 | 51 | 52 |
| 48" | 148 | 76 | 89 | 56 | 57 |
| 60" | 174 | 91 | 107 | 66 | 67 |

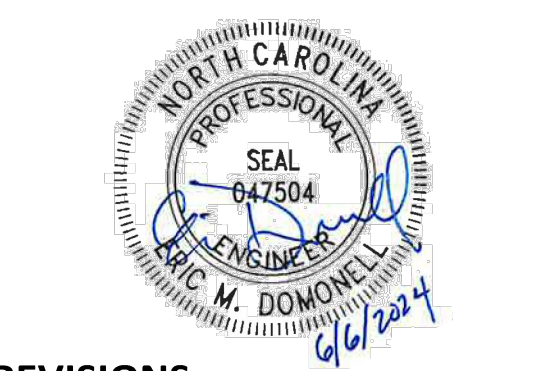
6. INSTALLATION INFORMATION: REFER TO ASTM SPECIFICATION D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITYFLOW APPLICATIONS" SO THAT APPROPRIATE MODIFICATIONS CAN BE MADE TO ACCOMMODATE SITE SPECIFIC NEEDS.

HDPE PIPE TRENCH INSTALLATION DETAIL
 N.T.S.

McADAMS
 The John R. McAdams Company, Inc.
 2905 Meridian Parkway
 Durham, NC 27713
 phone 919. 361. 5000
 fax 919. 361. 2269
 license number: C-0293
 www.mcadamsco.com

CLIENT
 NAME: TOWN OF ROLESVILLE
 ADDRESS: 502 SOUTHTOWN CIRCLE
 ADDRESS: ROLESVILLE NC 27571
 PHONE: 919.554.6582

FRAZIER FARM PARK
 CONSTRUCTION DRAWINGS
 PHASE 1A
 11624 LOUISBURG ROAD
 ROLESVILLE, NORTH CAROLINA



REVISIONS

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

PLAN INFORMATION

PROJECT NO. 202011039
 FILENAME 2020110039-PH1-01
 CHECKED BY EMD
 DRAWN BY SME
 SCALE N/A
 DATE 06.06.2024

SHEET

STORM DRAINAGE & UTILITY DETAILS
C8.03