

**STORM WATER MAINTENANCE AND REPAIR AGREEMENT  
AND PERMANENT EASEMENT**

This Agreement is made and entered into by and between Cedar Falls Community School District (CFCSD) (hereinafter "Owner") and the City of Cedar Falls, Iowa (hereinafter "City).

WHEREAS, Owner owns land in the City legally described on Exhibit A attached, that has been developed or will be developed by Owner (hereinafter "Benefited Property"); and

WHEREAS, the City acknowledges that a Storm Water Management Plan as required by Section 24-336 of the City's Code of Ordinances (hereinafter "Plan") has been submitted to and approved by the City; and

WHEREAS, said Plan includes construction of storm water management facilities on Owner's land; and

WHEREAS, a Maintenance and Repair Agreement related to such storm water management facilities which complies with Section 24-341 of the City's Code of Ordinances is required; and

WHEREAS, Owner acknowledges that all of the Benefited Property will benefit from the storm water management facilities; and

WHEREAS, the parties have reached agreement on the terms and conditions of these matters and now desire to set forth their agreement in writing.

NOW, THEREFORE it is mutually agreed by the parties as follows:

1. Owner shall construct at Owner's cost storm water management facilities in compliance with Section 24-341 of the City's Code of Ordinances as set forth in the Plan submitted by Owner (hereinafter "Facilities").
2. Such Facilities shall be constructed as depicted on Exhibit B attached. Any change to the composition of or size, shape or location of the Facilities must be approved by the

City.

3. Owner shall be responsible for the inspection, operation, maintenance and repair of the Facilities, and shall make records of the installation, inspections, maintenance and repairs, and shall retain such records for at least twenty-five (25) years or until the Facilities or any portion thereof has been reconstructed. These records shall be made available to the City during any City inspection, and shall be submitted to the City at other reasonable times upon request. Nothing in these record keeping requirements shall be construed to limit in any way the Owner's responsibility to inspect, maintain and repair the Facilities.

a) Owner agrees to comply with the Detention Basin Operation and Maintenance Plan for the Facilities attached as Exhibit C and incorporated herein.

b) Owner agrees to comply with the Maintenance and Inspection Schedule for Storm Water Detention System for the Facilities attached as Exhibit D and incorporated herein.

4. Owner may construct at Owner's cost additional storm water management facilities on the Benefited Properties, upon the written consent of the City, in which case the duties and responsibilities of inspection, operation, maintenance, repair, and record keeping stated in this Agreement shall apply to such additional storm water management facilities.

5. If Owner fails or refuses to meet the requirements of this Agreement, the City, after notice as provided herein, may correct a violation or non-compliance by performing or causing to be performed all necessary work to place the Facilities in proper working condition. If the Facilities are not a danger to public safety or public health, the Owner shall be provided with reasonable notice to correct the violation in a timely manner. In the event that the Facilities become a danger to public safety or public health, the City shall notify the Owner in writing that upon receipt of the notice, the Owner shall have two days or such additional time as circumstances may require to maintain and/or repair the Facilities. If the violations or non-compliance have not been corrected by the Owner in a timely manner, and the City performs or causes to be performed the work necessary to place the Facilities in proper working condition, the City may assess, jointly and severally, the cost of the work to the Owner, and to future owners of any portion of the Benefited Property, which cost shall be a lien on the Facilities and on the Benefited Property, and the City may assess the cost of the work to each separately owned portion of the Benefited Property in equal shares as a lien to be collected in the same manner as property taxes.

6. Owner agrees to utilize the forms attached hereto as Exhibit E with regard to inspection, maintenance and repair of the Facilities.

7. In consideration of approval by the City of the foregoing Agreement and attached Exhibits, Owner accepts the duties and responsibilities set forth herein which shall be covenants running with the land, and agrees that the same shall be binding upon and inure to the benefit of Owner and Owner's grantees, transferees, successors and assigns.

IN WITNESS WHEREOF, the City and the Owner have executed this Storm Water Facility Maintenance and Repair Agreement at Cedar Falls, Iowa, effective as of the date first stated above.

By (Signature): \_\_\_\_\_

Printed Name: Jeff Hassman

Title: Board President, Cedar Falls Community School District

STATE OF Iowa )  
 ) SS  
COUNTY OF Black Hawk )

This instrument was acknowledged before me on the \_\_\_ day of \_\_\_\_\_, 2022, by Jeff Hassman as Board President of Cedar Falls Community District.  
(Printed Name) (Title)  
School District .

\_\_\_\_\_  
Notary Public in and for the State of Iowa

**City of Cedar Falls, Iowa**

By: \_\_\_\_\_  
Robert M. Green, Mayor

ATTEST:

\_\_\_\_\_  
Jacqueline Danielsen, MMC, City Clerk

STATE OF Iowa )  
 ) SS  
COUNTY OF Black Hawk )

This instrument was acknowledged before me on the \_\_\_\_\_ day of \_\_\_\_\_, 2022, by Robert M. Green, Mayor, and Jacqueline Danielsen, MMC, City Clerk, of the City of Cedar Falls, Iowa.

\_\_\_\_\_  
Notary Public in and for the State of Iowa

## Exhibit A

### Legal Description

Parcel "A" in Record Doc. #2018-2100 and Parcel "B" in Record Doc. #2020-7423 found in the Black Hawk County Courthouse, Black Hawk County, Iowa.



## Exhibit B

### Stormwater Management Facilities

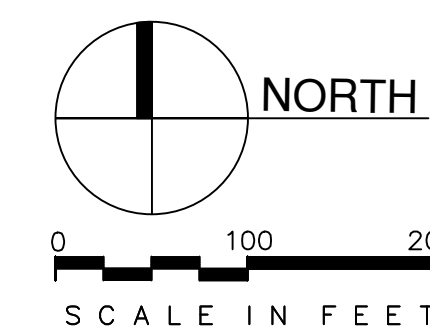
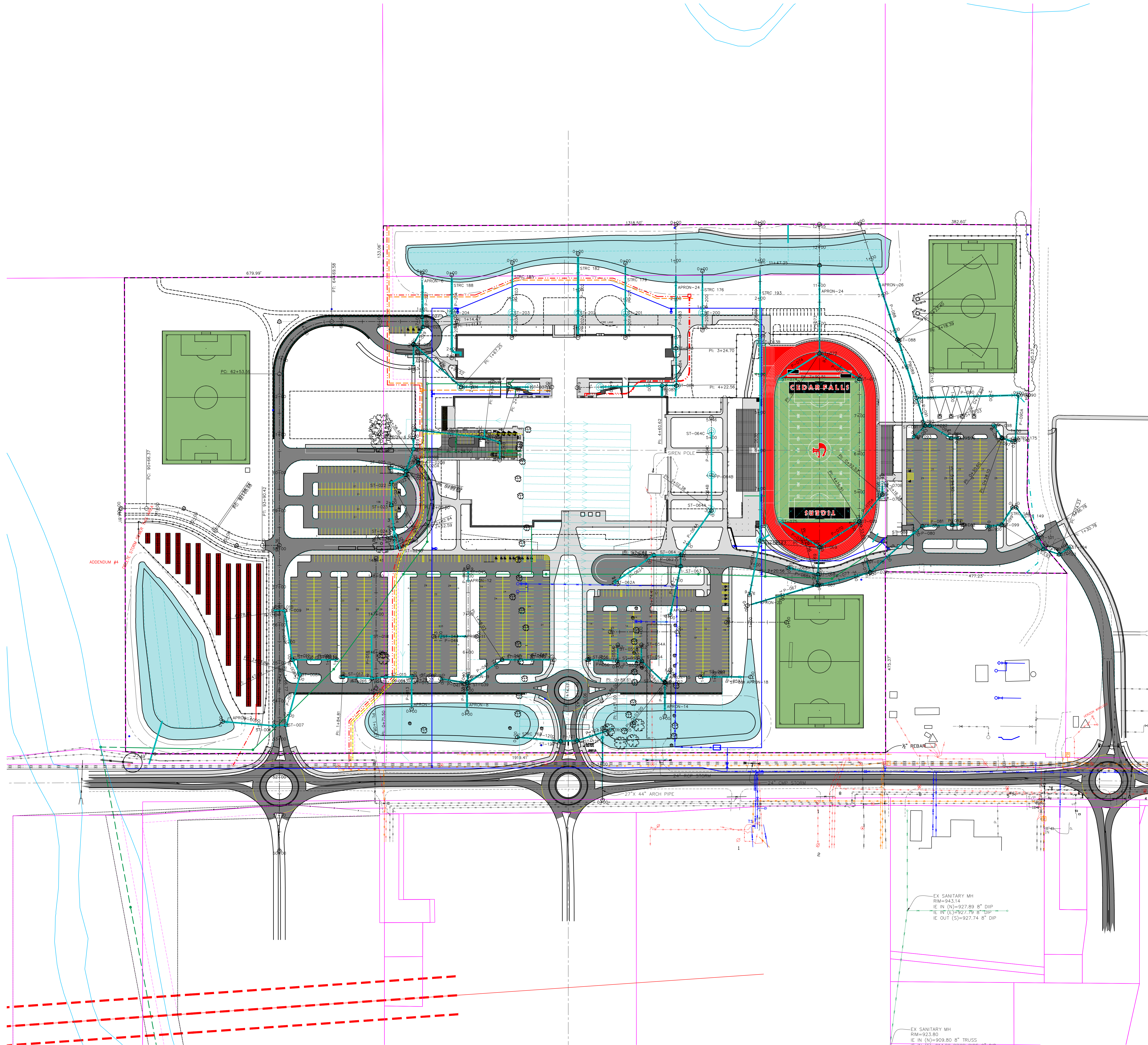
See the following Civil C6.00 series sheets from the construction plans.



PLAN NOTES

GENERAL SITE NOTES

- 1.) All Storm Sewer Structure tops (Intakes and Utility Accesses) shall be poured after paving is completed. Intakes and Utility Access tops behind the back of curb shall match the same slope as the existing/proposed grading in that area. Concrete Fillets shall also be installed in all storm sewer structures unless otherwise noted. Nyoplast drainage structures shall be installed and configured per the manufacturer's specifications.
- 2.) Storm Sewer Utility Access Structure Form Grade elevations and locations are shown based on the center of the structure unless otherwise noted. Utility Accesses casting locations shall be placed to match pavement jointing patterns. Storm Sewer Utility Access Structure sizes vary as described in the standard road plans and storm sewer details. Price bid shall include all materials, equipment and labor required to construct the UA according to these details.
- 3.) All Storm Sewer Joints Crossing Water Main shall be gasketed and wrapped according to SUDAS Section 4020. Storm sewer pipes crossing existing/proposed utilities shall be centered between pipe end joints on that crossing.
- 4.) All connections between dissimilar pipes (including reducers) shall be considered incidental to storm sewer construction and shall be completed using a Fernco 1060 series (Concrete to PVC/DIP) and 1056 series (PVC/DIP to PVC/DIP) for up to 24" diameter transitions. HDPE to concrete/DIP or PVC shall be completed per manufacturer specifications.
- 5.) Existing storm sewer drainage shall be maintained during construction, if existing drainage patterns are interrupted a plan must be in place to provide temporary drainage if needed. This may include temporary pumping or ditching which should be considered incidental to storm sewer installation.
- 6.) Dewatering and temporary pumping required during construction is the responsibility of the contractor and shall be considered incidental to storm sewer installation.
- 7.) Class 1 bedding material, per SUDAS Specification Section 3010.2.02A, shall be considered incidental to pipe, intake and utility access construction and shall be placed according to SUDAS Details SW-101 and SW-102, Class R-5 for all Reinforced Concrete Pipe (including circular piping) and F-3 for HDPE/PVC Pipe. One-inch (1-inch) or 1 1/2 inch clean crushed stone may be substituted for Class 1 Bedding Material in Section 3010.2.02A.
- 8.) RCP apron section footings shall be installed under all apron outlets.
- 9.) Curb cut openings shall include scour protection let downs. Locations and details are shown in the erosion control sheets. These shall extend a minimum of 1' past either side of the curb openings.
- 10.) Refer to sheets C.610 to C.618 for storm sewer and detention outlet details.
- 11.) Structure to pipe connections shall be completed per SUDAS section 6010. Concrete pipe joints shall be constructed per SUDAS section 4020. HDPE/PVC pipe connections shall be per manufacturer specifications and detail SW-211 shall be used when required for pipe to pipe or pipe to structure connections. All pipe to pipe or pipe to structure connections are considered incidental to storm construction.
- 12.) Class III or better concrete pipe per SUDAS 4020 shall be used for all concrete pipe construction. HDPE/PVC pipes shall have a smooth interior and comply with SUDAS section 4020.
- 13.) Aprons shall be installed on the same line and slope of the storm sewer pipe. Aprons shall be according to SUDAS detail 4030.22. The last three joints of each pipe outlet (including apron) shall be connected per detail DR-121. This work is considered incidental to storm construction. All outlet and inlet pipes on grade shall include aprons.
- 14.) Existing storm sewer pipe type, size, and elevations are estimated based on field survey and shall be verified by the contractor prior to construction or fabrication of storm structures and pipe installation.



**INVISION**  
ARCHITECTURAL ARCHITECTURE

501 Sycamore  
Suite 101  
Waterloo, IA 50703  
PO Box 1800  
Waterloo, IA 50704-1800  
319.233.8419  
319.233.9772 Fax  
www.invisionarch.com  
CONSULTANT:  
CONSTRUCTION MANAGER  
STORY CONSTRUCTION

STRUCTURAL  
RAKER RHOODES  
ENGINEERING  
MEP  
MODUS

CIVIL ENGINEERING AND  
LANDSCAPE ARCHITECTURE  
AECOM TECHNICAL  
SERVICES, INC.  
RITLAND+KUIPER

REVISIONS:

Description	Date	No.
ADDENDUM #4	12/04/2020	

OWNER SIGN-OFF:

DATE	NAME

CEDAR FALLS COMMUNITY SCHOOL DISTRICT  
**CEDAR FALLS HIGH SCHOOL**  
W 27TH STREET, CEDAR  
FALLS, IA 50613

PROJECT NO:  
19116

DATE:  
JANUARY 22, 2021

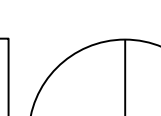
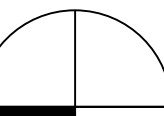
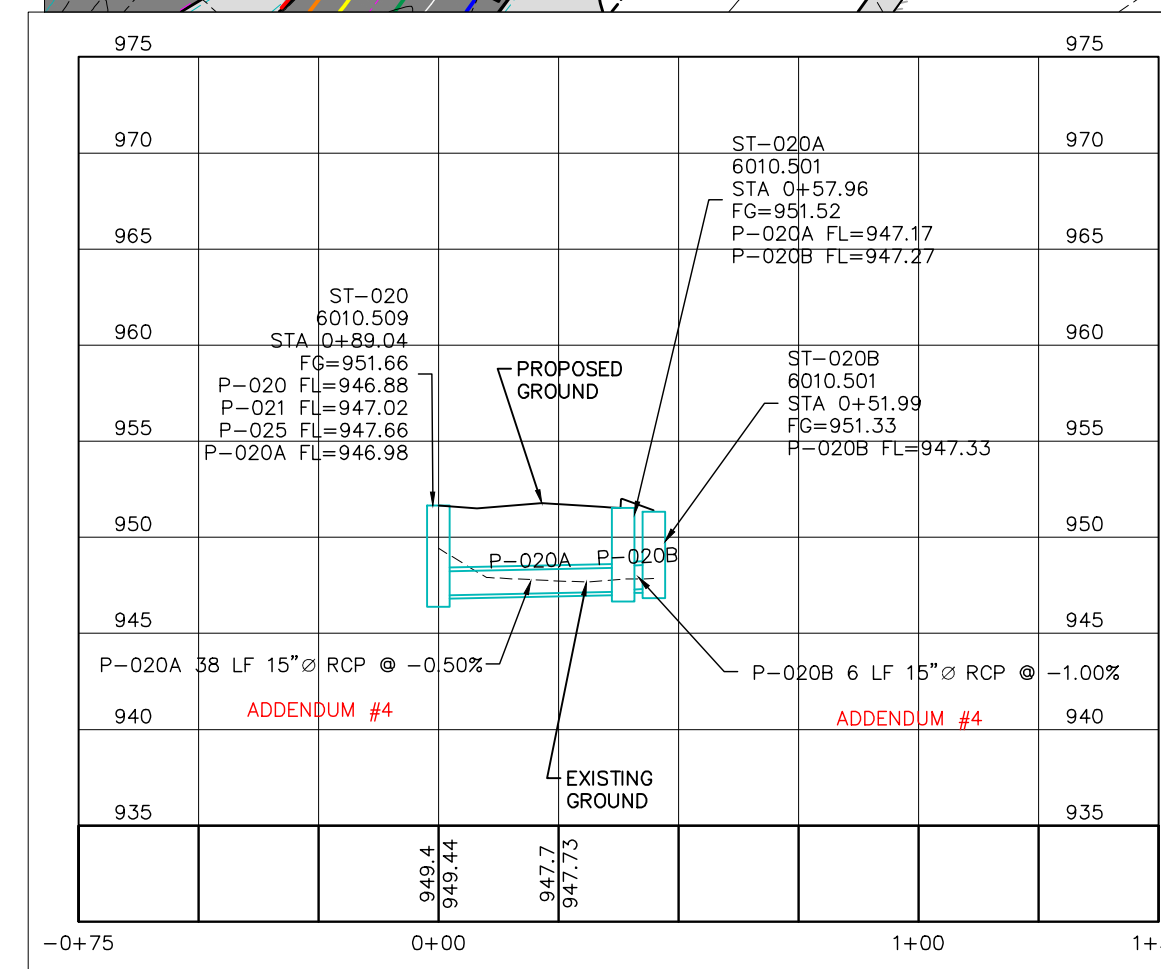
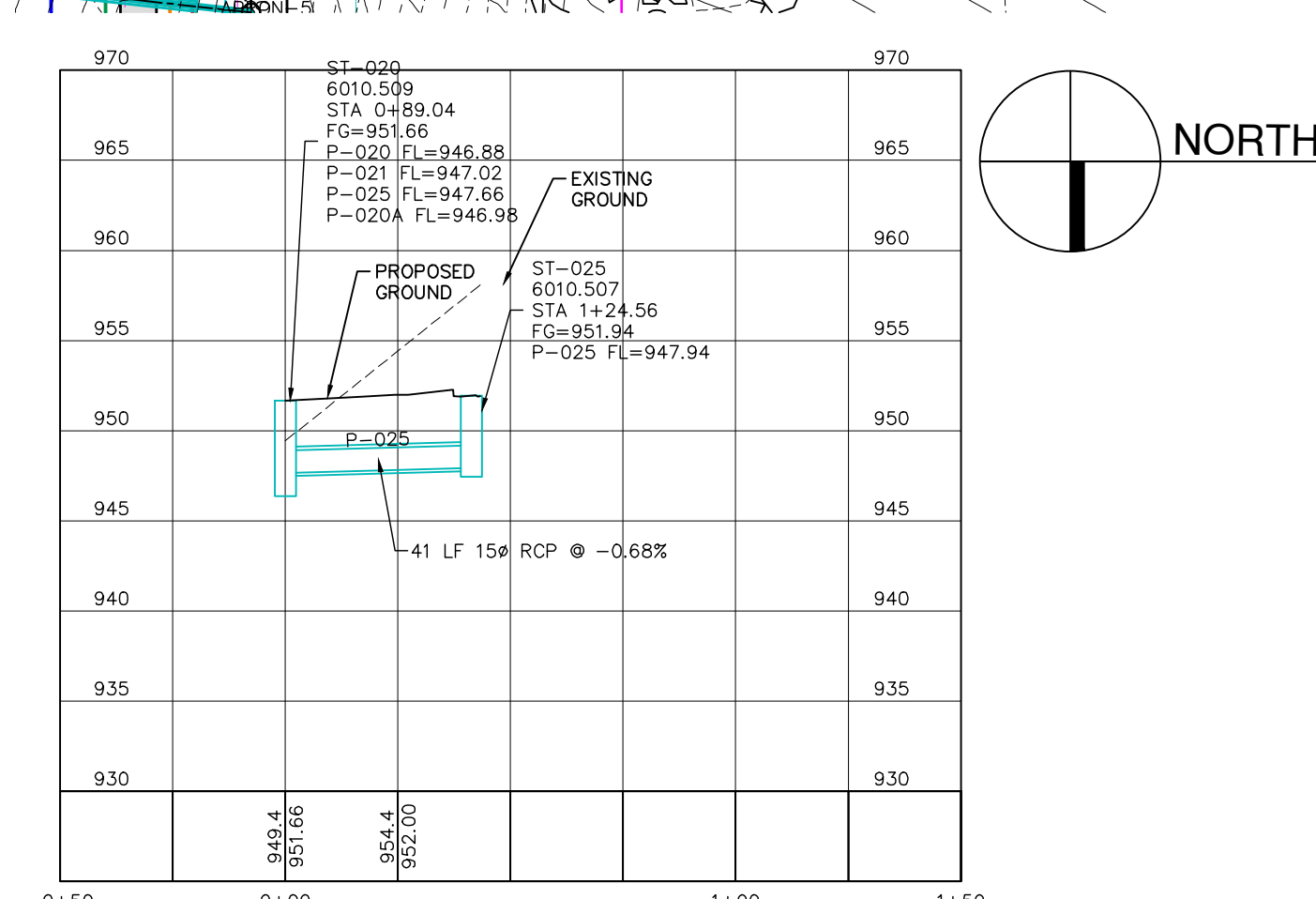
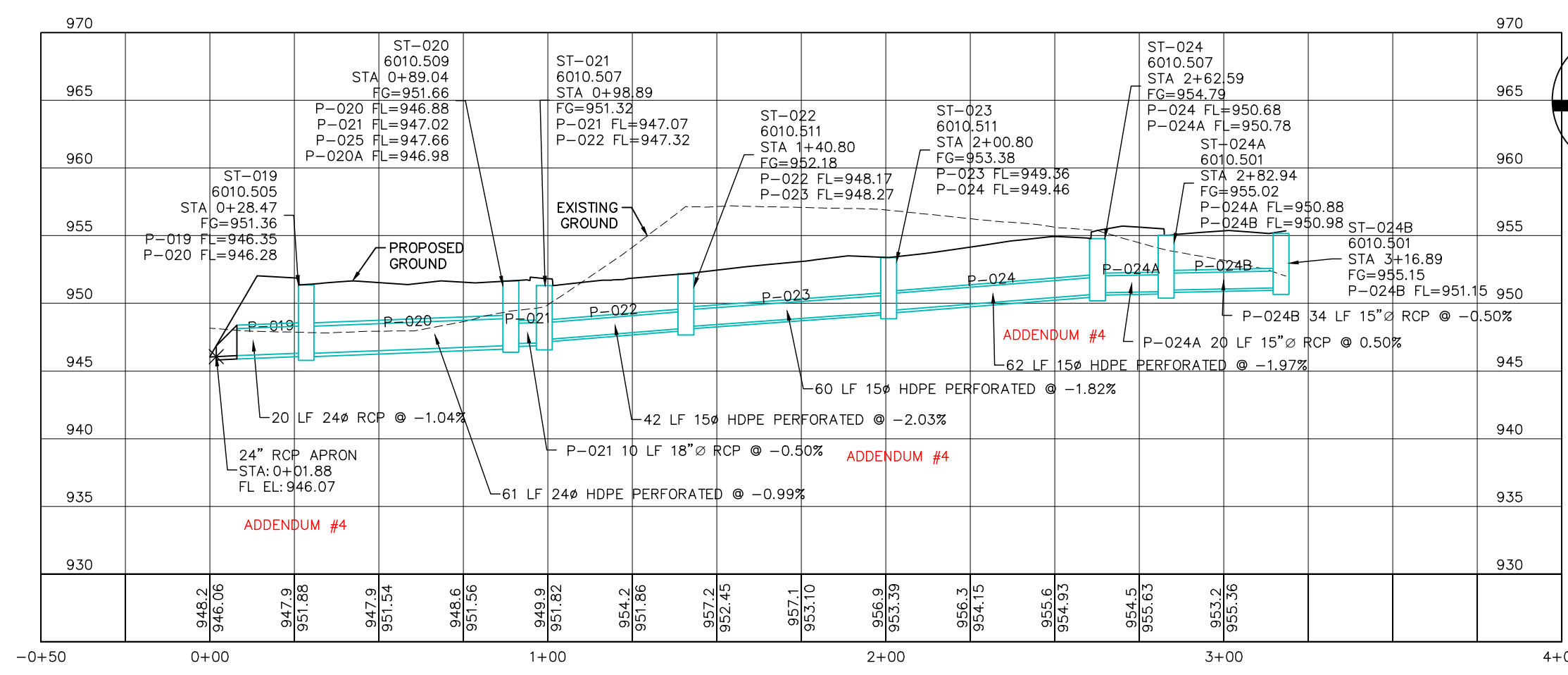
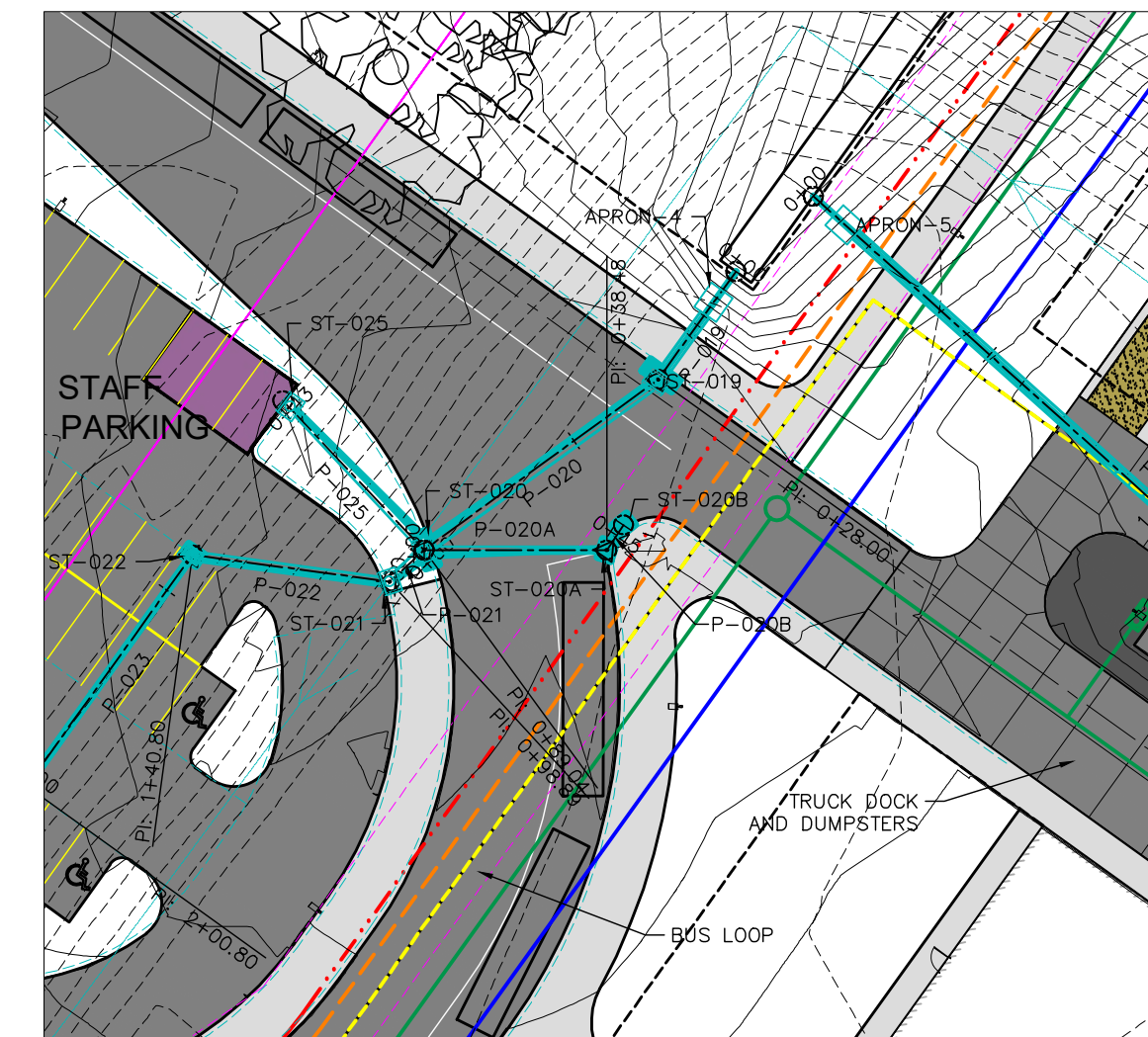
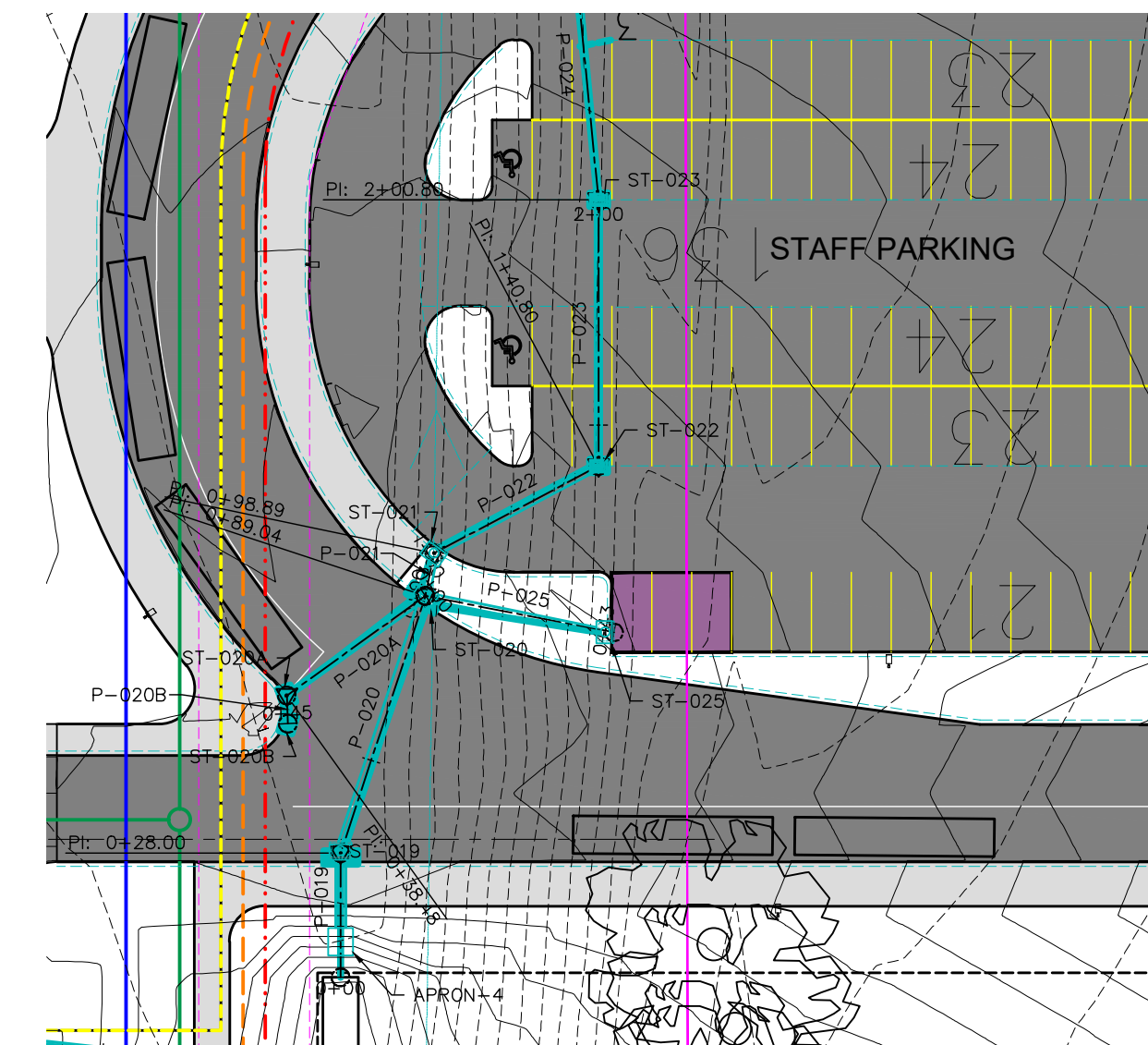
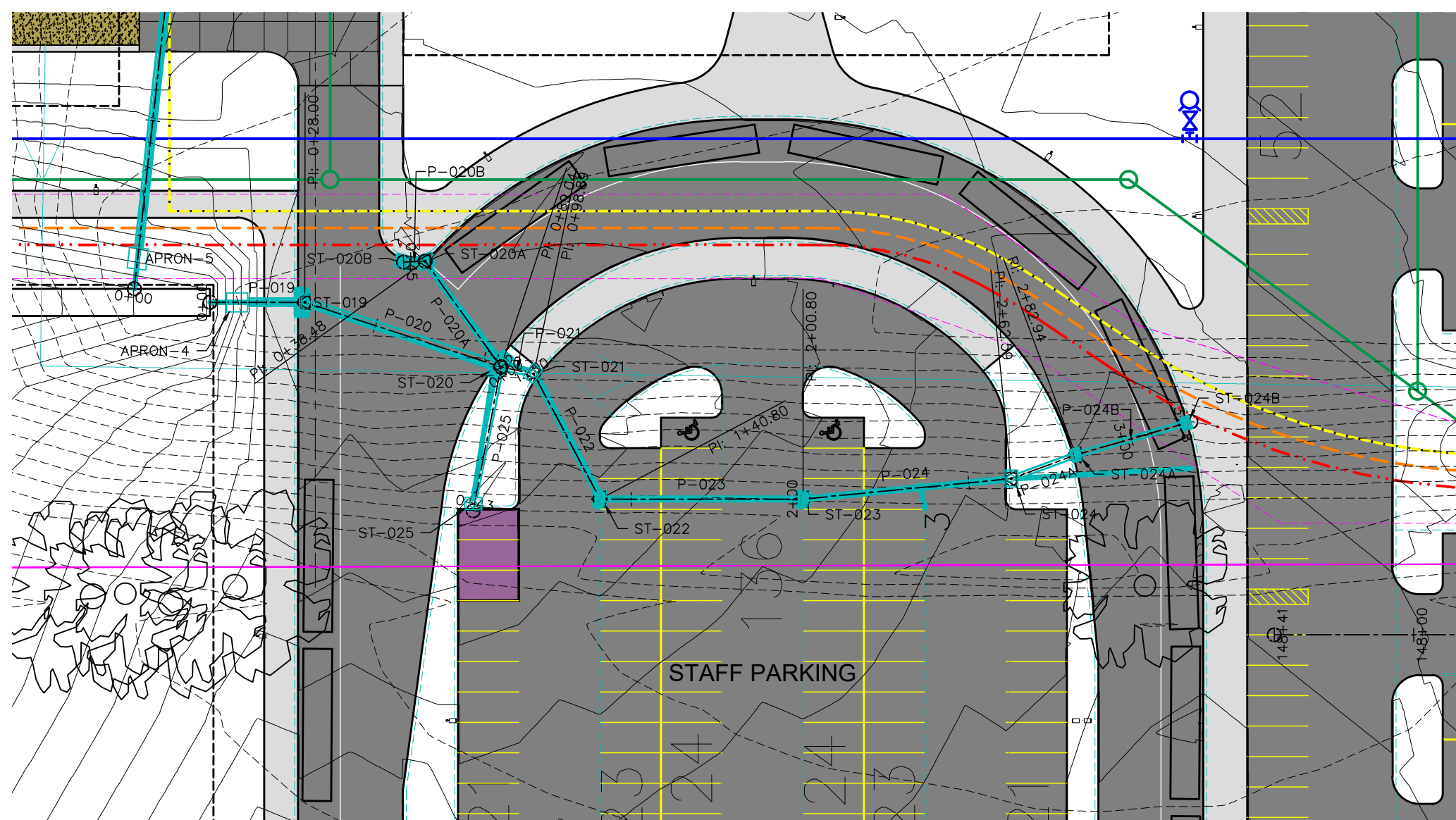
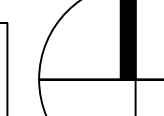
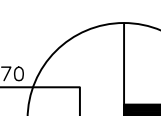
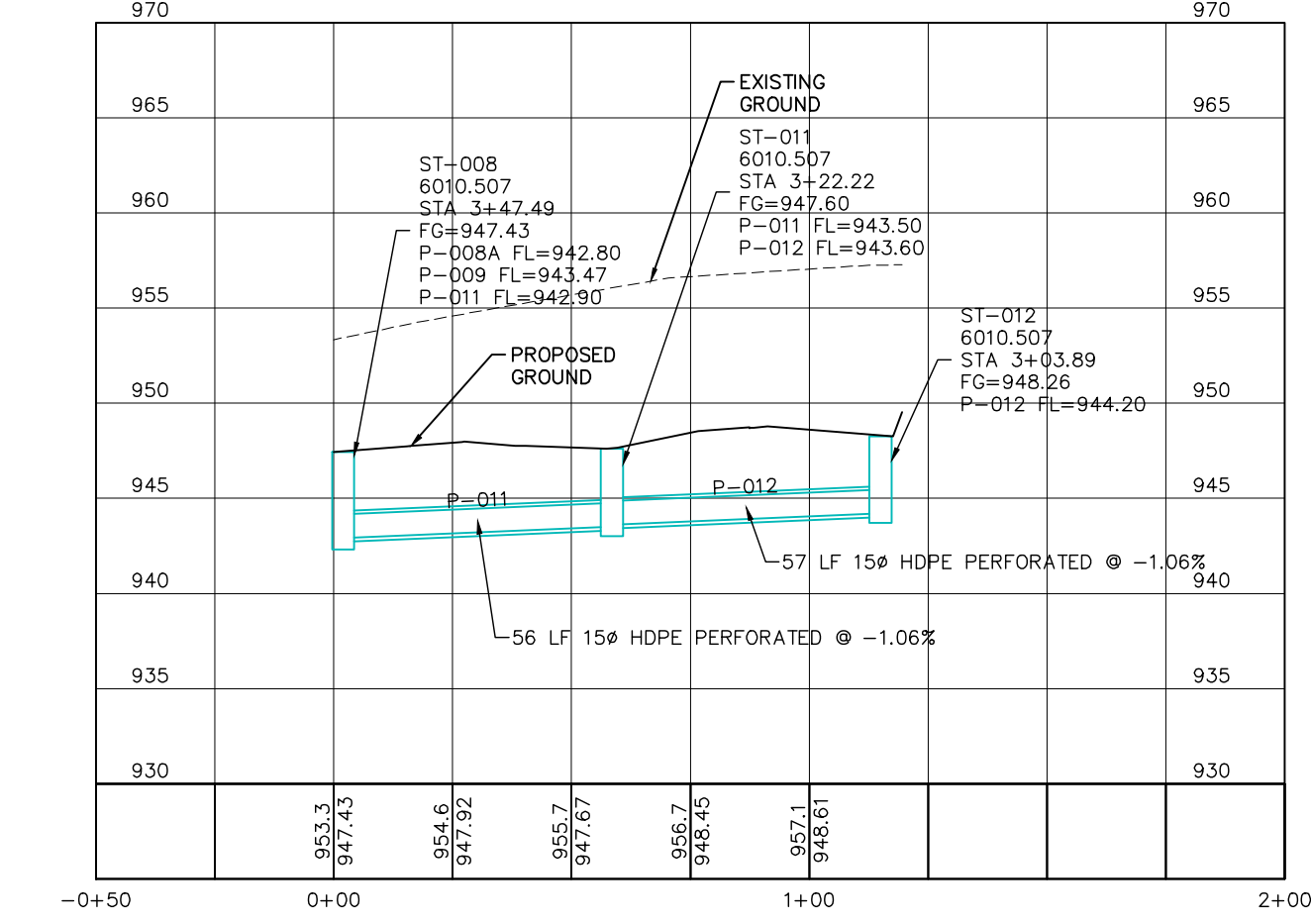
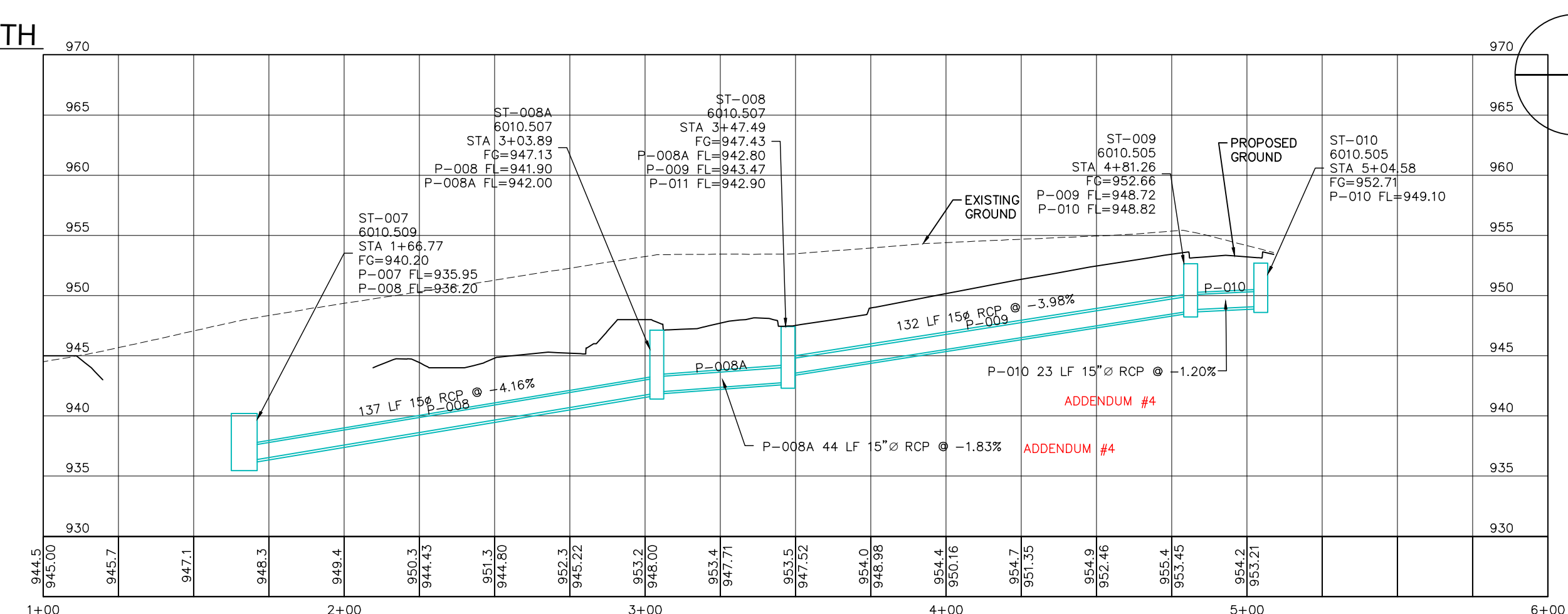
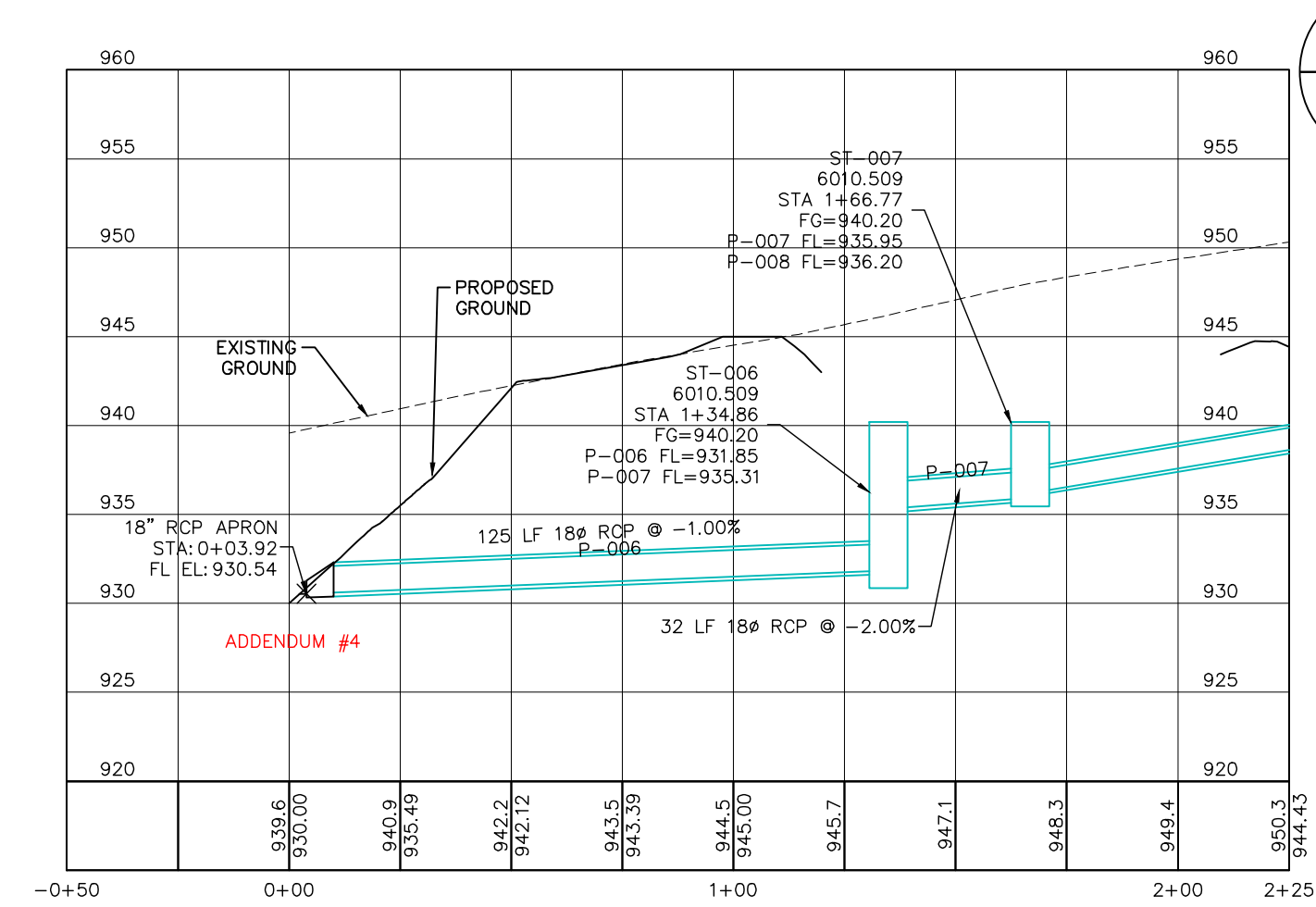
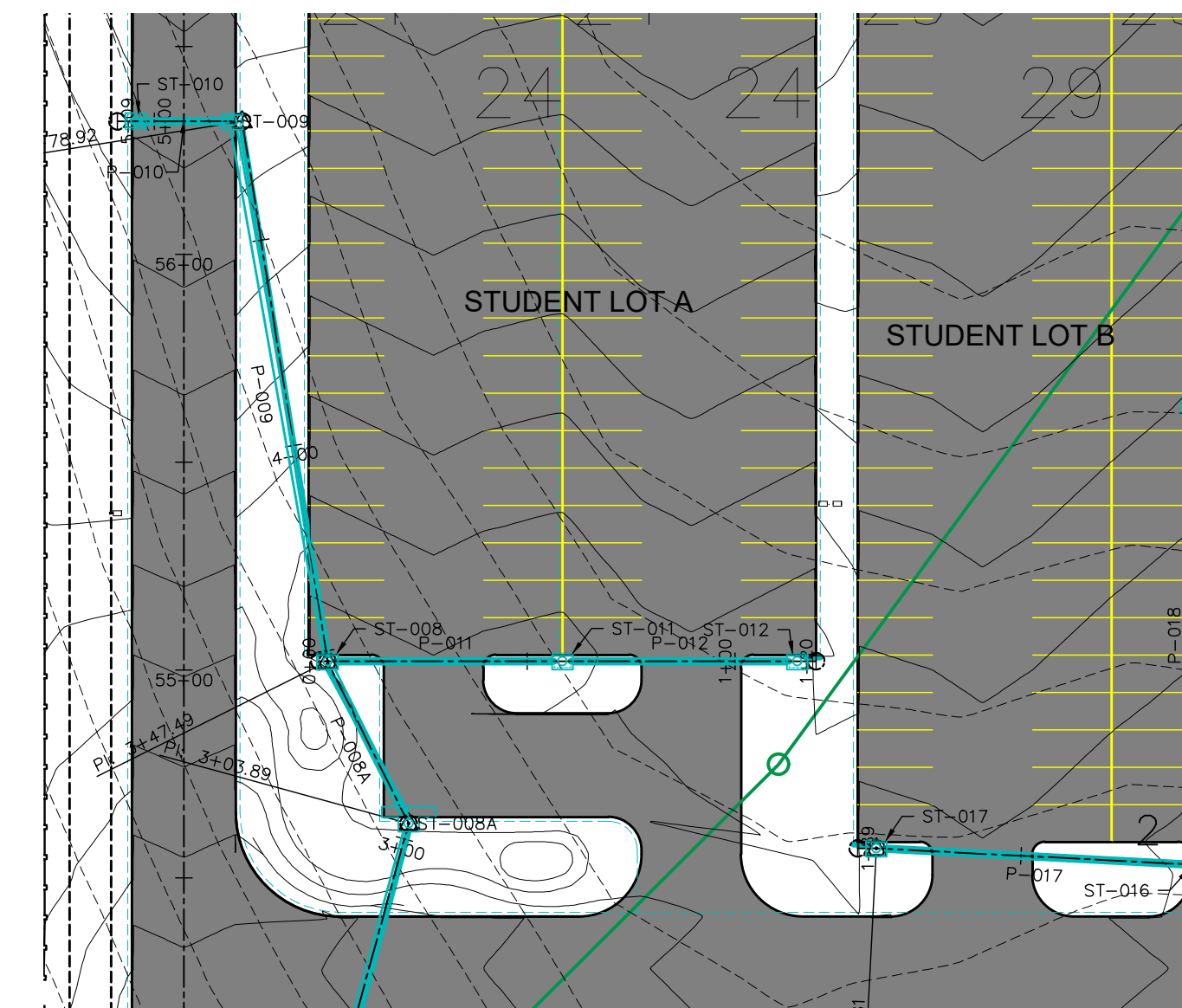
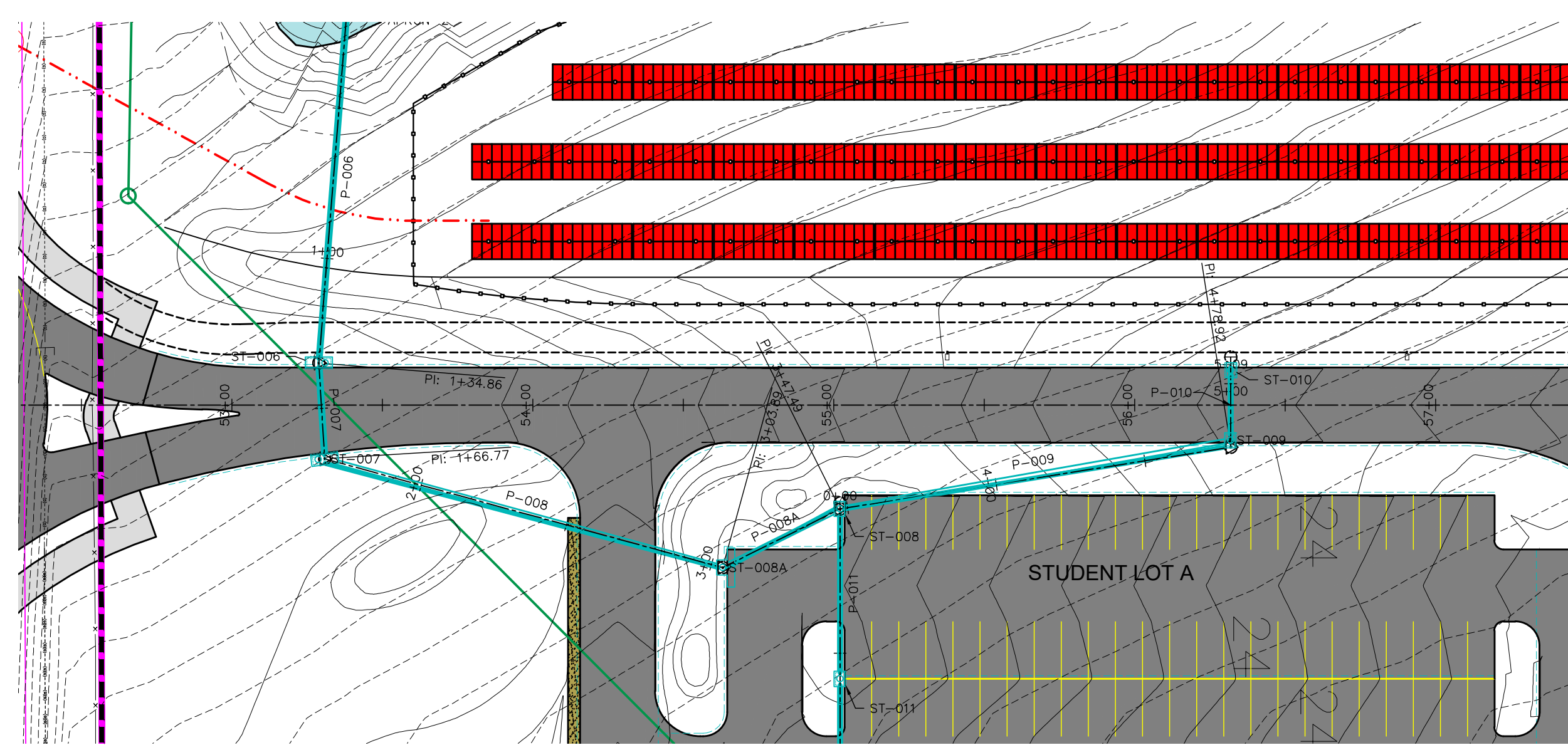
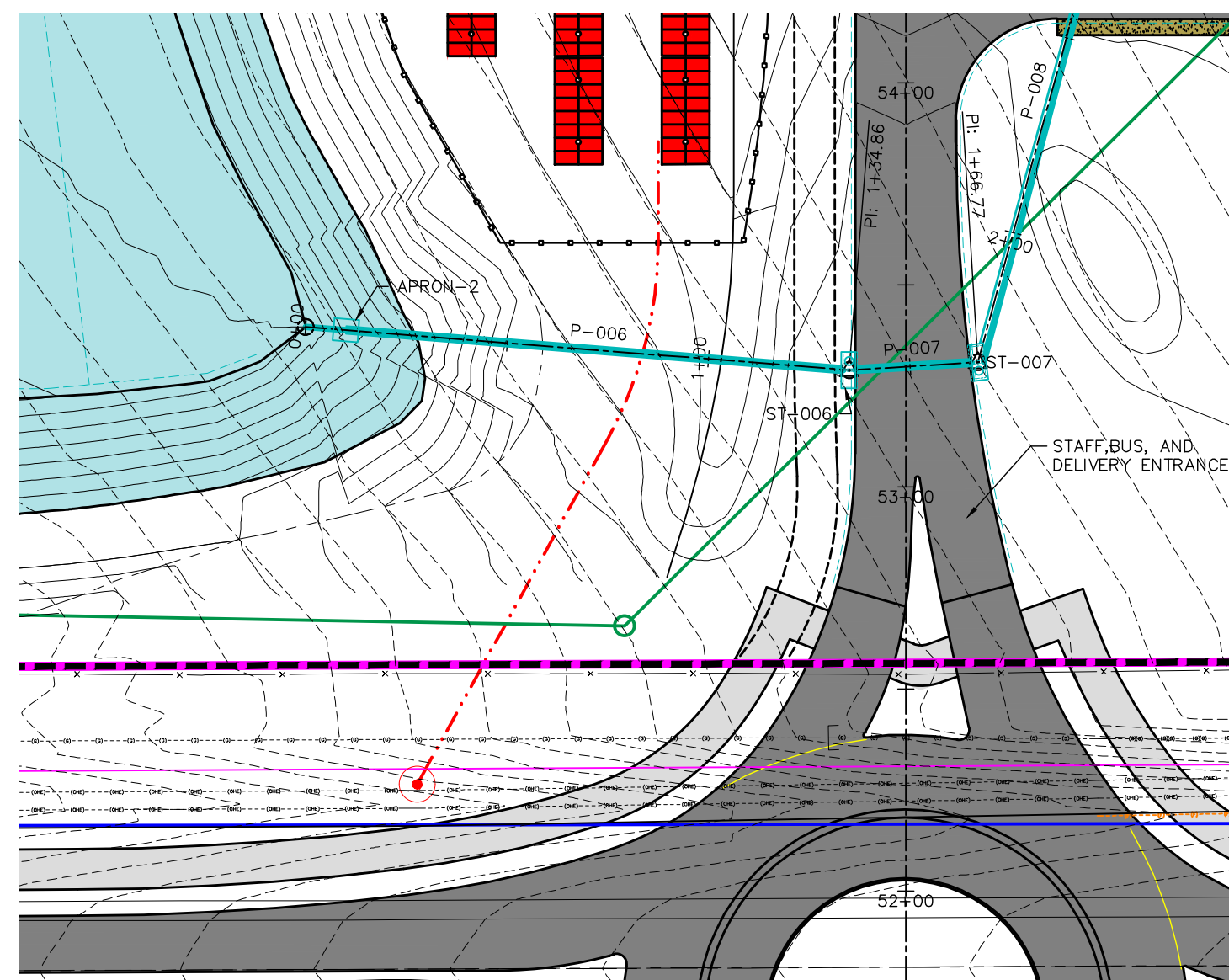
SHEET SET:  
CONSTRUCTION  
DOCUMENTS

SHEET NAME:  
STORM DRAINAGE  
PLAN

SHEET:  
**C6.00**  
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PLAN NOTES



GENERAL SITE NOTES

LEGEND

- EXISTING GRAVEL EDGE
- EXISTING ELECTRICAL
- EXISTING FIBER OPTIC
- EXISTING OVERHEAD ELECTRIC
- EXISTING SANITARY SEWER
- EXISTING WATER MAIN
- EXISTING WATER SERVICE
- EXISTING STORM SEWER
- PROPOSED GAS MAIN
- PROPOSED FIBER OPTIC
- PROPOSED STORM SEWER
- PROPOSED WATER MAIN
- FUTURE ADDITIONS

- ROAD PAVEMENT
- SIDEWALK/TRAIL
- GRAVEL EDGE



REVISIONS:

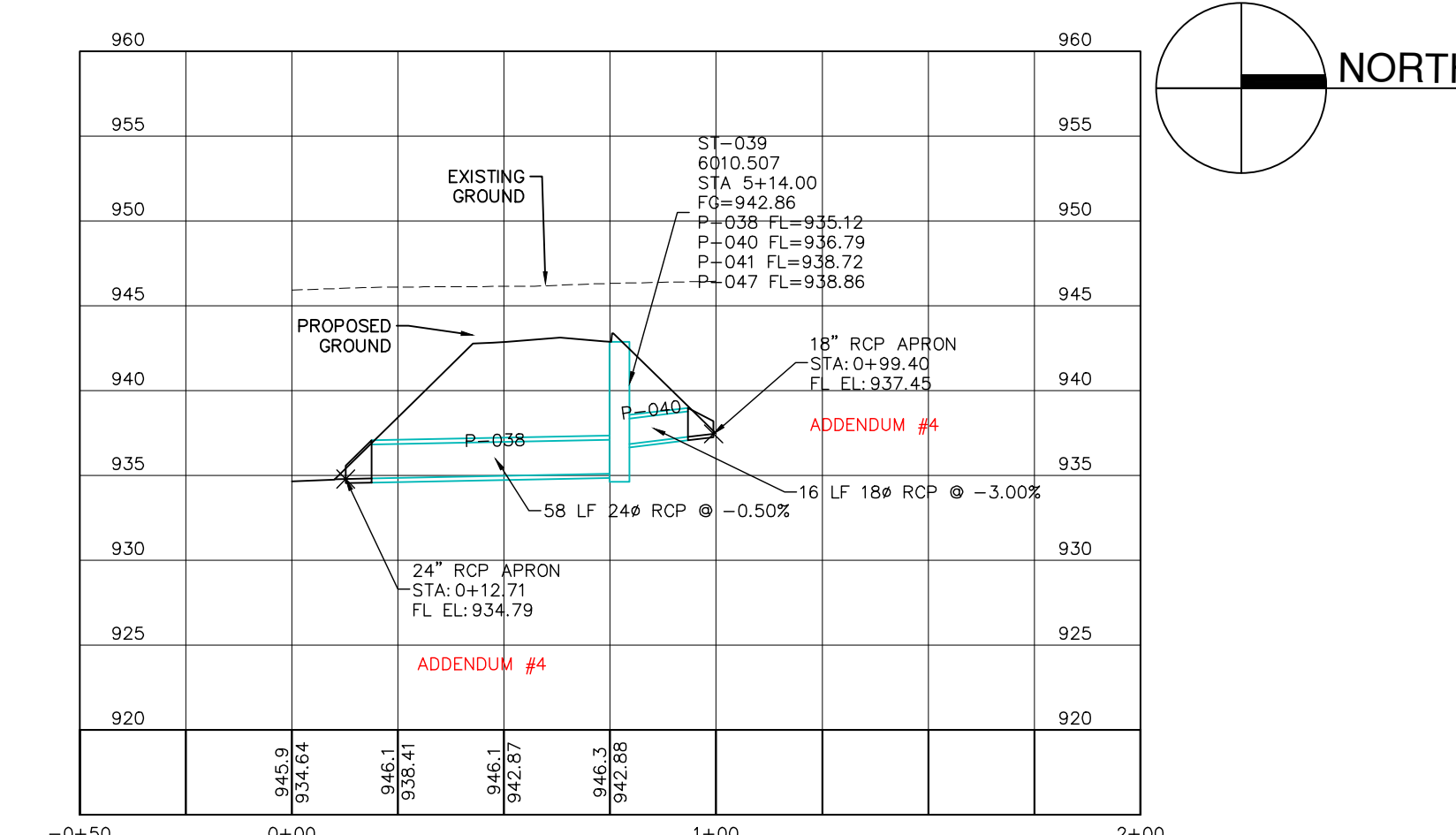
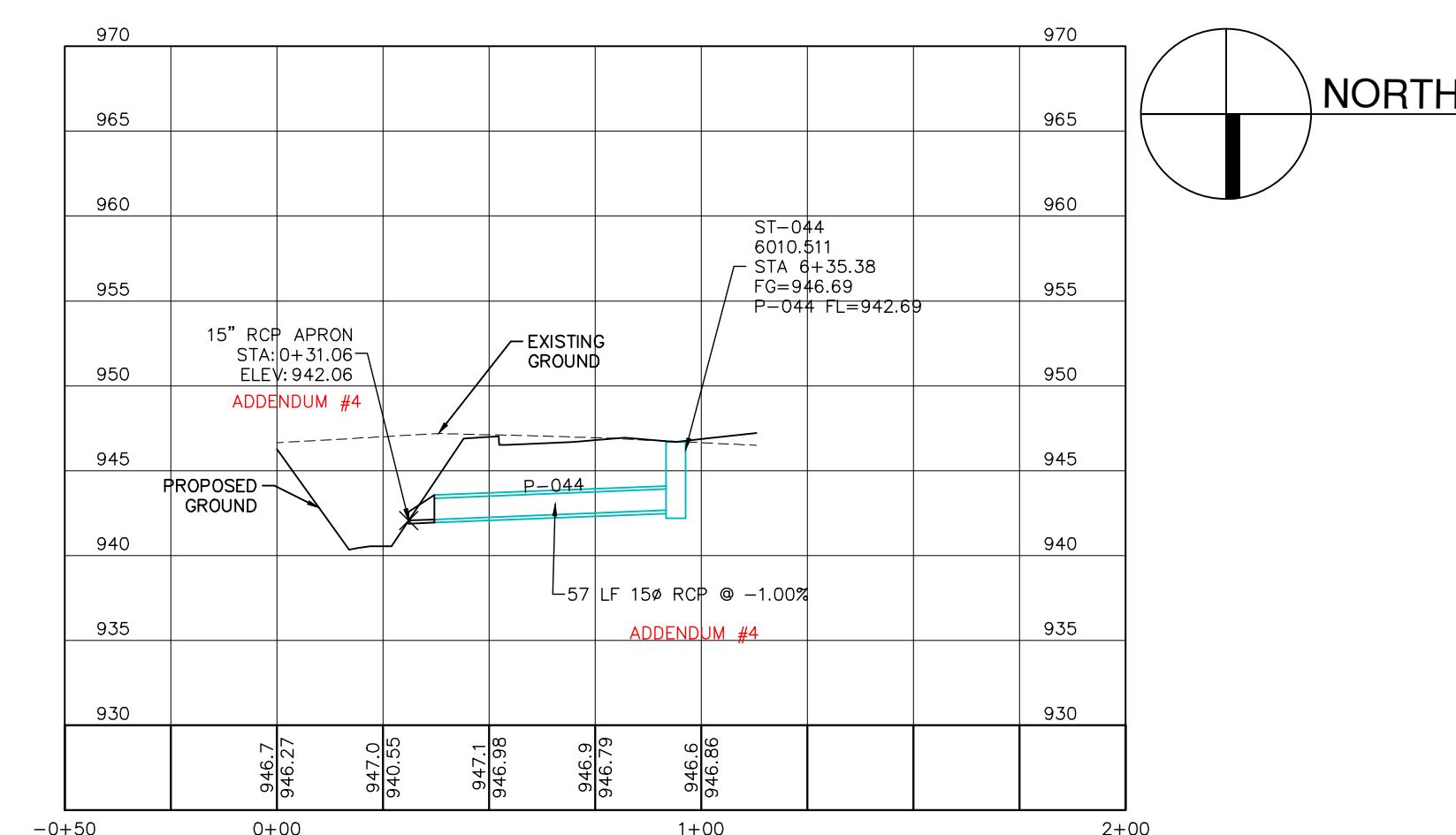
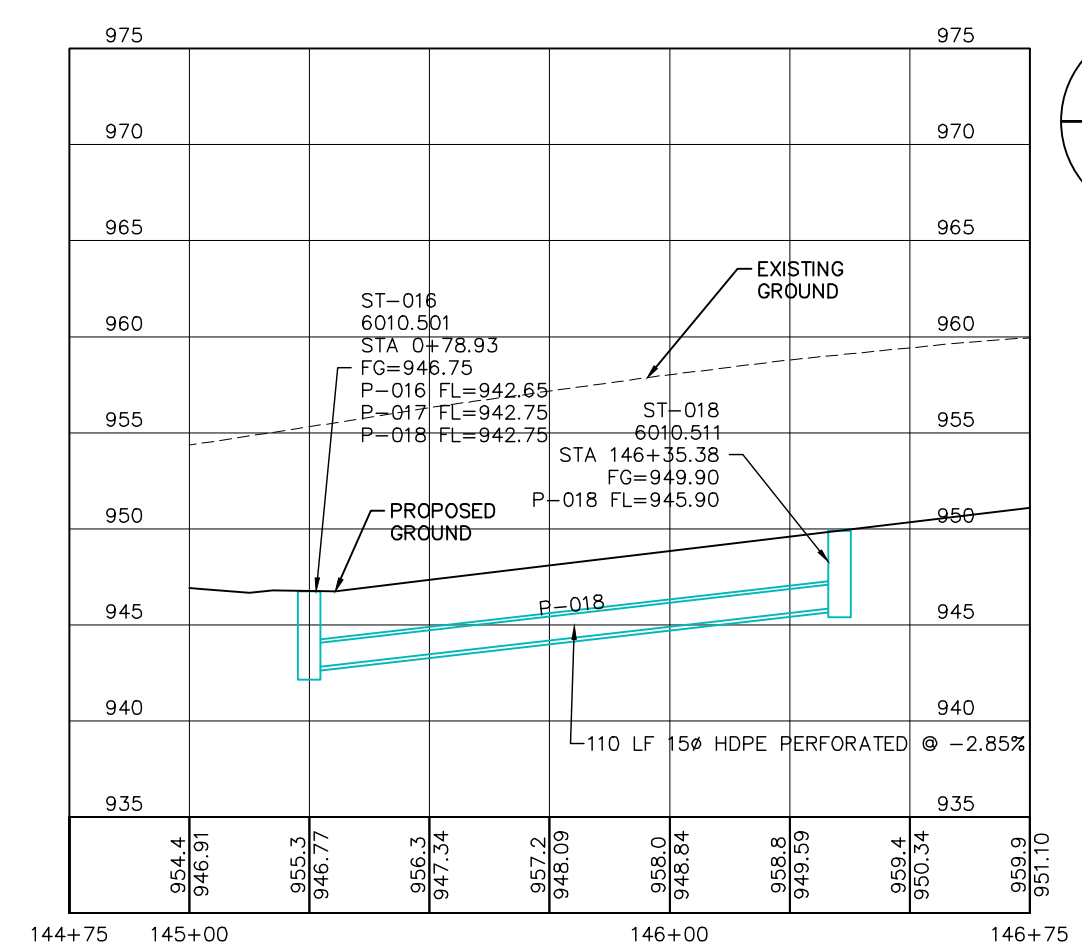
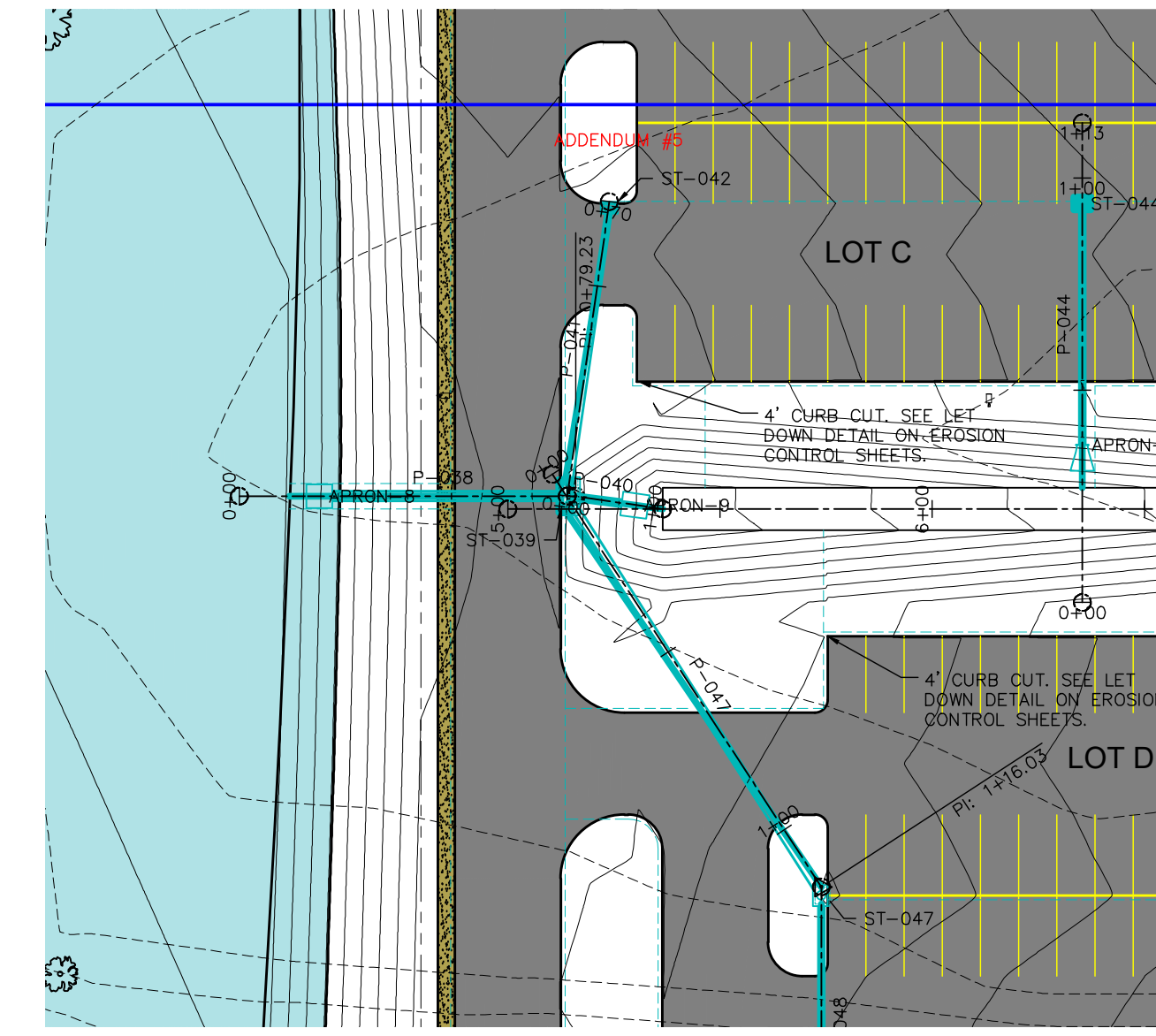
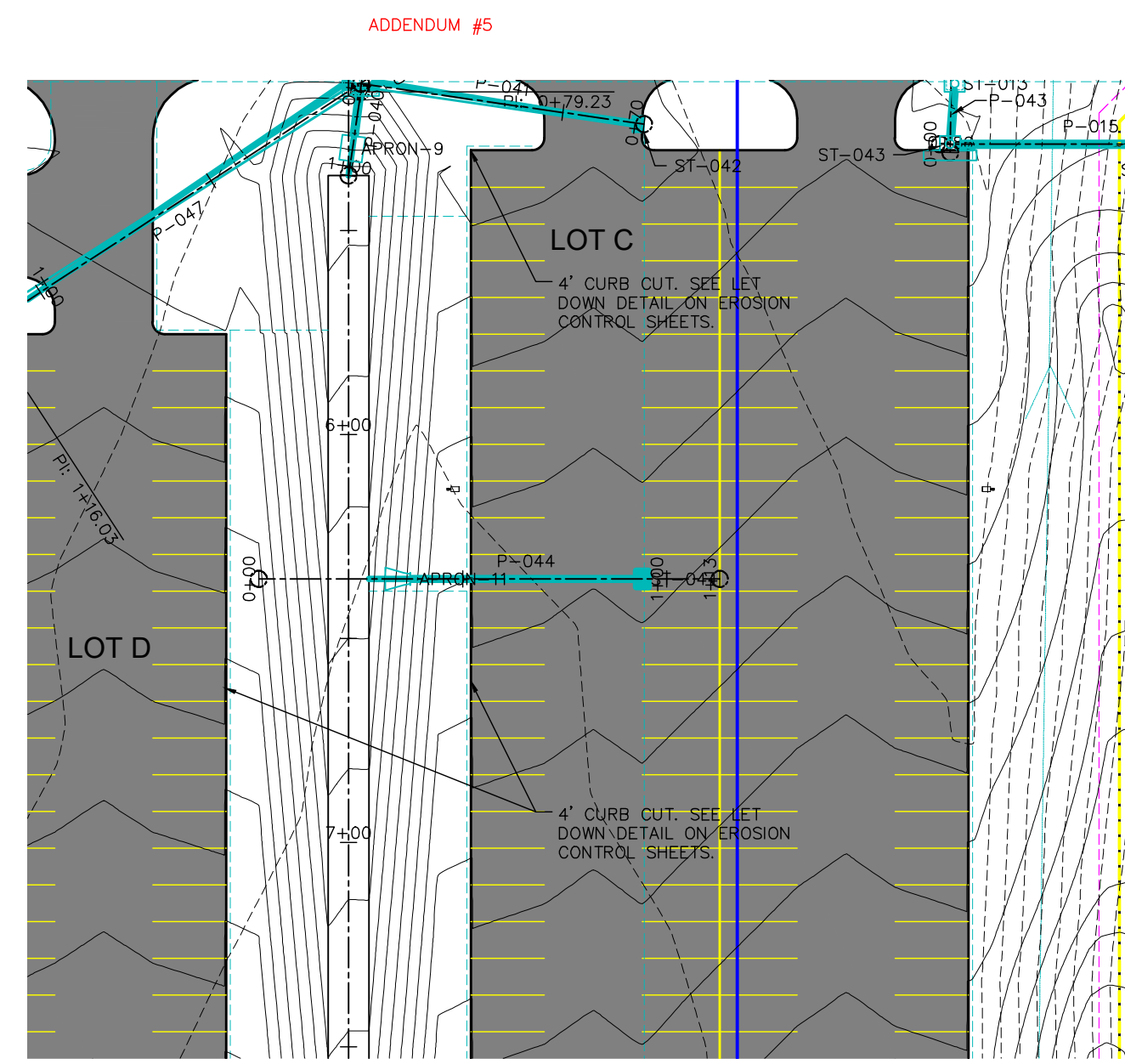
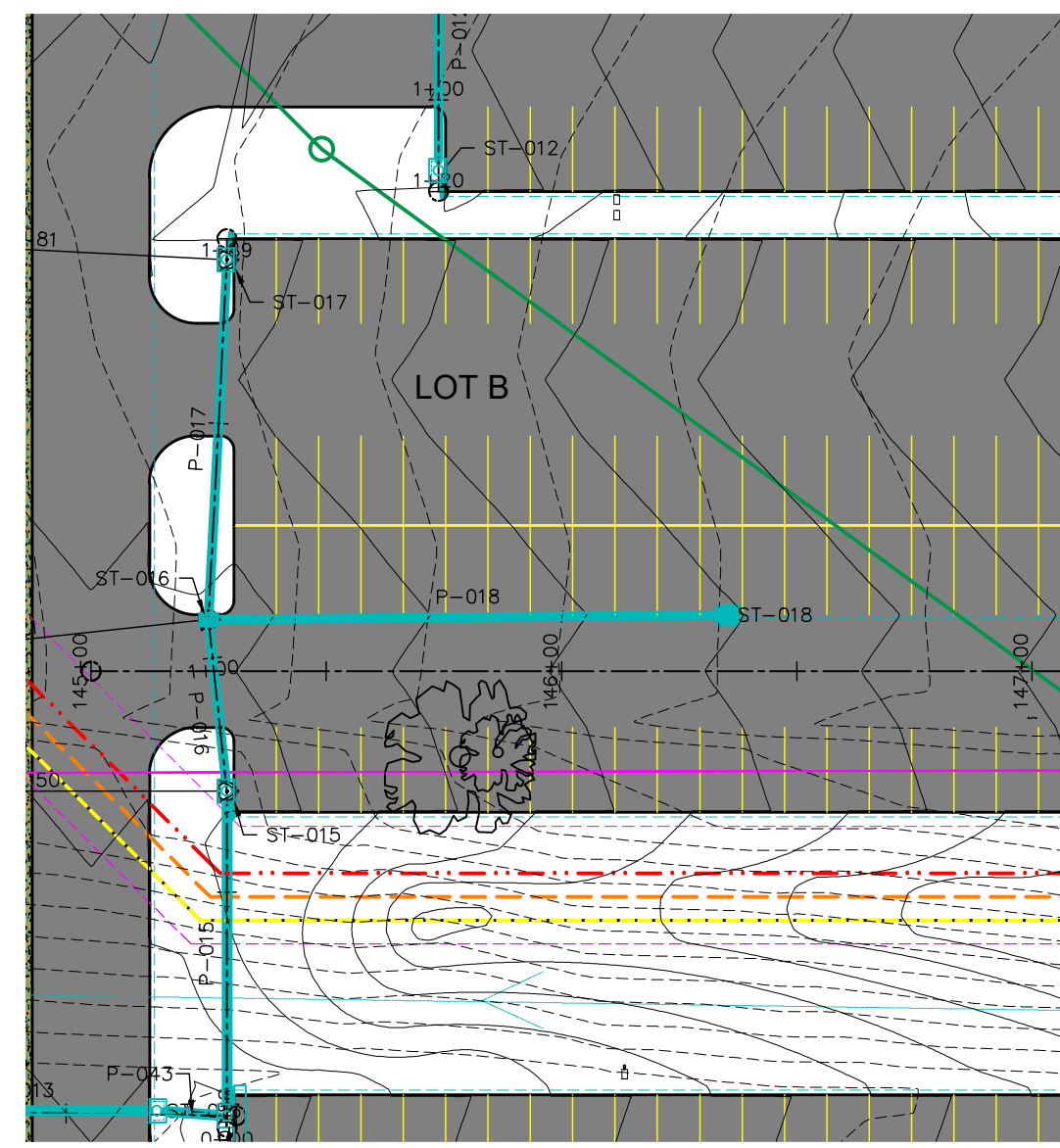
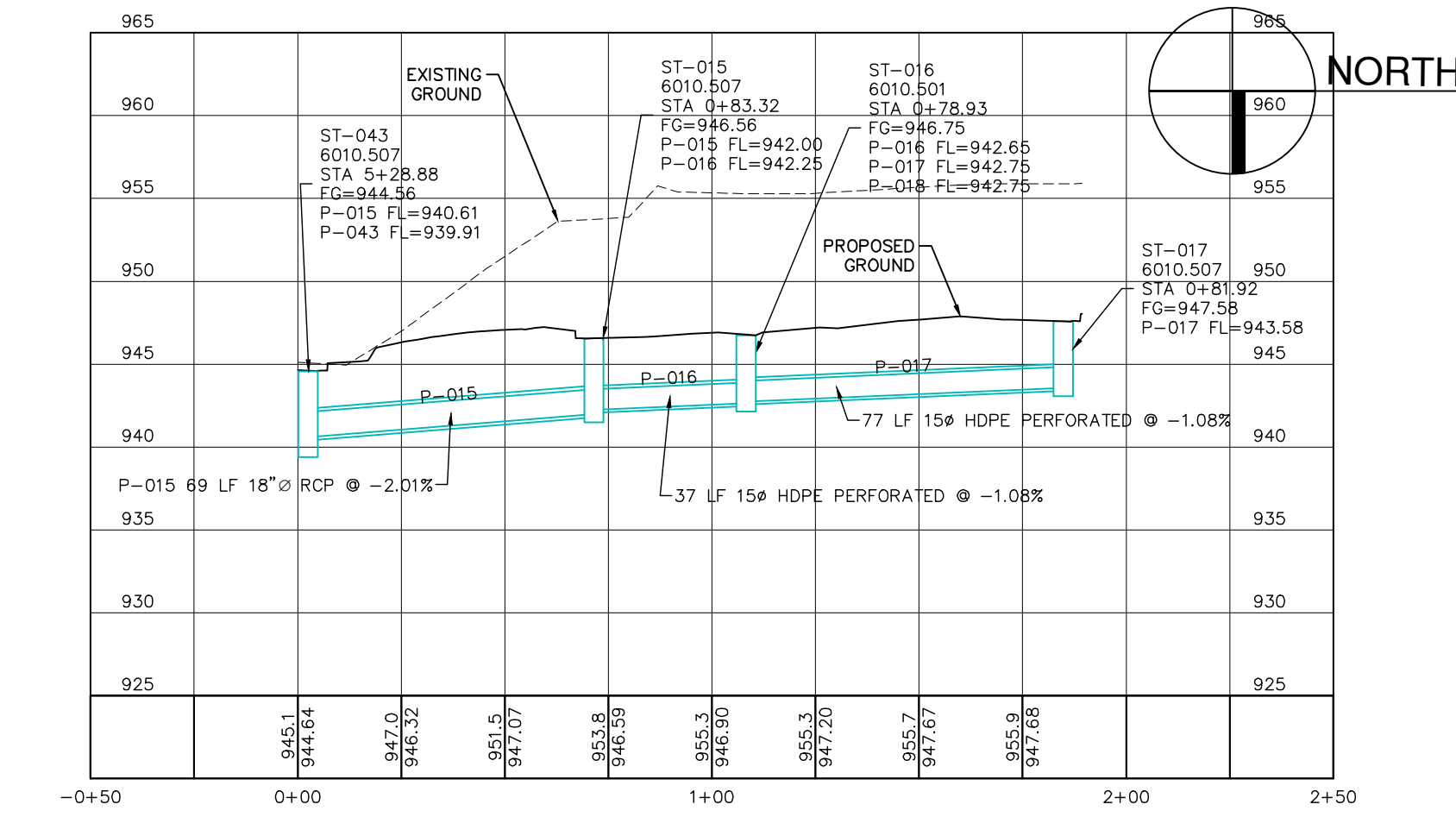
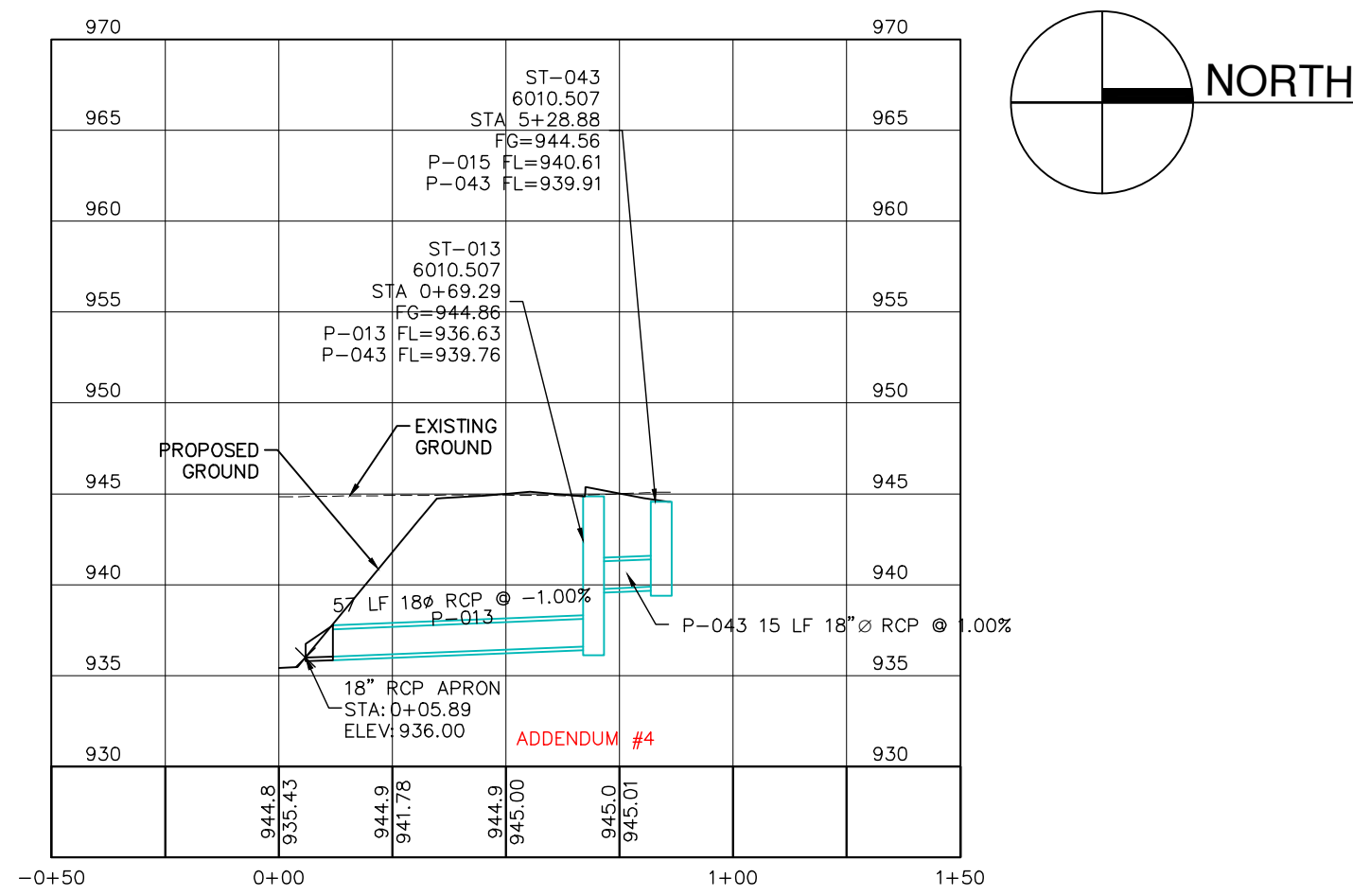
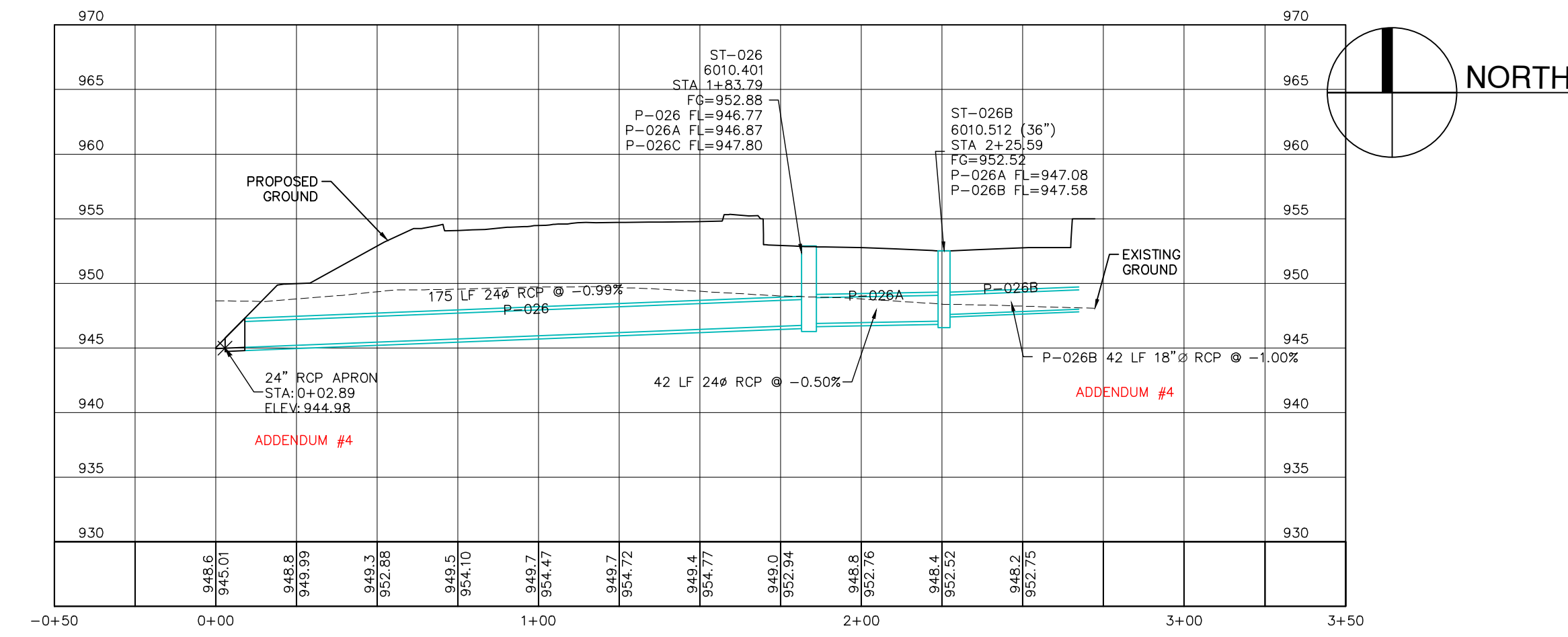
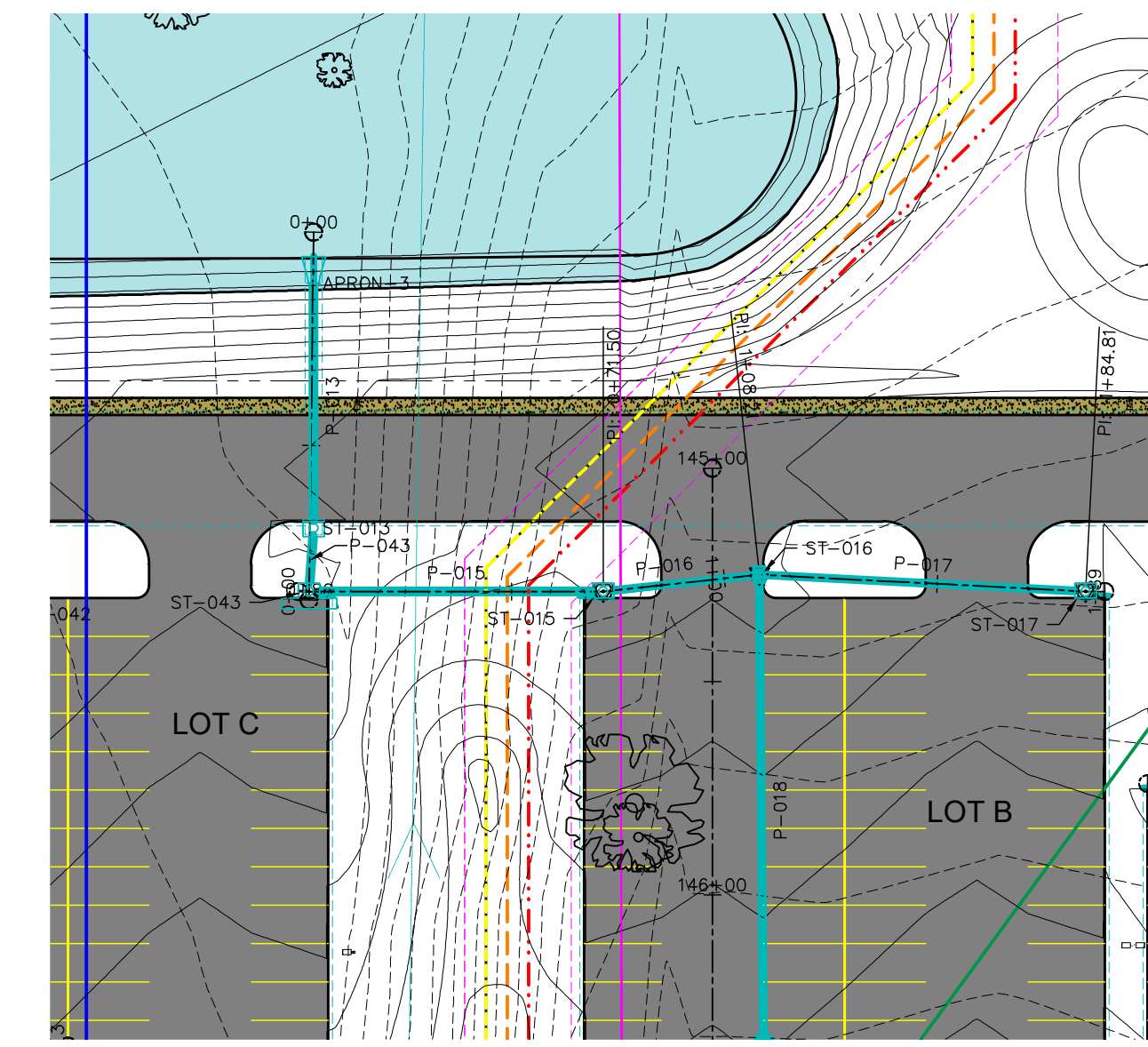
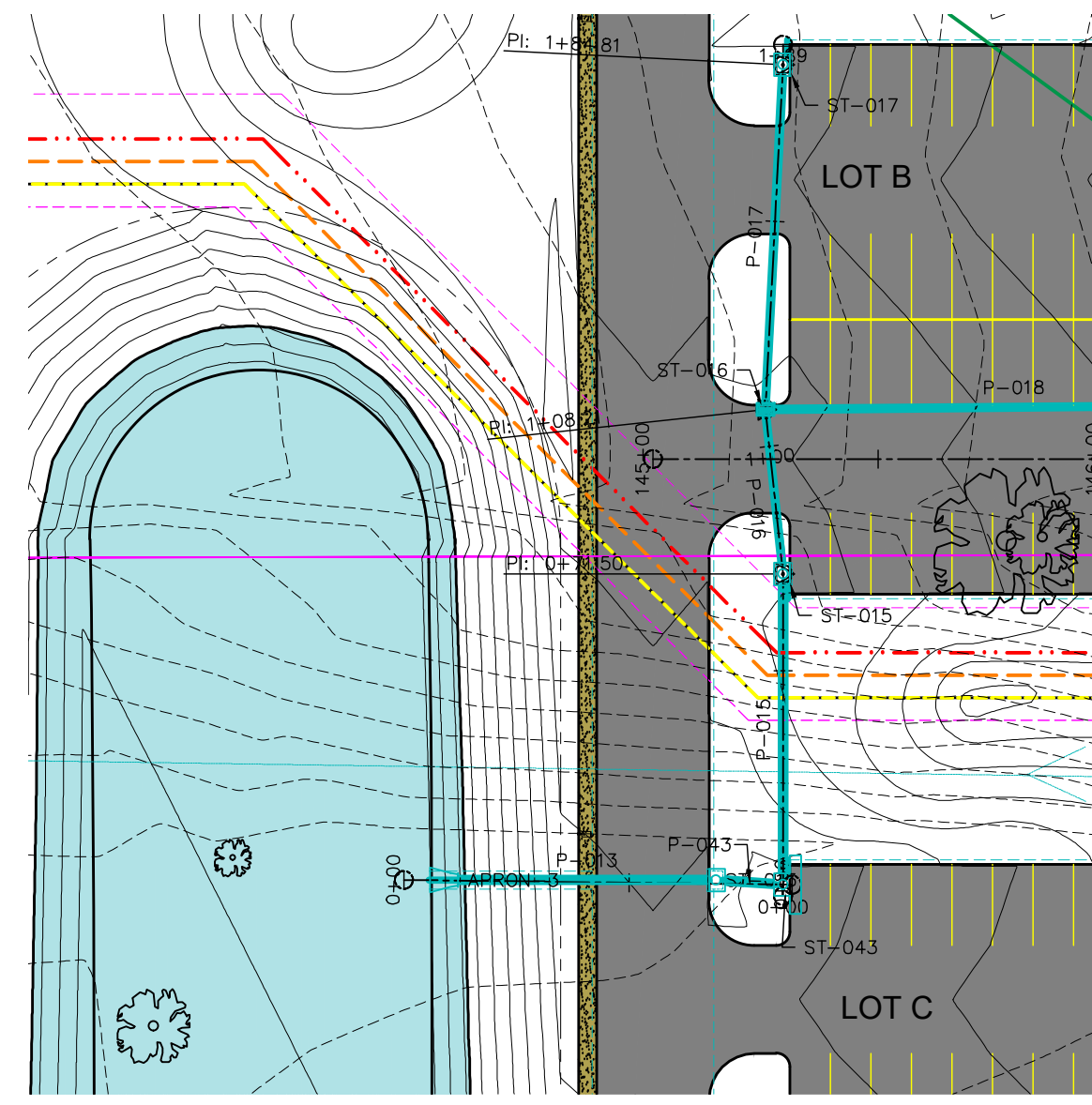
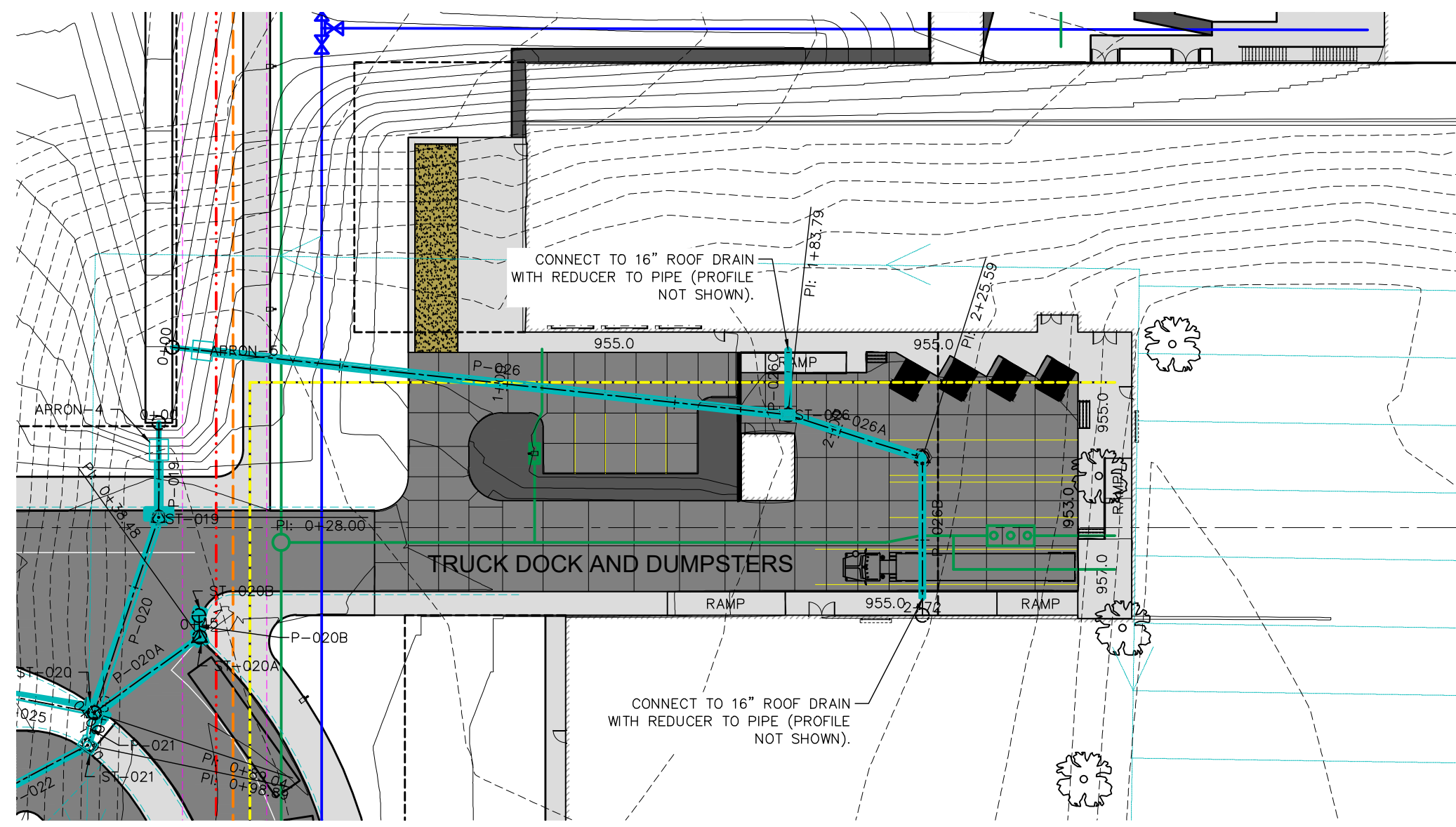
Description	Date	No.
ADDENDUM #1	12/04/2020	

OWNER SIGN-OFF:

DATE	NAME



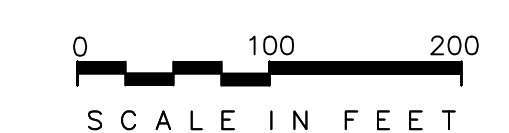
# PLAN NOTES



# GENERAL SITE NOTES

## LEGEND

- EXISTING GRAVEL EDGE
- EXISTING ELECTRICAL
- EXISTING FIBER OPTIC
- EXISTING OVERHEAD ELECTRIC
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- ROAD PAVEMENT
- SIDEWALK/TRAIL
- GRAVEL EDGE



REVISIONS:

Description	Date	No.
ADDENDUM #1	12/04/2020	
ADDENDUM #2	12/11/2020	

OWNER SIGN-OFF:  
DATE \_\_\_\_\_ NAME \_\_\_\_\_

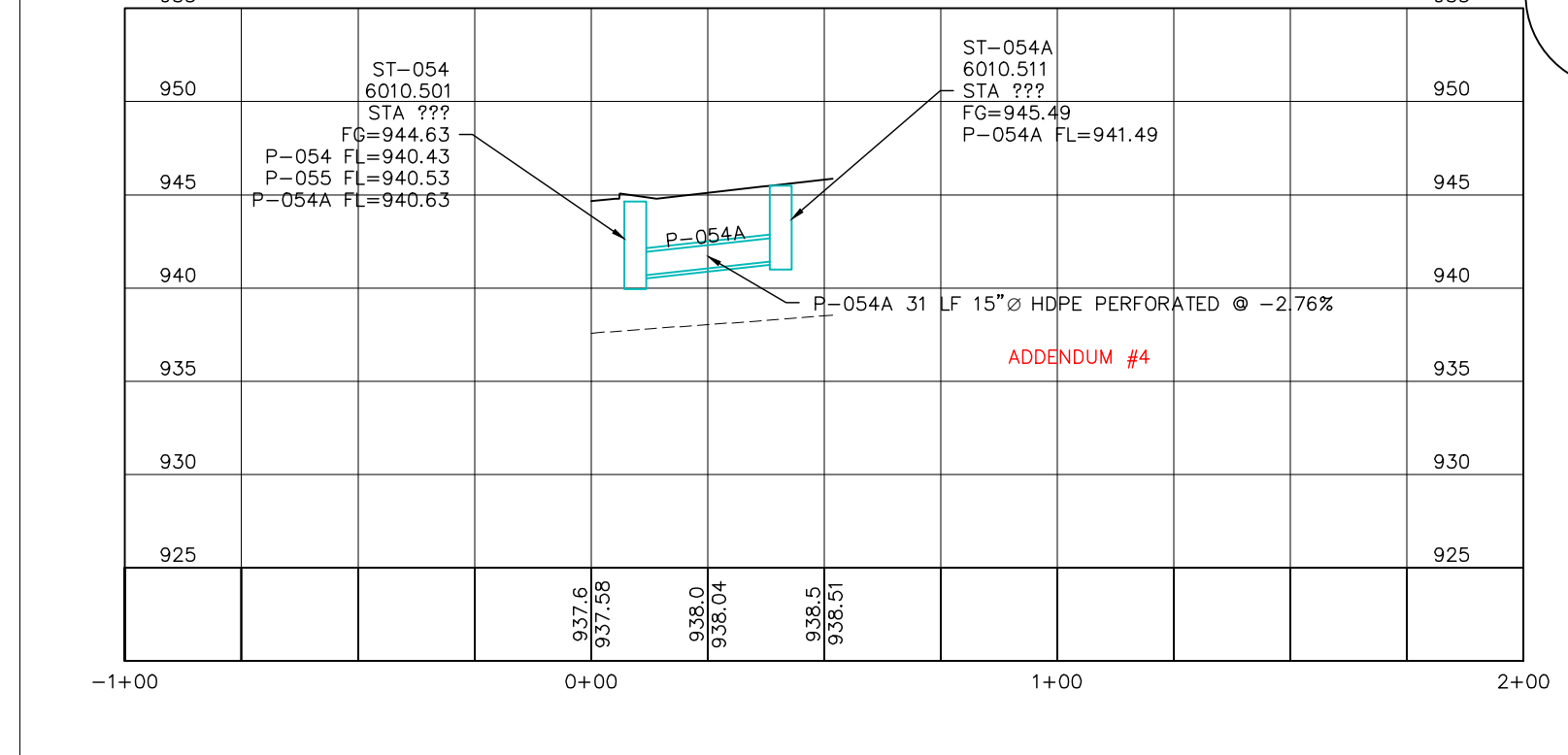
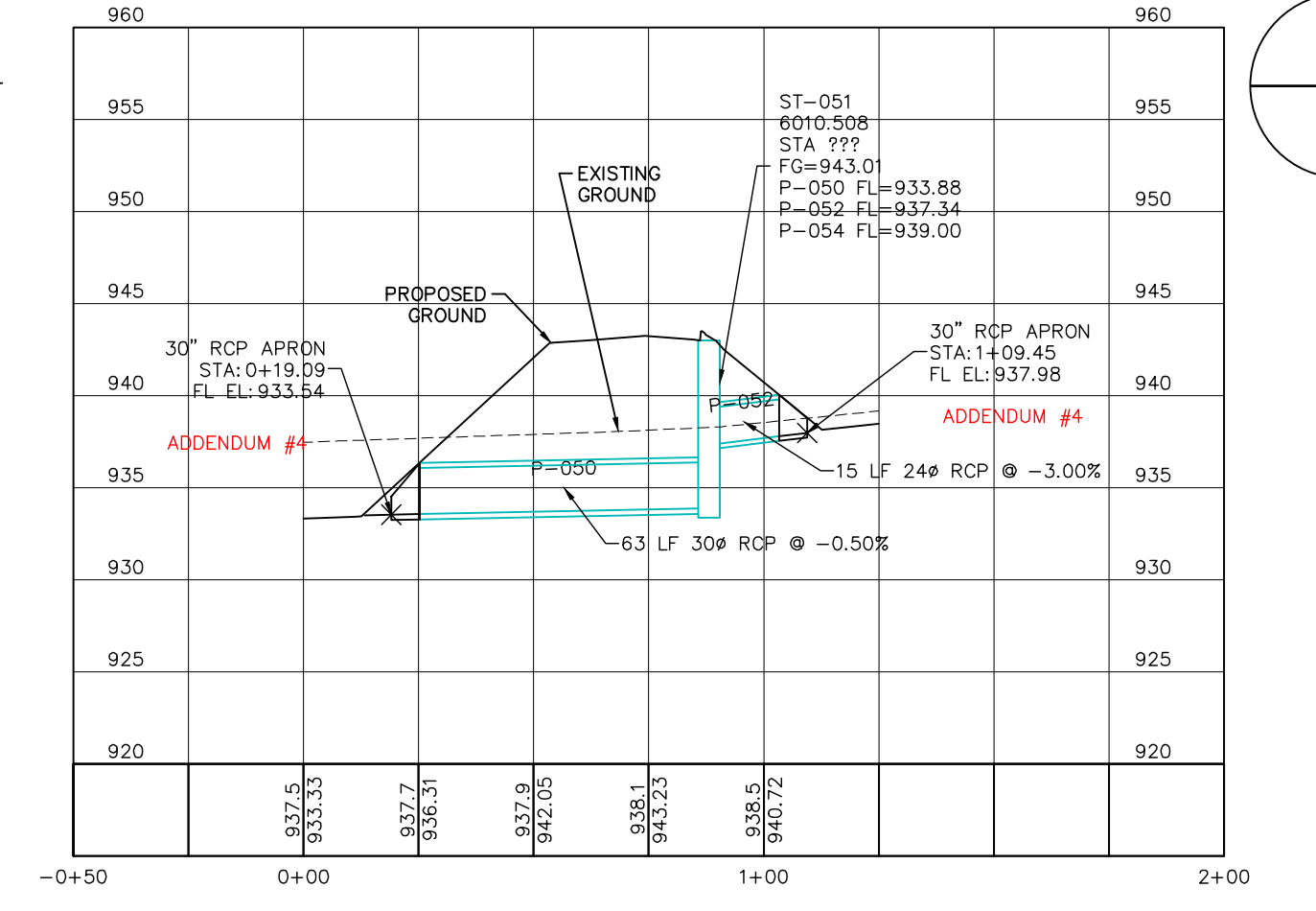
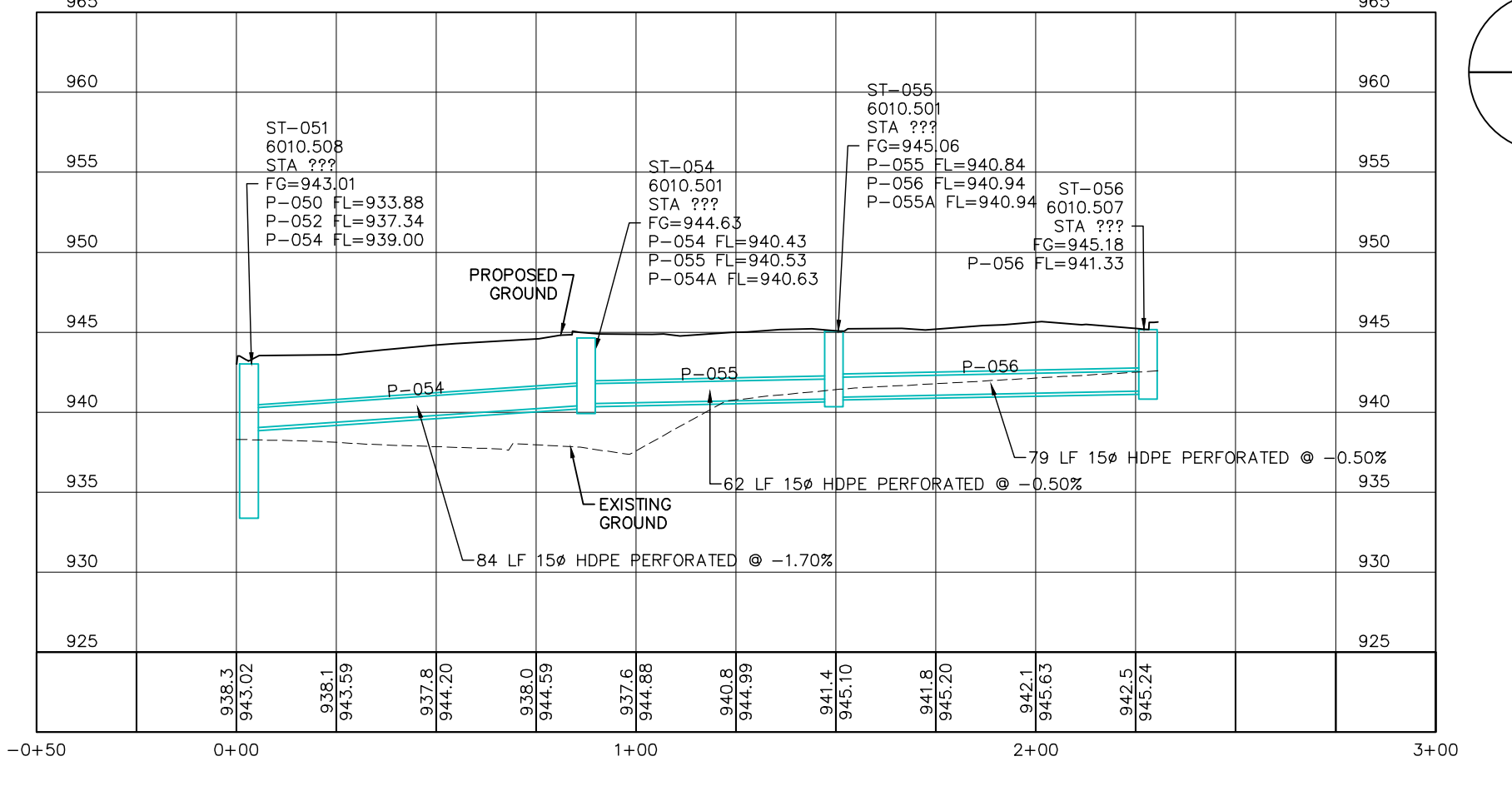
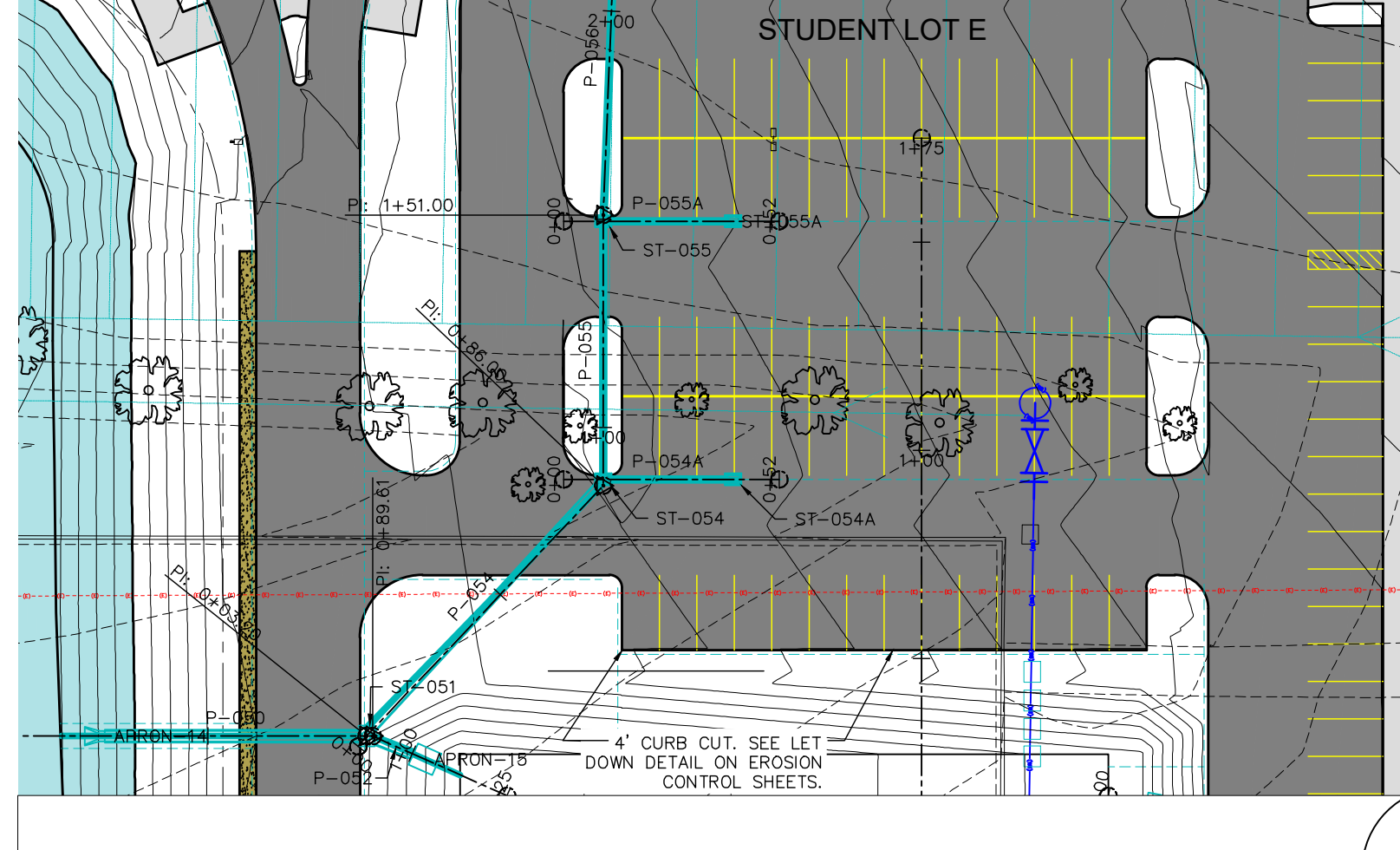
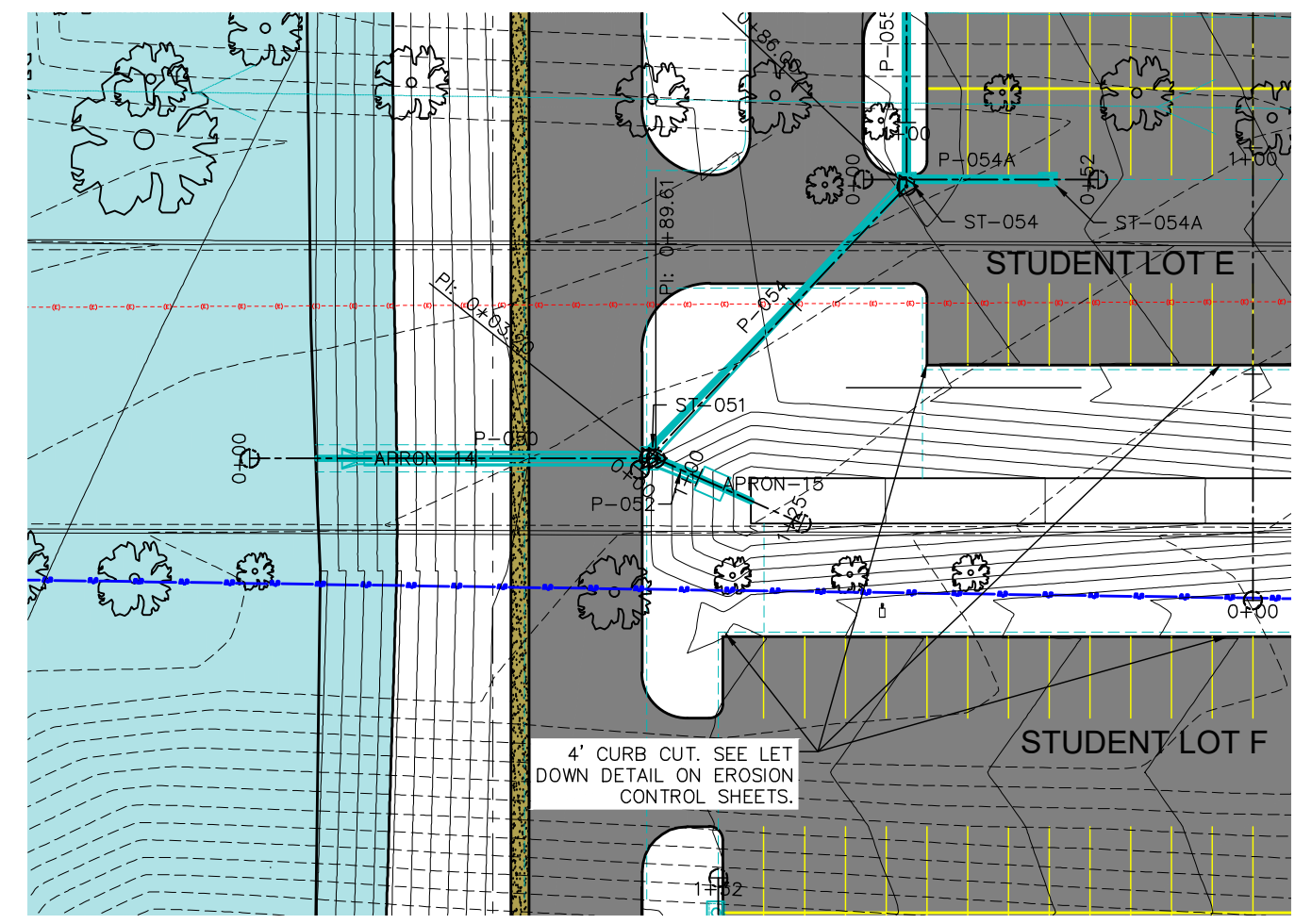
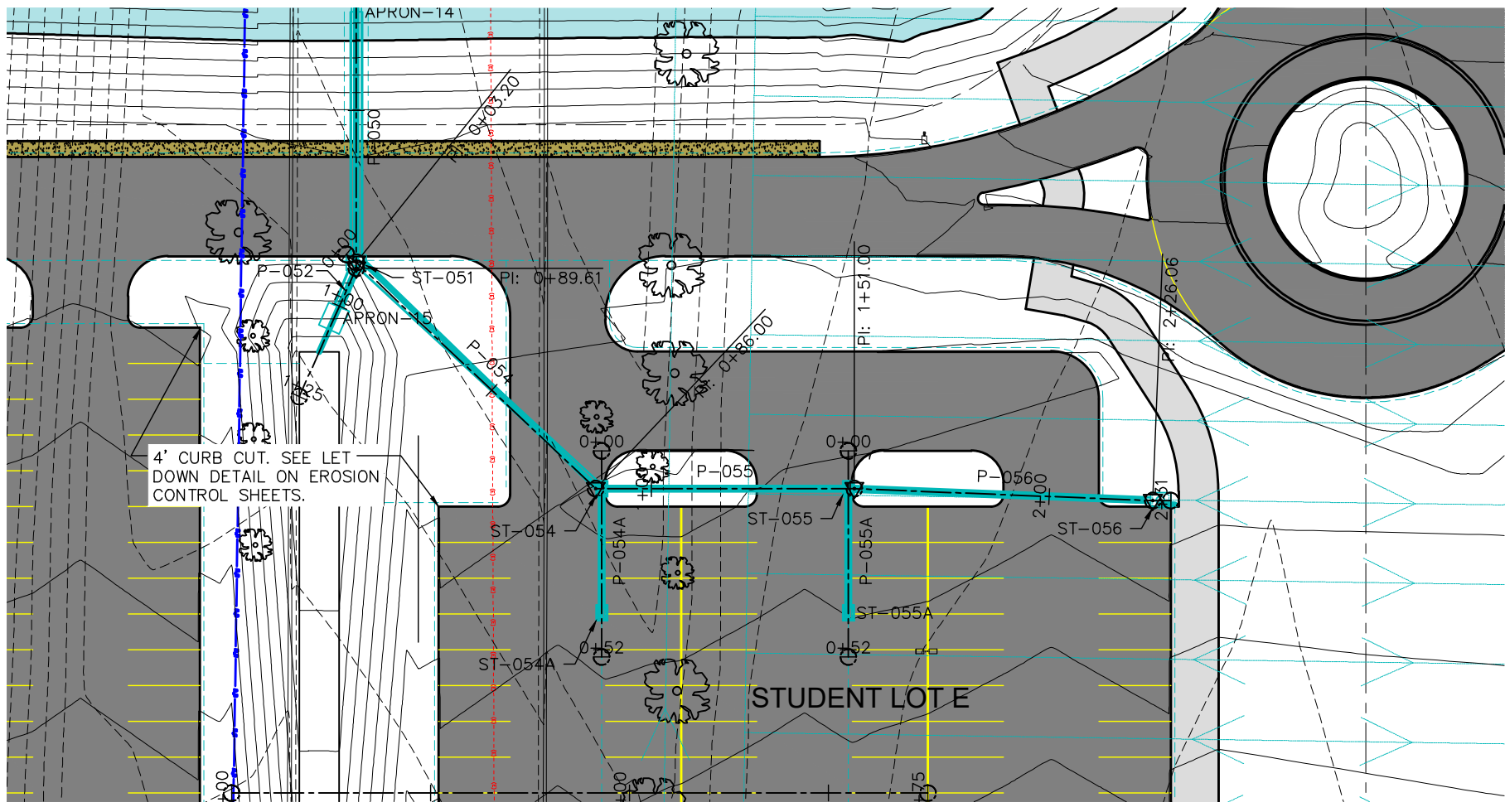
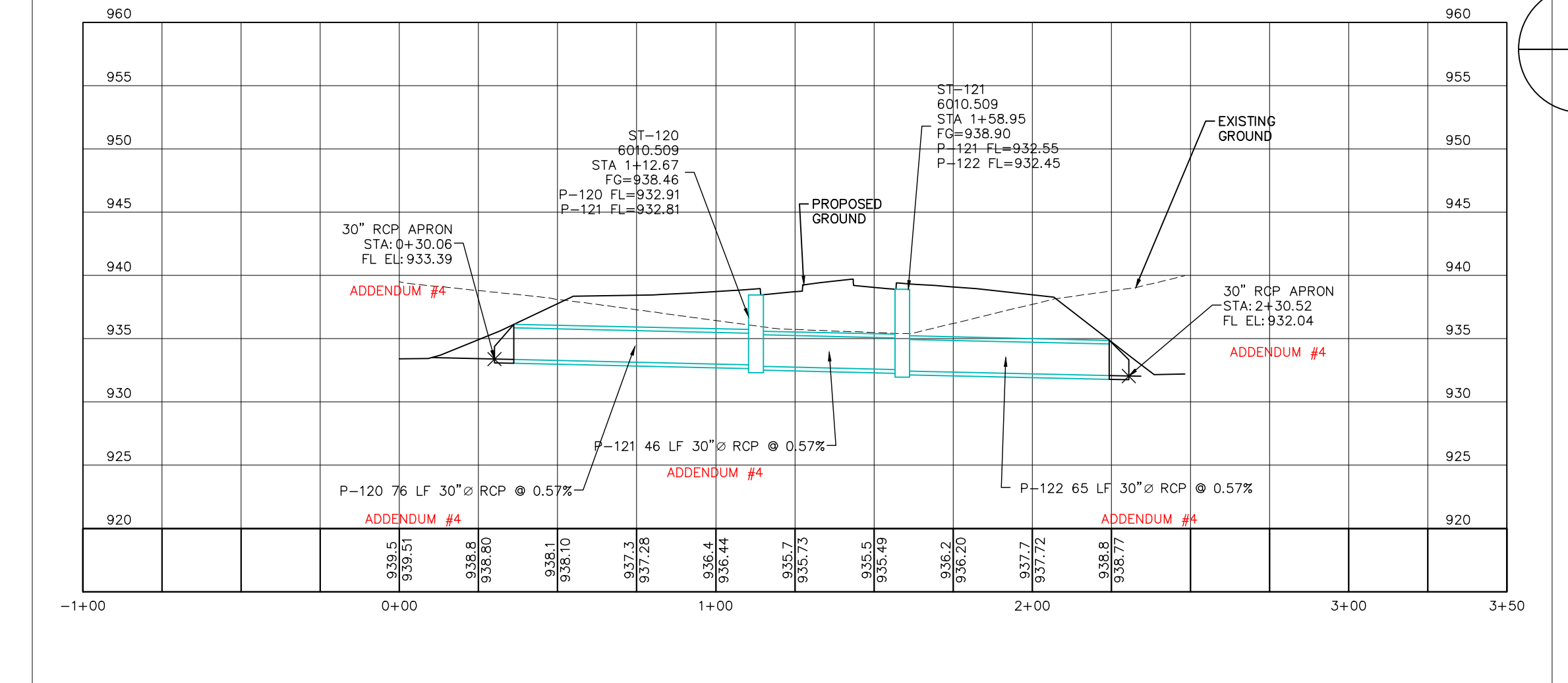
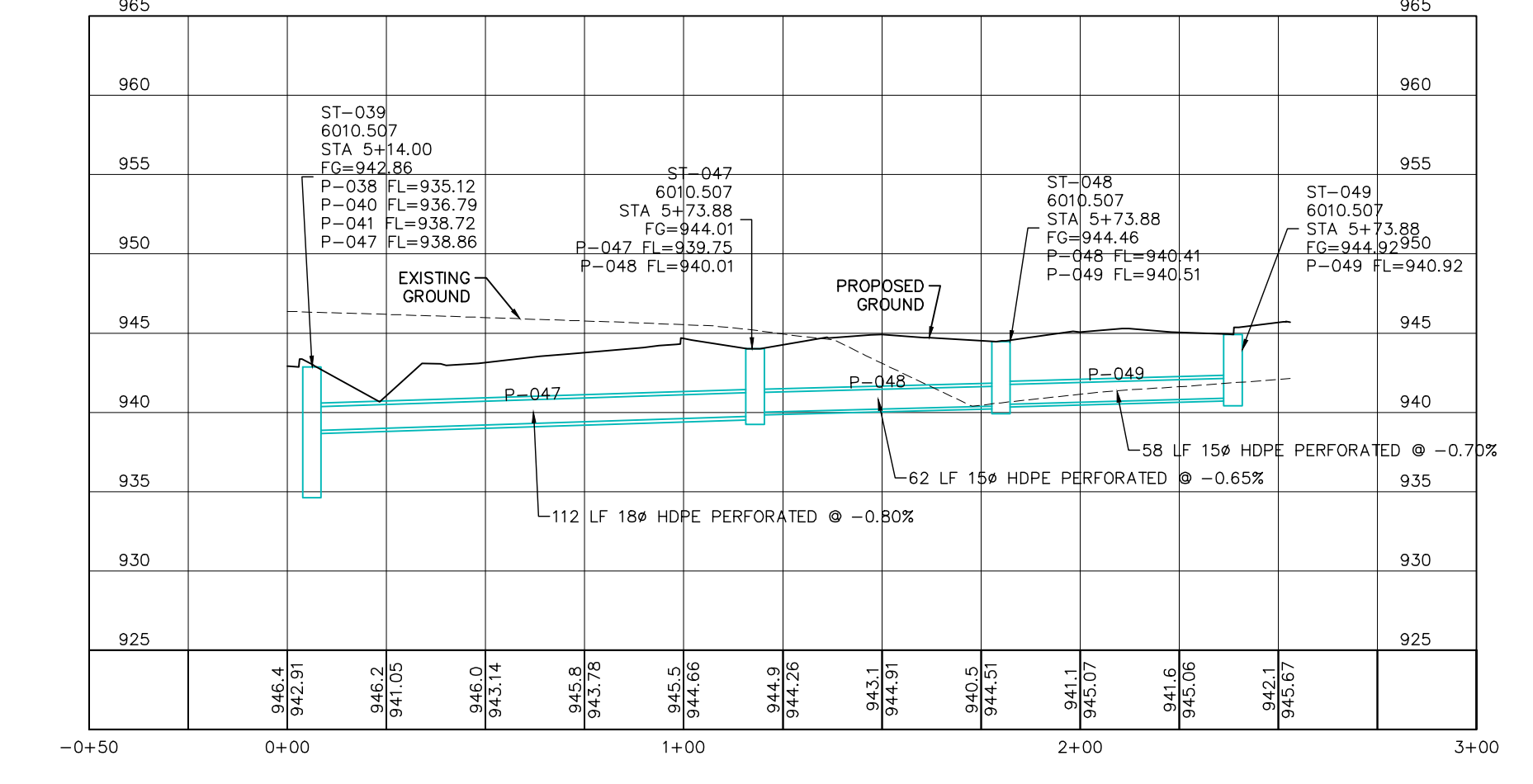
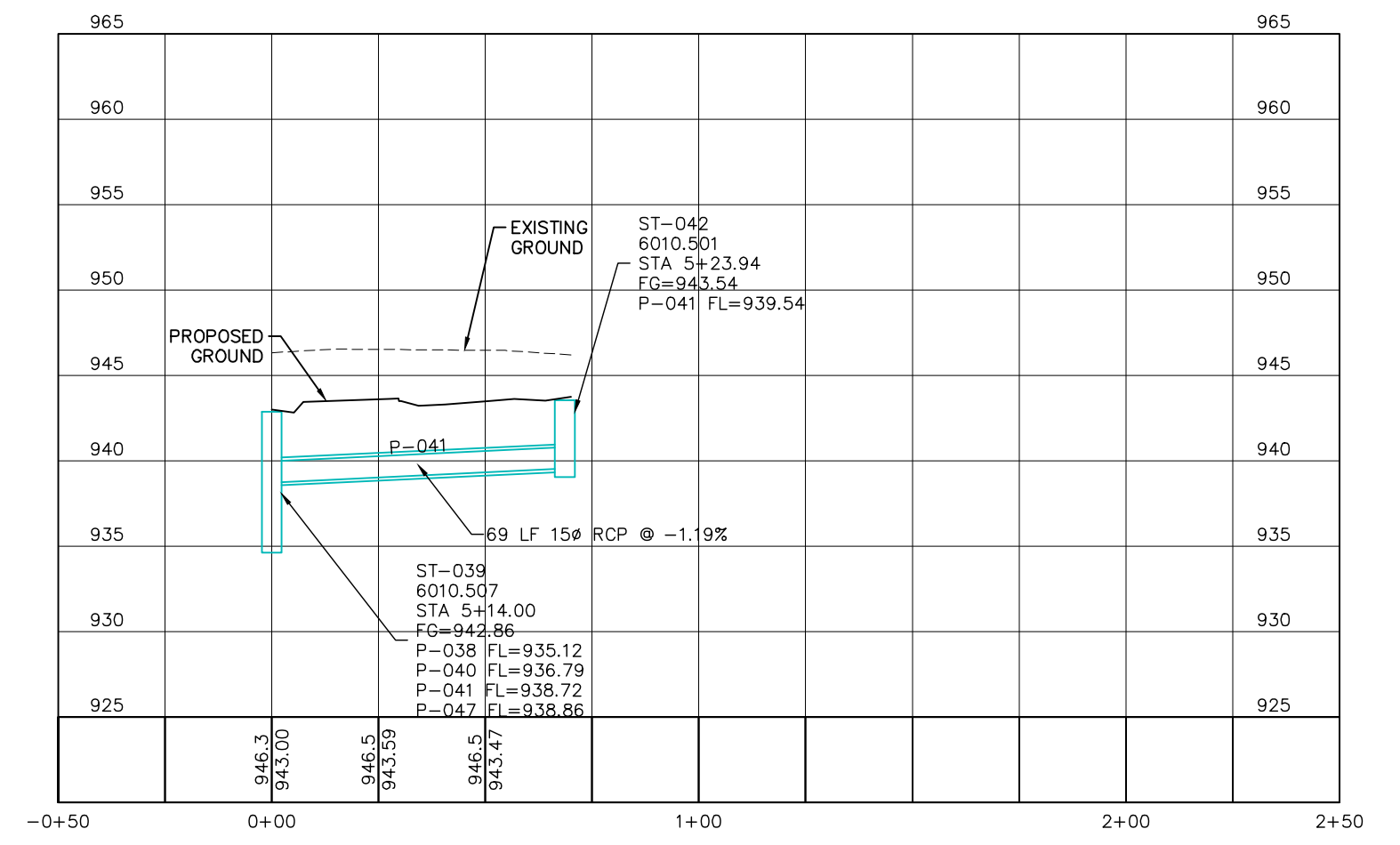
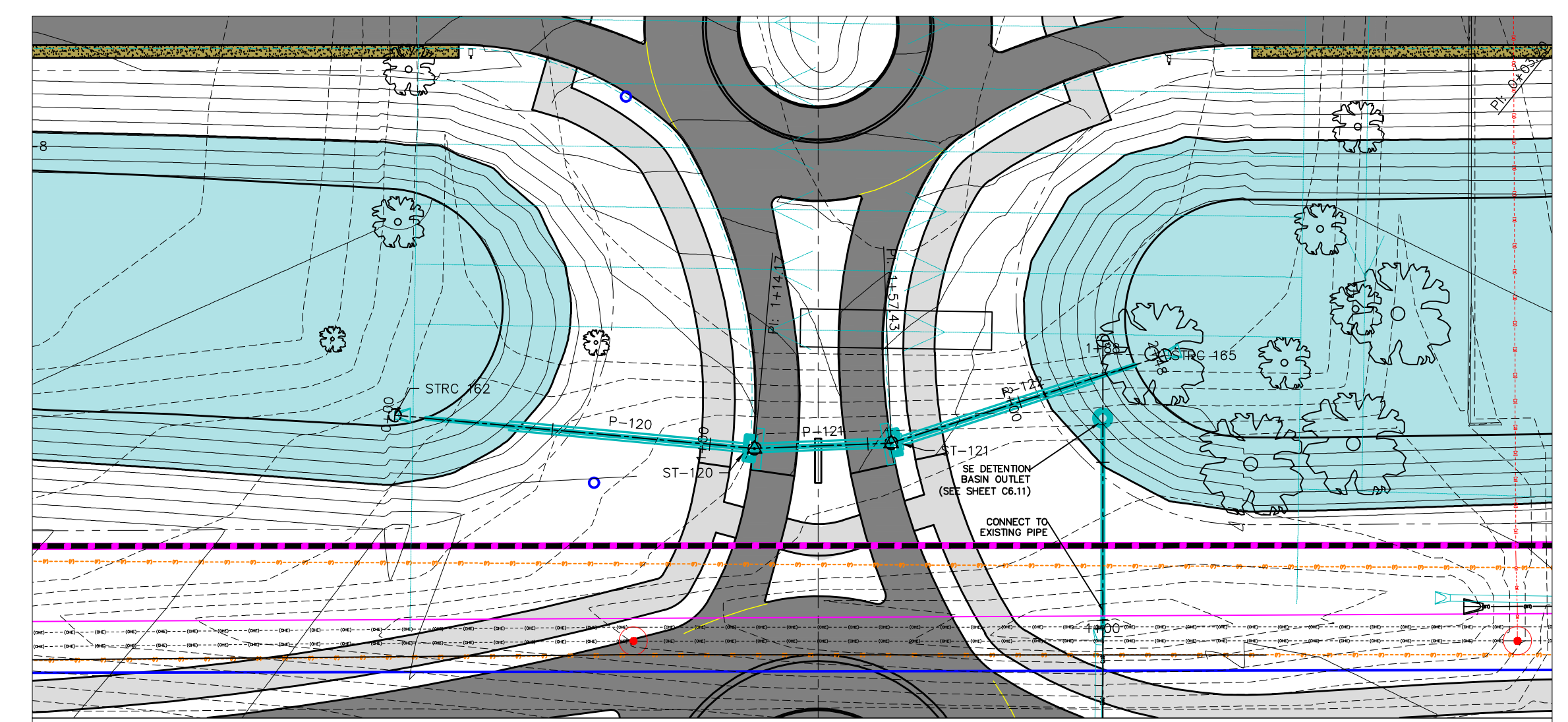
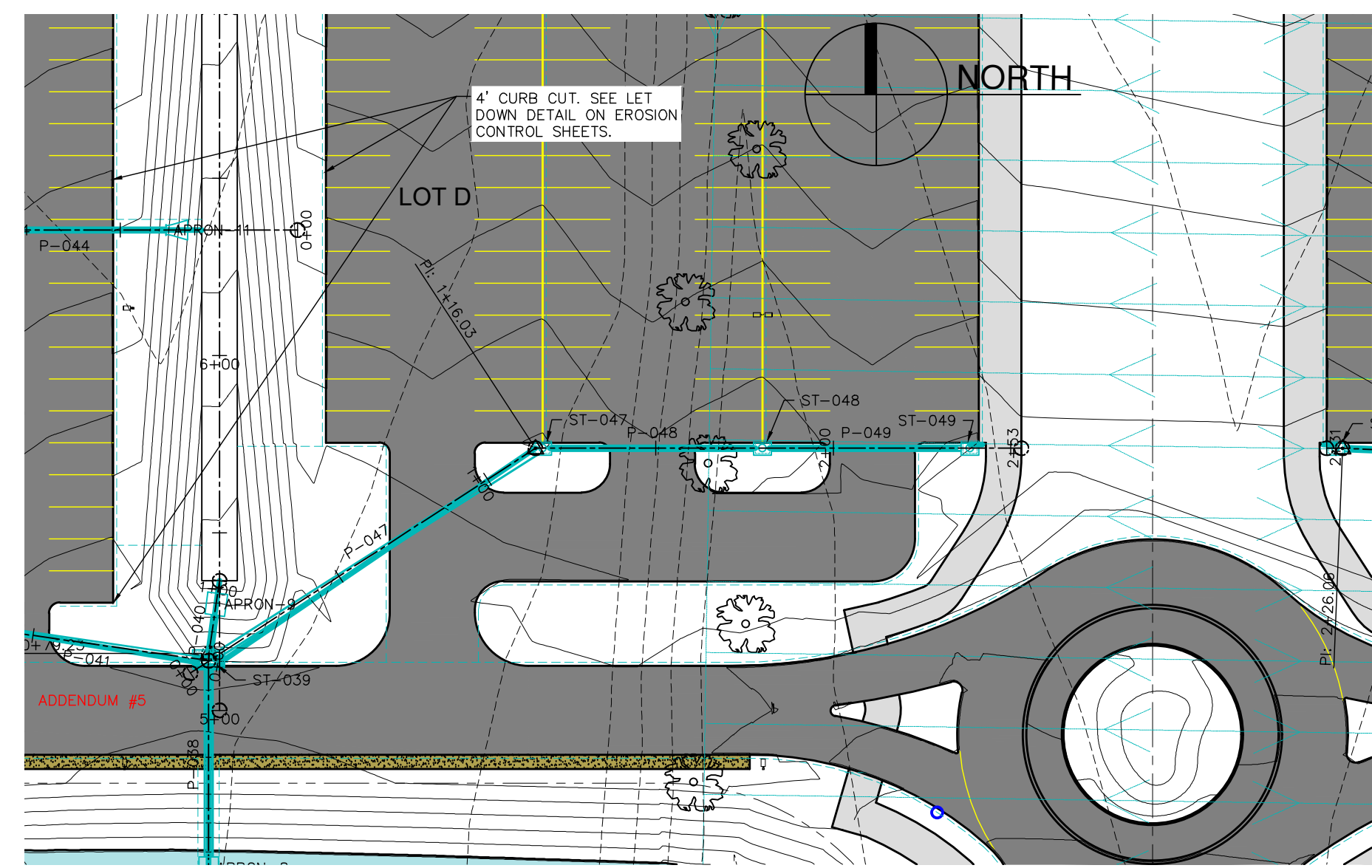
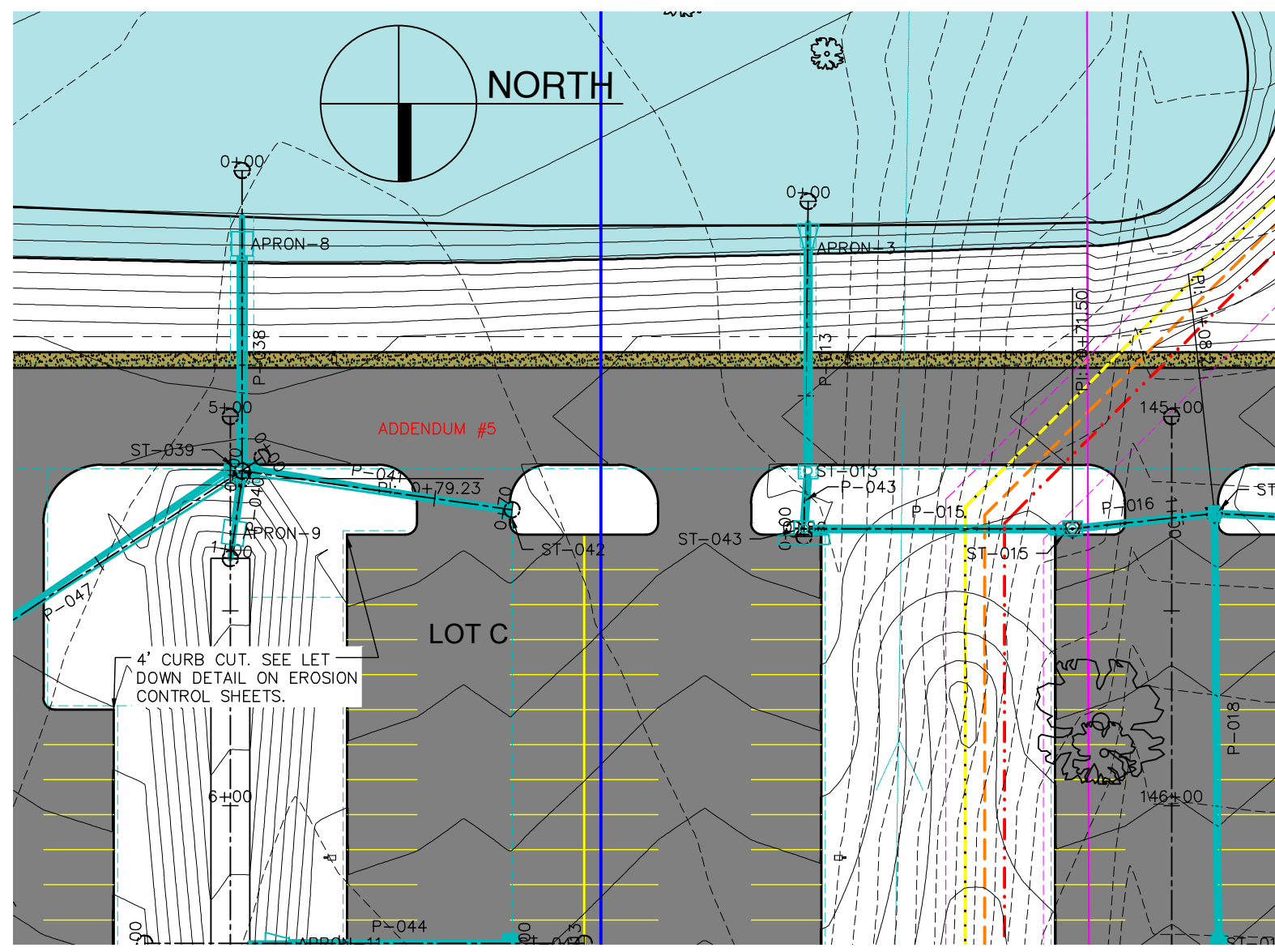


REVISIONS:

Description	Date	No.
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ADDENDUM #5	12/11/2020	

OWNER SIGN-OFF:

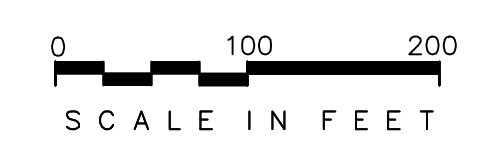
DATE	NAME



GENERAL SITE NOTES

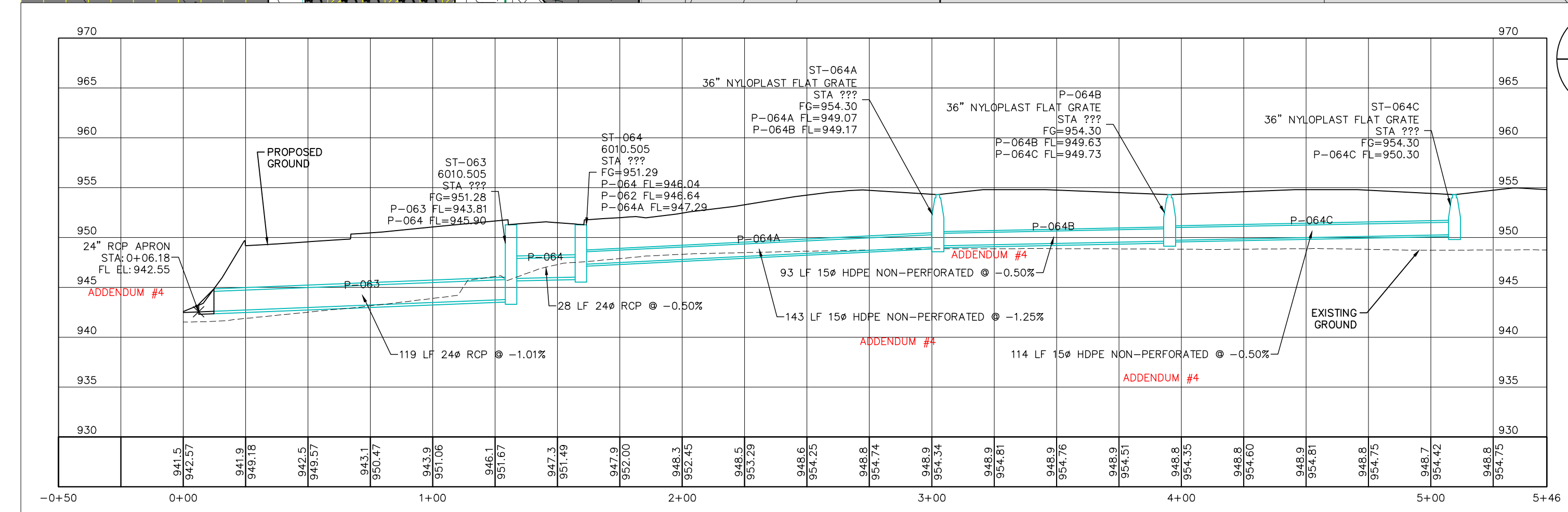
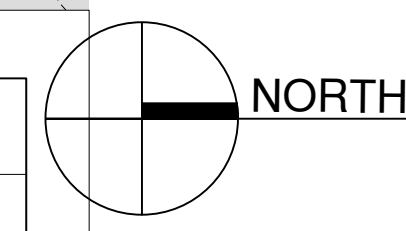
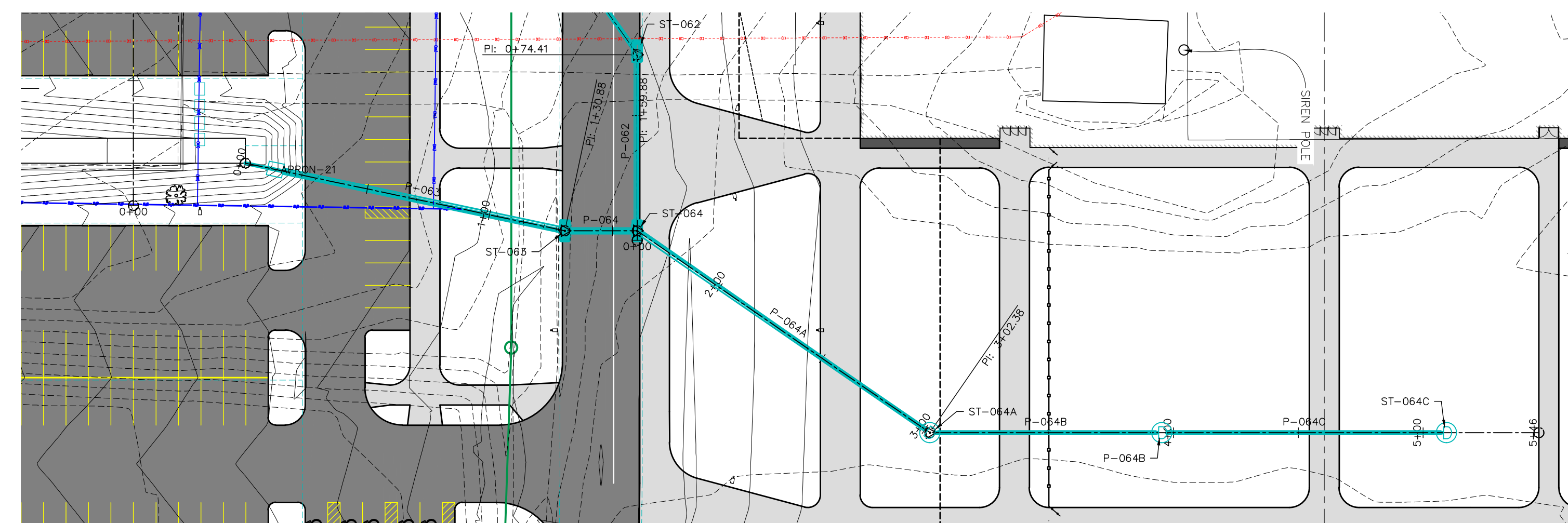
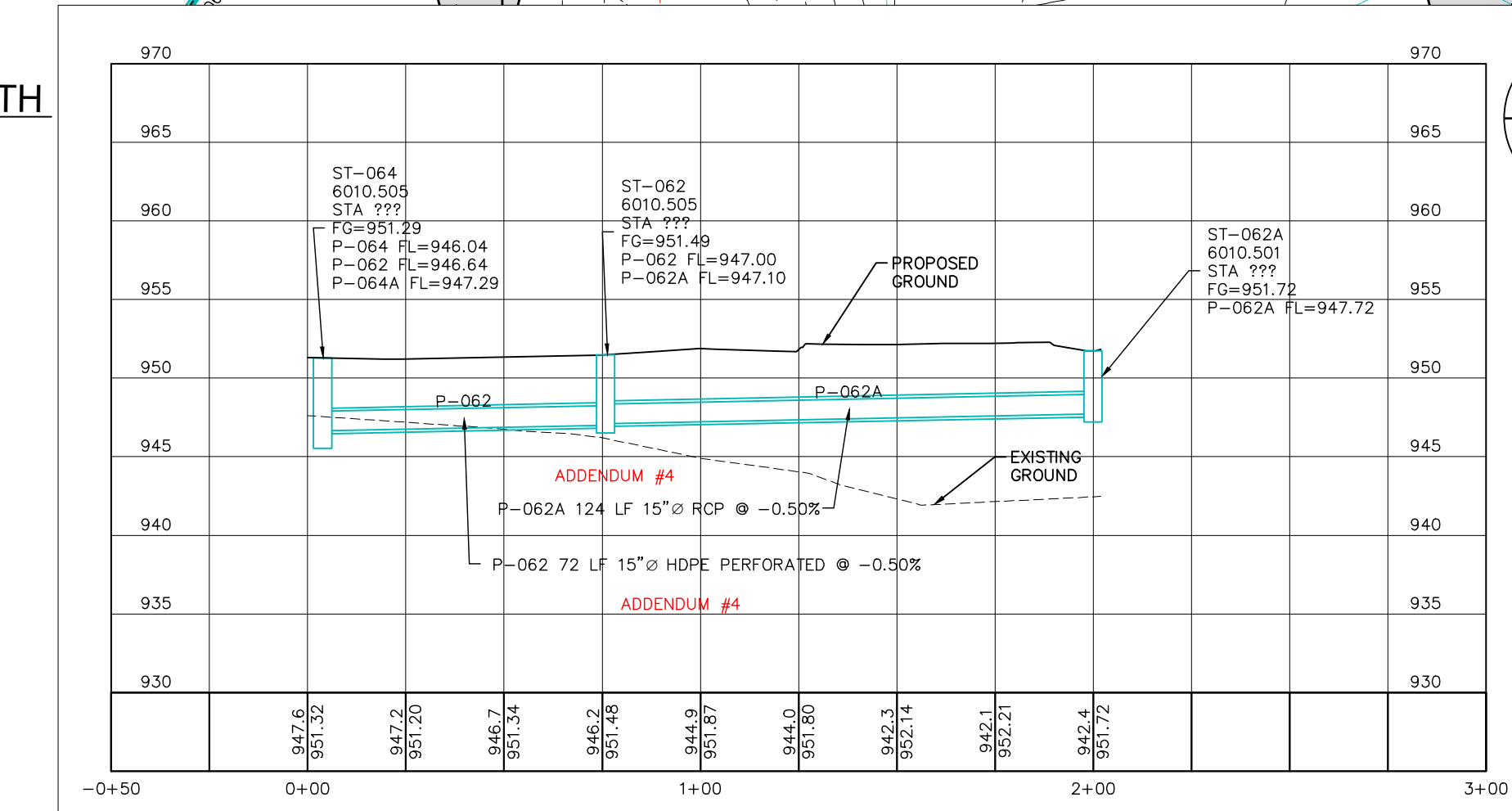
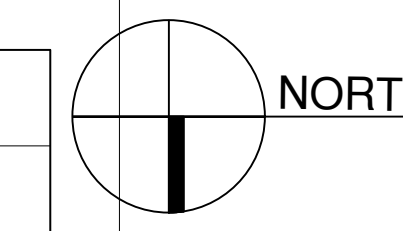
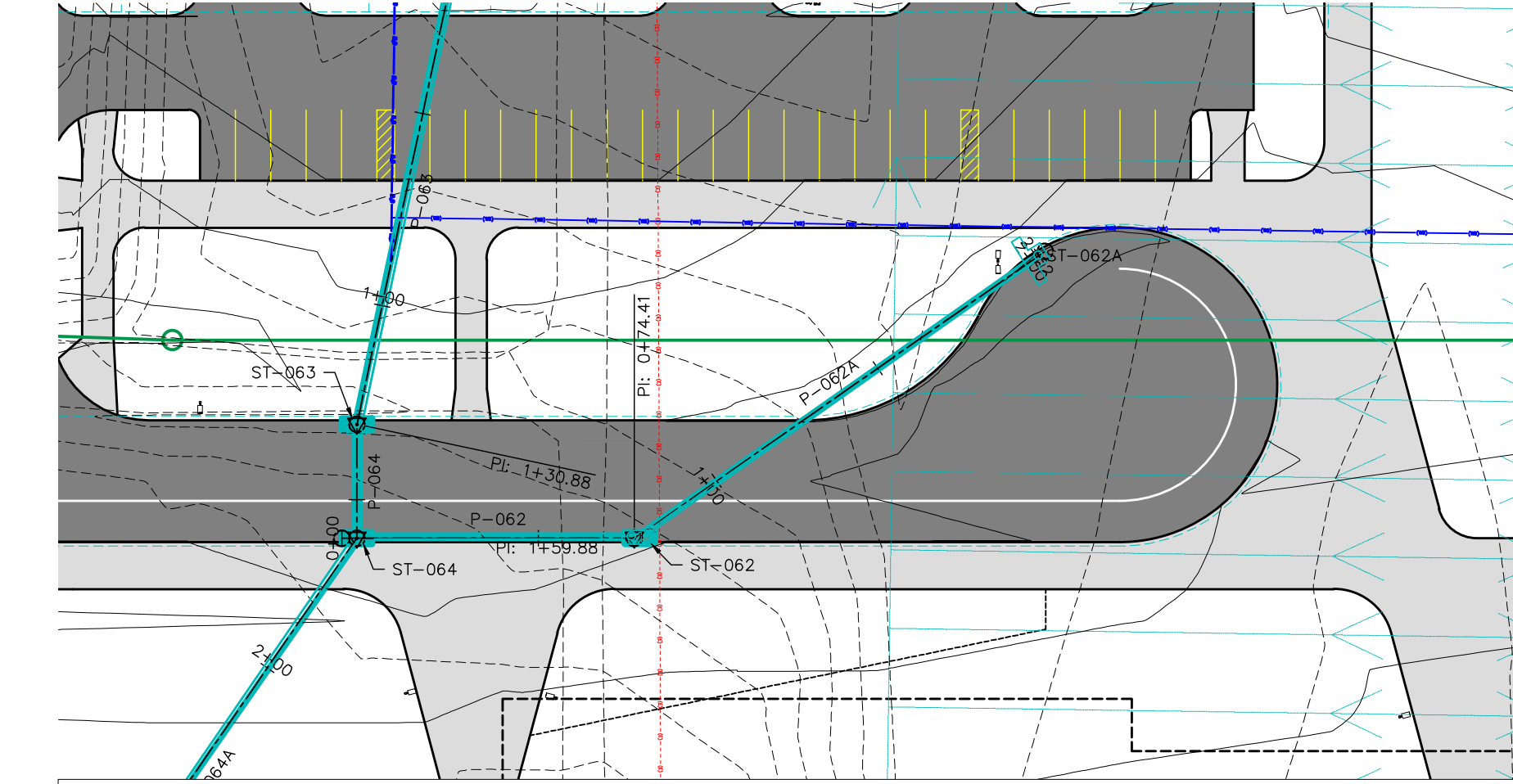
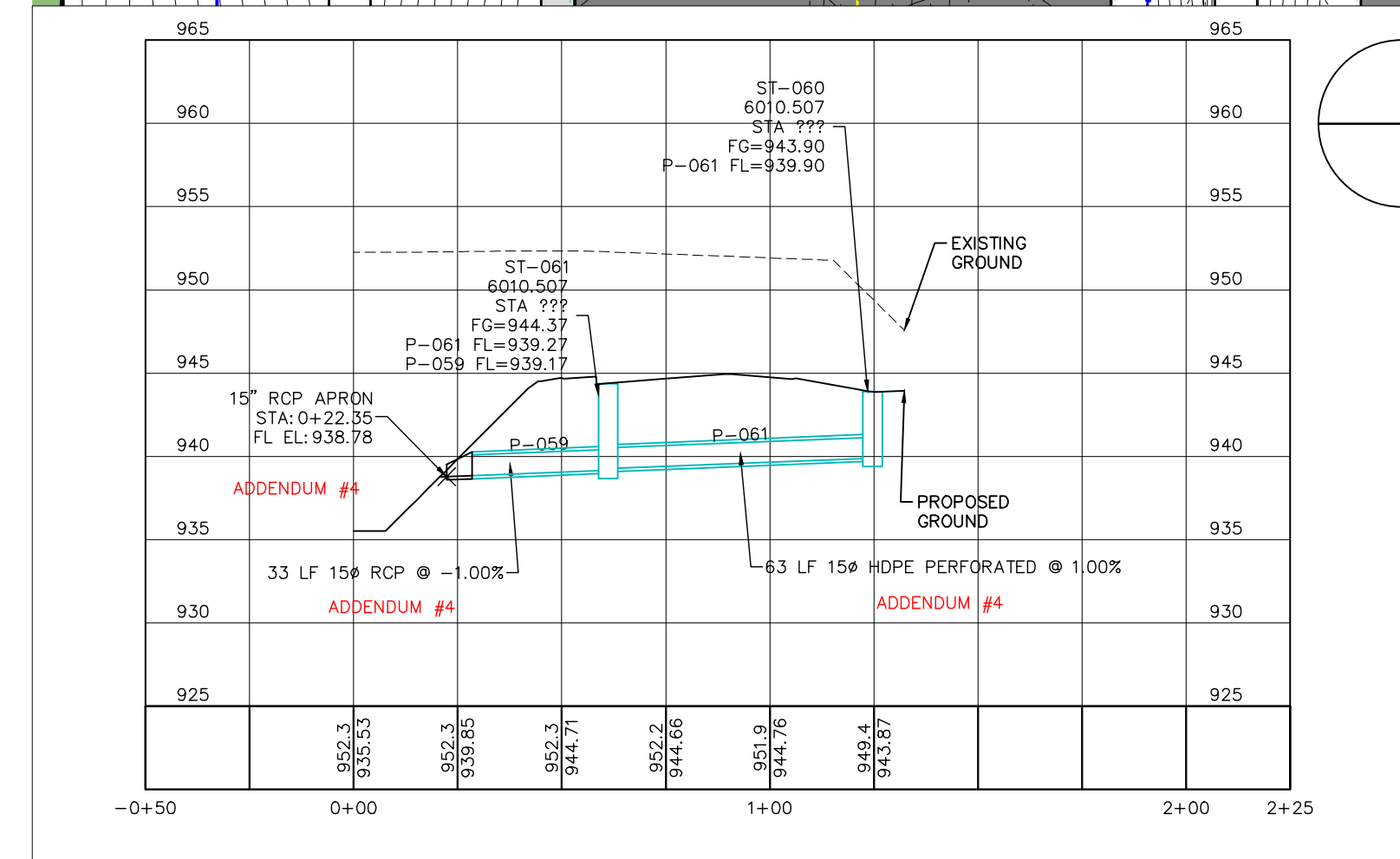
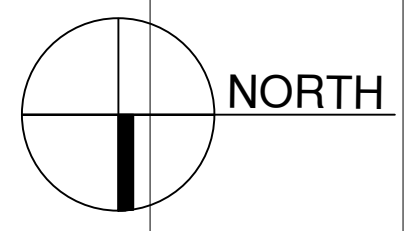
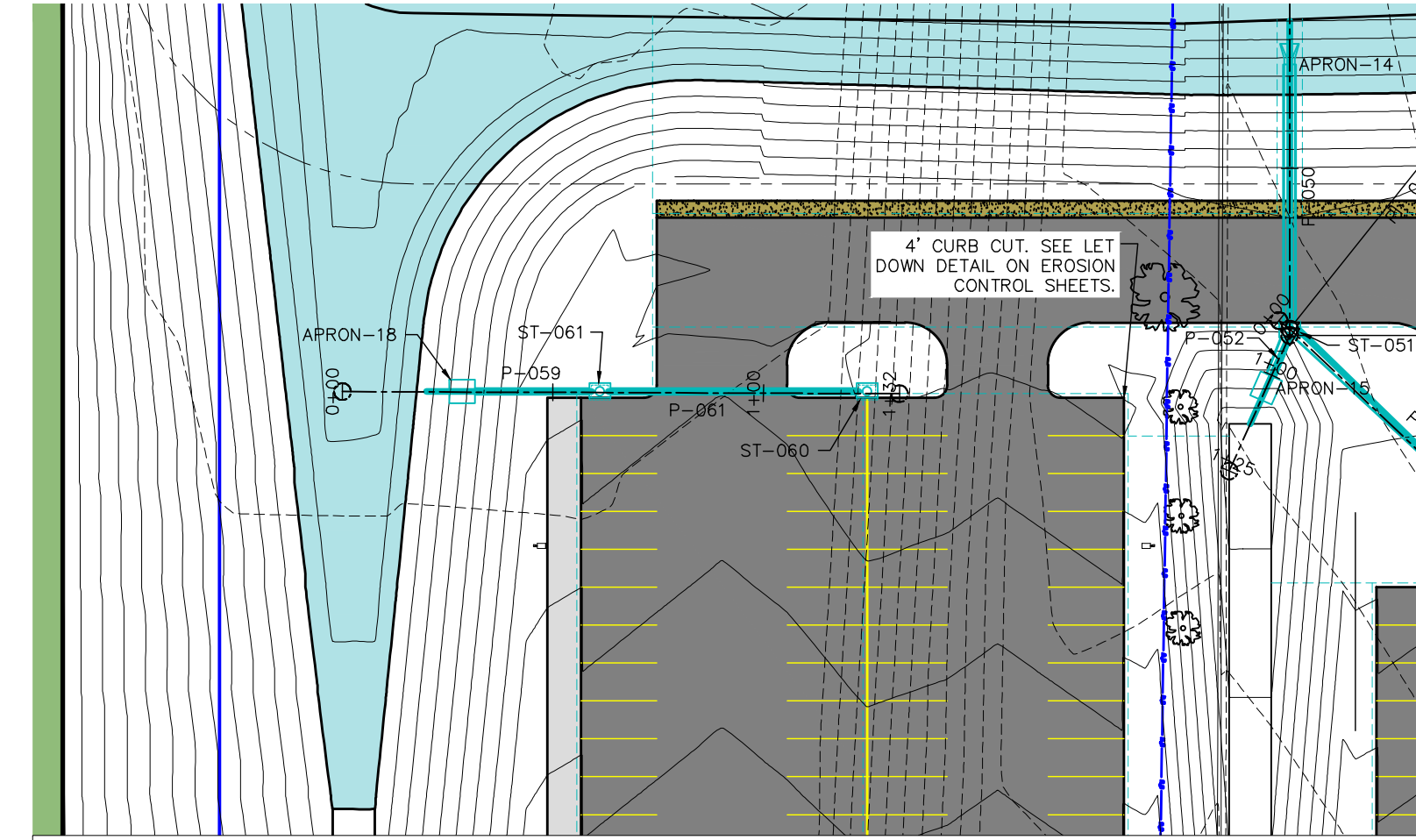
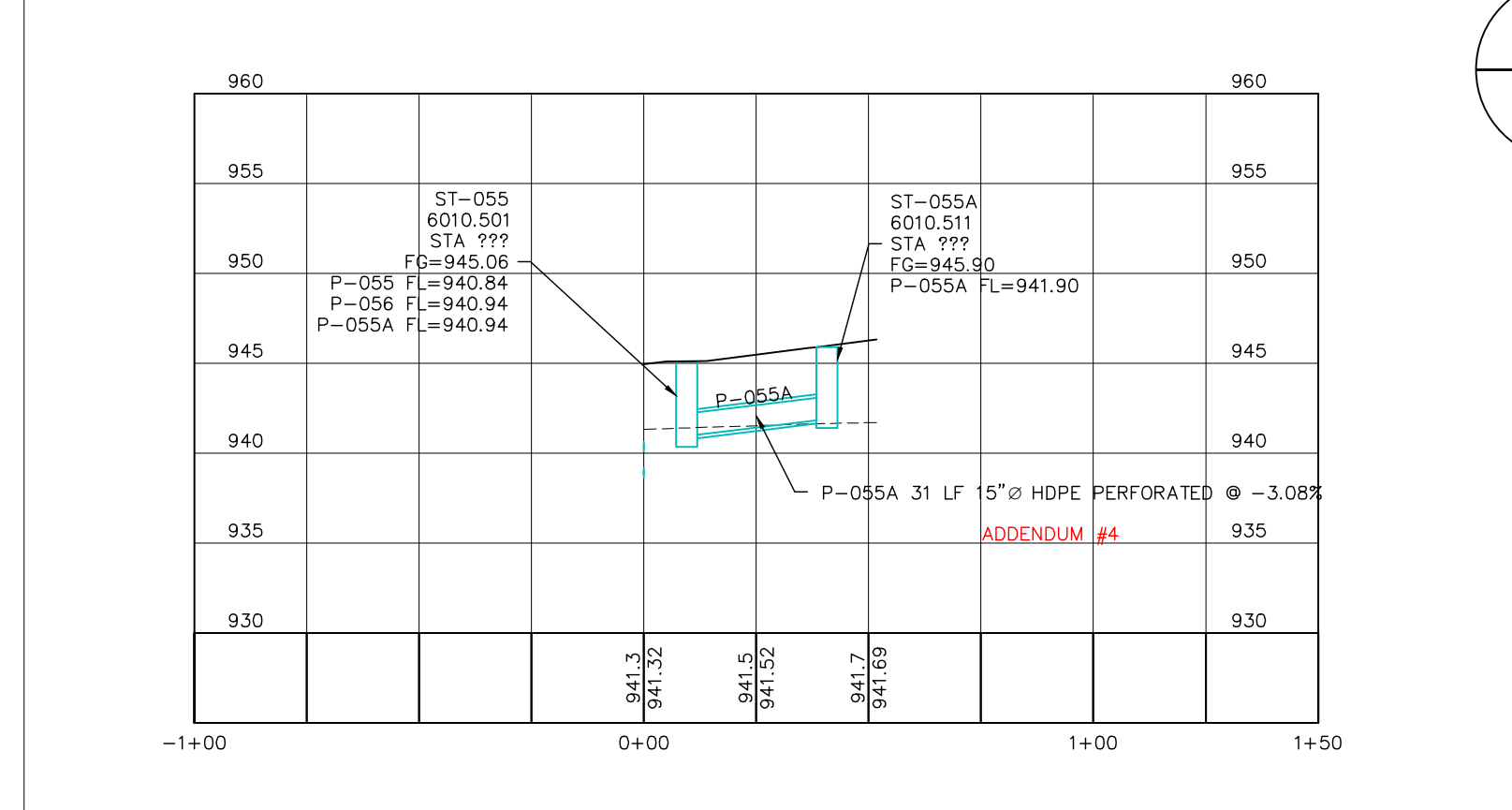
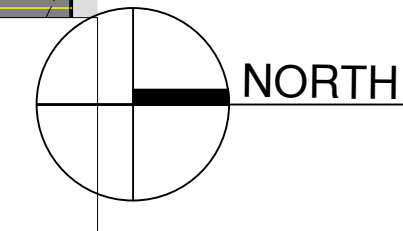
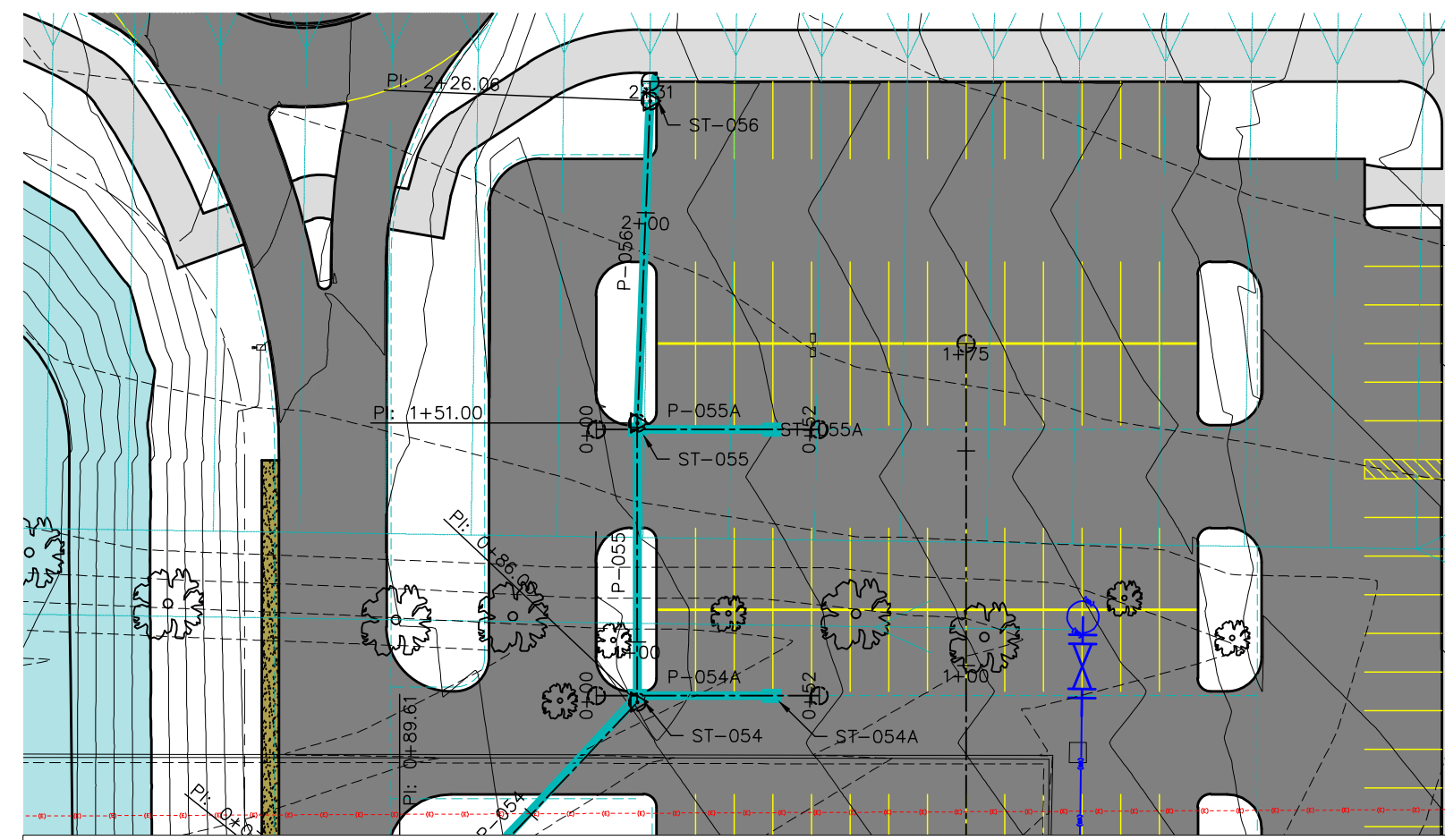
LEGEND

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PLAN NOTES



GENERAL SITE NOTES

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- EXISTING FIBER OPTIC
- EXISTING OVERHEAD ELECTRIC
- EXISTING SANITARY SEWER
- EXISTING WATER MAIN
- EXISTING WATER SERVICE
- EXISTING STORM SEWER
  
- PROPOSED GAS MAIN
- PROPOSED FIBER OPTIC
- PROPOSED ELECTRICAL
- PROPOSED STORM SEWER
- PROPOSED WATER MAIN
- FUTURE ADDITIONS
  
- ROAD PAVEMENT
- SIDEWALK/TRAIL
- GRAVEL EDGE



REVISIONS:

Description	Date	No.
ADDENDUM #4	12/04/2020	

OWNER SIGN-OFF:

DATE \_\_\_\_\_ NAME \_\_\_\_\_

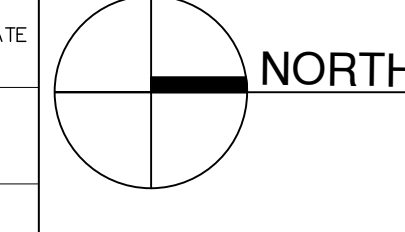
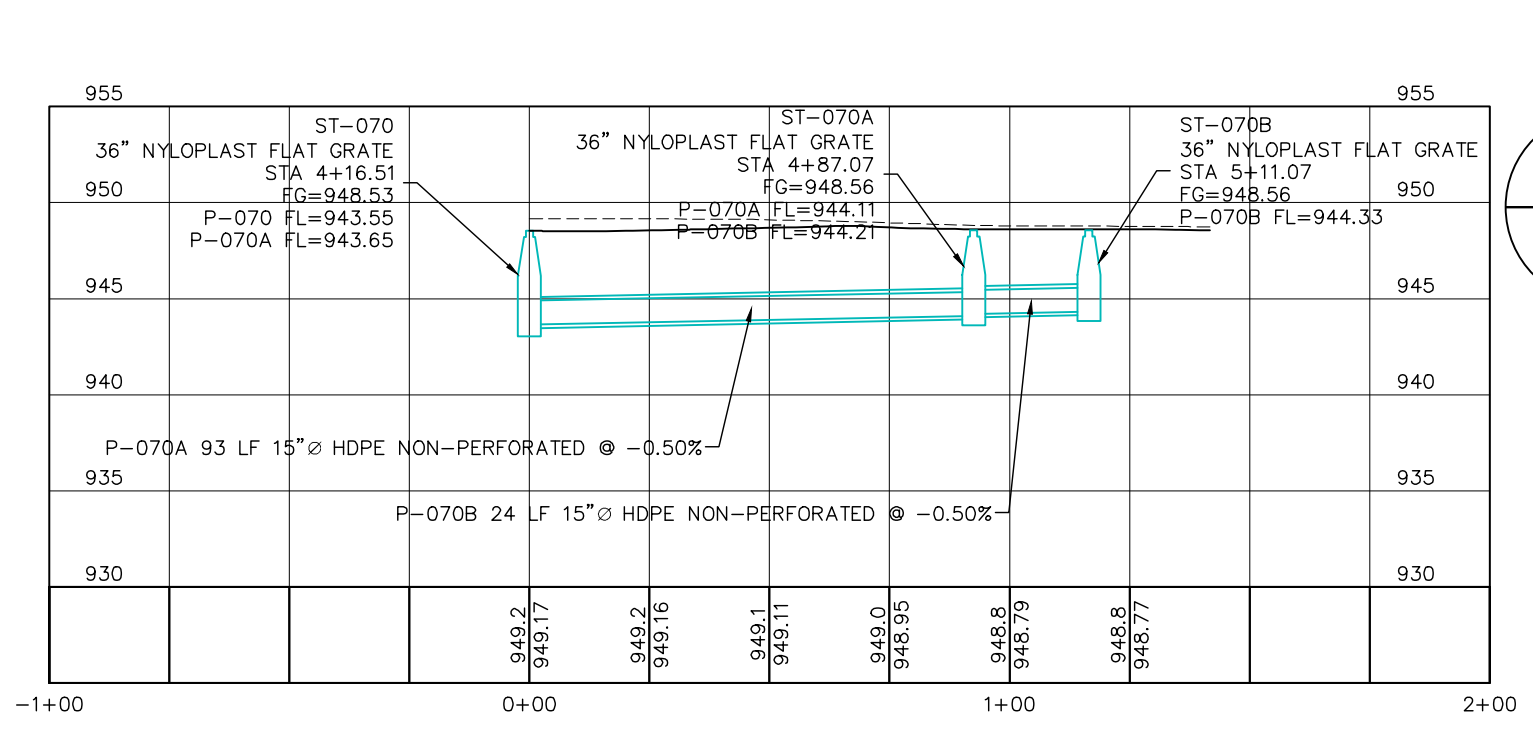
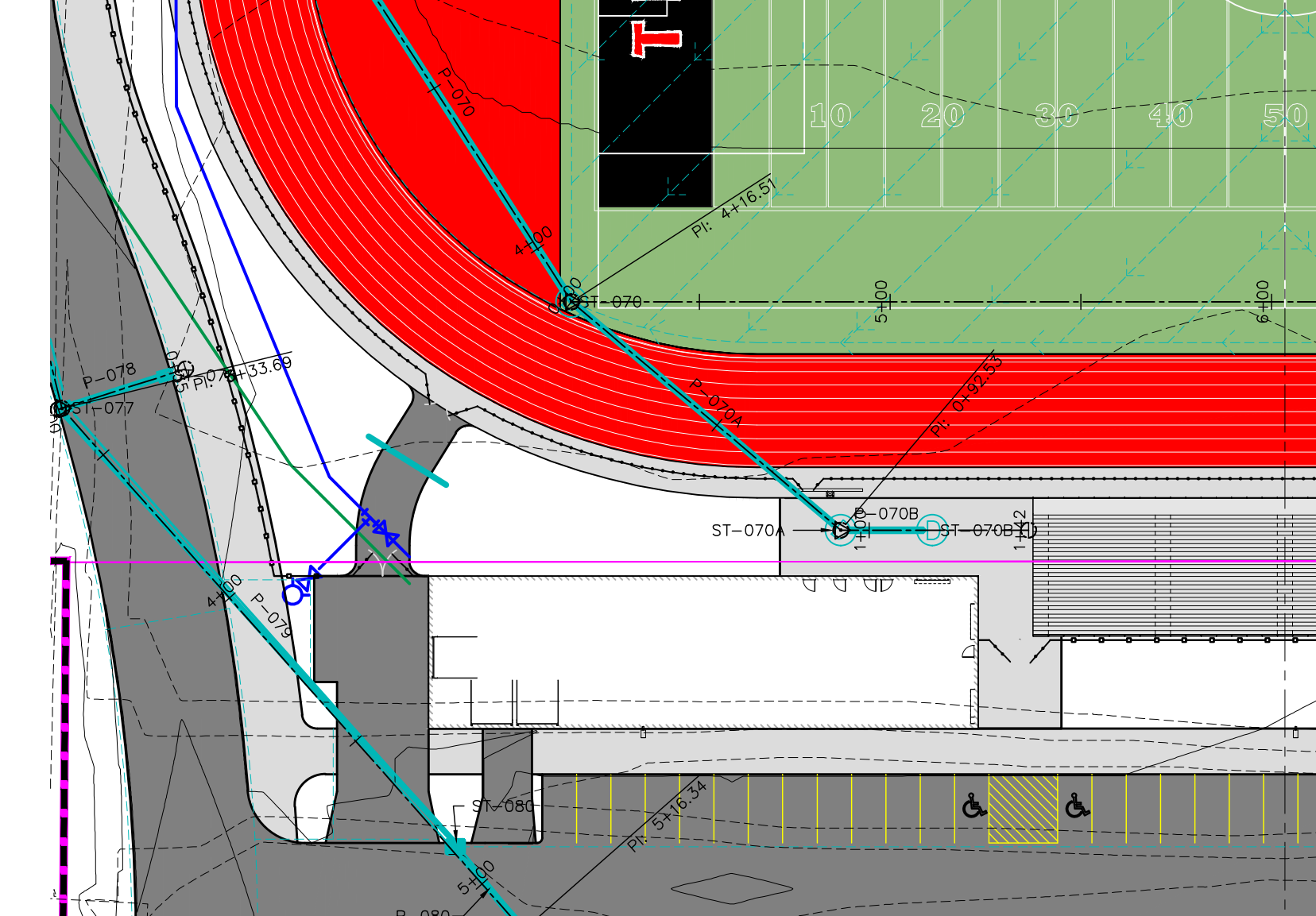
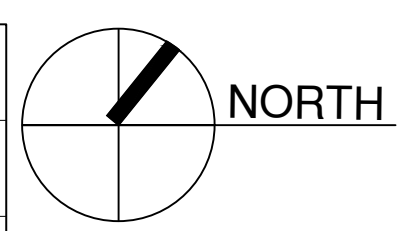
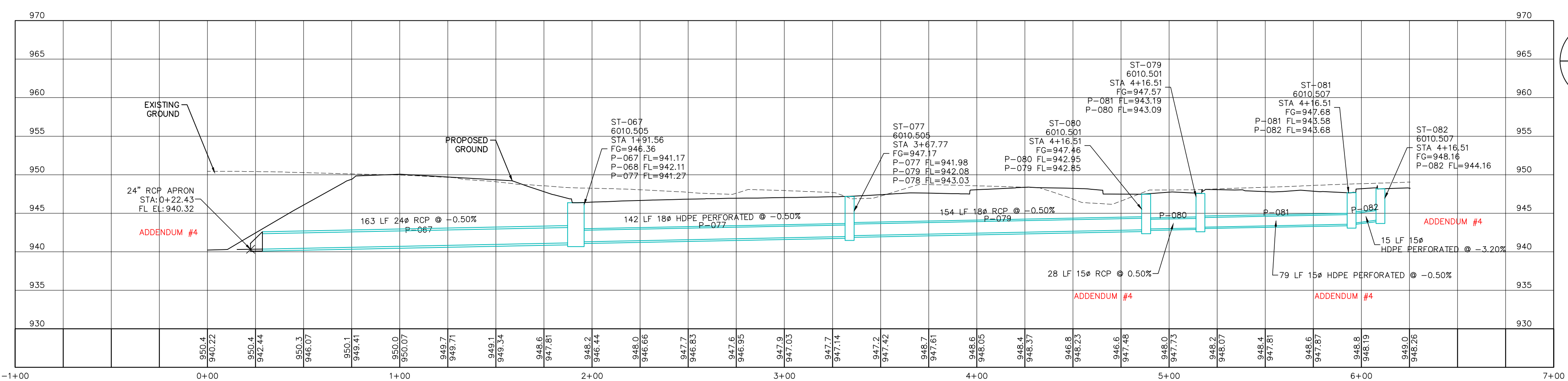
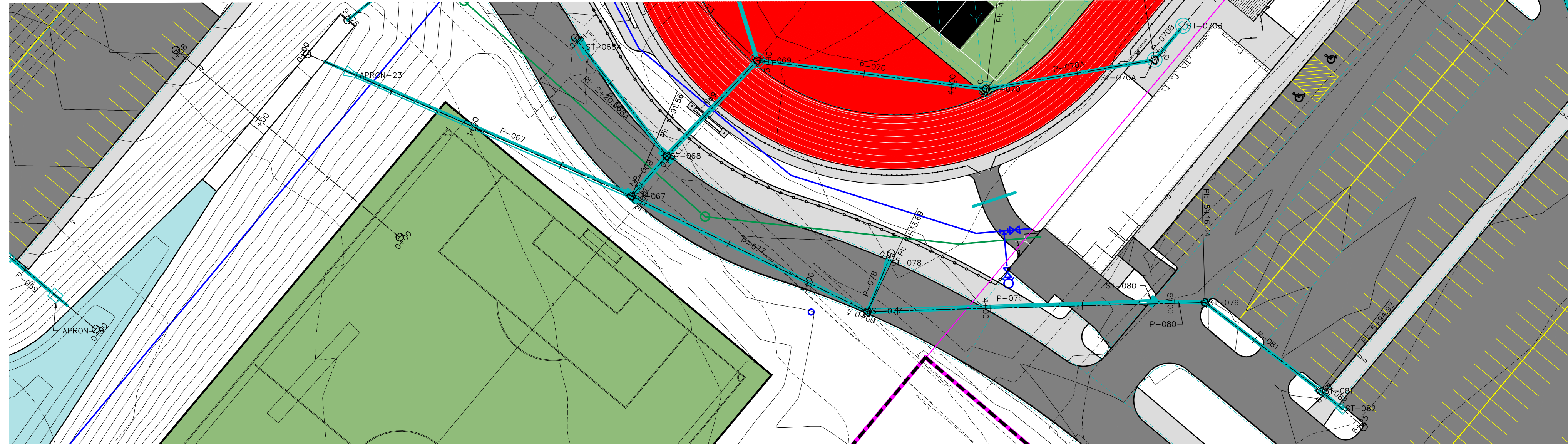
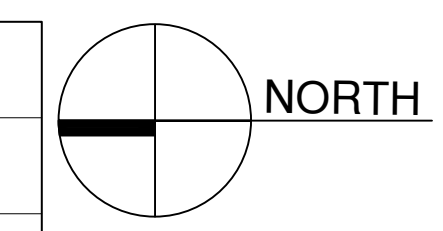
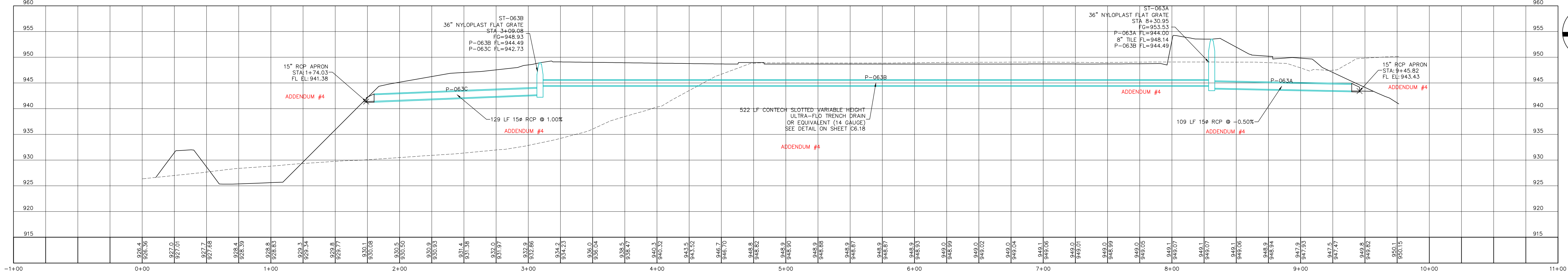
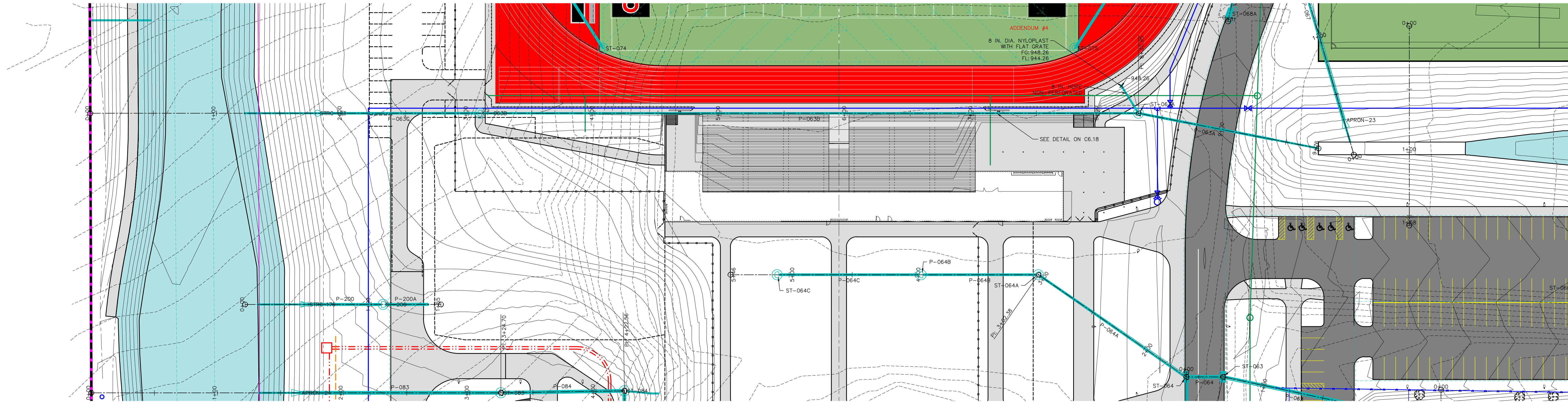


REVISIONS:

Description	Date	No.
ADDENDUM #4	12/04/2020	
ADDENDUM #5	12/11/2020	

OWNER SIGN-OFF:

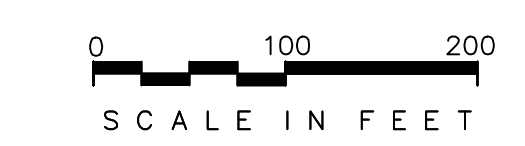
DATE	NAME



GENERAL SITE NOTES

LEGEND

- EXISTING GRAVEL EDGE
- EXISTING ELECTRICAL
- EXISTING FIBER OPTIC
- EXISTING OVERHEAD ELECTRIC
- EXISTING SANITARY SEWER
- EXISTING WATER MAIN
- EXISTING WATER SERVICE
- EXISTING STORM SEWER
- PROPOSED GAS MAIN
- PROPOSED FIBER OPTIC
- PROPOSED ELECTRICAL
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- PROPOSED WATER MAIN
- FUTURE ADDITIONS
- ROAD PAVEMENT
- SIDEWALK/TRAIL
- GRAVEL EDGE



CEDAR FALLS COMMUNITY SCHOOL DISTRICT  
**CEDAR FALLS HIGH SCHOOL**  
W 27TH STREET, CEDAR FALLS, IA 50613

PROJECT NO:  
19116

DATE:  
JANUARY 22, 2021

SHEET SET:  
CONSTRUCTION DOCUMENTS

SHEET NAME:  
STORM DRAINAGE PLAN

SHEET:  
**C6.05**

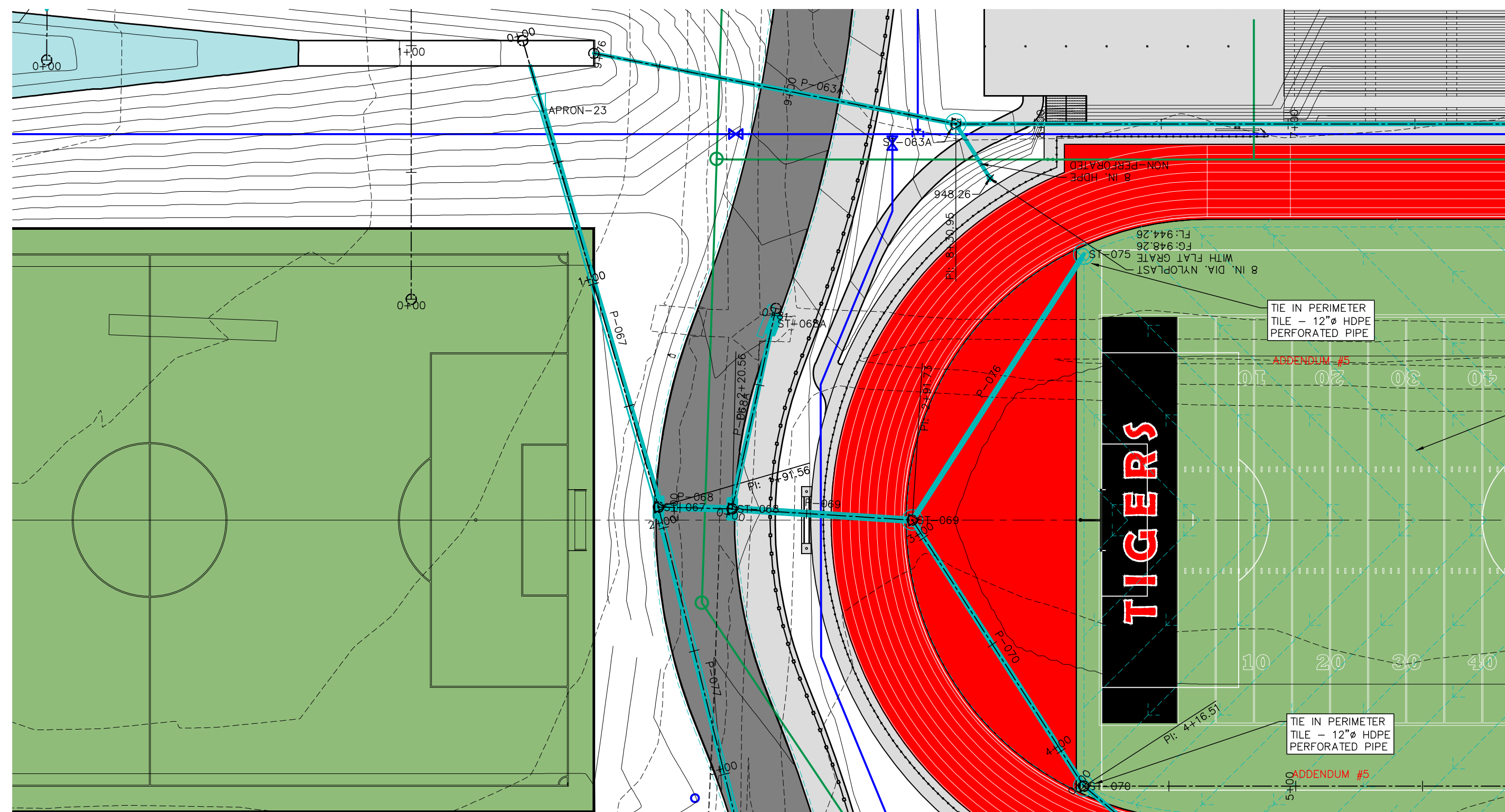


REVISIONS:

Description	Date	No.
ADDENDUM #4	12/04/2020	
ADDENDUM #5	12/11/2020	

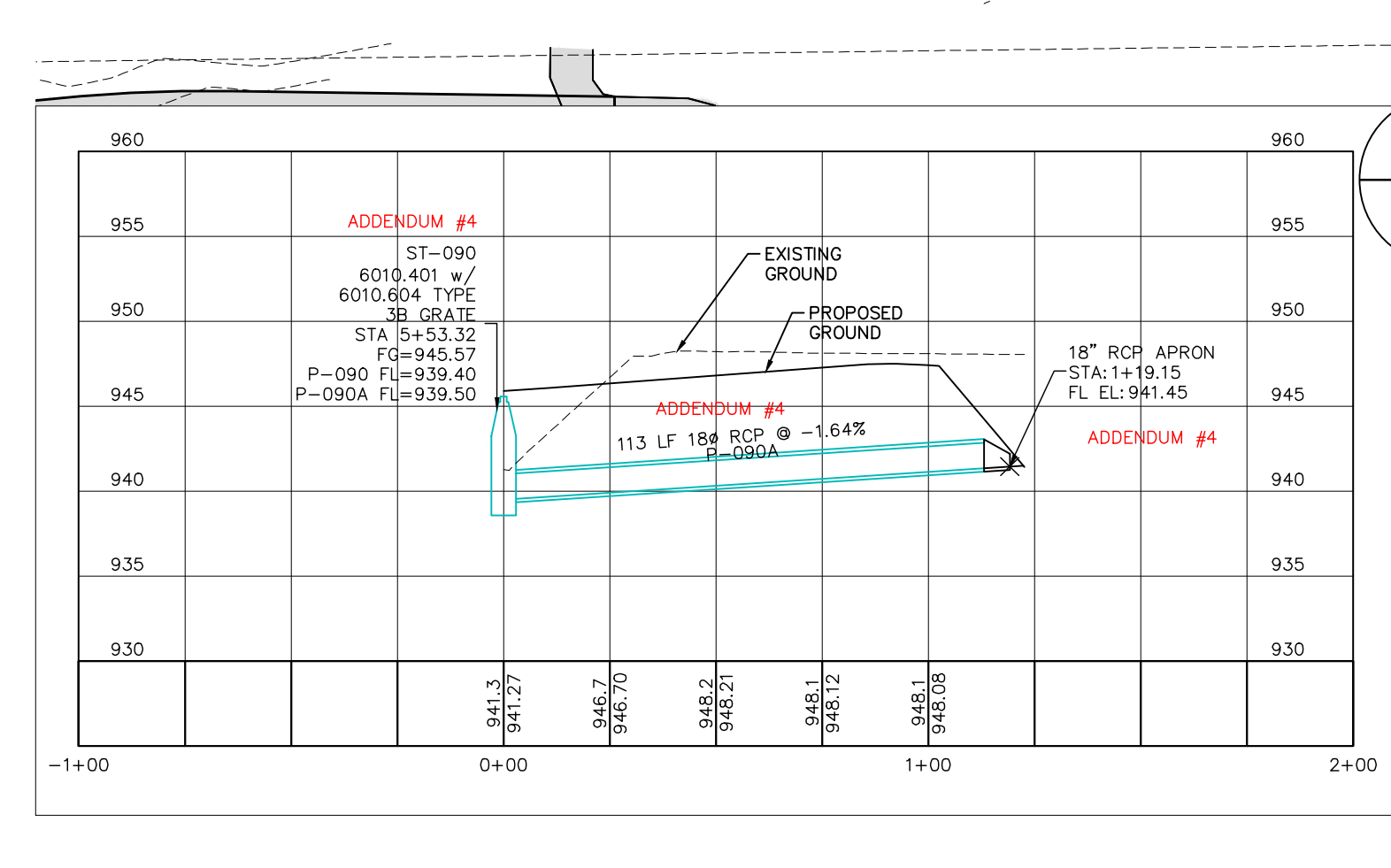
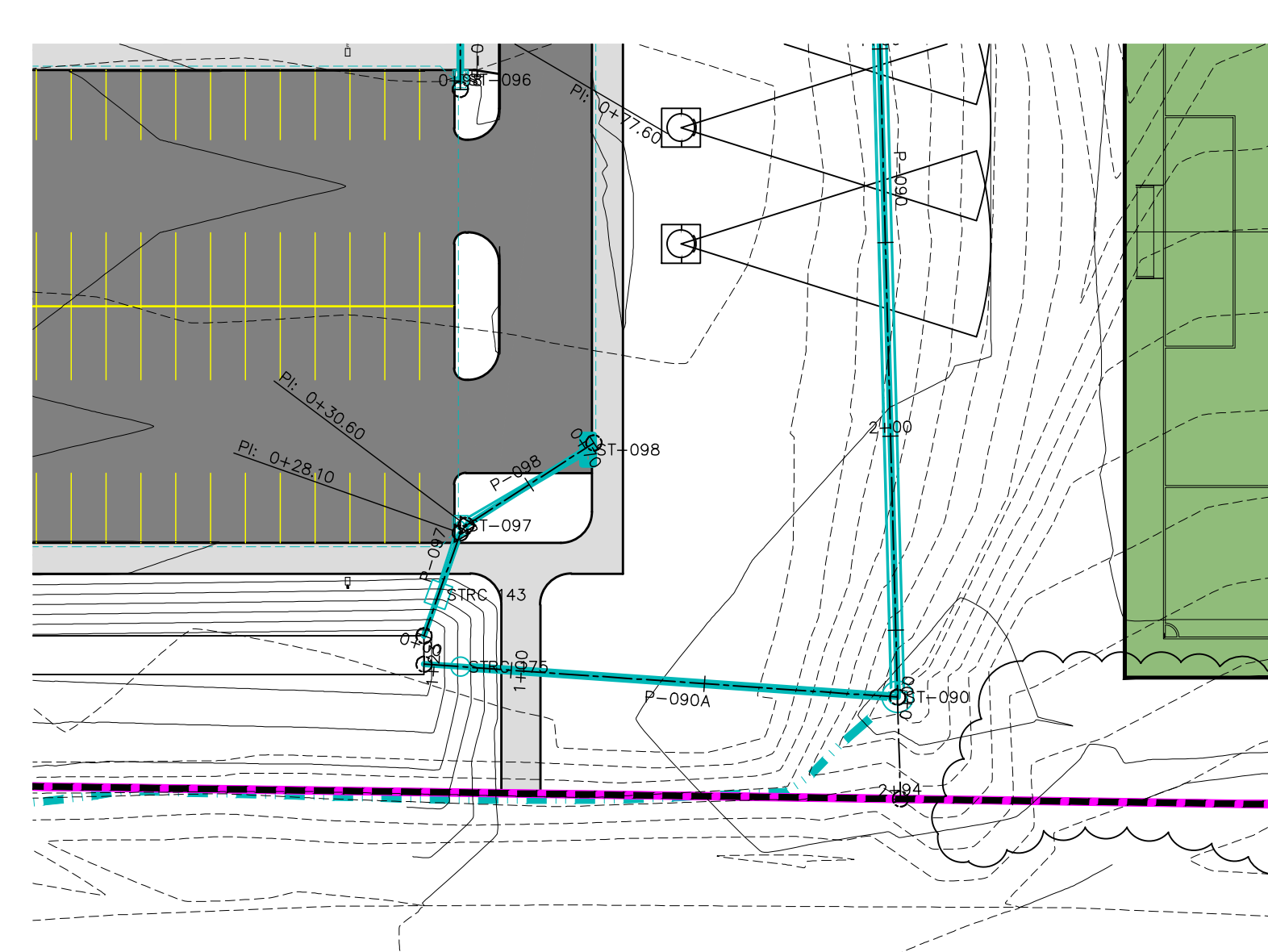
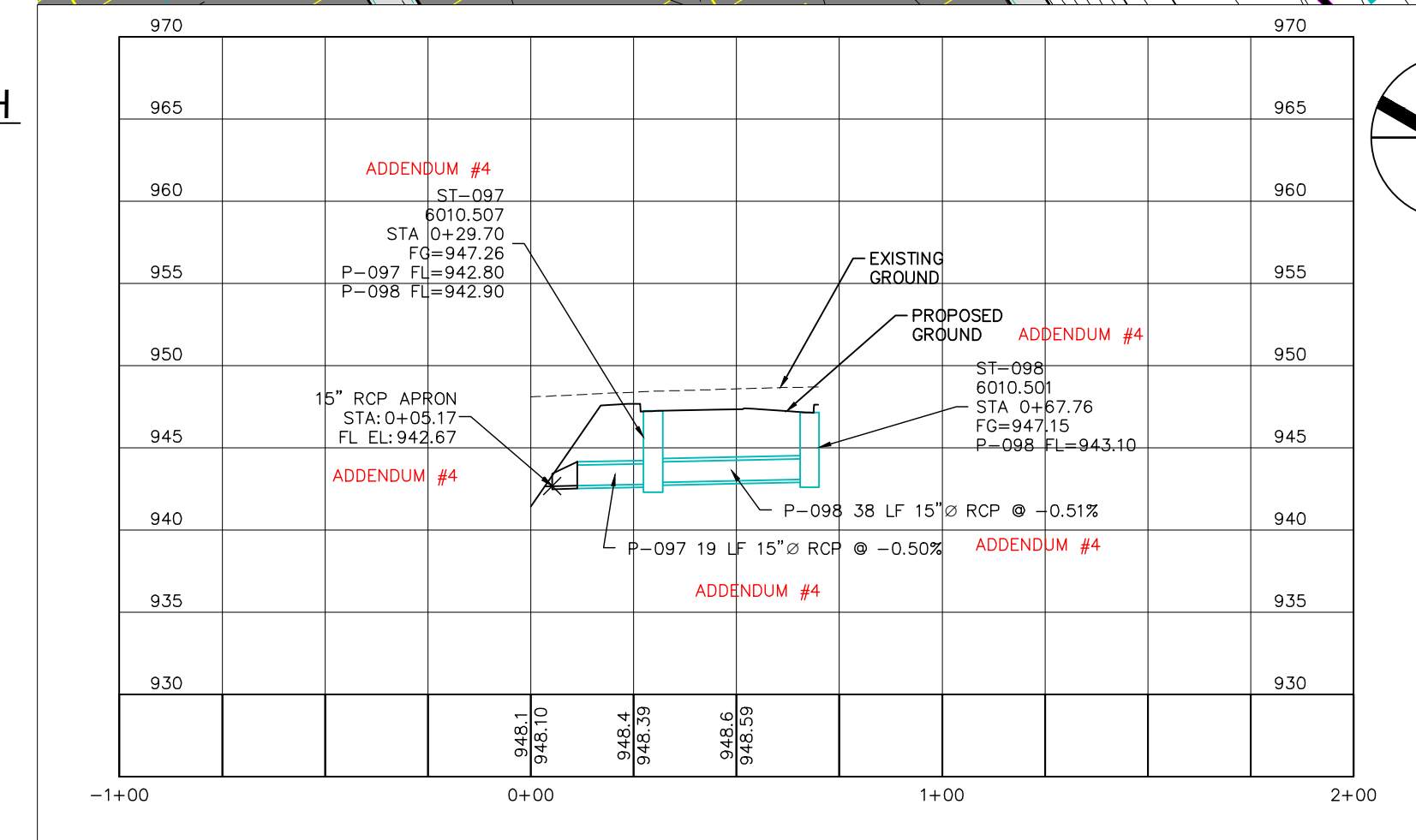
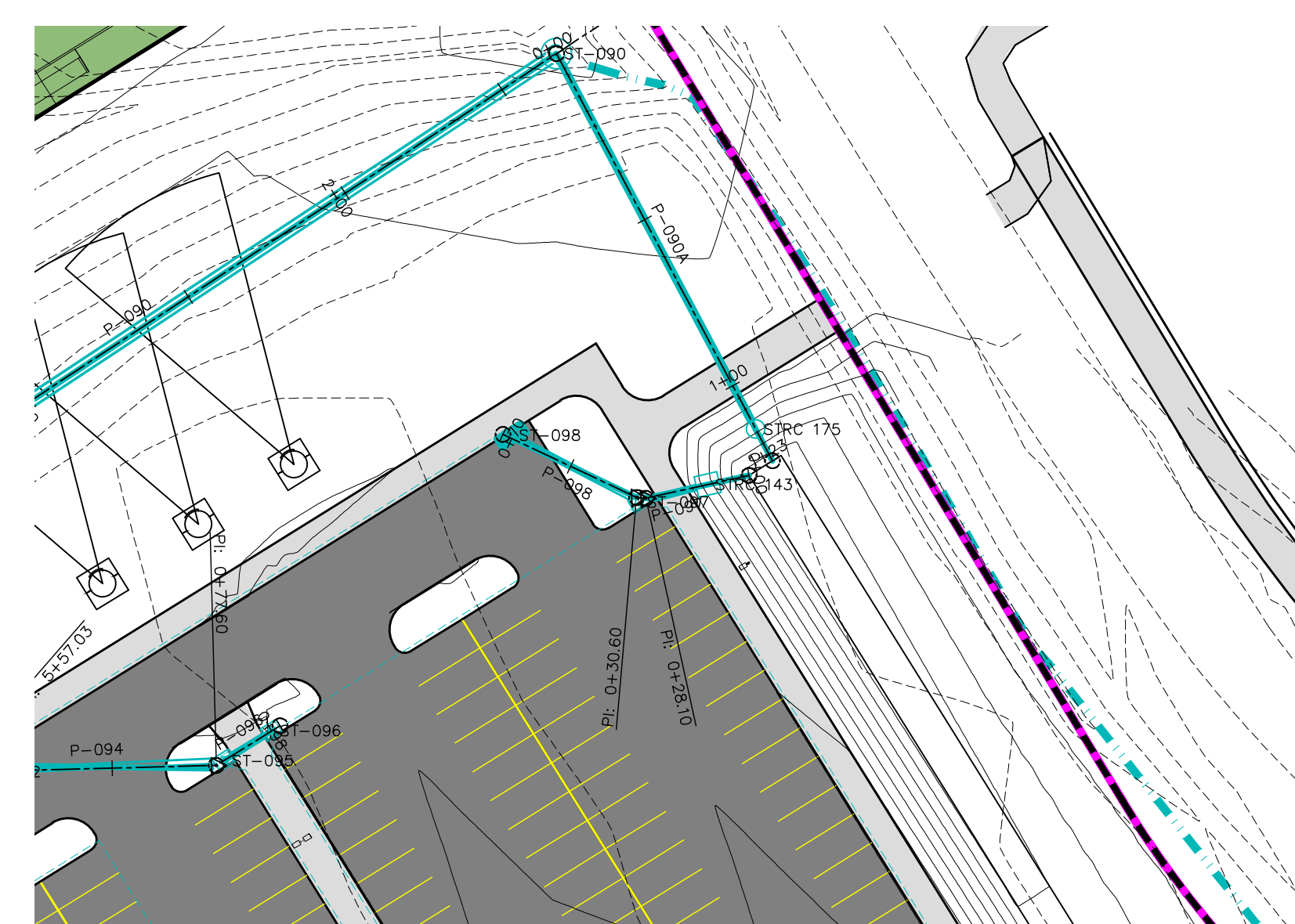
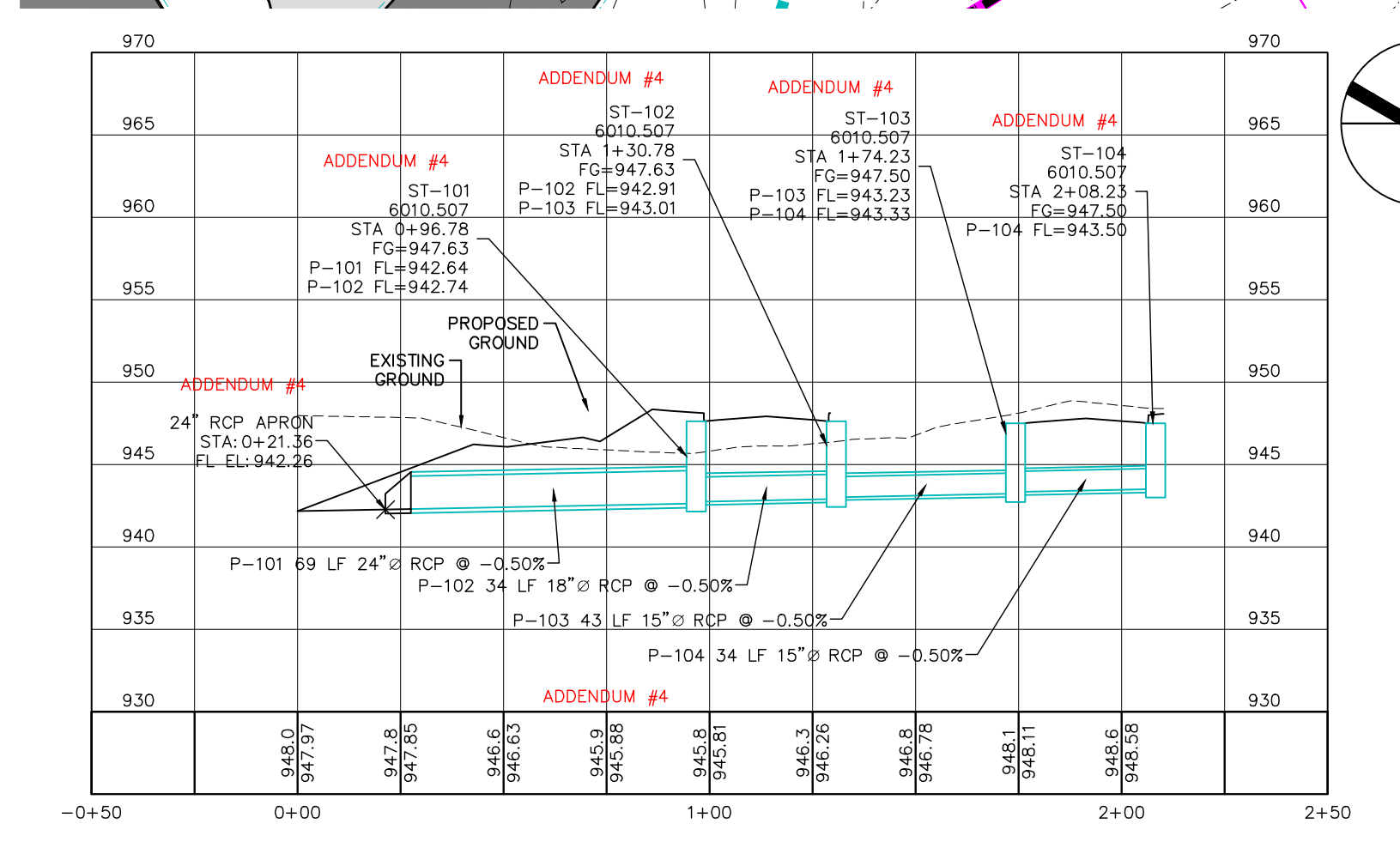
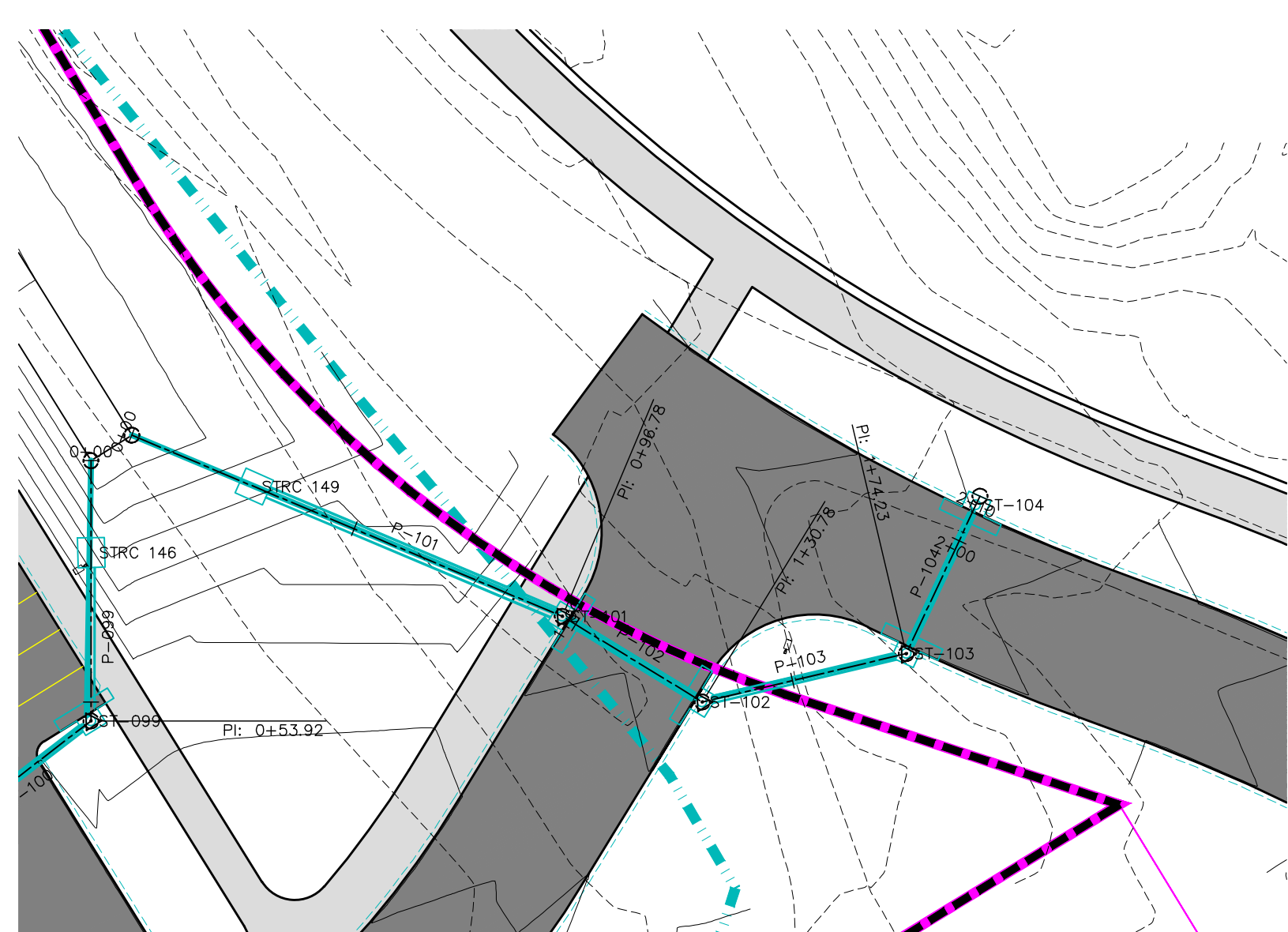
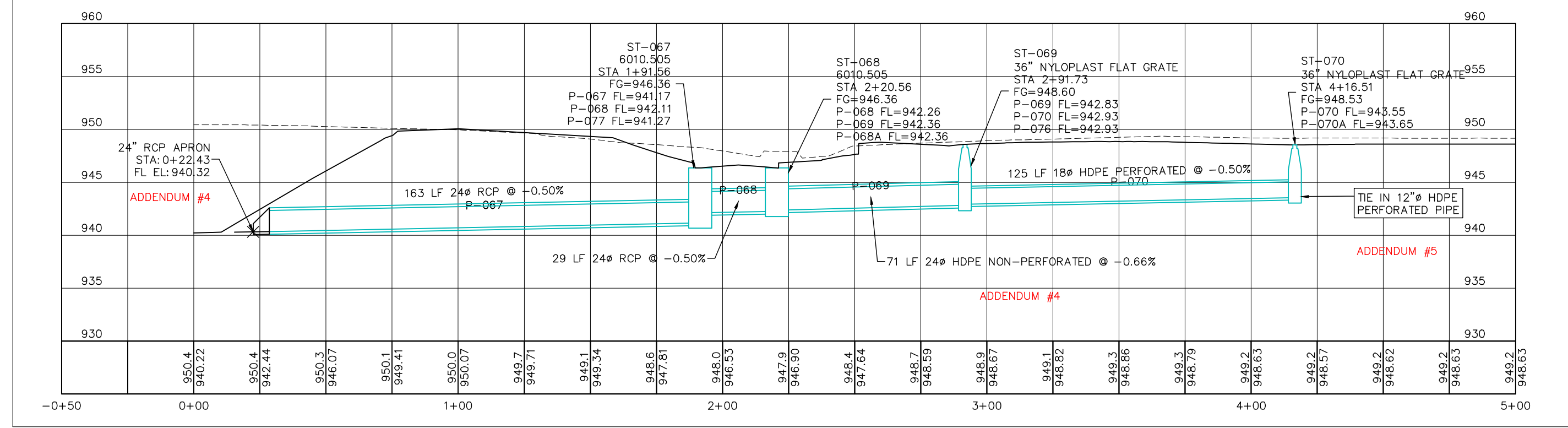
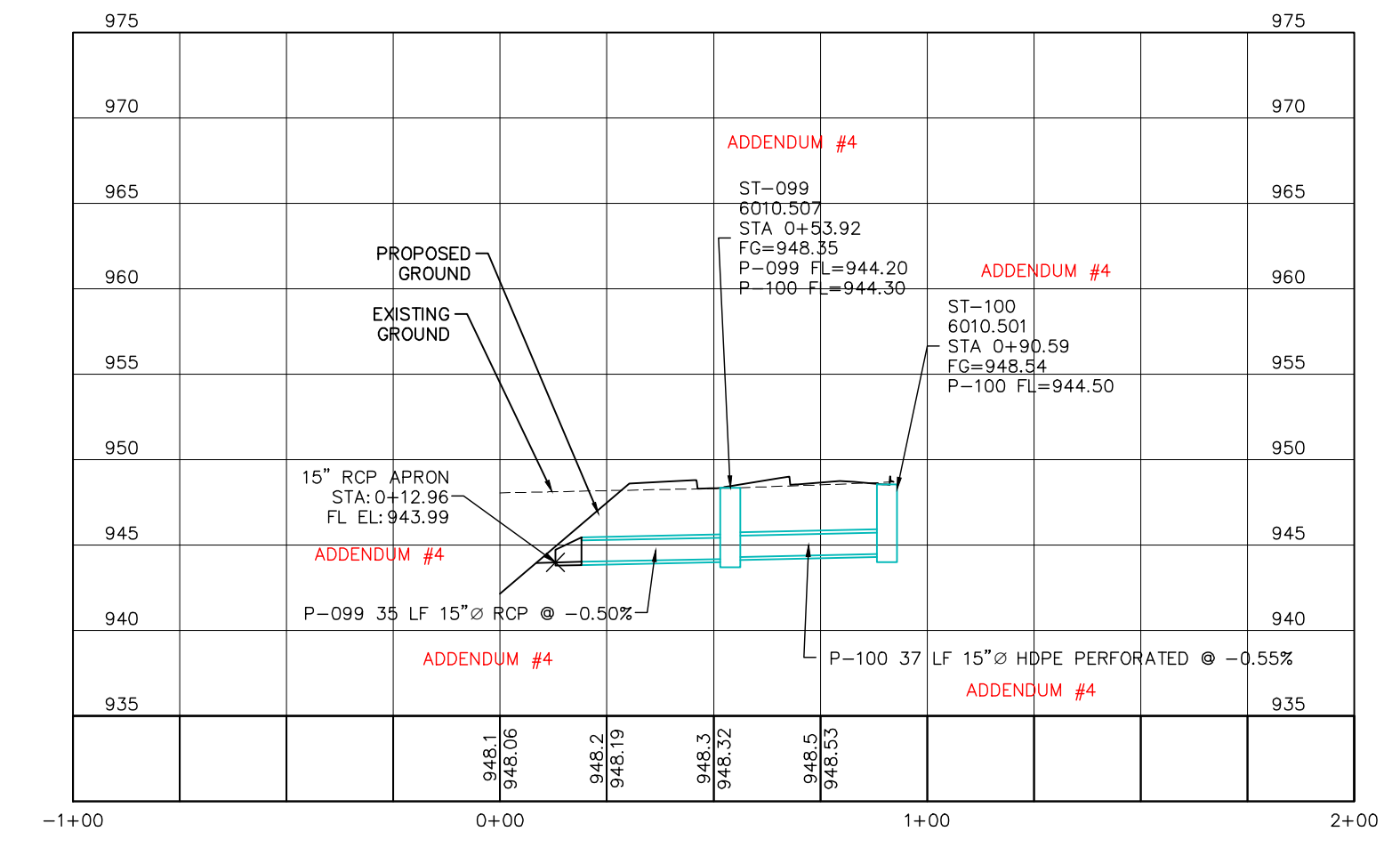
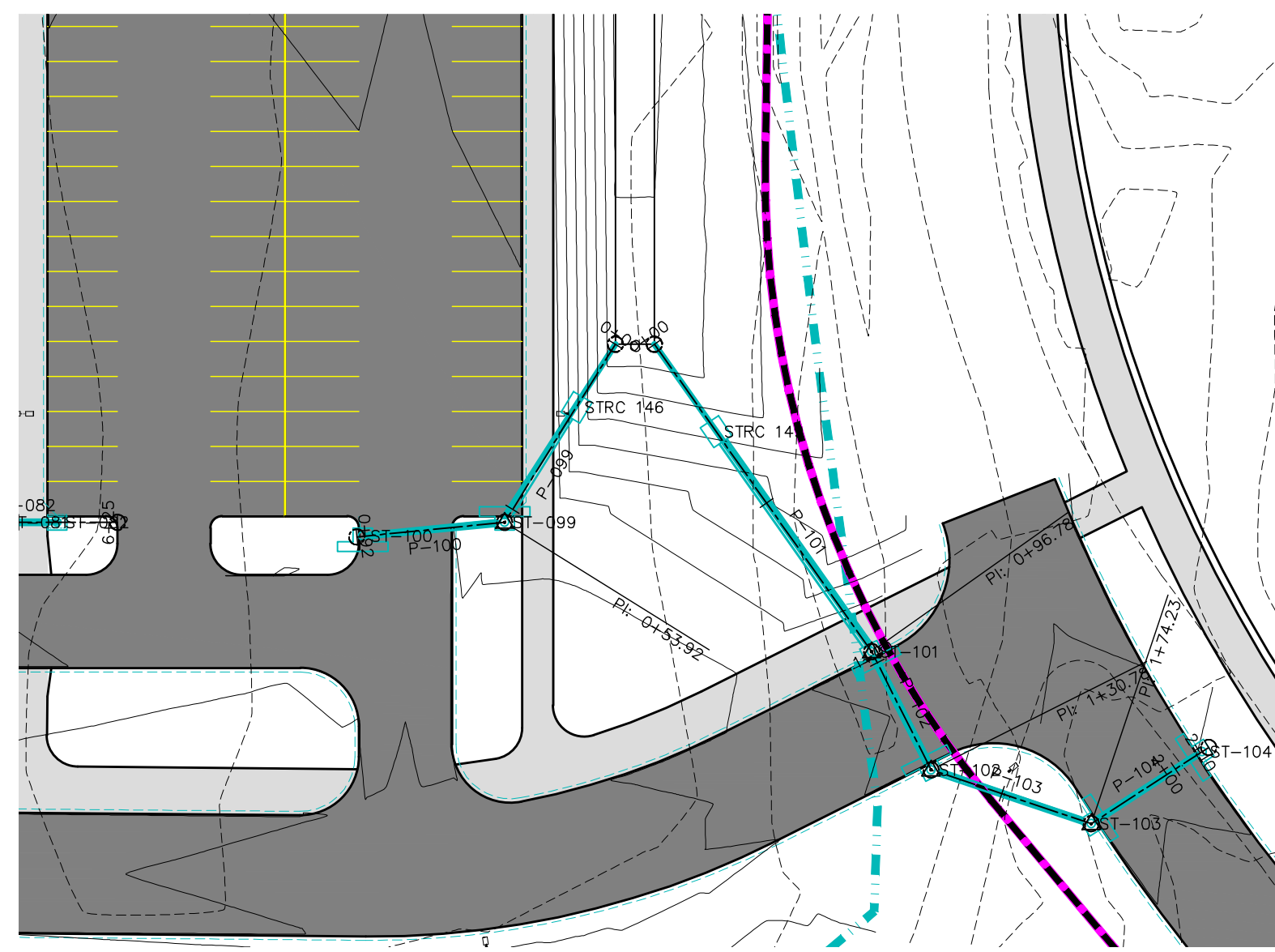
OWNER SIGN-OFF:

DATE \_\_\_\_\_ NAME \_\_\_\_\_



1X12 PANEL DRAIN LAID FLAT (TYPICAL)

ADDENDUM #5



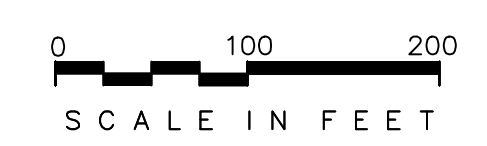
GENERAL SITE NOTES

LEGEND

- EXISTING GRAVEL EDGE
- EXISTING ELECTRICAL
- EXISTING FIBER OPTIC
- EXISTING OVERHEAD ELECTRIC
- EXISTING SANITARY SEWER
- EXISTING WATER MAIN
- EXISTING WATER SERVICE
- EXISTING STORM SEWER

- PROPOSED GAS MAIN
- PROPOSED FIBER OPTIC
- PROPOSED ELECTRICAL
- PROPOSED STORM SEWER
- PROPOSED WATER MAIN
- FUTURE ADDITIONS

- ROAD PAVEMENT
- SIDEWALK/TRAIL
- GRAVEL EDGE



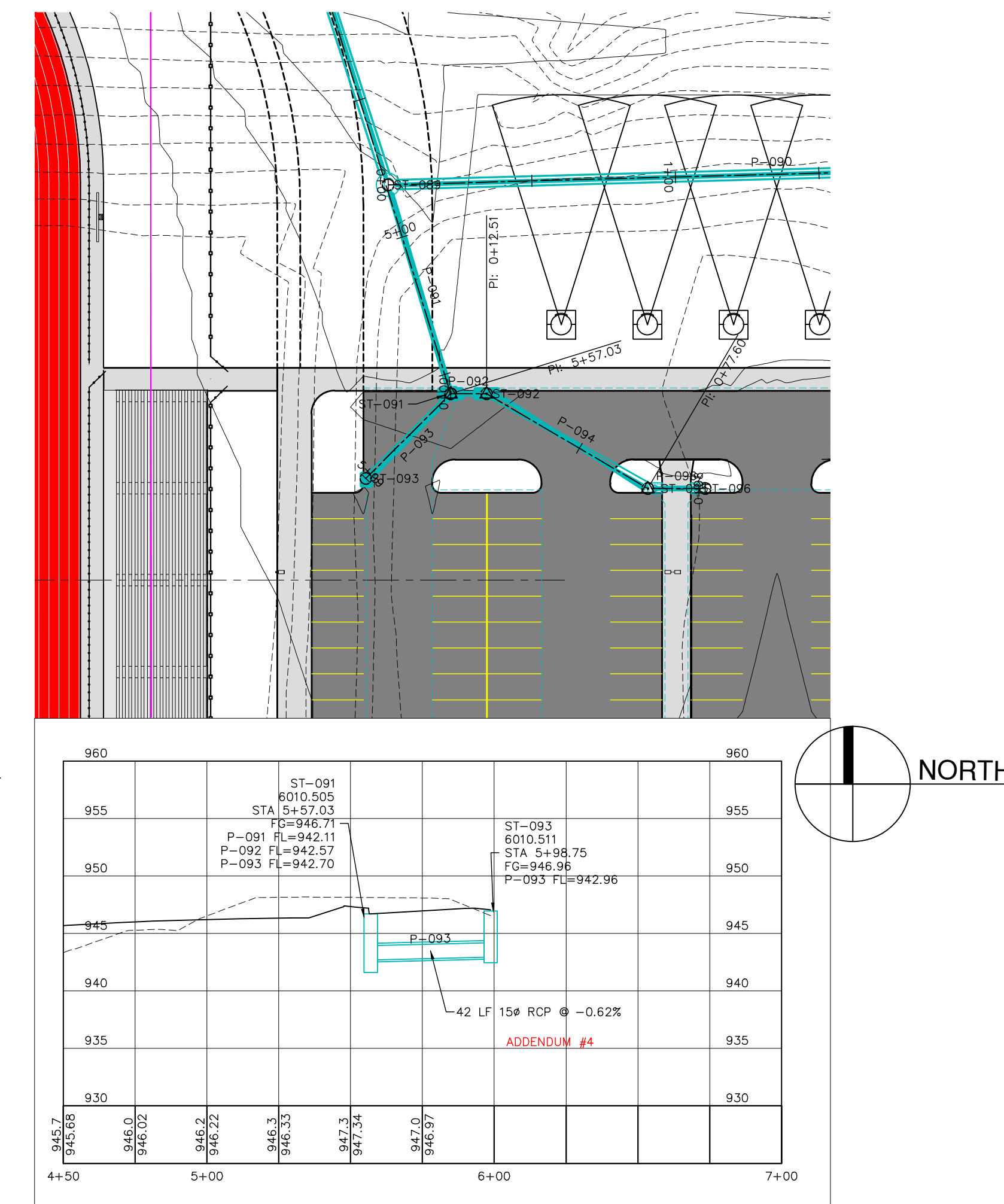
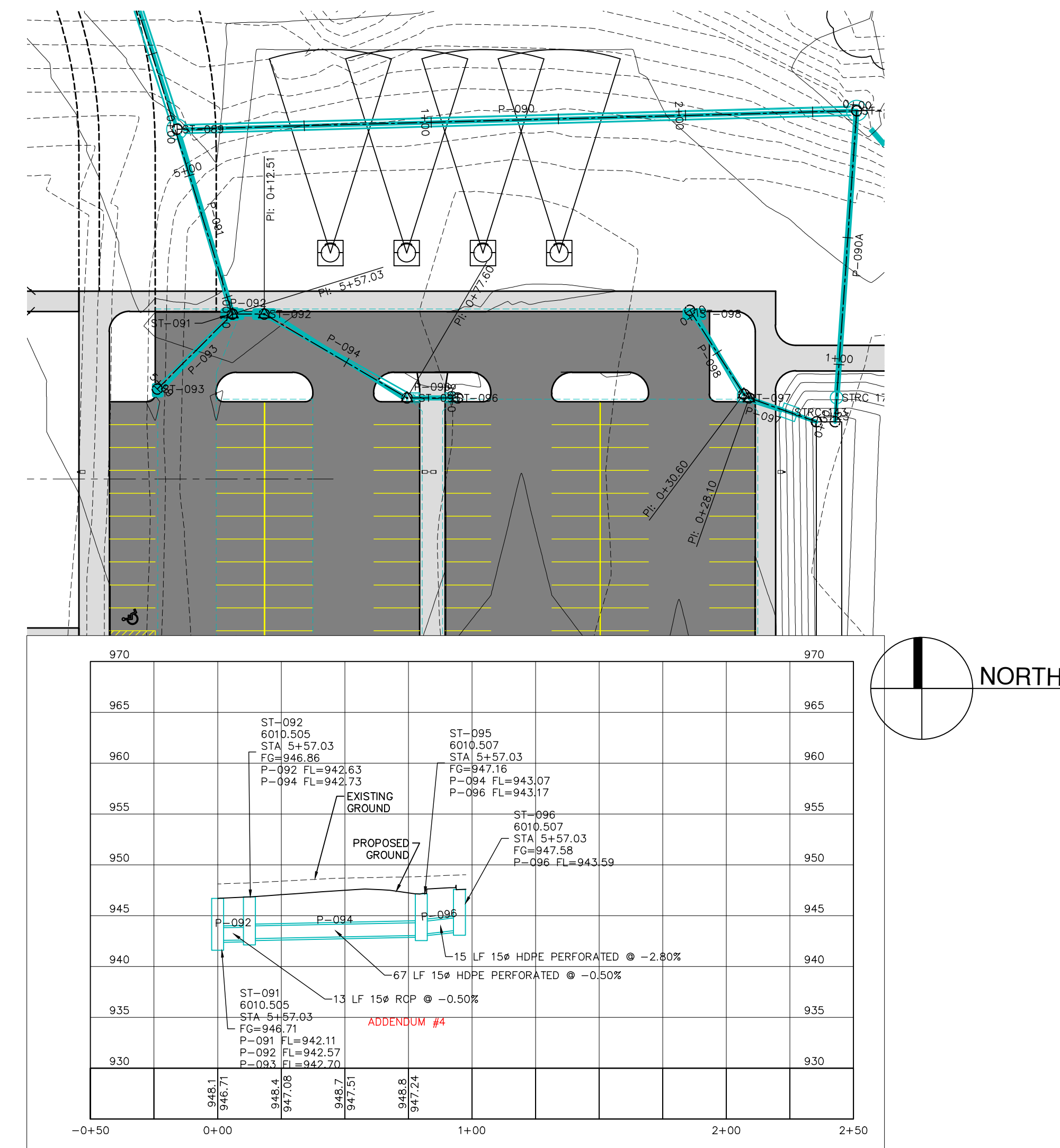
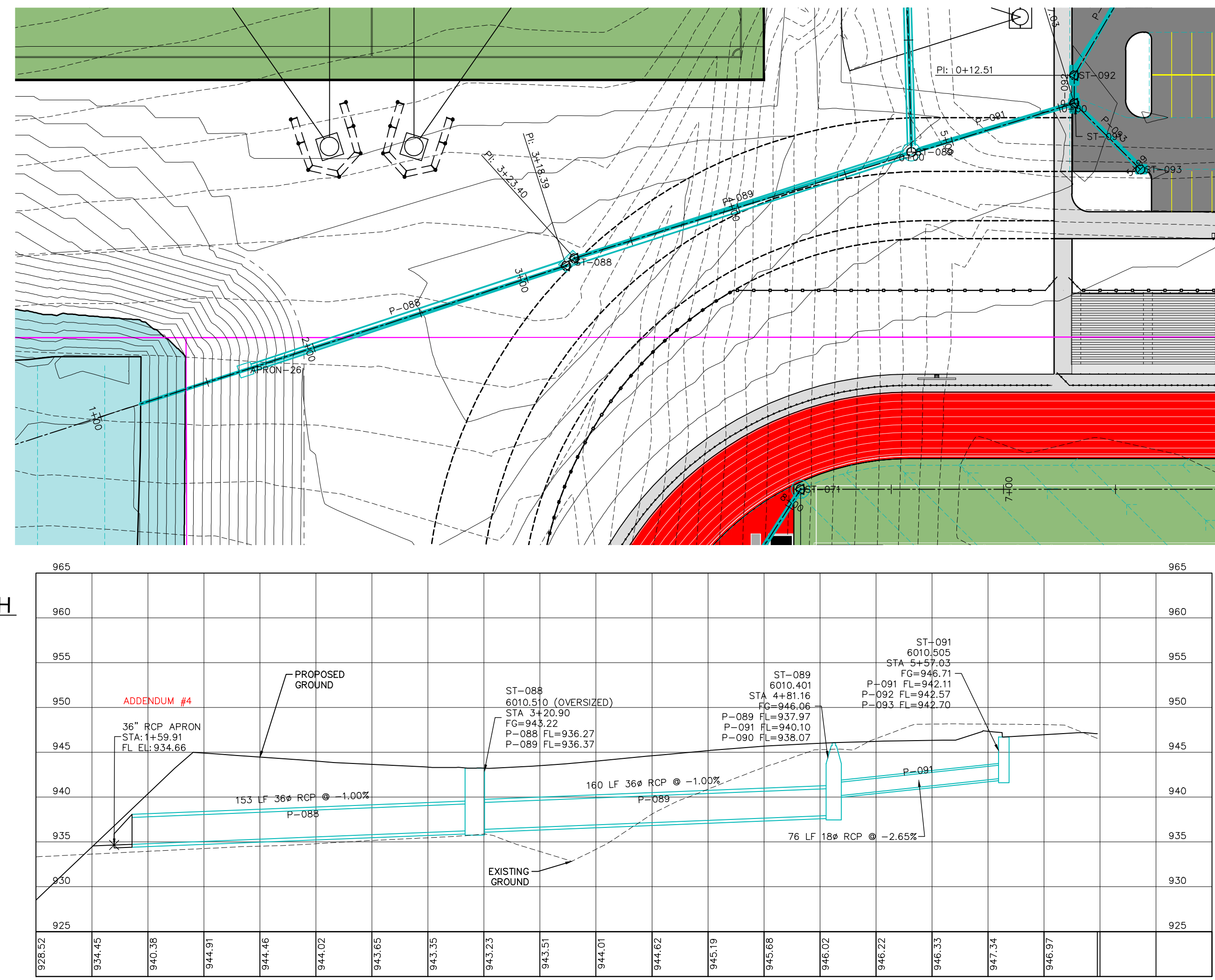
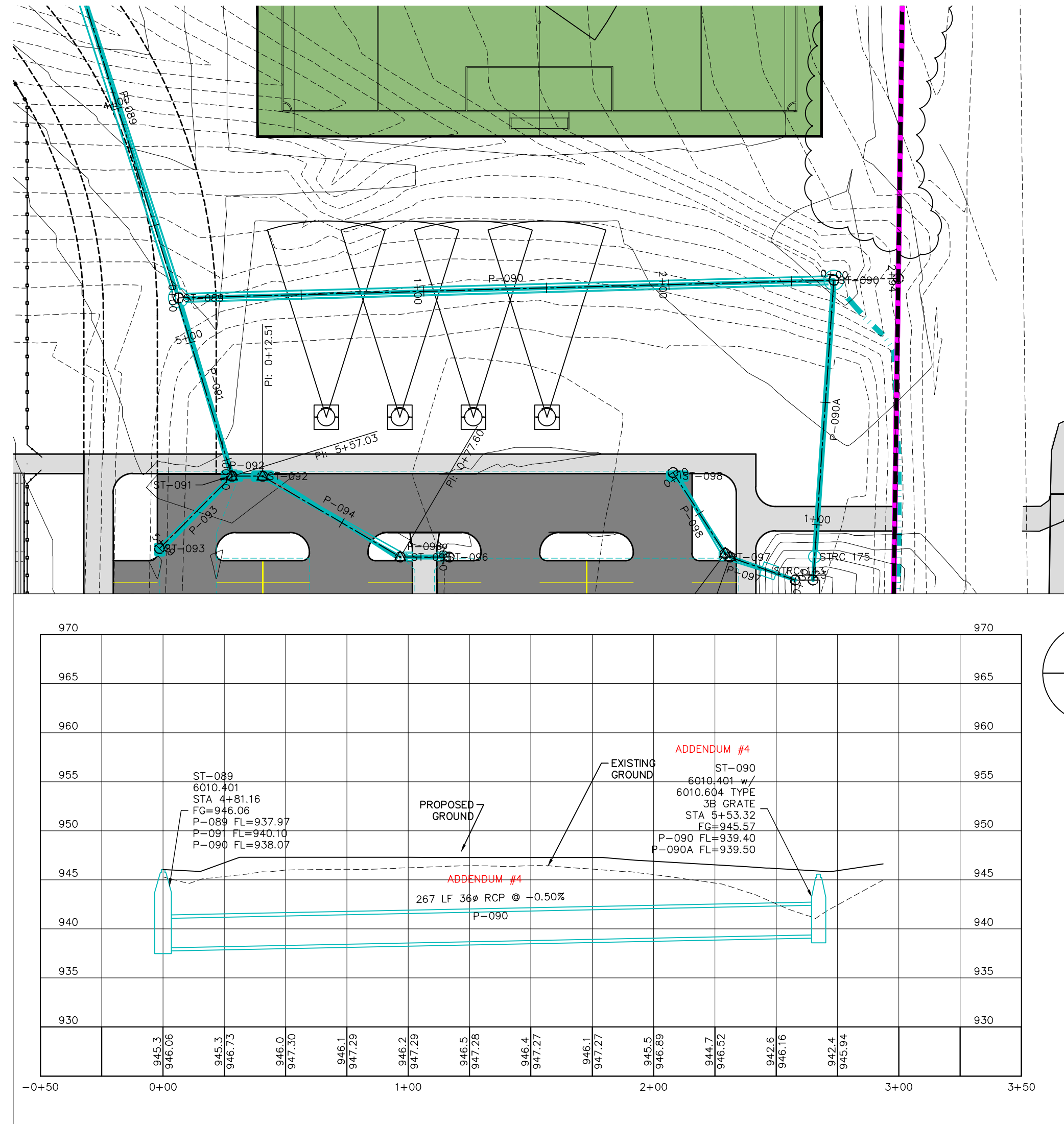
CEDAR FALLS COMMUNITY SCHOOL DISTRICT  
CEDAR FALLS HIGH SCHOOL  
W 27TH STREET, CEDAR FALLS, IA 50613

PROJECT NO:  
19116  
DATE:  
JANUARY 22, 2021  
SHEET SET:  
CONSTRUCTION DOCUMENTS

SHEET NAME:  
STORM DRAINAGE PLAN

C6.06  
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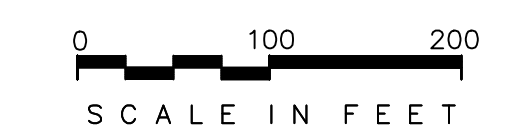




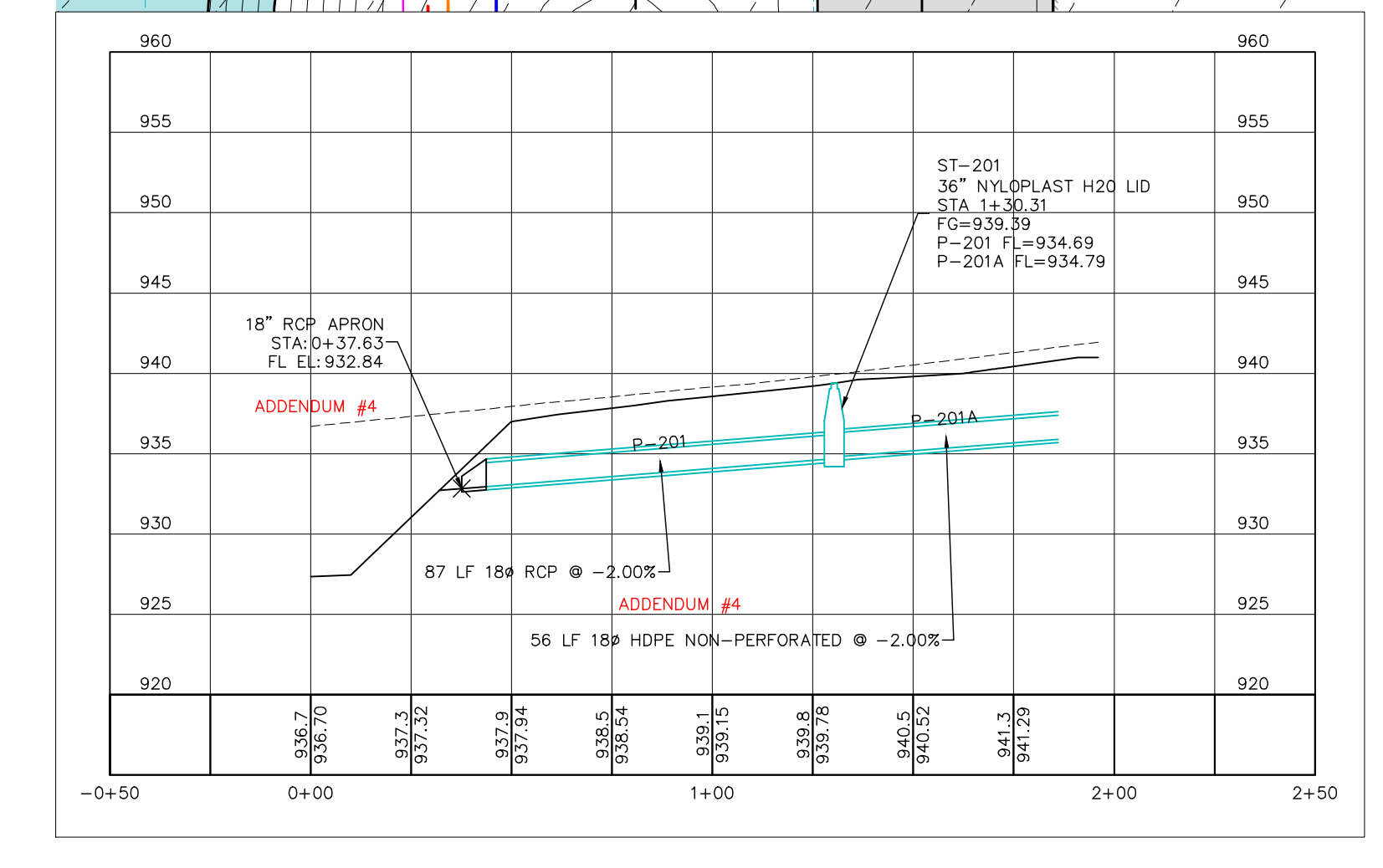
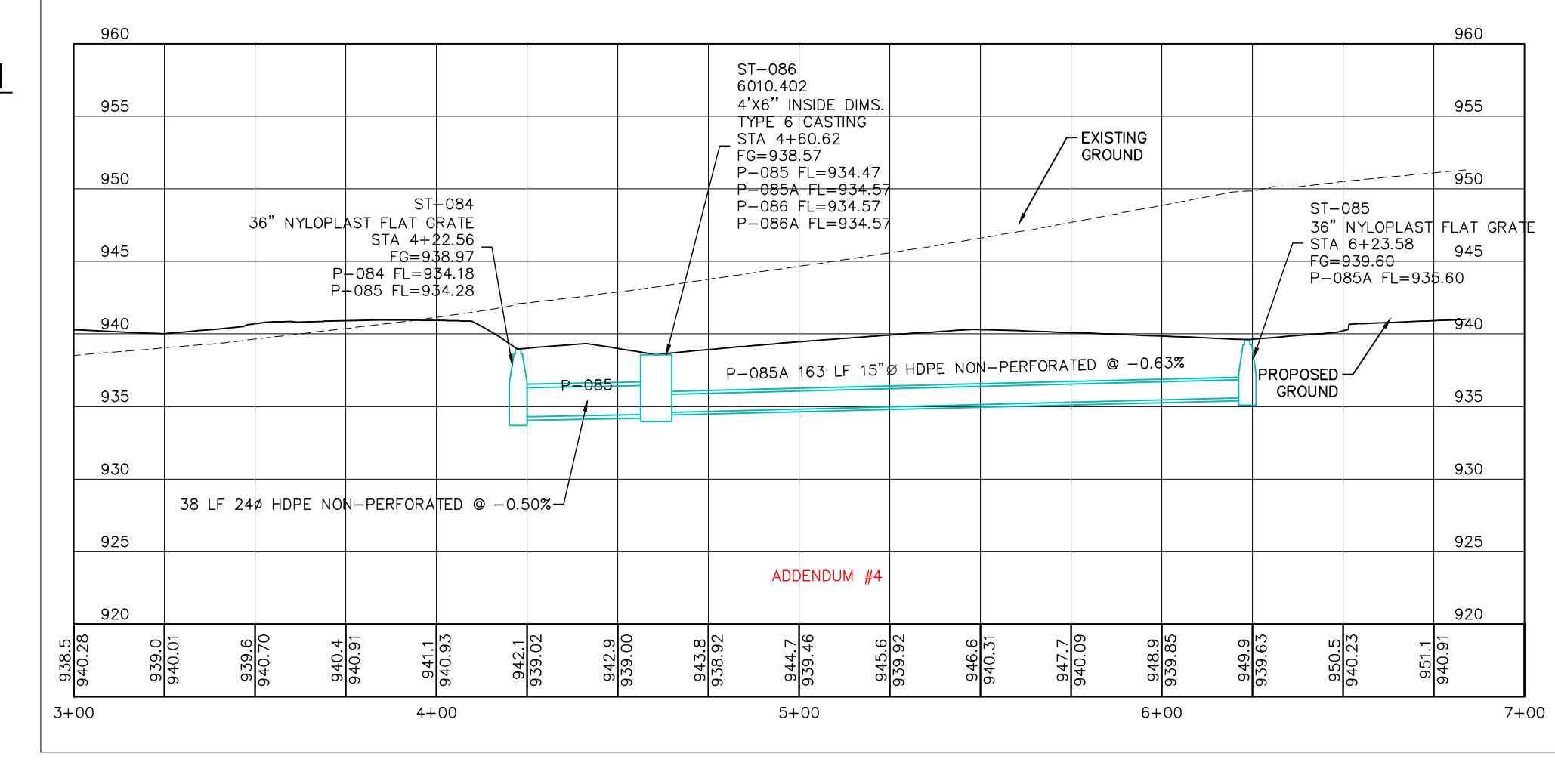
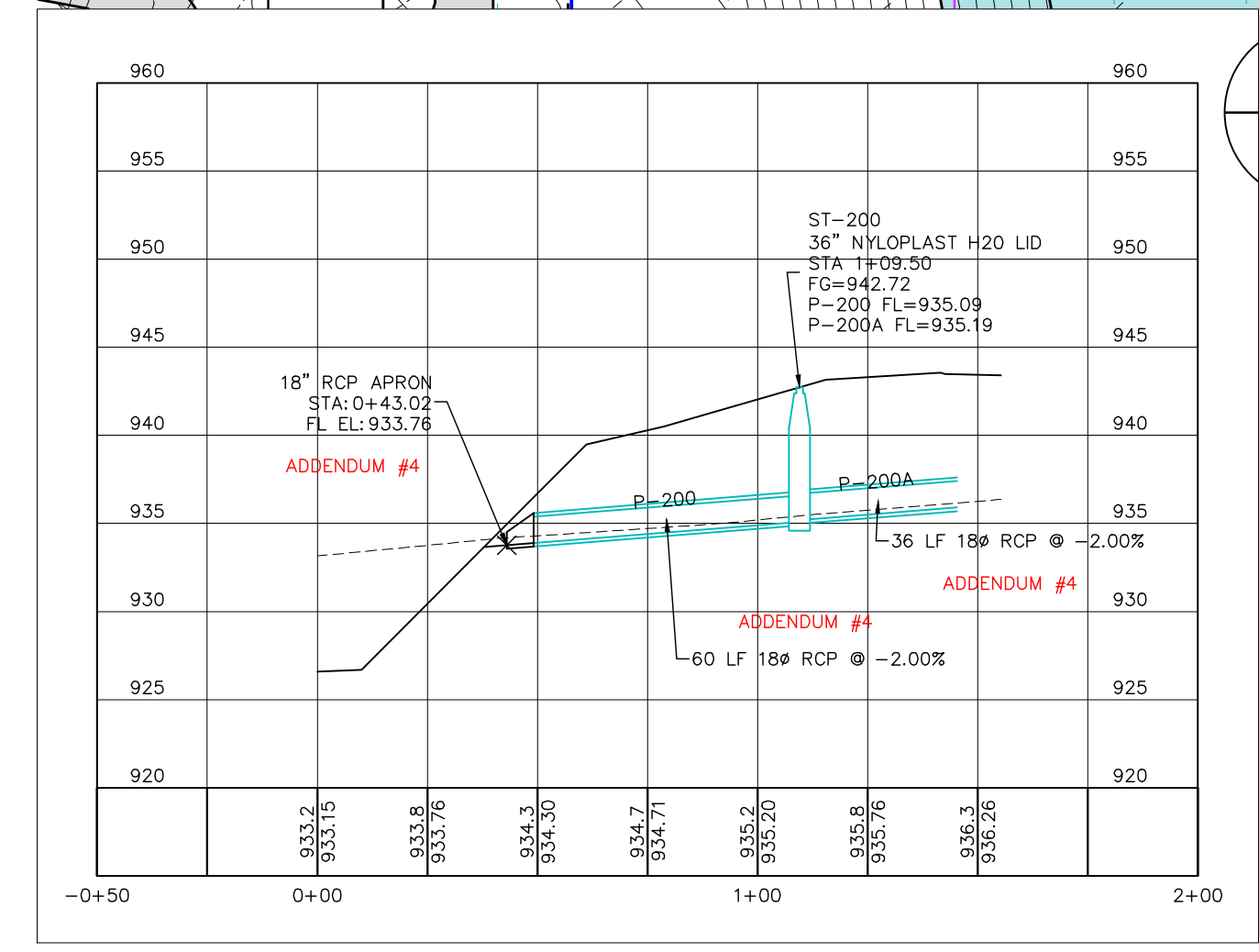
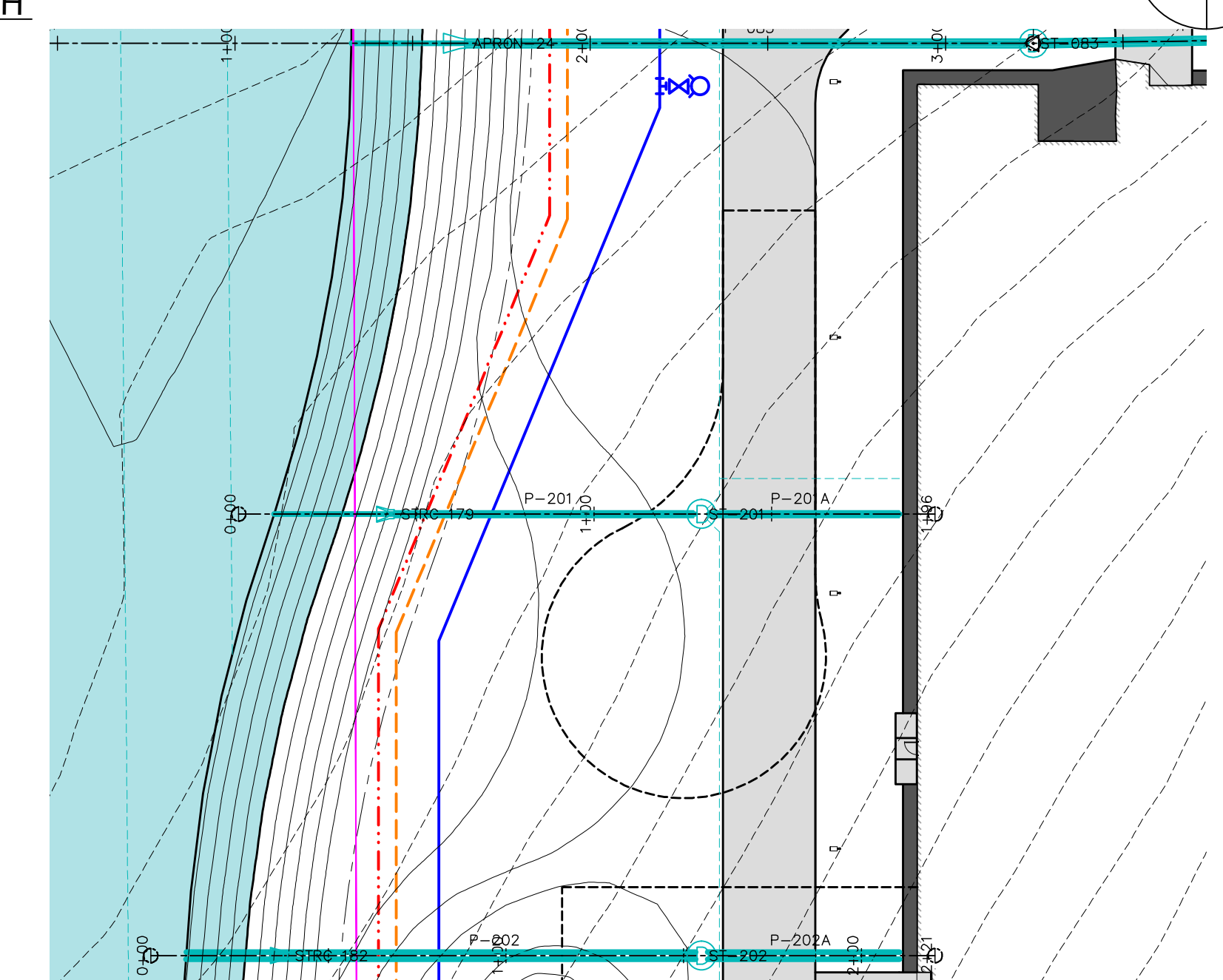
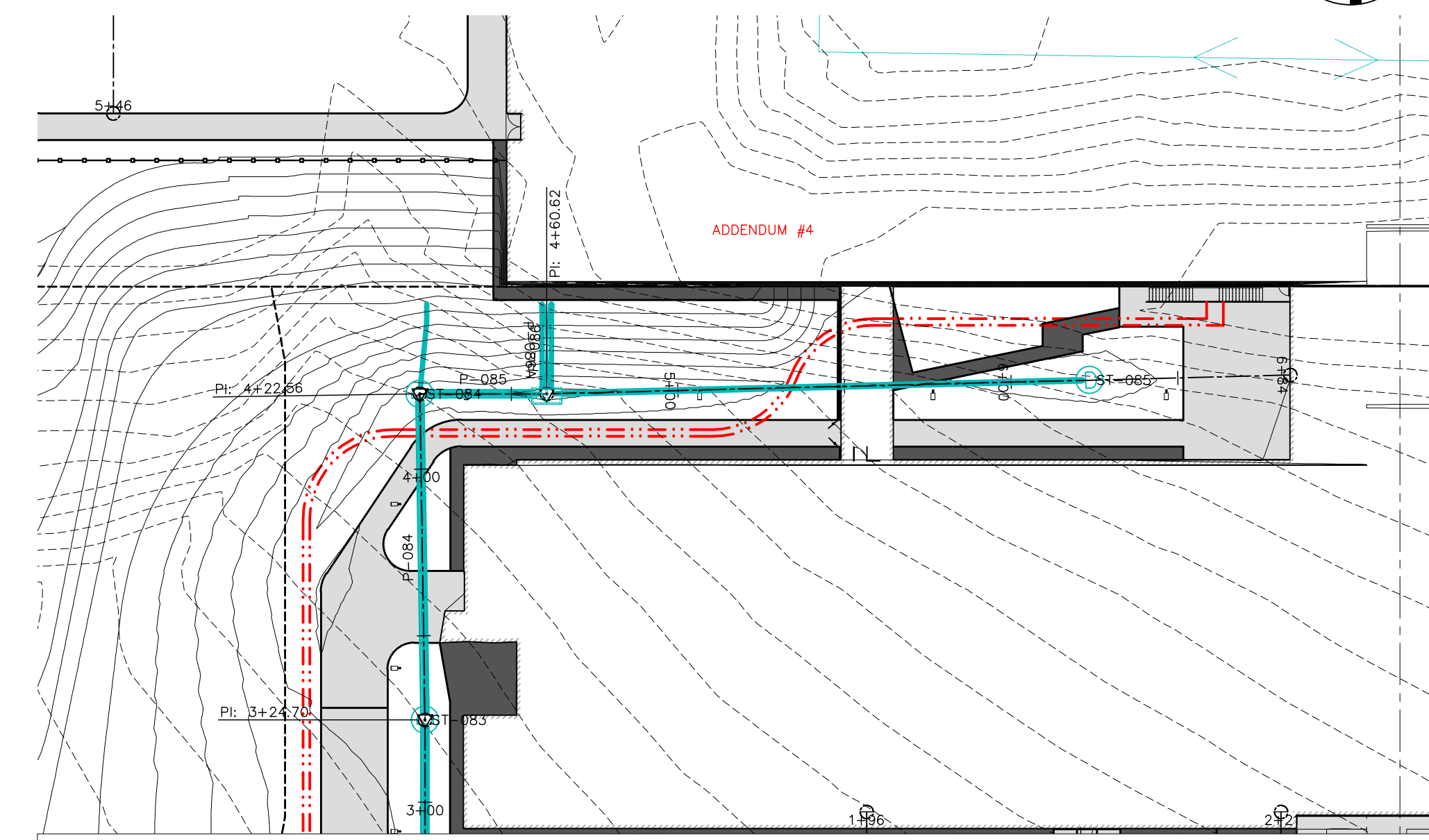
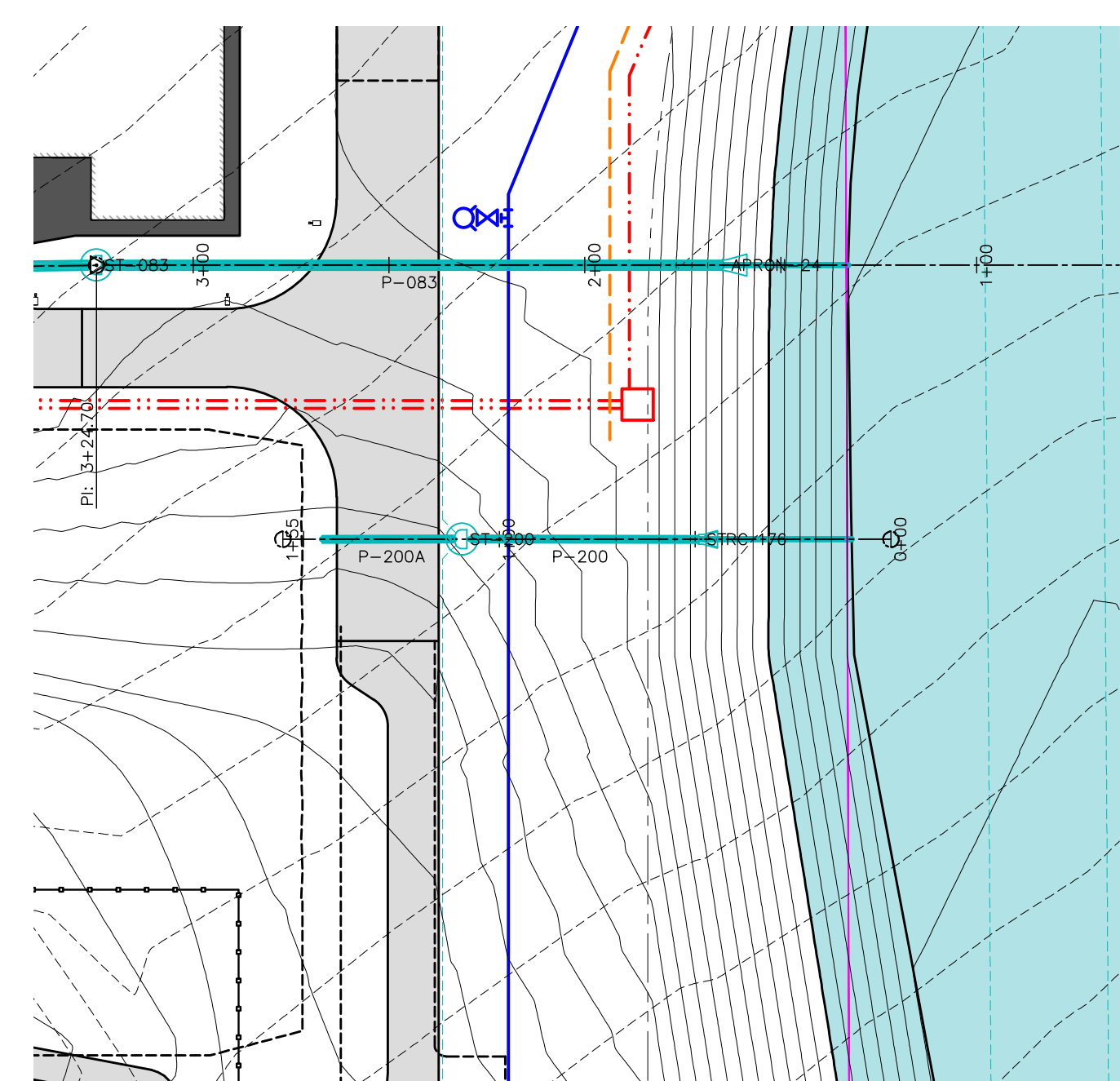
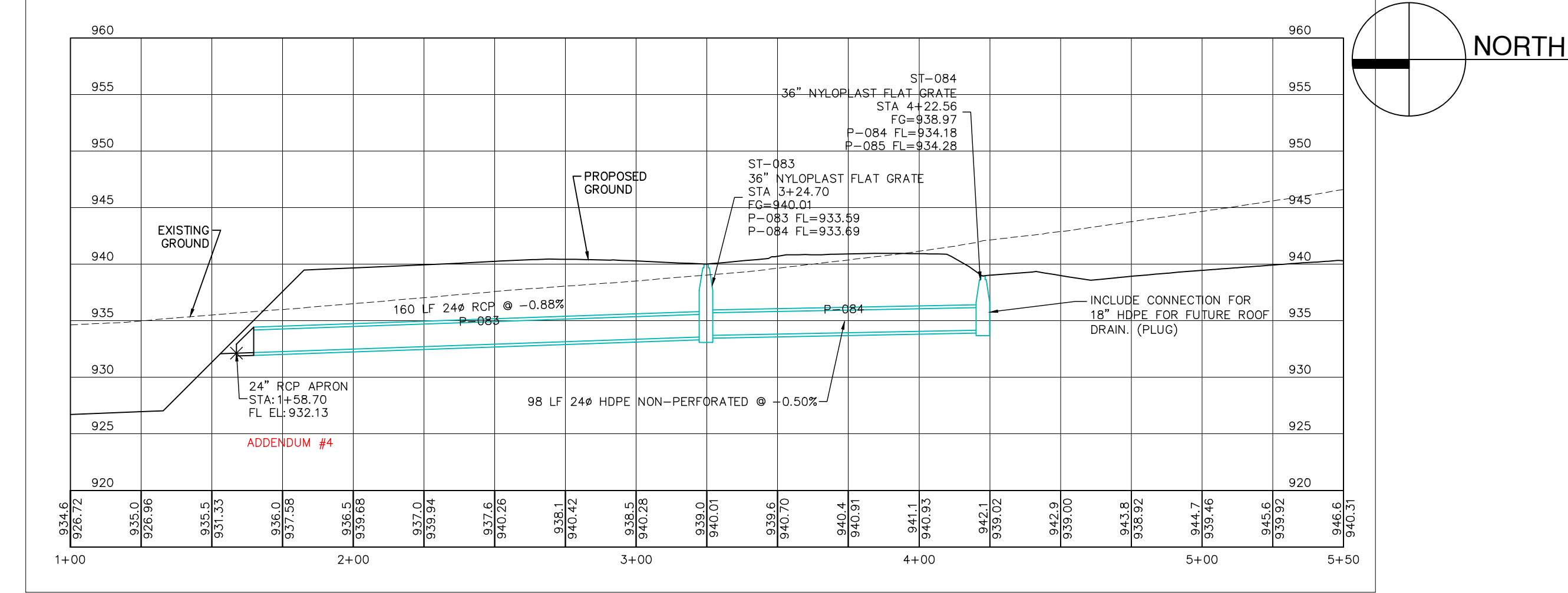
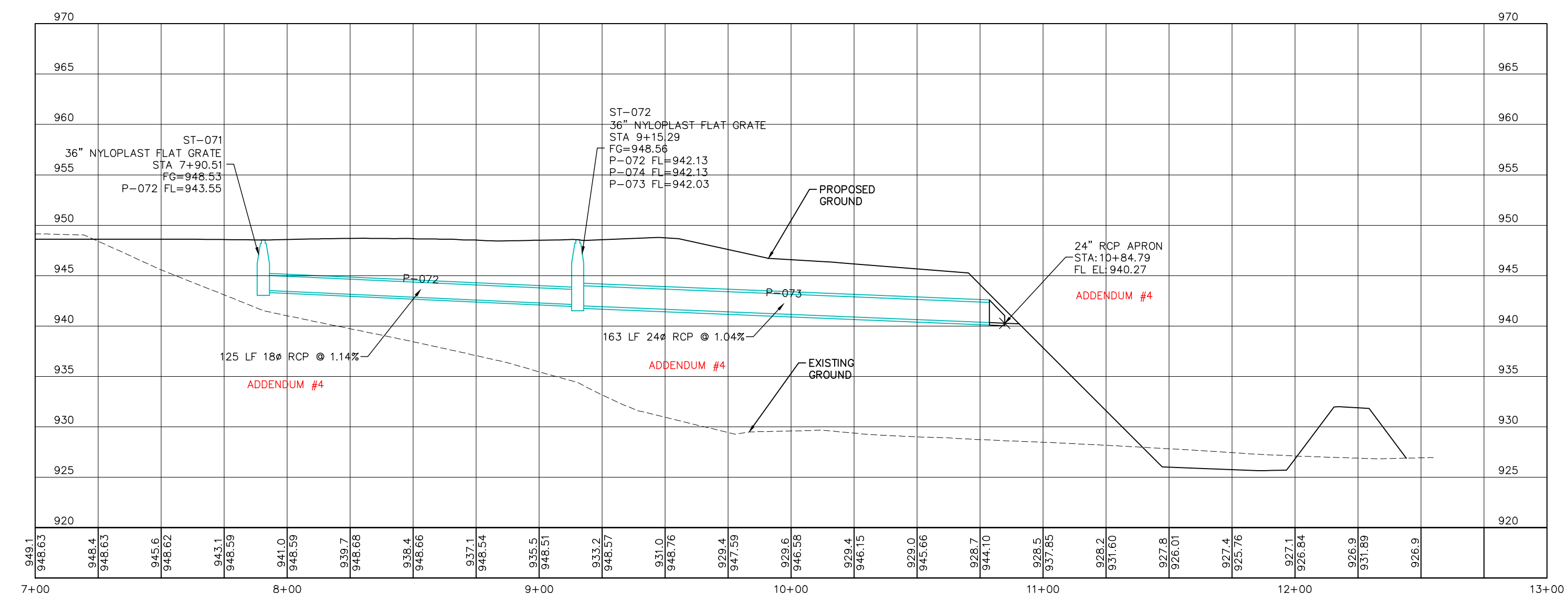
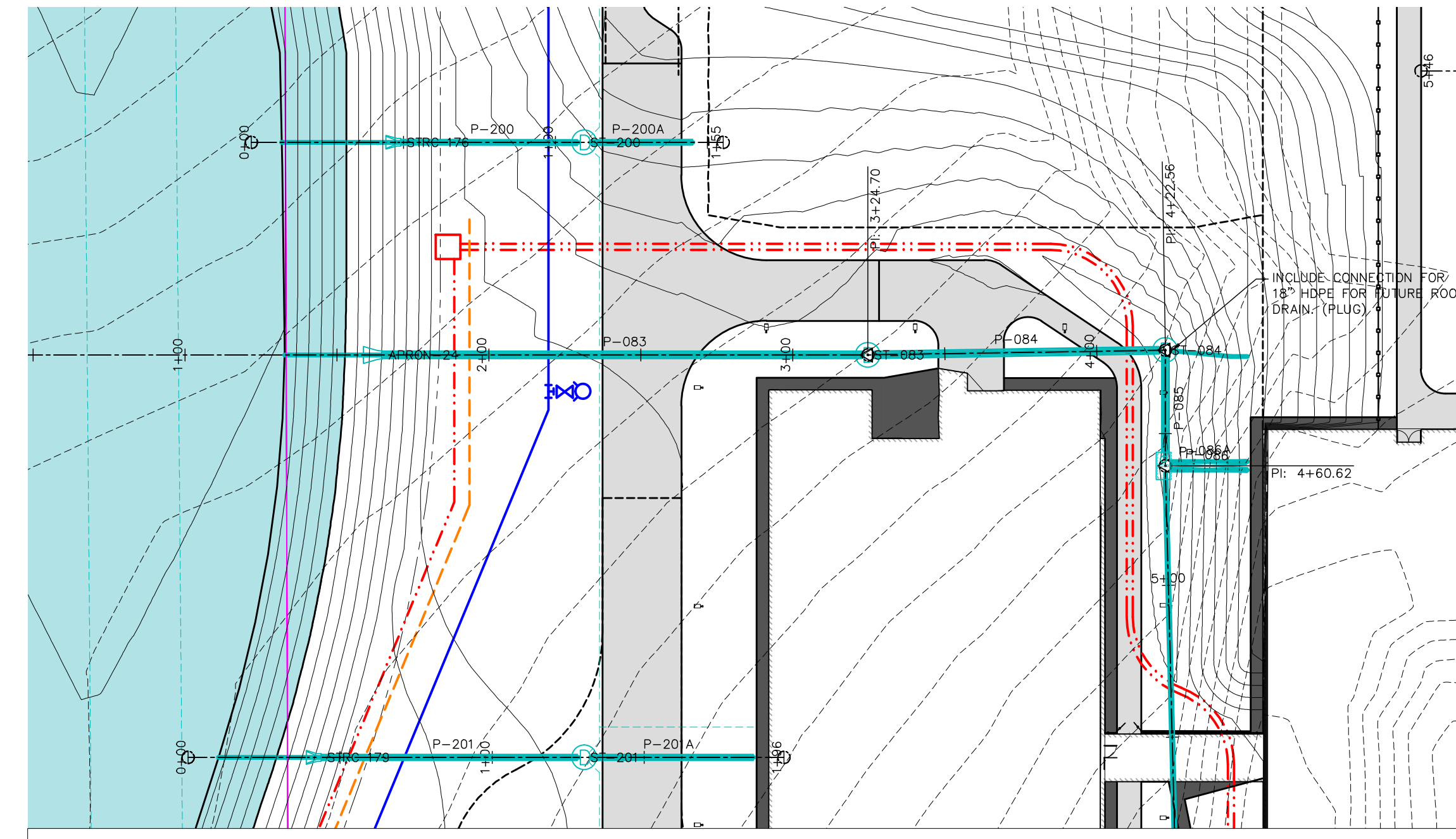
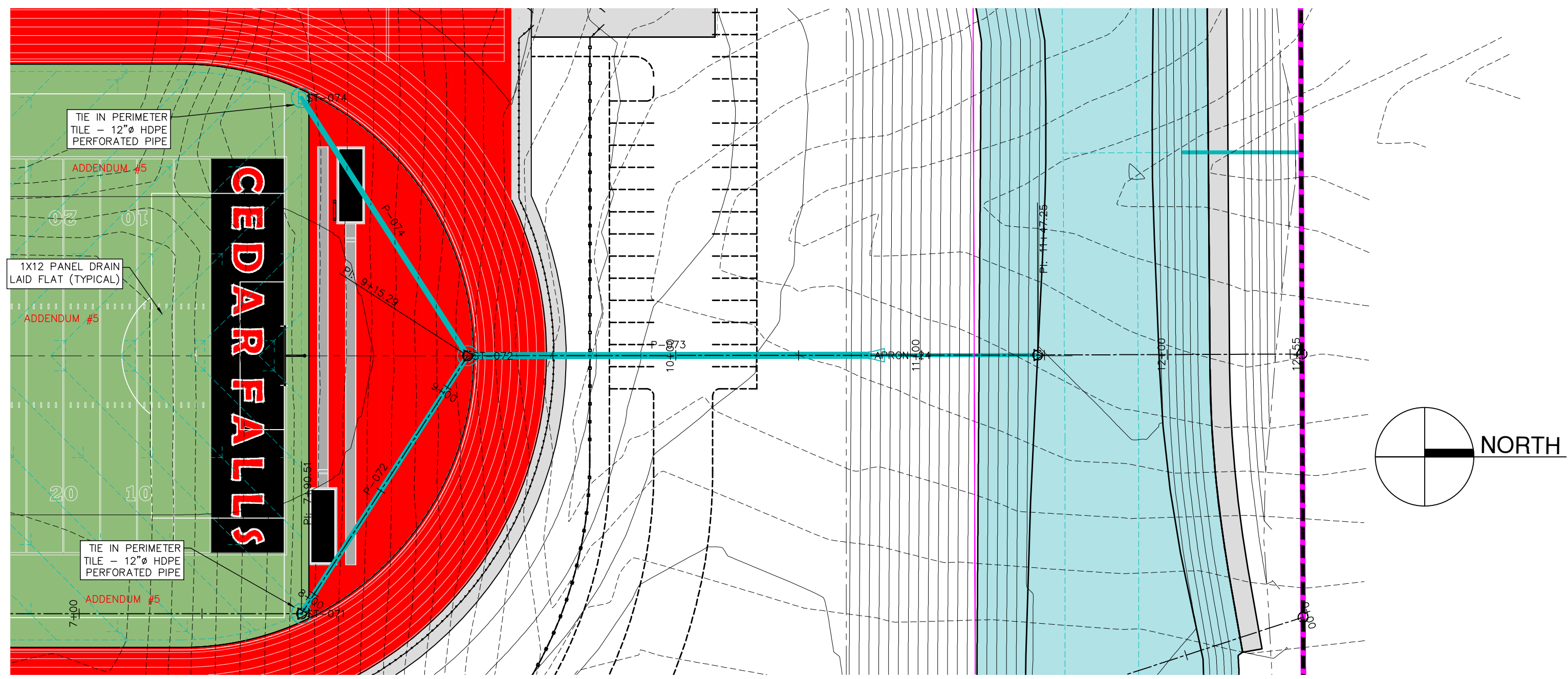
GENERAL SITE NOTES

LEGEND

- EXISTING GRAVEL EDGE
- EXISTING ELECTRICAL
- EXISTING FIBER OPTIC
- EXISTING OVERHEAD ELECTRIC
- EXISTING SANITARY SEWER
- EXISTING WATER MAIN
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- EXISTING STORM SEWER
- PROPOSED GAS MAIN
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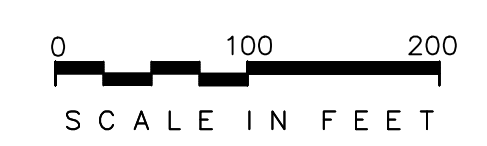




GENERAL SITE NOTES

LEGEND

- EXISTING GRAVEL EDGE
- EXISTING ELECTRICAL
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- ROAD PAVEMENT
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REVISIONS:

Description	Date	No.
ADDENDUM #1	12/04/2020	

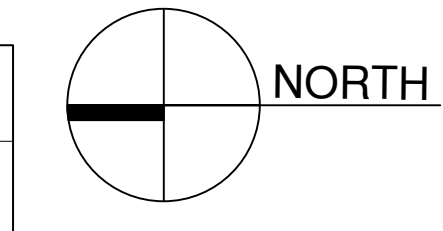
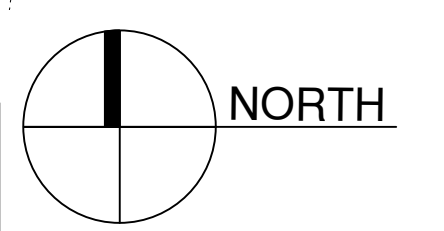
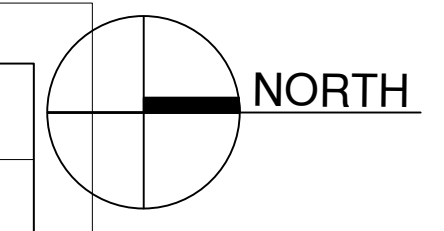
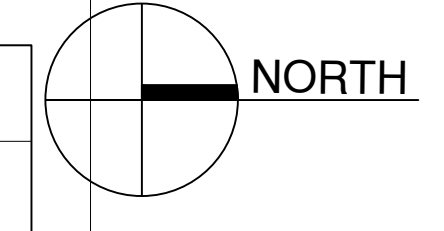
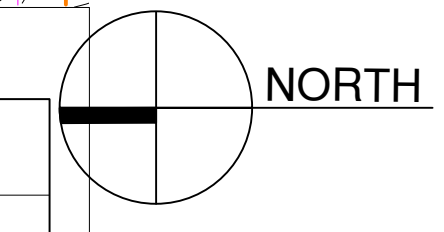
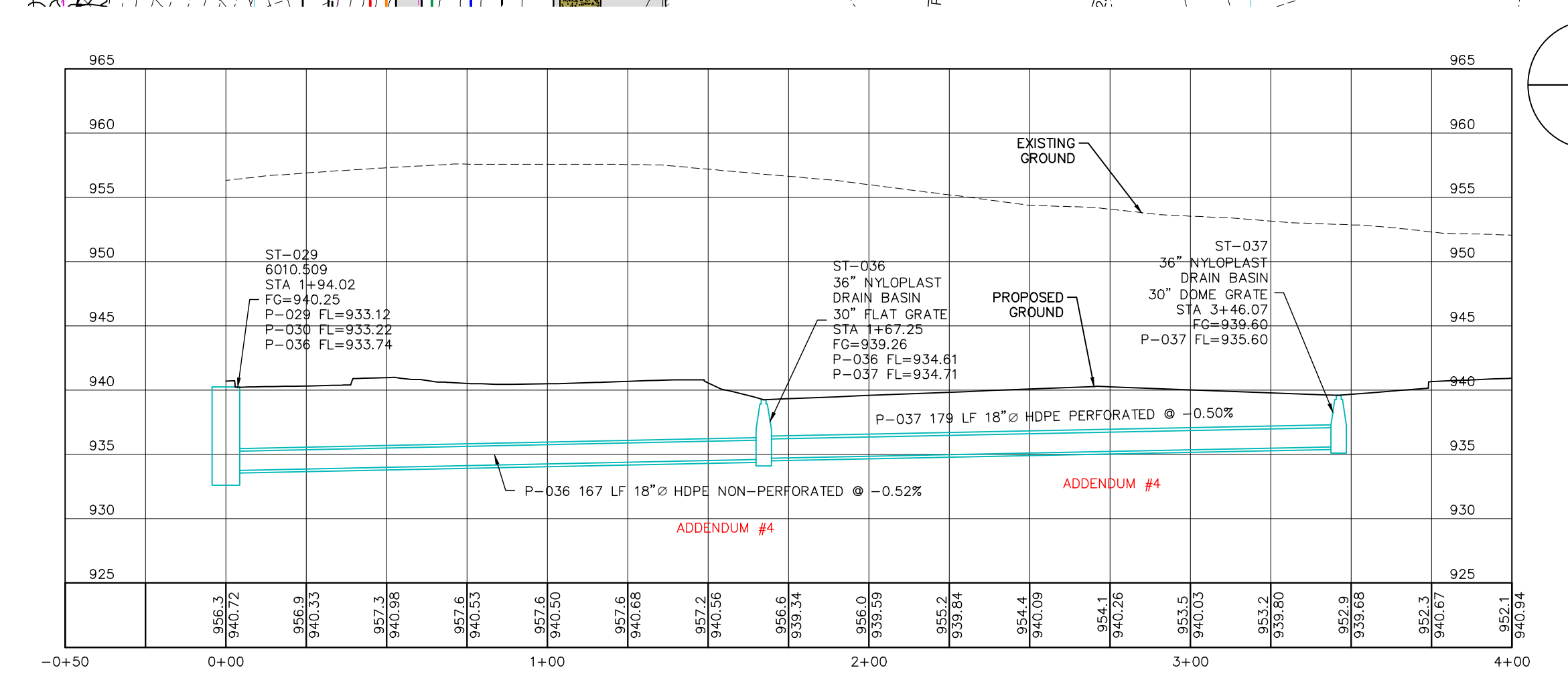
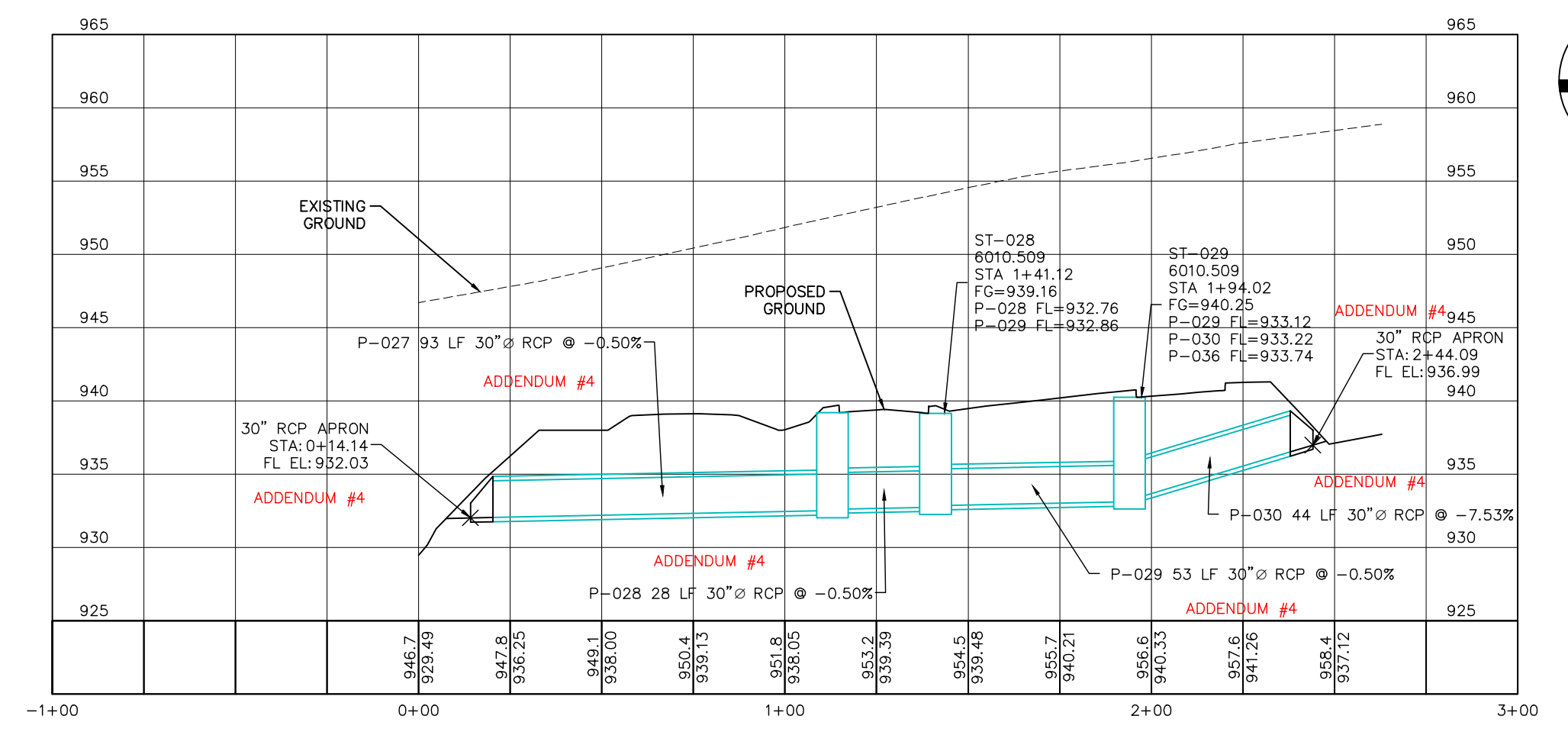
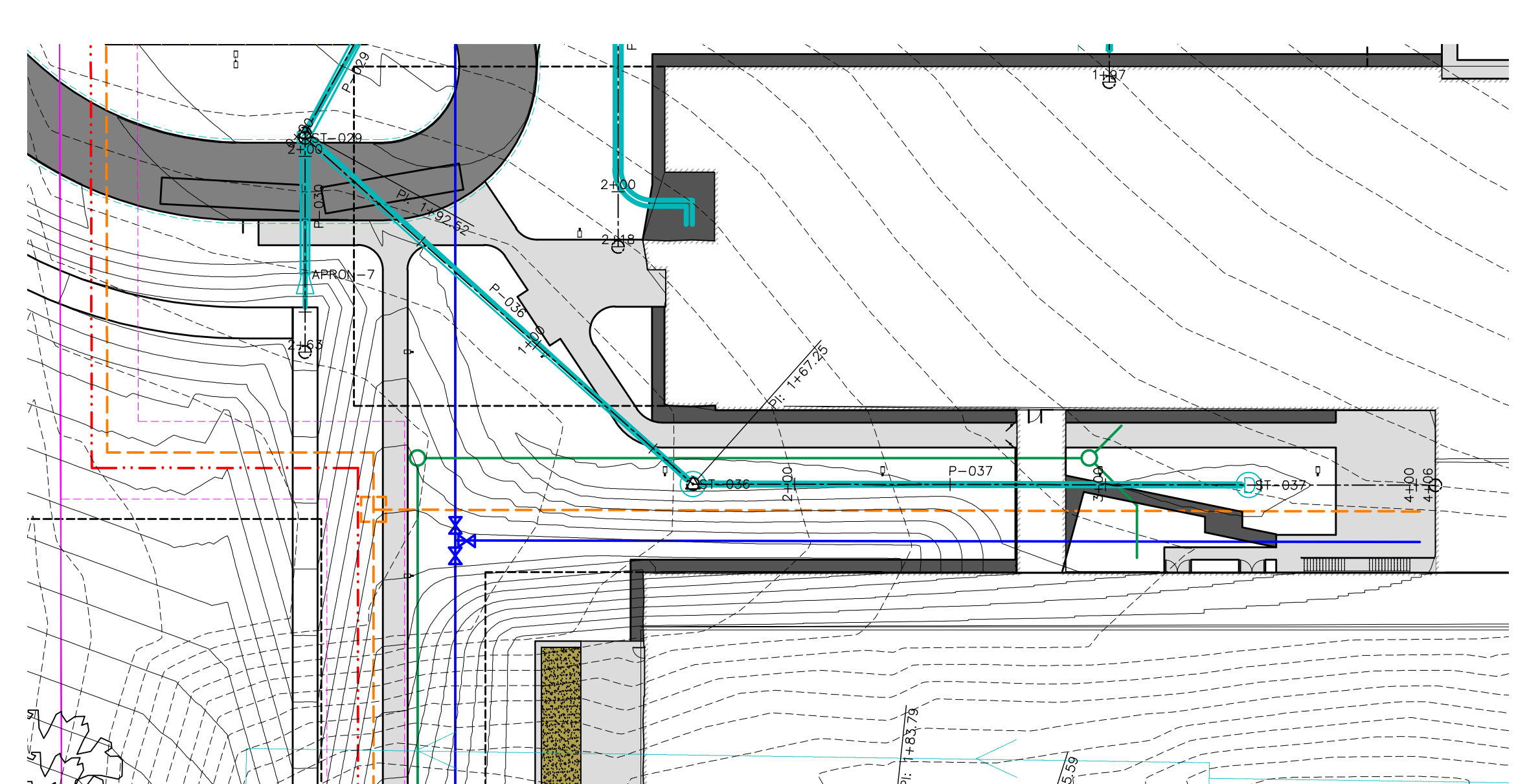
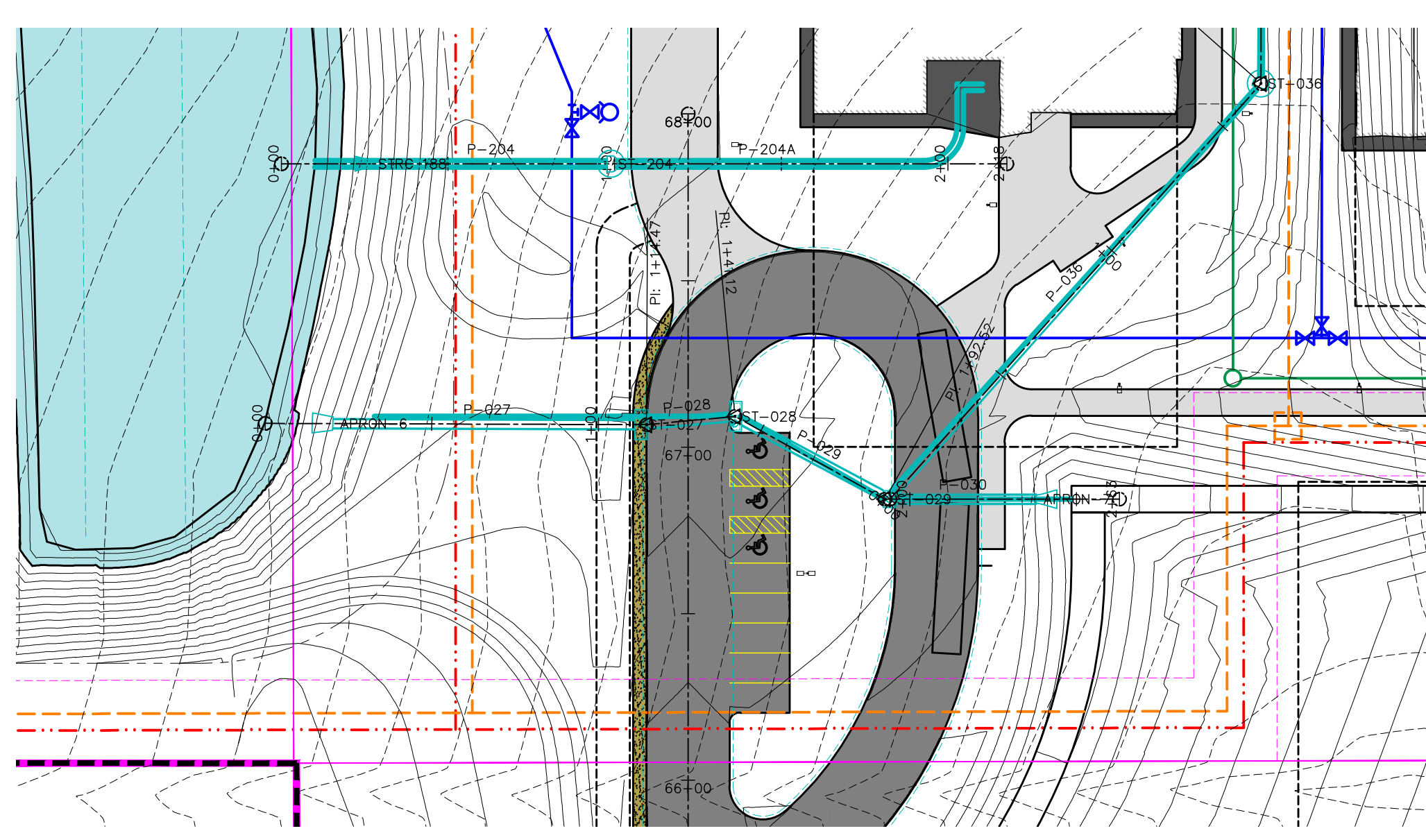
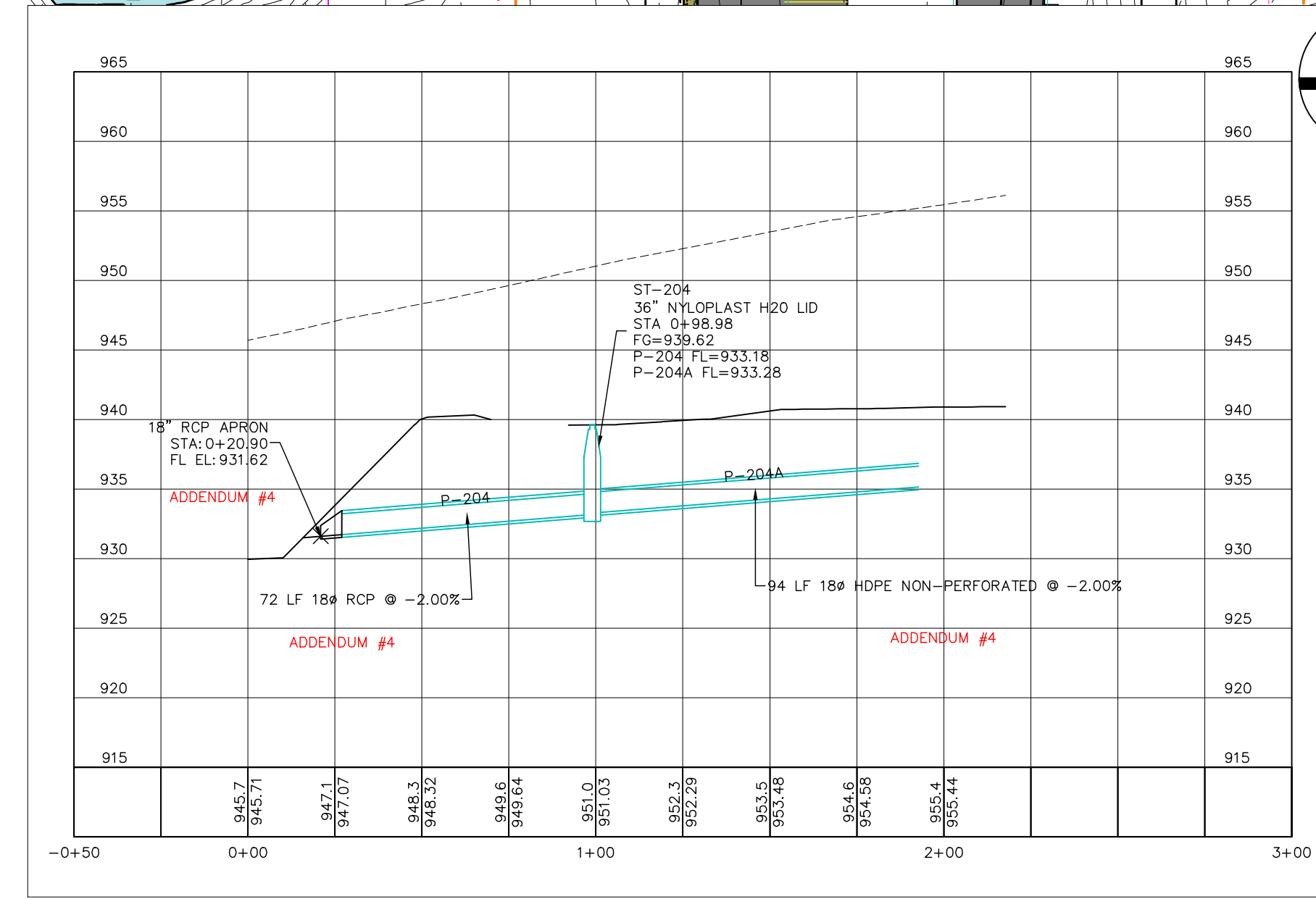
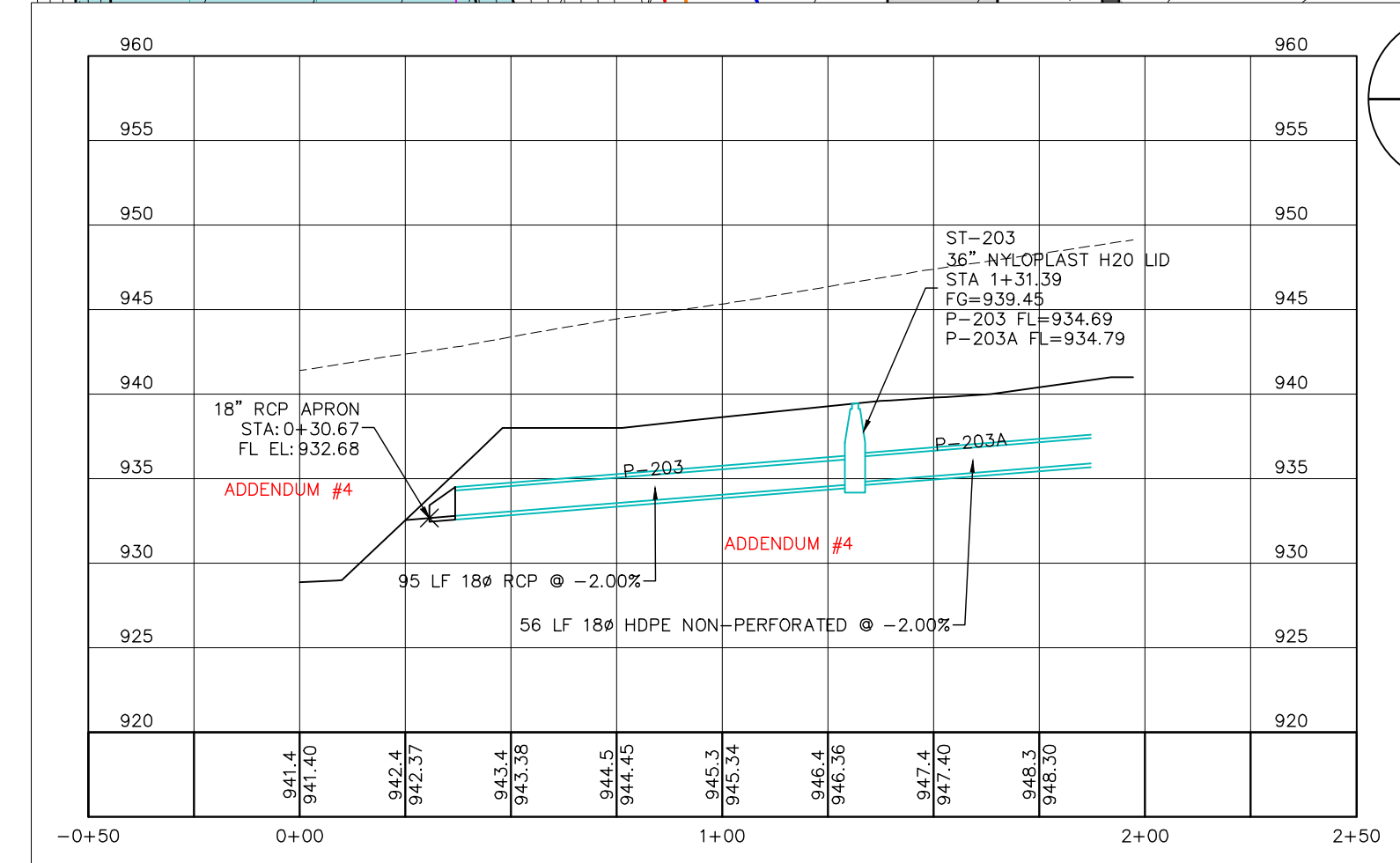
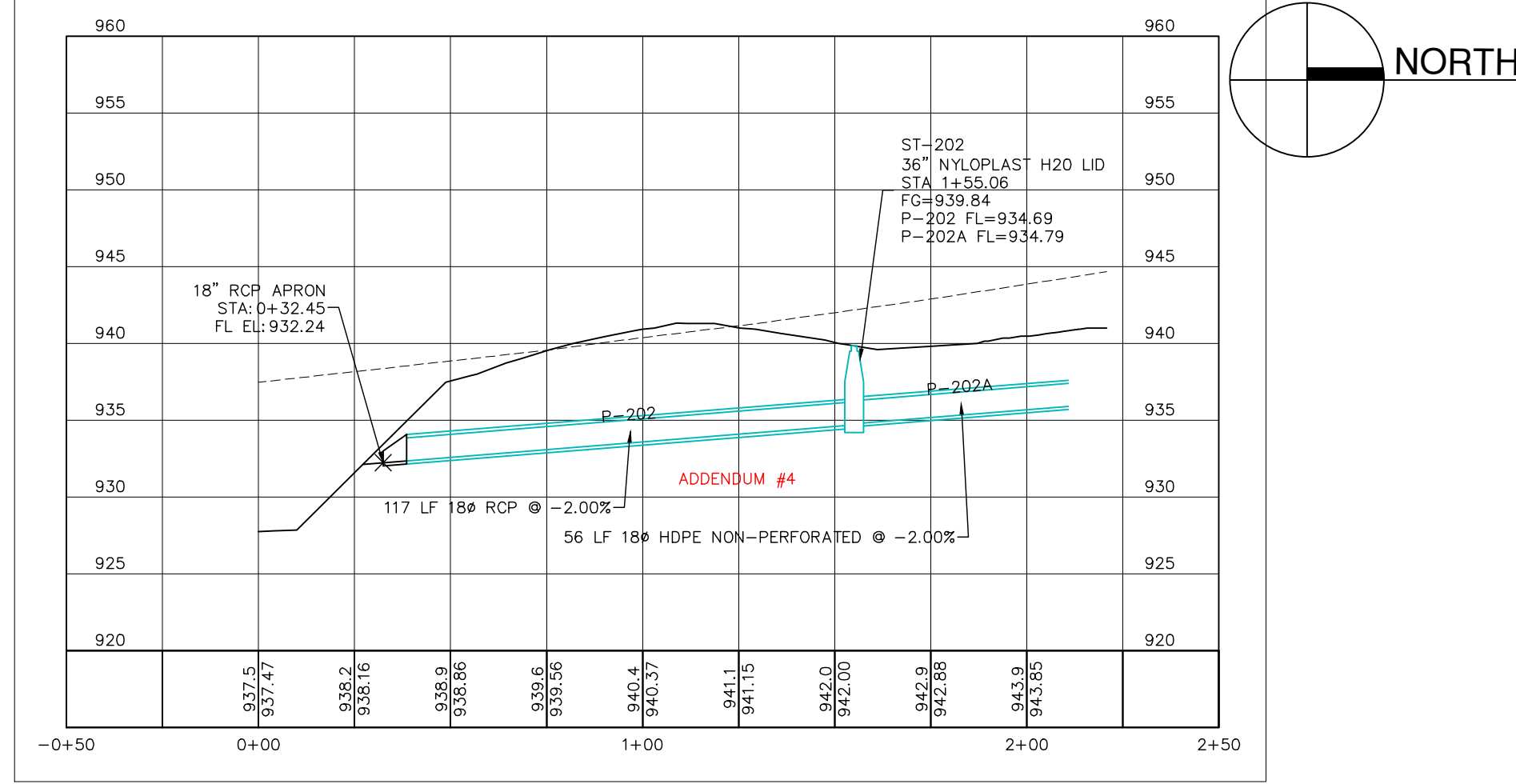
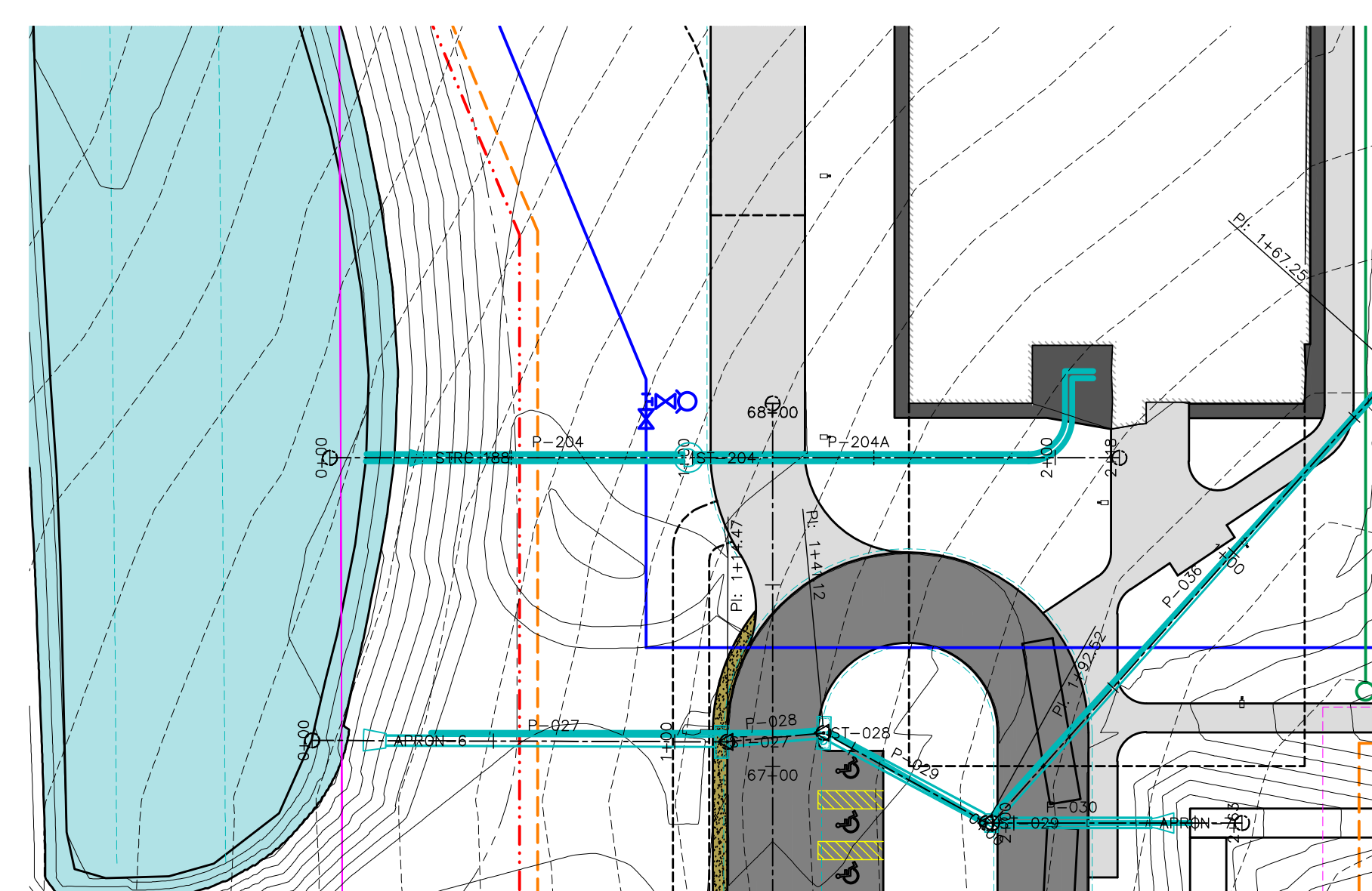
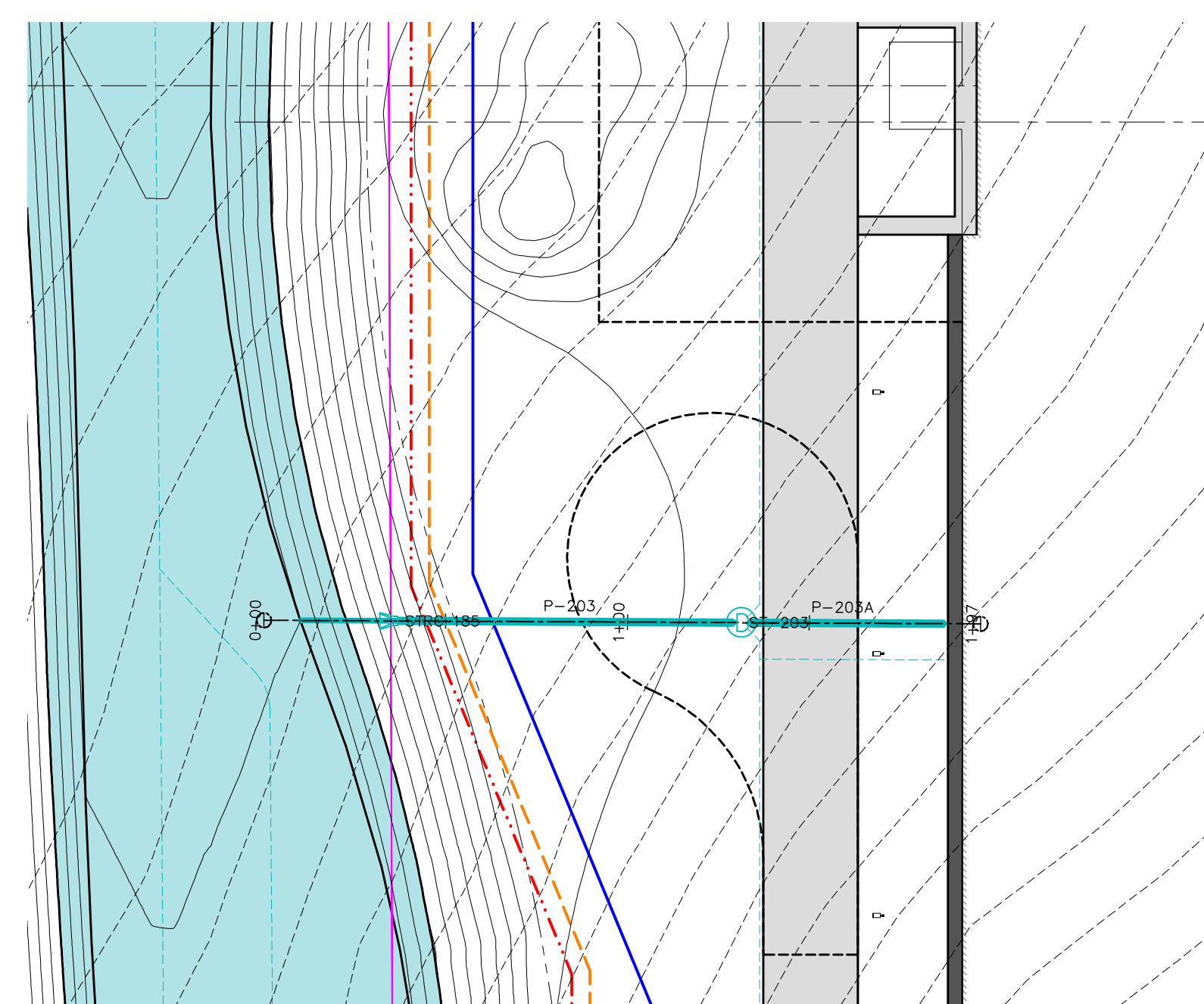
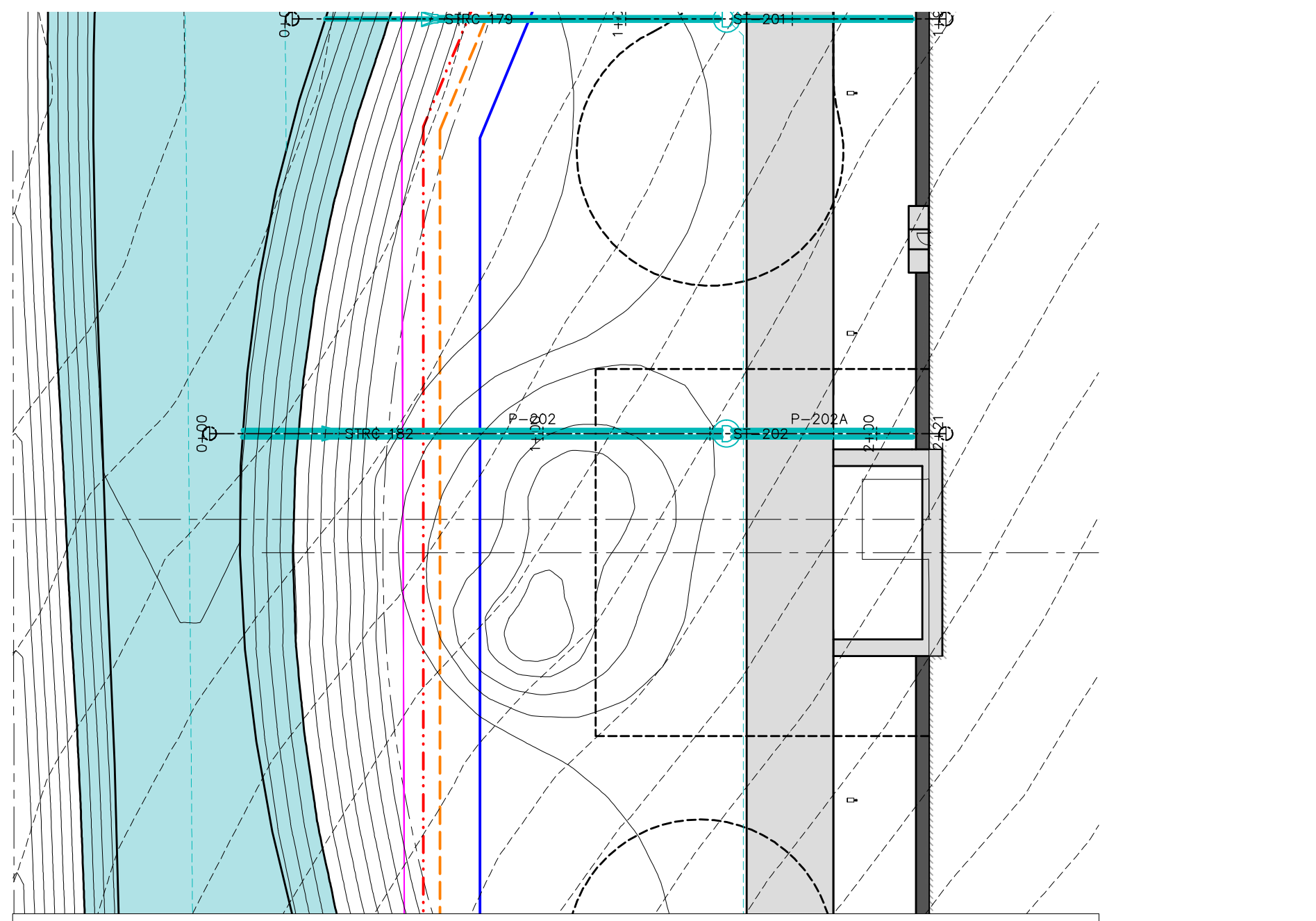
OWNER SIGN-OFF:  
 DATE \_\_\_\_\_ NAME \_\_\_\_\_

PROJECT NO:  
 19116  
 DATE:  
 JANUARY 22, 2021  
 SHEET SET:  
 CONSTRUCTION  
 DOCUMENTS

SHEET NAME:  
 STORM DRAINAGE  
 PLAN



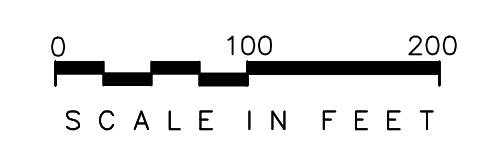
PLAN NOTES



GENERAL SITE NOTES

LEGEND

- EXISTING GRAVEL EDGE
- EXISTING ELECTRICAL
- EXISTING FIBER OPTIC
- EXISTING OVERHEAD ELECTRIC
- EXISTING SANITARY SEWER
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- FUTURE ADDITIONS
- ROAD PAVEMENT
- SIDEWALK/TRAIL
- GRAVEL EDGE



REVISIONS:	Description	Date	No.
ADDENDUM #4		12/04/2020	

OWNER SIGN-OFF:  
DATE \_\_\_\_\_ NAME \_\_\_\_\_

PROJECT NO:  
19116

DATE:  
JANUARY 22, 2021  
SHEET SET:  
CONSTRUCTION  
DOCUMENTS

SHEET NAME:  
STORM DRAINAGE  
PLAN



### 4030.221

REINFORCING BAR LIST

D	W	Mark	Size	Length	Count	D	W	Mark	Size	Length	Count
12"	2'-4"	411	4	2'-0"	3	48"	7'-10"	411	4	7'-0"	3
		412	4	3'-0"	2			412	4	3'-0"	6
18"	2'-10 1/2"	411	4	2'-0 1/2"	3	54"	8'-4"	411	4	8'-1"	3
		412	4	3'-0"	2			412	4	3'-0"	6
24"	3'-0"	411	4	3'-0"	3	60"	8'-11"	411	4	8'-7"	3
		412	4	3'-0"	3			412	4	3'-0"	6
30"	4'-0"	411	4	4'-0"	3	66"	9'-5"	411	4	9'-1"	3
		412	4	3'-0"	3			412	4	3'-0"	6
36"	4'-6"	411	4	4'-6"	3	72"	10'-0"	411	4	9'-6"	3
		412	4	3'-0"	3			412	4	3'-0"	7
42"	7'-0"	411	4	7'-0"	3	78"	10'-7"	411	4	10'-3"	3
		412	4	3'-0"	3			412	4	3'-0"	7
		413	4	3'-0"	3	84"	11'-4"	411	4	11'-0"	3
		414	4	3'-0"	3			414	4	3'-0"	6

RCP APRON SECTION FOOTING

### 6010.501/ SW-501

REINFORCING BAR LIST

Mark	Size	Location	Shape	Count	Length	Spacing
4w1	4	Walls	---	4	Wall Height minus 4"	12"
4w2	4	Long Walls	---	4	Varies	12"
4w3	4	Short Walls	---	4	Varies	12"
4b1	4	Base	---	4	10"	10"
4b2	4	Base	---	5	3'-2"	10"

MAXIMUM PIPE DIAMETERS

Location	Pipe Structure	Cast-in-place Structure
Short Wall	18"	18"
Long Wall	24"	30"

### 6010.603/ SW-603

REINFORCING BAR LIST

Mark	Size	Location	Shape	Count	Length	Spacing
4w1	4	Walls	---	4	Wall Height minus 4"	12"
4w2	4	Long Walls	---	4	Varies	12"
4w3	4	Short Walls	---	4	Varies	12"
4b1	4	Base	---	4	10"	10"
4b2	4	Base	---	5	3'-2"	10"

MAXIMUM PIPE DIAMETERS

Location	Pipe Structure	Cast-in-place Structure
Short Wall	18"	18"
Long Wall	24"	30"

### 6010.507/ SW-507

REINFORCING BAR LIST

Mark	Size	Location	Shape	Count	Length	Spacing
411	4	Top	---	4	4'-0"	12"
412	4	Top	---	4	3'-6"	12"
413	4	Top	---	10	10"	8"
414	4	Base	---	6	3'-0"	11"
415	4	Base	---	5	4'-0"	10"
416	4	Insert	---	2	Boxout Length minus 8"	See Plan
4w1	4	Walls	---	4	Wall Height minus 4"	12"
4w2	4	Long Walls	---	Varies	3'-8"	12"
4w3	4	Short Walls	---	Varies	3'-8"	12"

MAXIMUM PIPE DIAMETERS

Location	Pipe Structure	Cast-in-place Structure
Short Wall	18"	18"
Long Wall	24"	30"

### 6010.401/SW-401

REINFORCING BAR LIST

Mark	Size	Location	Shape	Count	Length	Spacing
411	4	Top	---	4	4'-0"	12"
412	4	Top	---	4	3'-6"	12"
413	4	Top	---	10	10"	8"
414	4	Base	---	6	3'-0"	11"
415	4	Base	---	5	4'-0"	10"
416	4	Insert	---	2	Boxout Length minus 8"	See Plan
4w1	4	Walls	---	4	Wall Height minus 4"	12"
4w2	4	Long Walls	---	Varies	3'-8"	12"
4w3	4	Short Walls	---	Varies	3'-8"	12"

MAXIMUM PIPE DIAMETERS

Location	Pipe Structure	Cast-in-place Structure
Short Wall	18"	18"
Long Wall	24"	30"

### 6010.509/ SW-509

REINFORCING BAR LIST

Mark	Size	Location	Shape	Count	Length	Spacing
4b1	4	Base	---	8	3'-6"	12"
4b2	4	Base	---	5	3'-6"	10"
411	4	Insert	---	4	Boxout Length minus 8"	See Insert
412	4	Top	---	8	3'-6"	12"
413	4	Top	---	18	10"	8"
4w1	4	Walls	---	22	Wall Height minus 4"	12"
4w2	4	Long Walls	---	Varies	3'-8"	12"
4w3	4	Short Walls	---	Varies	3'-8"	12"
5w1	5	Beam	---	2	7'-3"	4"

BENT BARS

### 6010.509/ SW-509

REINFORCING BAR LIST

Mark	Size	Location	Shape	Count	Length	Spacing
4b1	4	Base	---	8	3'-6"	12"
4b2	4	Base	---	5	3'-6"	10"
411	4	Insert	---	4	Boxout Length minus 8"	See Insert
412	4	Top	---	8	3'-6"	12"
413	4	Top	---	18	10"	8"
4w1	4	Walls	---	22	Wall Height minus 4"	12"
4w2	4	Long Walls	---	Varies	3'-8"	12"
4w3	4	Short Walls	---	Varies	3'-8"	12"
5w1	5	Beam	---	2	7'-3"	4"

ISOMETRIC (REFER TO SECTION B-B for alignment of Top with Spacer)

### DETENTION BASIN DRAINAGE TILE TRENCH DETAIL

NOTES

- REMOVABLE MESH CAP (1/2" HARDWARE CLOTH) OR 1/2" MESH GALVANIZED SCREEN FASTENED SECURELY, BUT NOT PERMANENTLY, TO OUTLET PIPE. OUTLET PIPE SHOULD EXTEND INTO INTAKE SO THAT MESH CAP IS REMOVABLE.
- REDUCING COUPLER (AT THE CONTRACTOR'S OPTION, THE SUBDRAIN MAY BE EXTENDED INTO THE C.M.P. A MINIMUM OF 1'-0" AND THE OPENING FULLY SEALED WITH GROUT).
- DRAIN TILE OUTLET TO BE GROUTED ON THE INSIDE AND OUTSIDE OF THE INLET WALL.

### 6010.401/SW-401

REINFORCING BAR LIST

Mark	Size	Location	Shape	Count	Length	Spacing
411	4	Top	---	4	4'-0"	12"
412	4	Top	---	4	3'-6"	12"
413	4	Top	---	10	10"	8"
414	4	Base	---	6	3'-0"	11"
415	4	Base	---	5	4'-0"	10"
416	4	Insert	---	2	Boxout Length minus 8"	See Plan
4w1	4	Walls	---	4	Wall Height minus 4"	12"
4w2	4	Long Walls	---	Varies	3'-8"	12"
4w3	4	Short Walls	---	Varies	3'-8"	12"

MAXIMUM PIPE DIAMETERS

Location	Pipe Structure	Cast-in-place Structure
Short Wall	18"	18"
Long Wall	24"	30"

SHALLOW RECTANGULAR STORM SEWER MANHOLE

### GENERAL SITE NOTES

1. REMOVABLE MESH CAP (1/2" HARDWARE CLOTH) OR 1/2" MESH GALVANIZED SCREEN FASTENED SECURELY, BUT NOT PERMANENTLY, TO OUTLET PIPE. OUTLET PIPE SHOULD EXTEND INTO INTAKE SO THAT MESH CAP IS REMOVABLE.

2. REDUCING COUPLER (AT THE CONTRACTOR'S OPTION, THE SUBDRAIN MAY BE EXTENDED INTO THE C.M.P. A MINIMUM OF 1'-0" AND THE OPENING FULLY SEALED WITH GROUT).

3. DRAIN TILE OUTLET TO BE GROUTED ON THE INSIDE AND OUTSIDE OF THE INLET WALL.

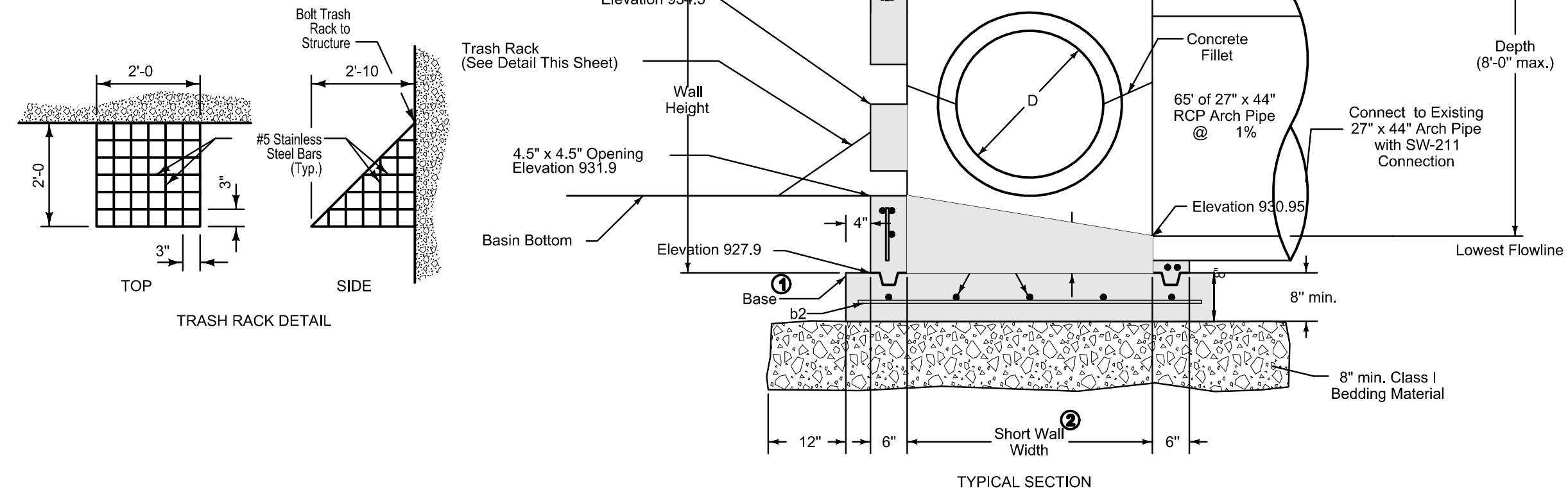
GENERAL NOTES

- MATERIAL AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CURRENT STANDARD SPECIFICATIONS.
- REDUCING COUPLER (AT CONTRACTOR'S OPTION, THE SUBDRAIN MAY BE EXTENDED INTO THE C.M.P. A MINIMUM OF 1'-0" AND THE OPENING FULLY SEALED WITH GROUT).
- SUBDRAIN OUTLET TO BE GROUTED ON THE INSIDE AND OUTSIDE OF THE INLET WALL.
- ALL CORRUGATED METAL INLETS MUST HAVE RODENT GUARDS.
- REMOVABLE MESH CAP (1/2" HARDWARE CLOTH) OR 1/2" MESH GALVANIZED SCREEN FASTENED SECURELY, BUT NOT PERMANENTLY, TO OUTLET PIPE. OUTLET PIPE SHOULD EXTEND INTO INTAKE SO THAT MESH CAP IS REMOVABLE.



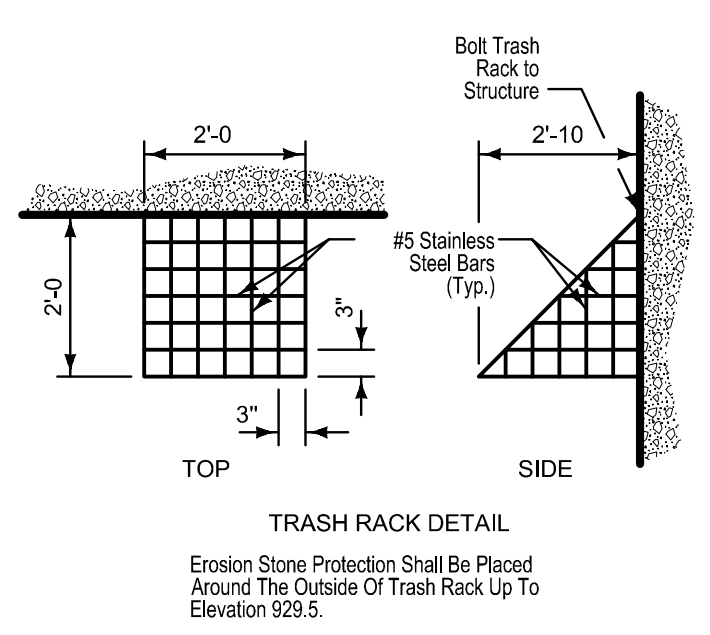
Adjacent walls may have different widths based upon pipe configuration, but structure must be rectangular.

- 1 Cast-in-place base shown. If base is precast integral with walls, the footprint of the base is not required to extend beyond the outer edge of the walls.
- 2 Wall widths vary with pipe diameter and range from 40 inches minimum to 77 inches maximum. Provide 6 inches of wall width (minimum) each side of pipe opening.
- 3 Provide two #4 hoop bars at top opening and at all pipe openings.
- 4 7 inch minimum wall height above all pipes.

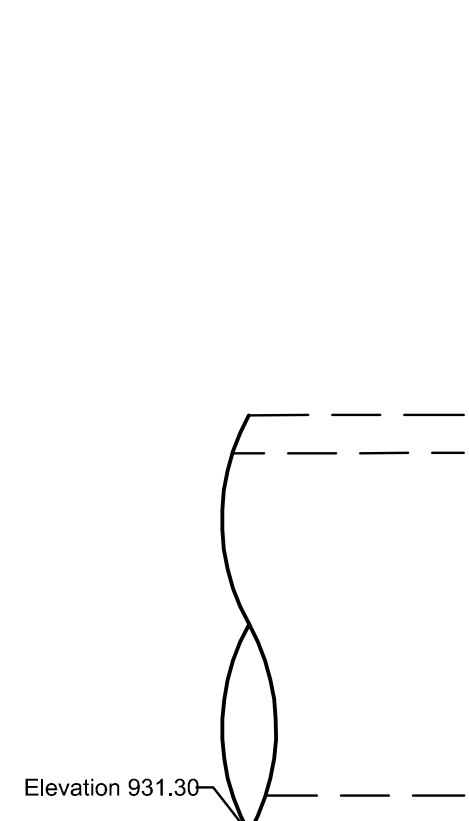


SOUTHWEST DETENTION BASIN #3

- 1 Precast (shown) or cast-in-place base:
  - Precast: 6 inch thick concrete with #6 welded wire mesh on 4 inch centers (WWF 4" x 4"). Center mesh vertically within base.
  - Cast-in-place: 8 inch thick non-reinforced concrete.
- 2 12 inch minimum riser height above all pipes.

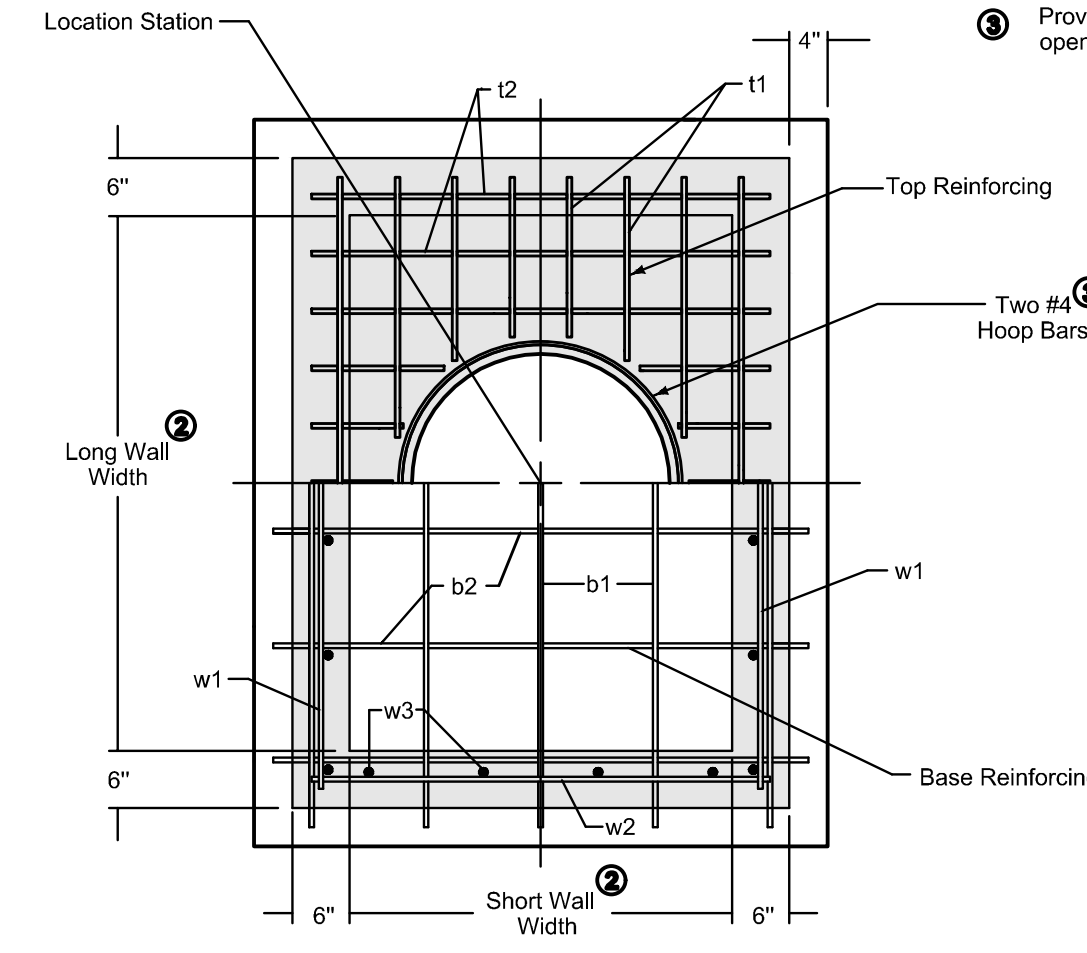


SOUTHWEST DETENTION BASIN #3



SOUTHWEST DETENTION BASIN #3

- 2 Wall widths vary with pipe diameter and range from 40 inches minimum to 77 inches maximum. Provide 6 inches of wall width (minimum) each side of pipe opening.
- 3 Provide two #4 hoop bars at top opening and at all pipe openings.

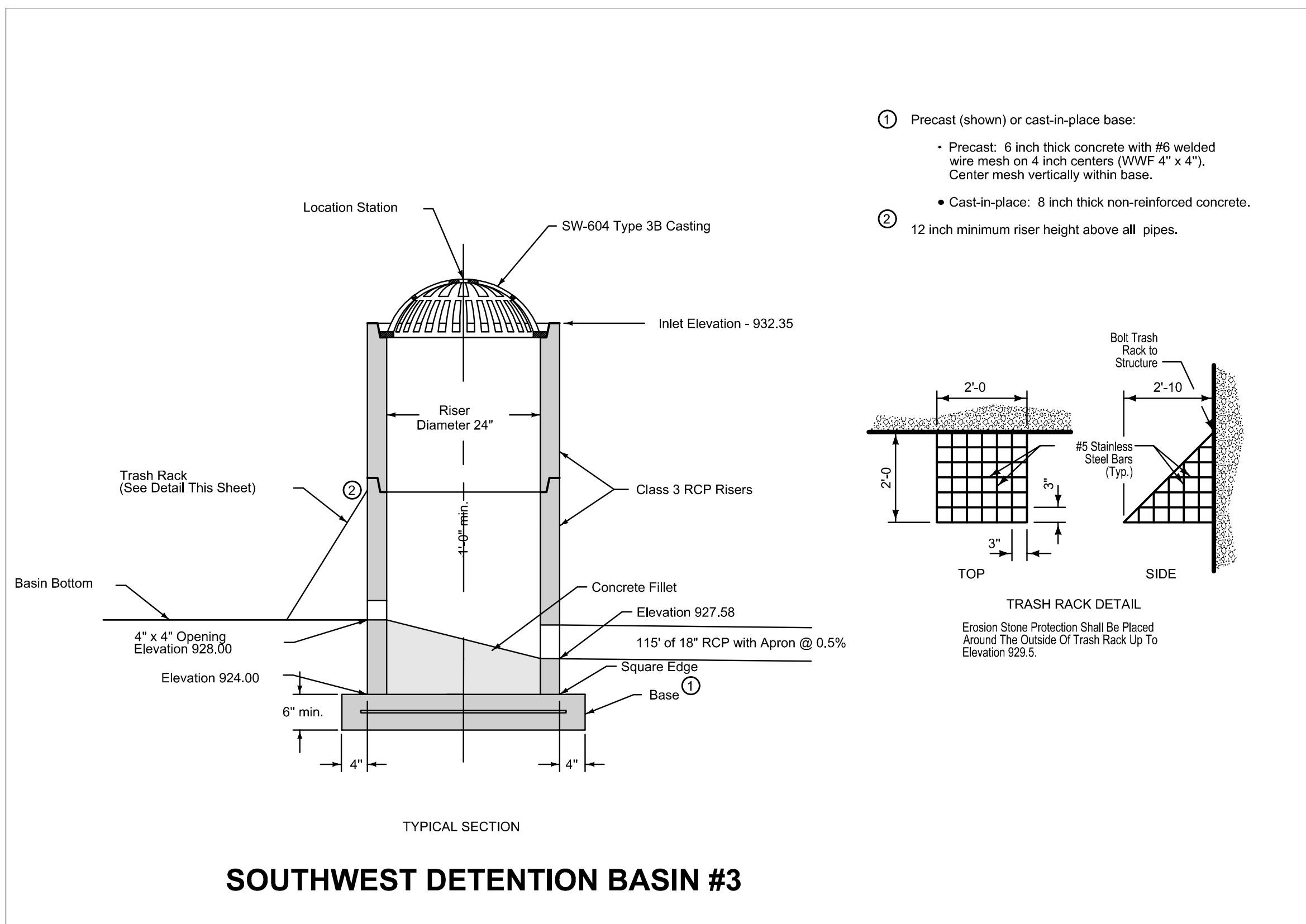


REINFORCING BAR LIST

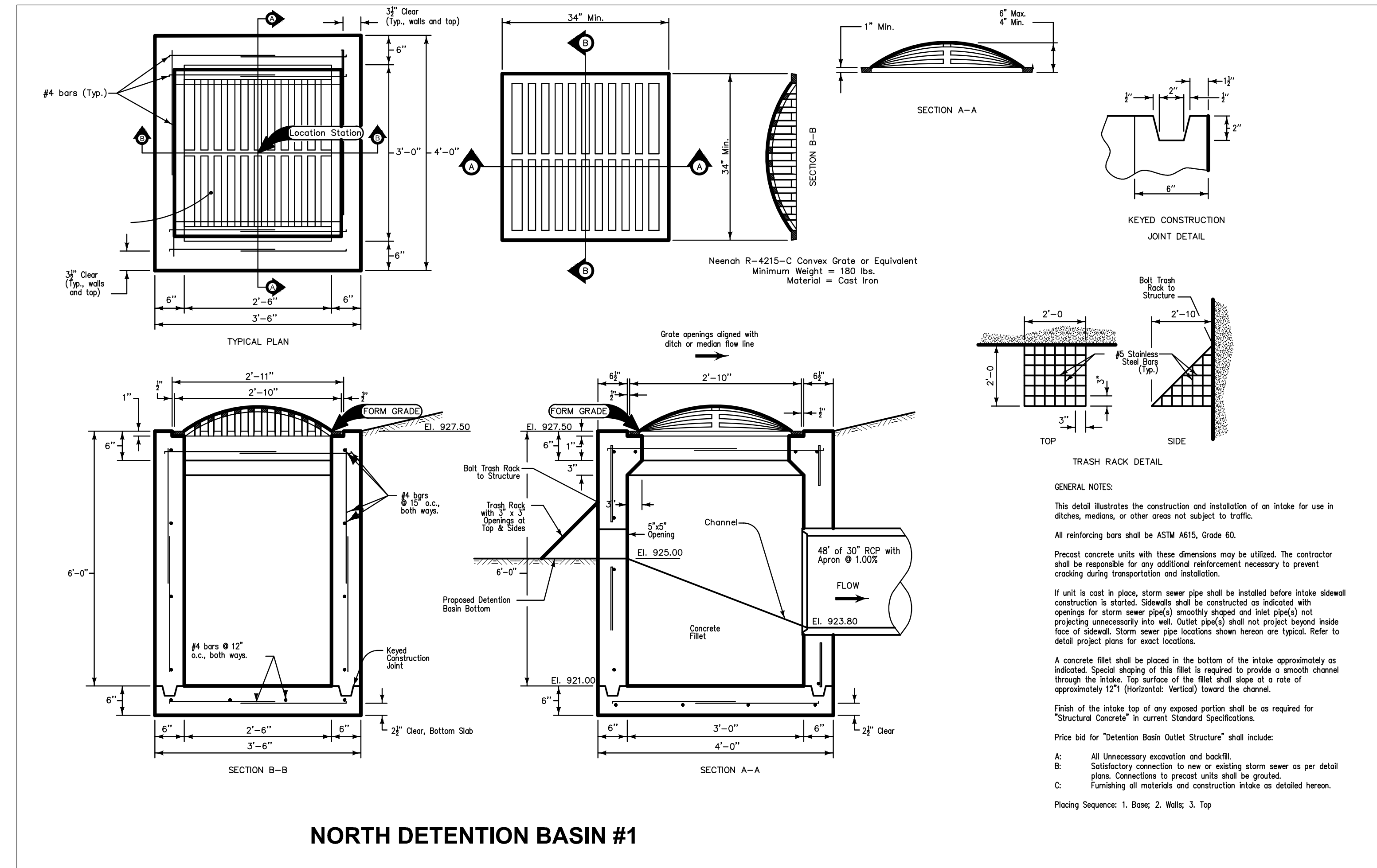
Mark	Size	Location	Shape	Length	Spacing
t1	See Table	Top	---	Long Wall plus 8"	6"
t2	See Table	Top	---	Short Wall plus 8"	6"
b1	See Table	Base	---	Long Wall plus 14"	12"
b2	See Table	Base	---	Short Wall plus 14"	12"
w1	See Table	Walls	---	Long Wall plus 8"	12"
w2	See Table	Walls	---	Short Wall plus 8"	12"
w3	See Table	Walls	---	Wall Height minus 4"	12"

Place a minimum of one w1 bar above each pipe opening

Diameter of Largest Pipe, D	Minimum Bar Size
48" or 54"	6
33" to 42"	5
30" or smaller	4

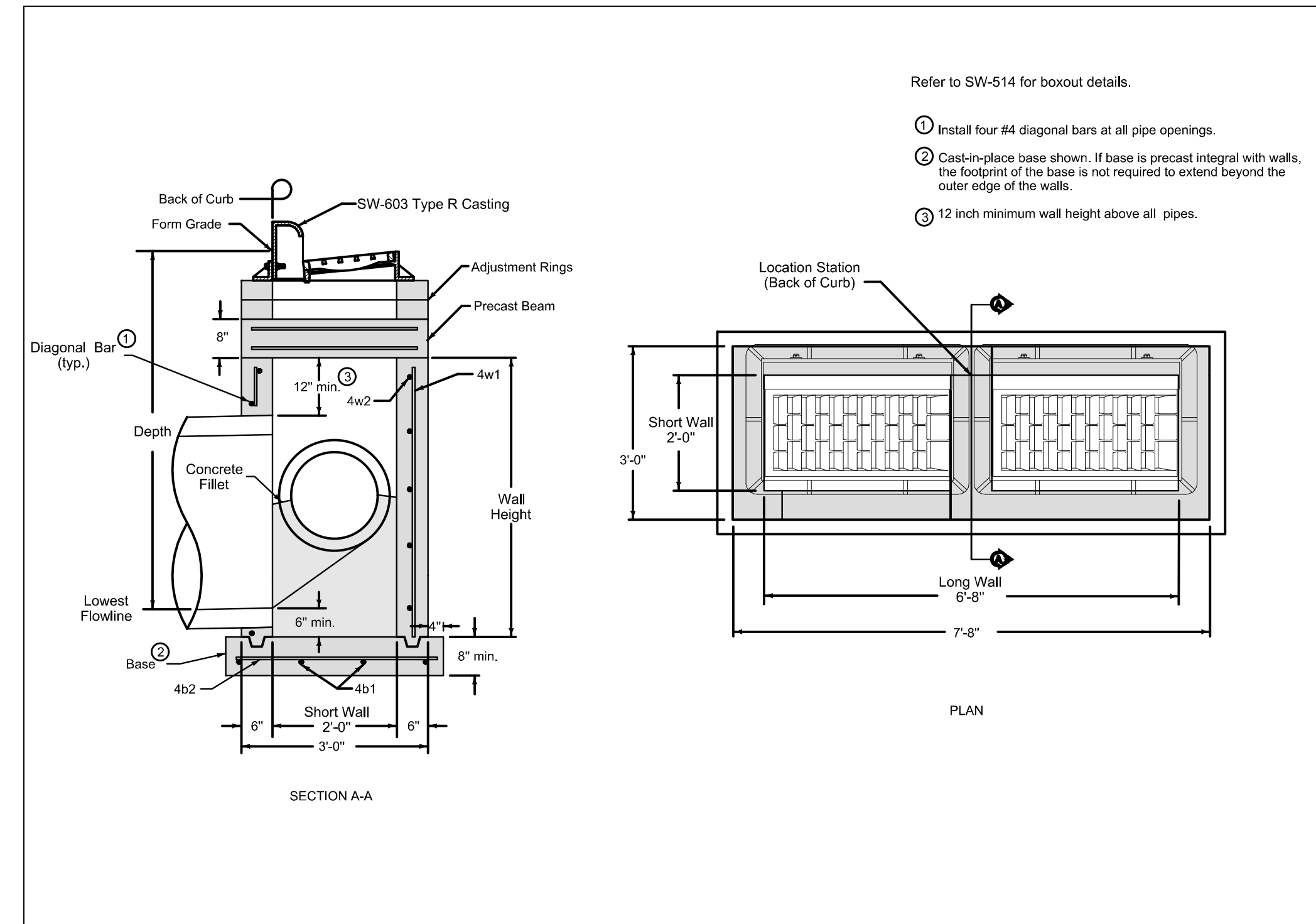


SOUTHWEST DETENTION BASIN #3



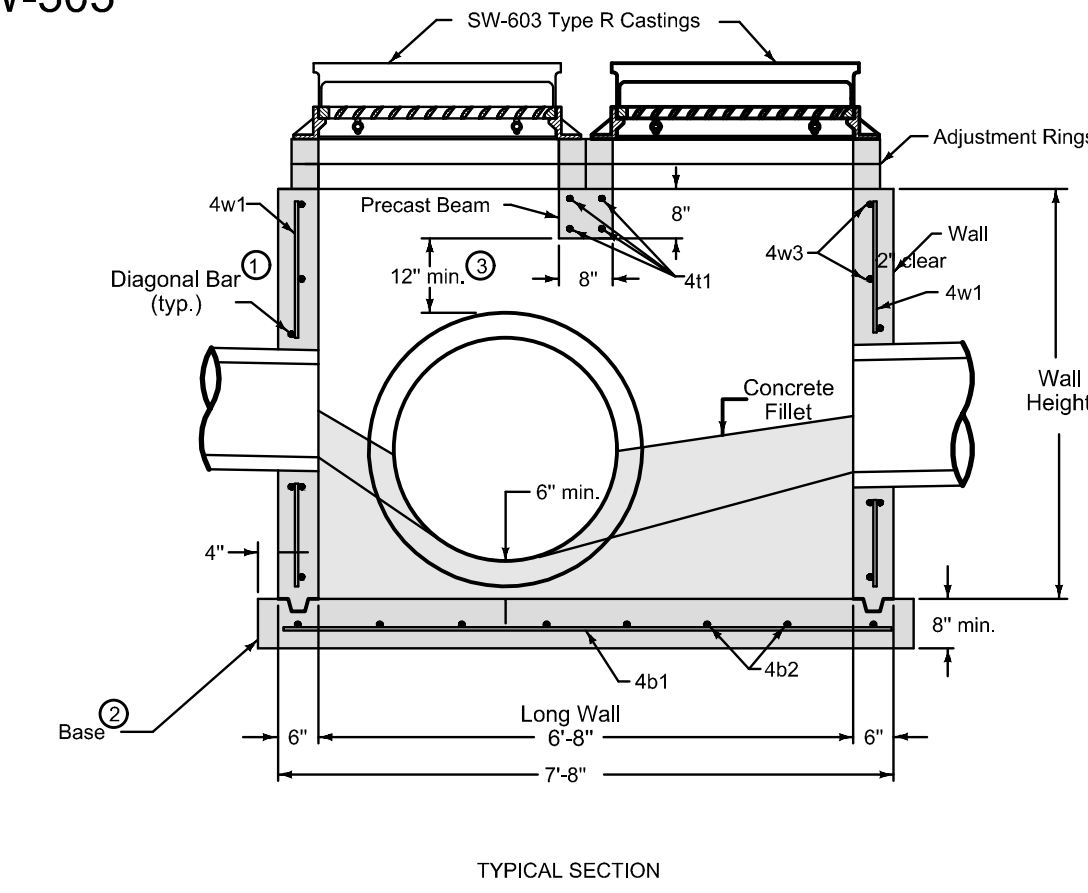
NORTH DETENTION BASIN #1

GENERAL NOTES:  
 This detail illustrates the construction and installation of an intake for use in ditches, medians, or other areas not subject to traffic.  
 All reinforcing bars shall be ASTM A615, Grade 60.  
 Precast concrete units with these dimensions may be utilized. The contractor shall be responsible for any additional reinforcement necessary to prevent cracking during transportation and installation.  
 If unit is cast in place, storm sewer pipe shall be installed before intake sidewall construction is started. Sidewalls shall be constructed as indicated with openings for storm sewer pipe(s) smoothly sloped and tied (sloped) not projecting unnecessarily into well. Outlet pipe(s) shall not project beyond inside face of sidewall. Storm sewer pipe locations shown herein are typical. Refer to detail project plans for exact locations.  
 A concrete fillet shall be placed in the bottom of the intake approximately as indicated. Slight sloping of this fillet is required to provide a smooth channel through the intake. Top surface of the fillet shall slope at a rate of approximately 1% (horizontal) vertical) toward the channel.  
 Finish of the intake top of any exposed portion shall be as required for "Structural Concrete" in current Standard Specifications.  
 Price bid for "Detention Basin Outlet Structure" shall include:  
 A. All Unnecessary excavation and backfill.  
 B. Satisfactory connection to new or existing storm sewer as per detail plans. Connections to precast units shall be grouted.  
 C. Furnishing all materials and construction in place as detailed herein.  
 Paving Sequence: 1. Base, 2. Walls, 3. Top



SECTION A-A

6010.505/ SW-505



TYPICAL SECTION

REINFORCING BAR LIST

Mark	Size	Location	Shape	Count	Length	Spacing
4a1	4	Beam	---	4	2'-6"	4"
4b1	4	Base	---	4	7'-10"	10"
4b2	4	Base	---	8	3'-2"	12"
4w1	4	Walls	---	20	Wall Height minus 4"	12"
4a2	4	Long Walls	---	Varies	7'-4"	12"
4a3	4	Short Walls	---	Varies	2'-8"	12"

MAXIMUM PIPE DIAMETERS

Pipe Location	Precast Structure	Cast-in-place Structure
Short Wall	15"	18"
Long Wall	60"	66"

- 1 Install four #4 diagonal bars at all pipe openings.
- 2 Cast-in-place base shown. If base is precast integral with walls, the footprint of the base is not required to extend beyond the outer edge of the walls.
- 3 12 inch minimum wall height above all pipes.

501 Sycamore  
 Suite 101  
 Waterloo, IA 50704  
 P.O. Box 1880  
 Waterloo, IA 50704-1800  
 319.233.8419  
 319.233.9772 Fax  
 www.invisionarch.com  
 CONSULTANT:  
 CONSTRUCTION MANAGER  
 STORY CONSTRUCTION  
 STRUCTURAL  
 RAKER RHODES  
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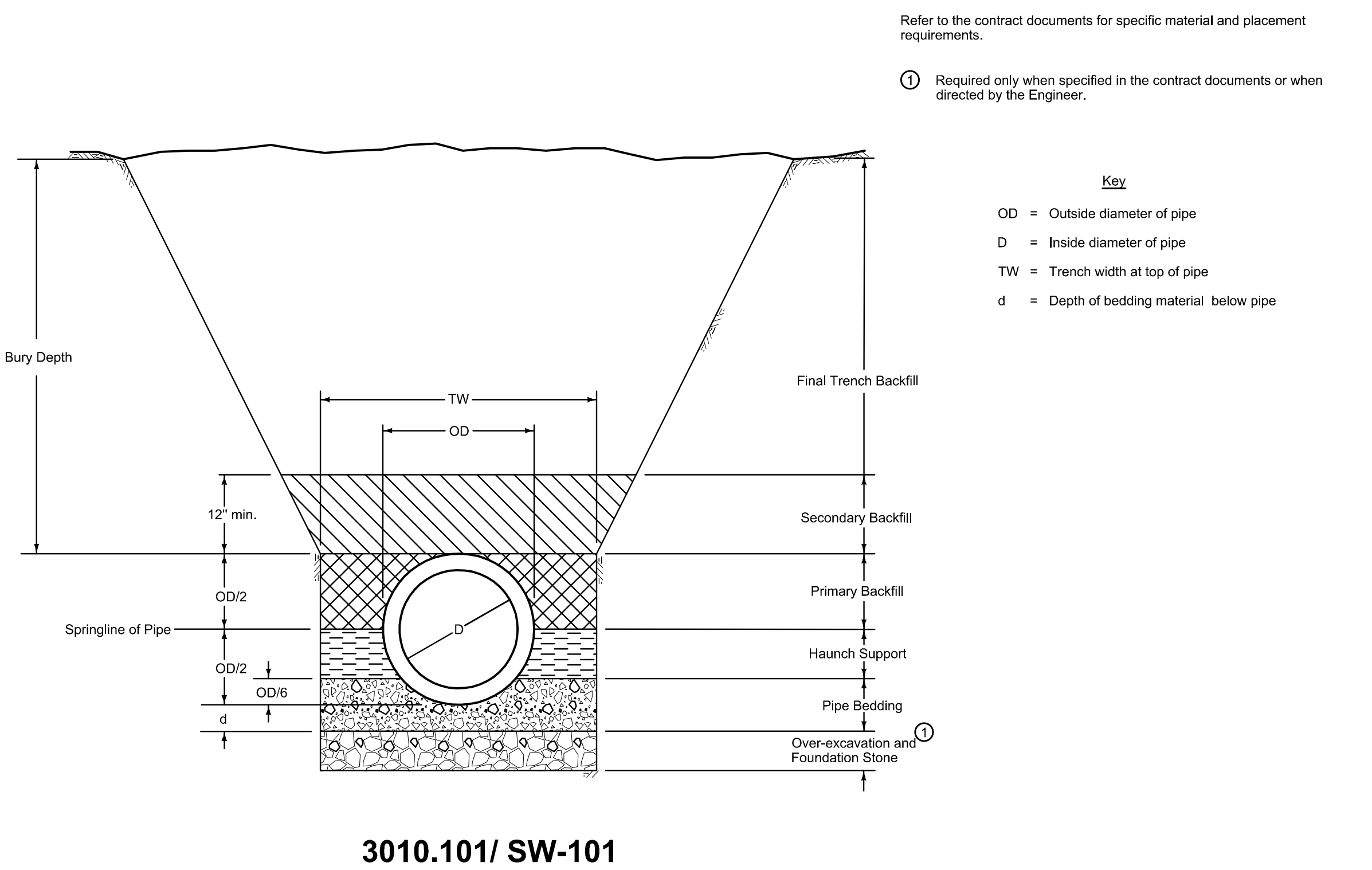
REVISIONS:

OWNER SIGN-OFF:

CEDAR FALLS COMMUNITY SCHOOL DISTRICT  
 CEDAR FALLS HIGH SCHOOL  
 W 27TH STREET, CEDAR FALLS, IA 50613

PROJECT NO.: 19116  
 DATE: JANUARY 22, 2021  
 SHEET SET: CONSTRUCTION DOCUMENTS

SHEET NAME: STORM DRAINAGE PLAN



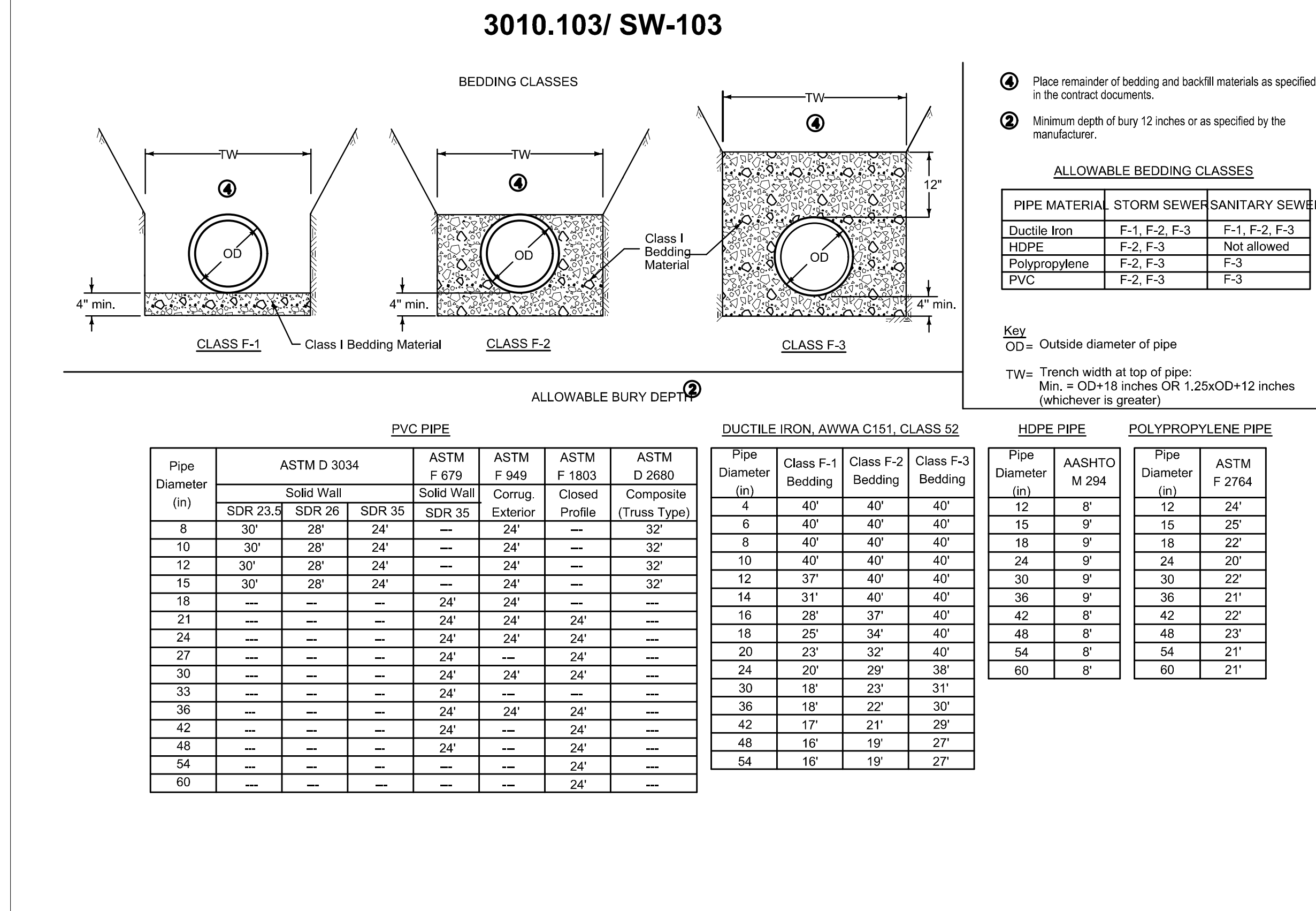
3010.101/ SW-101

Refer to the contract documents for specific material and placement requirements.

- 1 Required only when specified in the contract documents or when directed by the Engineer.

**Key**

OD = Outside diameter of pipe  
 D = Inside diameter of pipe  
 TW = Trench width at top of pipe  
 d = Depth of bedding material below pipe



3010.103/ SW-103

**BEDDING CLASSES**

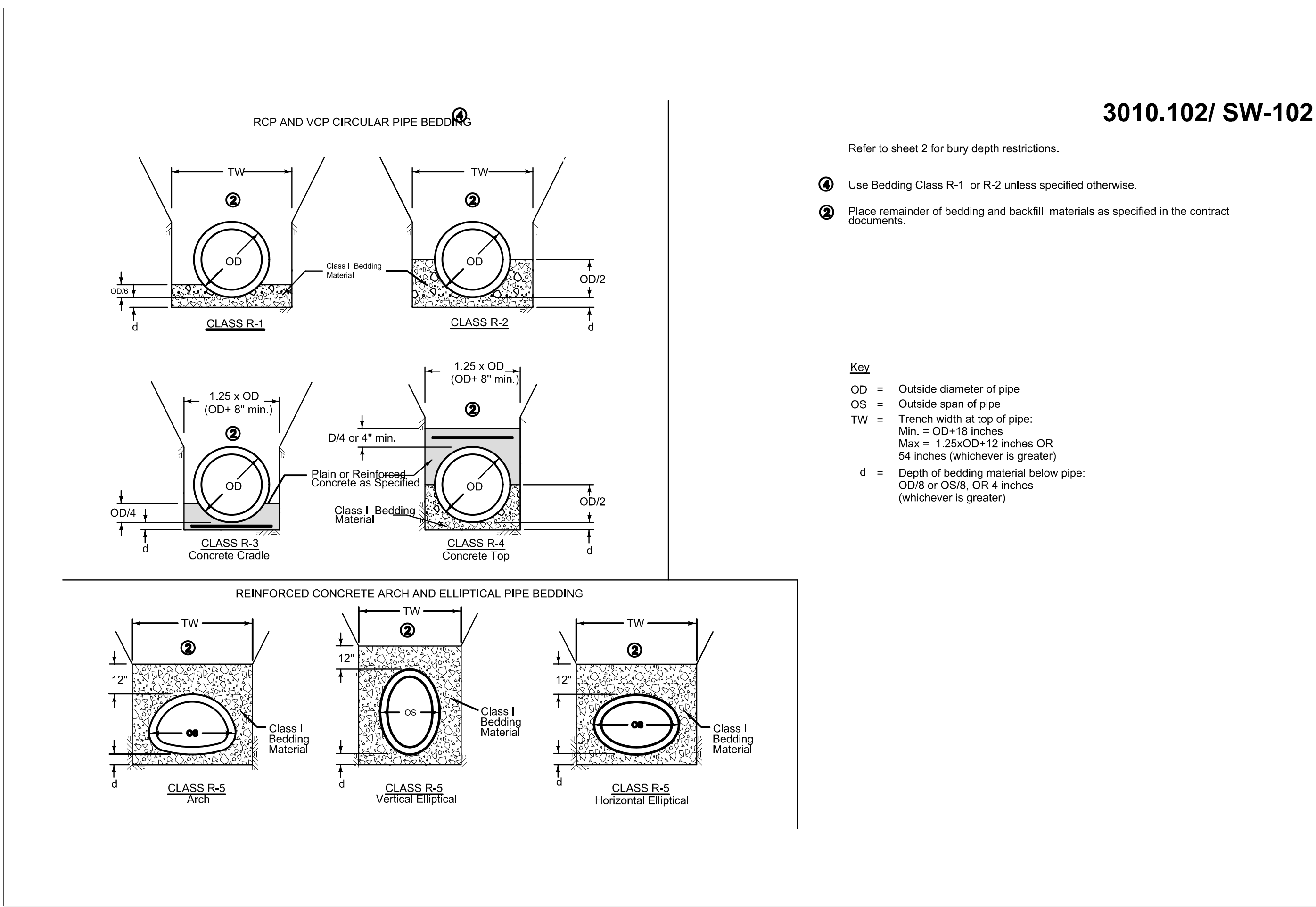
- 1 Place remainder of bedding and backfill materials as specified in the contract documents.
- 2 Minimum depth of bury 12 inches or as specified by the manufacturer.

**ALLOWABLE BEDDING CLASSES**

PIPE MATERIAL	STORM SEWER	SANITARY SEWER
Ductile Iron	F-1, F-2, F-3	F-1, F-2, F-3
HDPE	F-2, F-3	Not allowed
Polypropylene	F-2, F-3	F-3
PVC	F-2, F-3	F-3

Key  
 OD = Outside diameter of pipe  
 TW = Trench width at top of pipe;  
 Min. = OD + 18 inches OR 1.25xOD + 12 inches  
 (whichever is greater)

PVC PIPE						DUCTILE IRON, AWWA C151, CLASS 52				HDPE PIPE		POLYPROPYLENE PIPE		
Pipe Diameter (in)	ASTM D 3034		ASTM F 679	ASTM F 949	ASTM F 1803	ASTM D 2650	Pipe Diameter (in)	Class F-1 Bedding	Class F-2 Bedding	Class F-3 Bedding	Pipe Diameter (in)	AASHTO M 294	Pipe Diameter (in)	ASTM F 2764
	SDR 23.4	SDR 26												
8	30'	28'	24'	24'	24'	32'	6	40'	40'	40'	15	9"	15	25"
12	30'	28'	24'	24'	24'	32'	8	40'	40'	40'	18	9"	18	22"
15	30'	28'	24'	24'	24'	32'	10	40'	40'	40'	24	9"	24	20"
18	---	---	---	24'	24'	---	12	37'	40'	40'	30	9"	30	22"
21	---	---	---	24'	24'	---	14	31'	40'	40'	36	9"	36	21"
24	---	---	---	24'	24'	---	16	28'	37'	40'	42	8"	42	22"
27	---	---	---	24'	24'	---	18	25'	34'	40'	48	8"	48	23"
30	---	---	---	24'	24'	---	20	23'	32'	40'	54	8"	54	21"
33	---	---	---	24'	24'	---	24	20'	29'	38'	60	8"	60	21"
36	---	---	---	24'	24'	---	30	18'	23'	31'				
42	---	---	---	24'	24'	---	36	18'	22'	30'				
48	---	---	---	24'	24'	---	42	17'	21'	29'				
54	---	---	---	24'	24'	---	48	16'	19'	27'				
60	---	---	---	24'	24'	---	54	16'	19'	27'				



3010.102/ SW-102

Refer to sheet 2 for bury depth restrictions.

- 1 Use Bedding Class R-1 or R-2 unless specified otherwise.
- 2 Place remainder of bedding and backfill materials as specified in the contract documents.

**Key**

OD = Outside diameter of pipe  
 OS = Outside span of pipe  
 TW = Trench width at top of pipe;  
 Min. = OD + 18 inches OR  
 1.25xOD + 12 inches OR  
 54 inches (whichever is greater)  
 d = Depth of bedding material below pipe;  
 OD/8 or OS/8, OR 4 inches  
 (whichever is greater)

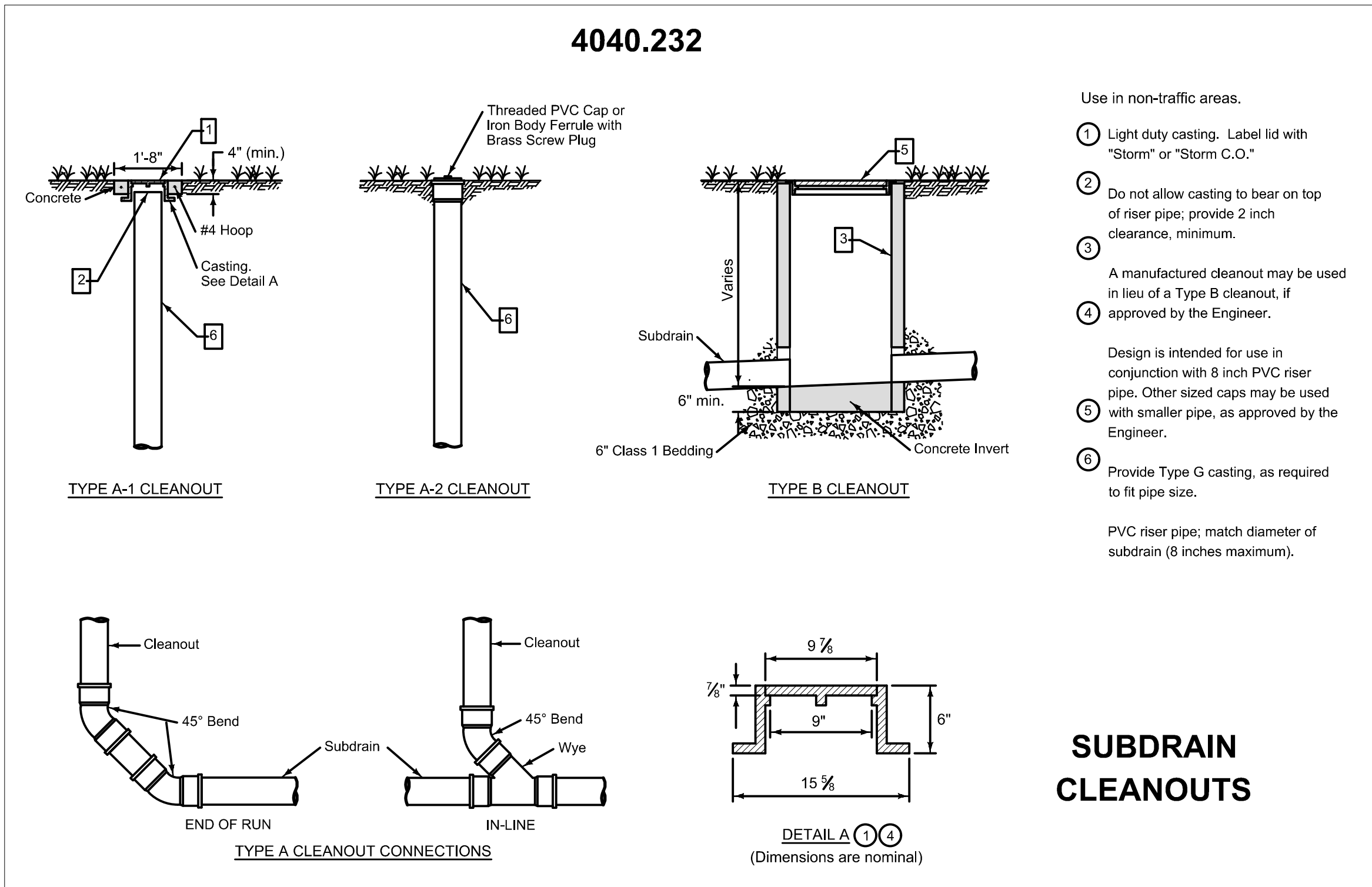
ALLOWABLE BURY DEPTH

CLASS III RCP					CLASS IV RCP					CLASS V RCP				
Pipe Diameter (in)	Class Bedding	Class Bedding	Class R-3 & R-4 Bedding	As=1.0%	Pipe Diameter (in)	Class Bedding	Class Bedding	Class R-3 & R-4 Bedding	As=0.4%   As=1.0%	Pipe Diameter (in)	Class Bedding	Class Bedding	Class R-3 & R-4 Bedding	As=0.4%   As=1.0%
12	7'	10'	15'	19'	27'	12	12'	15'	23'	28'	40'	40'	40'	40'
15	8'	10'	16'	19'	27'	15	12'	16'	23'	30'	40'	40'	40'	40'
18	8'	11'	18'	20'	40'	18	13'	16'	29'	40'	40'	40'	40'	40'
21	8'	11'	18'	26'	40'	21	13'	16'	40'	40'	40'	40'	40'	40'
24	8'	12'	23'	36'	40'	24	16'	23'	40'	40'	40'	40'	40'	40'
27	10'	15'	30'	40'	40'	27	19'	30'	40'	40'	40'	40'	40'	40'
30	11'	15'	29'	40'	40'	30	19'	29'	40'	40'	40'	40'	40'	40'
33	11'	15'	28'	40'	40'	33	19'	28'	40'	40'	40'	40'	40'	40'
36	11'	15'	27'	40'	40'	36	19'	28'	40'	40'	40'	40'	40'	40'
42	11'	15'	26'	36'	40'	42	18'	27'	40'	40'	40'	40'	40'	40'
48	11'	15'	25'	34'	40'	48	18'	26'	40'	40'	40'	40'	40'	40'
54	11'	15'	25'	34'	40'	54	18'	25'	40'	40'	40'	40'	40'	40'
60	11'	15'	25'	33'	40'	60	18'	25'	40'	40'	40'	40'	40'	40'
66	11'	15'	24'	32'	40'	66	18'	25'	40'	40'	40'	40'	40'	40'
72	11'	15'	24'	32'	40'	72	18'	24'	40'	40'	40'	40'	40'	40'

As = Area of Steel Reinforcing

EXTRA STRENGTH VCP					CONCRETE ARCH PIPE					HORIZONTAL ELLIPTICAL RCP					VERTICAL ELLIPTICAL RCP					
Pipe Dia. (in)	Class Bedding	Class Bedding	Class R-3 & R-4 Bedding	As=1.0%	Pipe Size (in x in)	Equiv. Dia. (in)	Class A-III	Class A-IV	Class A-V	Pipe Size (in x in)	Equiv. Dia. (in)	Class HE-III	Class HE-IV	Class HE-V	Pipe Size (in x in)	Equiv. Dia. (in)	Class VE-III	Class VE-IV	Class VE-V	Class VE-VI
6	25'	30'	30'	30'	18 x 11	15	6"	11"	11"	14 x 23	18	12"	22"	22"	23 x 14	18	10"	15"	22"	33"
8	20'	26'	30'	30'	22 x 13	18	6"	11"	11"	19 x 30	24	15"	25"	25"	30 x 19	24	10"	16"	34"	40"
10	18'	23'	30'	30'	26 x 15	21	6"	13"	13"	22 x 34	27	15"	28"	28"	34 x 22	27	11"	20"	40"	40"
12	16'	20'	30'	30'	29 x 18	24	7"	15"	15"	24 x 38	30	15"	27"	27"	38 x 24	30	12"	23"	40"	40"
15	15'	19'	28'	30'	36 x 22	30	8"	15"	15"	27 x 42	33	15"	27"	27"	42 x 27	33	15"	30"	40"	40"
18	14'	18'	30'	30'	44 x 27	36	8"	14"	14"	29 x 45	36	15"	26"	26"	45 x 29	36	15"	29"	40"	40"
21	15'	22'	30'	30'	51 x 31	42	8"	15"	15"	32 x 49	39	15"	28"	28"	49 x 32	39	15"	29"	40"	40"
24	18'	28'	30'	30'	56 x 36	48	8"	15"	15"	34 x 54	42	15"	25"	25"	54 x 34	42	15"	28"	40"	40"
27	20'	30'	30'	30'	65 x 40	54	8"	15"	15"	38 x 60	48	15"	25"	25"	60 x 38	48	15"	27"	40"	40"
30	19'	29'	30'	30'	73 x 45	60	8"	14"	14"	43 x 68	54	15"	24"	24"	68 x 43	54	15"	27"	40"	40"
33	20'	30'	30'	30'	86 x 54	72	9"	14"	14"	46 x 76	60	15"	24"	24"	76 x 46	60	15"	26"	40"	40"
36	20'	30'	30'	30'	96 x 60	80	9"	14"	14"	53 x 83	66	15"	24"	24"	83 x 53	66	15"	29"	40"	40"
39	19'	29'	30'	30'	108 x 66	90	9"	14"	14"	58 x 91	72	15"	24"	24"	91 x 58	72	15"	29"	40"	40"
42	18'	28'	30'	30'	126 x 78	108	10"	14"	14"	63 x 98	78	15"	23"	23"	98 x 63	78	15"	29"	40"	40"
					144 x 90	126	10"	14"	14"	68 x 106	84	15"	23"	23"	106 x 68	84	15"	24"	40"	40"

As = Area of Steel Reinforcing

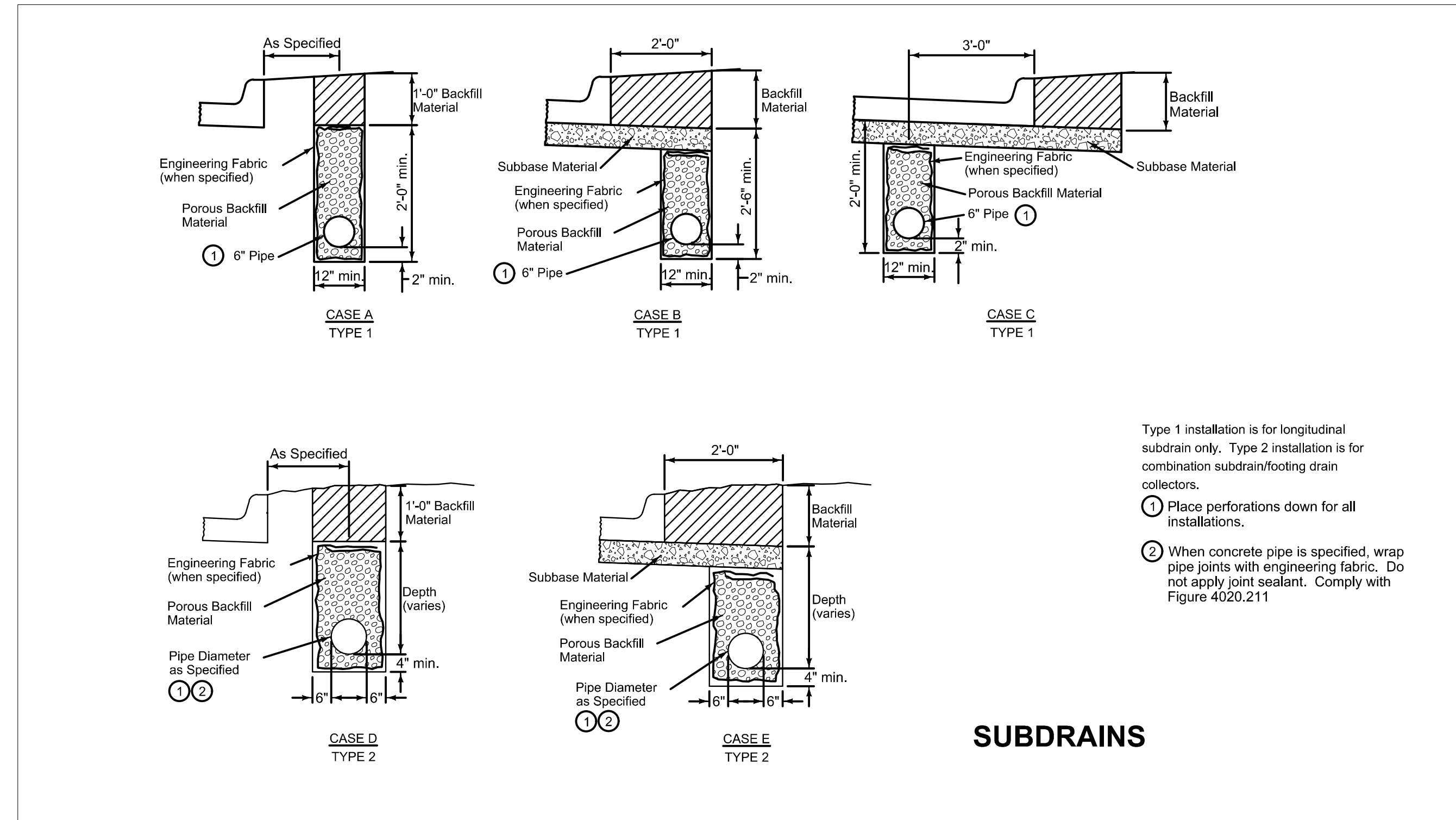


4040.232

Use in non-traffic areas.

- 1 Light duty casting. Label lid with "Storm" or "Storm C.O."
- 2 Do not allow casting to bear on top of riser pipe; provide 2 inch clearance, minimum.
- 3 A manufactured cleanout may be used in lieu of a Type B cleanout, if approved by the Engineer.
- 4 Design is intended for use in conjunction with 8 inch PVC riser pipe. Other sized caps may be used with smaller pipe, as approved by the Engineer.
- 5 Provide Type G casting, as required to fit pipe size.
- 6 PVC riser pipe; match diameter of subdrain (8 inches maximum).

**SUBDRAIN CLEANOUTS**



**SUBDRAINS**

- 1 Type 1 installation is for longitudinal subdrain only. Type 2 installation is for combination subdrain/footing drain collectors.
- 2 Place perforations down for all installations.
- 3 When concrete pipe is specified, wrap pipe joints with engineering fabric. Do not apply joint sealant. Comply with Figure 4020.211

GENERAL SITE NOTES

501 Sycamore  
 Suite 101  
 Waterloo, IA 50703  
 P.O. Box 1860  
 Waterloo, IA 50704-1800  
 319.233.8419  
 319.233.9772 Fax  
 www.invisionarch.com  
 CONSULTANT:  
 CONSTRUCTION MANAGER  
 STORY CONSTRUCTION

STRUCTURAL  
 RAKER RHODES  
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REVISIONS:

OWNER SIGN-OFF:

CEDAR FALLS COMMUNITY SCHOOL DISTRICT  
 CEDAR FALLS HIGH SCHOOL  
 W 27TH STREET, CEDAR  
 FALLS, IA 50613

PROJECT NO:  
 191116

DATE: JANUARY 22, 2021  
 SHEET SET:  
 CONSTRUCTION DOCUMENTS

SHEET NAME:  
 STORM DRAINAGE  
 PLAN

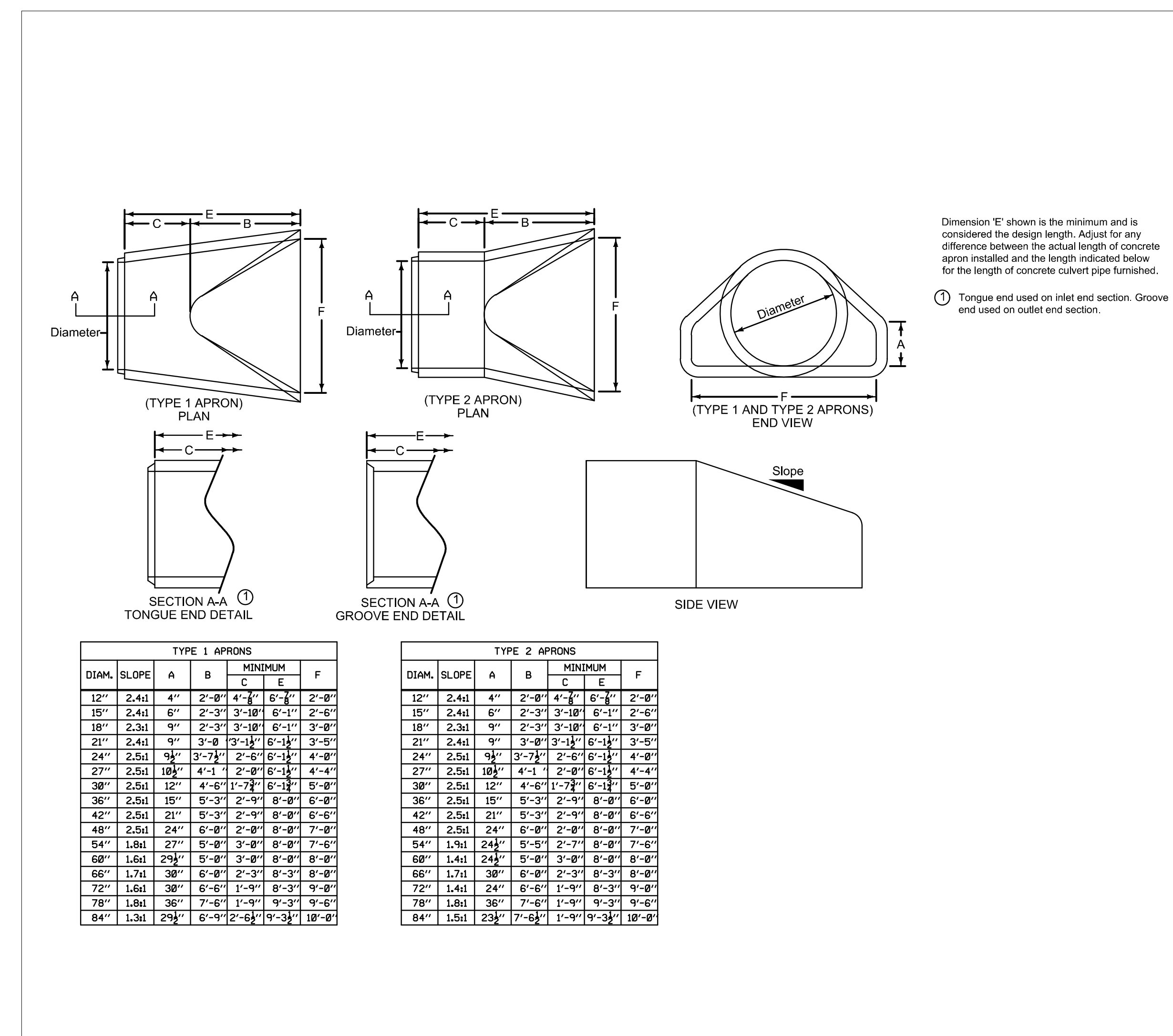
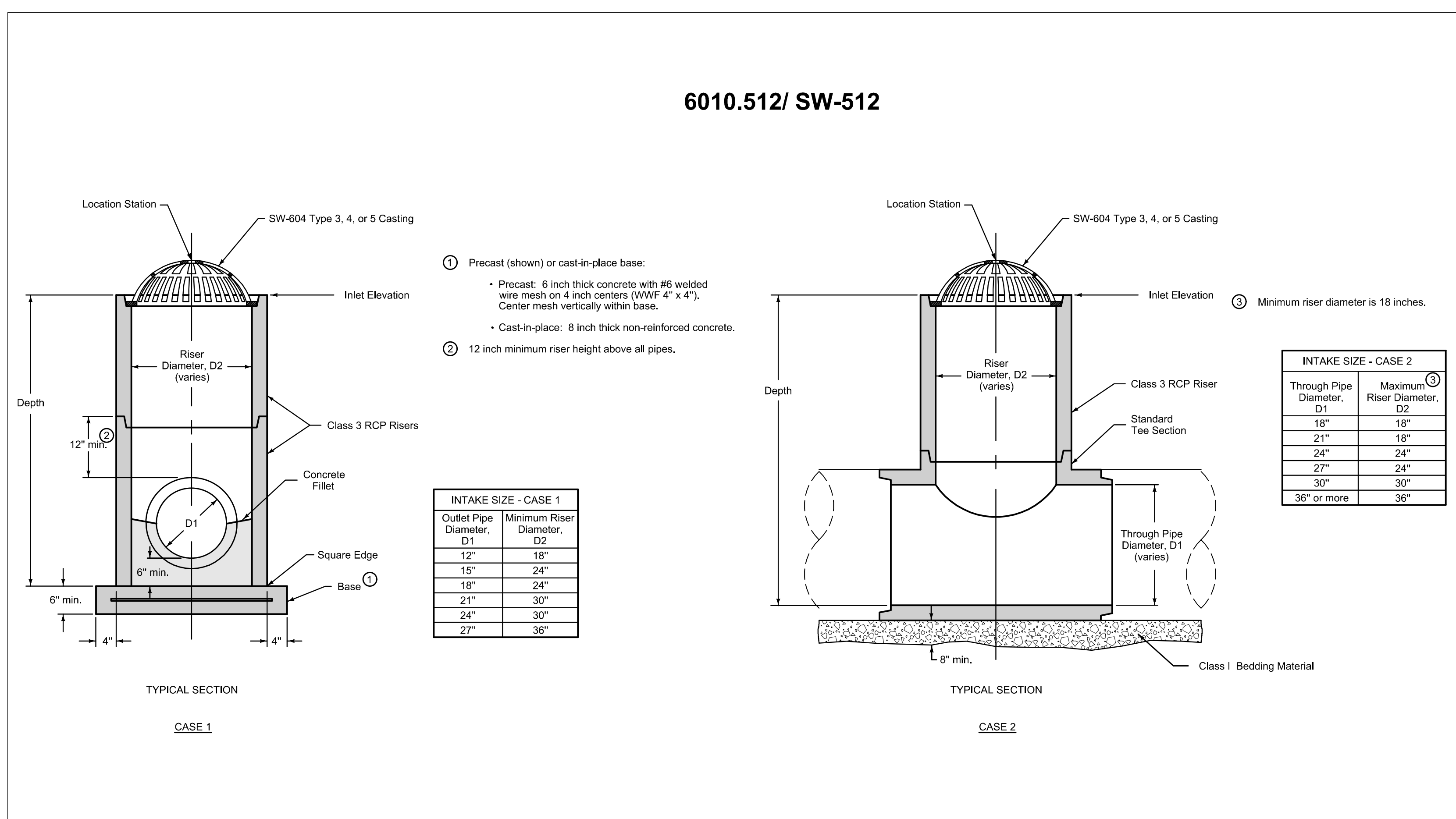
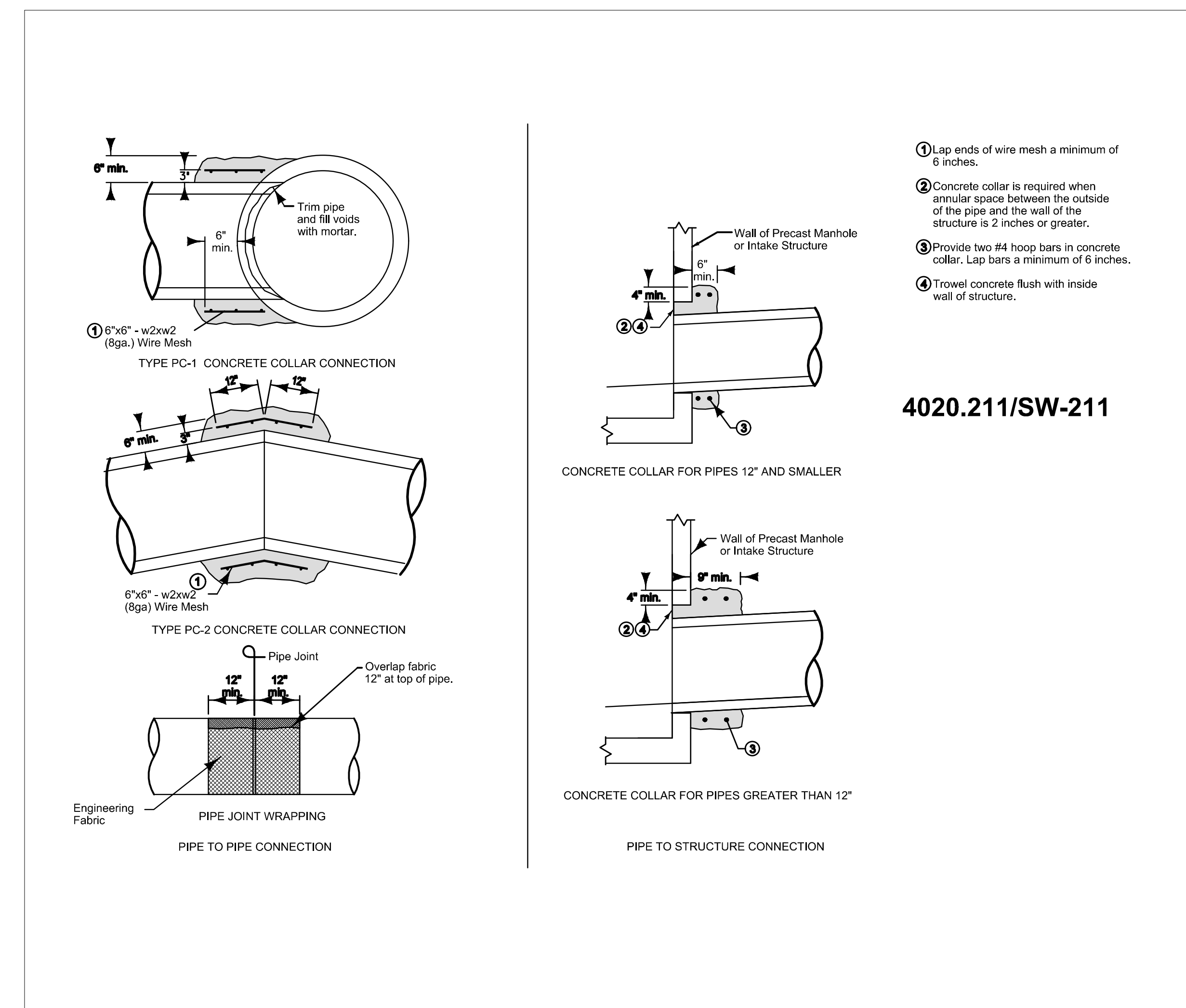
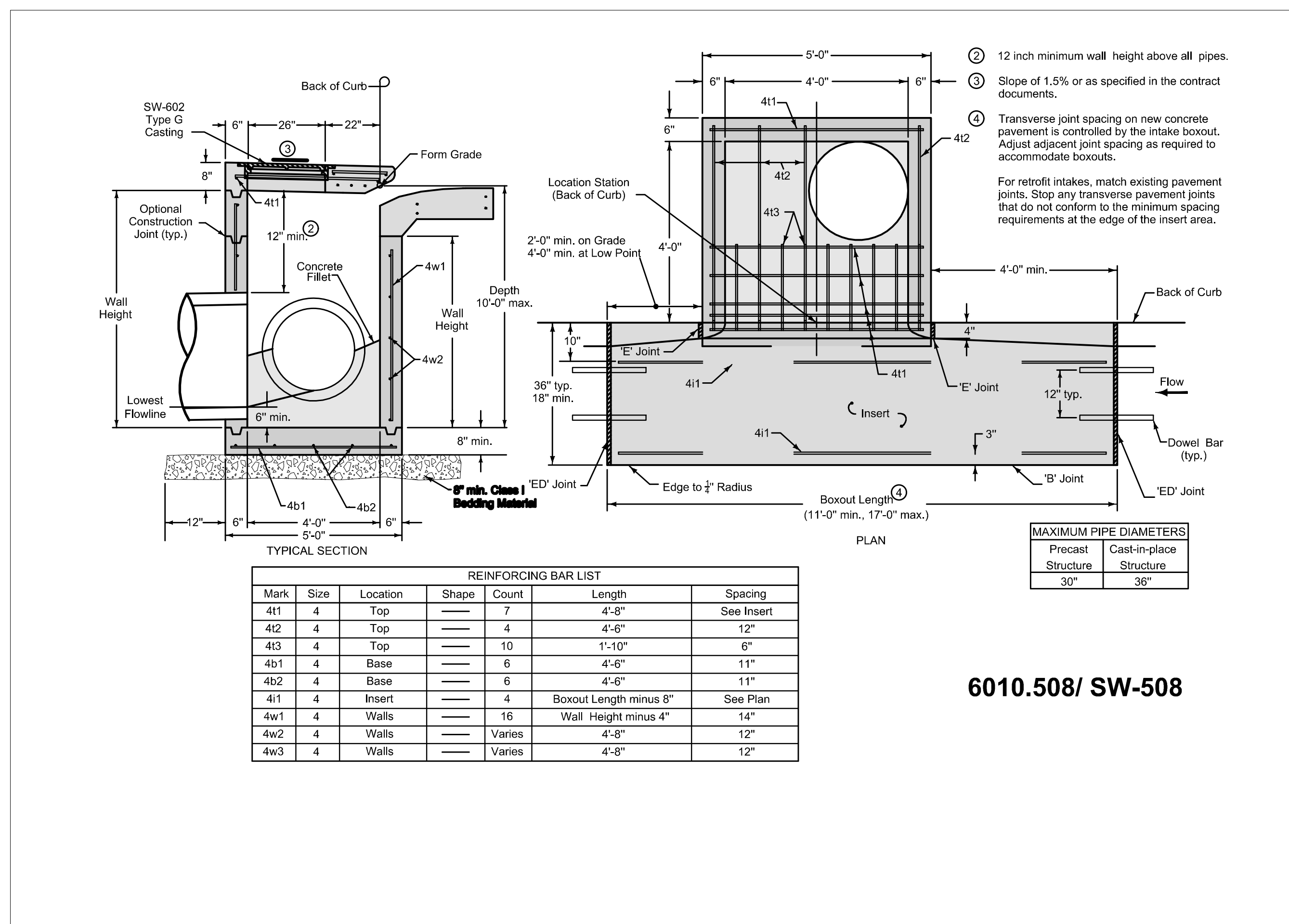
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GENERAL SITE NOTES

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**CEDAR FALLS HIGH SCHOOL**  
W 27TH STREET, CEDAR FALLS, IA 50613

PROJECT NO:  
19116

DATE:  
JANUARY 22, 2021  
SHEET SET:  
CONSTRUCTION DOCUMENTS

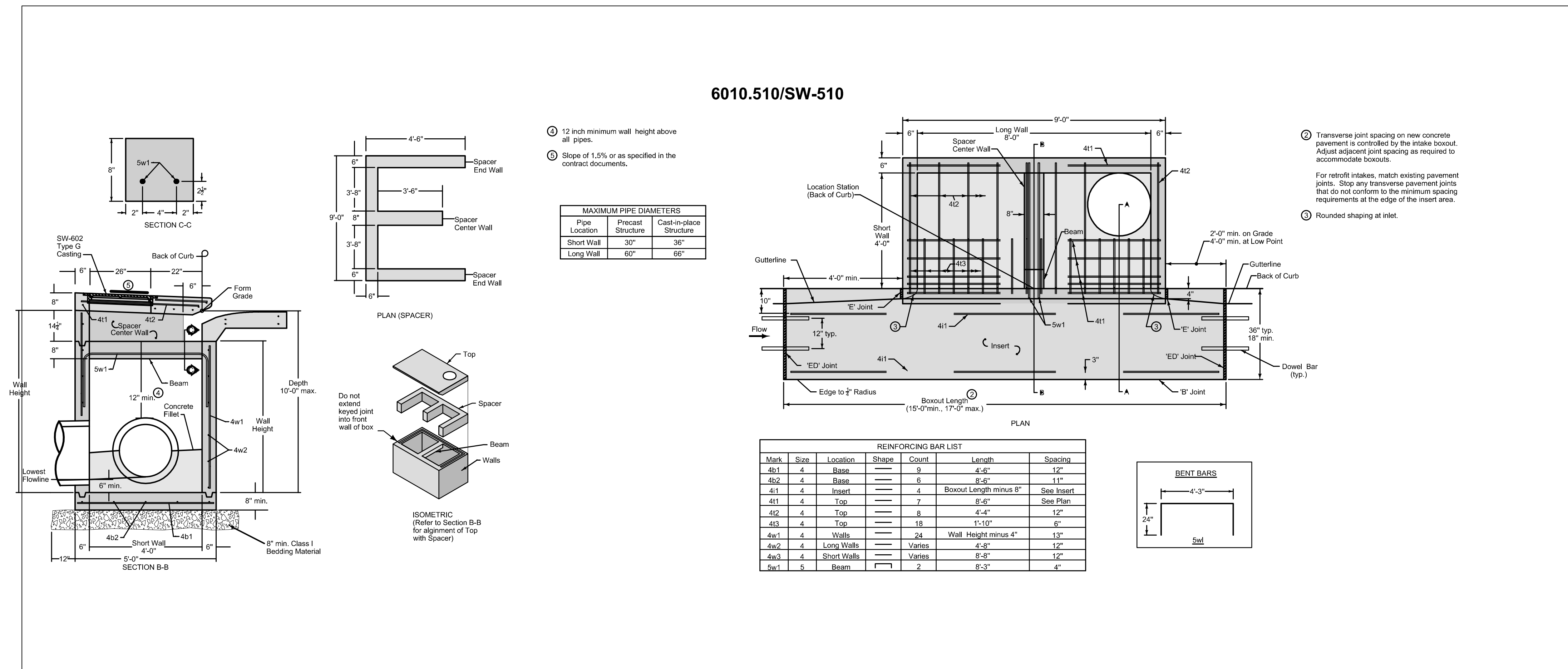
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STORM DRAINAGE PLAN

SHEET:  
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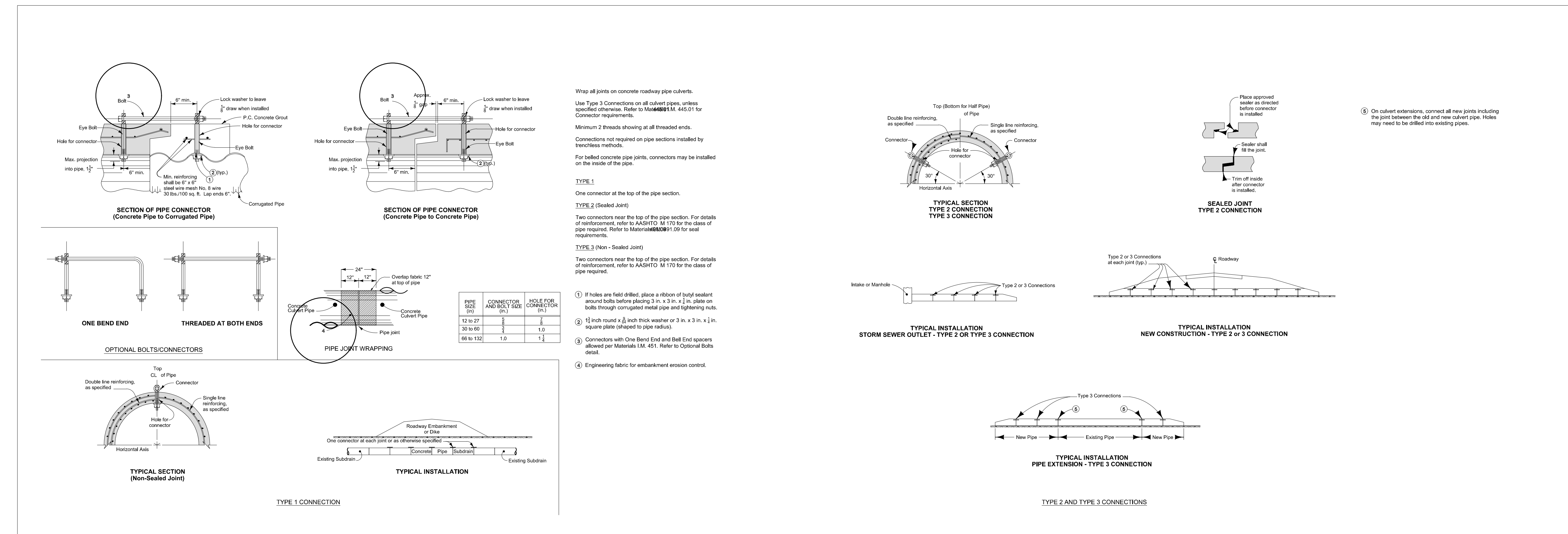




6010.510/SW-510



GENERAL SITE NOTES



501 Sycamore  
Suite 101  
Waterloo, IA 50703  
P.O. Box 1880  
Waterloo, IA 50704-1800  
319.233.8419  
319.233.9772 Fax  
www.invisionarch.com

CONSULTANT:

CONSTRUCTION MANAGER  
STORY CONSTRUCTION

STRUCTURAL  
RAKER RHODES  
ENGINEERING  
MEP  
MODUS

CIVIL ENGINEERING AND  
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19116

DATE:  
JANUARY 22, 2021

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CONSTRUCTION DOCUMENTS

SHEET NAME:  
STORM DRAINAGE PLAN

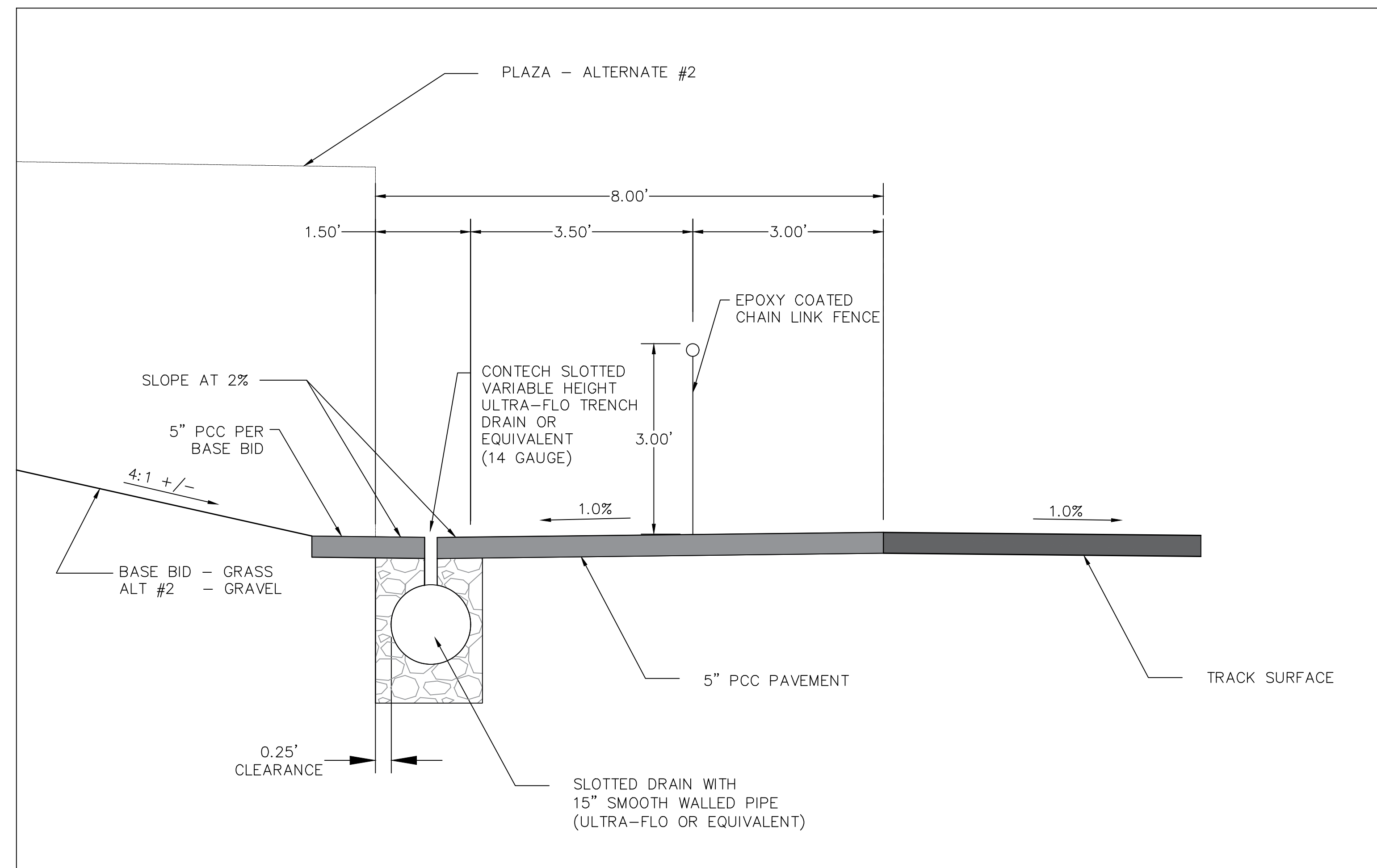
SHEET:  
C6.17

CEAR FALLS COMMUNITY SCHOOL DISTRICT  
CEDAR FALLS HIGH SCHOOL  
W 27TH STREET, CEDAR FALLS, IA 50613

DATE:  
JANUARY 22, 2021



PLAN NOTES



GENERAL SITE NOTES

**INVISION**  
ARCHITECTURAL

501 Sycamore  
Suite 101  
Waterloo, IA 50703  
PO Box 1880  
Waterloo, IA 50704-1800  
319.233.8419  
319.233.9772 Fax  
www.invisionarch.com

CONSULTANT:  
CONSTRUCTION MANAGER  
STORY CONSTRUCTION

STRUCTURAL  
RAKER RHODES  
ENGINEERING  
MEP  
MODUS

CIVIL ENGINEERING AND  
LANDSCAPE ARCHITECTURE  
AECOM TECHNICAL  
SERVICES, INC.  
RITLAND+KUIPER

REVISIONS:

Description	Date	No.

OWNER SIGN-OFF:

DATE	NAME

CEDAR FALLS COMMUNITY SCHOOL DISTRICT  
**CEDAR FALLS HIGH SCHOOL**  
W 27TH STREET, CEDAR  
FALLS, IA 50613

PROJECT NO:  
19116

DATE:  
JANUARY 22, 2021  
SHEET SET:  
CONSTRUCTION  
DOCUMENTS

SHEET NAME:  
STORM DRAINAGE  
PLAN

SHEET:  
**C6.18**

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## Exhibit C

### Detention Basin Operation and Maintenance Manual

Inspection activities shall be performed as follows: Any problems that are found shall be repaired immediately.

<b><i>BMP element:</i></b>	<b><i>Potential problem:</i></b>	<b><i>How I will remediate the problem:</i></b>
<b><i>The entire BMP</i></b>	Trash/debris is present.	Remove the trash/debris.
<b><i>The perimeter of the detention basin</i></b>	Areas of bare soil and/or erosion gullies has formed.	Regrade the soil if necessary to remove the gully, and then plant a ground com and water until it is established. Provide lime and a one-time fertilizer application.
	Vegetation is too short or too long.	Maintain vegetation at standard prairie grass height and assess every two years for mow off or burn off maintenance.
<b><i>The inlet device: pipe or swale</i></b>	The pipe is clogged.	Unclog the pipe. Dispose of the sediment off-site.
	The pipe is cracked or otherwise damaged.	Replace the pipe.
	Erosion is occurring in the swale.	Regrade the swale if necessary to smooth it out and provide erosion control devises such as reinforced turf matting or riprap to avoid future problems with erosion.
<b><i>The forebay</i></b>	Sediment has accumulated to a depth greater than the original design depth for sediment storage.	Search for the source of the sediment and remedy the problem if possible. Remove the sediment and dispose of it in a location where it will not cause impacts to streams or the BMP.
	Erosion has occurred.	Provide additional erosion protection such as reinforced turf matting or riprap if needed to prevent future erosion problems.
	Weeds are present.	Remove the weeds, preferably by hand. If pesticide is used, wipe it on the plants rather than spraying.
<b><i>The main detention area</i></b>	Sediment has accumulated to a depth greater than the original design sediment storage depth.	Search for the source of the sediment and remedy the problem if possible. Remove the sediment and dispose of it in a location where it will not cause impacts to streams or the BMP.
	Cattails, phragmites or other invasive plants com 50% of the basin surface.	Remove the plants by wiping them with herbicide (do not spray).
<b><i>The embankment</i></b>	Shrubs have started to grow on the embankment.	Remove shrubs immediately .
	A tree has started to grow on the embankment.	Remove the tree immediately.
<b><i>The outlet device</i></b>	Clogging has occurred.	Clean out the outlet device. Dispose of the sediment off-site.
	The outlet device is damaged.	Repair or replace the outlet device.
<b><i>Washed stone in front of orifice outlet</i></b>	Silt build up on stone blocking outlet.	Washed stone must be unclogged and replaced as needed.
<b><i>The receiving water</i></b>	Erosion or other signs of damage has occurred at the outlet.	Repair damage.

## Exhibit D

### MAINTENANCE SCHEDULE STORM DETENTION SYSTEM

#### DESCRIPTION:

- 1) **Inspect system within 60 days of initial operation.**
- 2) **Four periodic inspections of system within first year of operation.**
- 3) **Inspect system after each 100-year storm occurrence as measured at the National Weather Service reporting station at the Waterloo Regional Airport.**
- 4) **After one year of system operation, inspect annually.**

# Exhibit E

## Stormwater Management Inspection/Maintenance Form *To be kept on site*

**PROJECT NAME:** \_\_\_\_\_

**PROJECT LOCATION:** \_\_\_\_\_

**OWNER/LEGAL ENTITY:** \_\_\_\_\_

**TELEPHONE:** \_\_\_\_\_

**E-MAIL:** \_\_\_\_\_

**INITIAL DATE OF OPERATION:** \_\_\_\_\_

DATE	ITEM INSPECTED	INSPECTOR (Please Print)	OBSERVATION & REMARKS

DATE	ITEM INSPECTED	INSPECTOR (Please Print)	OBSERVATION & REMARKS