

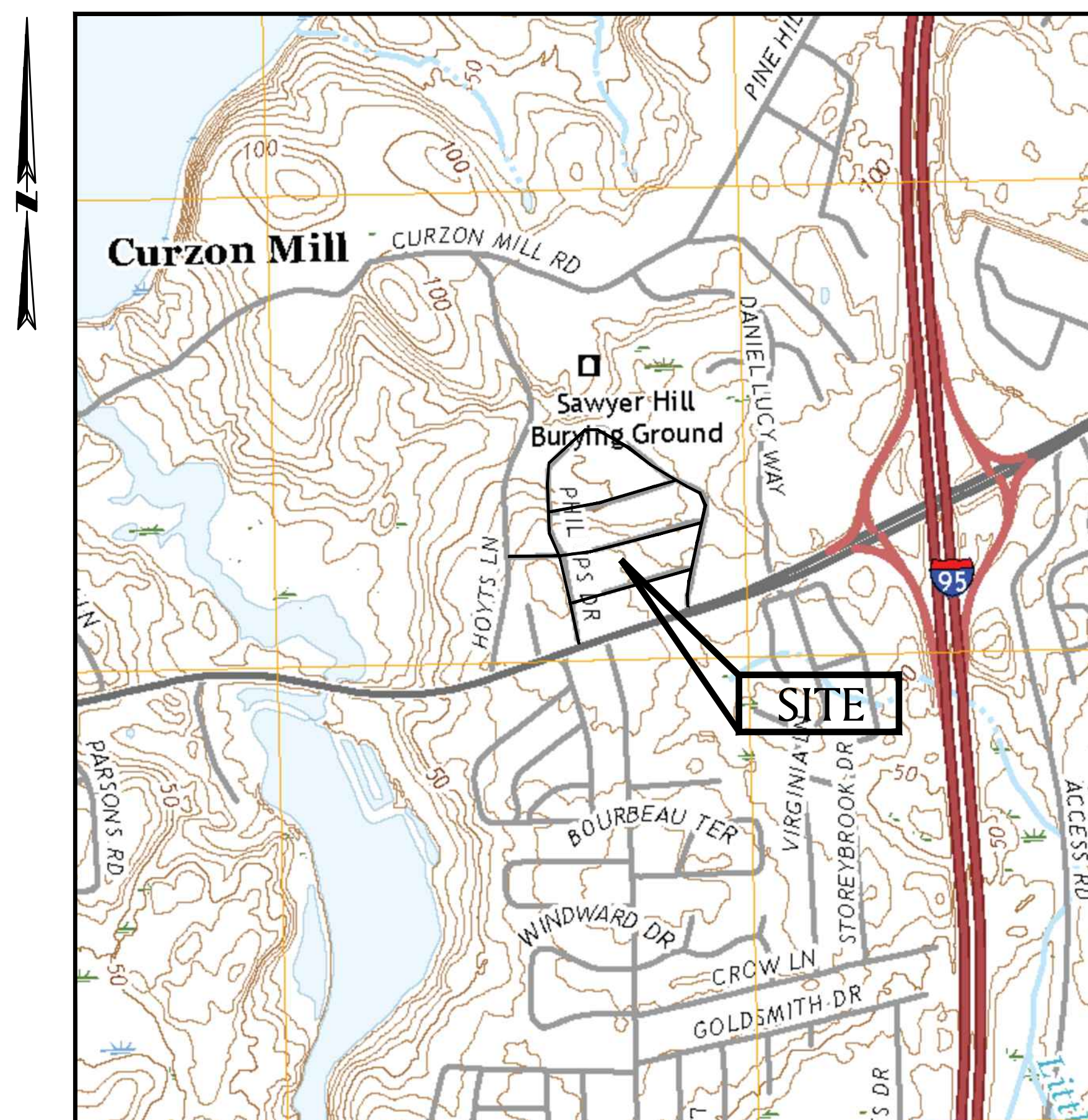
# ROADWAY, DRAINAGE & WATER MAIN IMPROVEMENTS PHILIPS DRIVE NEIGHBORHOOD

NEWBURYPORT, MASSACHUSETTS

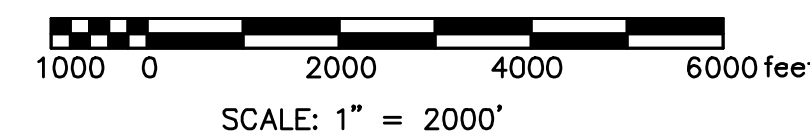
APRIL 2022

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SITE MAP



PREPARED FOR:



CITY OF NEWBURYPORT  
DEPARTMENT OF PUBLIC SERVICES  
16A PERRY WAY  
NEWBURYPORT, MA 01950

CONTRACT #BP-22-1158-NBPT3-NBPT3-73229

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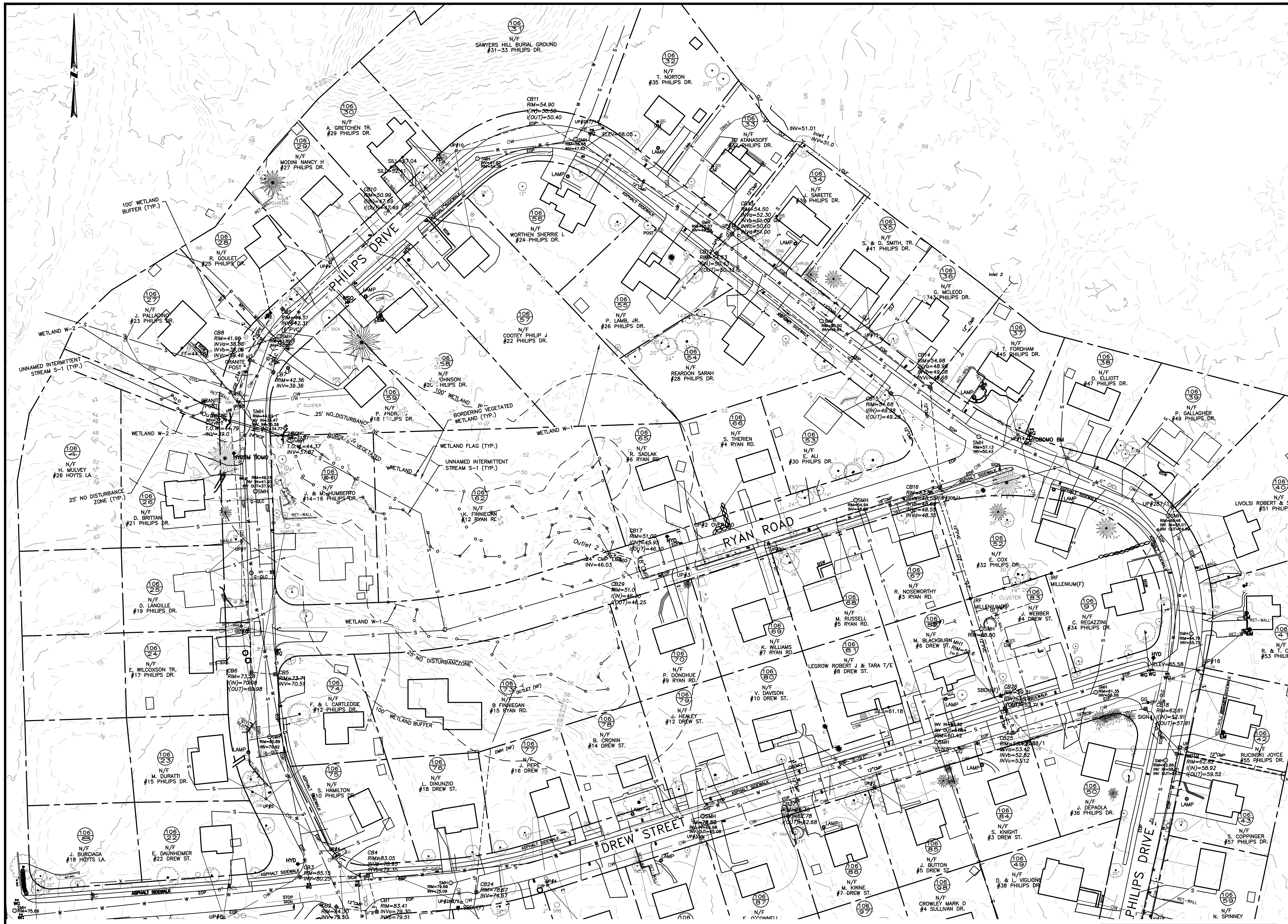


300 Brickstone Square  
Andover, Massachusetts 01810  
617 896 4300









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**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS

EXISTING CONDITIONS  
PLAN - NORTH

APRIL 2022

REVISIONS:

NO.	DESCRIPTION

PREPARED FOR:  
CITY OF NEWBURYPORT  
DEPARTMENT OF PUBLIC SERVICES  
16A PERRY WAY NEWBURYPORT,  
MA 01950

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SCALE: 1" = 50'  
0 25 50 100 FEET

FILE: 8992300-EC.DWG  
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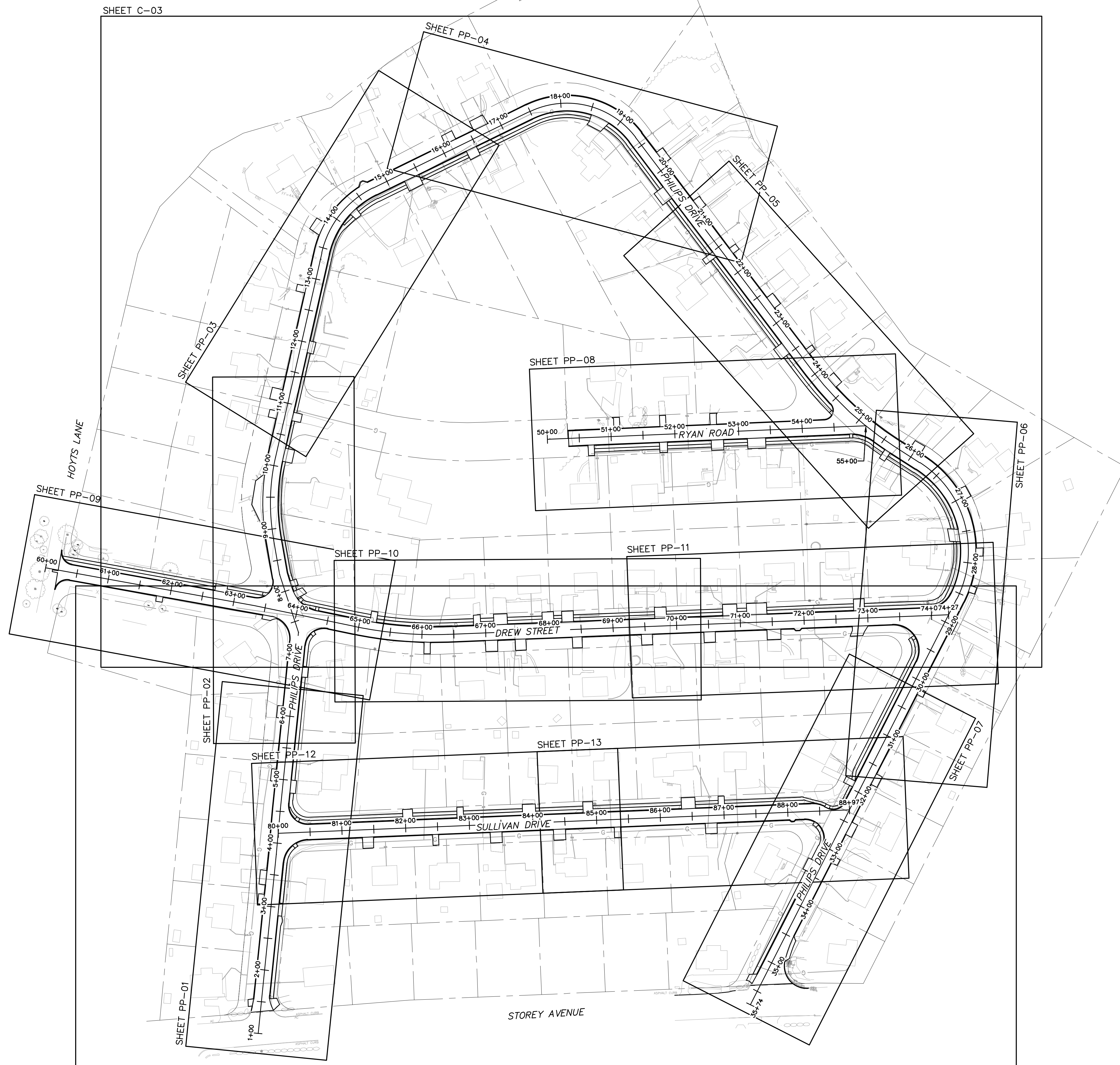
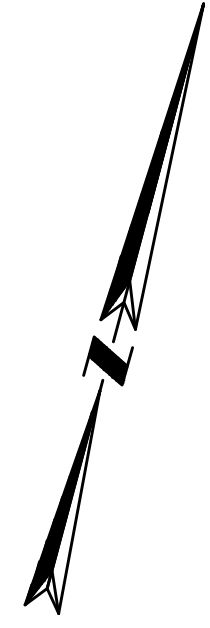
EC-02

ROADWAY, DRAINAGE & WATER MAIN IMPROVEMENTS - FEBRUARY 22, 2022









**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

**PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS**

**OVERALL KEY PLAN**

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SCALE: 1" = 80'  
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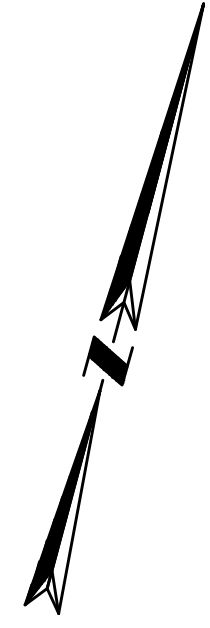
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FILE: 8992300-OVERALL.DWG  
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**C-01**

ROADWAY, DRAINAGE & WATER MAIN IMPROVEMENTS - FEBRUARY 22, 2022

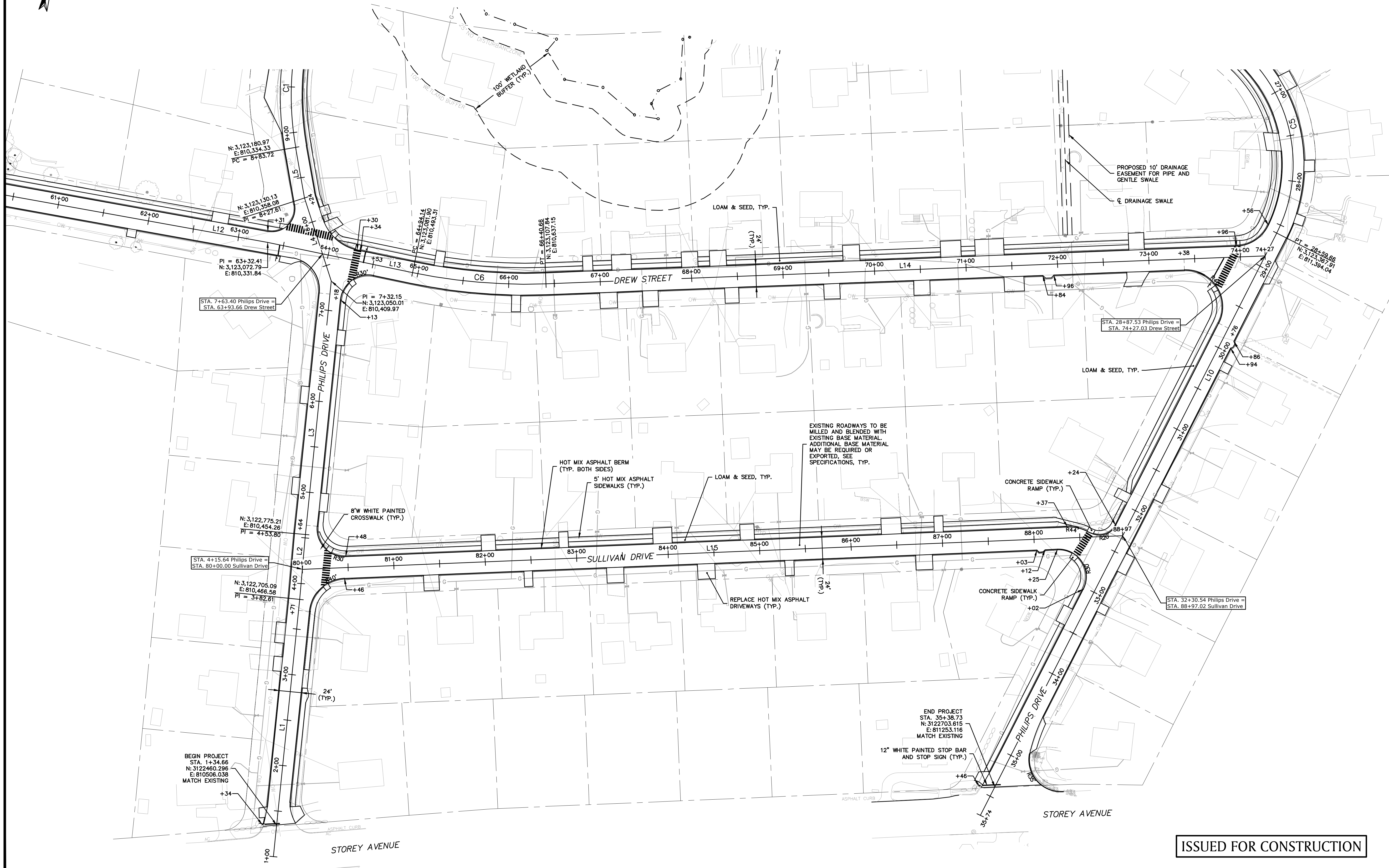




PHILIPS DRIVE CONSTRUCTION BASELINE *					
NO.	BEGIN STA.	END STA.	LENGTH	RADIUS	LINE/CHORD DIR.
L1	1+00.00	3+82.61	282.61		N09°09'24"W
L2	3+82.61	4+53.80	71.20		N09°57'42"W
L3	4+53.80	7+32.15	278.34		N09°09'24"W
L10	28+59.66	35+73.52	713.86		S11°58'39"W

SULLIVAN DRIVE CONSTRUCTION BASELINE *					
NO.	BEGIN STA.	END STA.	LENGTH	RADIUS	LINE/CHORD DIR.
L15	80+00.00	88+97.02	897.02		N72°39'03"E

\*ALL DIMENSIONS IN FEET



# ROADWAY, DRAINAGE & WATER MAIN IMPROVEMENTS

PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS

## LAYOUT & MATERIALS PLAN SOUTH

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0 25 50 100 FEET

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C-02

ROADWAY, DRAINAGE & WATER MAIN IMPROVEMENTS - FEBRUARY 22, 2022





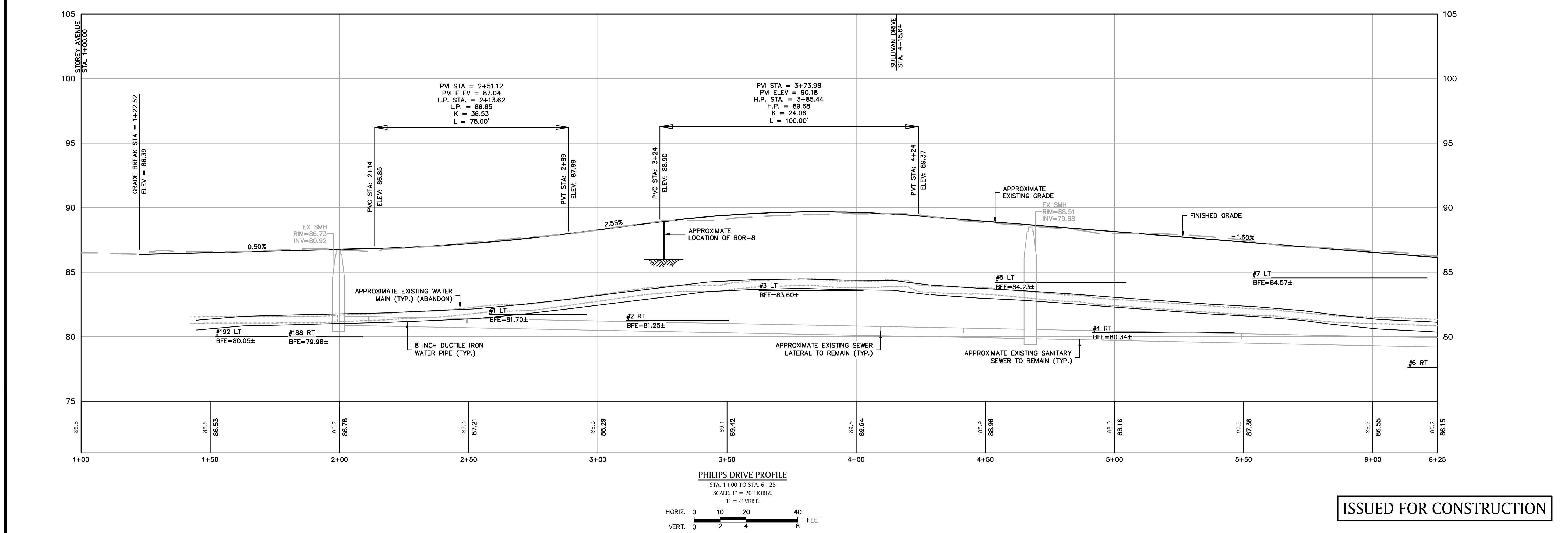
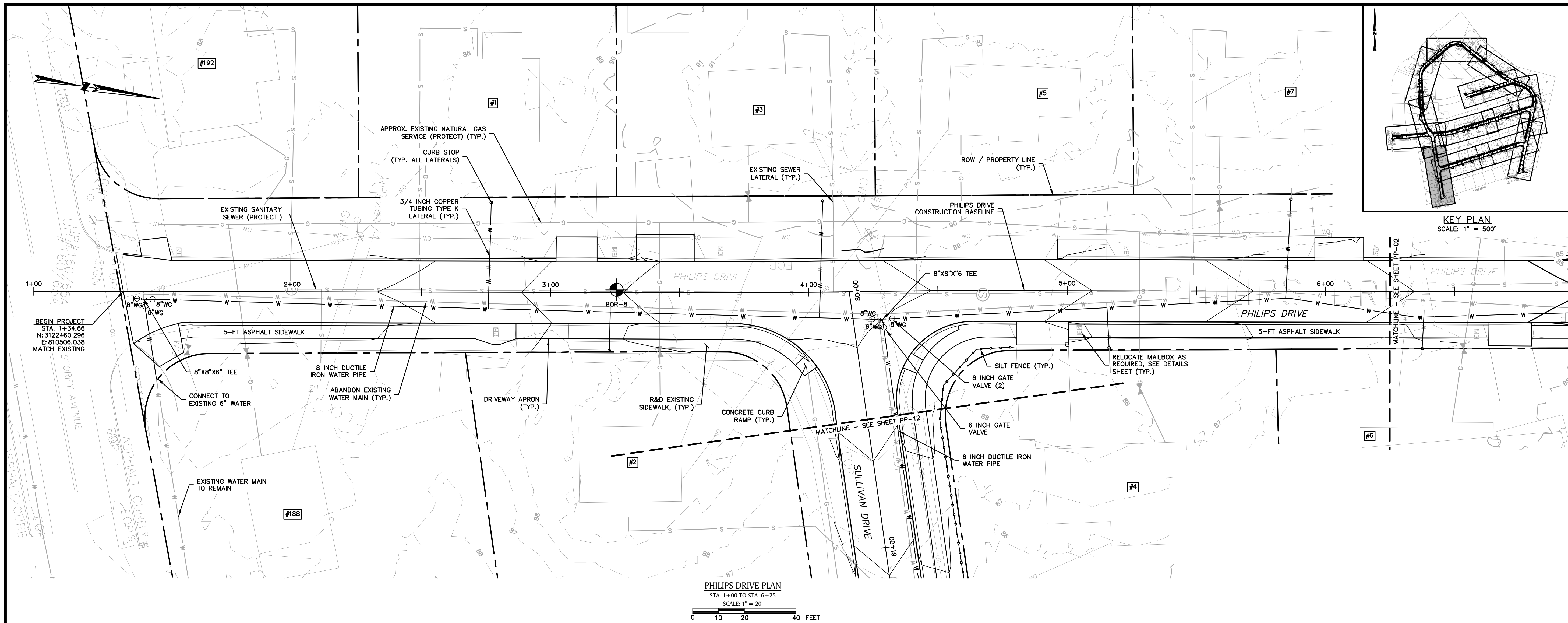












ISSUED FOR CONSTRUCTION



**ROADWAY,  
 DRAINAGE & WATER  
 MAIN  
 IMPROVEMENTS**

PHILIPS DRIVE  
 NEIGHBORHOOD  
 IN  
 NEWBURYPORT  
 MASSACHUSETTS

PHILIPS DRIVE PLAN &  
 PROFILE  
 STA. 1+00 TO STA. 6+25

APRIL 2022

REVISIONS:

NO.	DESCRIPTION

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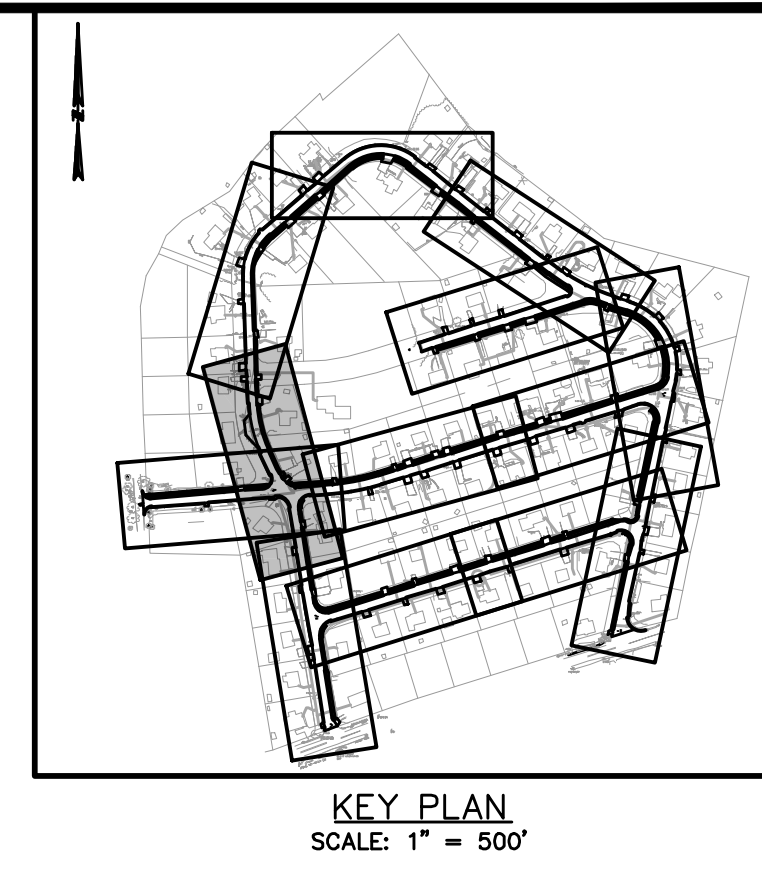
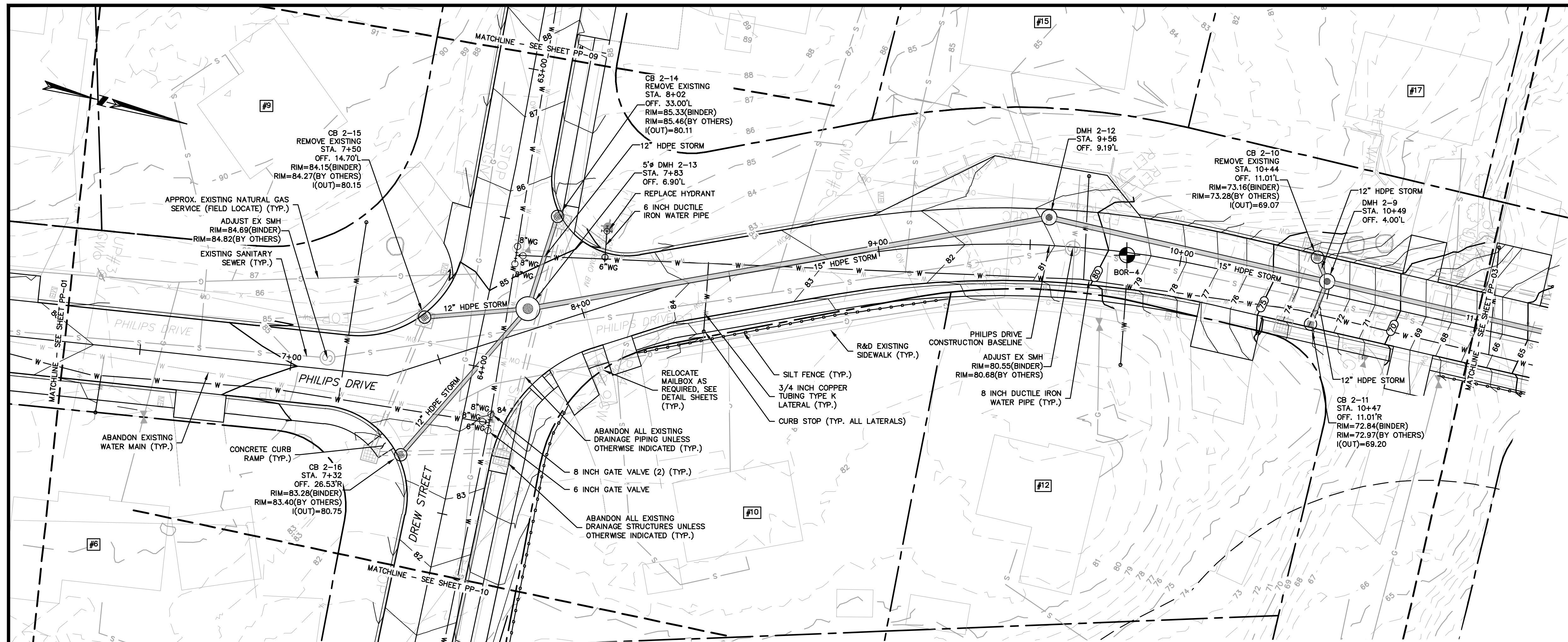
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FILE: 8992300-PLAN\_PROF-PHILIPS PH2  
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PP-01

ROADWAY, DRAINAGE & WATER MAIN IMPROVEMENTS - APRIL 2022





**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS

**PHILIPS DRIVE PLAN &  
PROFILE**  
STA. 6+25 TO STA. 11+00

APRIL 2022

REVISIONS:

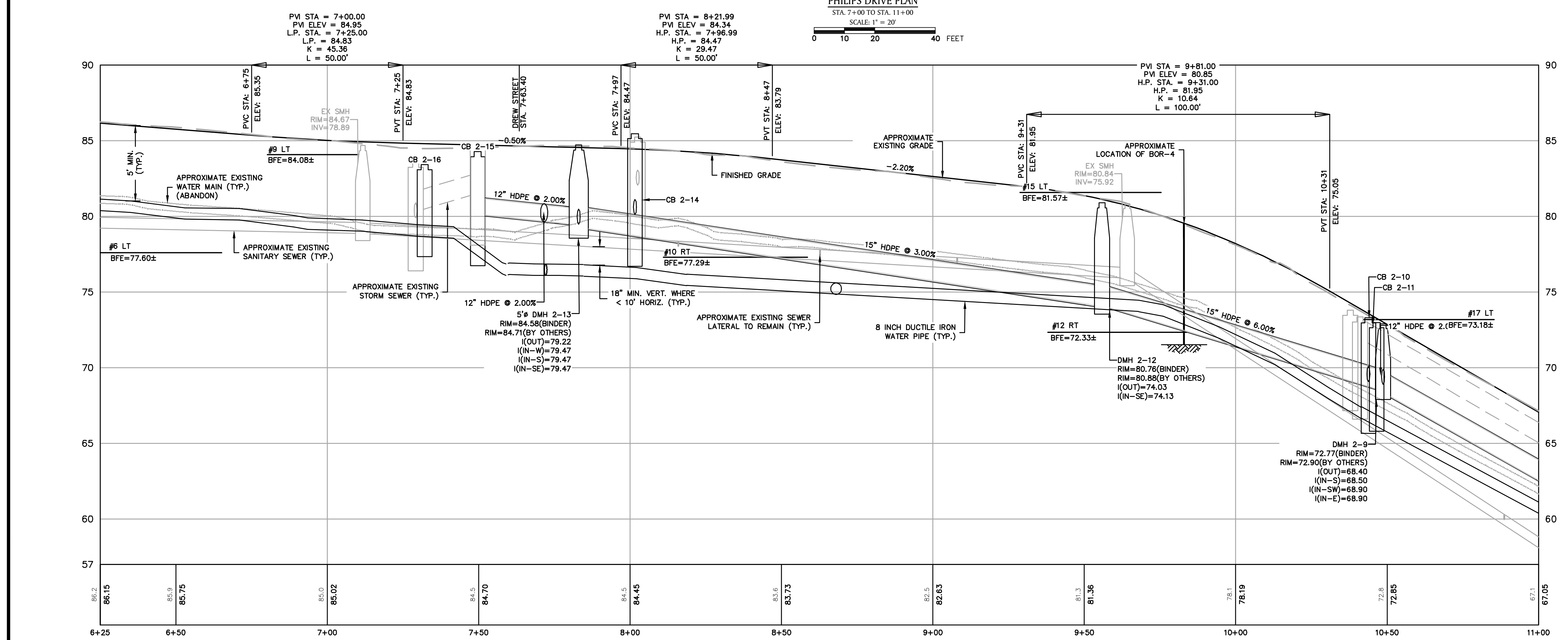
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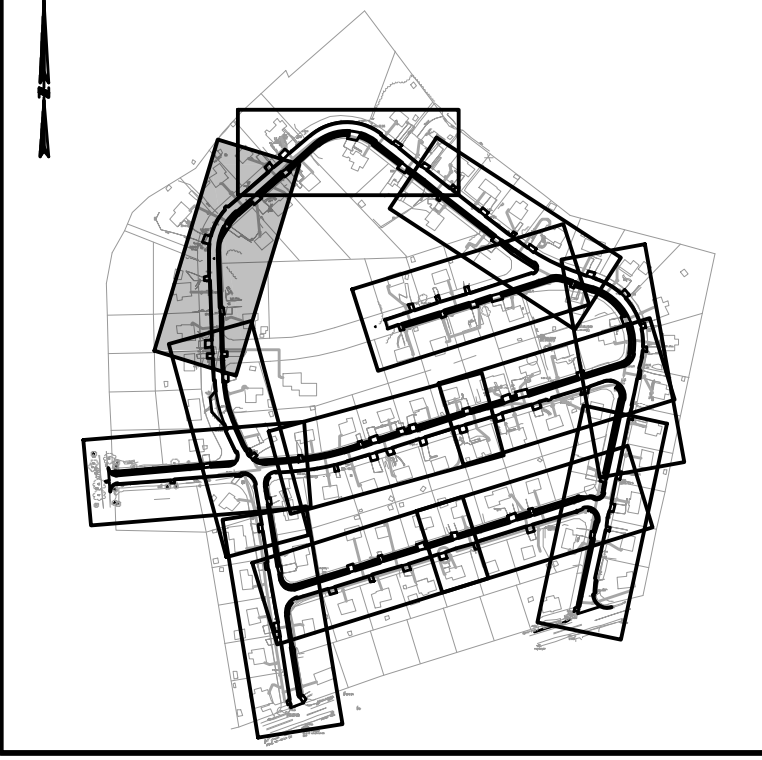
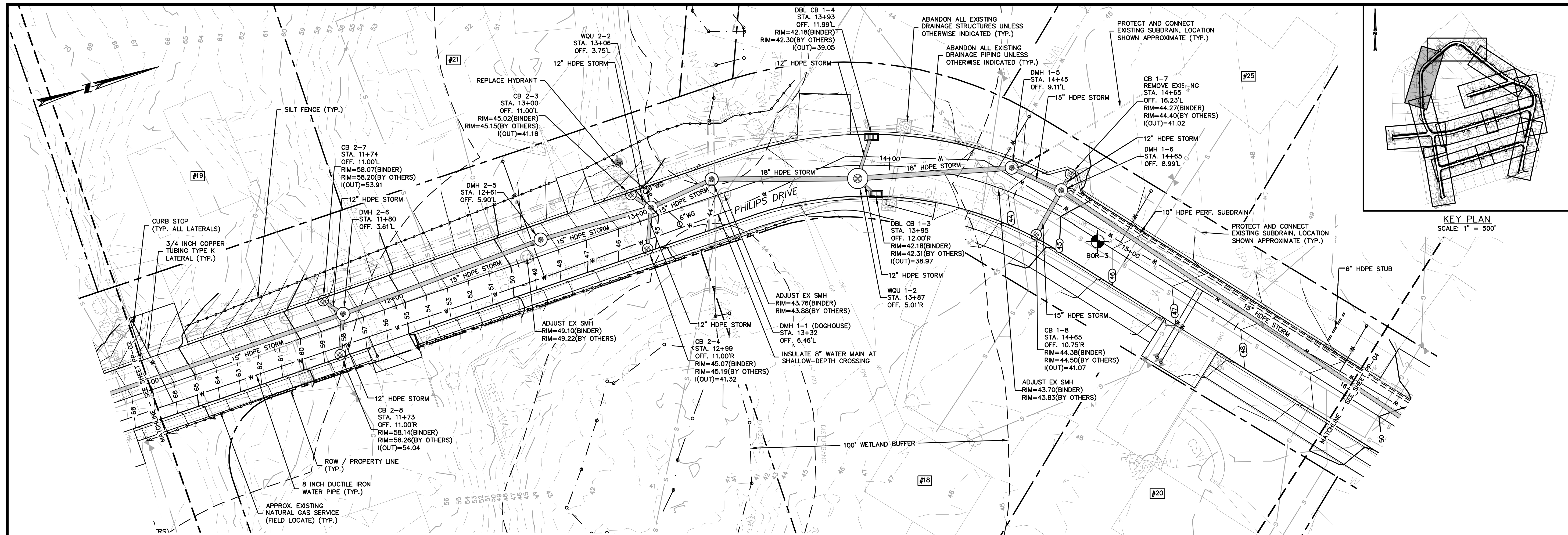


**PHILIPS DRIVE PROFILE**  
STA. 6+25 TO STA. 11+00  
SCALE: 1" = 20' HORIZ.  
1" = 4' VERT.

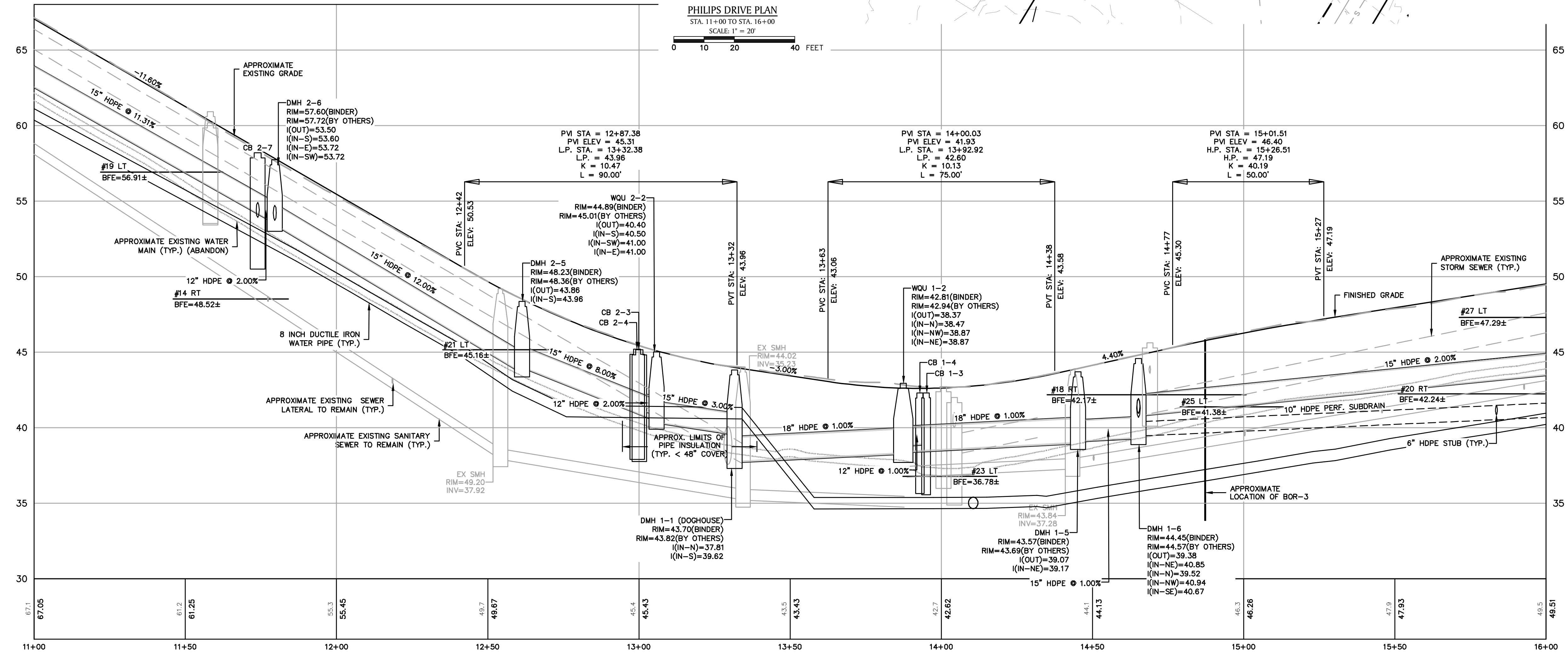
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ROADWAY, DRAINAGE & WATER MAIN IMPROVEMENTS - APRIL 2022





PHILIPS DRIVE PLAN  
STA. 11+00 TO STA. 16+00  
SCALE: 1" = 20'



PHILIPS DRIVE PROFILE  
STA. 11+00 TO STA. 16+00  
SCALE: 1" = 20' HORIZ.  
1" = 4' VERT.

# ROADWAY, DRAINAGE & WATER MAIN IMPROVEMENTS

PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS

PHILIPS DRIVE PLAN &  
PROFILE  
STA. 11+00 TO STA. 16+00

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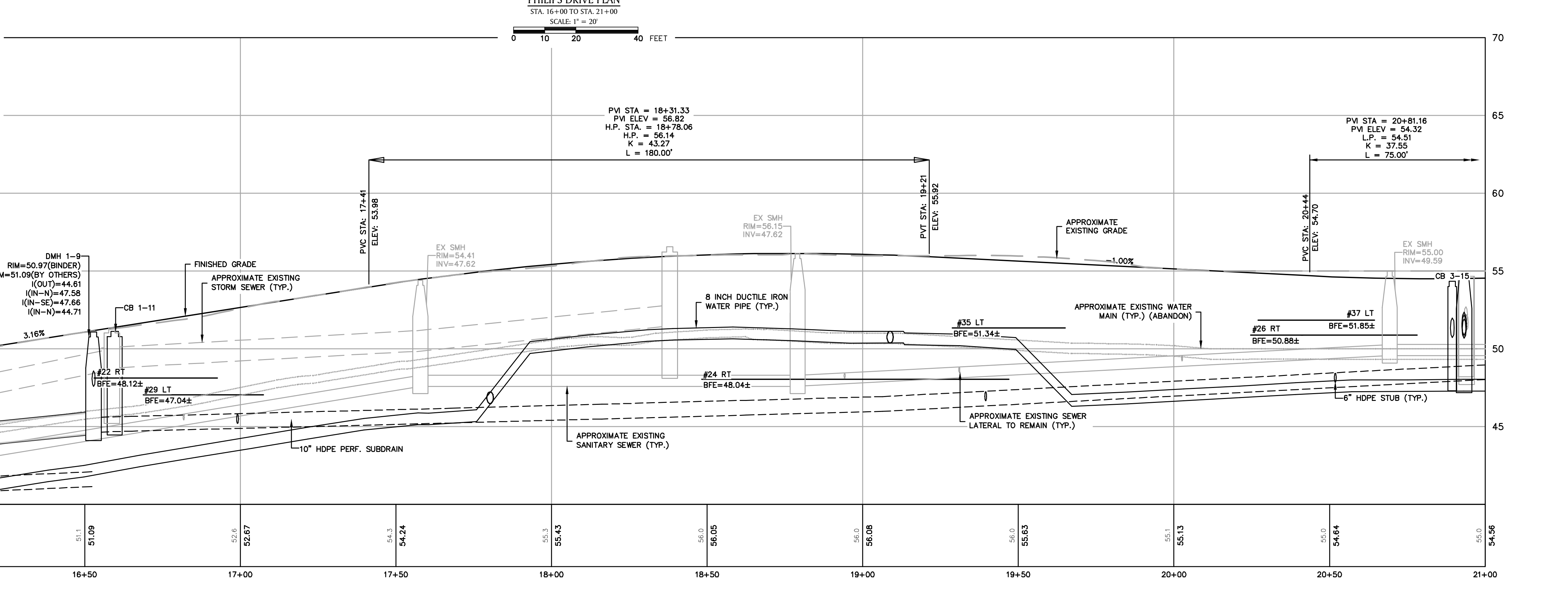
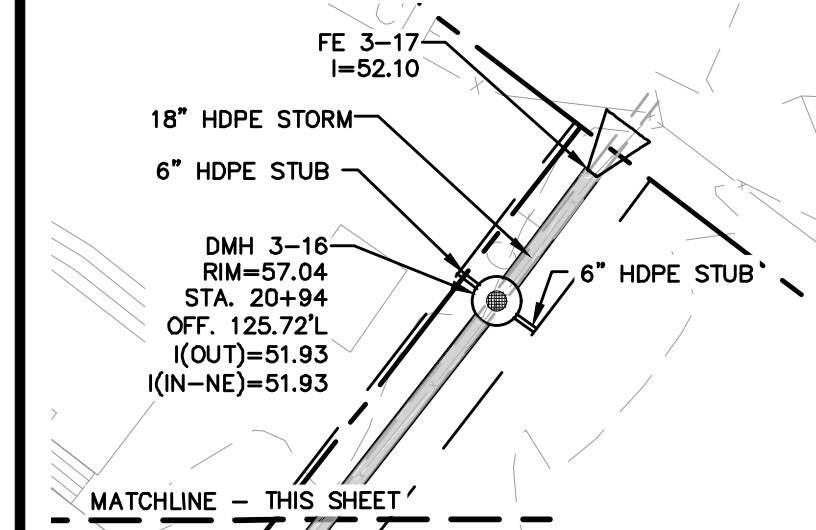
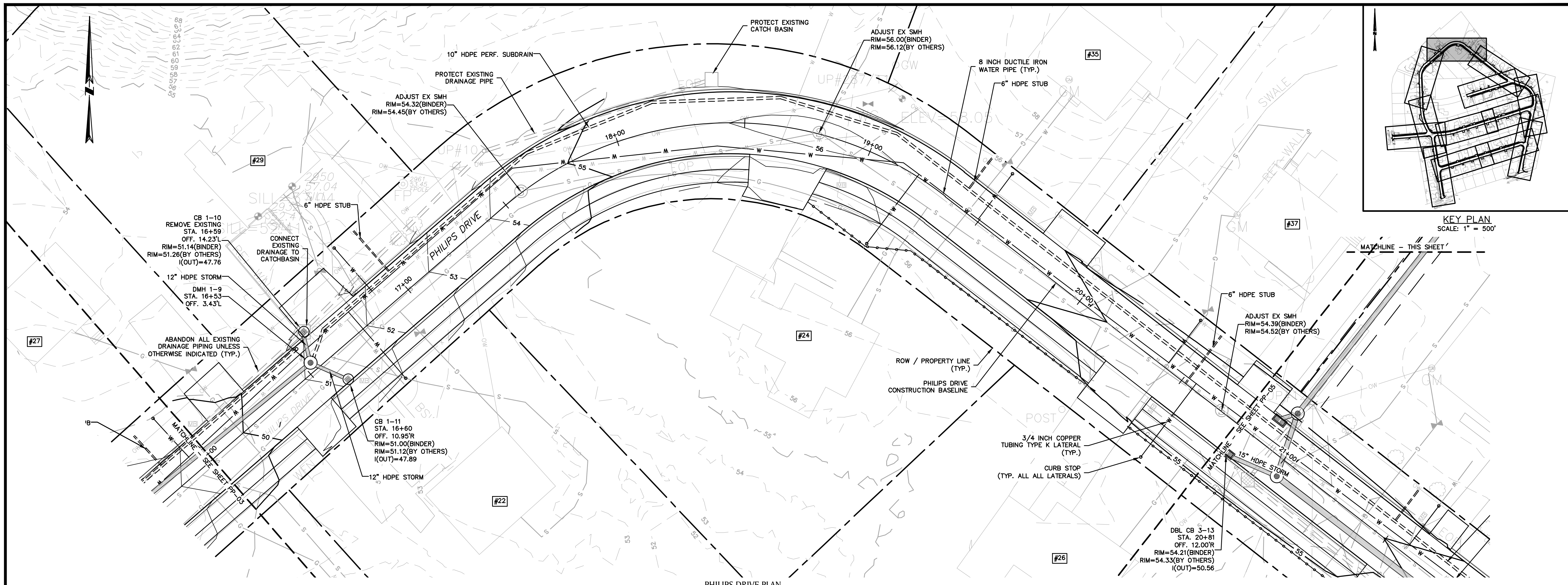
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PP-03

ROADWAY, DRAINAGE & WATER MAIN IMPROVEMENTS - APRIL 2022

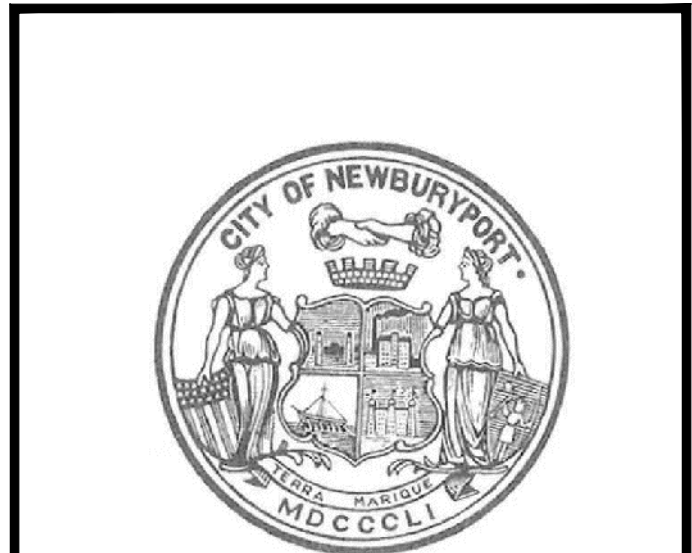






**PHILIPS DRIVE PROFILE**  
 STA. 16+00 TO STA. 21+00  
 SCALE: 1" = 20' HORIZ.  
 1" = 4' VERT.

**ISSUED FOR CONSTRUCTION**



**ROADWAY,  
 DRAINAGE & WATER  
 MAIN  
 IMPROVEMENTS**

**PHILIPS DRIVE  
 NEIGHBORHOOD  
 IN  
 NEWBURYPORT  
 MASSACHUSETTS**

**PHILIPS DRIVE PLAN &  
 PROFILE**  
 STA. 16+00 TO STA. 21+00

APRIL 2022

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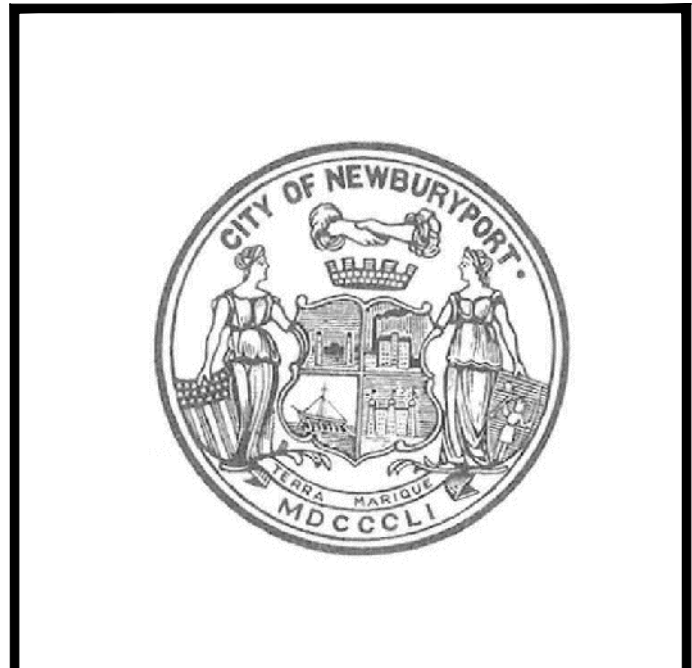
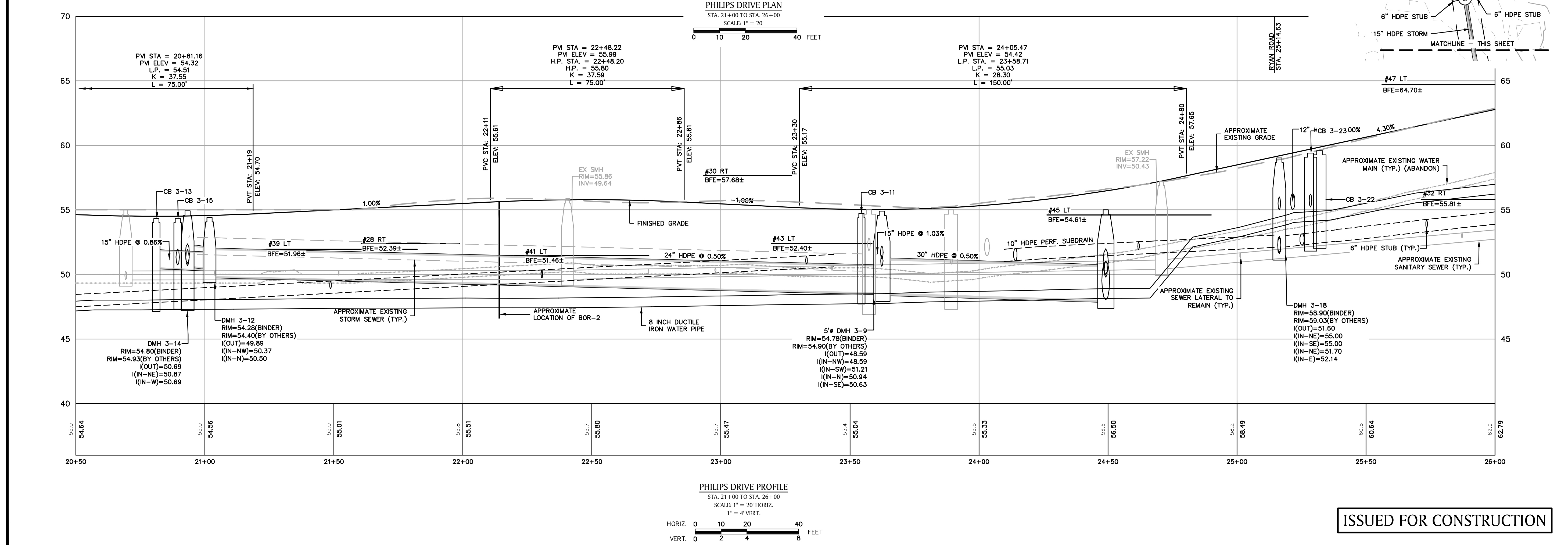
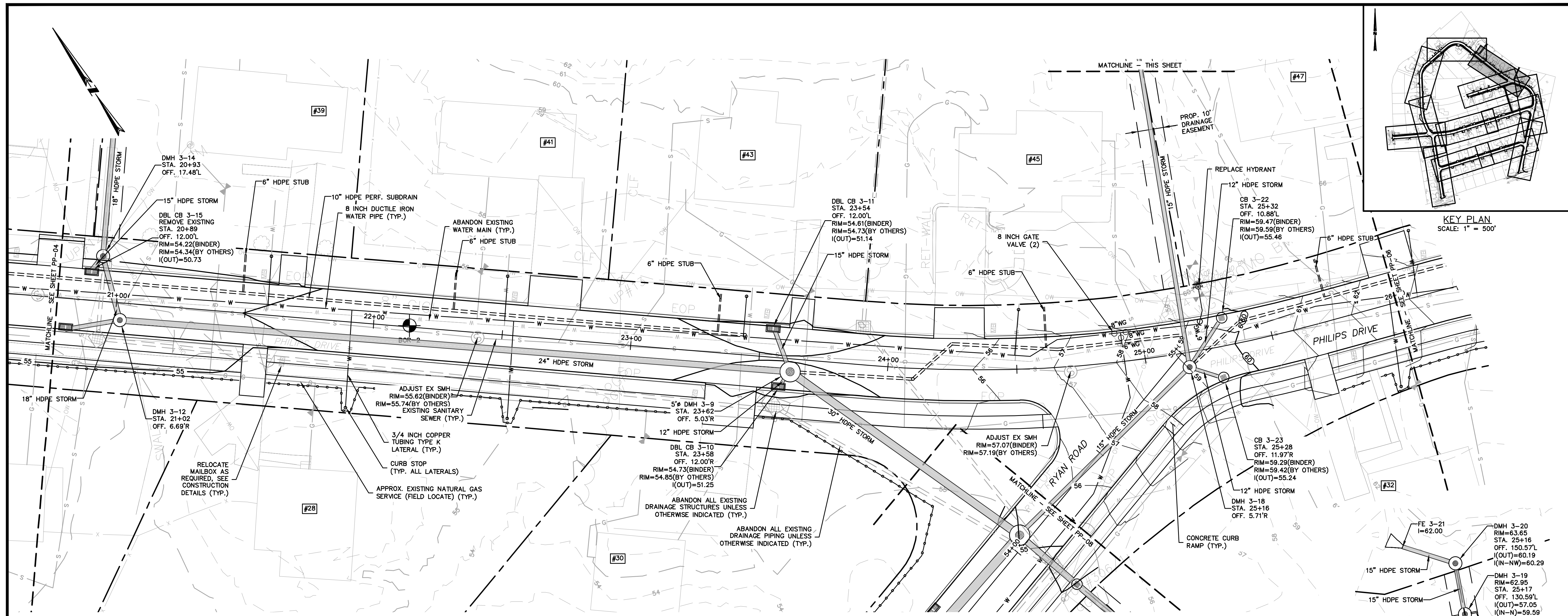
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PP-04

ROADWAY, DRAINAGE & WATER MAIN IMPROVEMENTS - APRIL 2022





**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

**PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS**

**PHILIPS DRIVE PLAN &  
PROFILE  
STA. 21+00 TO STA. 26+00**

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JOB. NO: 89923.00

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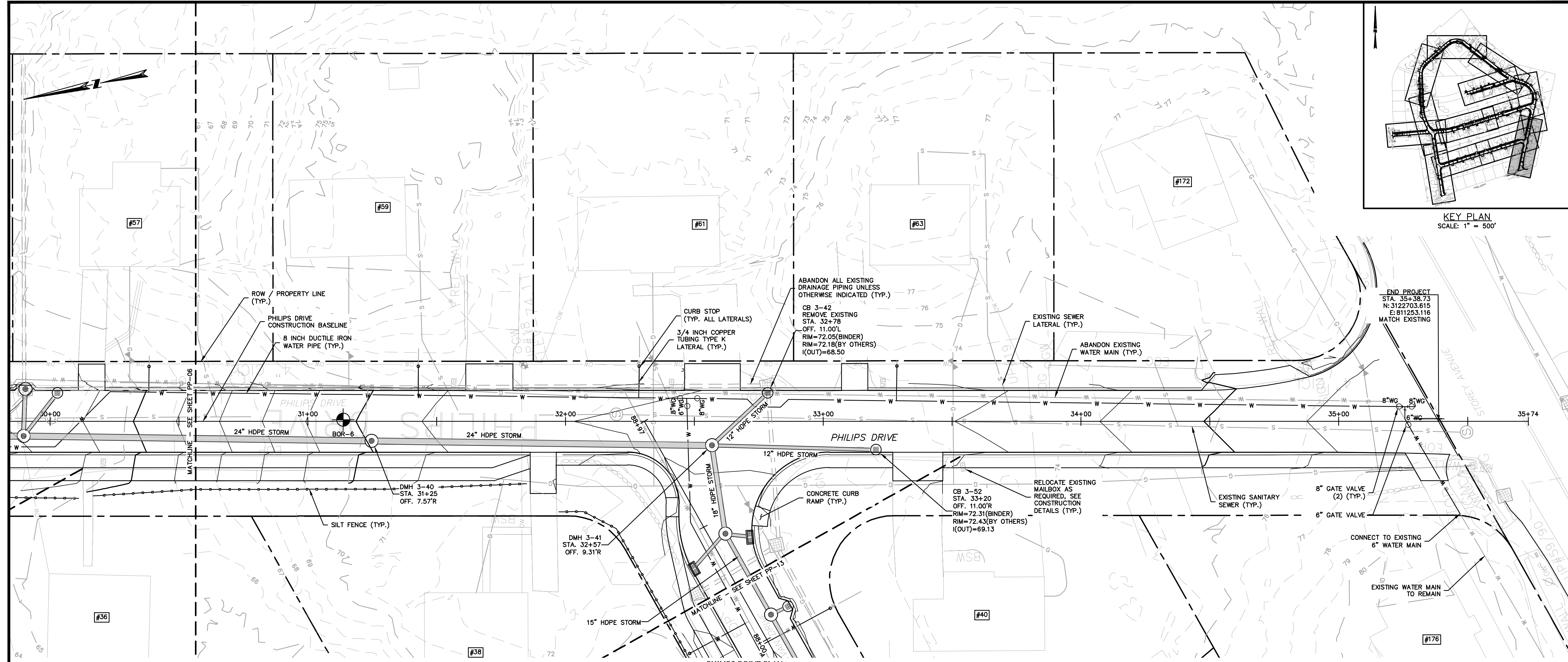
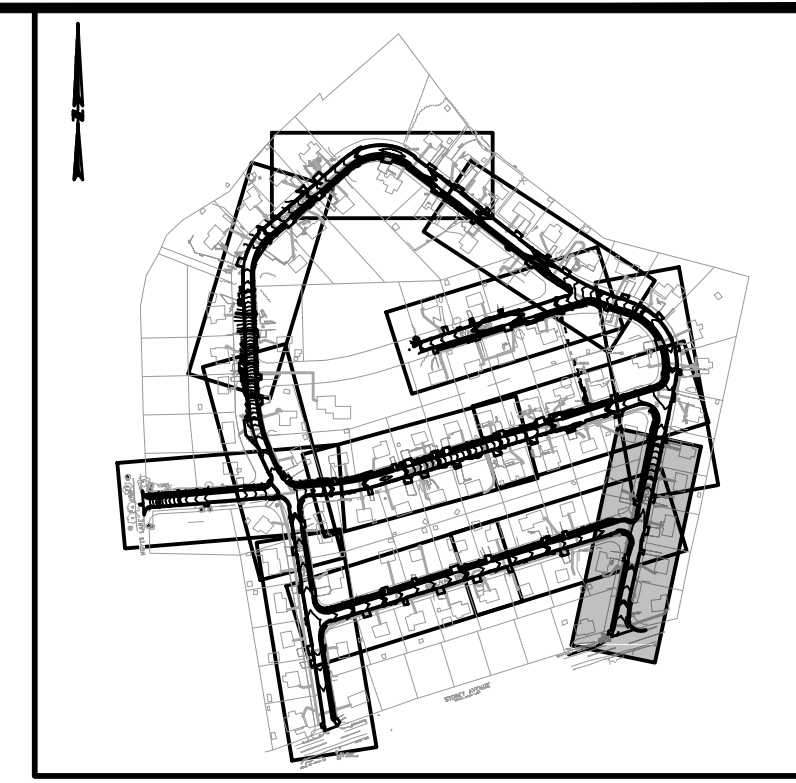
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ROADWAY, DRAINAGE & WATER MAIN IMPROVEMENTS - APRIL 2022

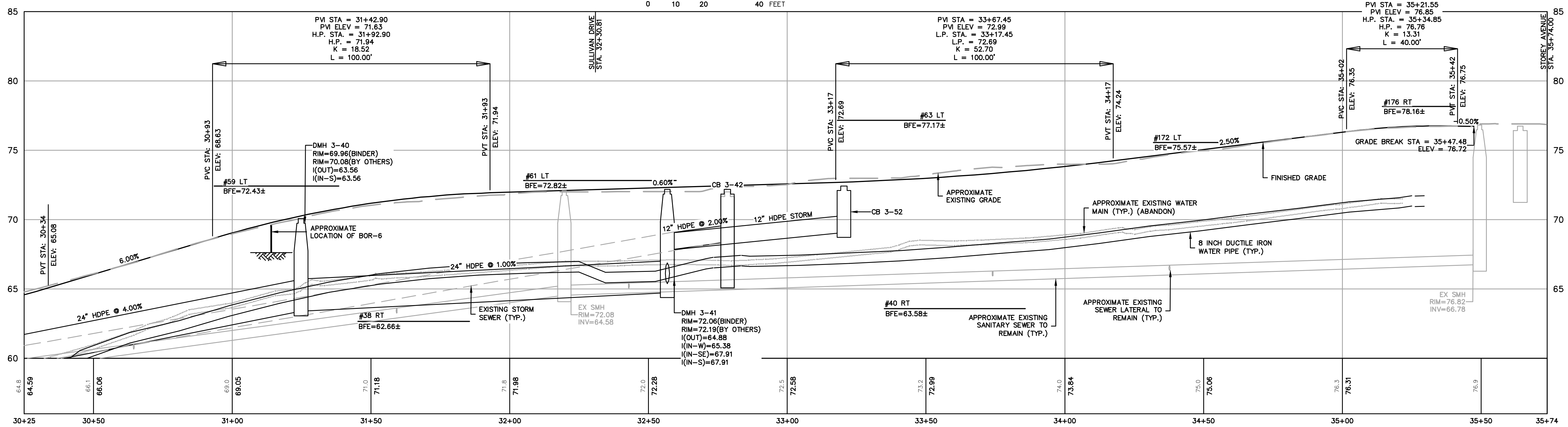




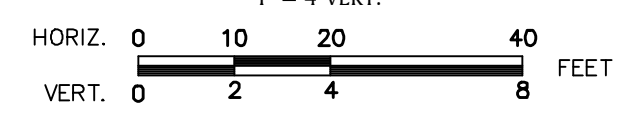




**PHILIPS DRIVE PLAN**  
 STA. 30+57 TO STA. 35+74  
 SCALE: 1" = 20'



**PHILIPS DRIVE PROFILE**  
 STA. 30+57 TO STA. 35+74  
 SCALE: 1" = 20' HORIZ.  
 1" = 4' VERT.



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**ROADWAY,  
 DRAINAGE & WATER  
 MAIN  
 IMPROVEMENTS**

**PHILIPS DRIVE  
 NEIGHBORHOOD  
 IN  
 NEWBURYPORT  
 MASSACHUSETTS**

**PHILIPS DRIVE PLAN &  
 PROFILE**  
 STA. 30+57 TO STA. 35+74

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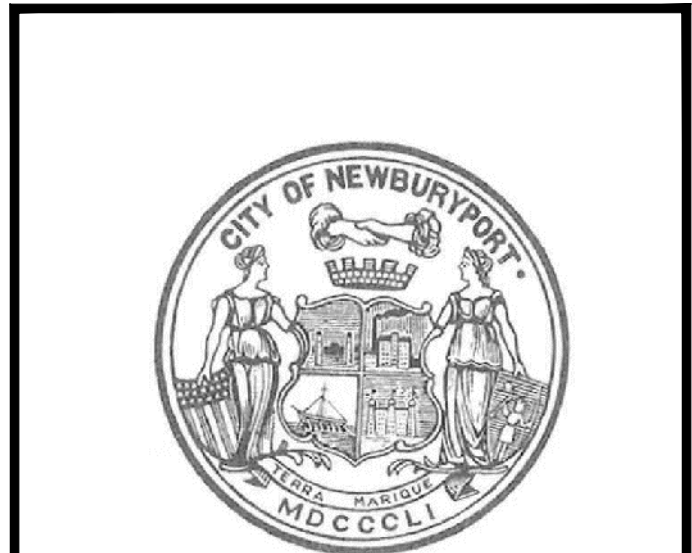
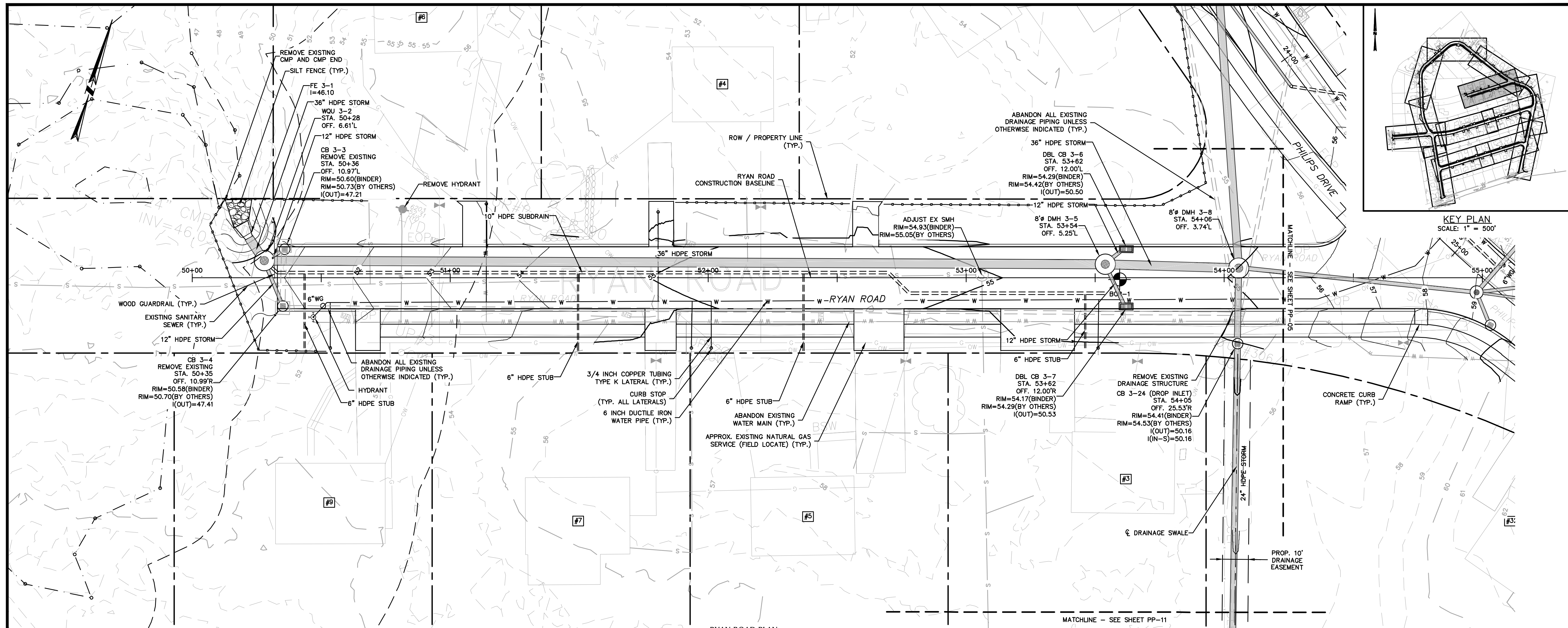
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**PP-07**





**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS

RYAN ROAD PLAN &  
PROFILE  
STA. 50+00 TO STA. 55+00

APRIL 2022

REVISIONS:

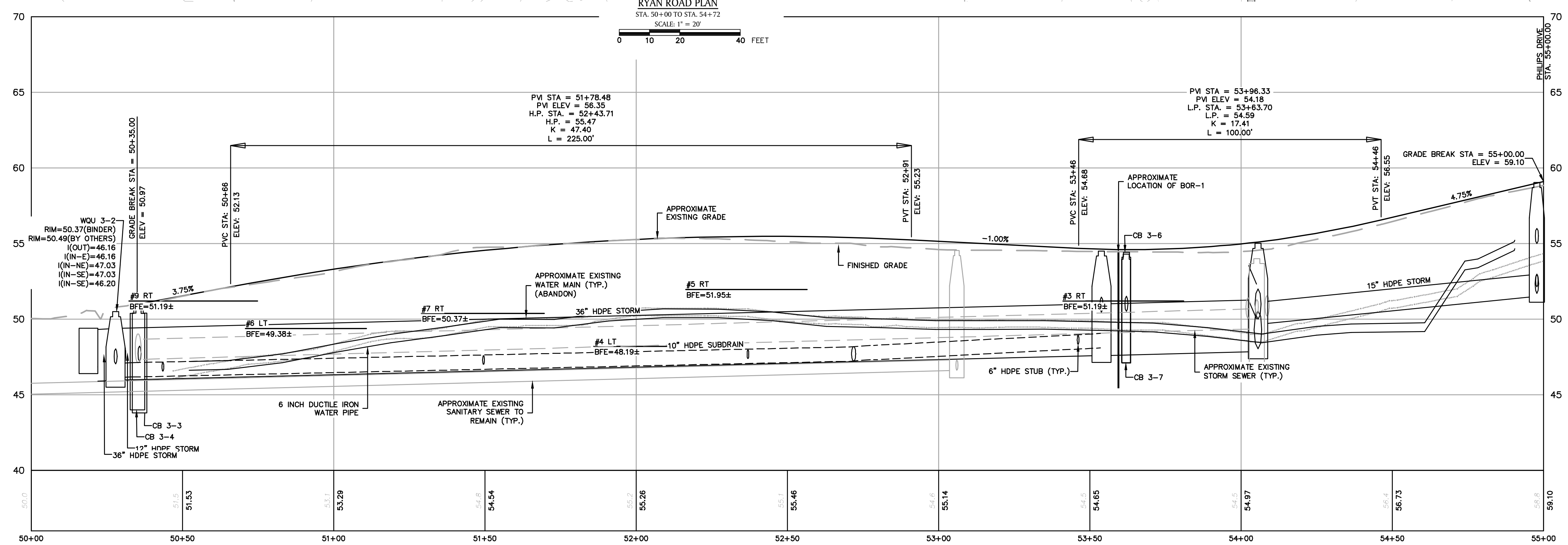

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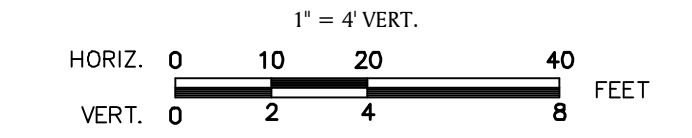
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SCALE: AS SHOWN

FILE: 8992300-PLAN\_PROF\_RYAN PH1.DWG  
DWG. NO:  
JOB. NO: 89923.00

PP-08



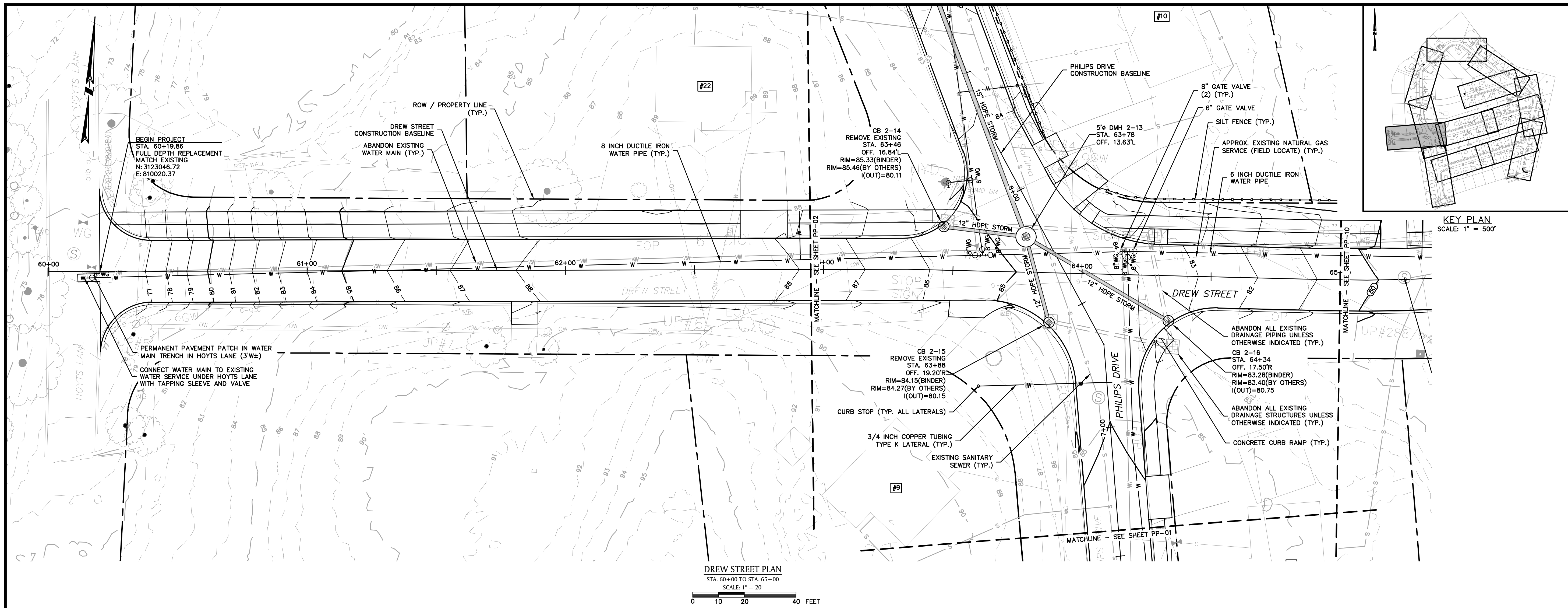
RYAN ROAD PROFILE  
STA. 50+00 TO STA. 54+72  
SCALE: 1" = 20' HORIZ.  
1" = 4' VERT.



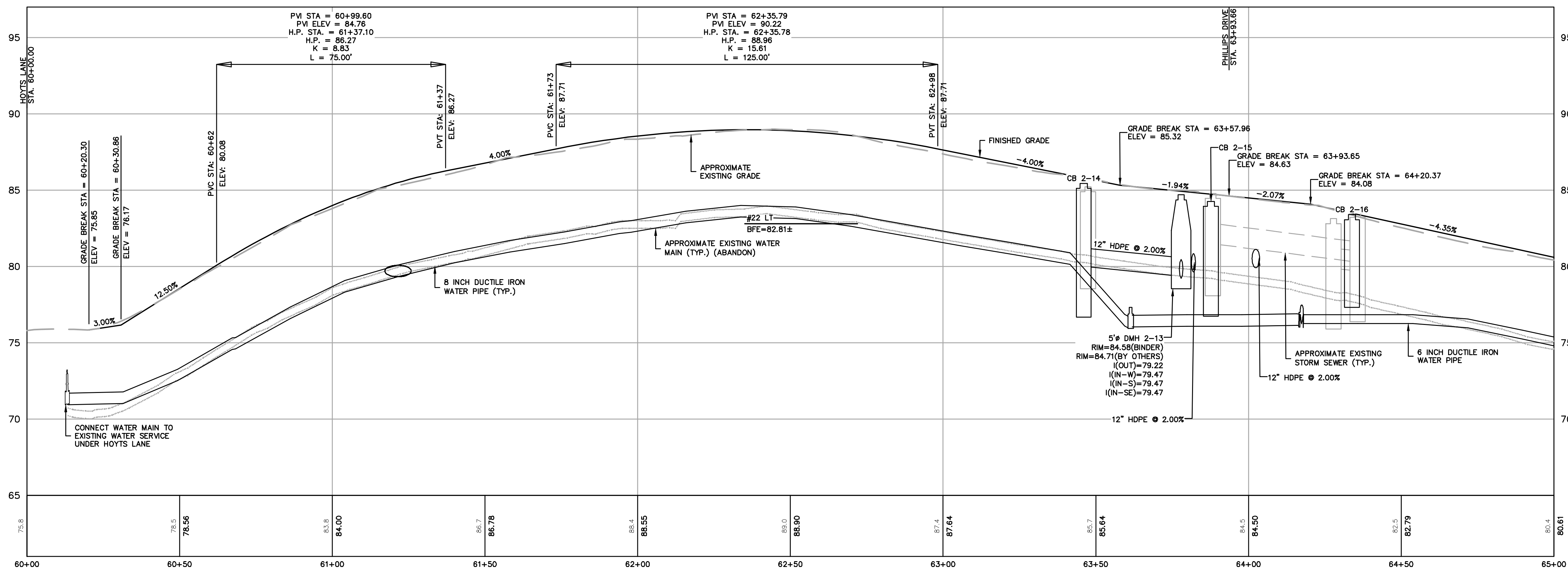
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ROADWAY, DRAINAGE & WATER MAIN IMPROVEMENTS - APRIL 2022





**DREW STREET PLAN**  
 STA. 60+00 TO STA. 65+00  
 SCALE: 1" = 20'  
 0 10 20 40 FEET



**DREW STREET PROFILE**  
 STA. 60+00 TO STA. 65+00  
 SCALE: 1" = 20' HORIZ.  
 1" = 4' VERT.  
 HORIZ. 0 10 20 40 FEET  
 VERT. 0 2 4 8 FEET

**ISSUED FOR CONSTRUCTION**



**ROADWAY,  
 DRAINAGE & WATER  
 MAIN  
 IMPROVEMENTS**

PHILIPS DRIVE  
 NEIGHBORHOOD  
 IN  
 NEWBURYPORT  
 MASSACHUSETTS

**DREW STREET PLAN &  
 PROFILE**  
 STA. 60+00 TO STA. 65+00

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NO.	DESCRIPTION

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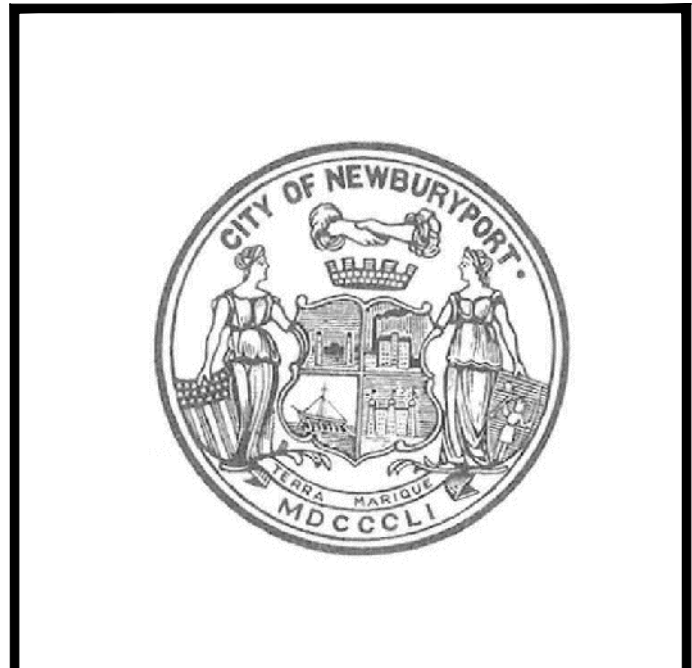
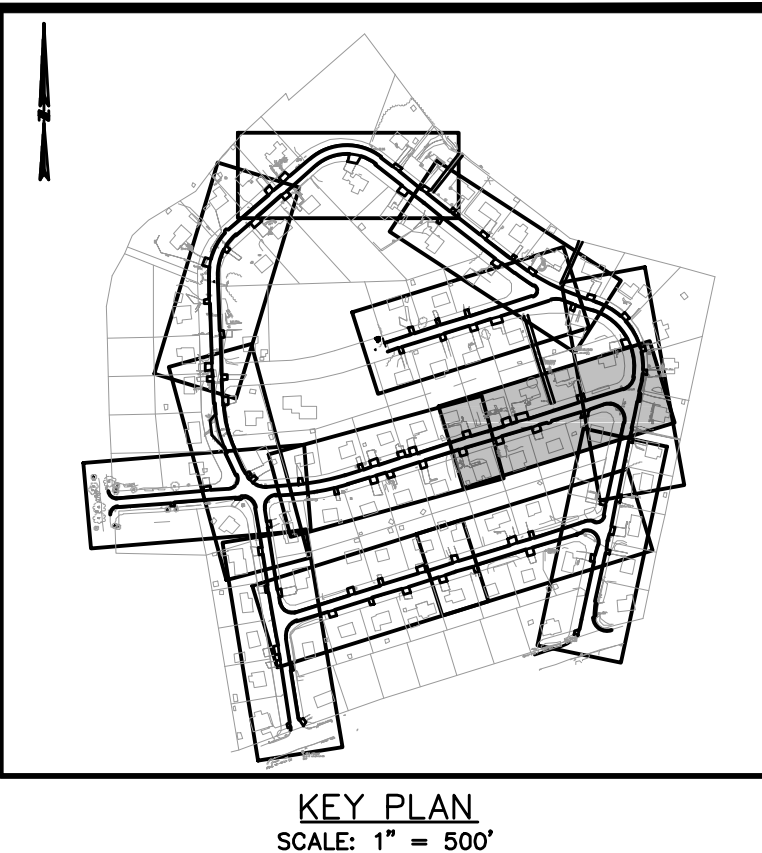
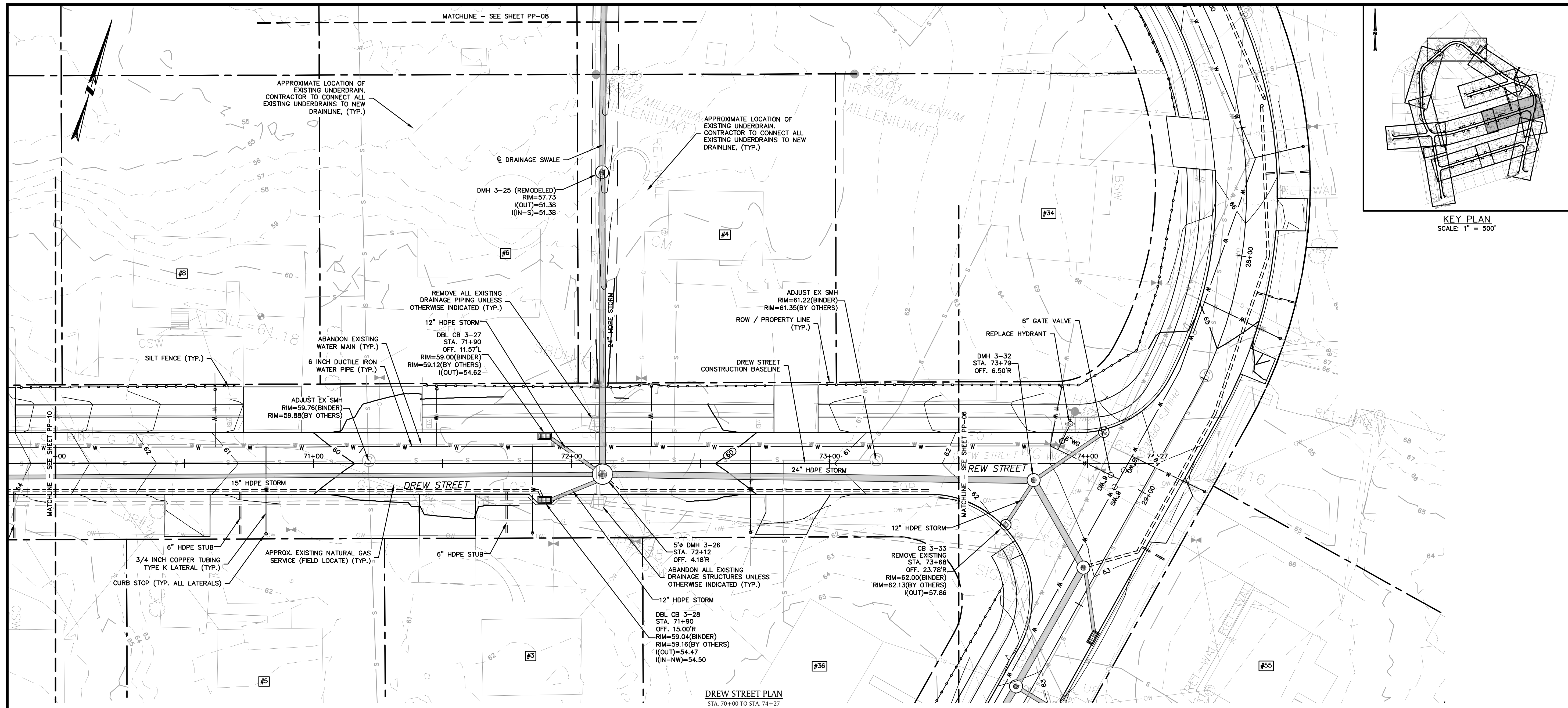
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 JOB. NO: 89923.00 **PP-09**

ROADWAY, DRAINAGE & WATER MAIN IMPROVEMENTS - APRIL 2022









**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS

**DREW STREET PLAN &  
PROFILE**  
STA. 70+00 TO STA. 74+27

APRIL 2022

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NEWBURYPORT, MA 01950

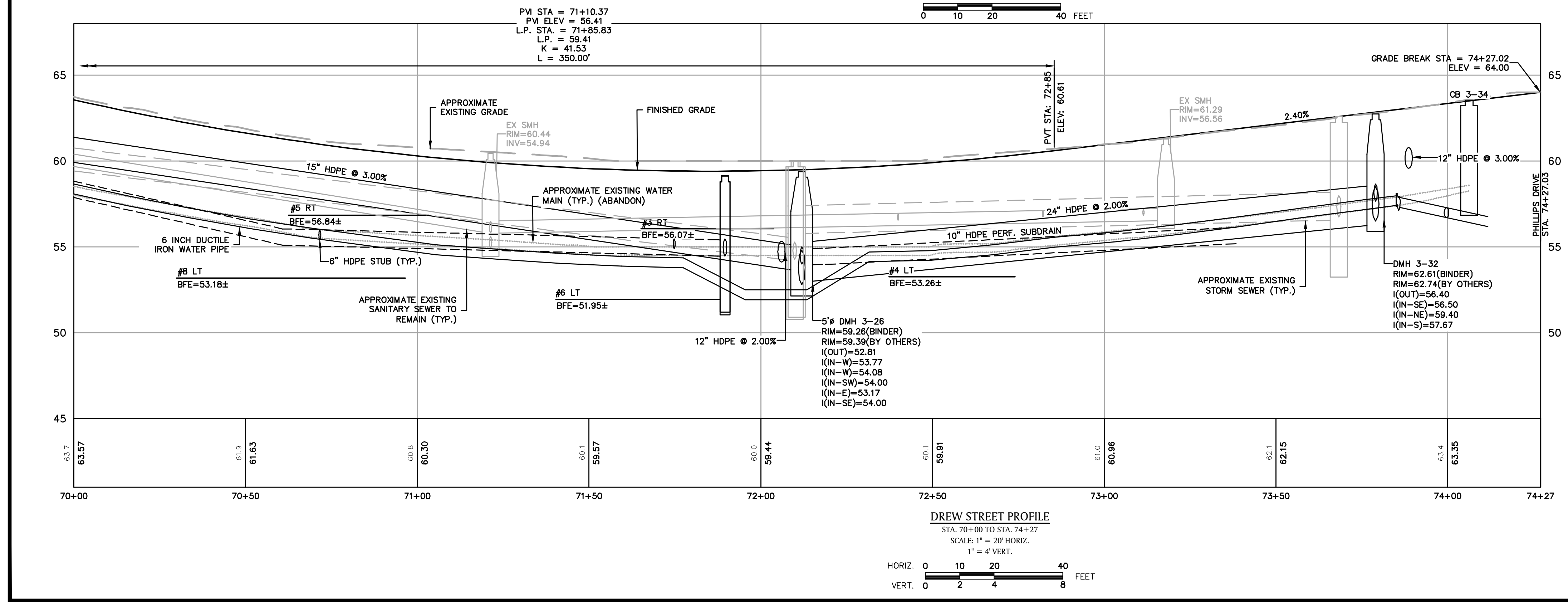
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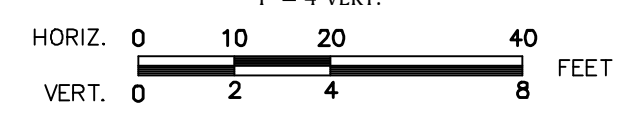
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**PP-11**

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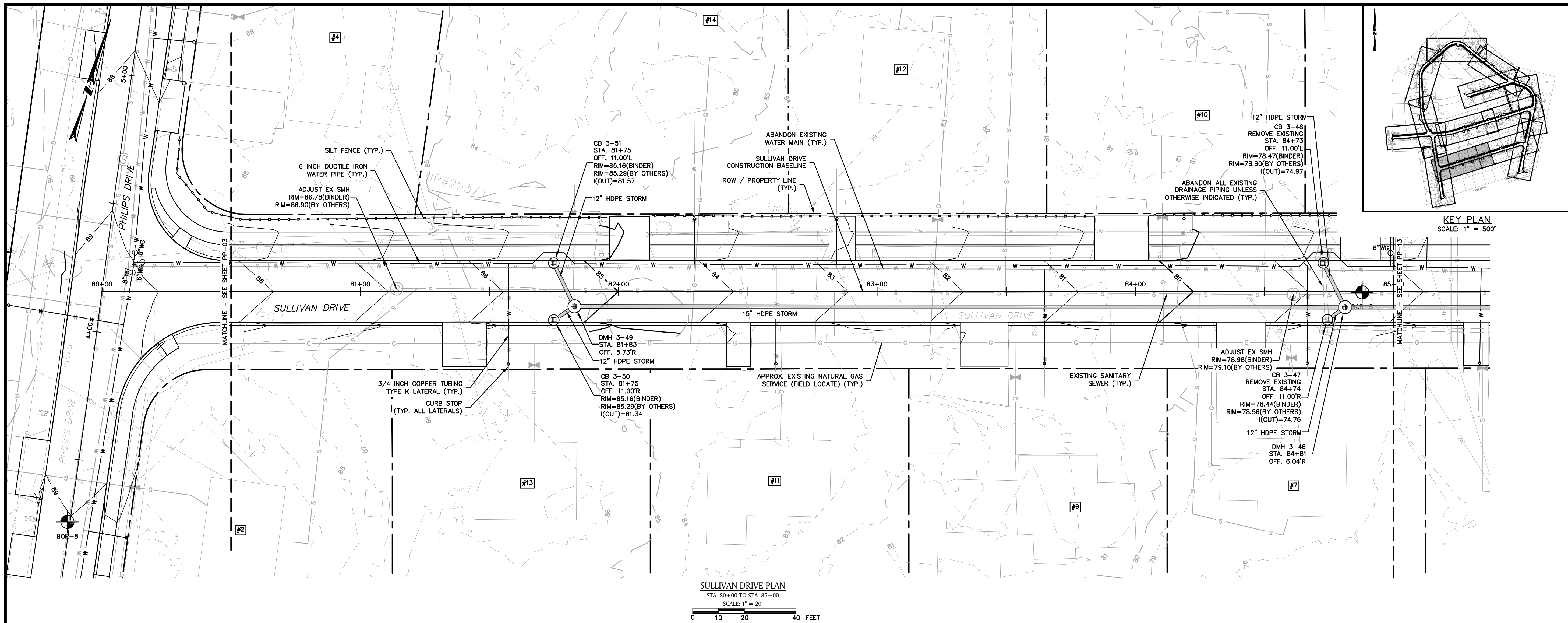


**DREW STREET PROFILE**  
STA. 70+00 TO STA. 74+27  
SCALE: 1" = 20' HORIZ.  
1" = 4' VERT.

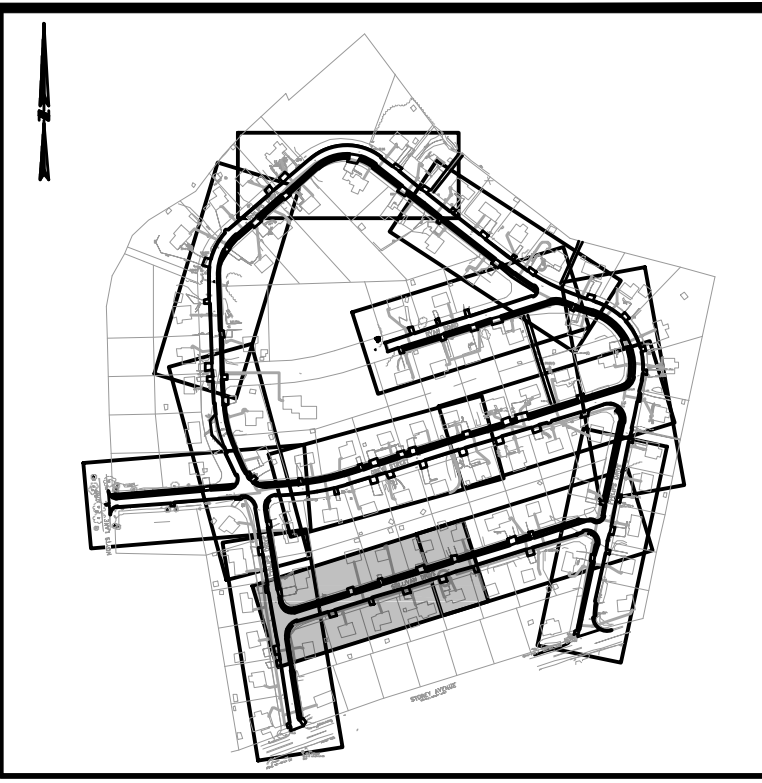


ROADWAY, DRAINAGE & WATER MAIN IMPROVEMENTS - APRIL 2022

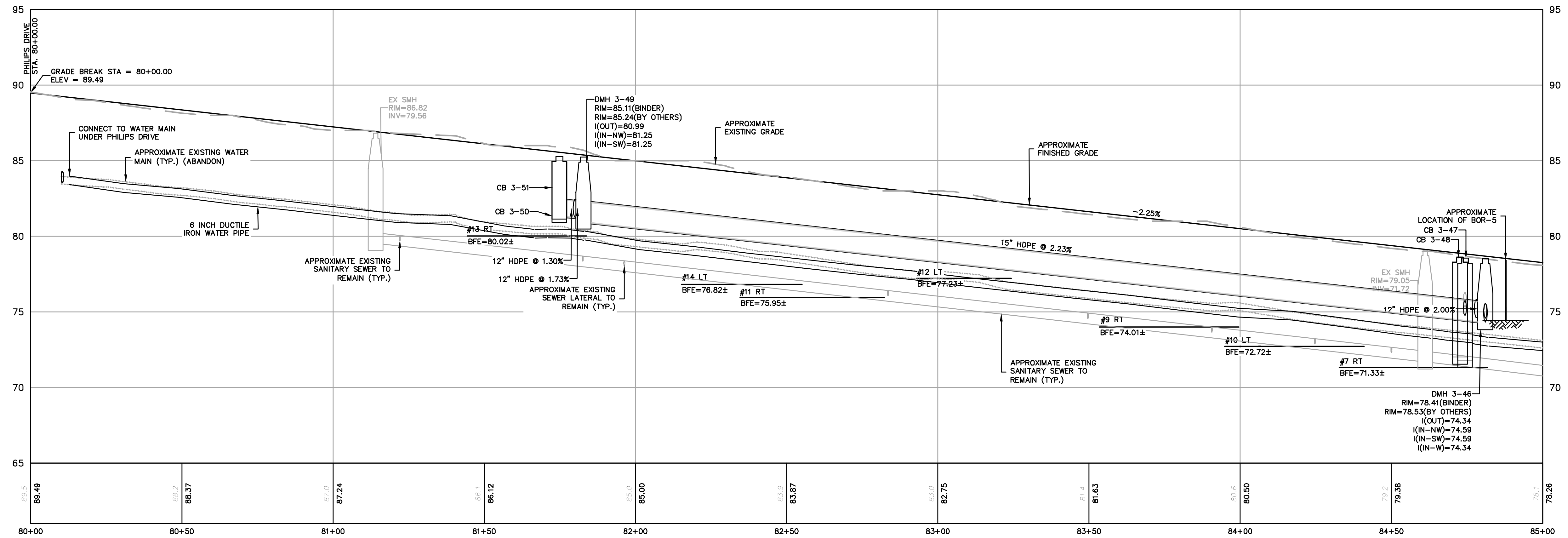




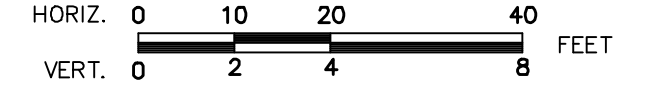
**SULLIVAN DRIVE PLAN**  
 STA. 80+00 TO STA. 85+00  
 SCALE: 1" = 20'



**KEY PLAN**  
 SCALE: 1" = 500'



**SULLIVAN DRIVE PROFILE**  
 STA. 80+00 TO STA. 85+00  
 SCALE: 1" = 20' HORIZ.  
 1" = 4' VERT.



**ISSUED FOR CONSTRUCTION**



**ROADWAY,  
 DRAINAGE & WATER  
 MAIN  
 IMPROVEMENTS**

**PHILIPS DRIVE  
 NEIGHBORHOOD  
 IN  
 NEWBURYPORT  
 MASSACHUSETTS**

**SULLIVAN DRIVE PLAN &  
 PROFILE**  
 STA. 80+00 TO STA. 85+00

APRIL 2022

REVISIONS:


PREPARED FOR:  
 CITY OF NEWBURYPORT  
 DEPARTMENT OF PUBLIC SERVICES  
 16A PERRY WAY  
 NEWBURYPORT, MA 01950

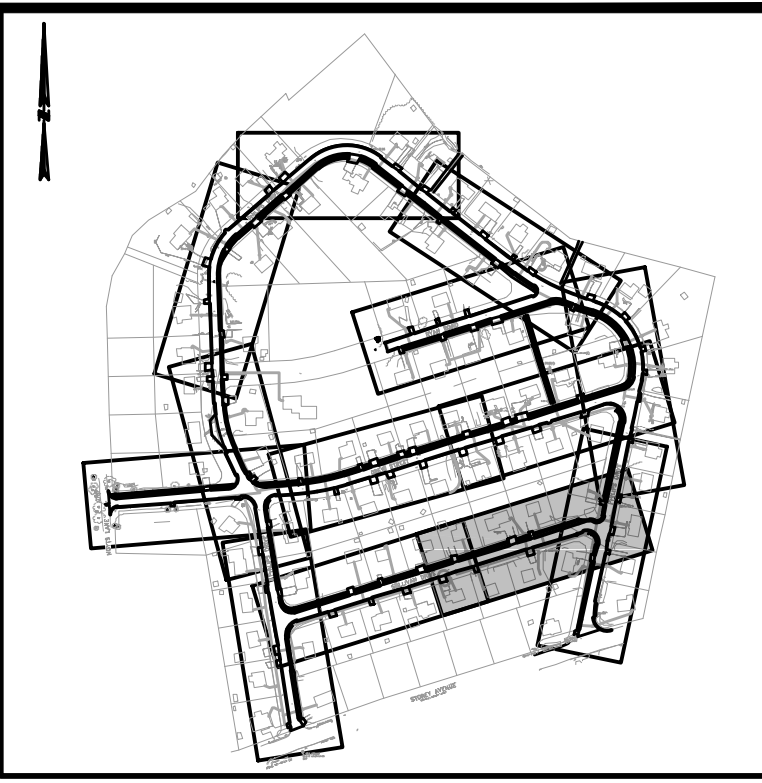
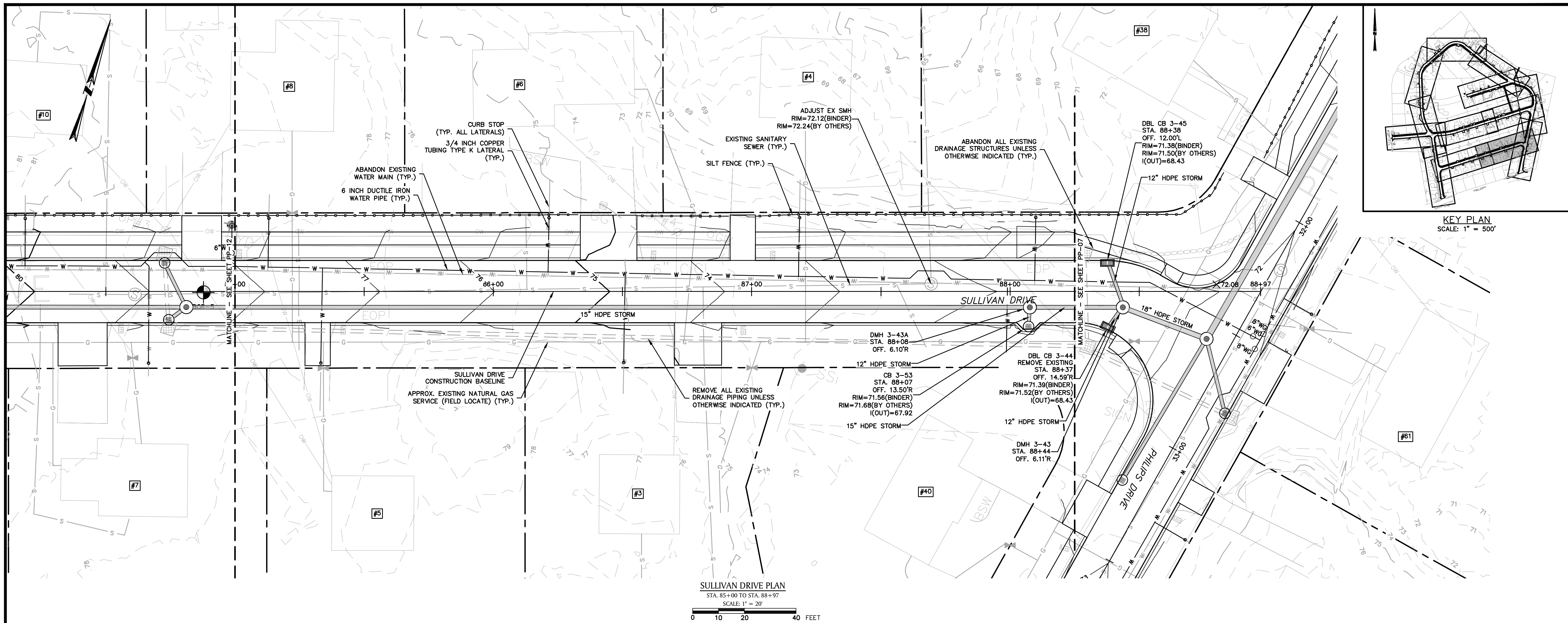
**BSC GROUP**  
 300 Brickstone Square  
 Andover, Massachusetts 01810  
 617 896 4300

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 SCALE: AS SHOWN

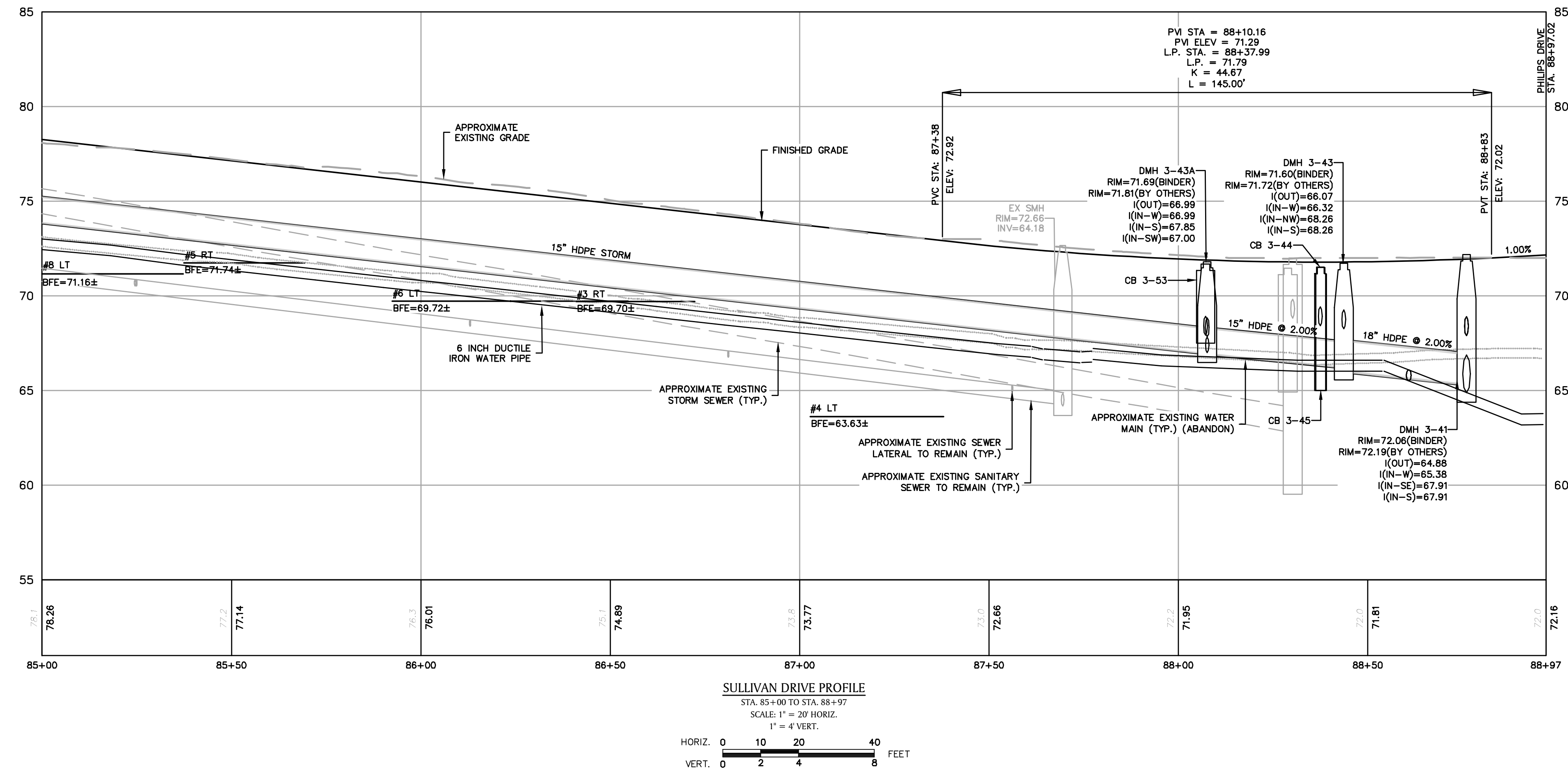
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 JOB. NO: 89923.00 **PP-12**

ROADWAY, DRAINAGE & WATER MAIN IMPROVEMENTS - APRIL 2022

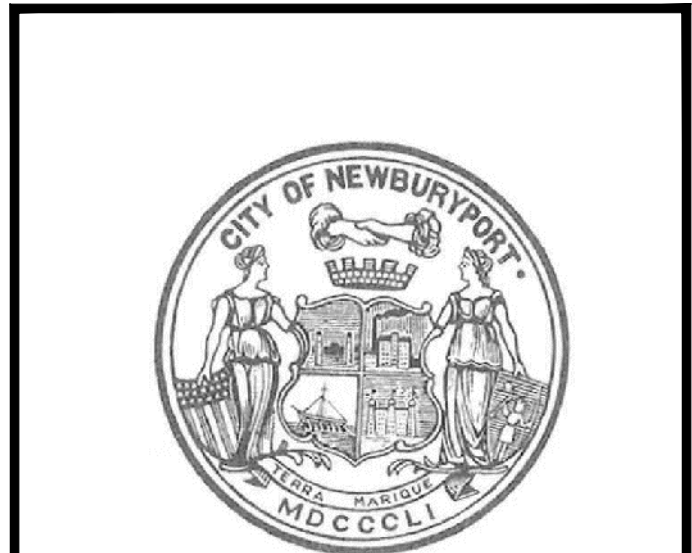




**SULLIVAN DRIVE PLAN**  
 STA. 85+00 TO STA. 88+97  
 SCALE: 1" = 20'



**SULLIVAN DRIVE PROFILE**  
 STA. 85+00 TO STA. 88+97  
 SCALE: 1" = 20' HORIZ.  
 1" = 4' VERT.



**ROADWAY,  
 DRAINAGE & WATER  
 MAIN  
 IMPROVEMENTS**

**PHILIPS DRIVE  
 NEIGHBORHOOD  
 IN  
 NEWBURYPORT  
 MASSACHUSETTS**

**SULLIVAN DRIVE PLAN &  
 PROFILE**  
 STA. 85+00 TO STA. 88+97

APRIL 2022

REVISIONS:


PREPARED FOR:  
 CITY OF NEWBURYPORT  
 DEPARTMENT OF PUBLIC SERVICES  
 16A PERRY WAY  
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FILE: 8992300-PLAN\_PROF\_SULLIVAN PH2  
 DWG. NO:  
 JOB. NO: 89923.00

**ISSUED FOR CONSTRUCTION**





**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS

**INTERSECTION DETAILED  
GRADING PLAN**

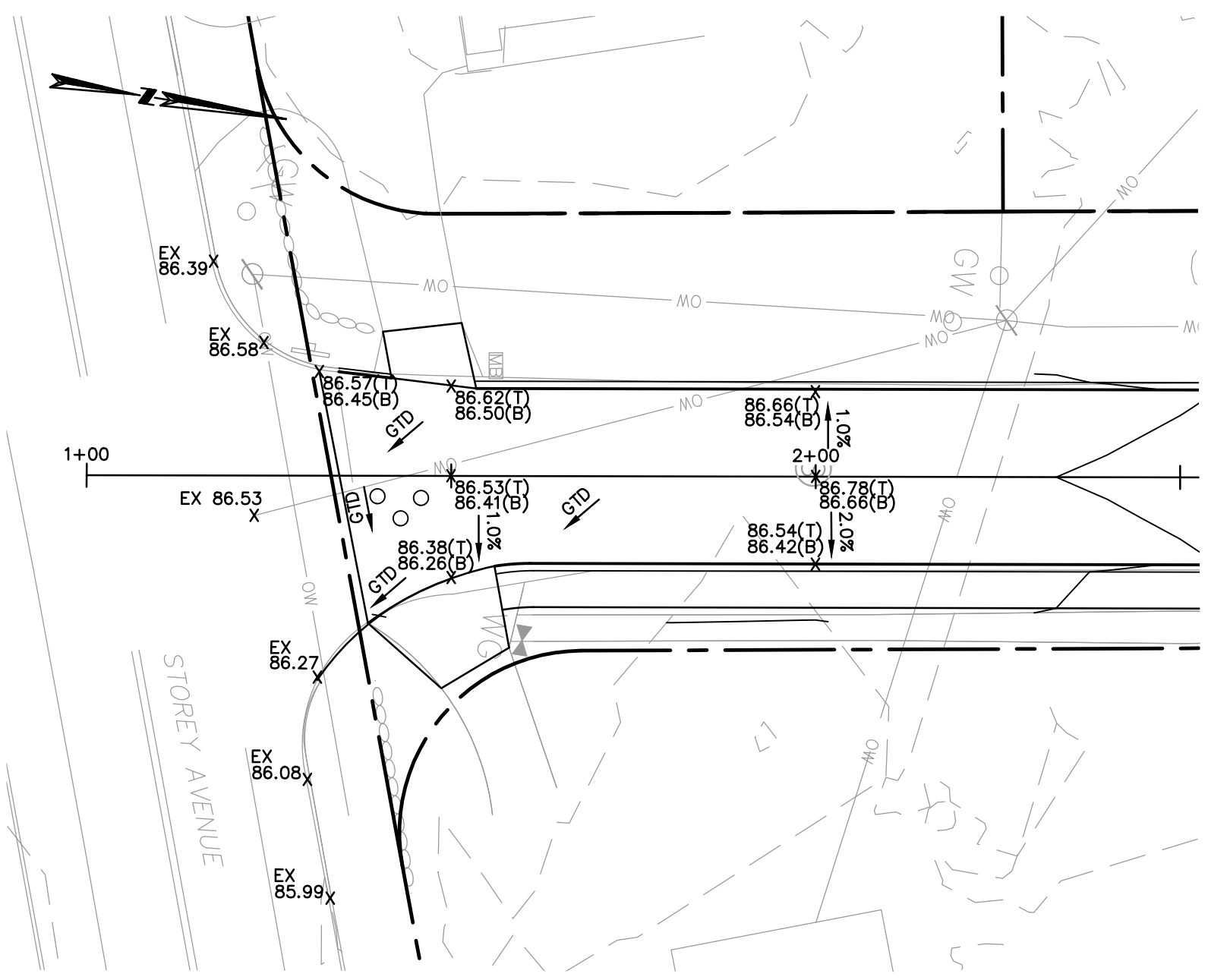
APRIL 2022

REVISIONS:

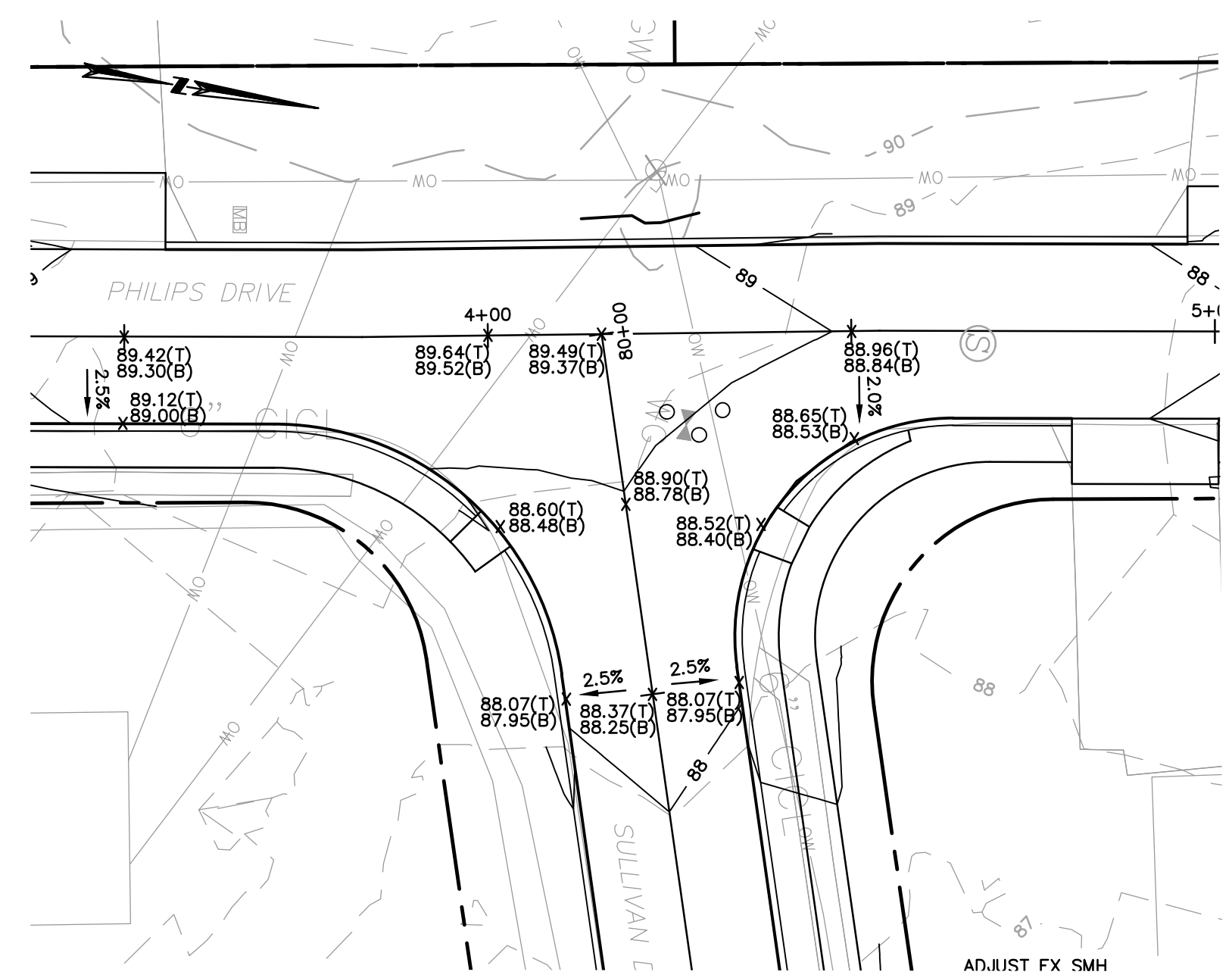

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DEPARTMENT OF PUBLIC SERVICES  
16A PERRY WAY  
NEWBURYPORT, MA 01950

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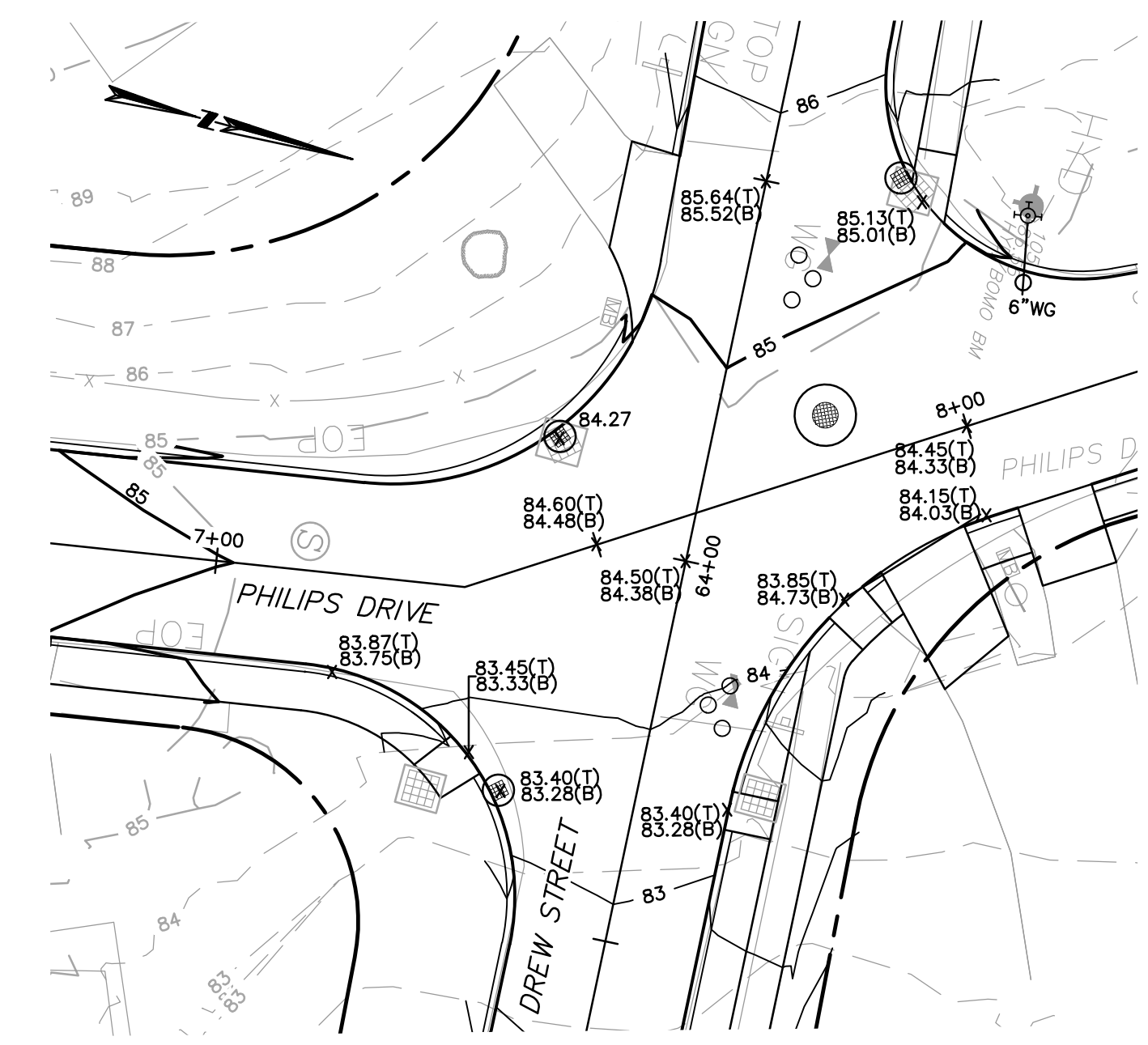
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SCALE: 1"=20'  
0 10 20 40 FEET  
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DWG. NO:  
JOB. NO: 89923.00 **GR-01**



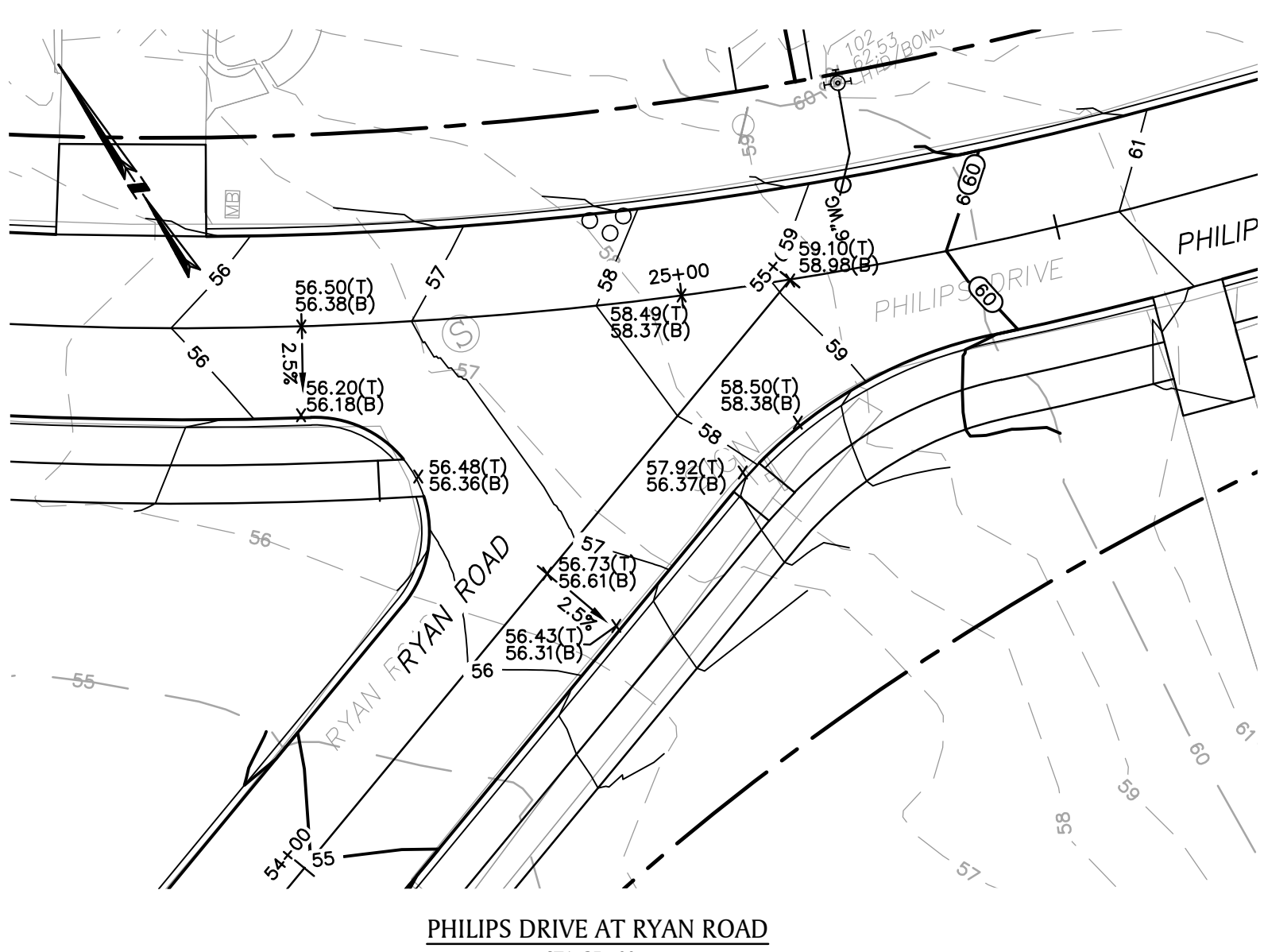
PHILIPS DRIVE AT STOREY AVENUE  
STA. 1+00±



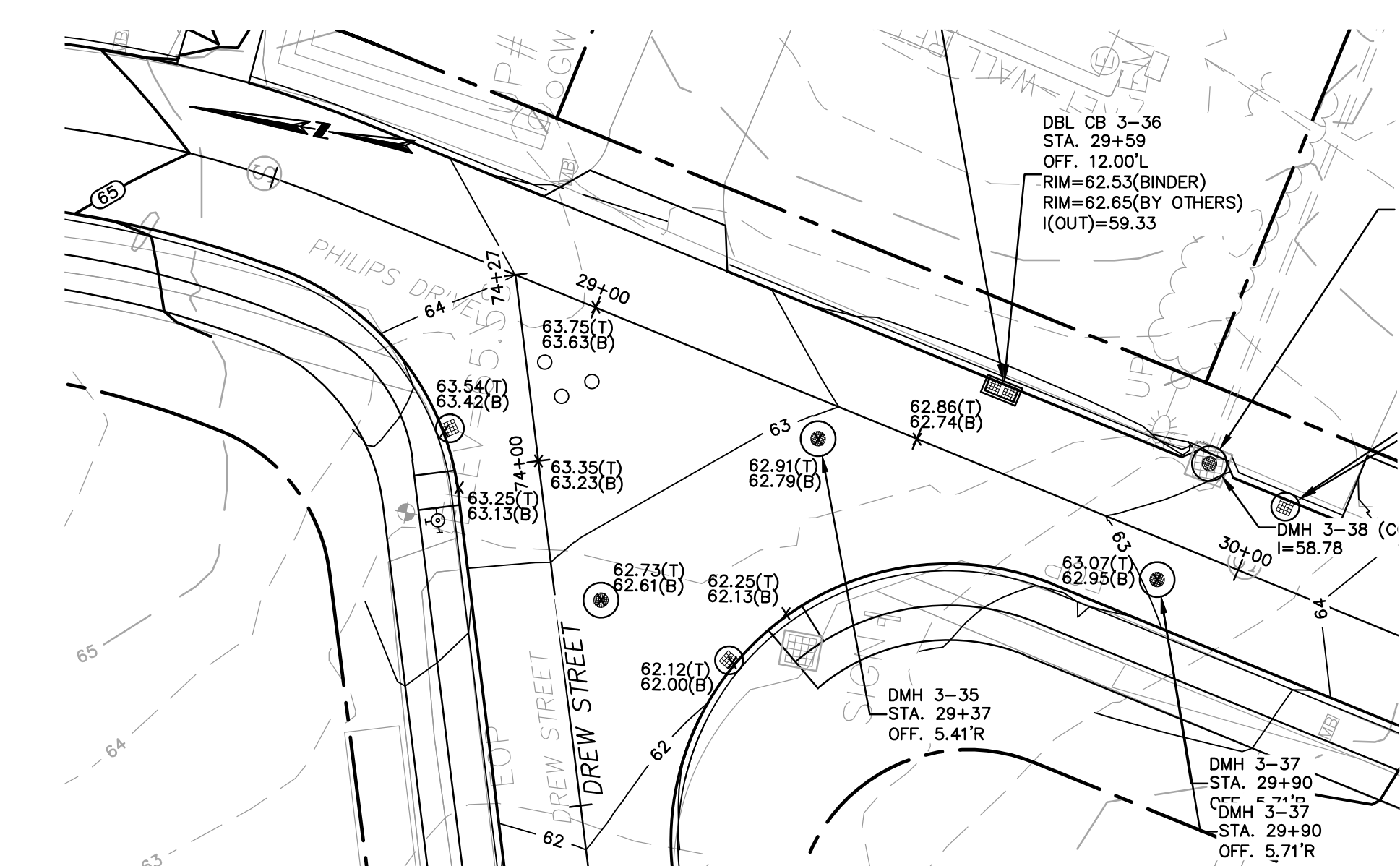
PHILIPS DRIVE AT SULLIVAN DRIVE  
STA. 4+25±



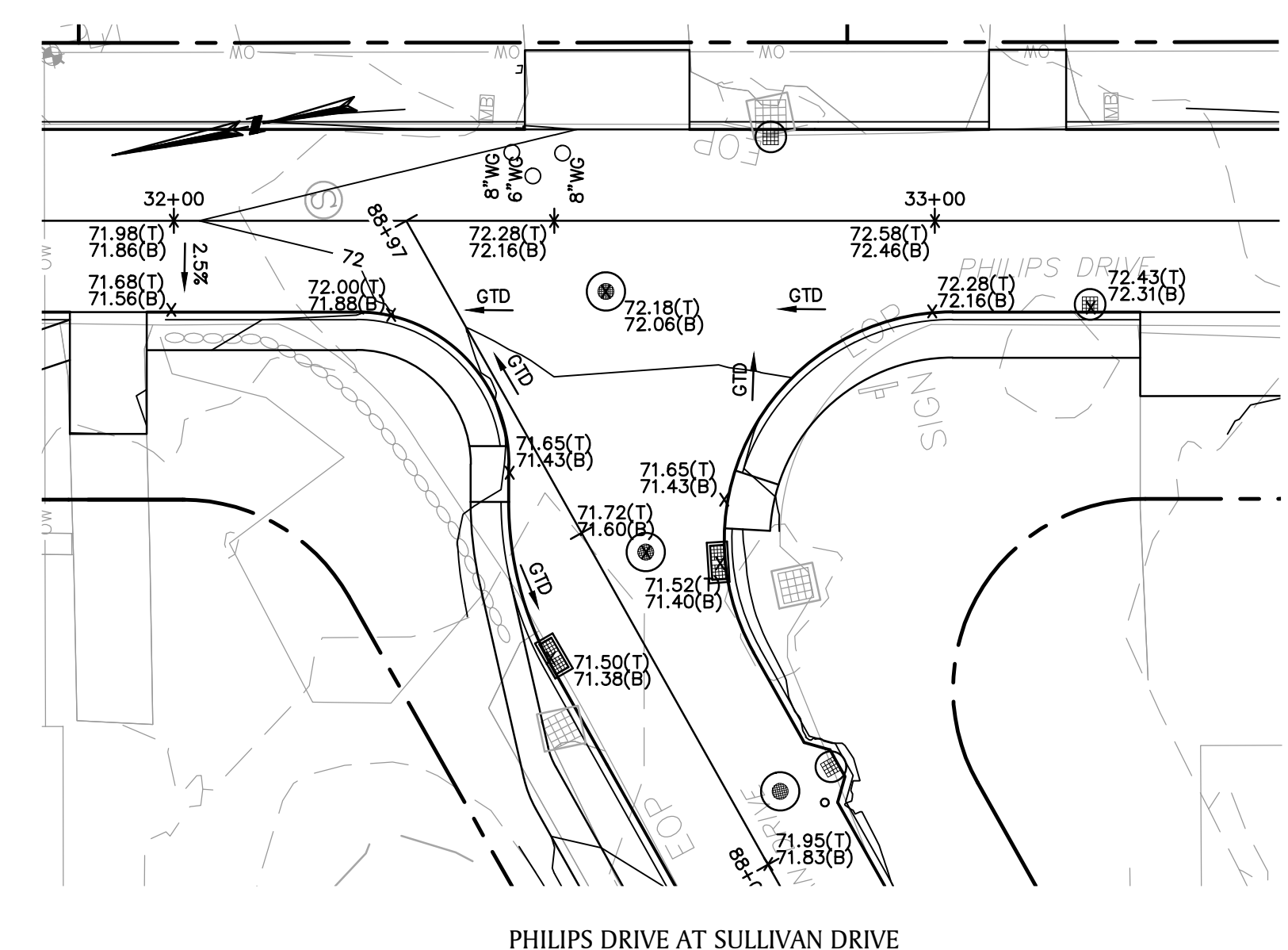
PHILIPS DRIVE AT DREW STREET  
STA. 7+60±



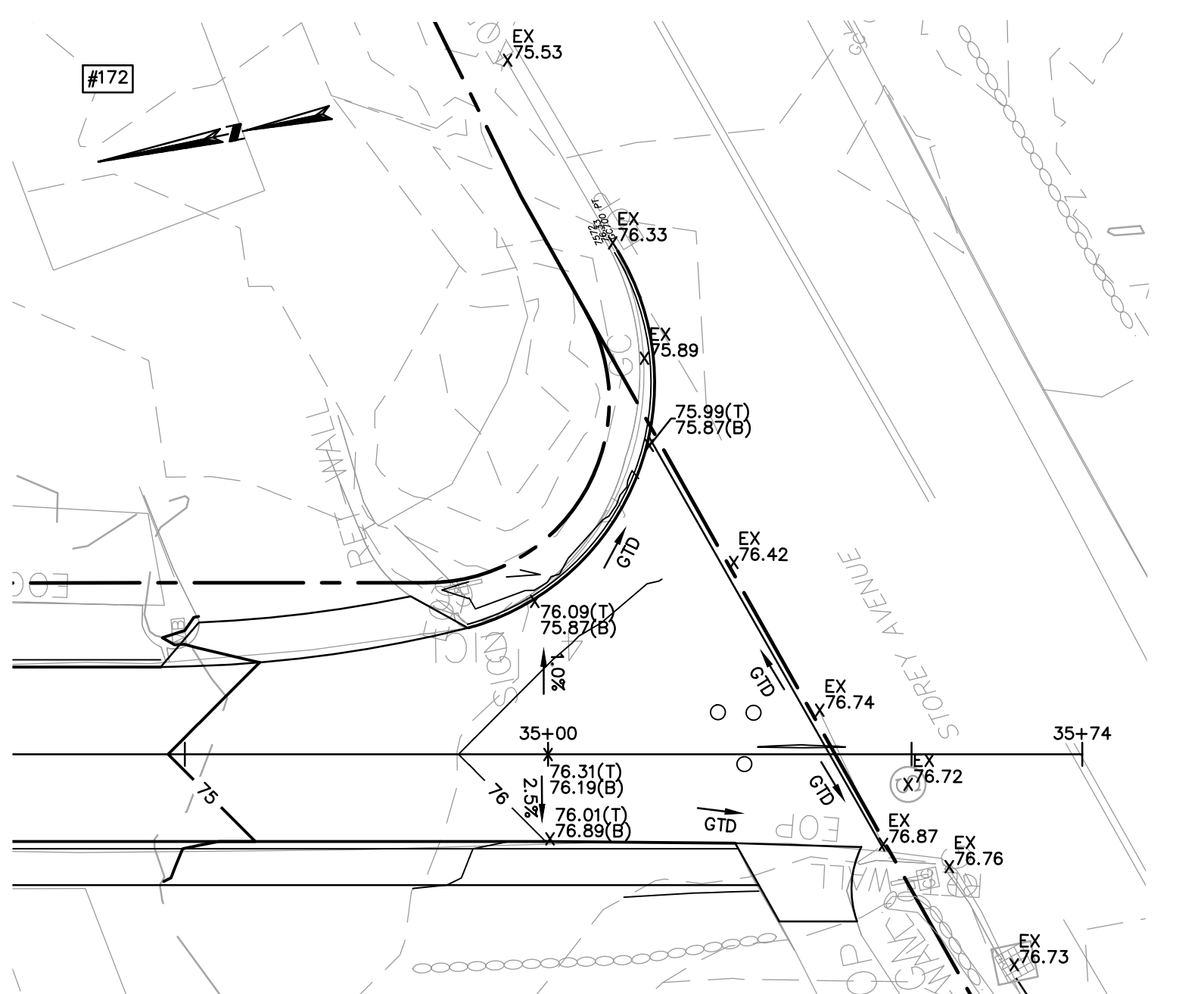
PHILIPS DRIVE AT RYAN ROAD  
STA. 25+00±



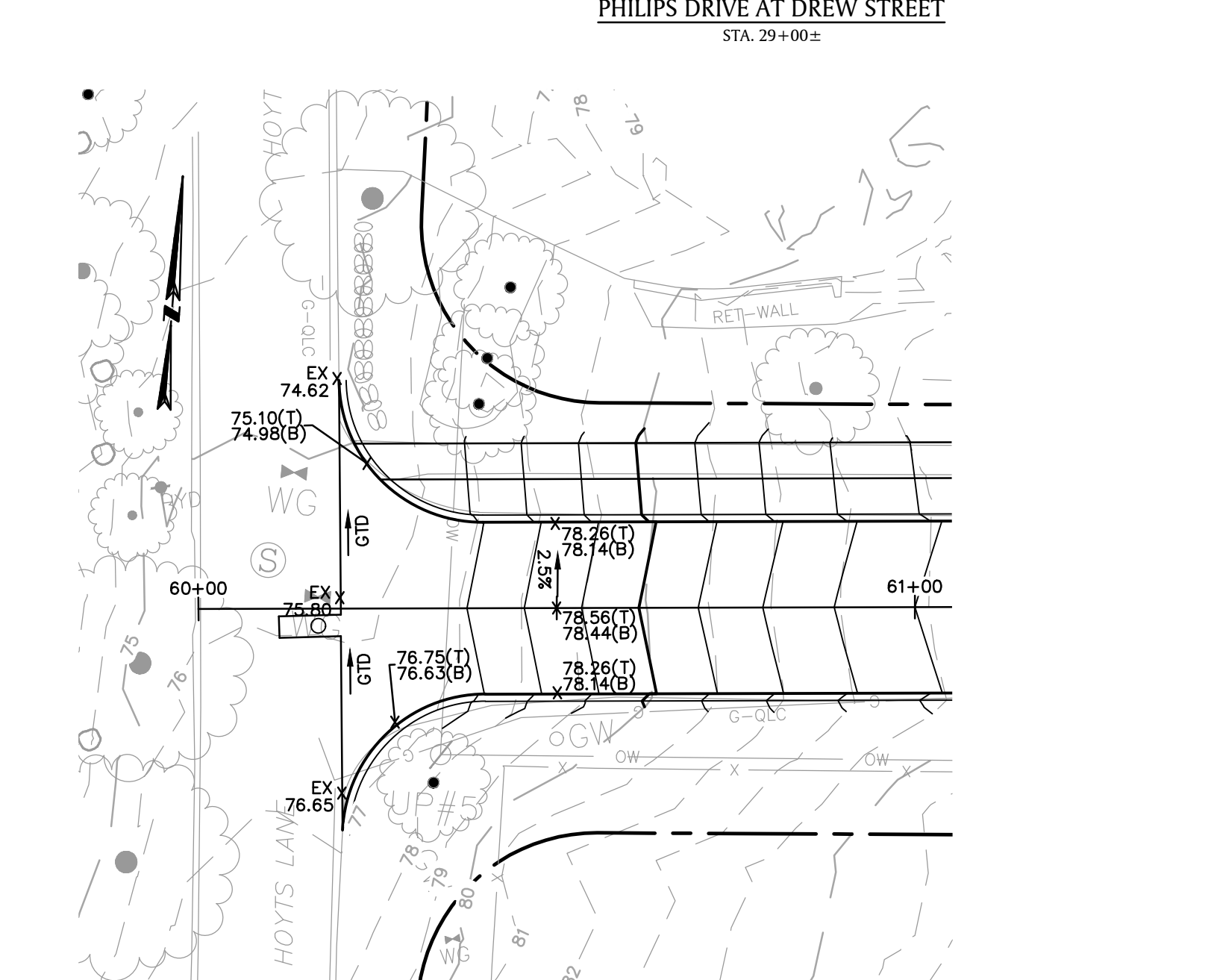
PHILIPS DRIVE AT DREW STREET  
STA. 29+00±



PHILIPS DRIVE AT SULLIVAN DRIVE  
STA. 32+50±



PHILIPS DRIVE AT STOREY AVENUE  
STA. 35+74±



DREW STREET AT HOYTS LANE  
STA. 60+00±

- PLAN LEGEND
- XX.XX (T) - TOP COURSE FINISHED GRADE
  - XX.XX(B) - BASE COURSE FINISHED GRADE
  - EX - EXISTING GRADE
  - GTD - GRATE TO DRAIN

**ISSUED FOR CONSTRUCTION**

ROADWAY, DRAINAGE & WATER MAIN IMPROVEMENTS - APRIL 2022





ROADWAY, DRAINAGE & WATER MAIN IMPROVEMENTS - APRIL 2022

**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS

**DETAILS**

APRIL 2022

REVISIONS:

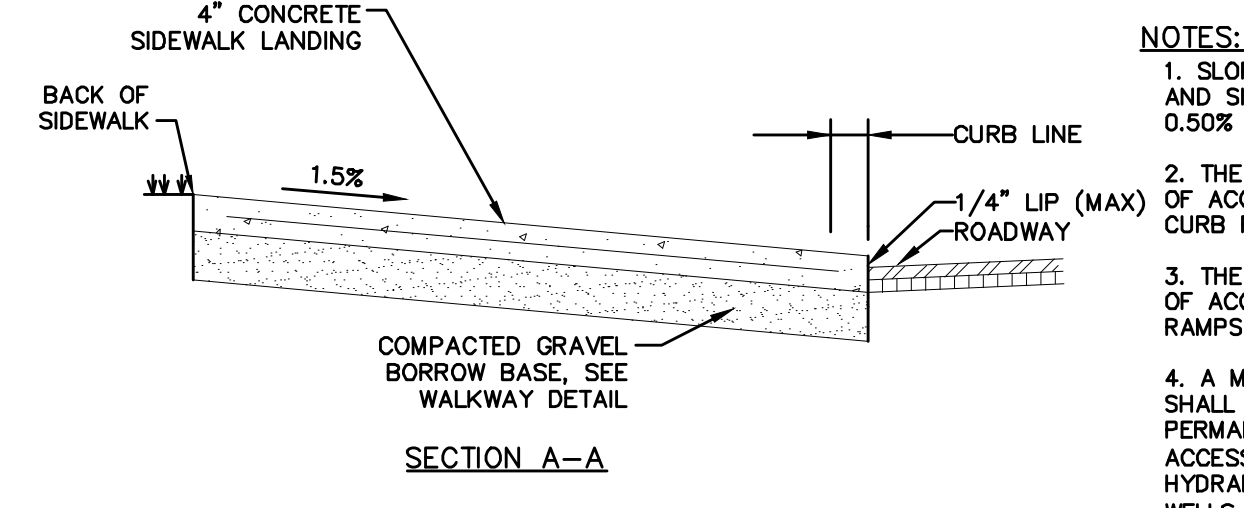
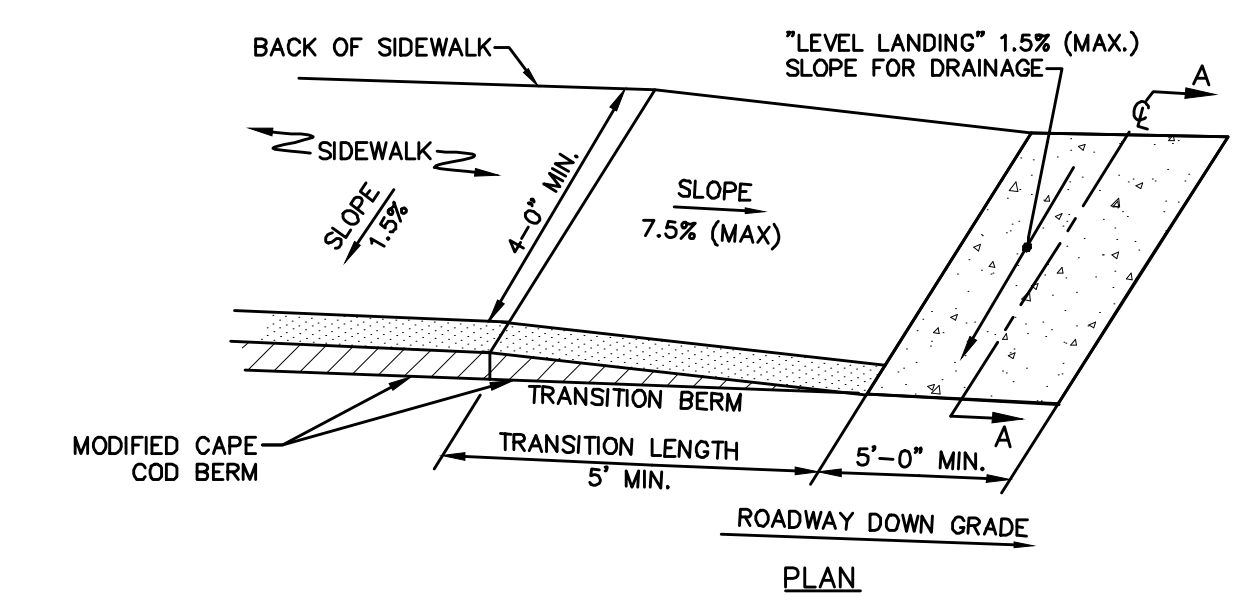

PREPARED FOR:  
CITY OF NEWBURYPORT  
DEPARTMENT OF PUBLIC SERVICES  
16A PERRY WAY  
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SCALE: NONE

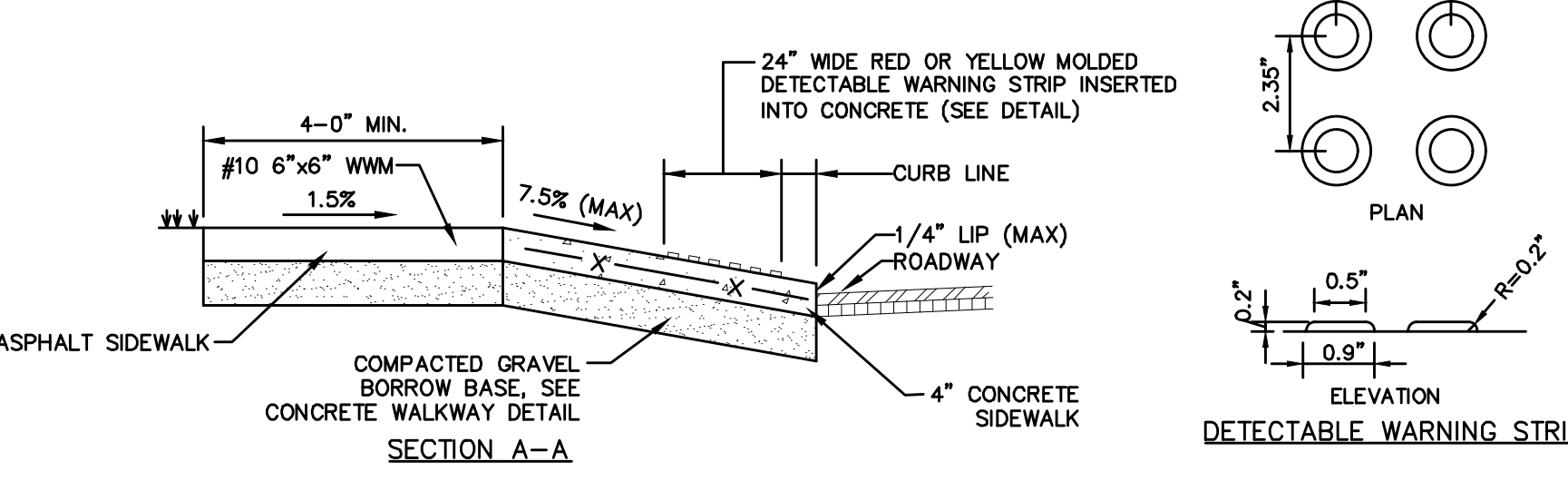
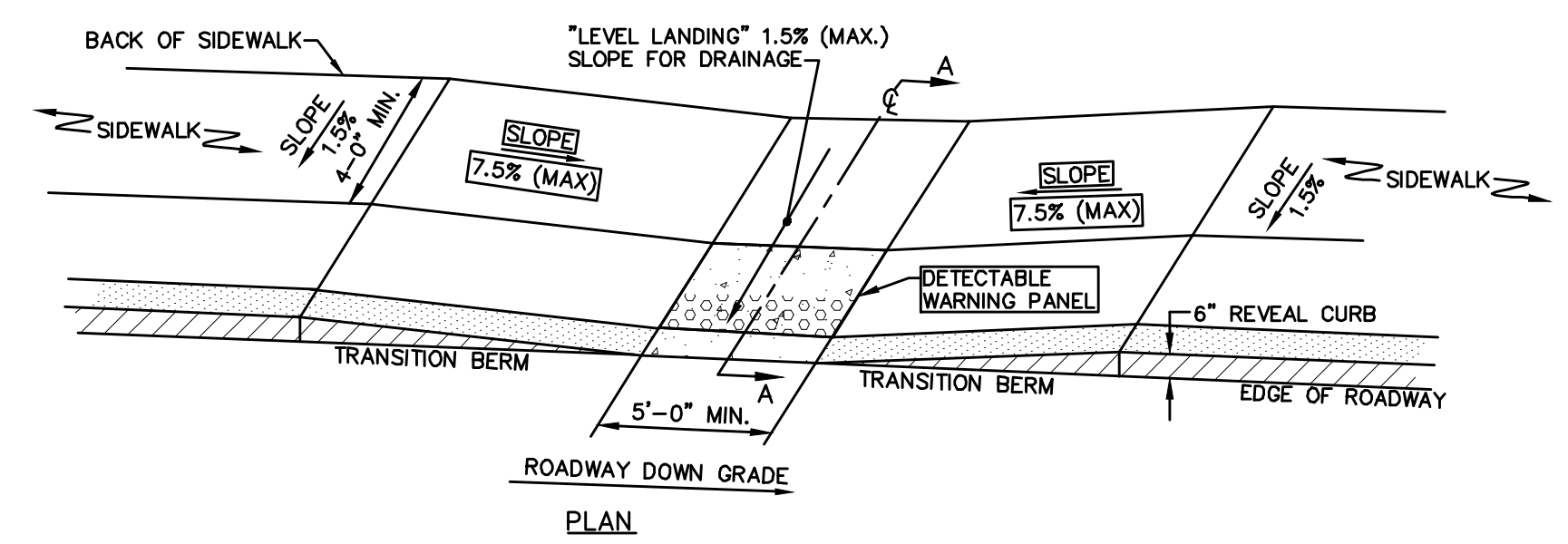
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DWG. NO:  
JOB. NO: 89923.00 **DET-01**

**ISSUED FOR CONSTRUCTION**

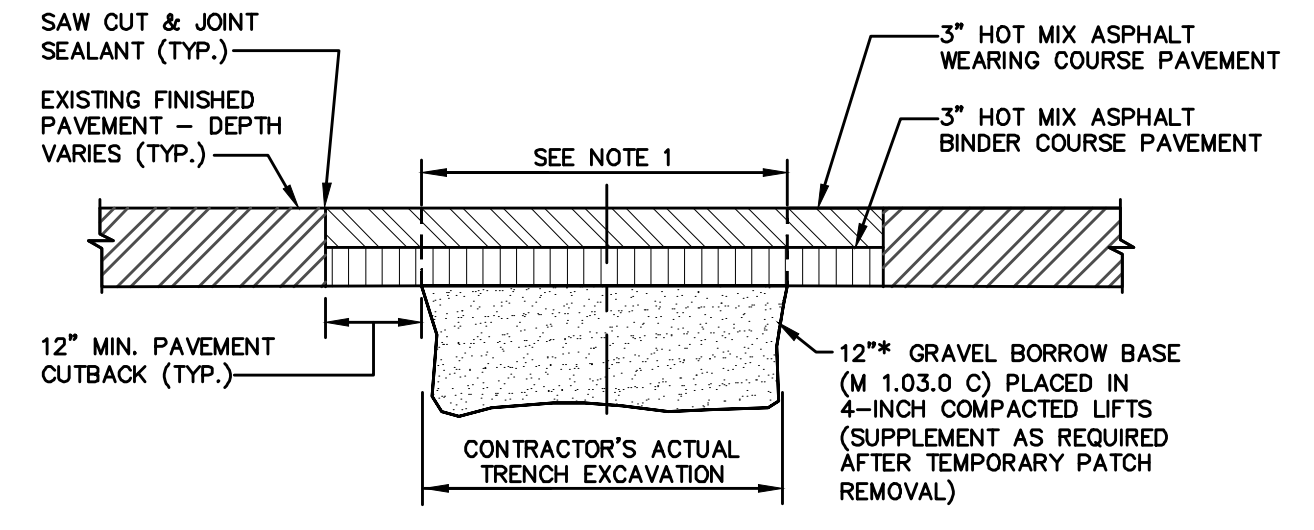


**ACCESSIBLE CURB RAMP**  
SCALE: NONE

- NOTES:**
1. SLOPE TOLERANCE FOR RAMP AND SIDEWALK CONSTRUCTION = ± 0.50%
  2. THE MAX. ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
  3. THE MAX. ALLOWABLE SLOPE OF ACCESSIBLE ROUTE CURB RAMPS SHALL BE 7.5%.
  4. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E. HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
  5. BASE OF RAMP SHALL BE GRADED TO PREVENT PONDING.

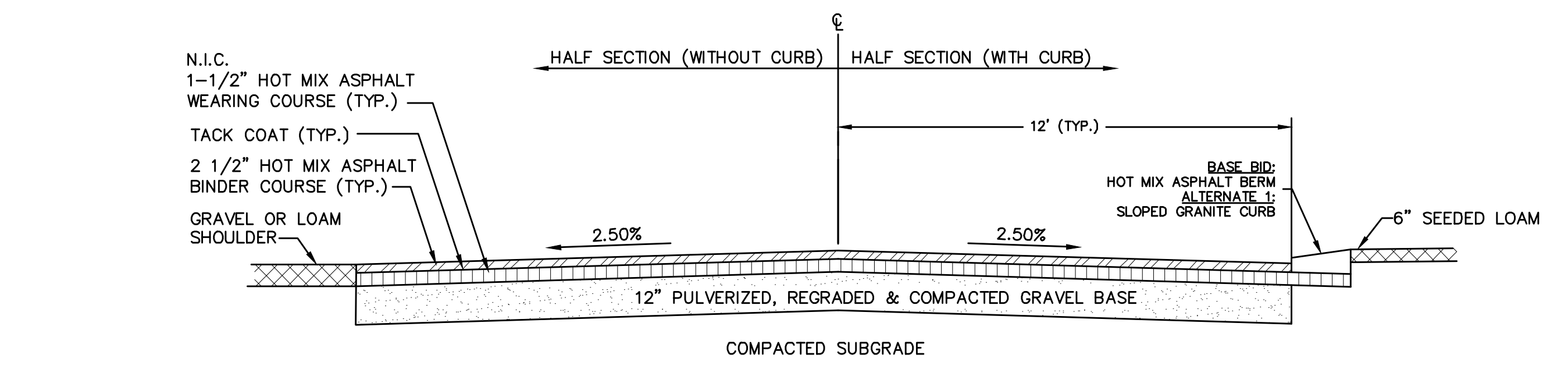


**ACCESSIBLE CURB RAMP TYPE 'E' - PARALLEL  
PERPENDICULAR WITH LANDSCAPING STRIP**  
SCALE: NONE

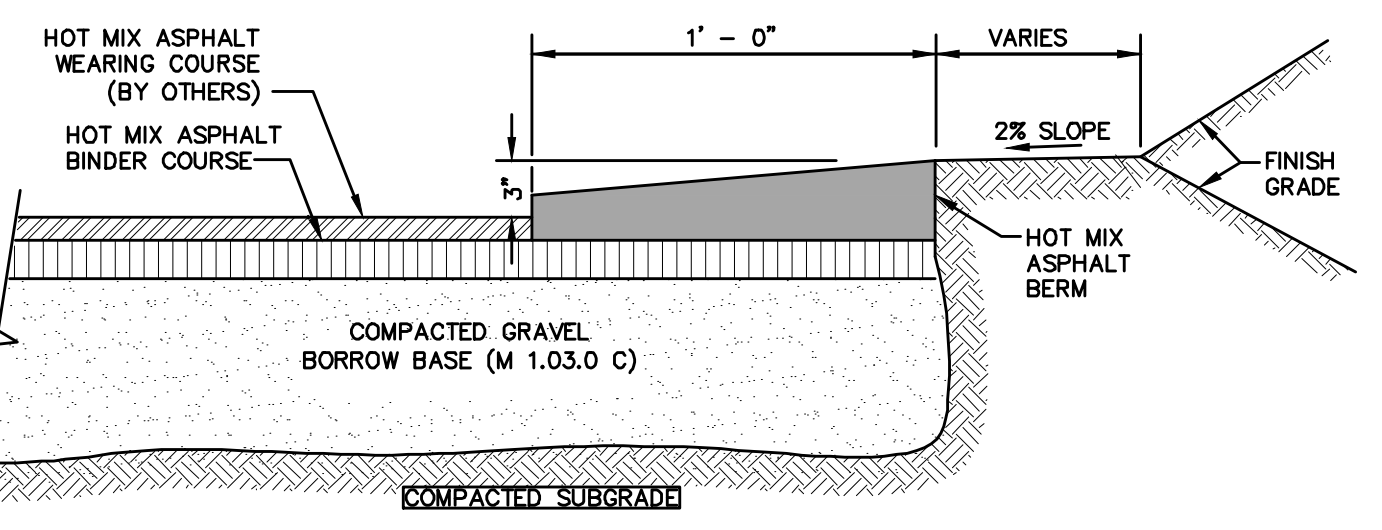


- NOTE:**
1. THE TEMPORARY PAVEMENT PATCH SHALL REMAIN THROUGH ONE WINTER SEASON BEFORE FINAL PAVING OR AS DIRECTED BY THE OWNER AND/OR THE ENGINEER, BUT NOT LESS THAN 90 DAYS.
  2. THE CONTRACTOR SHALL CUTBACK THE EXISTING PAVEMENT 12" BEYOND THE ACTUAL TRENCH EXCAVATION. ADDITIONAL EXCAVATION BEYOND THE PAVEMENT LIMITS WILL BE AT CONTRACTORS EXPENSE.
- \*DRIVEWAY SUBBASE SHALL BE 8 INCHES OF GRAVEL BORROW PLACED IN 4 INCH LIFTS AND COMPACTED

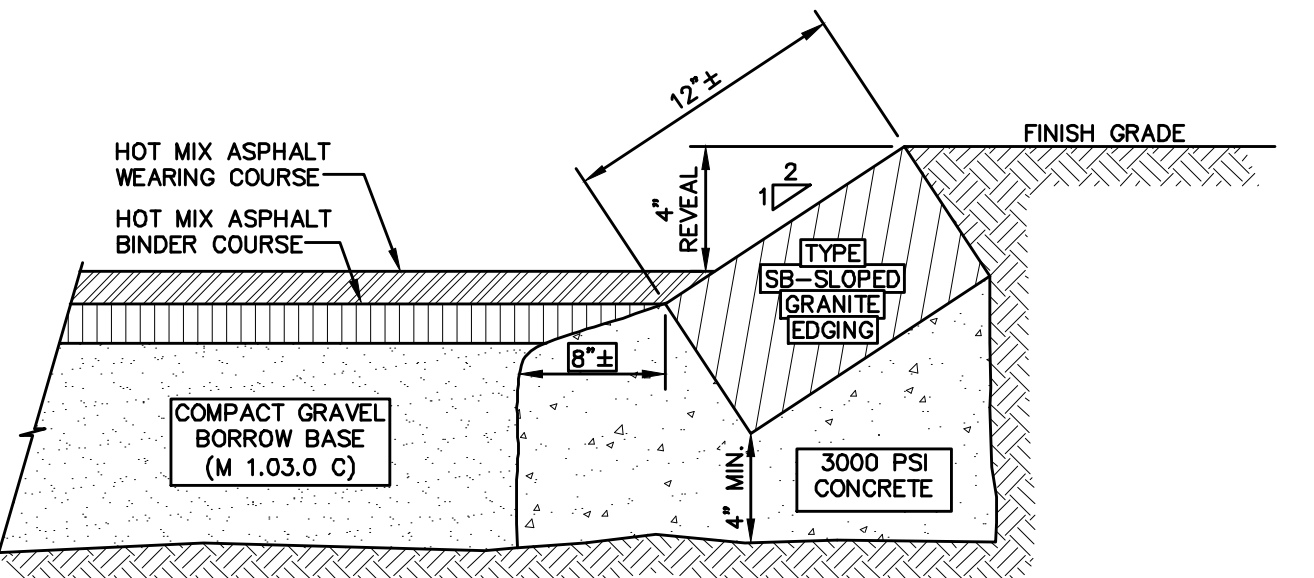
**PERMANENT TRENCH PAVEMENT**  
SCALE: NONE



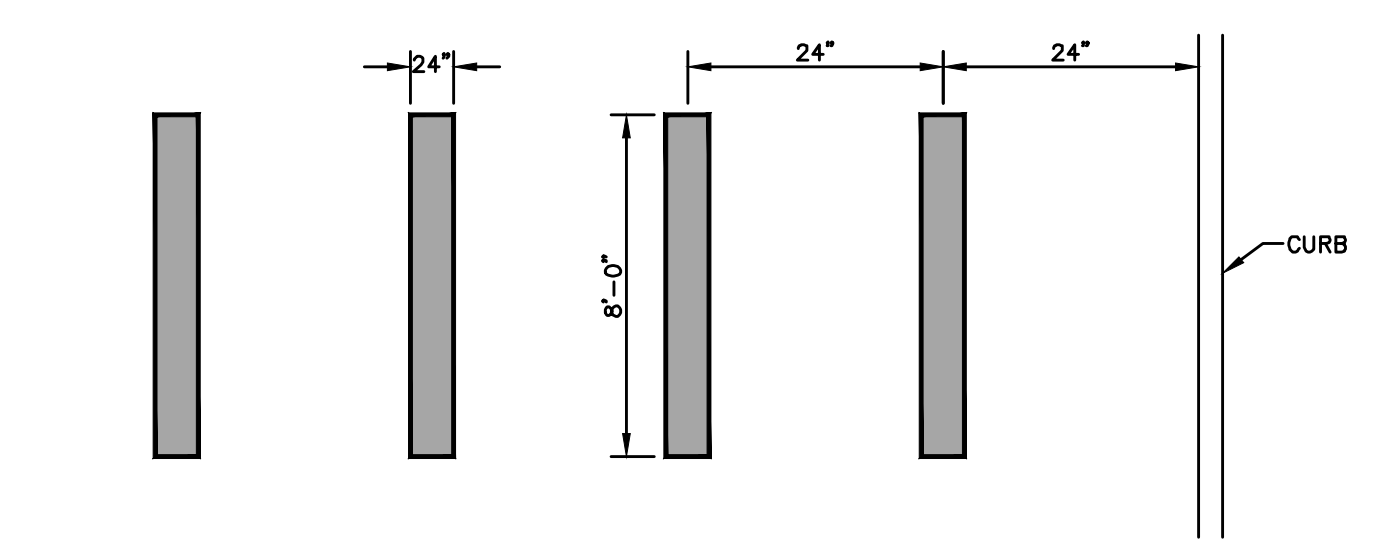
**FULL WIDTH ROADWAY RECLAMATION & PAVEMENT SECTION**  
SCALE: NONE



**HOT MIX ASPHALT BERM (BASE BID)**  
SCALE: NONE

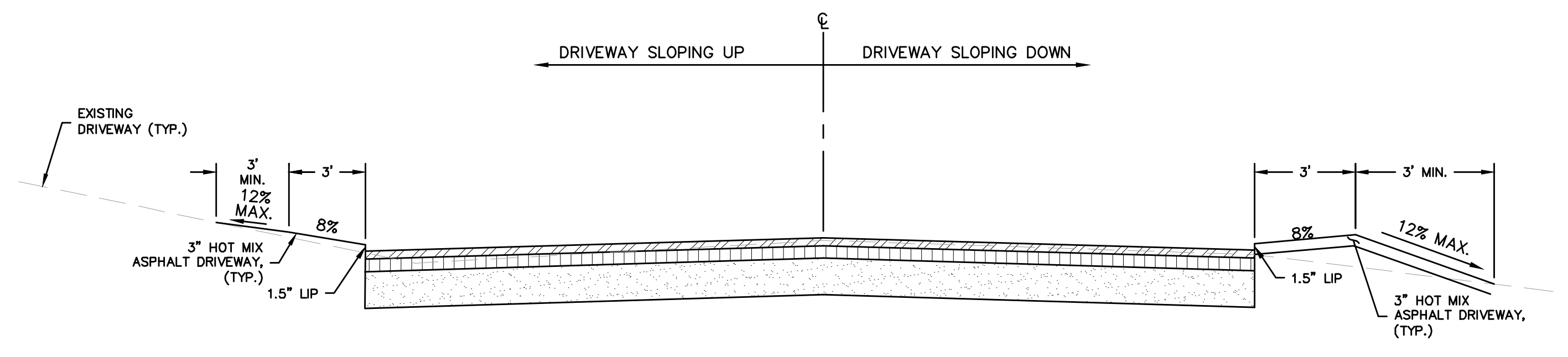


**SLOPED GRANITE CURB (ALTERNATE 1)**  
SCALE: NONE

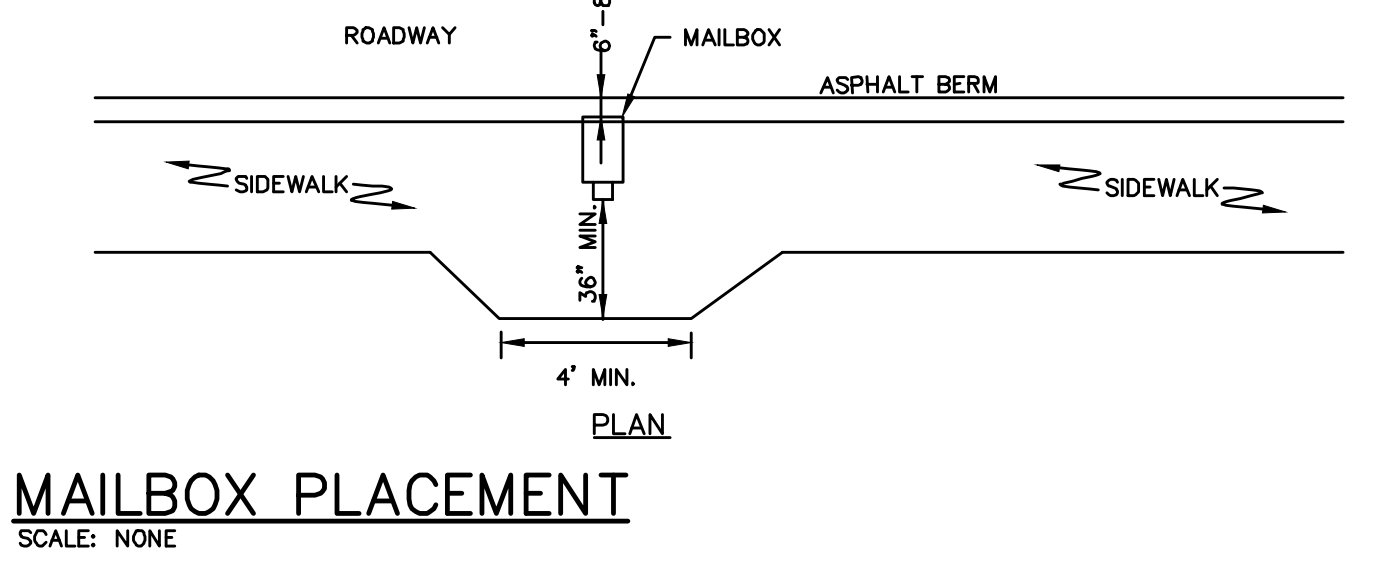
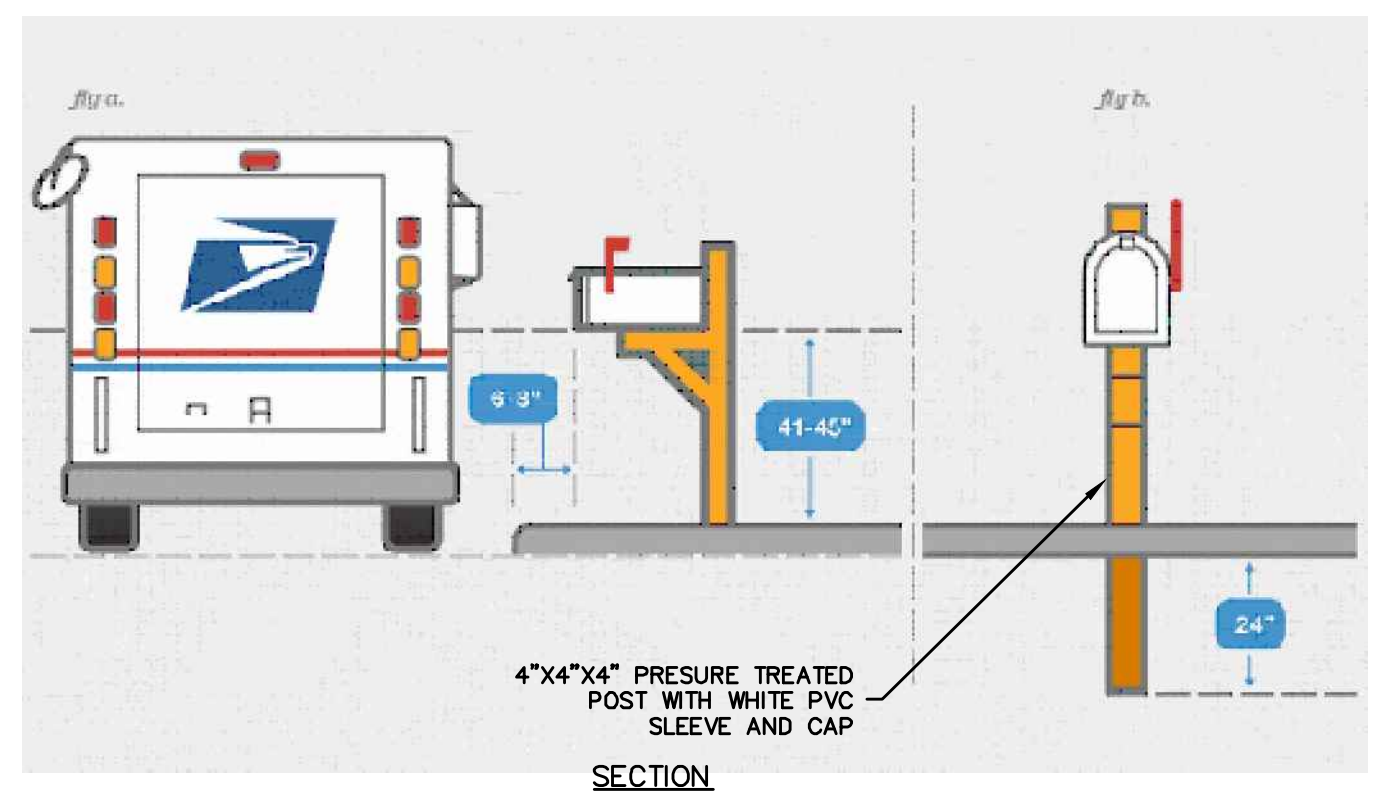


- NOTES:**
1. ALL TWELVE INCH (12") LINES SHALL BE APPLIED IN ONE APPLICATION, NO COMBINATION OF LINES (TWO - 6 INCH LINES) WILL BE ACCEPTED.
  2. ALL PAVEMENT MARKING MATERIALS WHETHER THERMOPLASTIC OR WATERBORNE PAINT TO BE REFLECTORIZED WITH GLASS BEADS.
  3. LONGITUDINAL CROSSWALK LINES TO BE PARALLEL TO DIRECTION OF TRAVEL OR AS OTHERWISE DIRECTED BY THE ENGINEER.
  4. ALL LONGITUDINAL CROSSWALK LINES TO BE THE SAME LENGTH AND PROPERLY DRESSED.
  5. STRIPES TO BE SOLID WHITE.

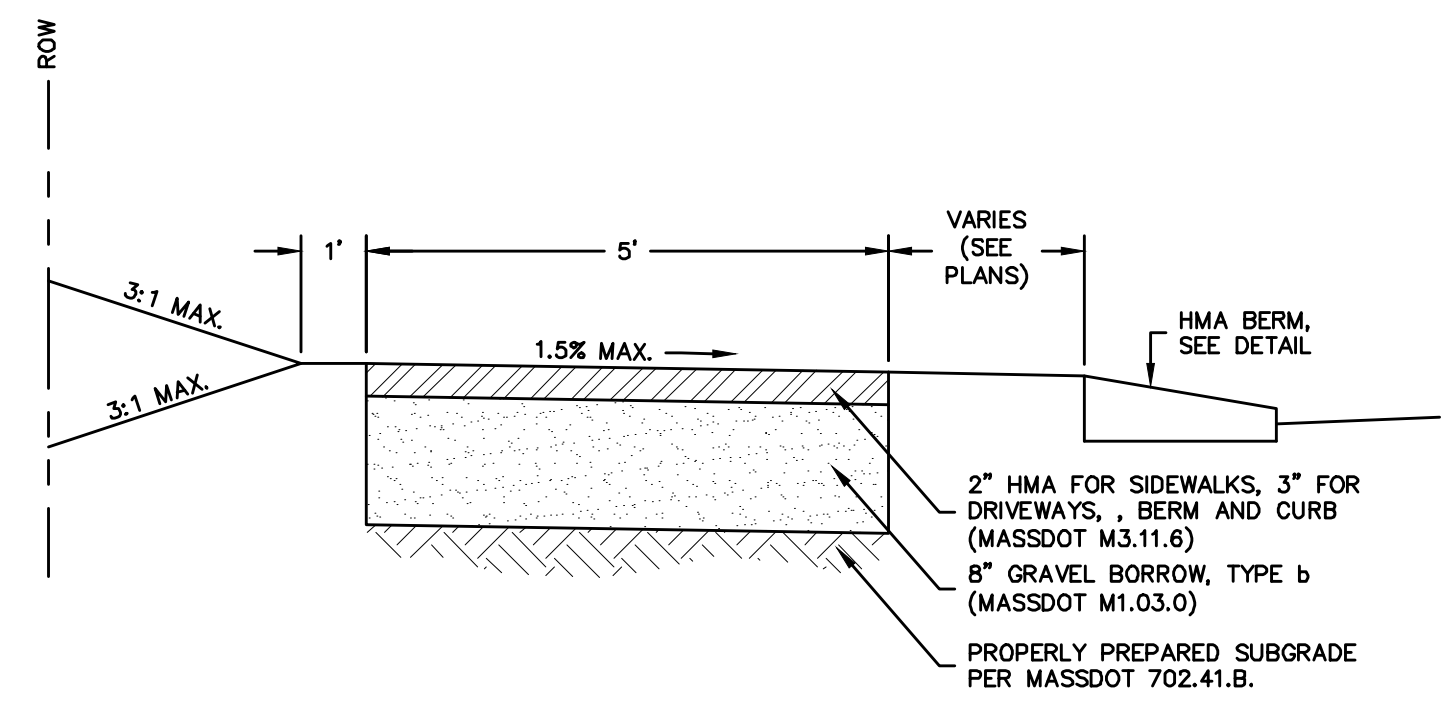
**PEDESTRIAN CROSSWALK MARKINGS**  
SCALE: NONE



**ROADWAY SECTION AT RESIDENTIAL DRIVEWAYS**  
SCALE: NONE



**MAILBOX PLACEMENT**  
SCALE: NONE

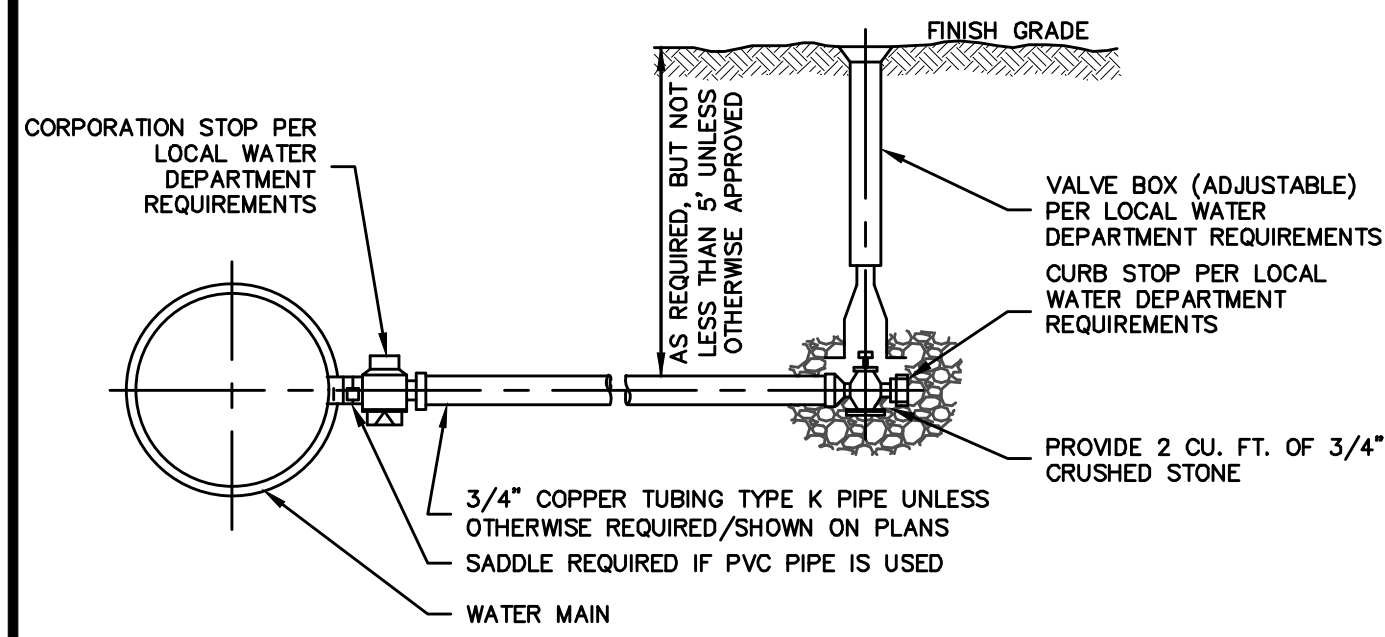


**HOT MIX ASPHALT SIDEWALK**  
SCALE: NONE

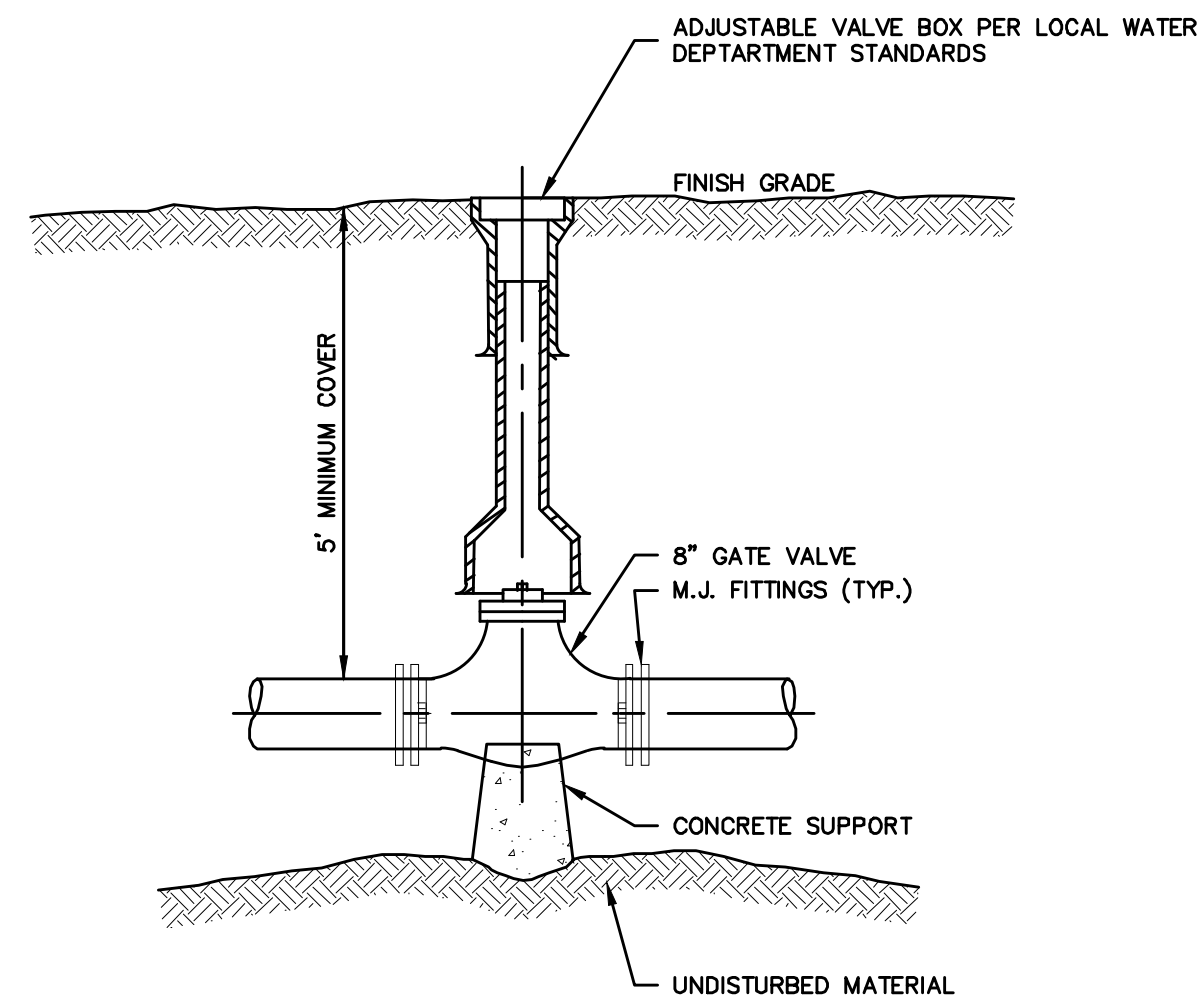




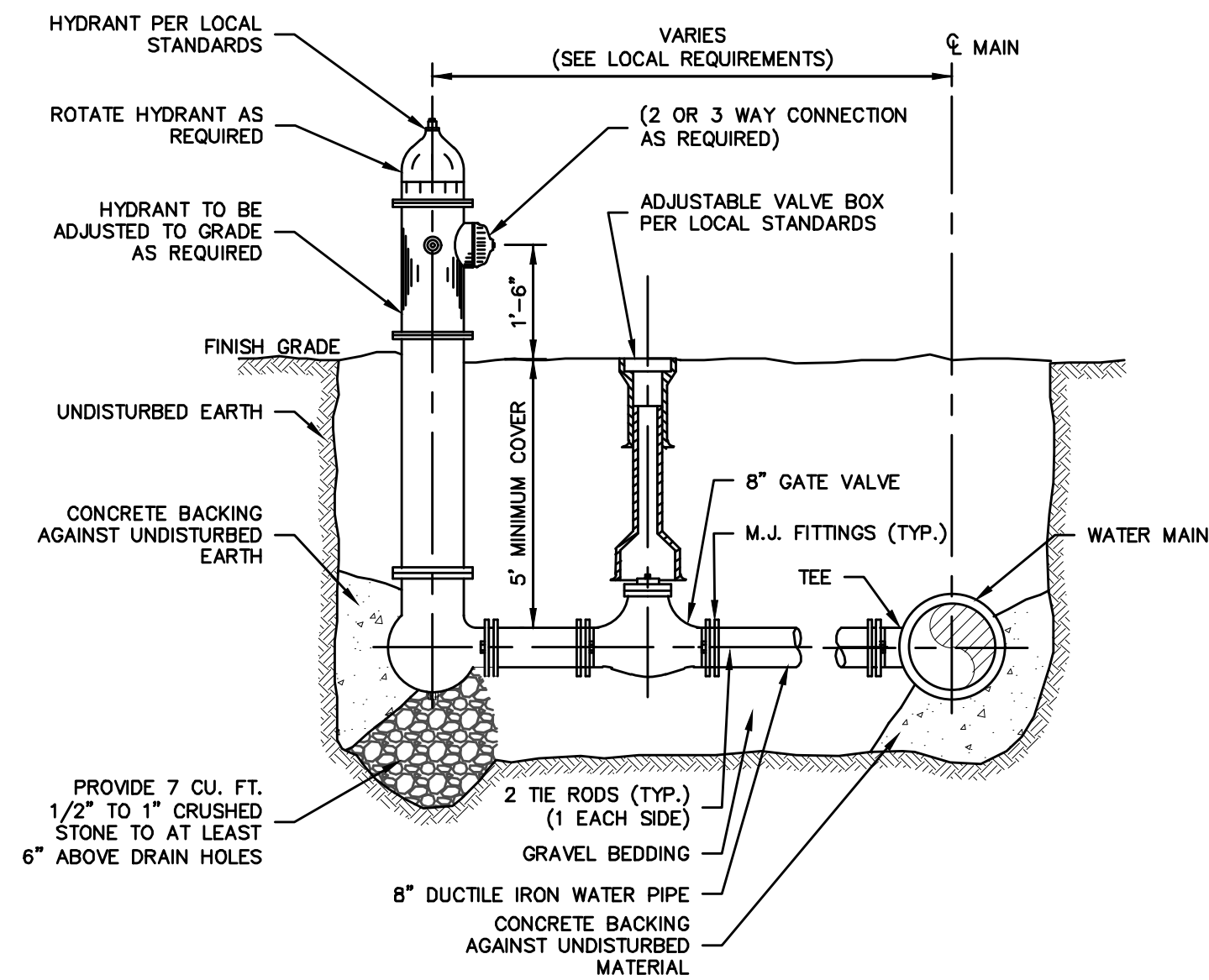




NOTE: PROVIDE COUPLING TO CONNECT EXISTING RESIDENCE SERVICE TO NEW WATER SERVICE LATERAL.

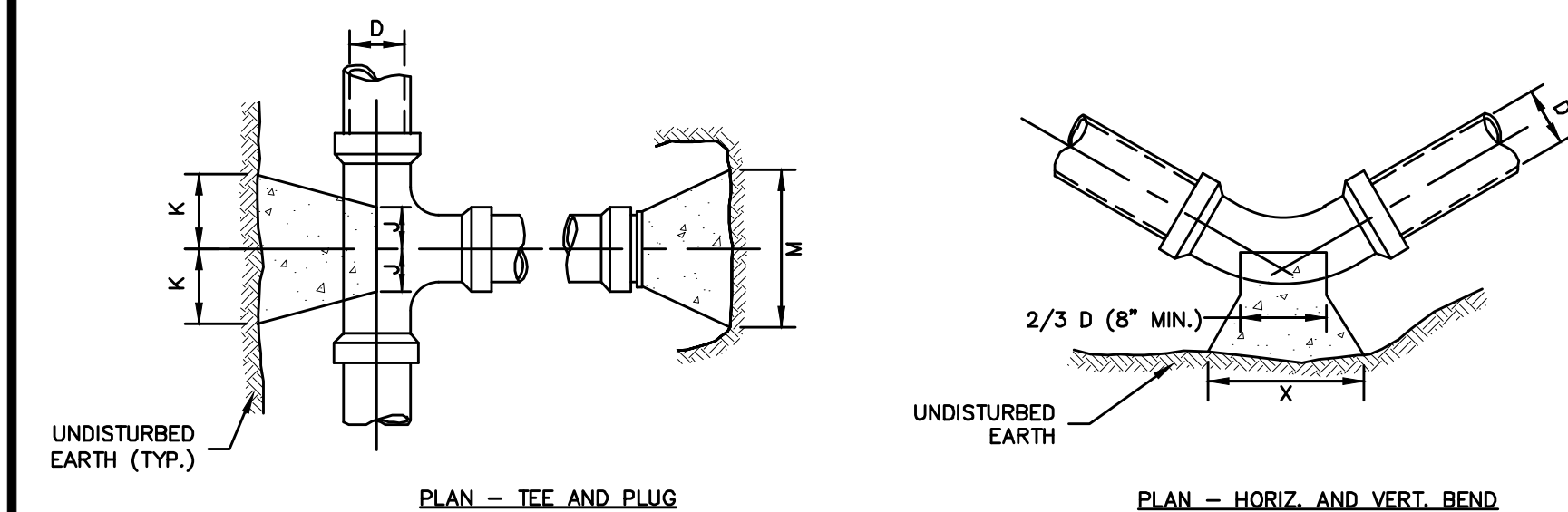


GATE VALVE



FIRE HYDRANT & VALVE

WATER SERVICE CONNECTION



SIZE OF BRANCH	J	K	L	M	N	O
4" TO 8"	10"	10"	1'-0"	2'-0"	1'-6"	10"
10" TO 16"	1'-0"	1'-6"	1'-8"	3'-10"	2'-10"	1'-6"
24"	1'-4"	2'-0"	2'-8"	5'-0"	3'-6"	1'-8"

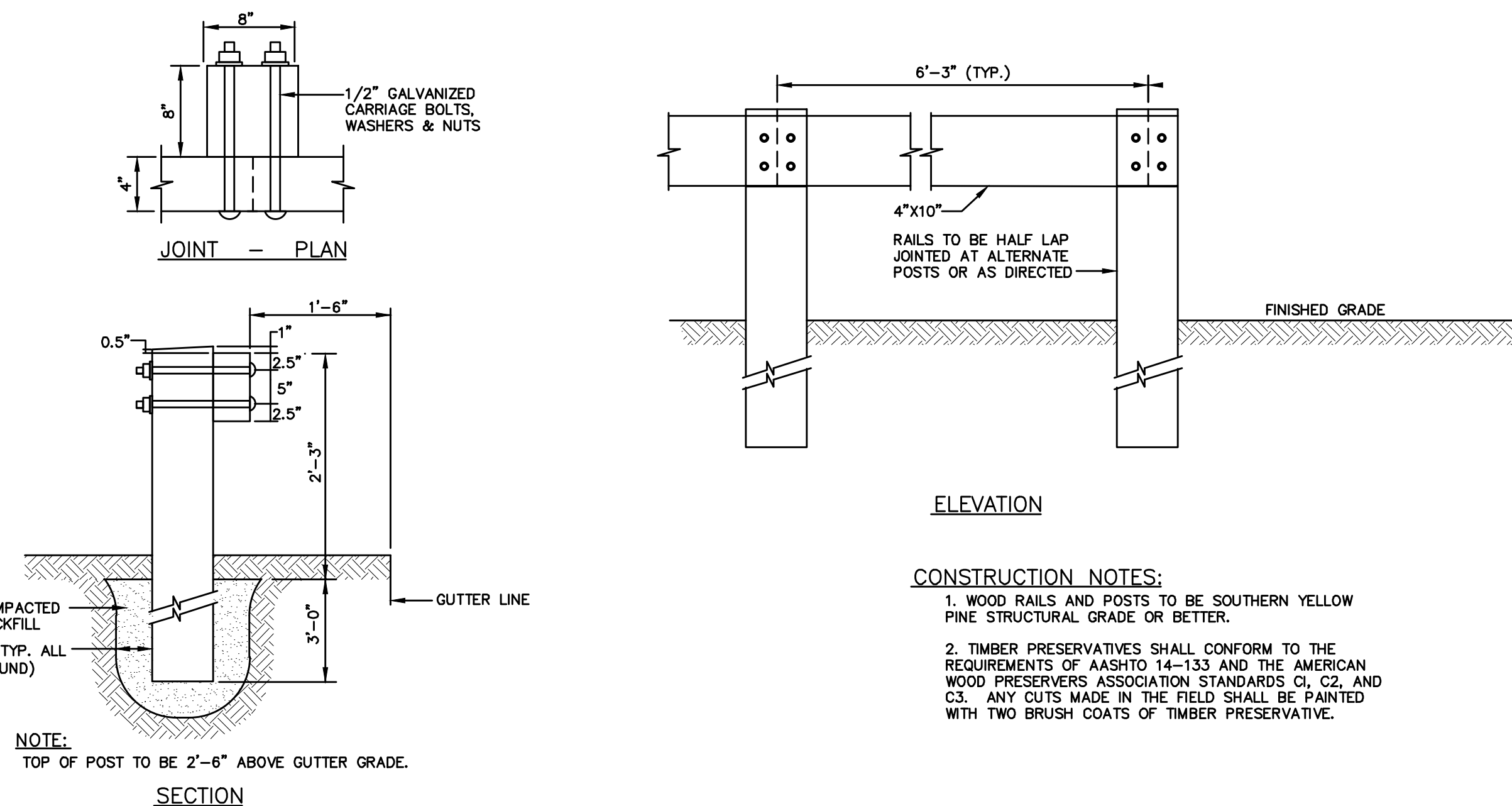
TEES AND PLUGS

	90° & 45°			22½° & 11½°		
D	4" TO 8"	10" TO 16"	24"	4" TO 8"	10" TO 16"	24"
X	1'-8"	3'-4"	3'-6"	1'-4"	2'-0"	3'-6"
Y	1'-2"	1'-8"	2'-4"	1'-0"	1'-2"	2'-4"

BENDS

GENERAL NOTES

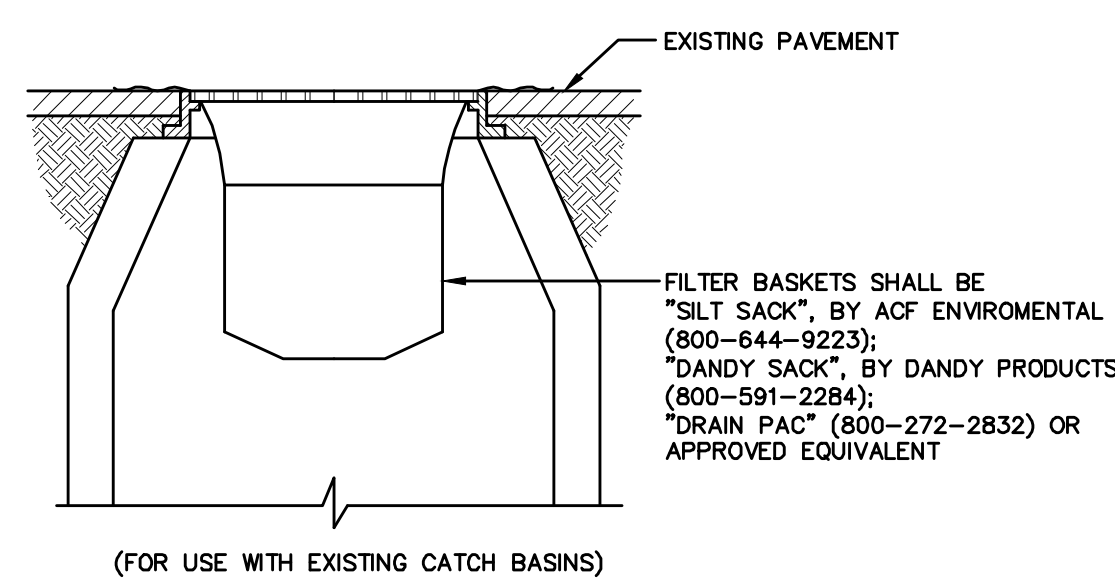
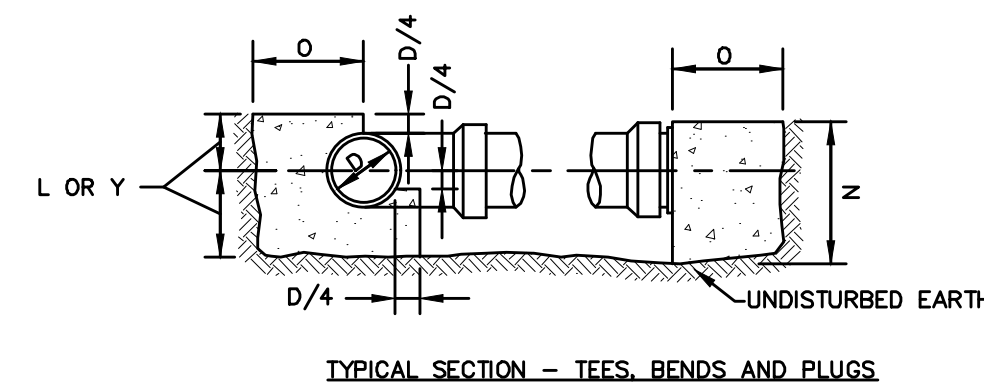
1. PROVIDE CONCRETE THRUST BLOCKS AT ALL BENDS, DEAD ENDS, & TEES UNLESS OTHERWISE DIRECTED. CONCRETE FOR ALL THRUST BLOCKS TO BE PLACED AGAINST FIRM, UNDISTURBED EARTH. PROVIDE APPROVED ANCHOR HARNESS RODS AND SOCKET CLAMPS AS SPECIFIED AND IN ACCORDANCE WITH PIPE MANUFACTURERS RECOMMENDATIONS WHERE SOIL HAS BEEN DISTURBED OR THRUST BLOCKS CANNOT BE USED.
2. ALL SOCKET CLAMP METAL SHALL BE COATED WITH BLACK ASPHALTUM OR OTHER WATER DEPARTMENT APPROVED COATINGS.
3. CONCRETE THRUST BLOCKS POURED BEHIND 3-WAY TEE AND HYDRANT SHOE TO BE USED WITH SOCKET CLAMPS.
4. NO CONCRETE SHALL COVER PIPE JOINTS, FITTING JOINTS, BOLTS OR HYDRANT DRAINS.



SINGLE FACE WOOD GUARD RAIL

SCALE: NONE

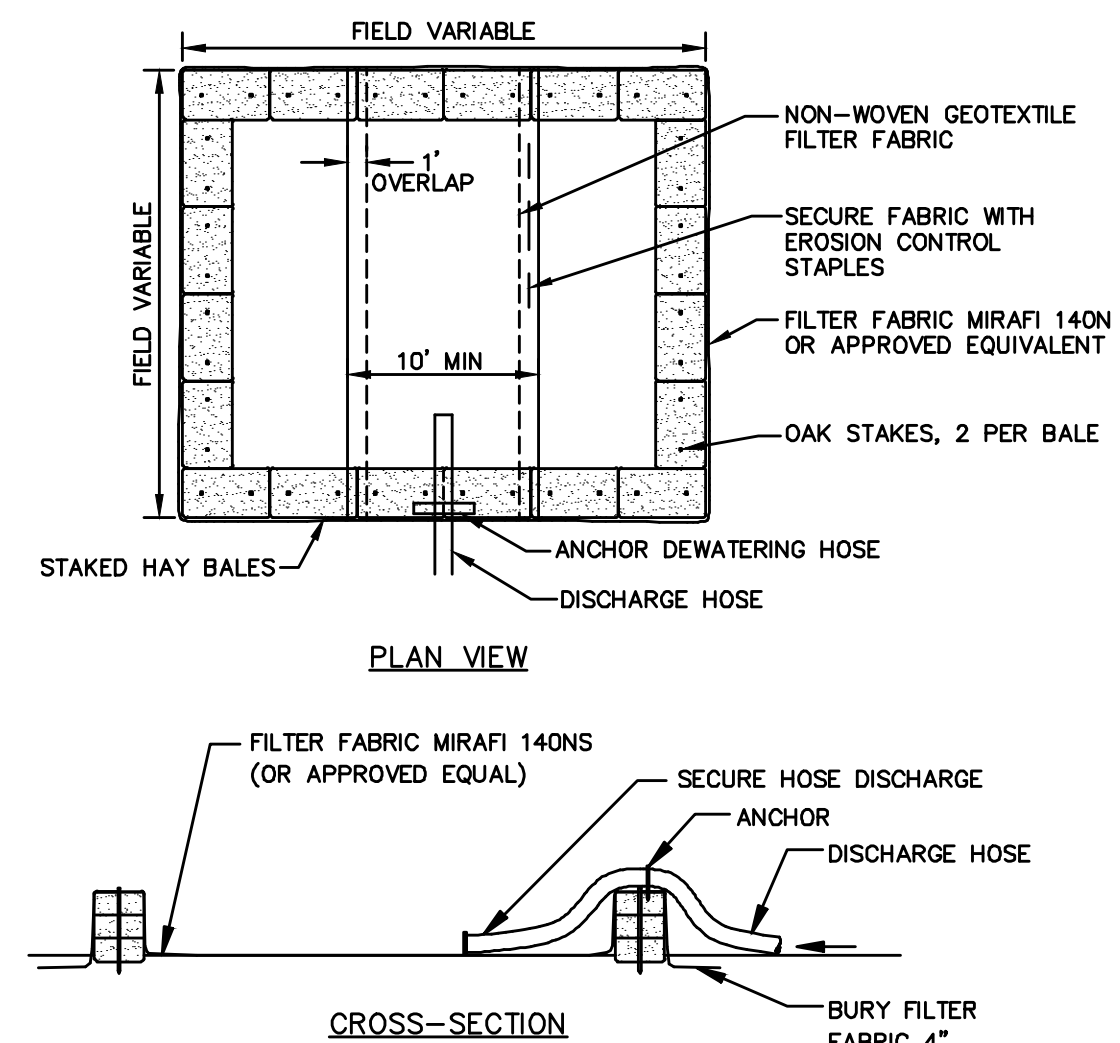
CONCRETE THRUST BLOCK FOR PRESSURE PIPE



NOTE: FILTER BASKETS TO BE PLACED IN ALL CATCH BASINS IN THE VICINITY OF NEW CONSTRUCTION. CATCH BASINS ARE TO BE PROTECTED AS SHOWN, WITH MINIMUM WEEKLY MAINTENANCE, OR AS REQUIRED AND REPLACED IF NECESSARY.

SEDIMENT FILTER INLET PROTECTION

SCALE: NONE

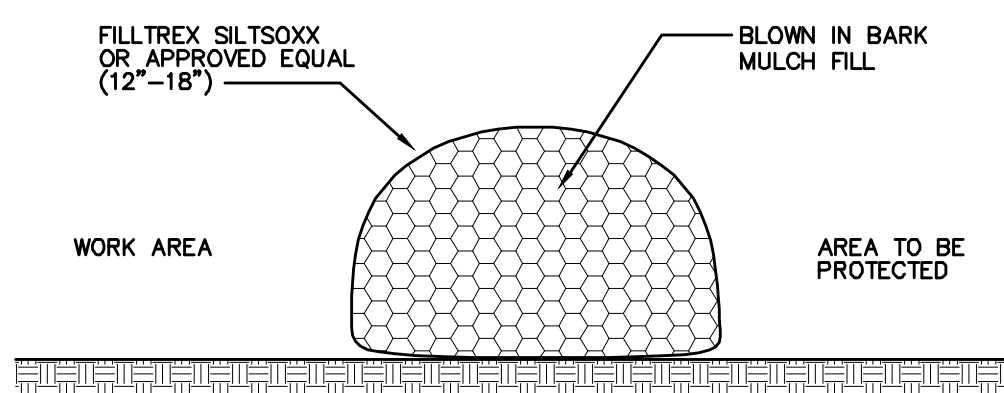


NOTES:

1. NUMBER OF BALES MAY VARY DEPENDING ON SITE CONDITIONS.
2. THE BASIN TO BE SIZED ACCORDING TO: CUBIC FEET OF STORAGE = PUMP DISCHARGE RATE (gpm) x 18
3. SIZE SHOWN ON PLANS SHALL BE ADJUSTED AS REQUIRED FOR THE ACTUAL PUMPING RATE.

DEWATERING HAYBALE BASIN (TYPE 1)

SCALE: NONE



NOTES:

1. COMPOST FILTER TUBE SHALL BE FILLTREX SILT SOCK OR APPROVED EQUAL.
2. COMPOST FILTER TUBE DEPICTED IS FOR MINIMUM SLOPES. GREATER SLOPES MAY REQUIRE LARGER SOCKS PER THE ENGINEER.
3. COMPOST MATERIAL TO BE DISBURSED ON SITE, AS DETERMINED BY THE ENGINEER.

COMP

SCALE: NONE



ROADWAY, DRAINAGE & WATER MAIN IMPROVEMENTS

PHILIPS DRIVE NEIGHBORHOOD IN NEWBURYPORT MASSACHUSETTS

DETAILS

APRIL 2022

REVISIONS:

NO.	DESCRIPTION

PREPARED FOR:  
CITY OF NEWBURYPORT  
DEPARTMENT OF PUBLIC SERVICES  
16A PERRY WAY  
NEWBURYPORT, MA 01950

**BSC GROUP**  
300 Brickstone Square  
Andover, Massachusetts 01810  
617 896 4300

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SCALE: NOT TO SCALE

FILE: 8992300-DET.DWG  
DWG. NO:  
JOB. NO: 89923.00

DET-03

ISSUED FOR CONSTRUCTION





**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS

**CROSS SECTIONS - PHILIPS DRIVE**  
STA. 1+50 TO STA. 5+00

APRIL 2022

REVISIONS:

NO.	DESCRIPTION

PREPARED FOR:

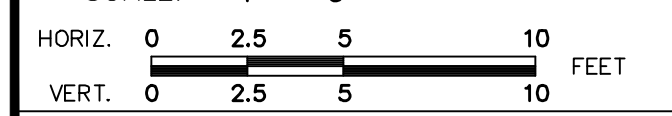
CITY OF NEWBURYPORT  
DEPARTMENT OF PUBLIC SERVICES  
16A PERRY WAY  
NEWBURYPORT, MA 01950



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Andover, Massachusetts 01810  
617 896 4300

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SCALE: 1" = 5'

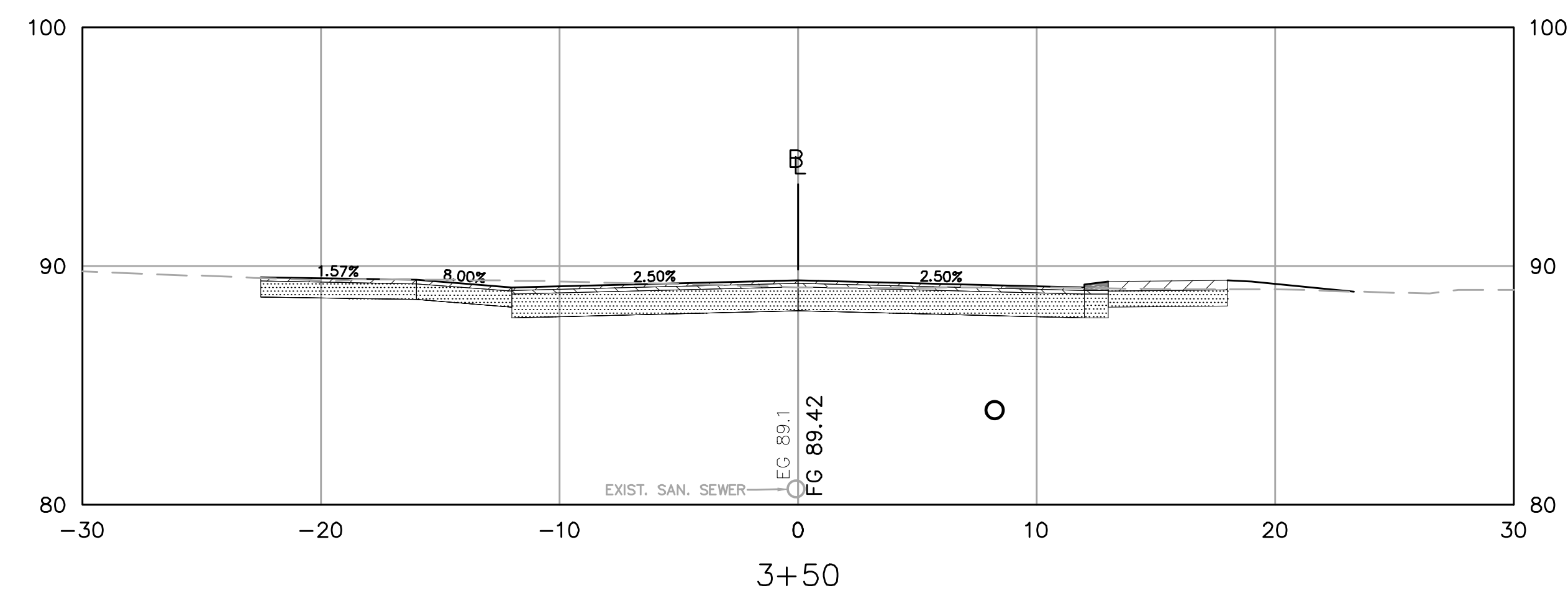
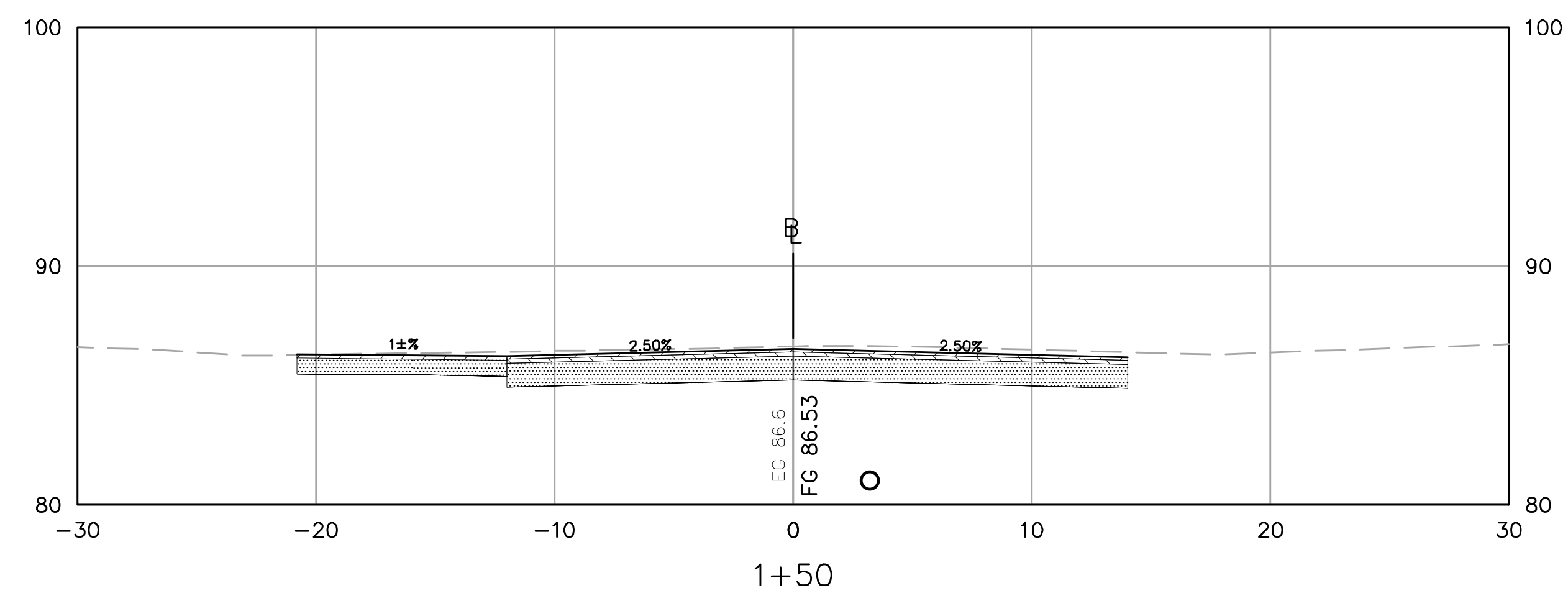
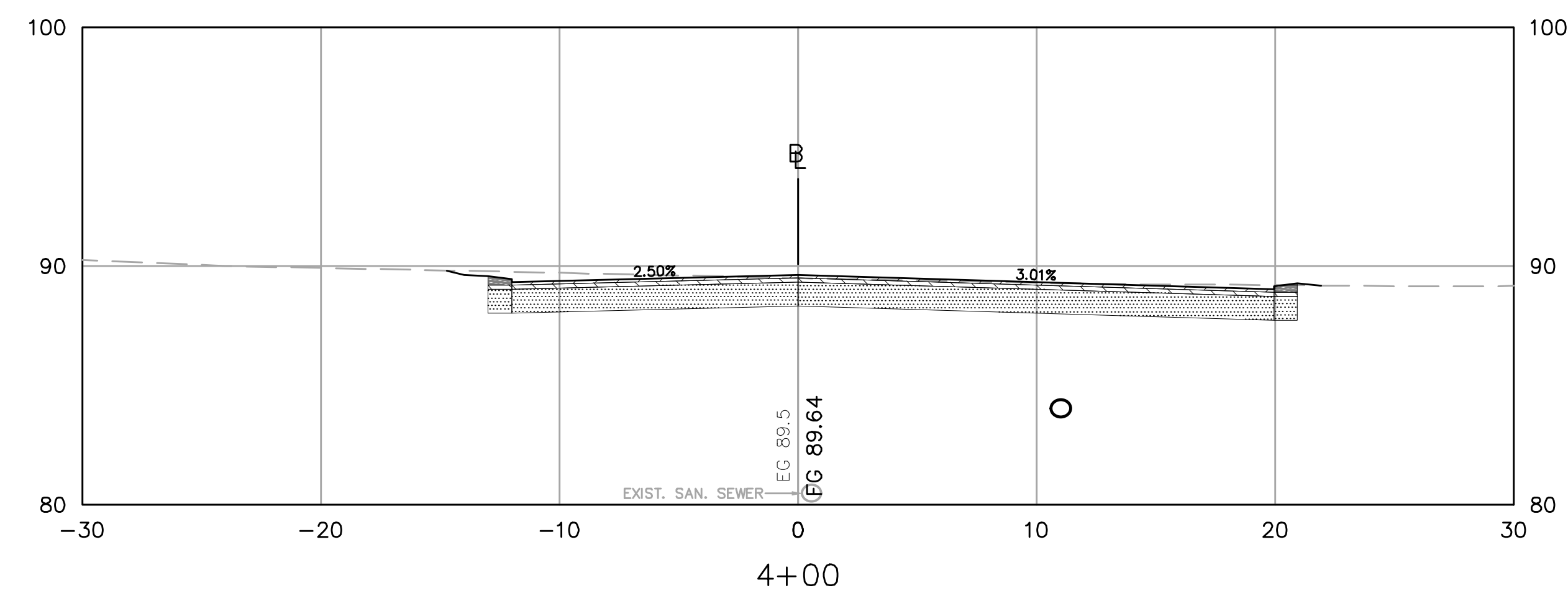
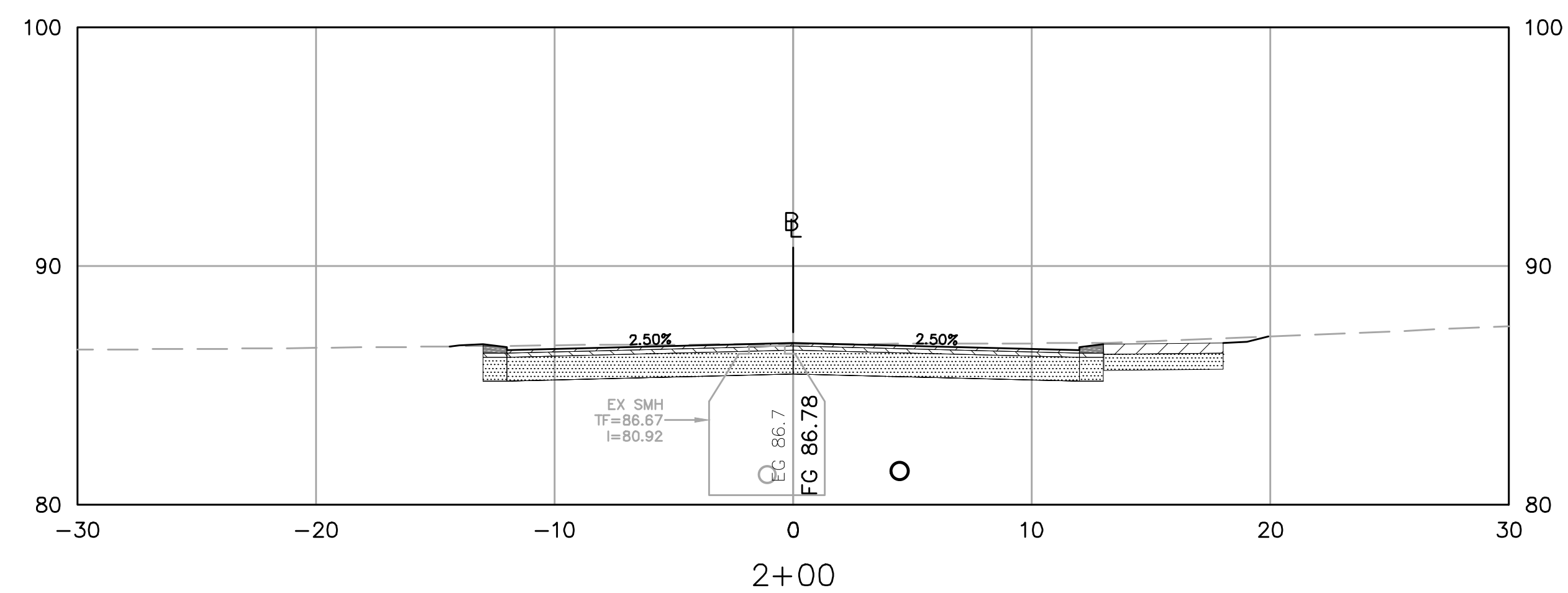
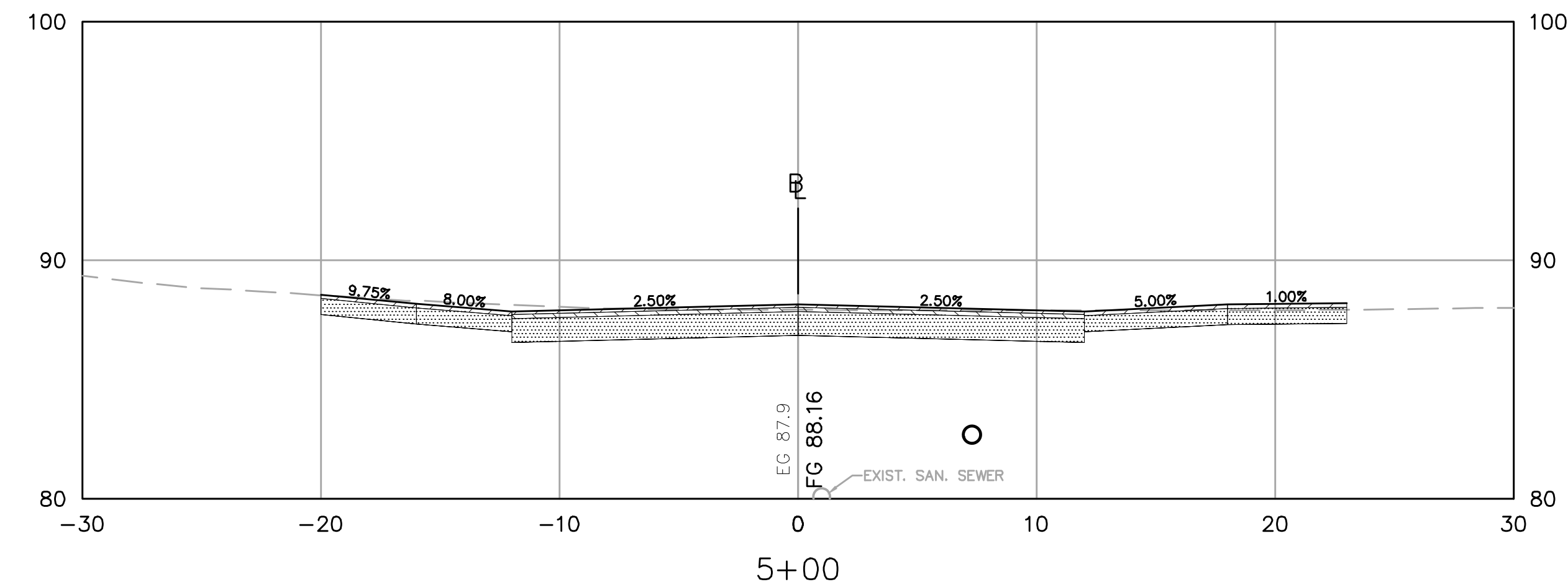
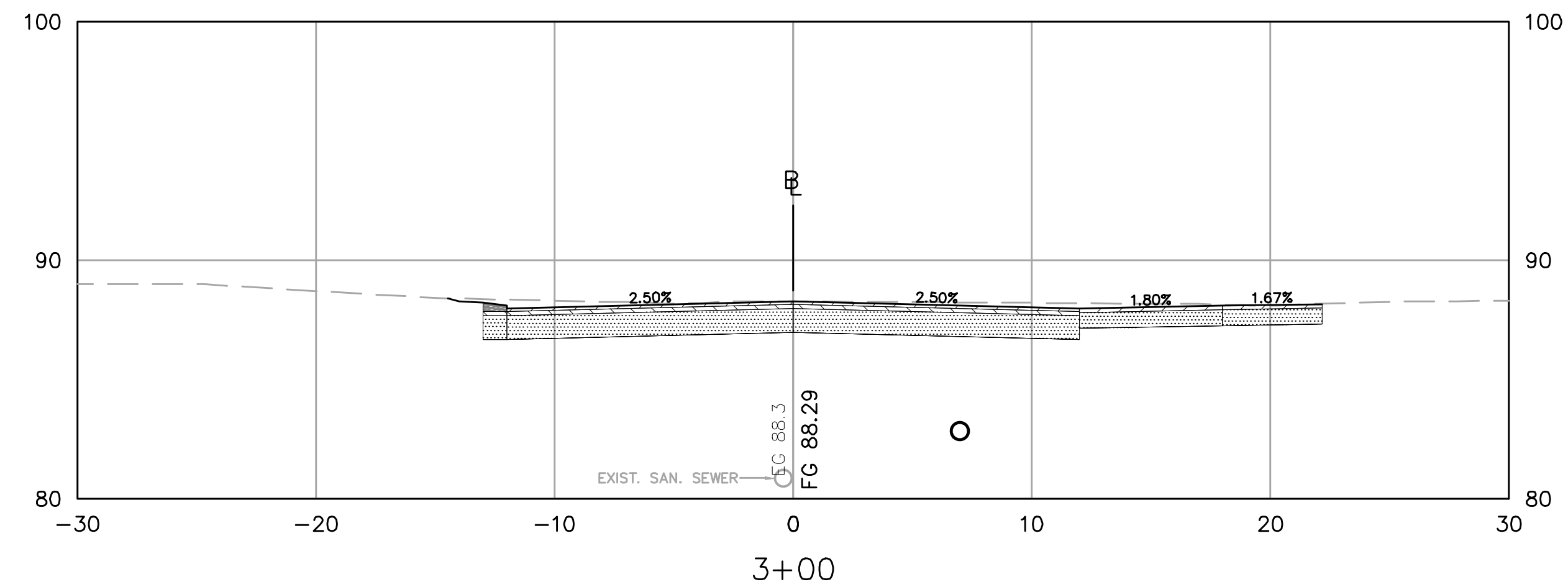


FILE: 8992300-XSEC.DWG

DWG. NO:

JOB. NO: 89923.00

**XS-01**



○ PROPOSED DUCTILE IRON WATER PIPE (SEE PLANS FOR SIZE)

**ISSUED FOR CONSTRUCTION**





**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS

CROSS SECTIONS - PHILIPS DRIVE  
STA. 6+00 TO STA. 9+50

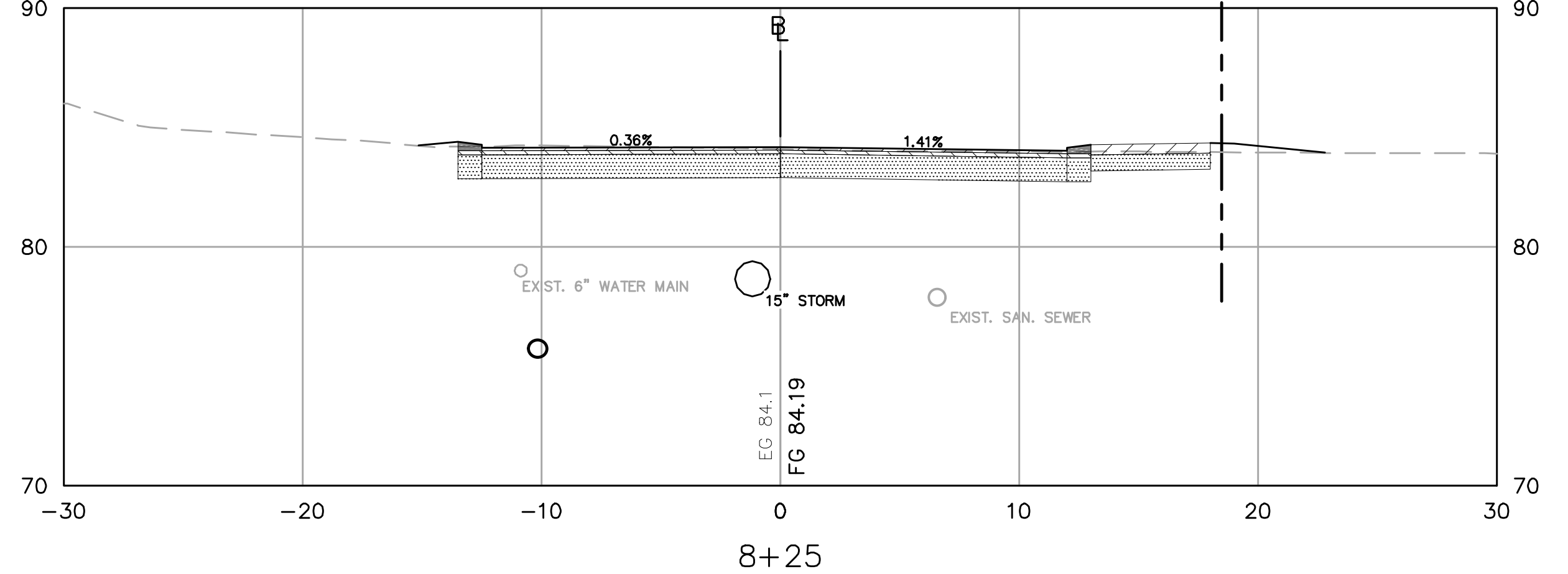
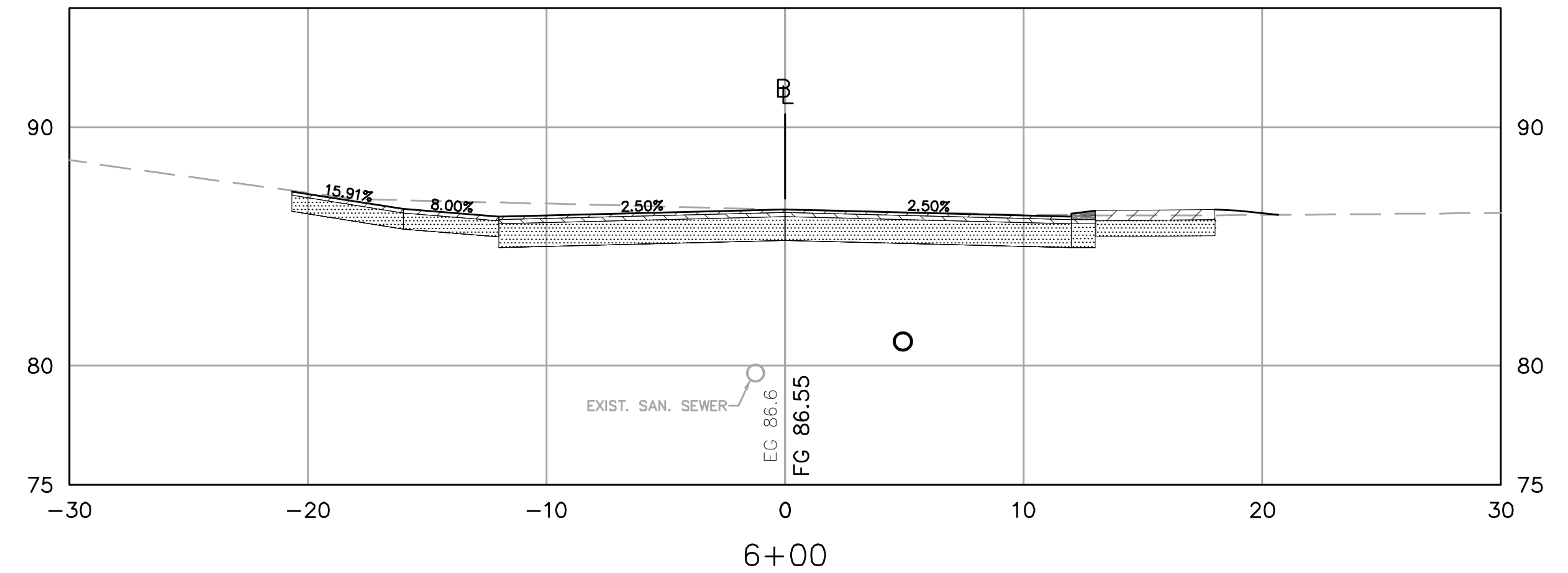
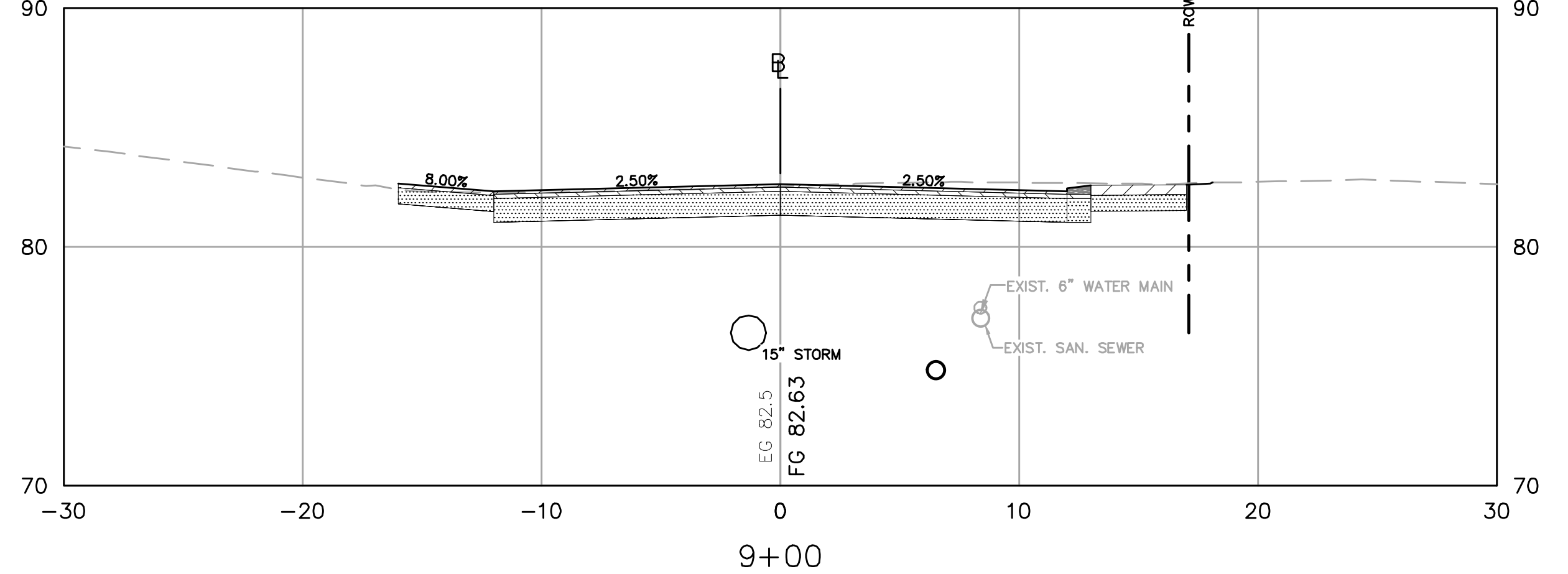
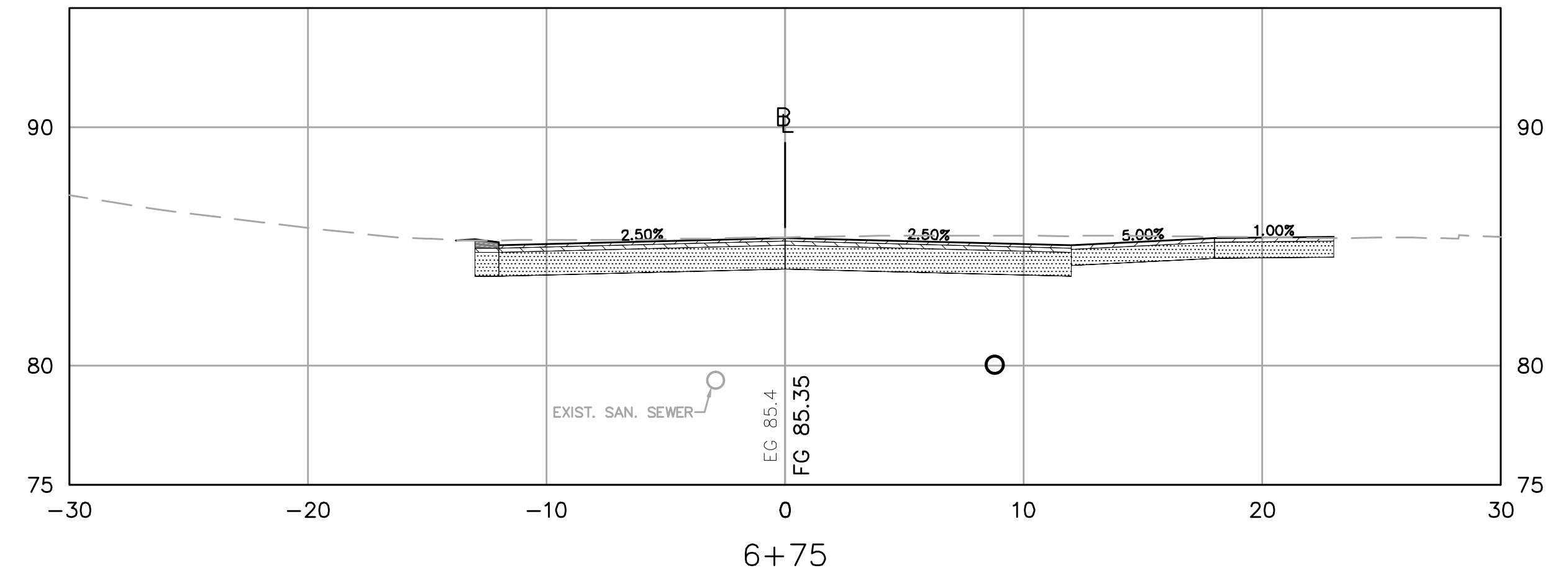
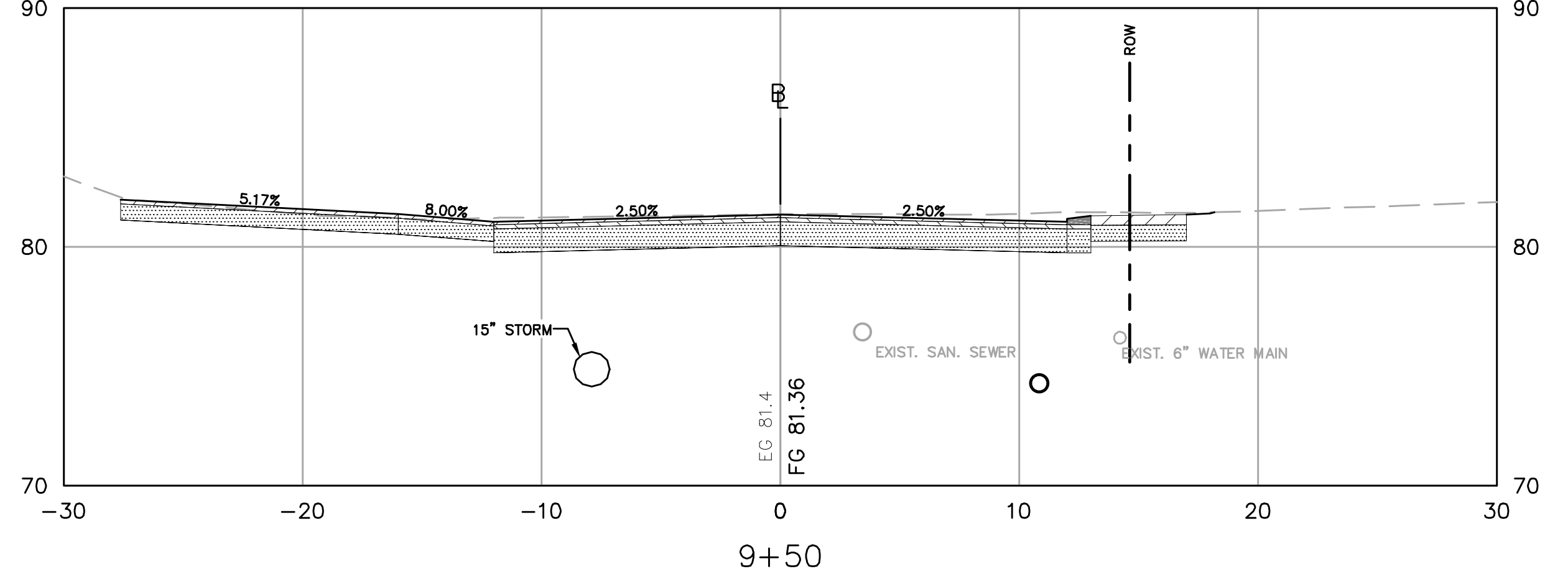
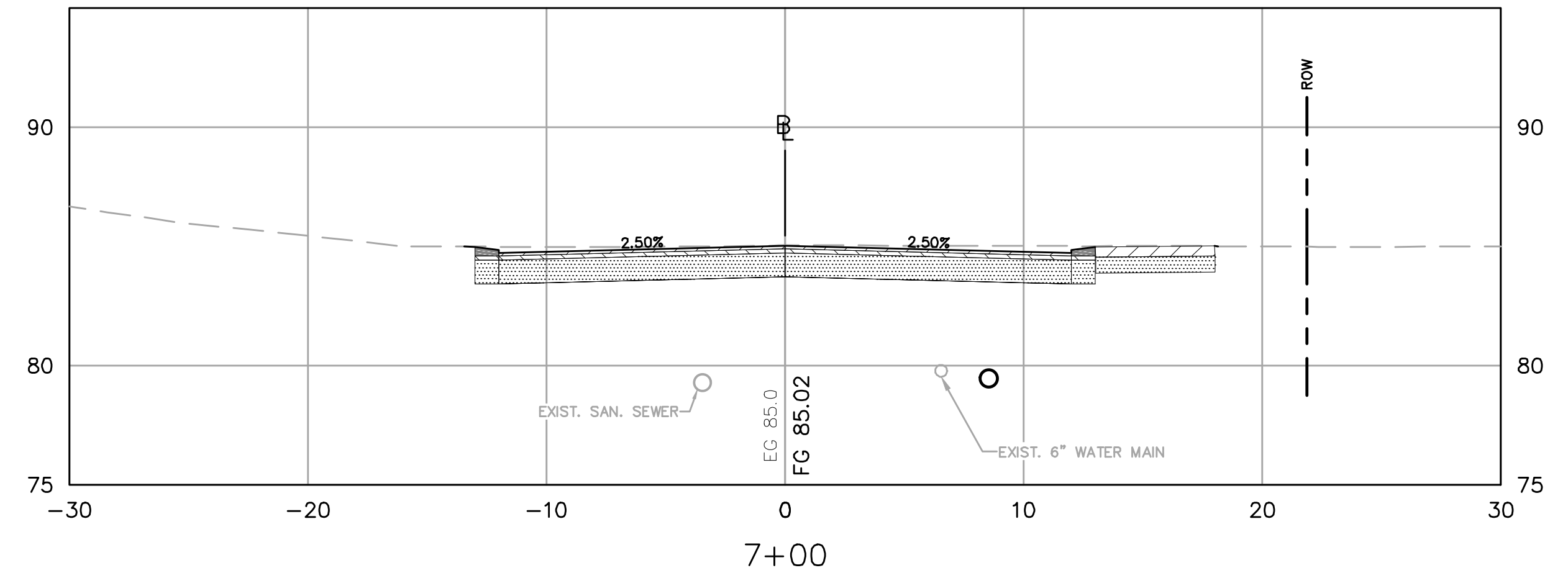
APRIL 2022

REVISIONS:


PREPARED FOR:  
CITY OF NEWBURYPORT  
DEPARTMENT OF PUBLIC SERVICES  
16A PERRY WAY  
NEWBURYPORT, MA 01950

**BSC GROUP**  
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Andover, Massachusetts 01810  
617 896 4300

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SCALE: 1" = 5'  
HORIZ. 0 2.5 5 10 FEET  
VERT. 0 2.5 5 10 FEET  
FILE: 8992300-XSEC.DWG  
DWG. NO:  
JOB. NO: 89923.00 **XS-02**



○ PROPOSED DUCTILE IRON WATER PIPE (SEE PLANS FOR SIZE)

**ISSUED FOR CONSTRUCTION**





**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

**PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS**

**CROSS SECTIONS - PHILIPS DRIVE  
STA. 10+00 TO STA. 12+80**

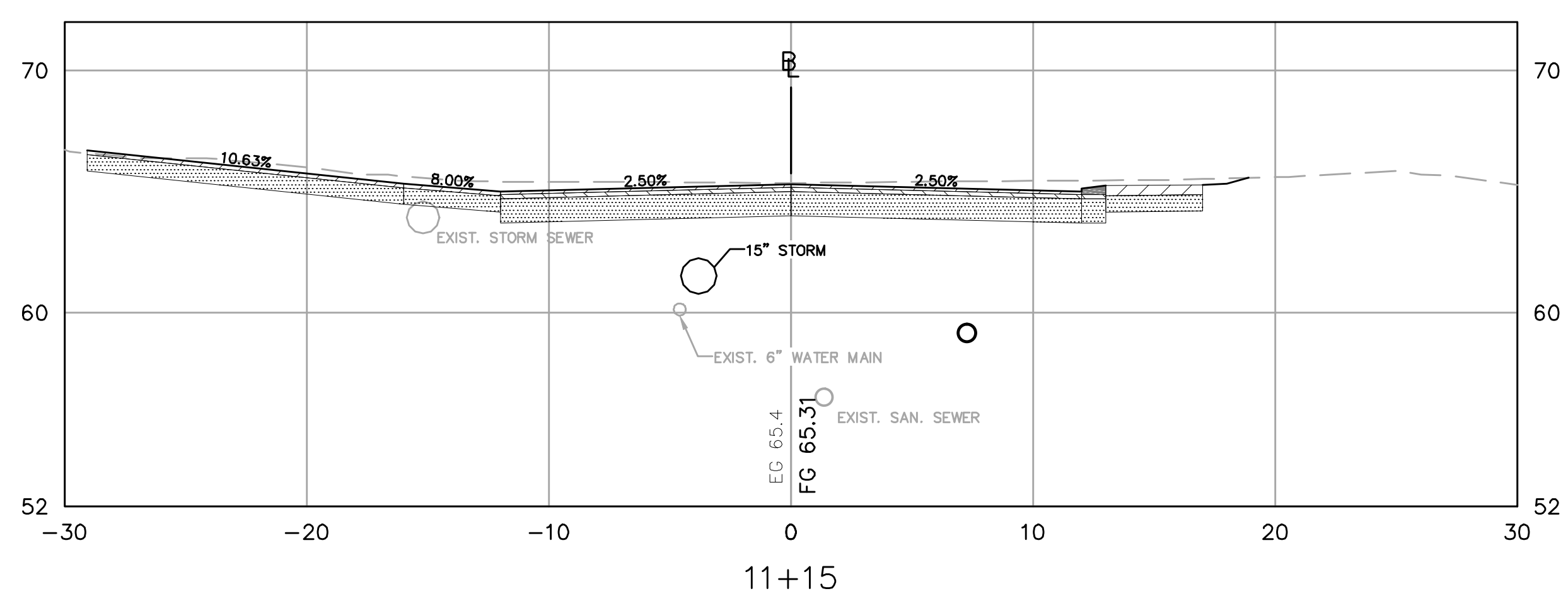
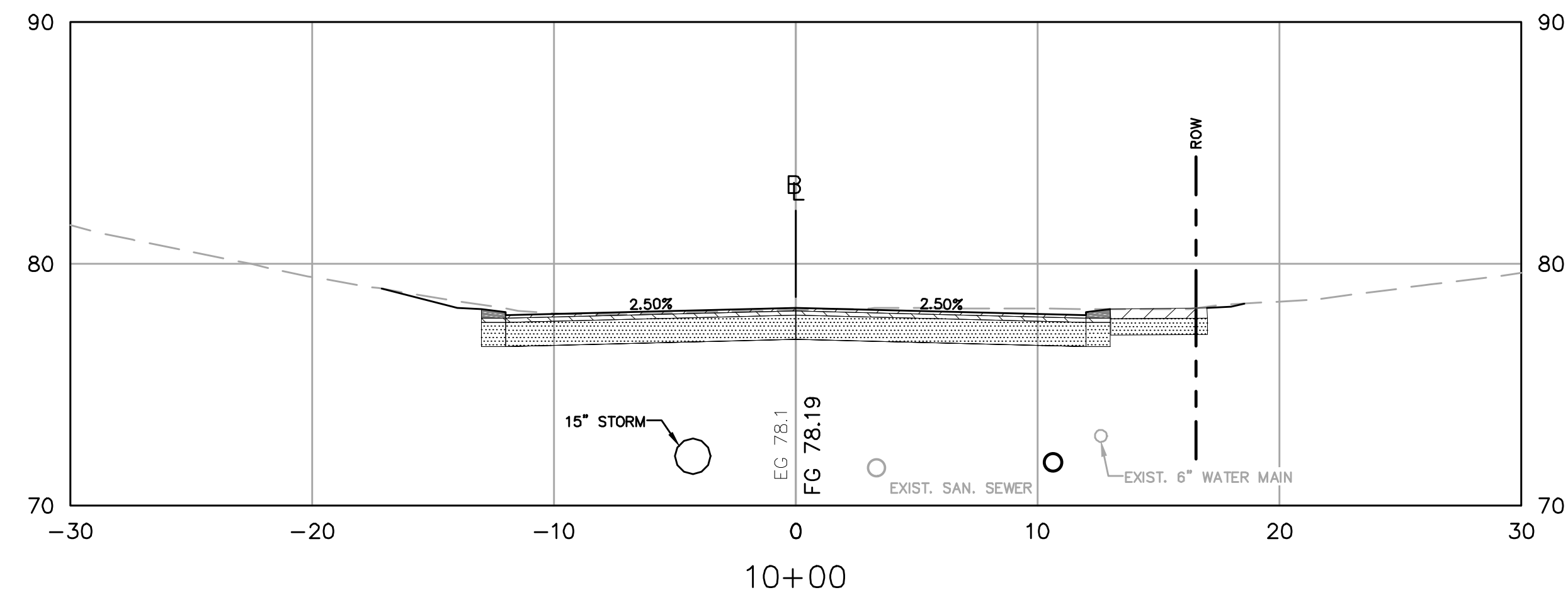
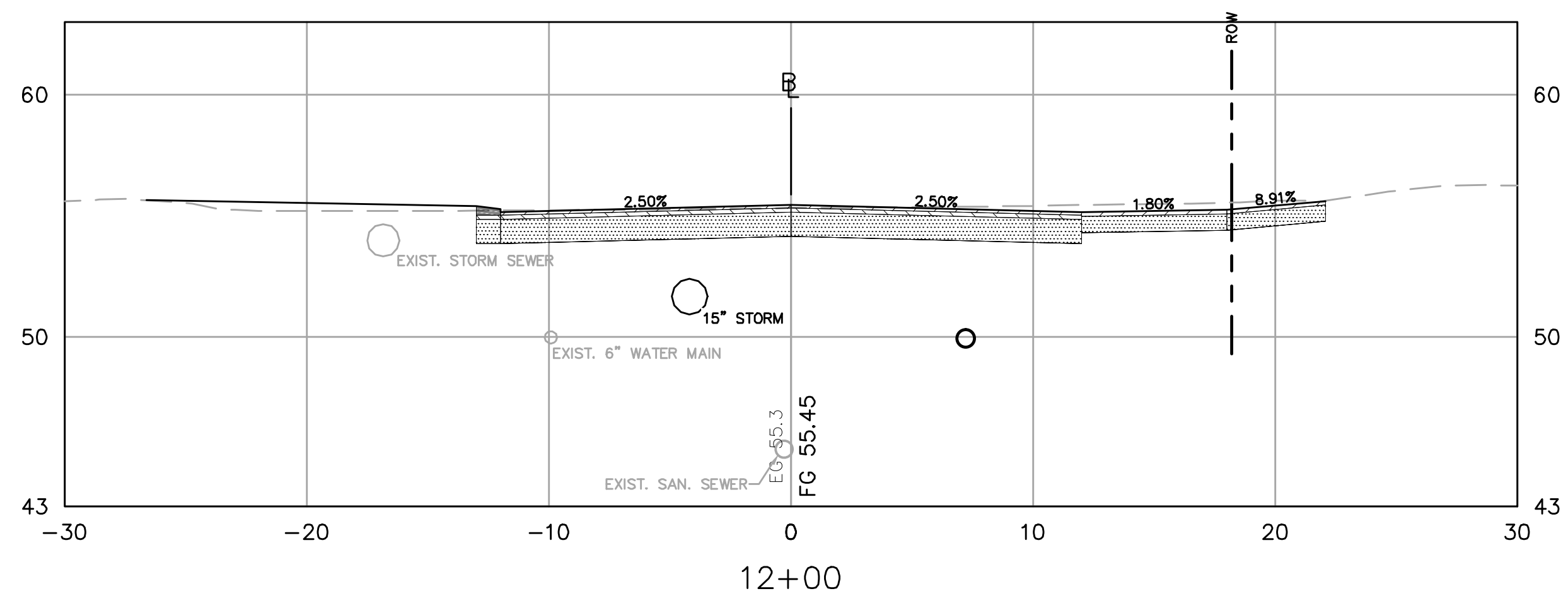
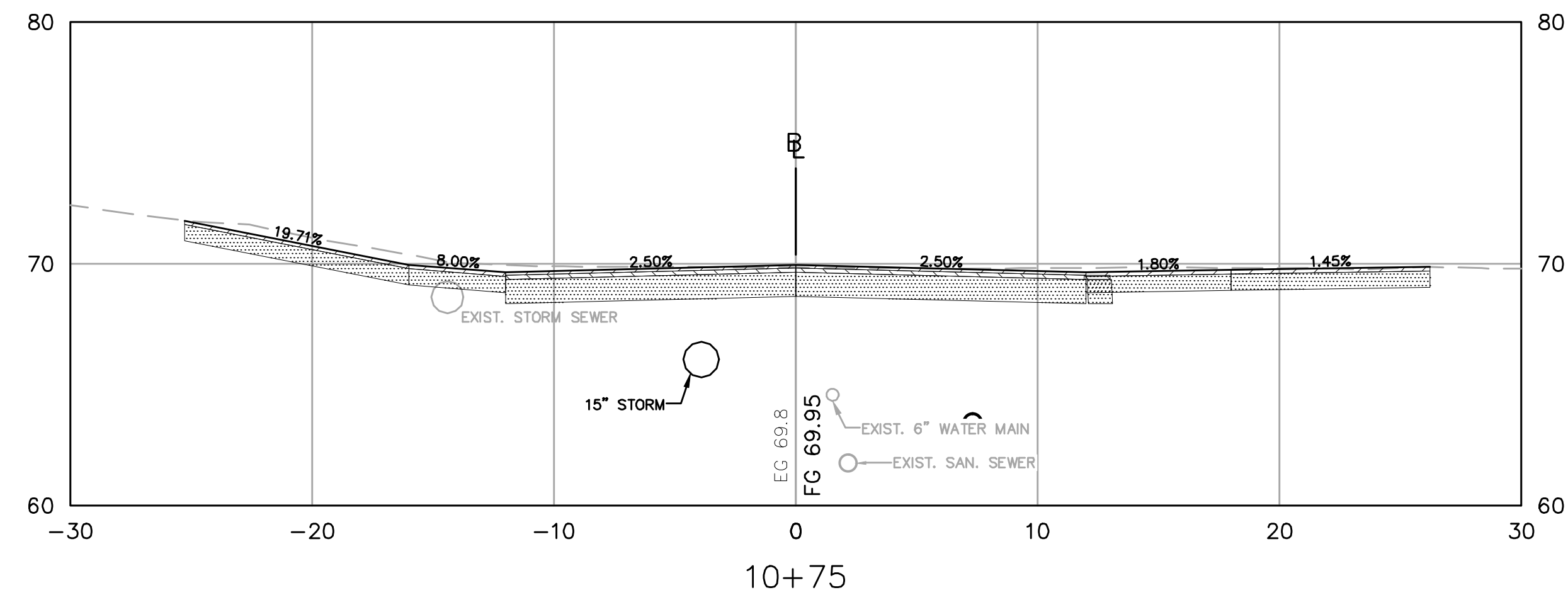
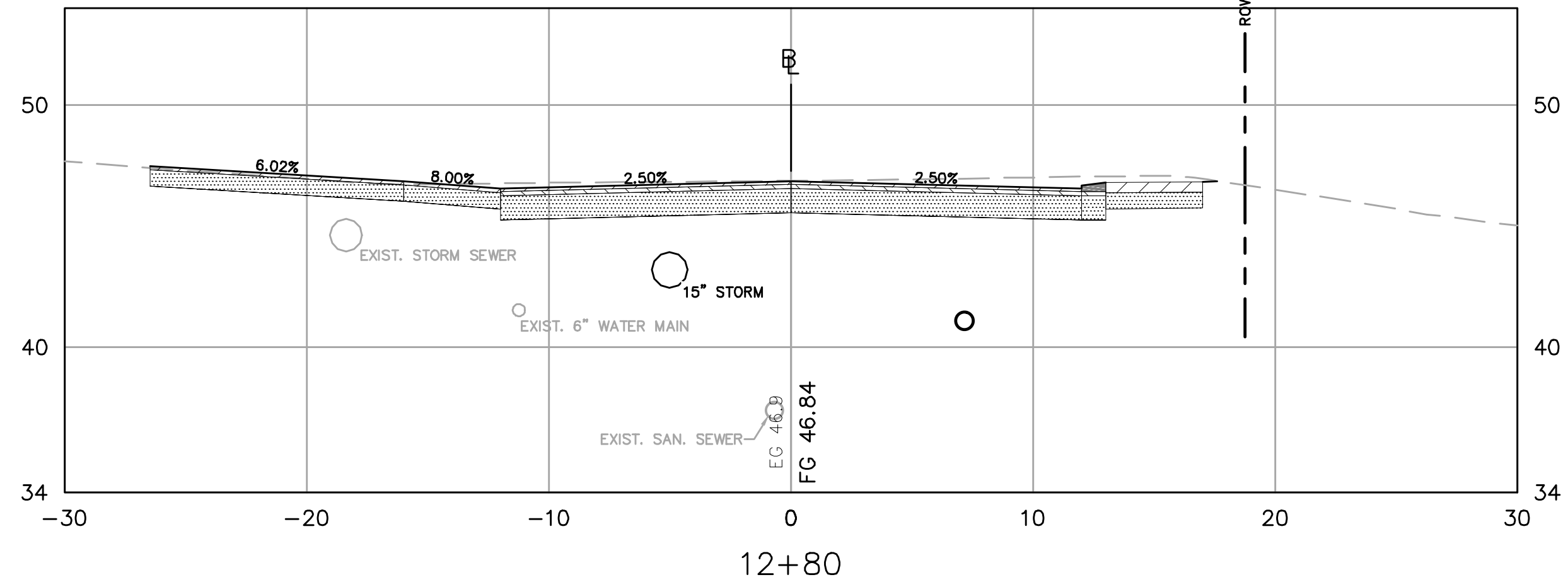
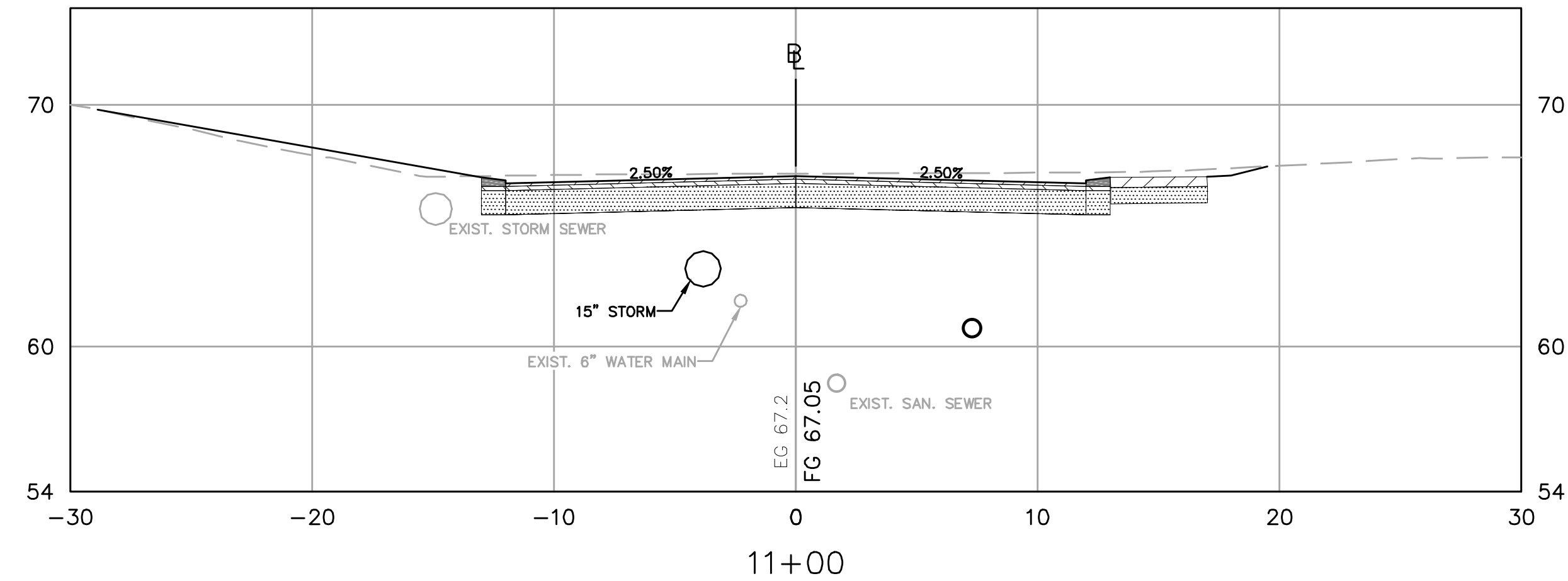
APRIL 2022

REVISIONS:


PREPARED FOR:  
CITY OF NEWBURYPORT  
DEPARTMENT OF PUBLIC SERVICES  
16A PERRY WAY  
NEWBURYPORT, MA 01950

**BSC GROUP**  
300 Brickstone Square  
Andover, Massachusetts 01810  
617 896 4300

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SCALE: 1" = 5'  
HORIZ. 0 2.5 5 10 FEET  
VERT. 0 2.5 5 10 FEET  
FILE: 8992300-XSEC.DWG  
DWG. NO:  
JOB. NO: 89923.00 **XS-03**



○ PROPOSED DUCTILE IRON WATER PIPE (SEE PLANS FOR SIZE)

**ISSUED FOR CONSTRUCTION**





ROADWAY, DRAINAGE & WATER MAIN IMPROVEMENTS - APRIL 2022

**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS

CROSS SECTIONS - PHILIPS DRIVE  
STA. 13+00 TO STA. 15+35

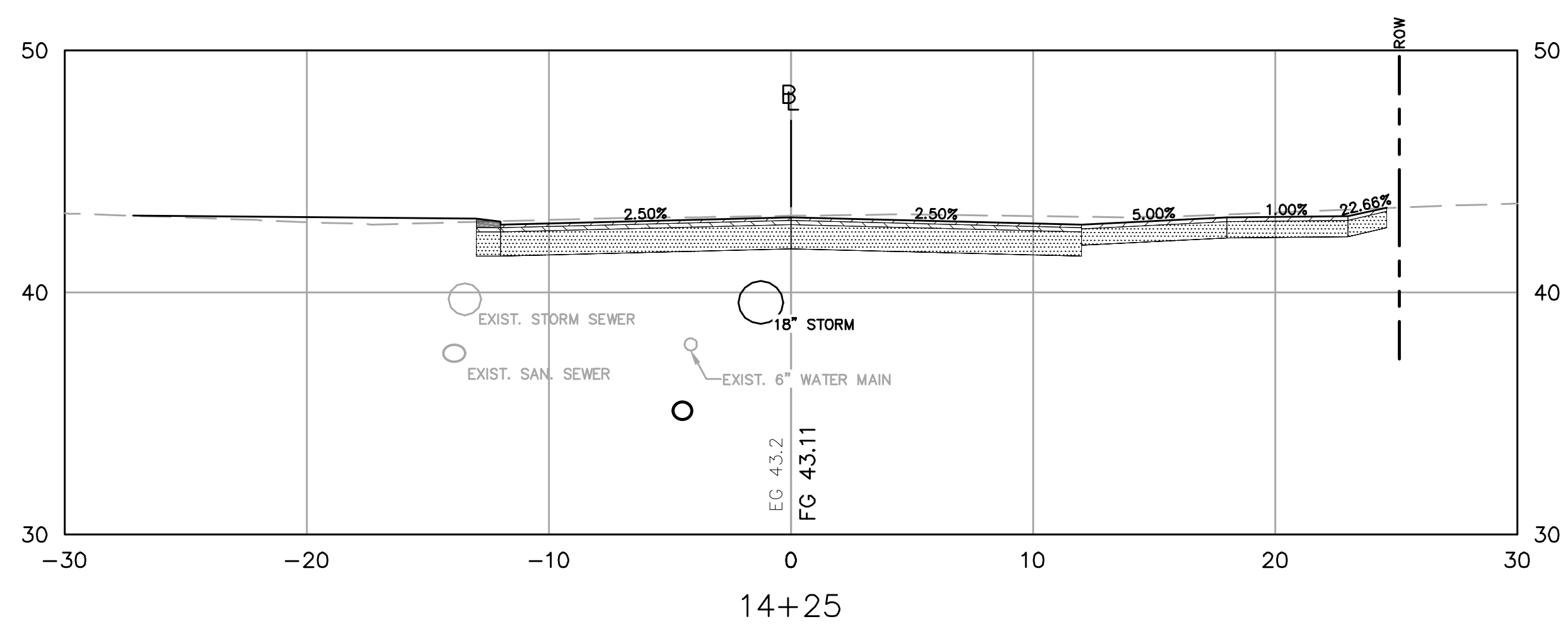
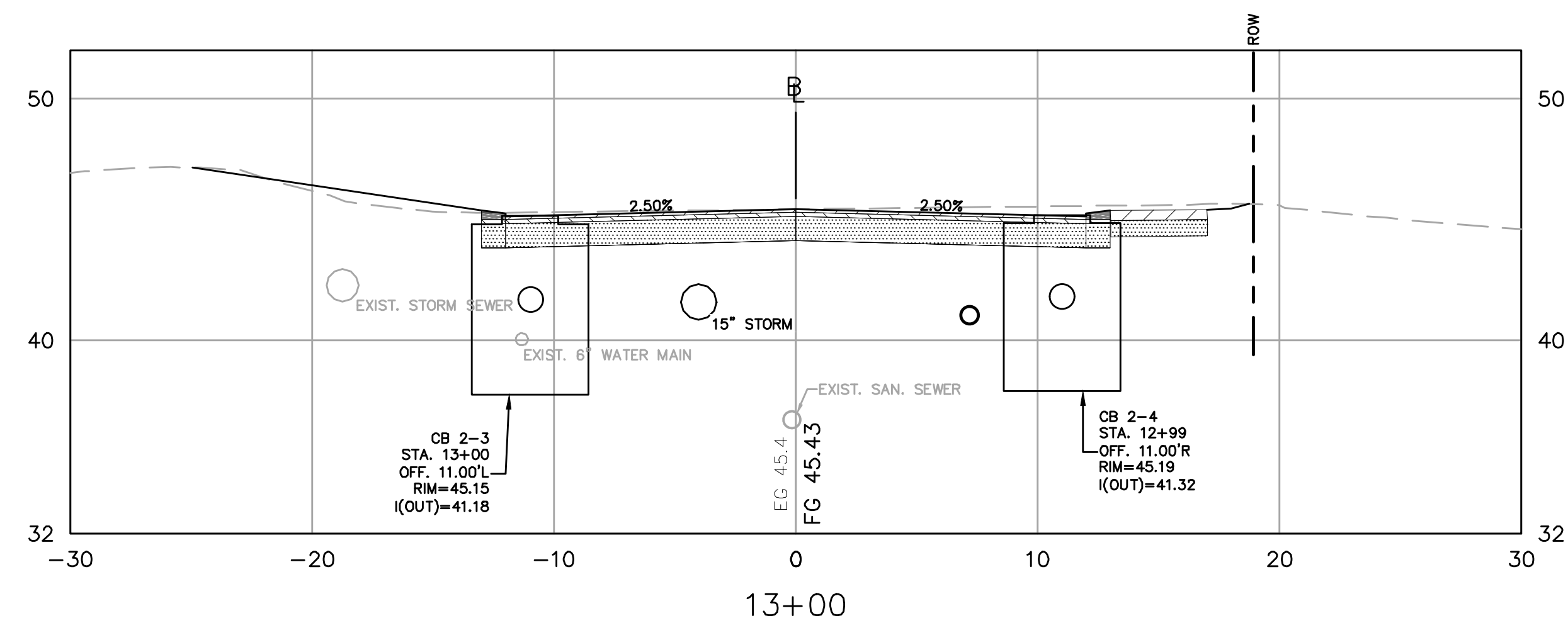
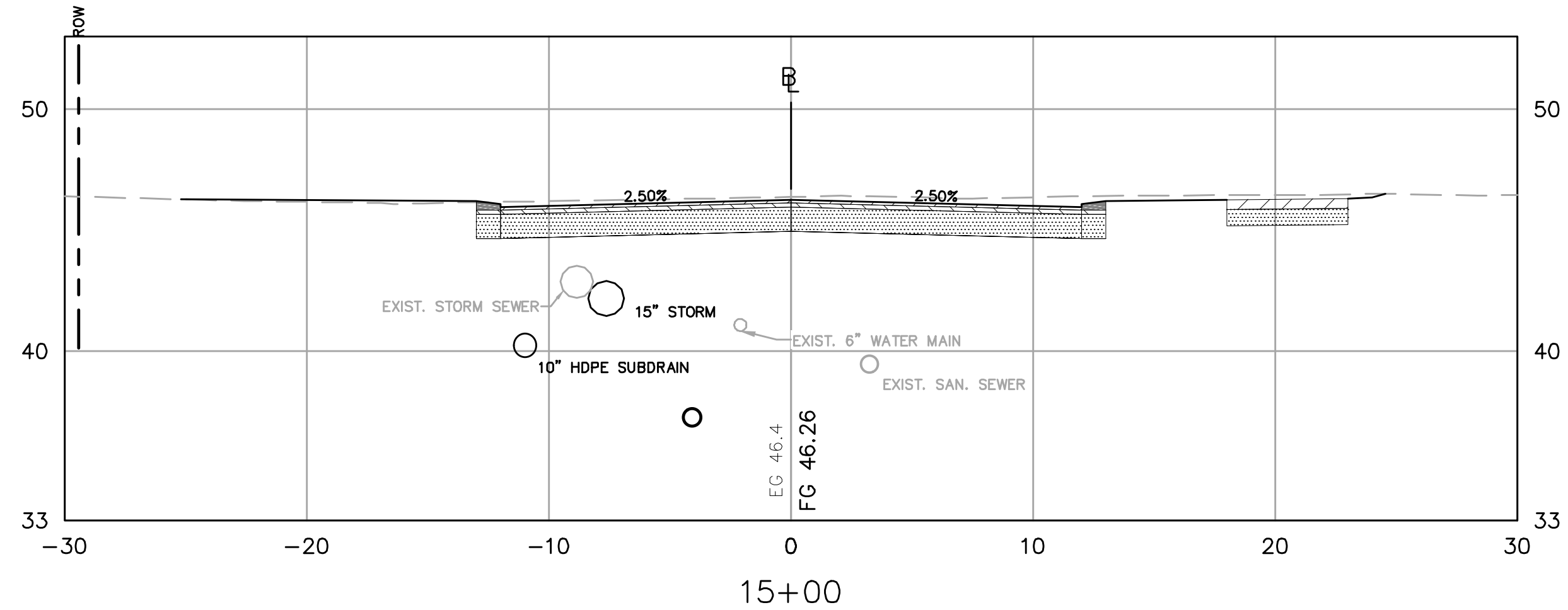
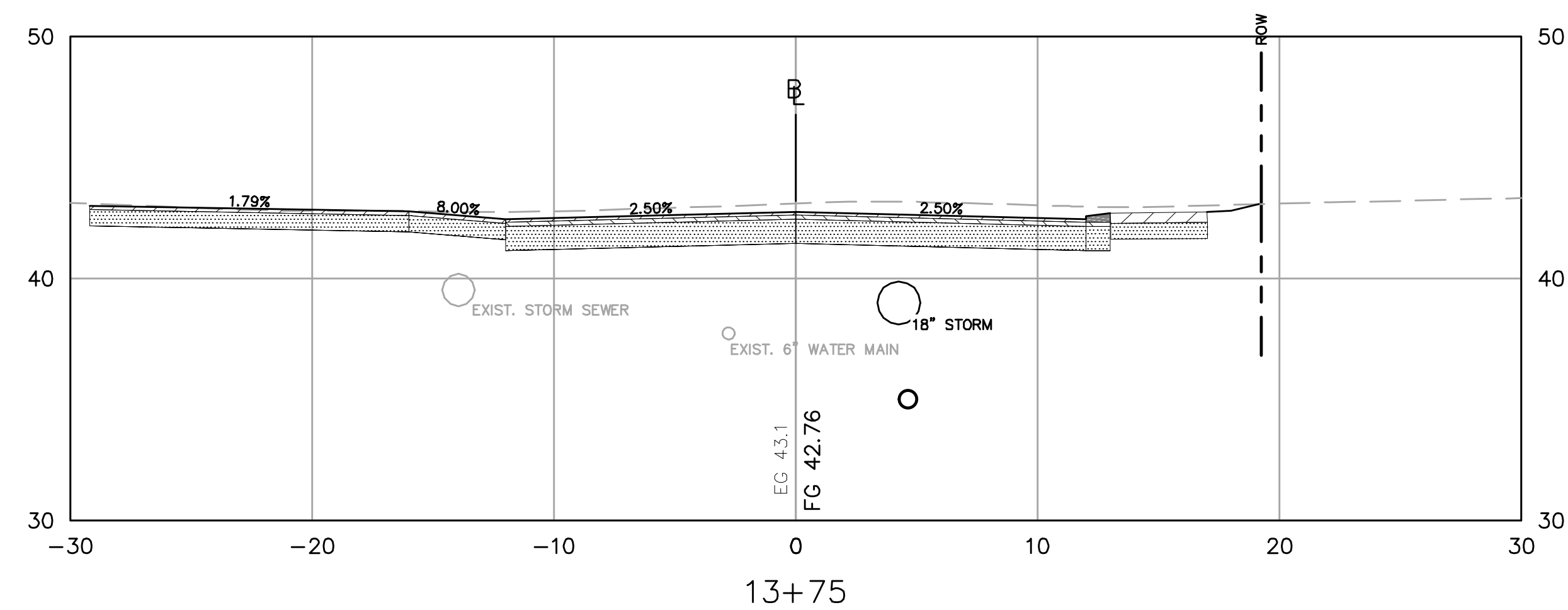
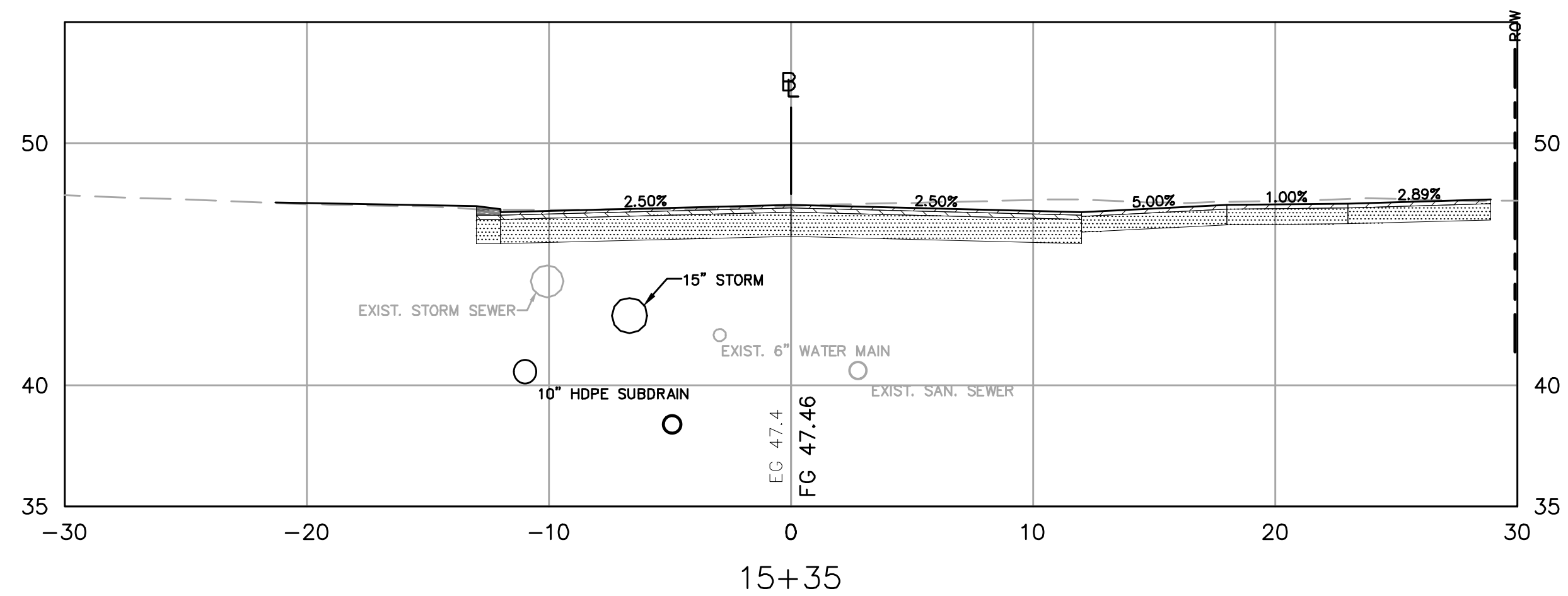
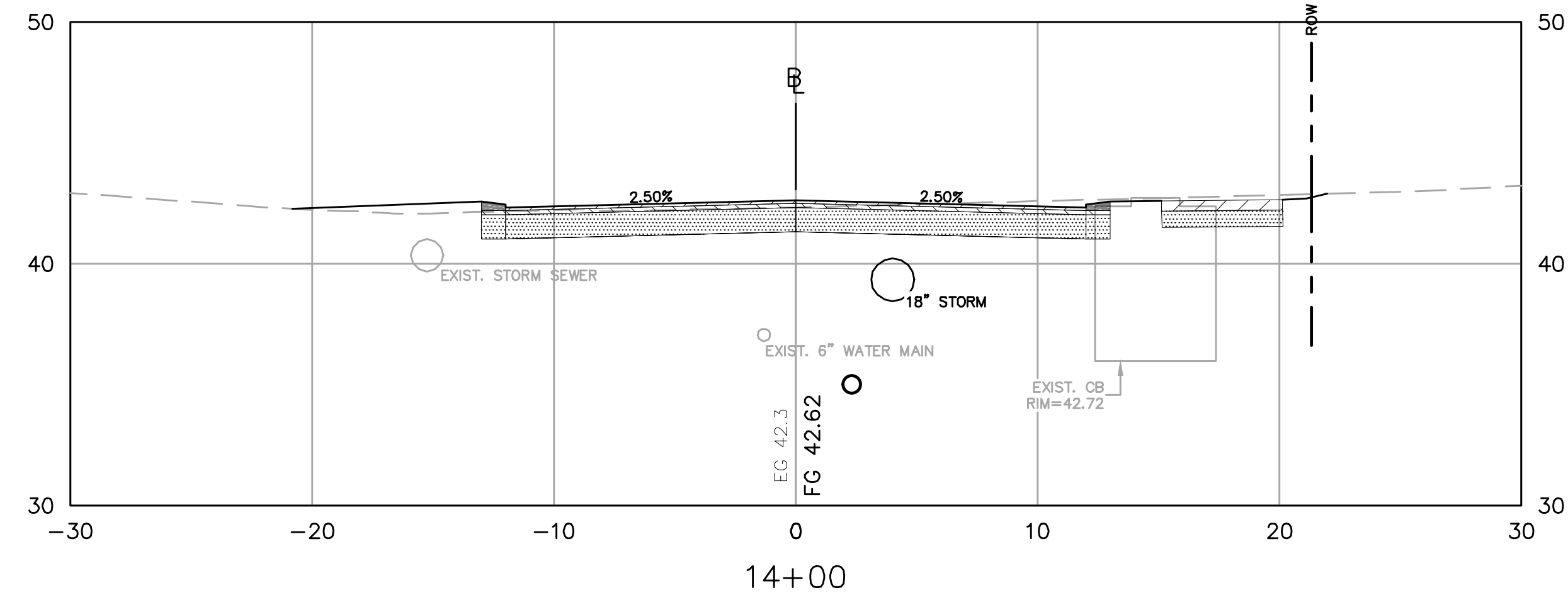
APRIL 2022

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DEPARTMENT OF PUBLIC SERVICES  
16A PERRY WAY  
NEWBURYPORT, MA 01950

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SCALE: 1" = 5'  
HORIZ. 0 2.5 5 10 FEET  
VERT. 0 2.5 5 10 FEET  
FILE: 8992300-XSEC.DWG  
DWG. NO:  
JOB. NO: 89923.00 **XS-04**



○ PROPOSED DUCTILE IRON WATER PIPE (SEE PLANS FOR SIZE)

**ISSUED FOR CONSTRUCTION**





**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS

**CROSS SECTIONS - PHILIPS DRIVE**  
STA. 16+00 TO STA. 18+00

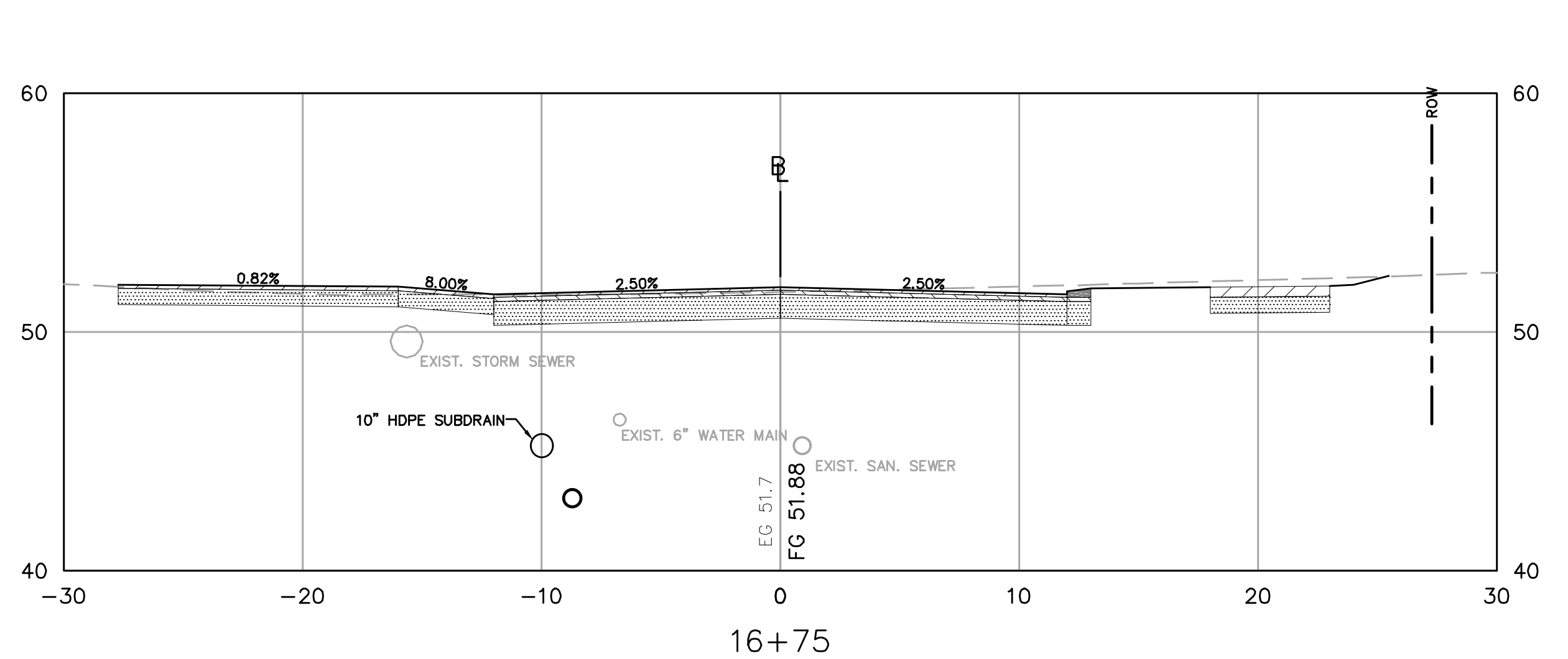
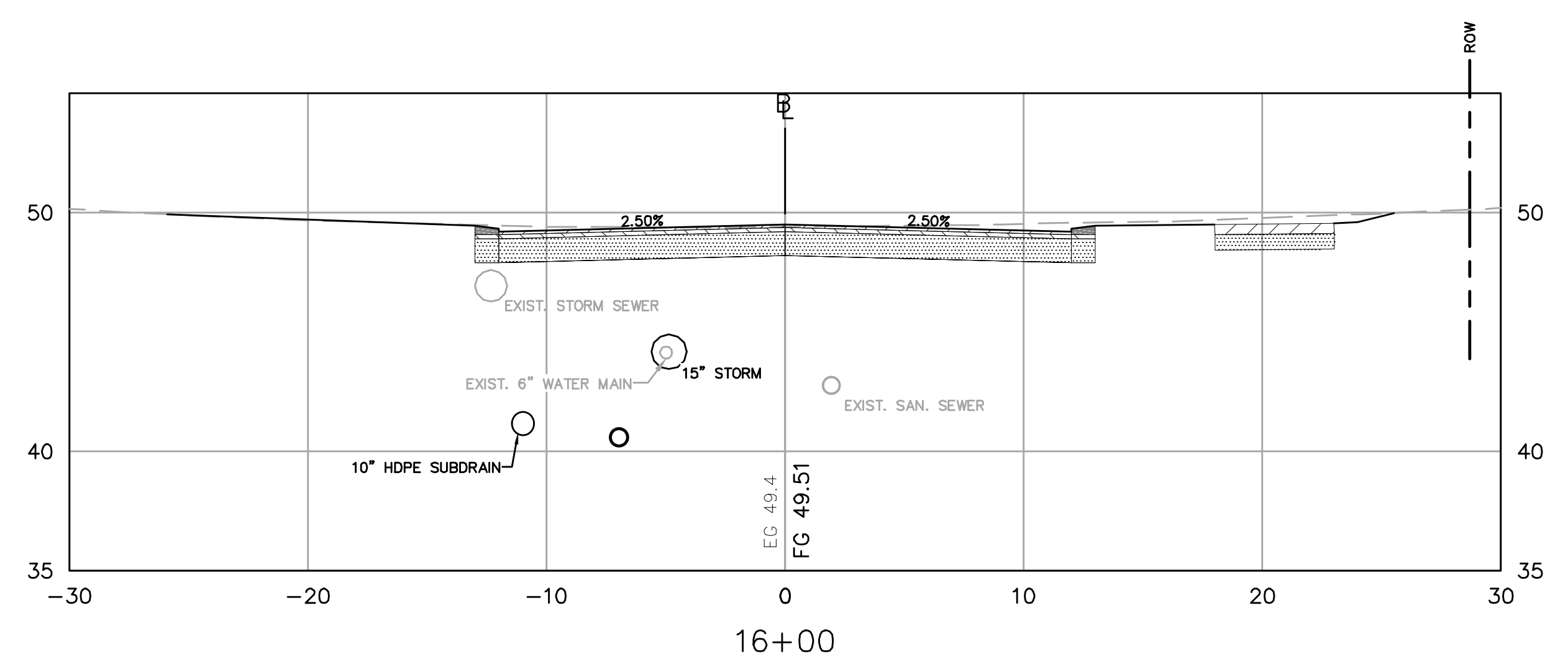
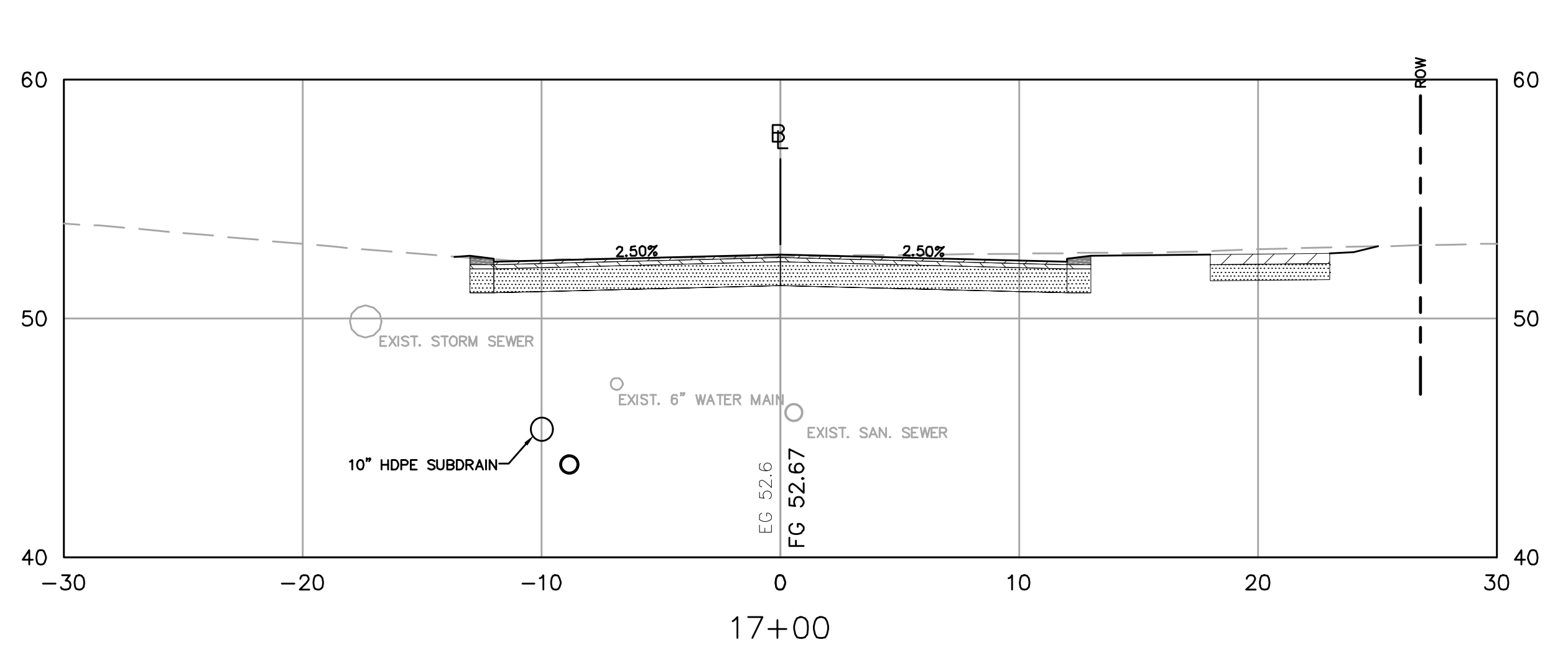
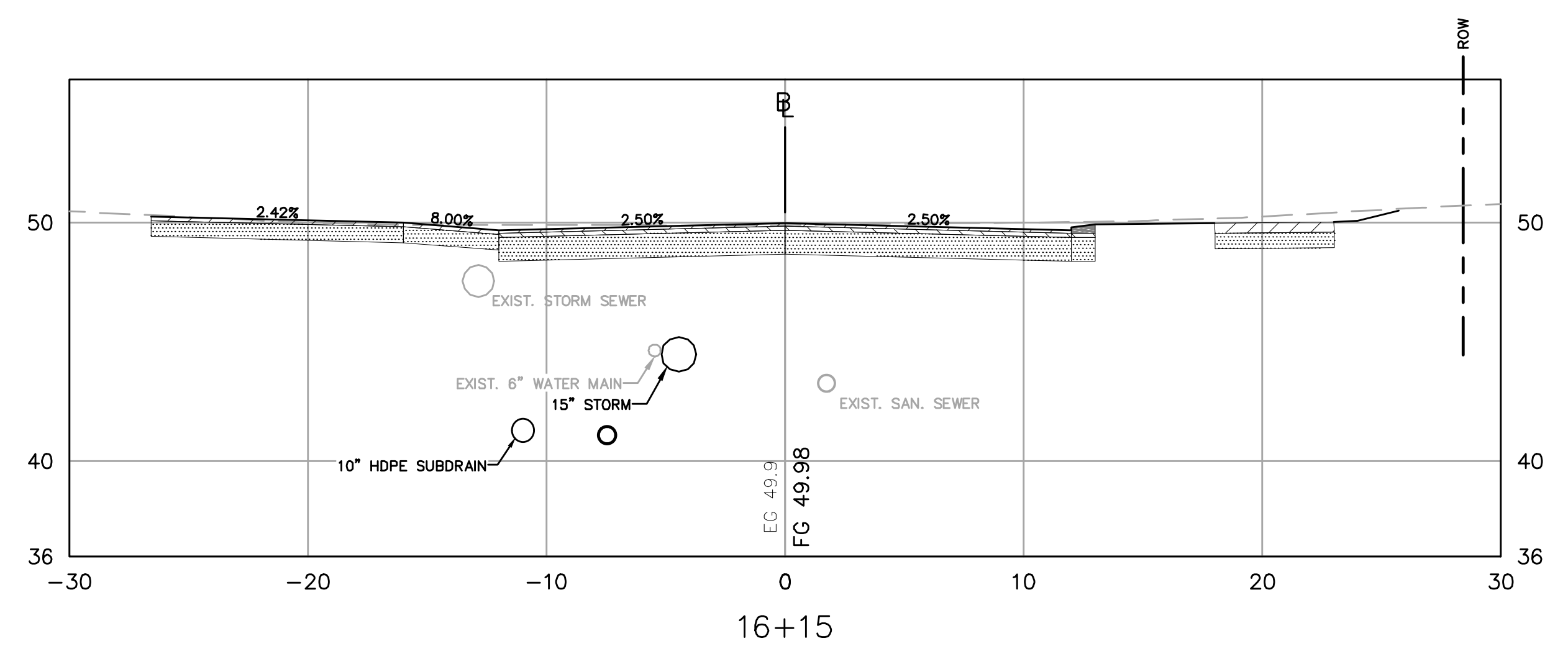
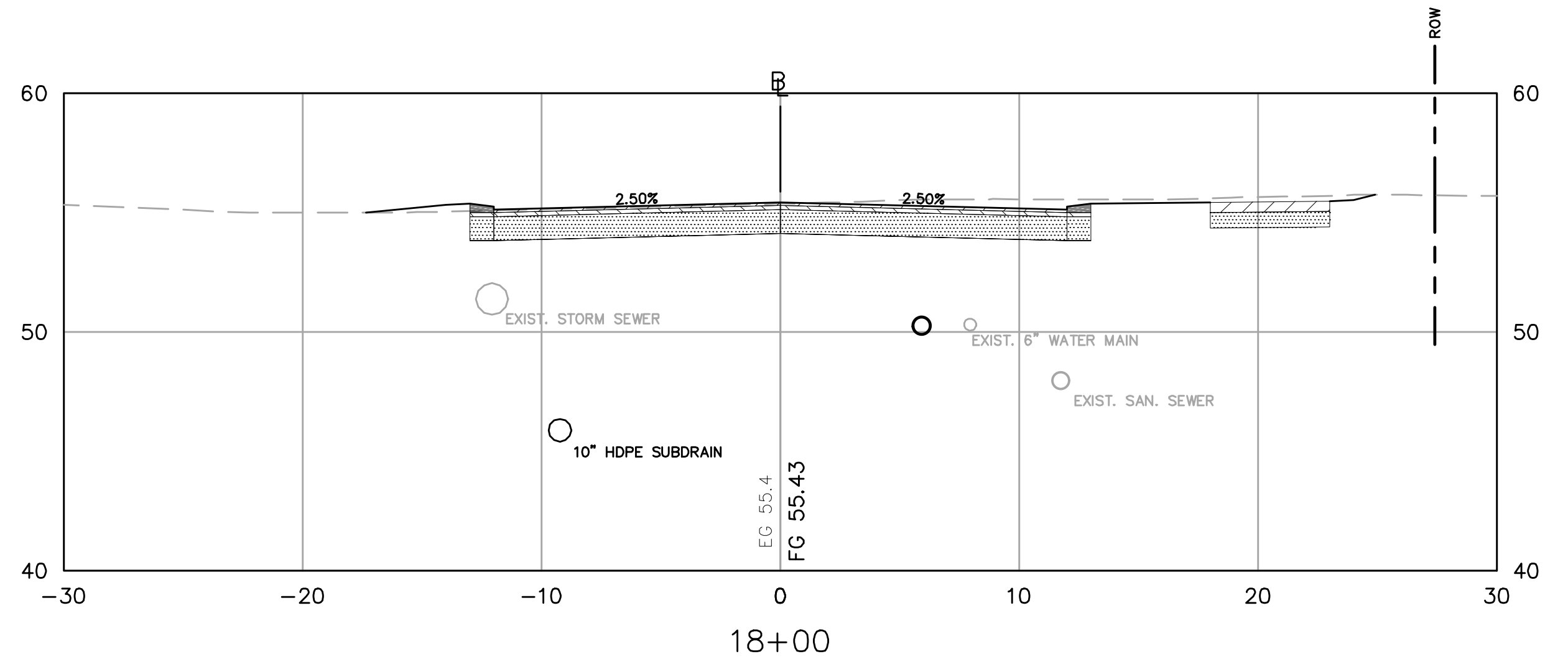
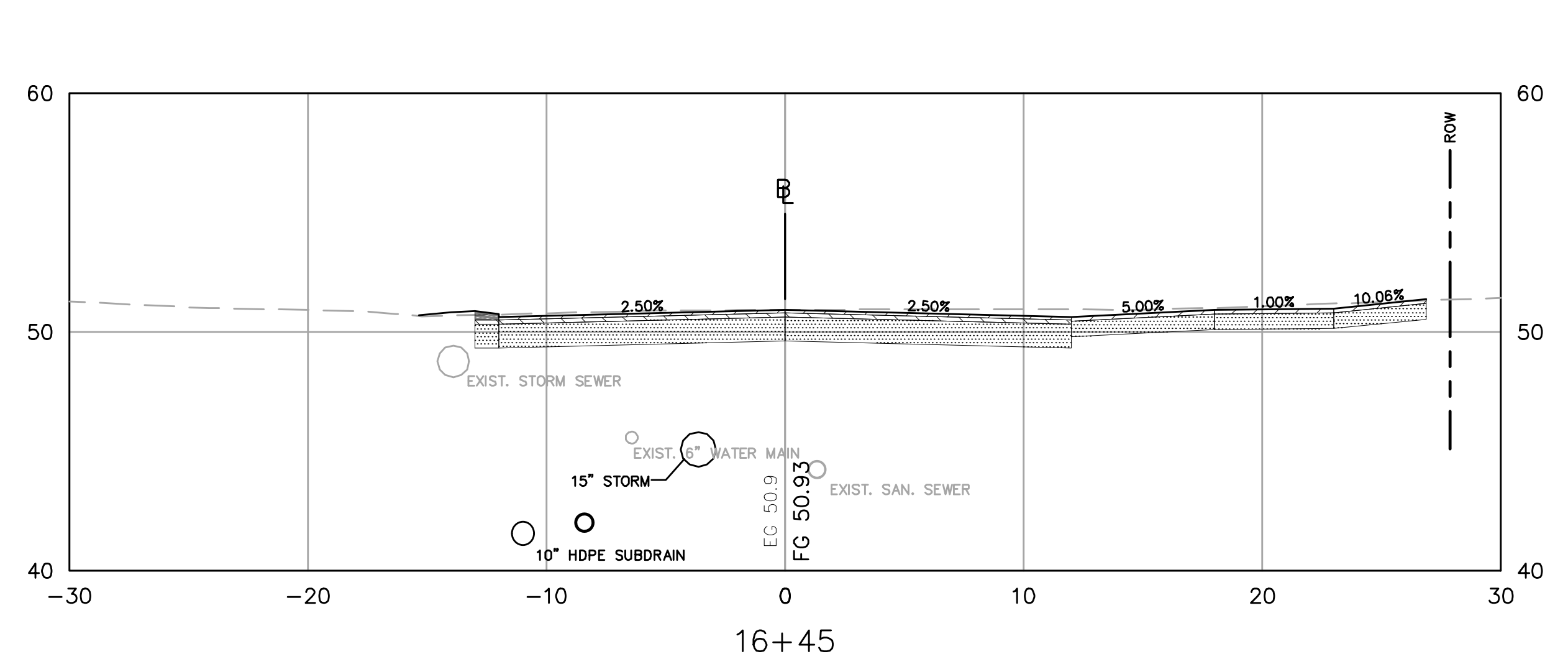
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DEPARTMENT OF PUBLIC SERVICES  
16A PERRY WAY  
NEWBURYPORT, MA 01950

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617 896 4300

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SCALE: 1" = 5'  
HORIZ. 0 2.5 5 10 FEET  
VERT. 0 2.5 5 10 FEET  
FILE: 8992300-XSEC.DWG  
DWG. NO:  
JOB. NO: 89923.00 **XS-05**



○ PROPOSED DUCTILE IRON WATER PIPE (SEE PLANS FOR SIZE)

**ISSUED FOR CONSTRUCTION**





ROADWAY, DRAINAGE & WATER MAIN IMPROVEMENTS - APRIL 2022

**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS

**CROSS SECTIONS - PHILIPS DRIVE**  
STA. 18+75 TO STA. 20+75

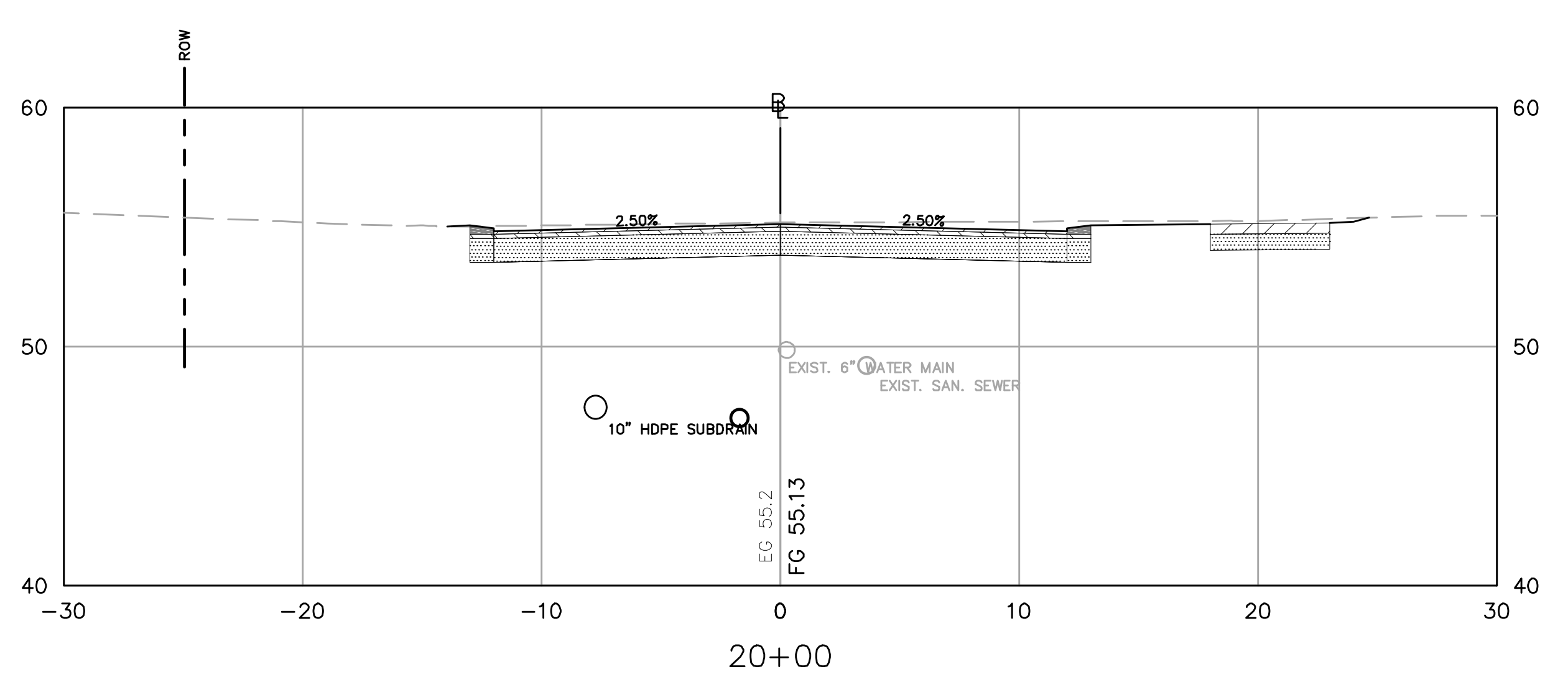
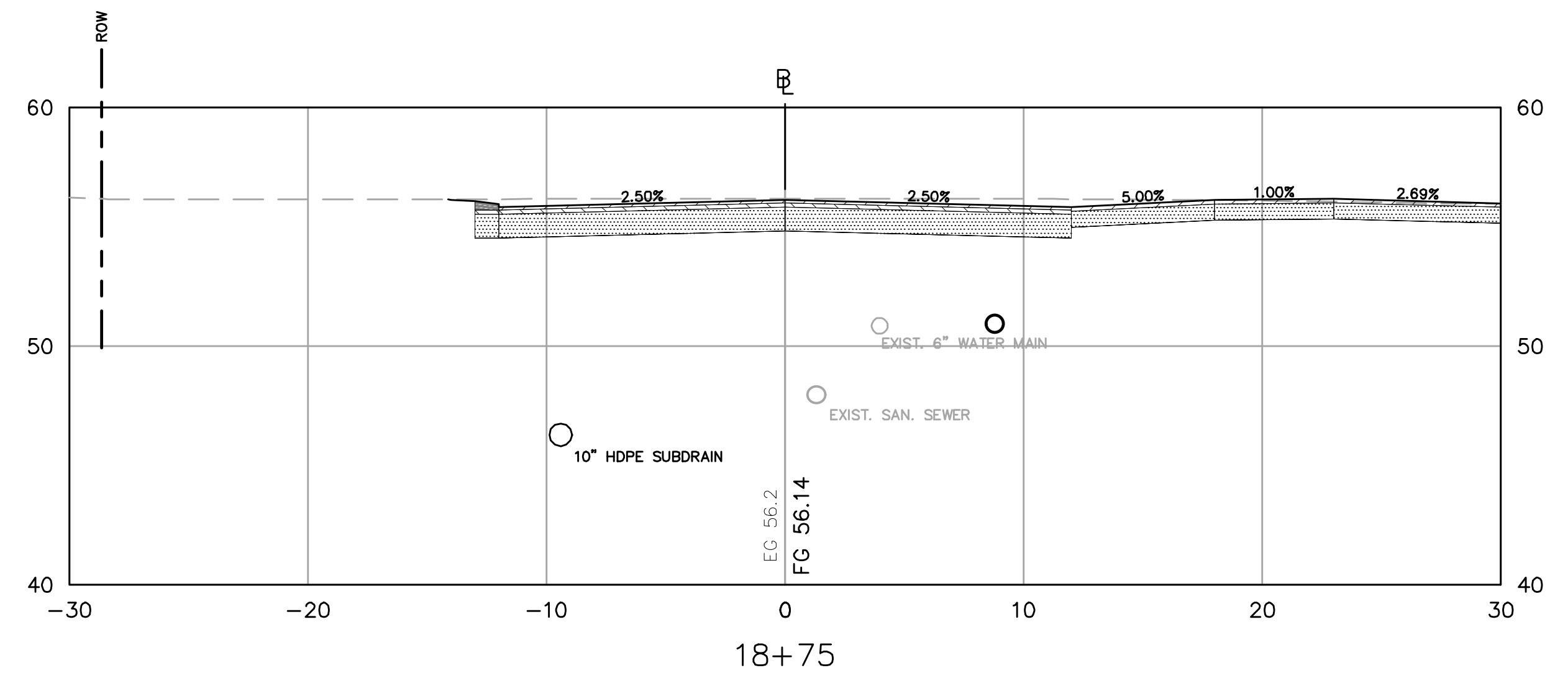
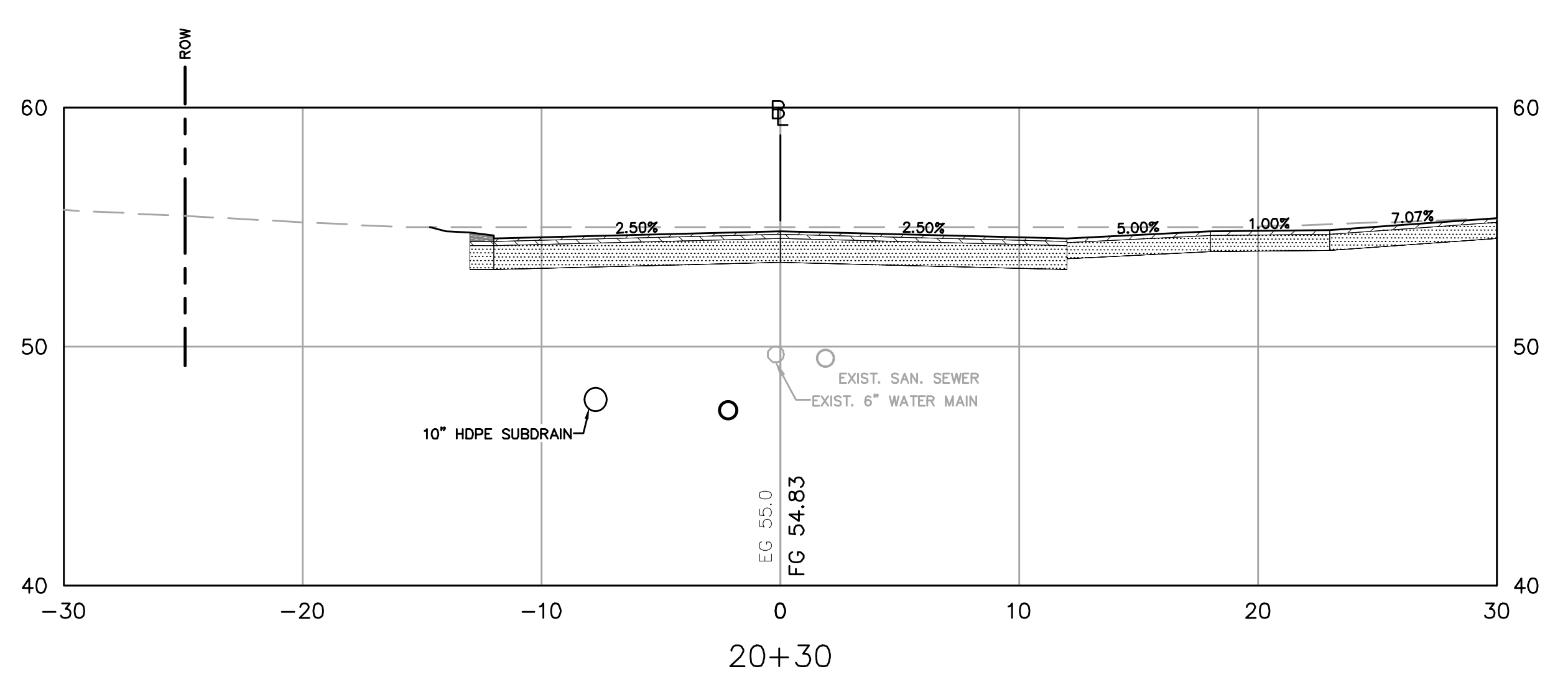
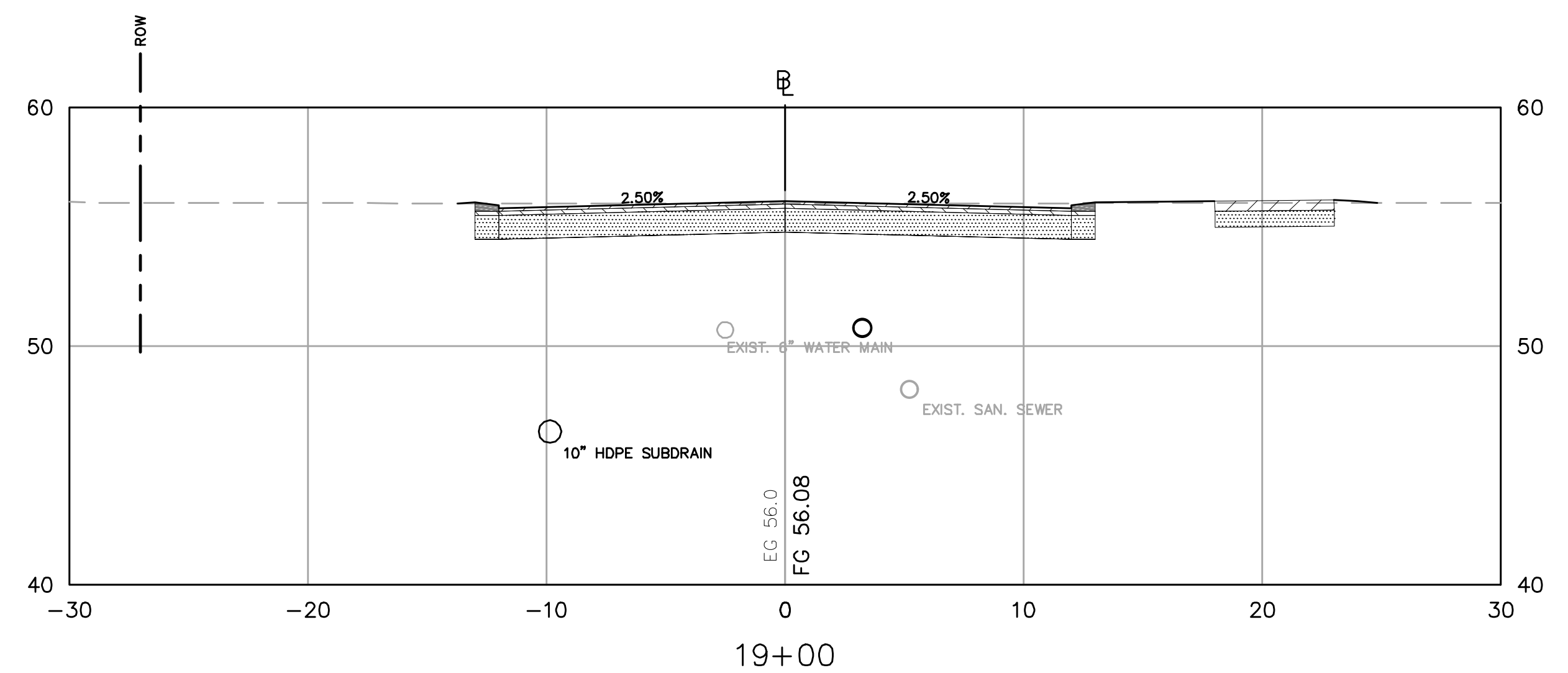
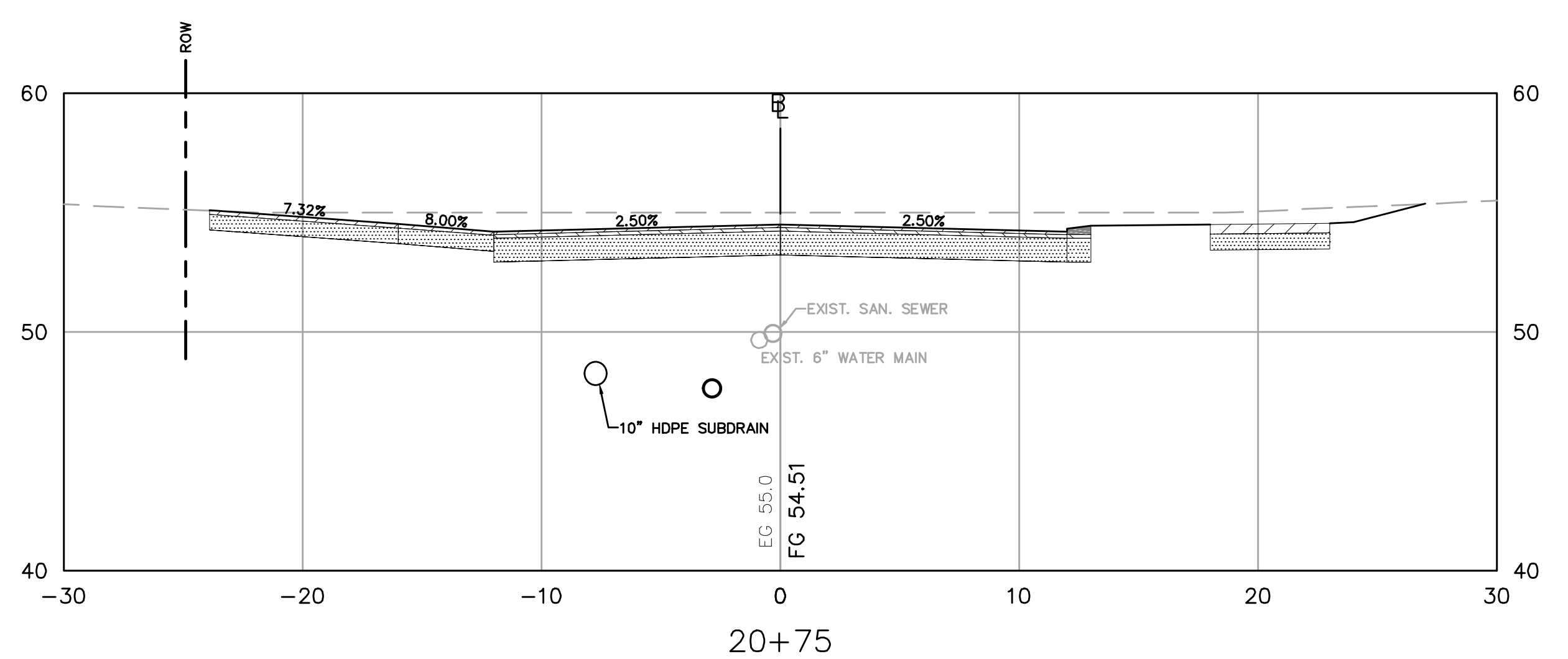
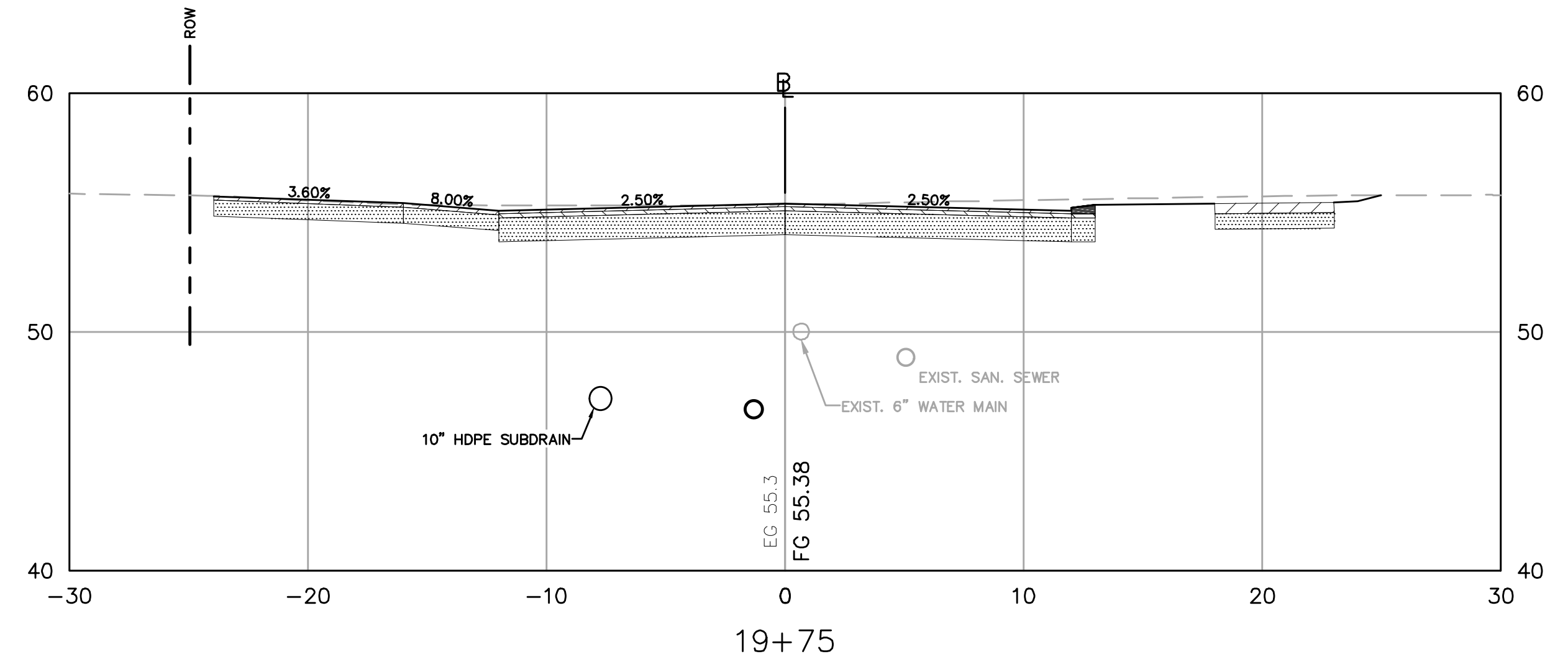
APRIL 2022

REVISIONS:


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SCALE: 1" = 5'  
HORIZ. 0 2.5 5 10 FEET  
VERT. 0 2.5 5 10 FEET  
FILE: 8992300-XSEC.DWG  
DWG. NO:  
JOB. NO: 89923.00 **XS-06**



○ PROPOSED DUCTILE IRON WATER PIPE (SEE PLANS FOR SIZE)

**ISSUED FOR CONSTRUCTION**





**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS

**CROSS SECTIONS - PHILIPS DRIVE**  
STA. 21+00 TO STA. 23+45

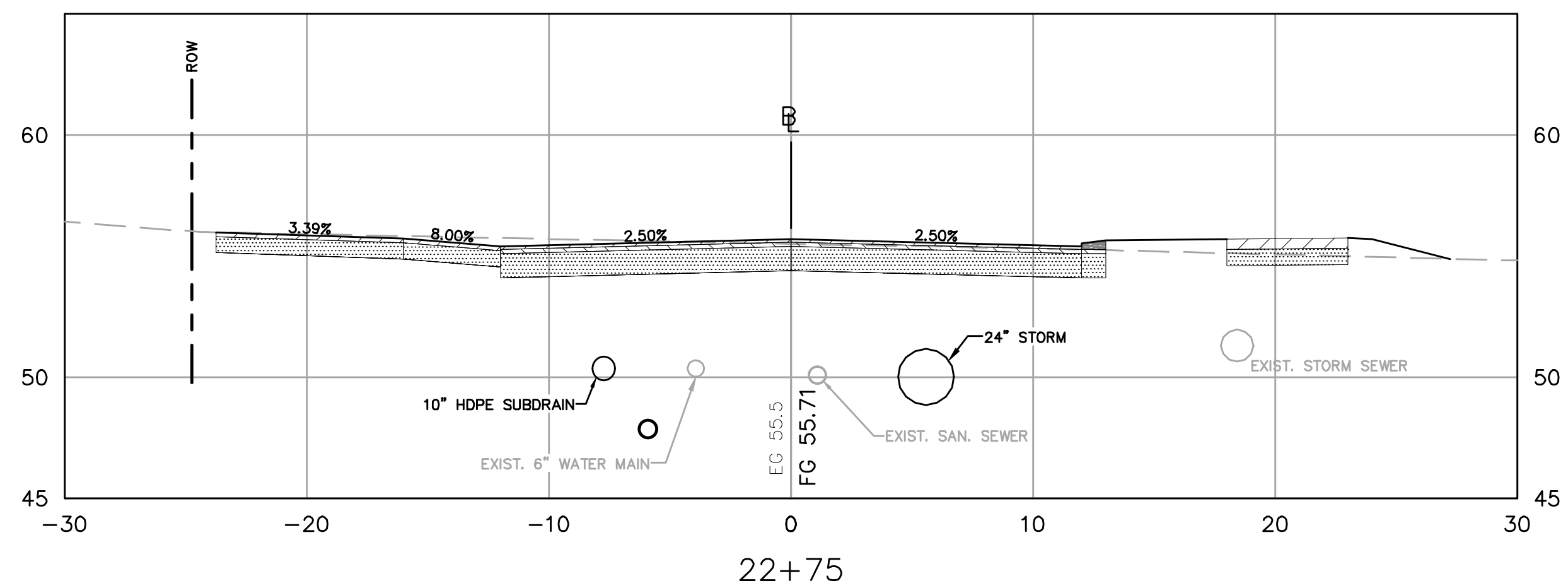
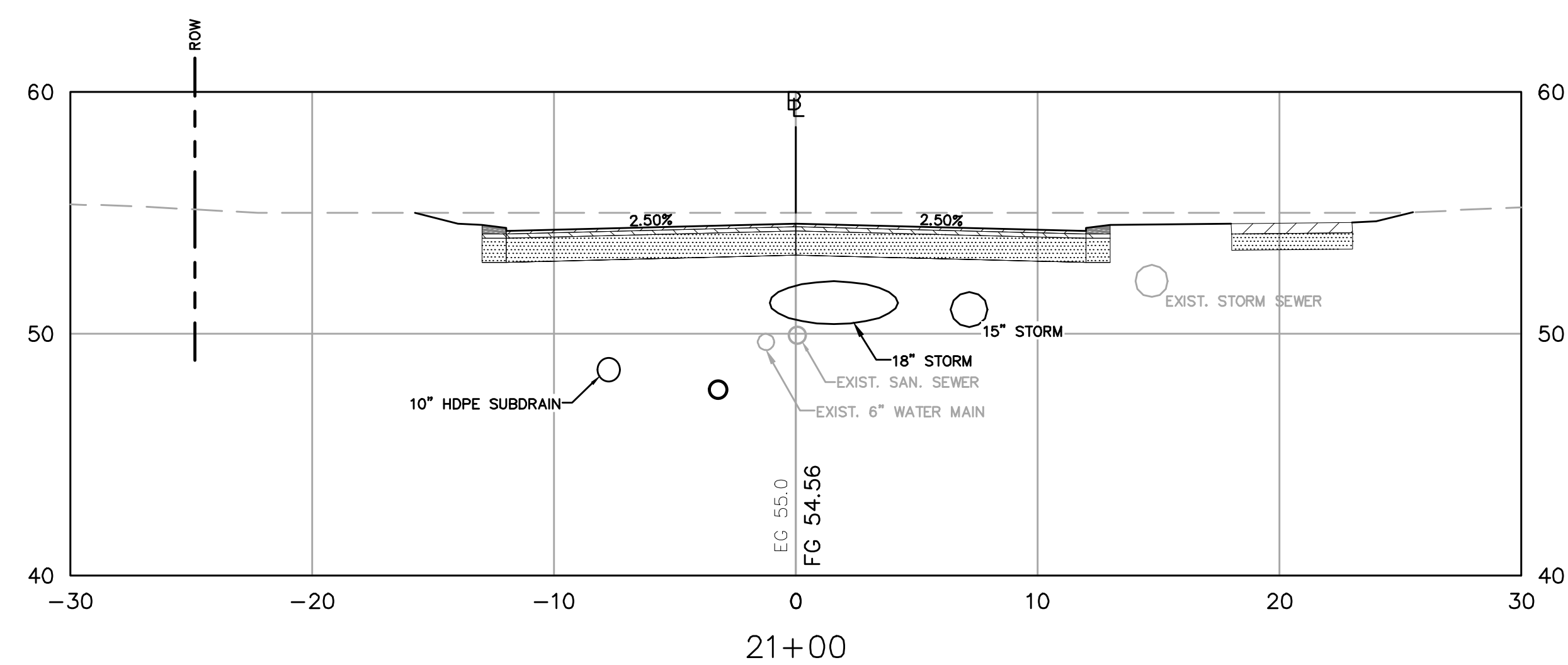
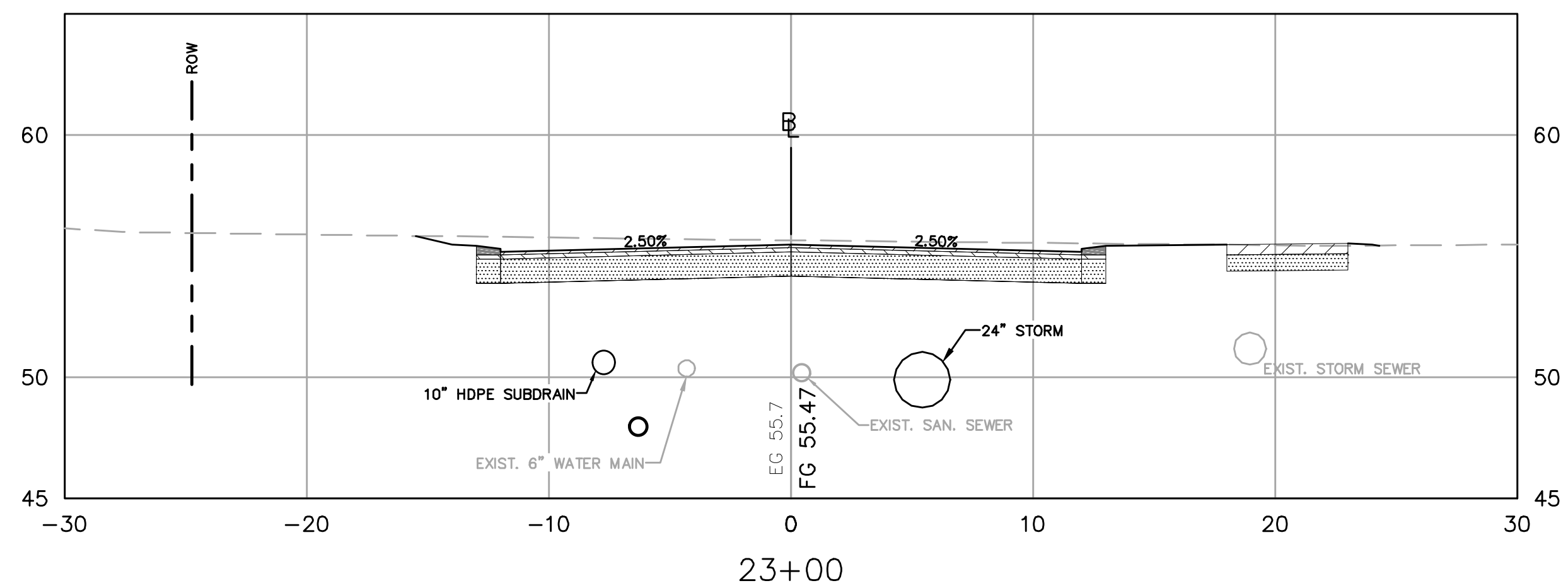
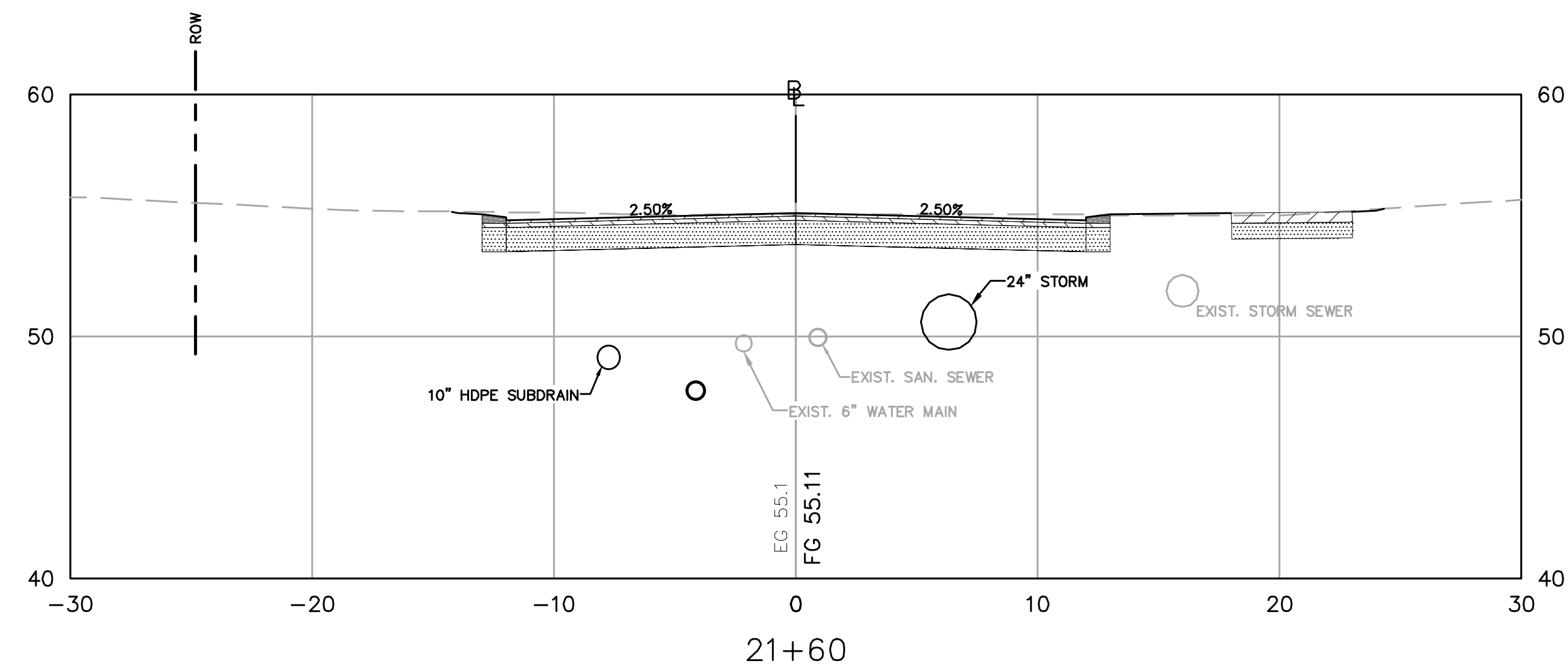
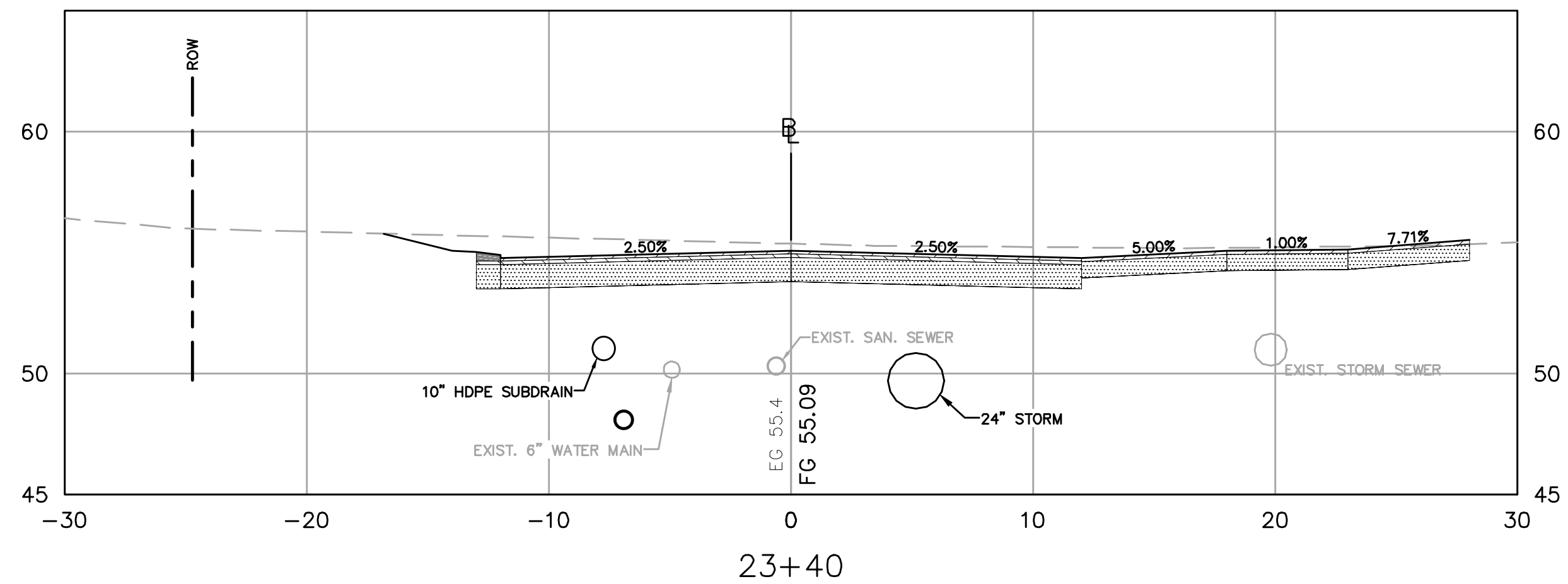
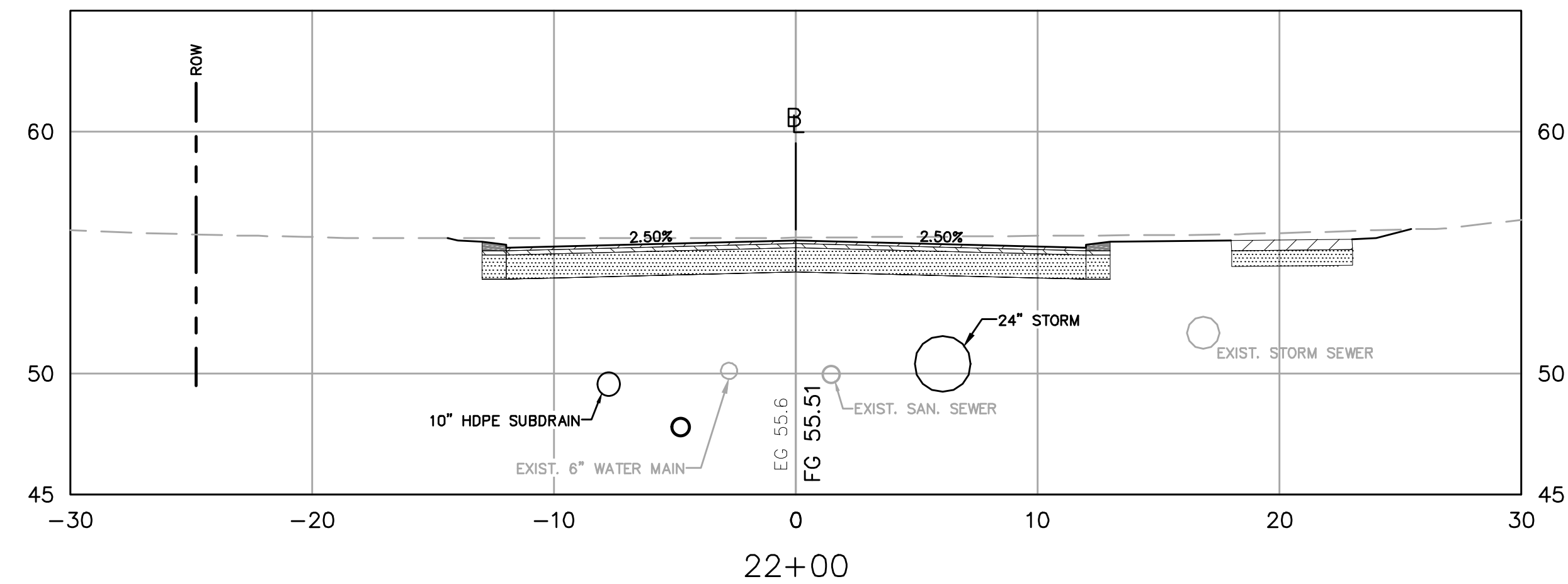
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SCALE: 1" = 5'  
HORIZ. 0 2.5 5 10 FEET  
VERT. 0 2.5 5 10 FEET  
FILE: 8992300-XSEC.DWG  
DWG. NO:  
JOB. NO: 89923.00 **XS-07**



○ PROPOSED DUCTILE IRON WATER PIPE (SEE PLANS FOR SIZE)

**ISSUED FOR CONSTRUCTION**





ROADWAY, DRAINAGE & WATER MAIN IMPROVEMENTS - APRIL 2022

**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS

**CROSS SECTIONS - PHILIPS DRIVE**  
STA. 23+65 TO STA. 26+00

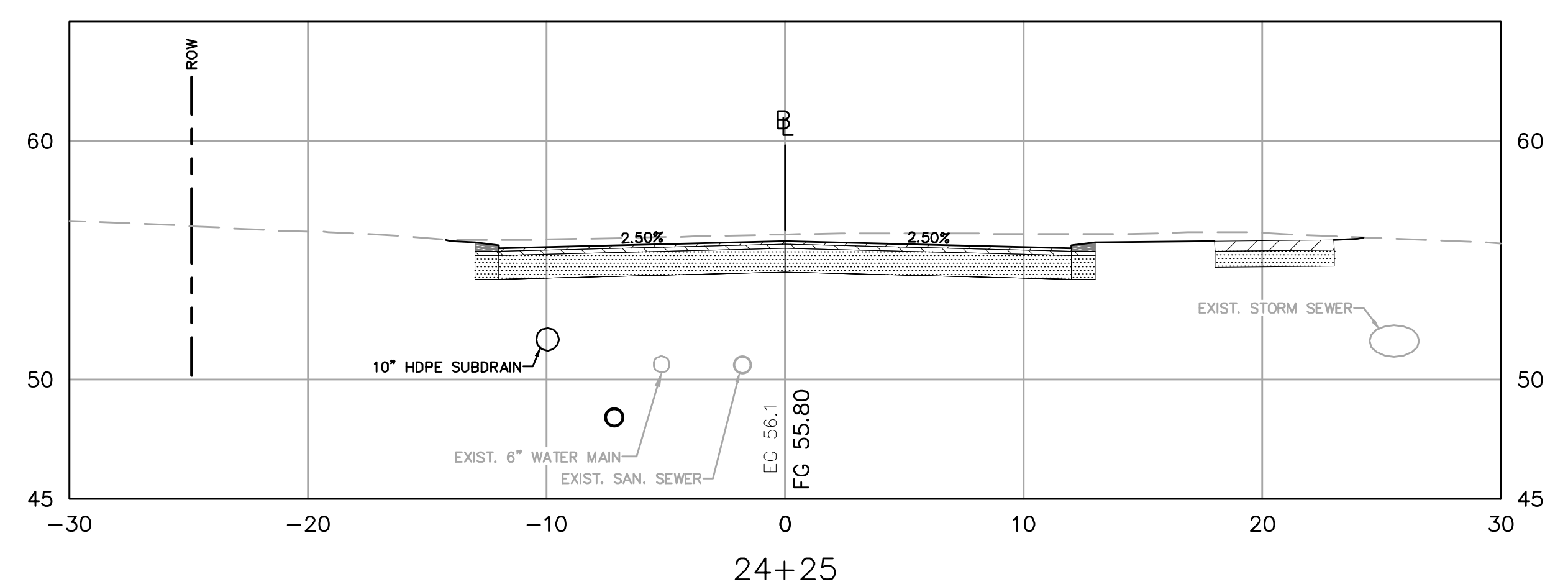
APRIL 2022

REVISIONS:

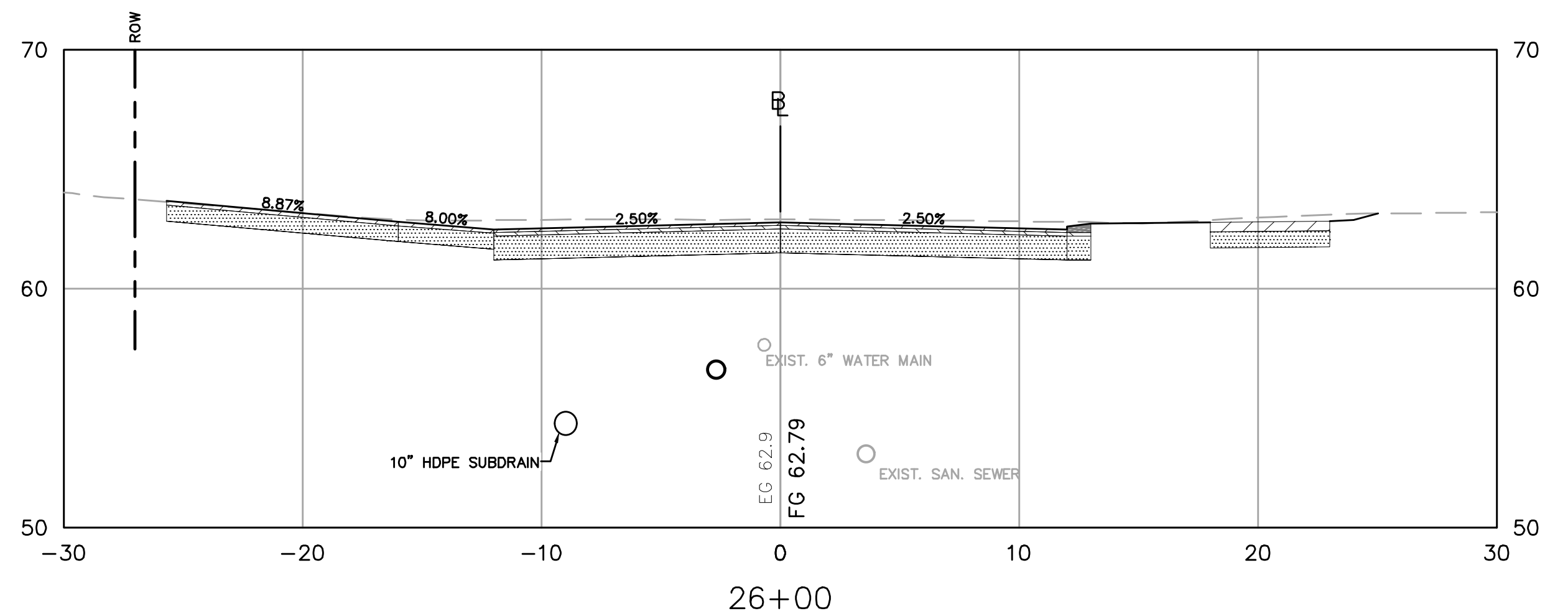

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16A PERRY WAY  
NEWBURYPORT, MA 01950

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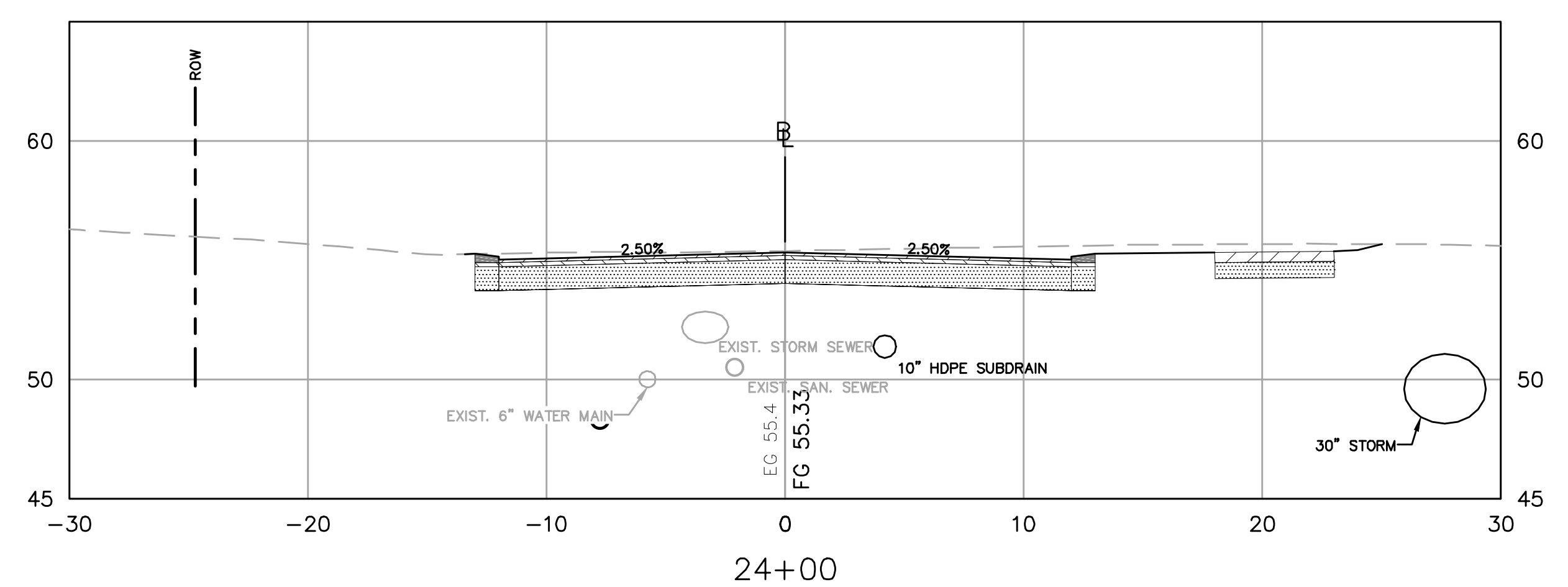
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DWG. NO:  
JOB. NO: 89923.00 **XS-08**



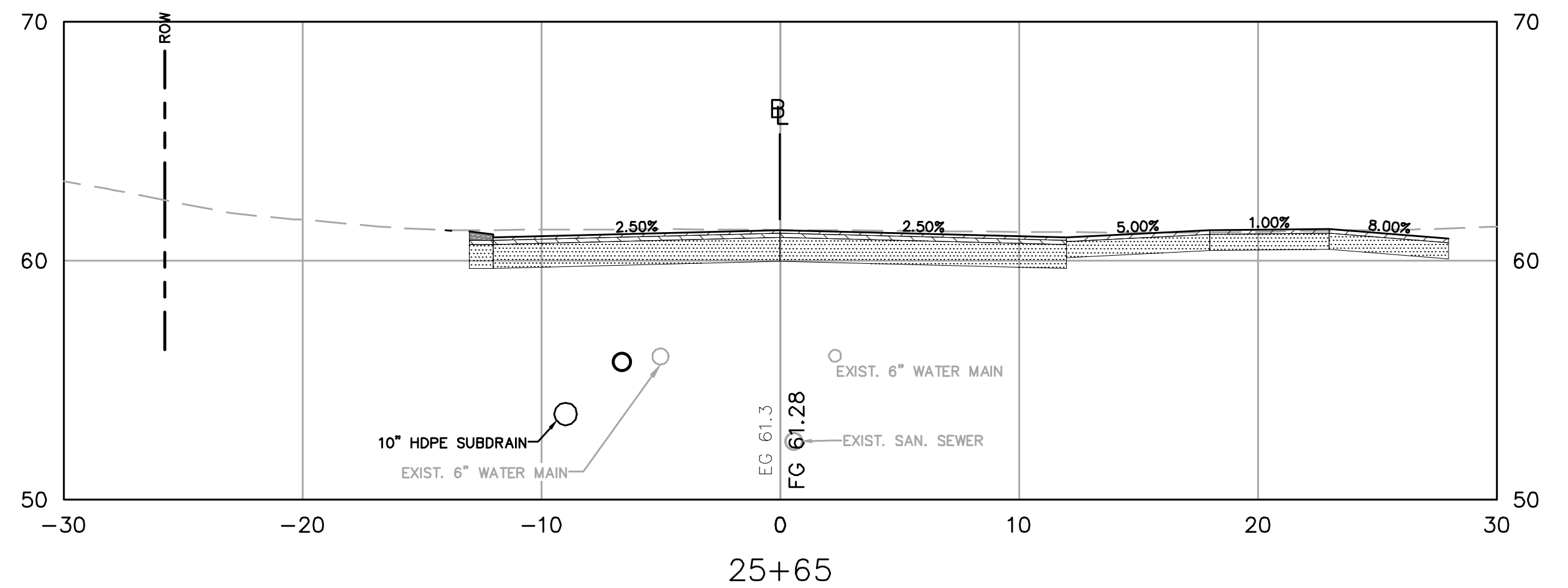
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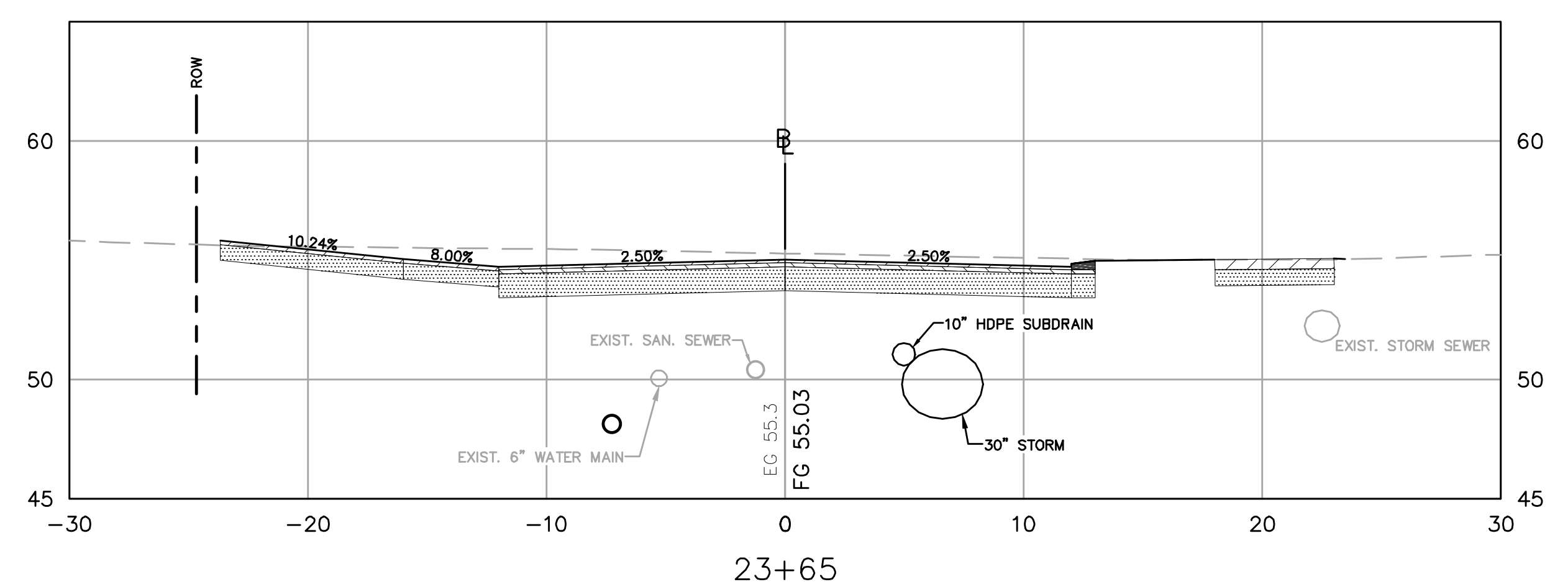
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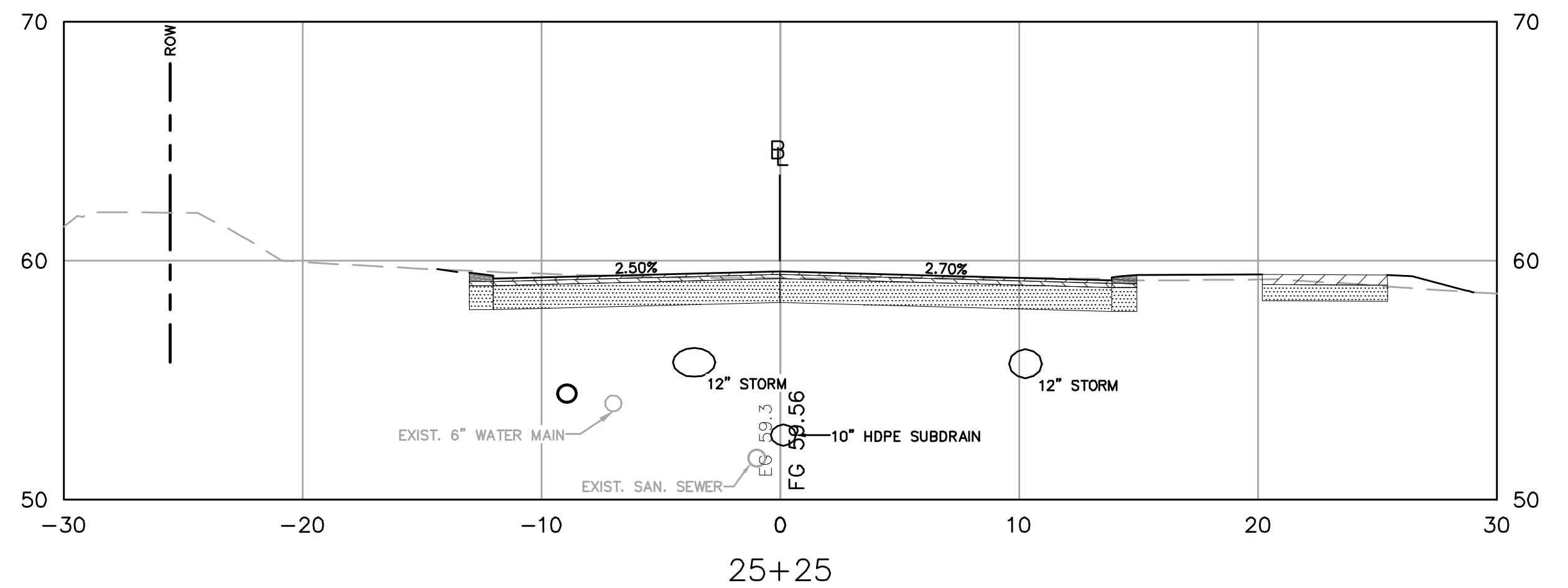
24+00



25+65



23+65



25+25

○ PROPOSED DUCTILE IRON WATER PIPE (SEE PLANS FOR SIZE)

**ISSUED FOR CONSTRUCTION**





**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS

**CROSS SECTIONS - PHILIPS DRIVE**

STA. 23+65 TO STA. 26+00

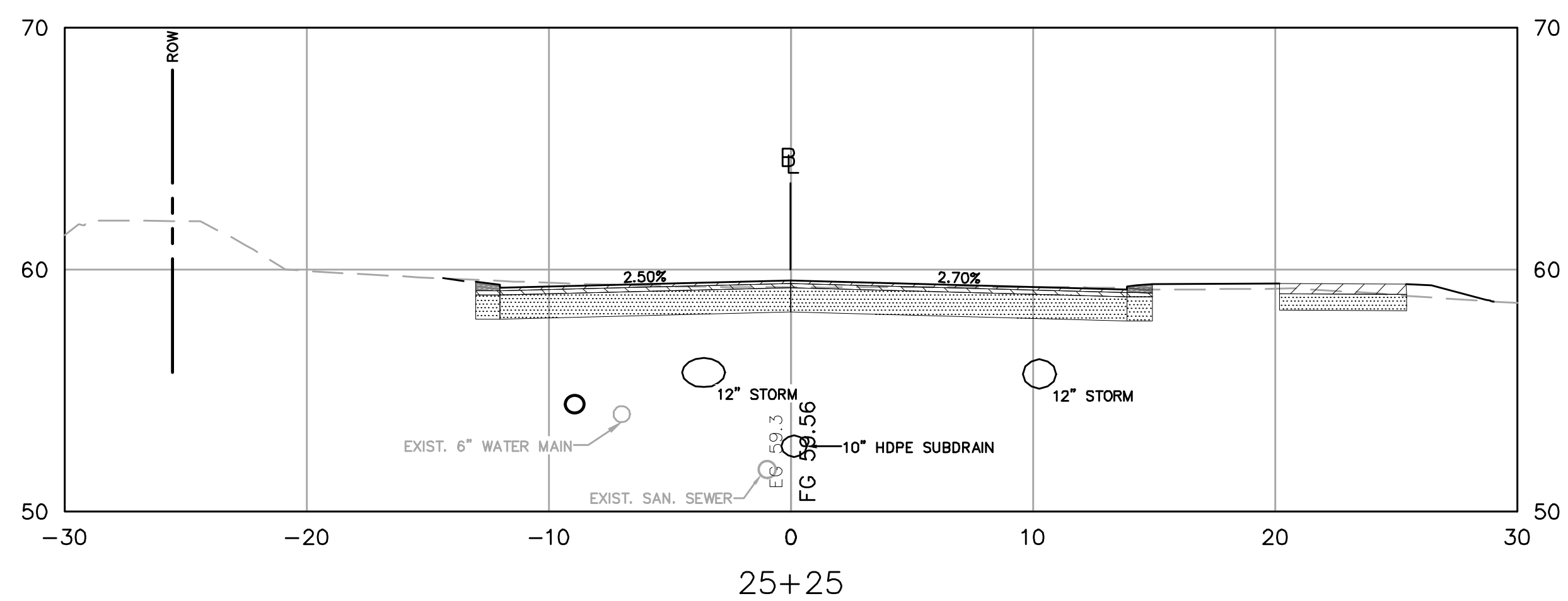
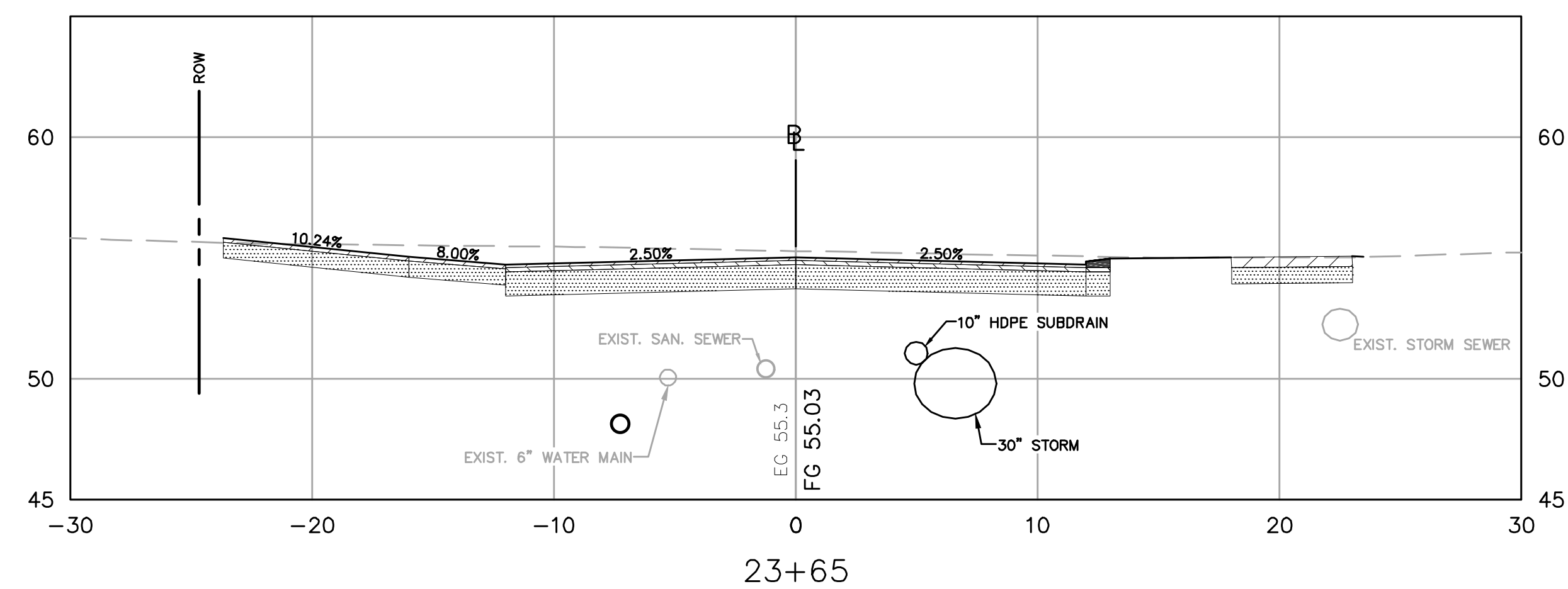
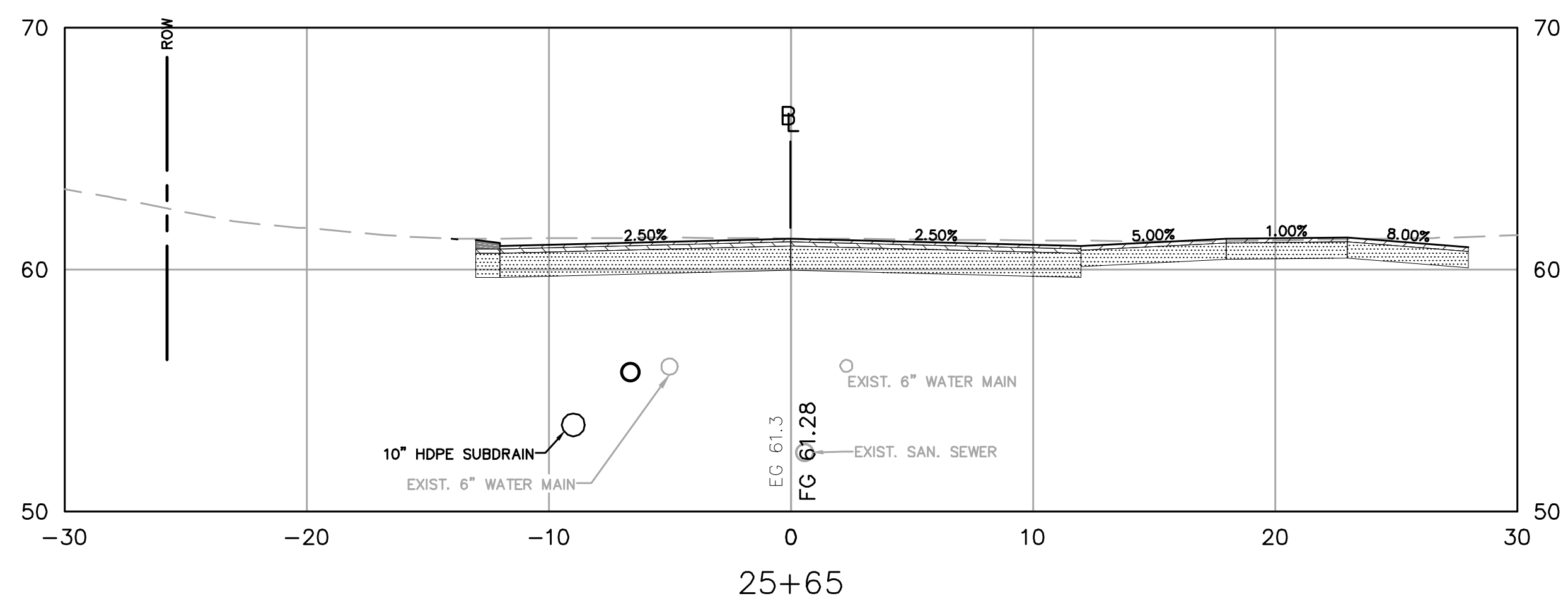
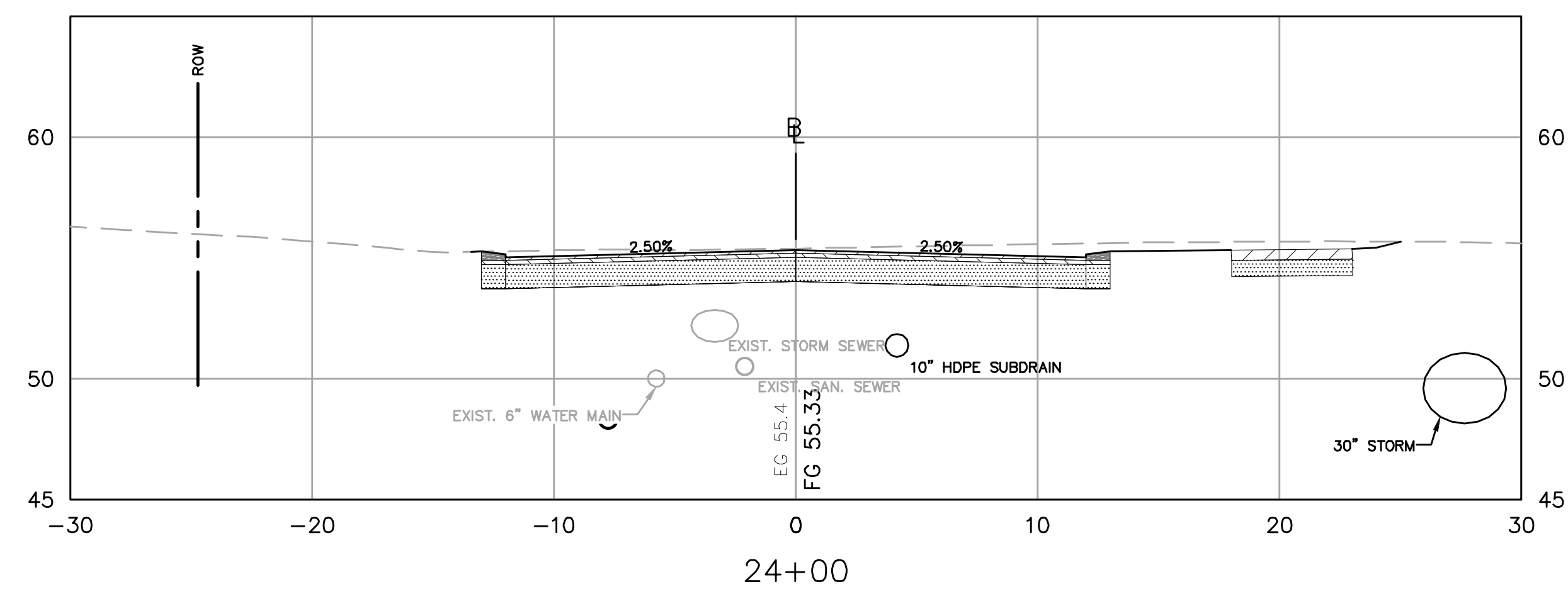
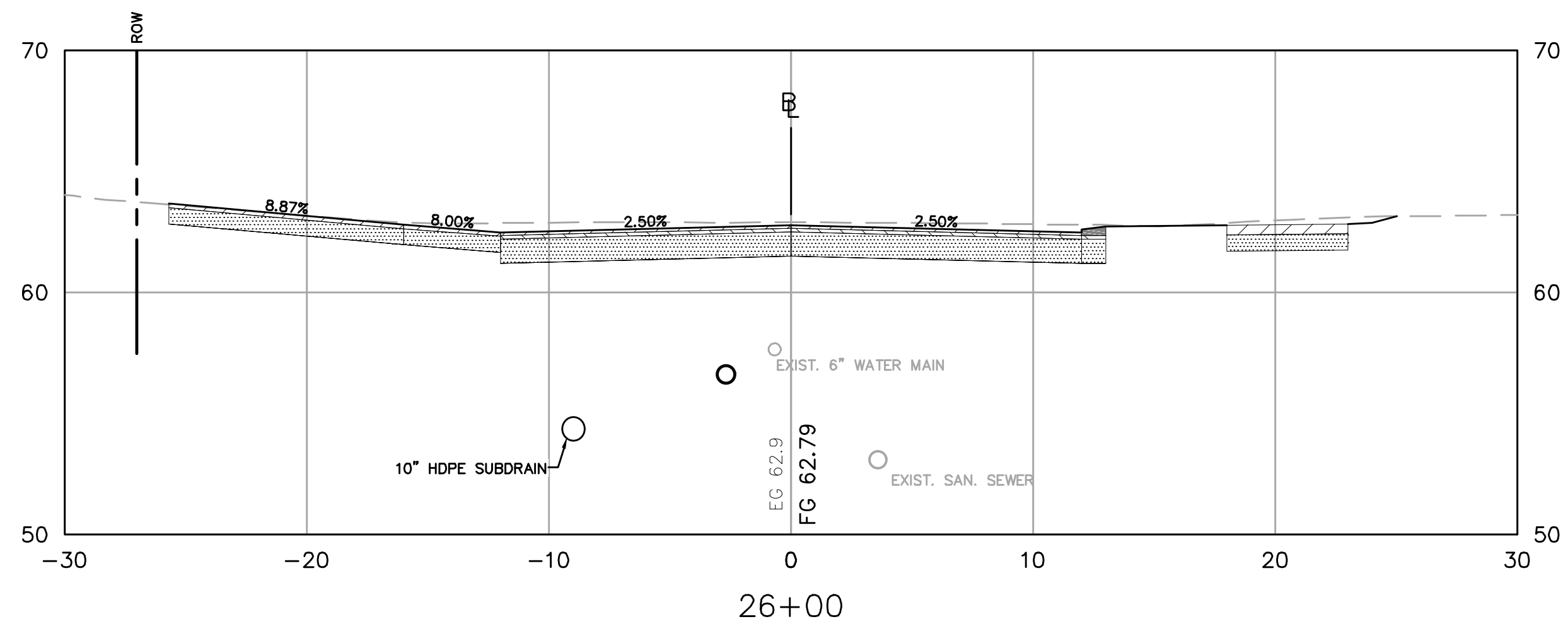
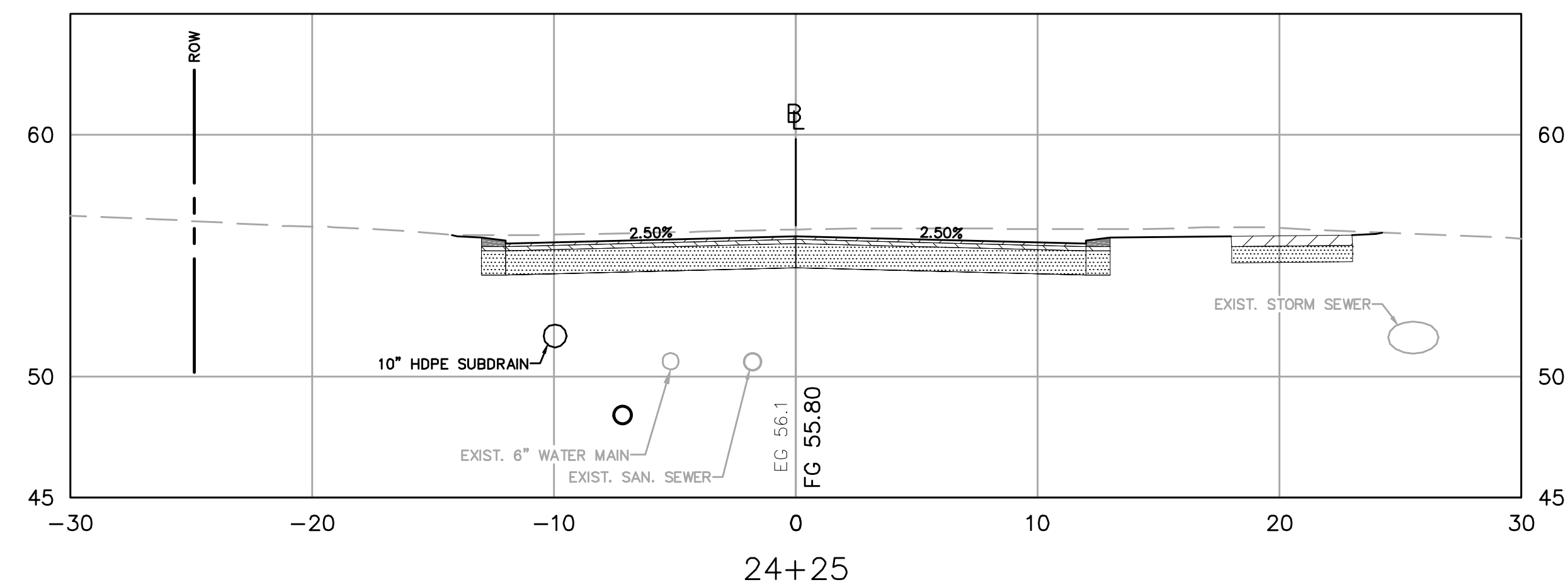
APRIL 2022

REVISIONS:


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DEPARTMENT OF PUBLIC SERVICES  
16A PERRY WAY  
NEWBURYPORT, MA 01950

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Andover, Massachusetts 01810  
617 896 4300

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SCALE: 1" = 5'  
HORIZ. 0 2.5 5 10 FEET  
VERT. 0 2.5 5 10 FEET  
FILE: 8992300-XSEC.DWG  
DWG. NO:  
JOB. NO: 89923.00 **XS-09**



○ PROPOSED DUCTILE IRON WATER PIPE (SEE PLANS FOR SIZE)

**ISSUED FOR CONSTRUCTION**





ROADWAY, DRAINAGE & WATER MAIN IMPROVEMENTS - APRIL 2022

**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS

**CROSS SECTIONS - PHILIPS DRIVE**  
STA. 27+00 TO STA. 29+75

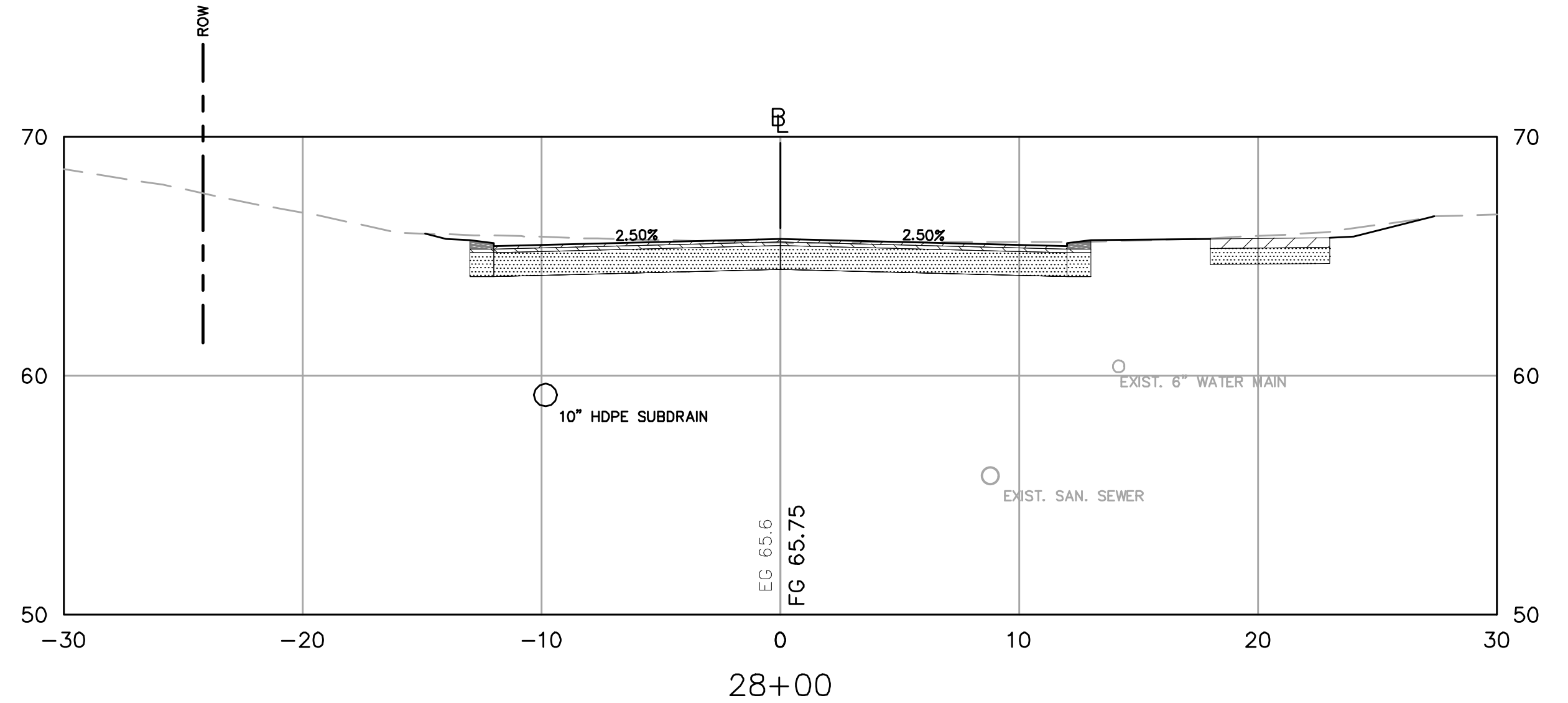
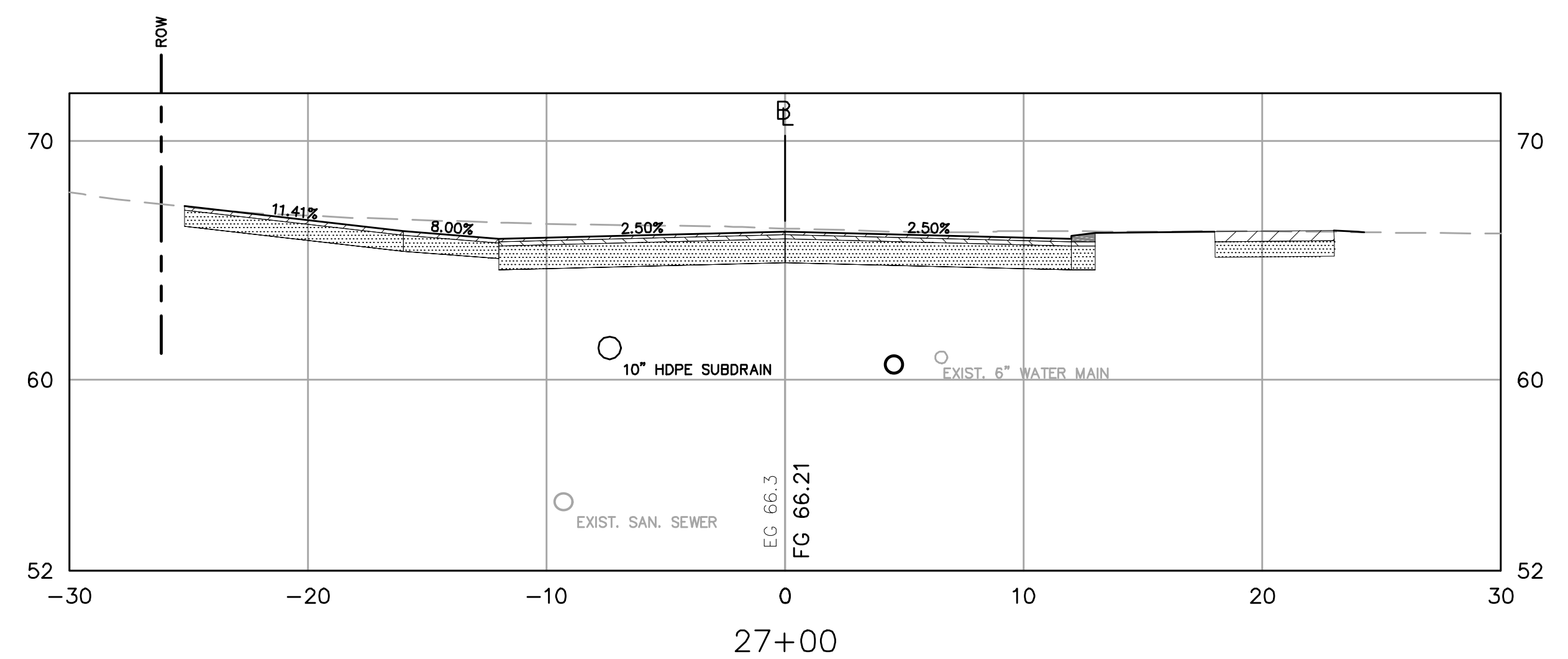
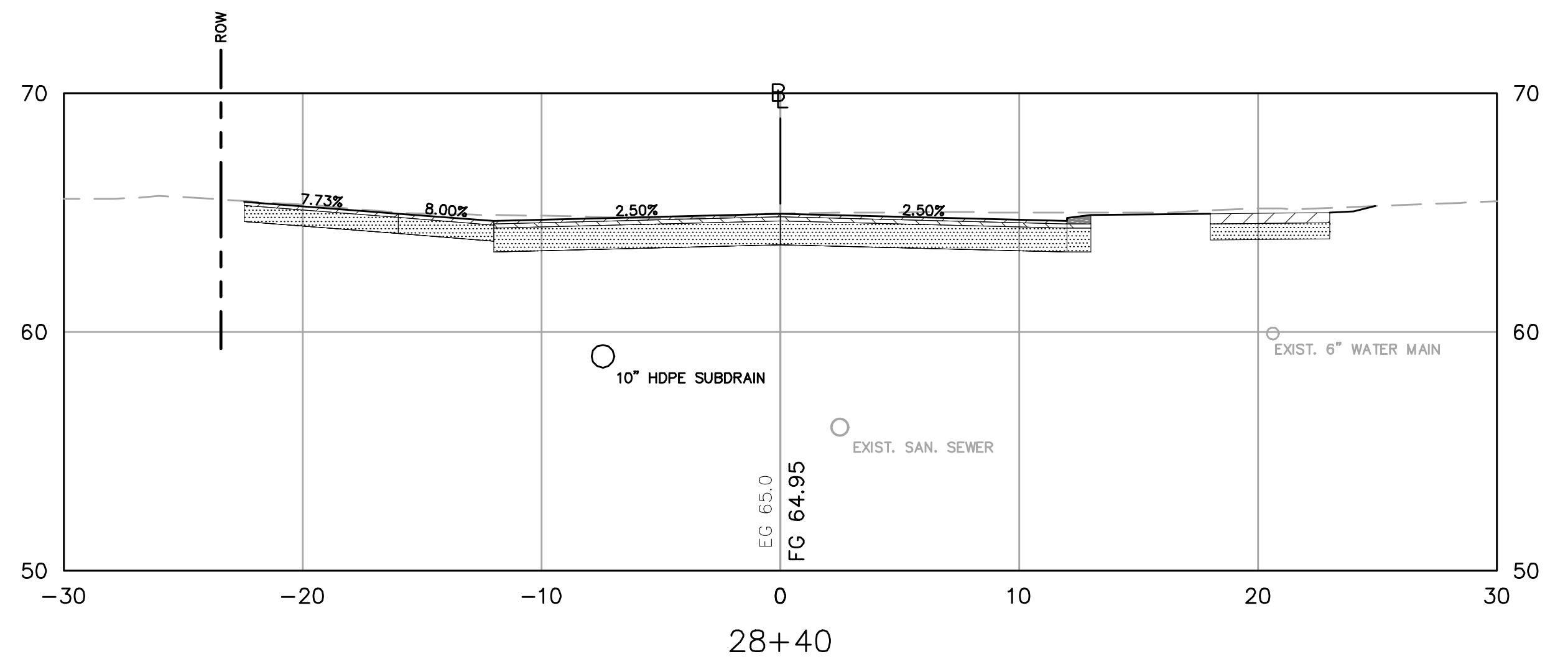
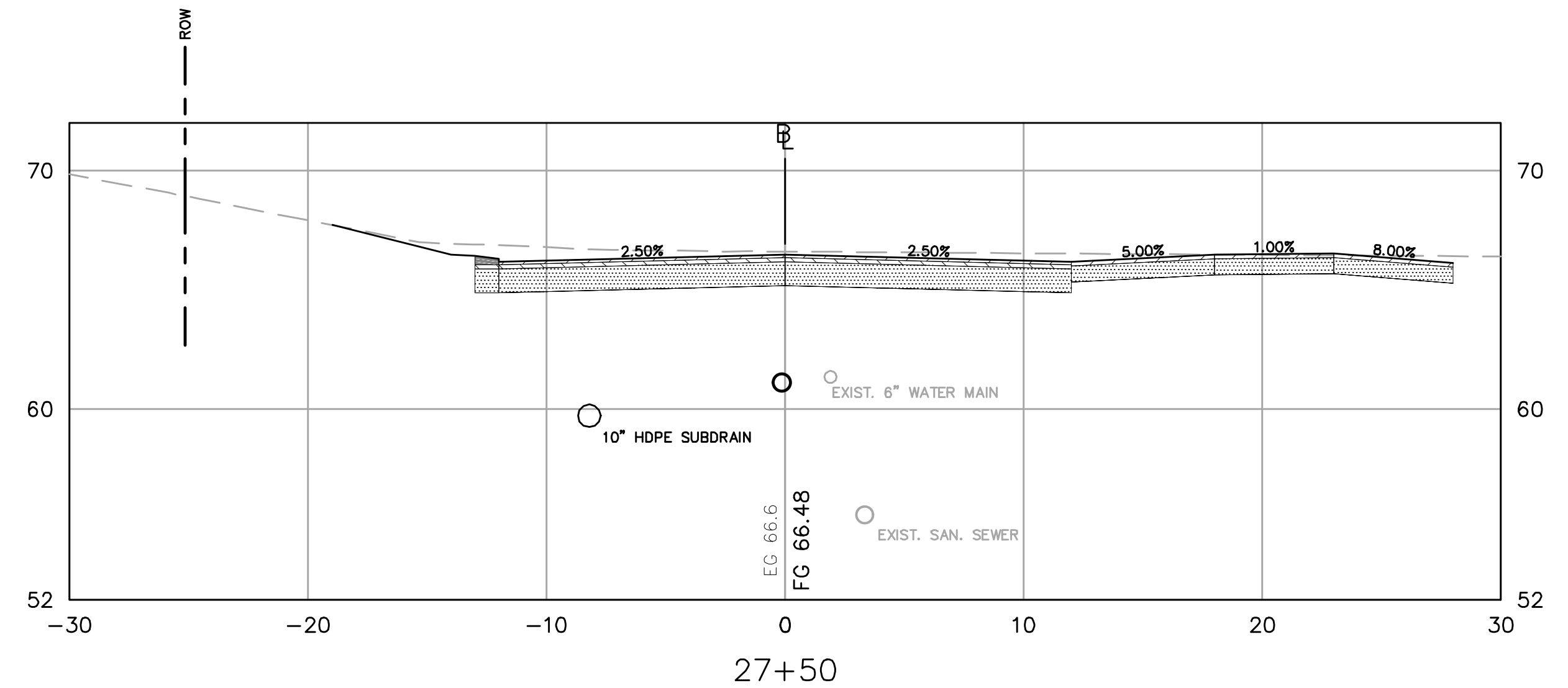
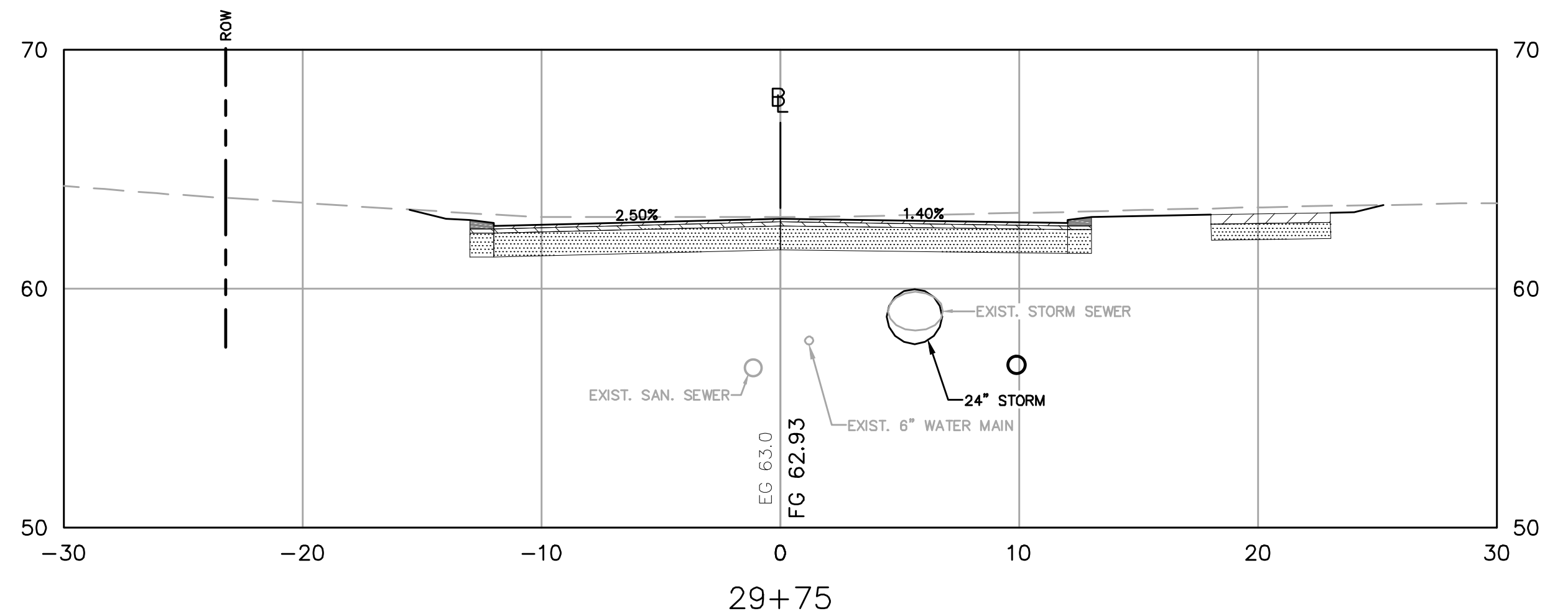
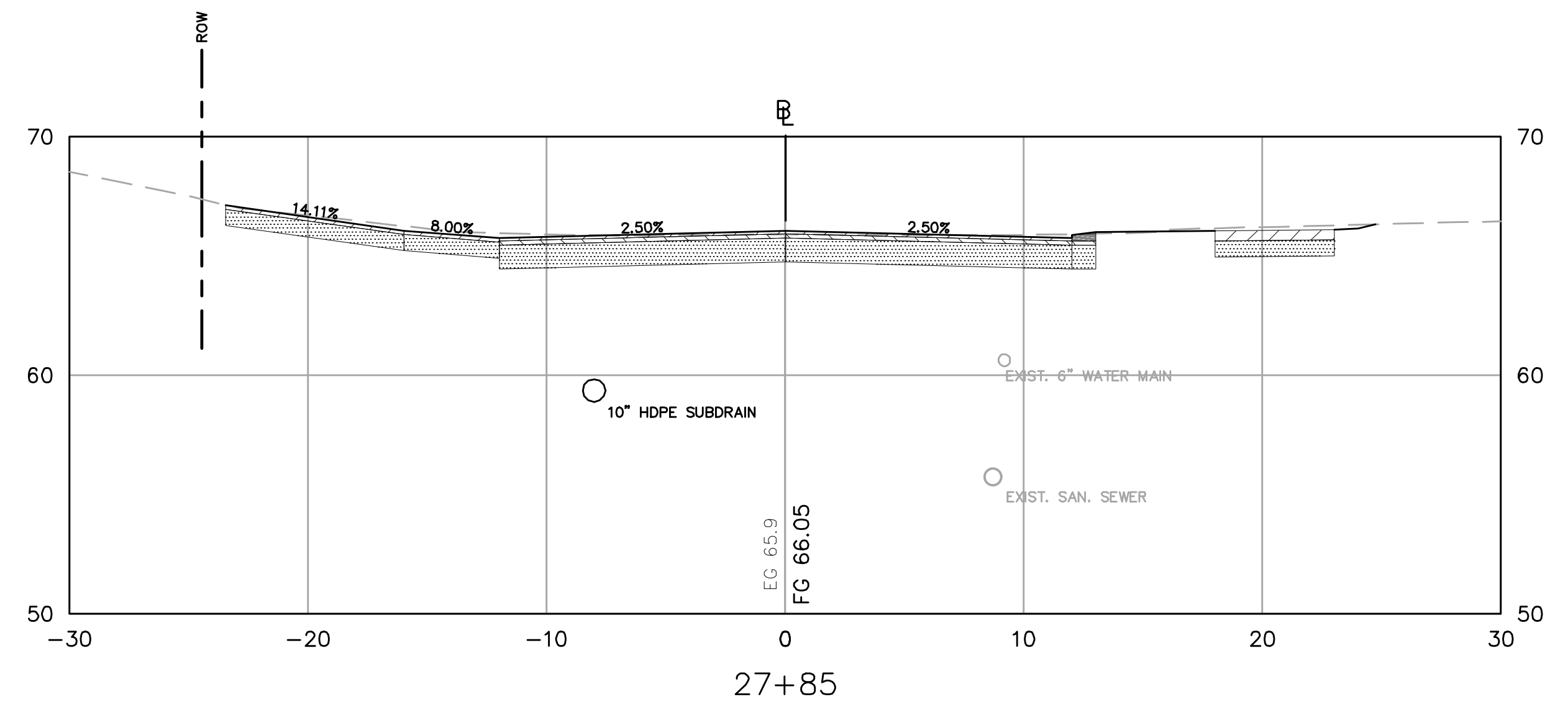
APRIL 2022

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DEPARTMENT OF PUBLIC SERVICES  
16A PERRY WAY  
NEWBURYPORT, MA 01950

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SCALE: 1" = 5'  
HORIZ. 0 2.5 5 10 FEET  
VERT. 0 2.5 5 10 FEET  
FILE: 8992300-XSEC.DWG  
DWG. NO:  
JOB. NO: 89923.00 **XS-10**



○ PROPOSED DUCTILE IRON WATER PIPE (SEE PLANS FOR SIZE)

**ISSUED FOR CONSTRUCTION**





**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

**PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS**

**CROSS SECTIONS - PHILIPS  
DRIVE**  
STA. 30+00 TO STA. 32+00

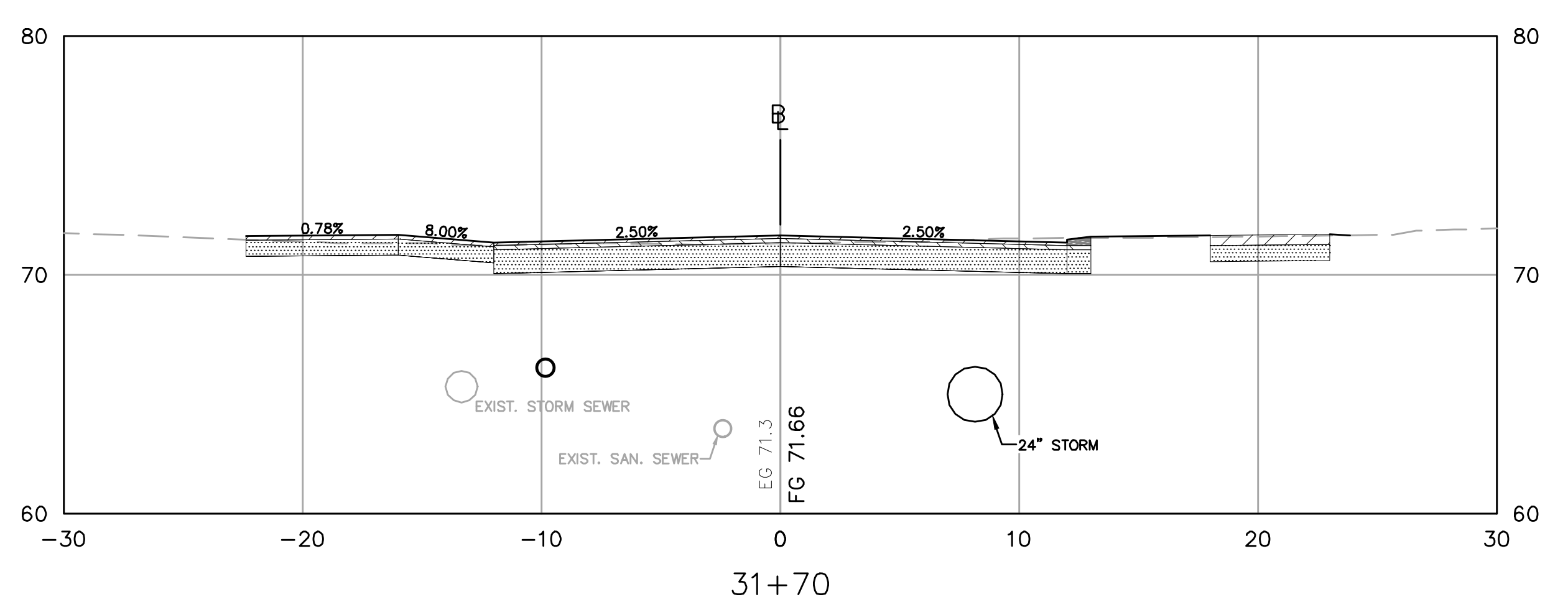
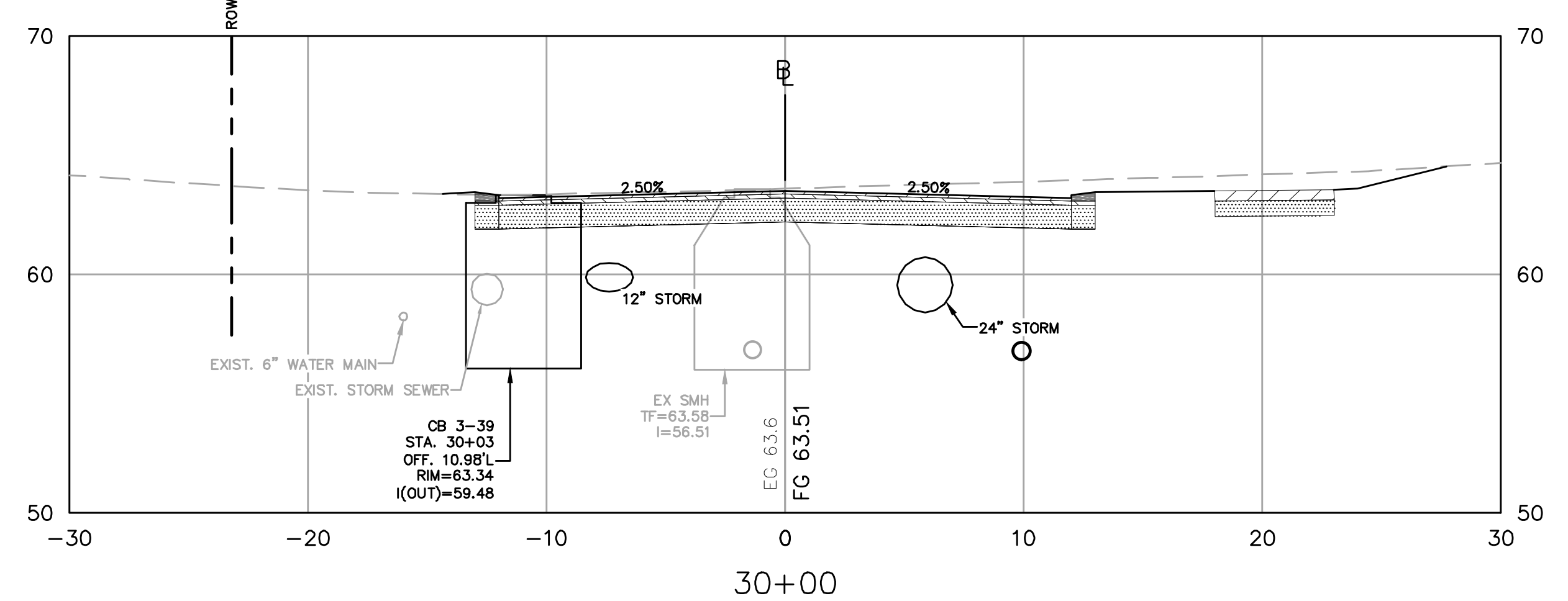
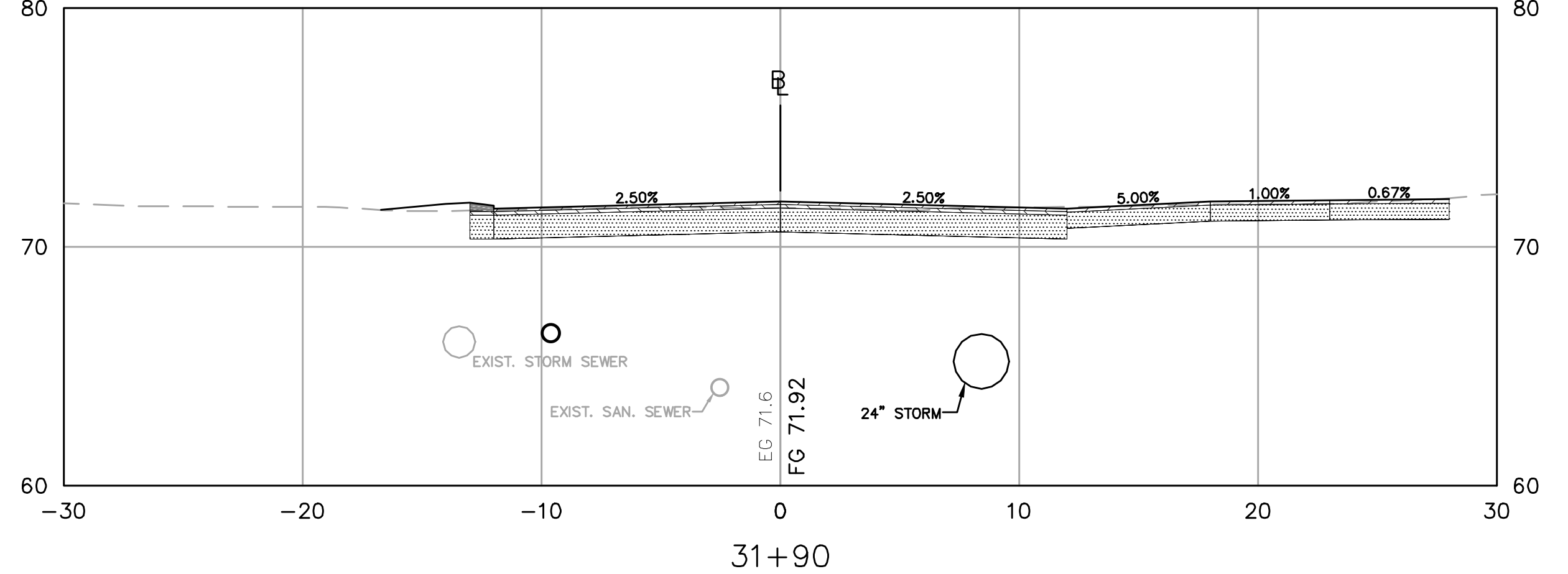
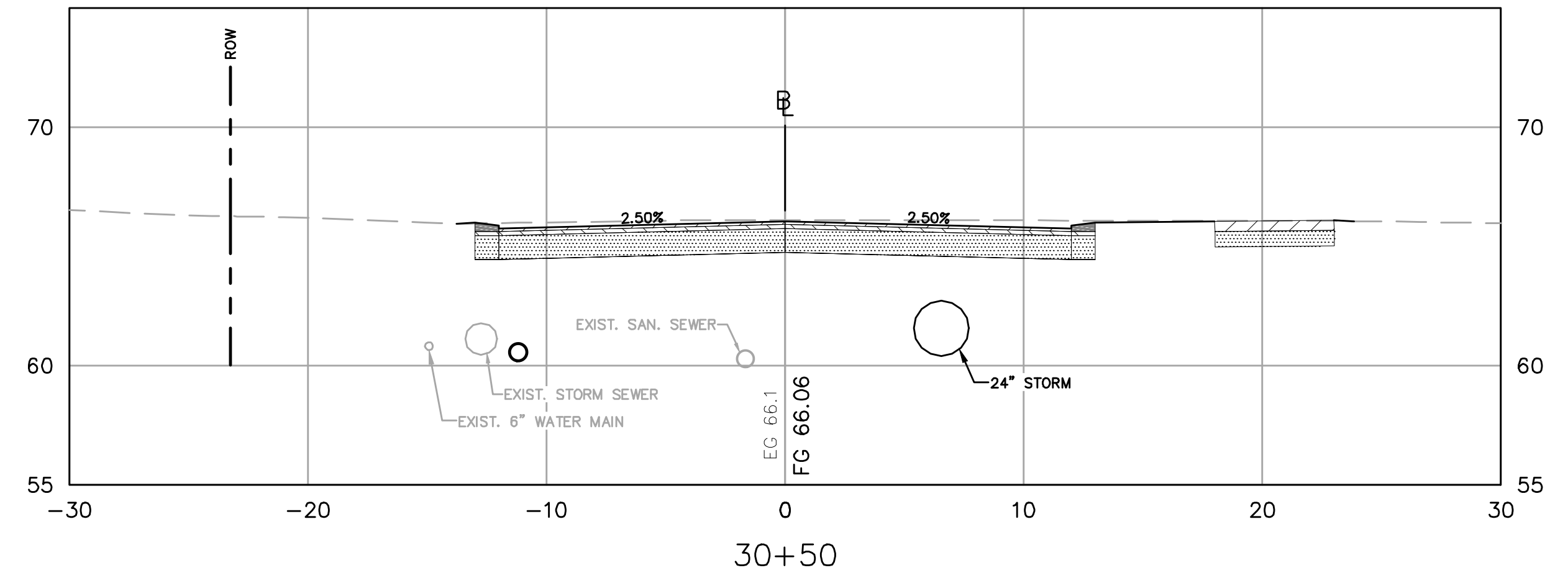
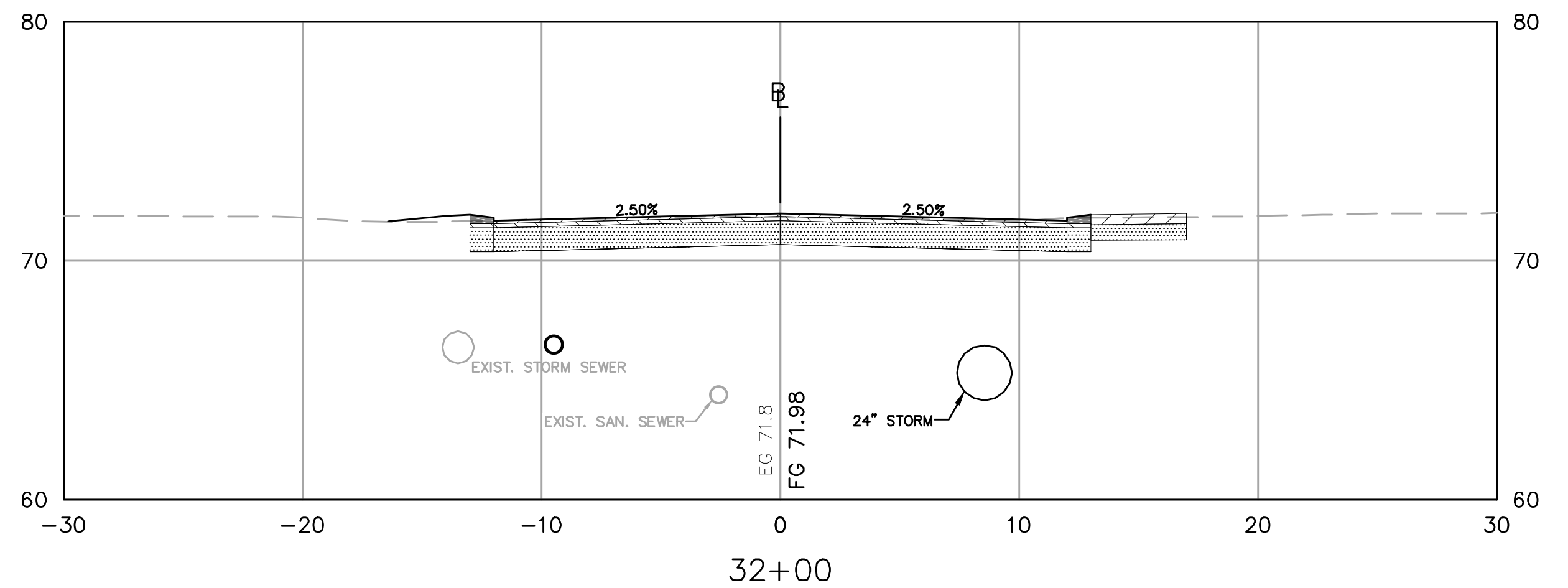
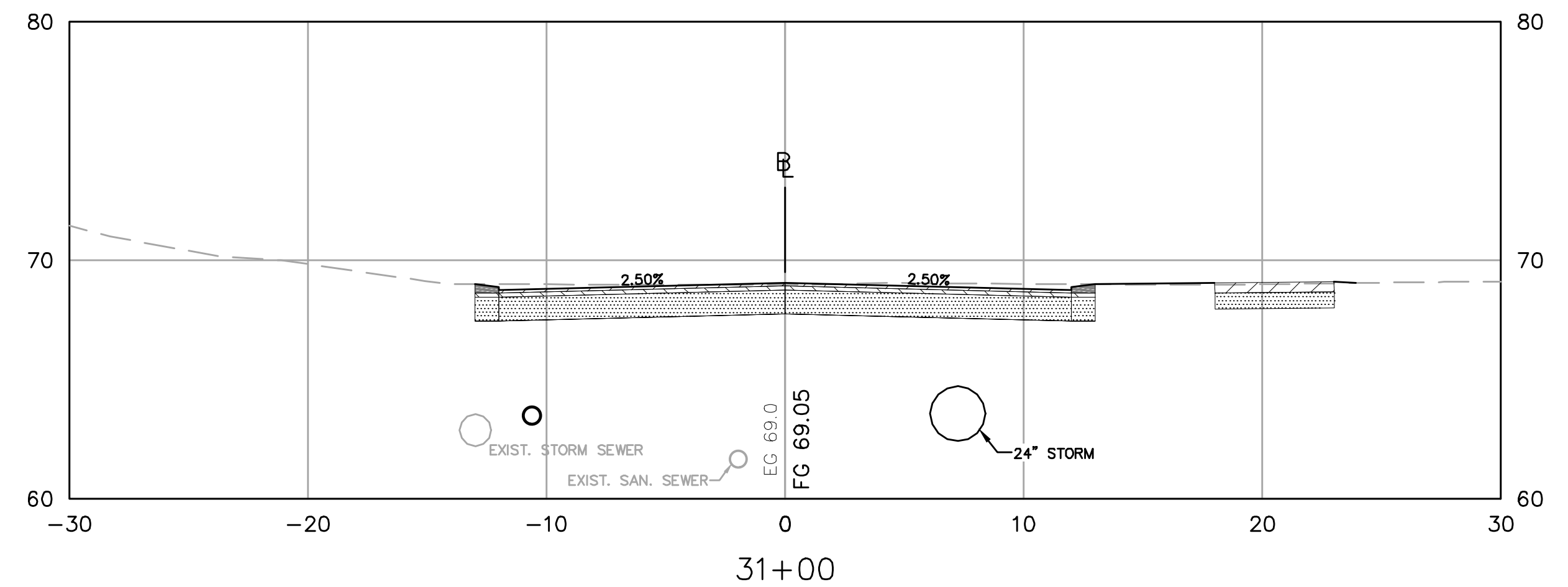
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DEPARTMENT OF PUBLIC SERVICES  
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NEWBURYPORT, MA 01950

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SCALE: 1" = 5'  
HORIZ. 0 2.5 5 10 FEET  
VERT. 0 2.5 5 10 FEET  
FILE: 8992300-XSEC.DWG  
DWG. NO:  
JOB. NO: 89923.00 **XS-11**



○ PROPOSED DUCTILE IRON WATER PIPE (SEE PLANS FOR SIZE)

**ISSUED FOR CONSTRUCTION**





ROADWAY, DRAINAGE & WATER MAIN IMPROVEMENTS - APRIL 2022

**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS

**CROSS SECTIONS - PHILIPS  
DRIVE**  
STA. 33+00 TO STA. 35+00

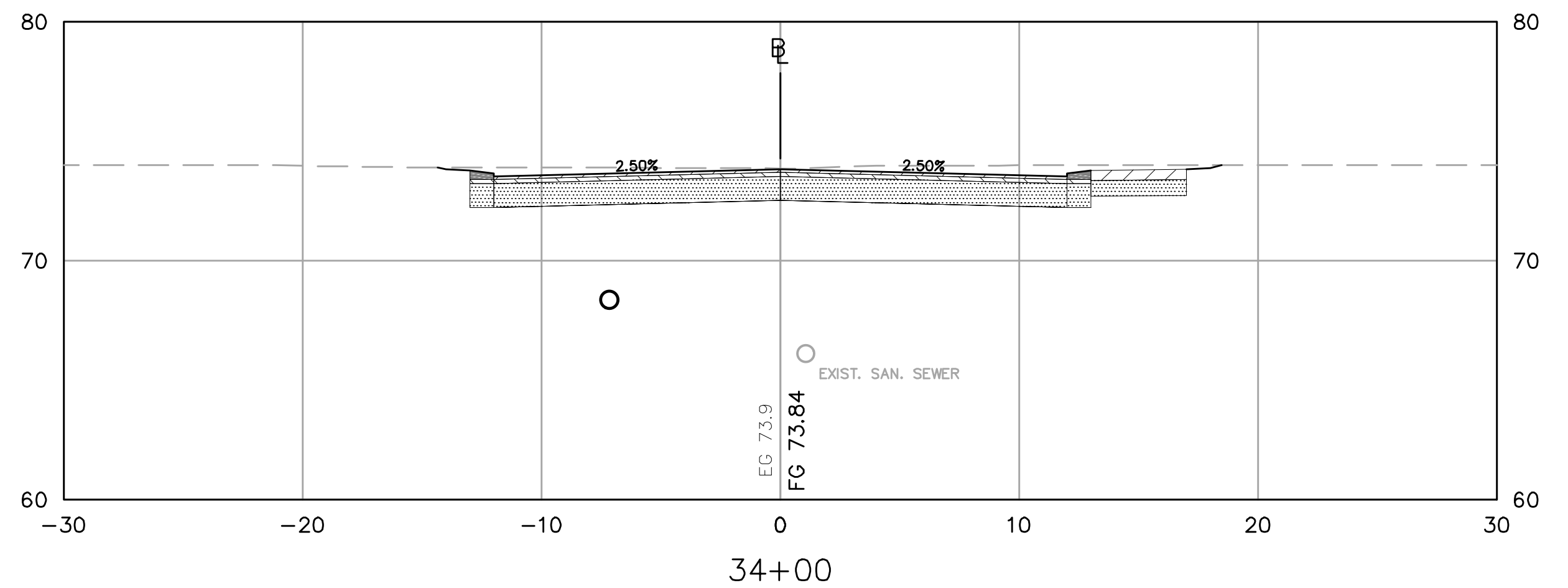
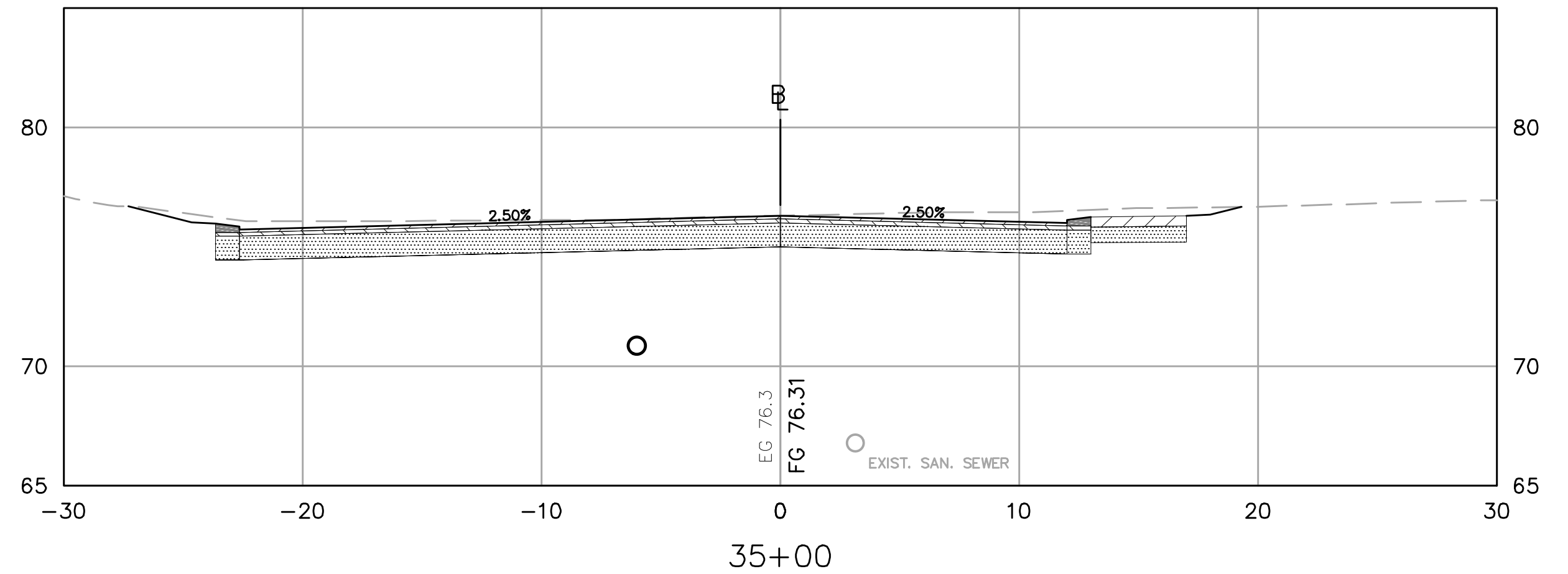
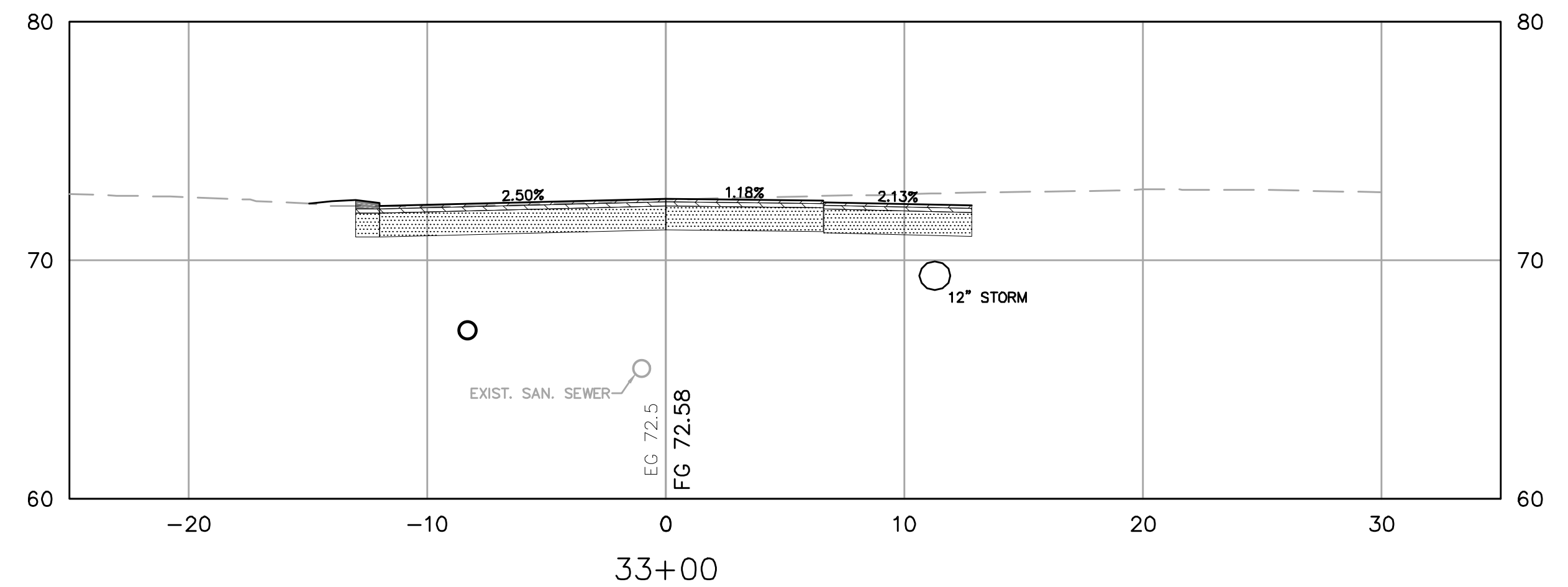
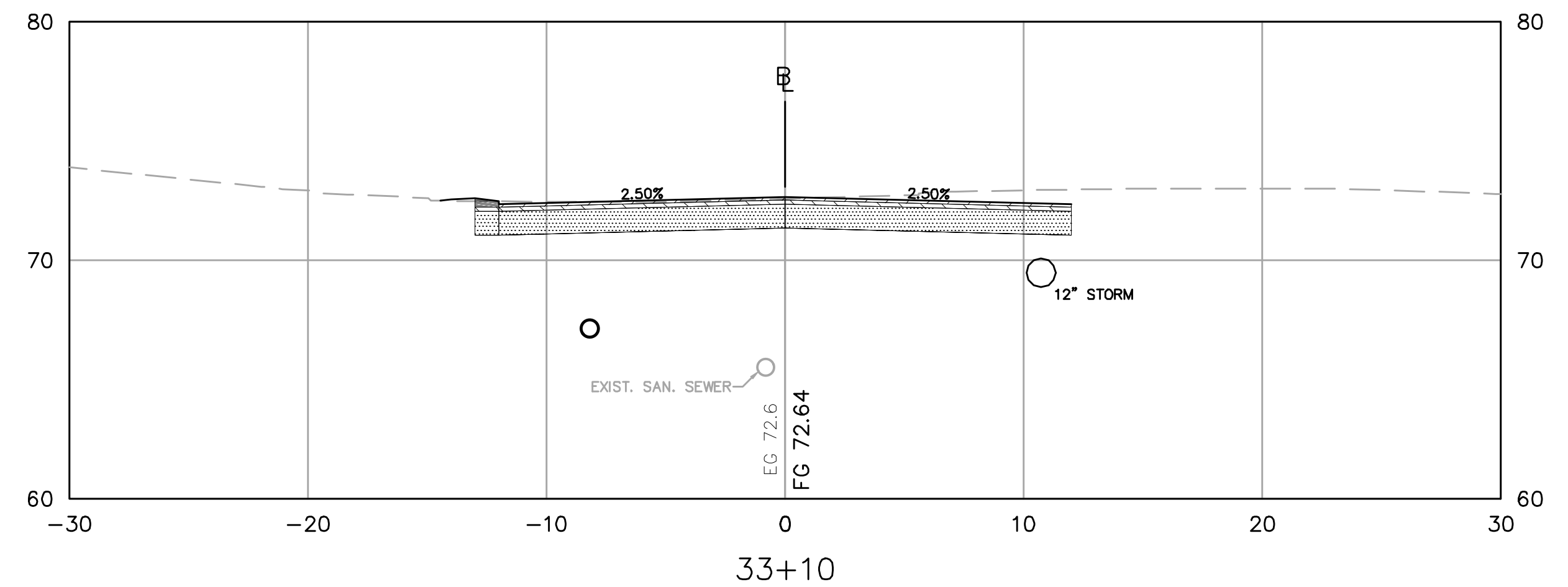
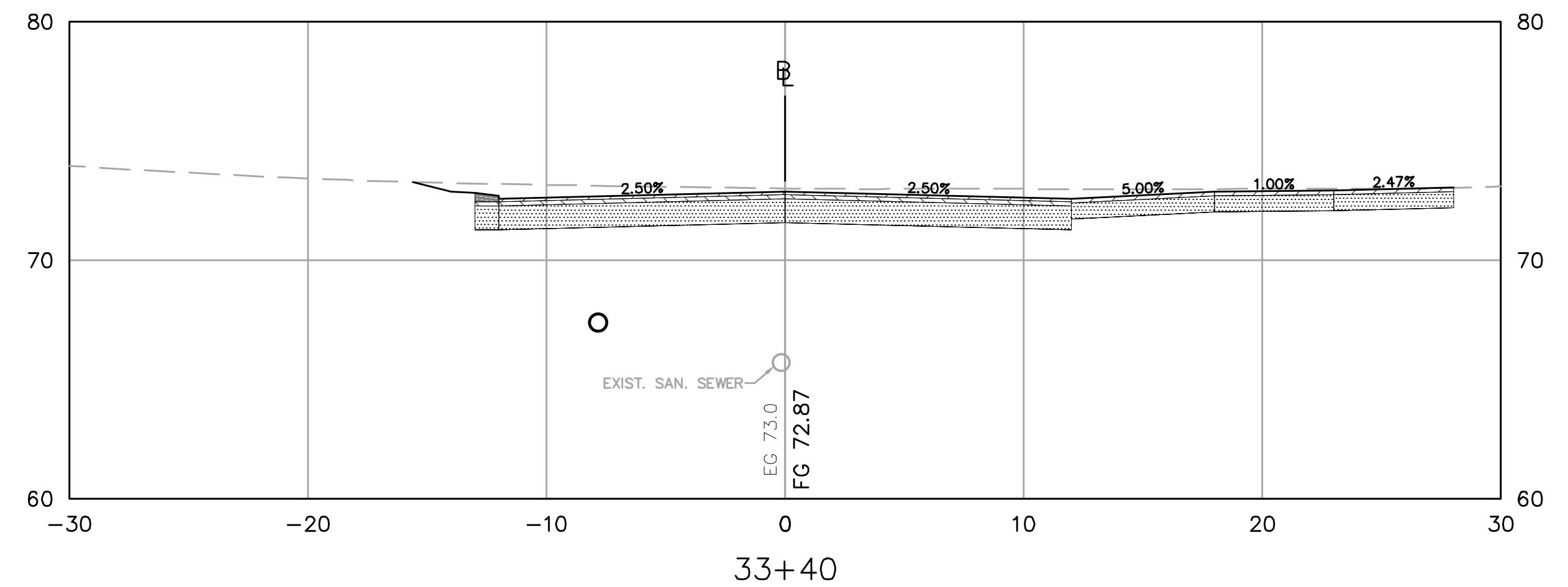
APRIL 2022

REVISIONS:


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DEPARTMENT OF PUBLIC SERVICES  
16A PERRY WAY  
NEWBURYPORT, MA 01950

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Andover, Massachusetts 01810  
617 896 4300

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HORIZ. 0 2.5 5 10 FEET  
VERT. 0 2.5 5 10 FEET  
FILE: 8992300-XSEC.DWG  
DWG. NO:  
JOB. NO: 89923.00 **XS-12**



PROPOSED DUCTILE IRON WATER PIPE (SEE PLANS FOR SIZE)

**ISSUED FOR CONSTRUCTION**





**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS

**CROSS SECTIONS - RYAN  
ROAD**  
STA. 50+32 TO STA. 52+00

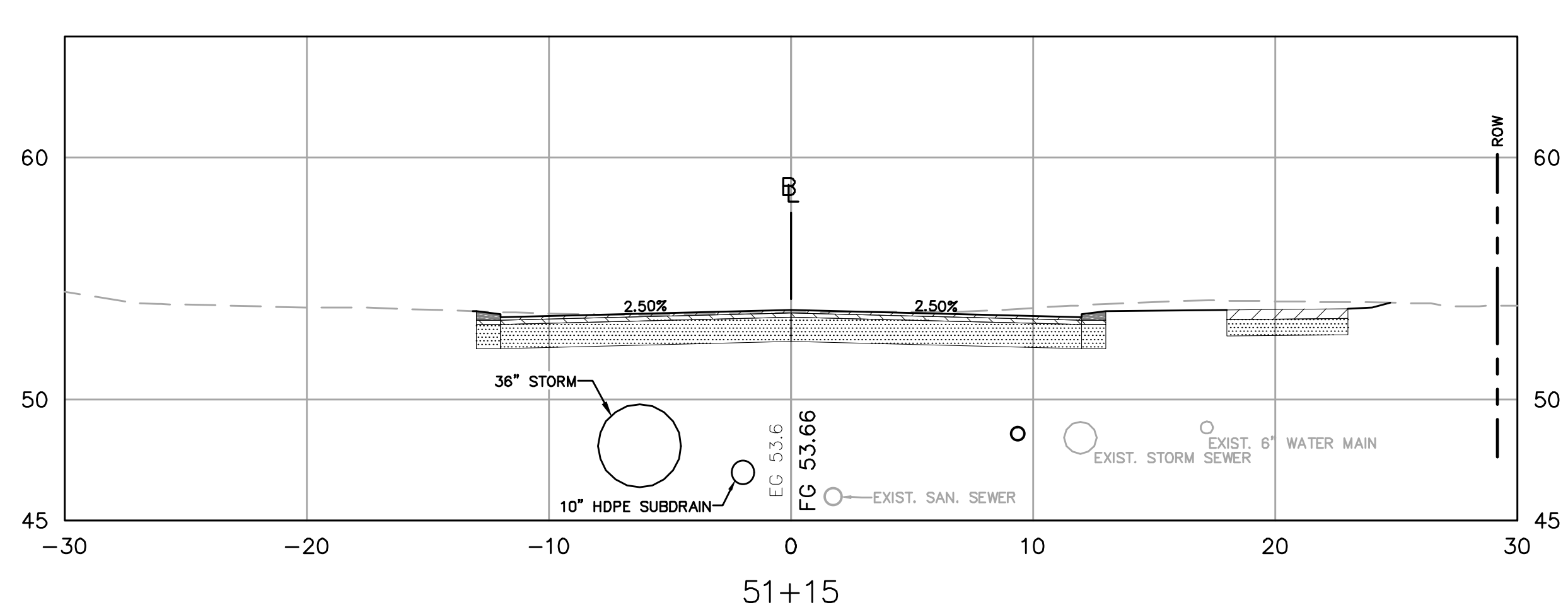
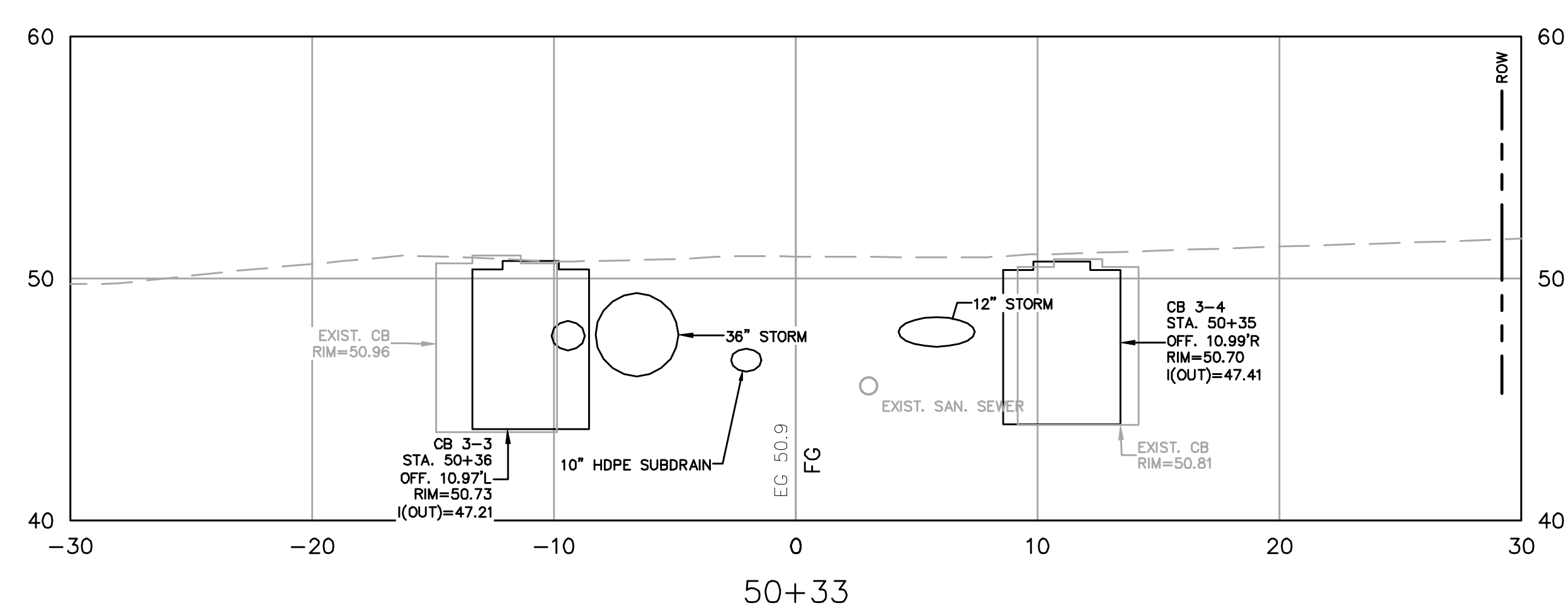
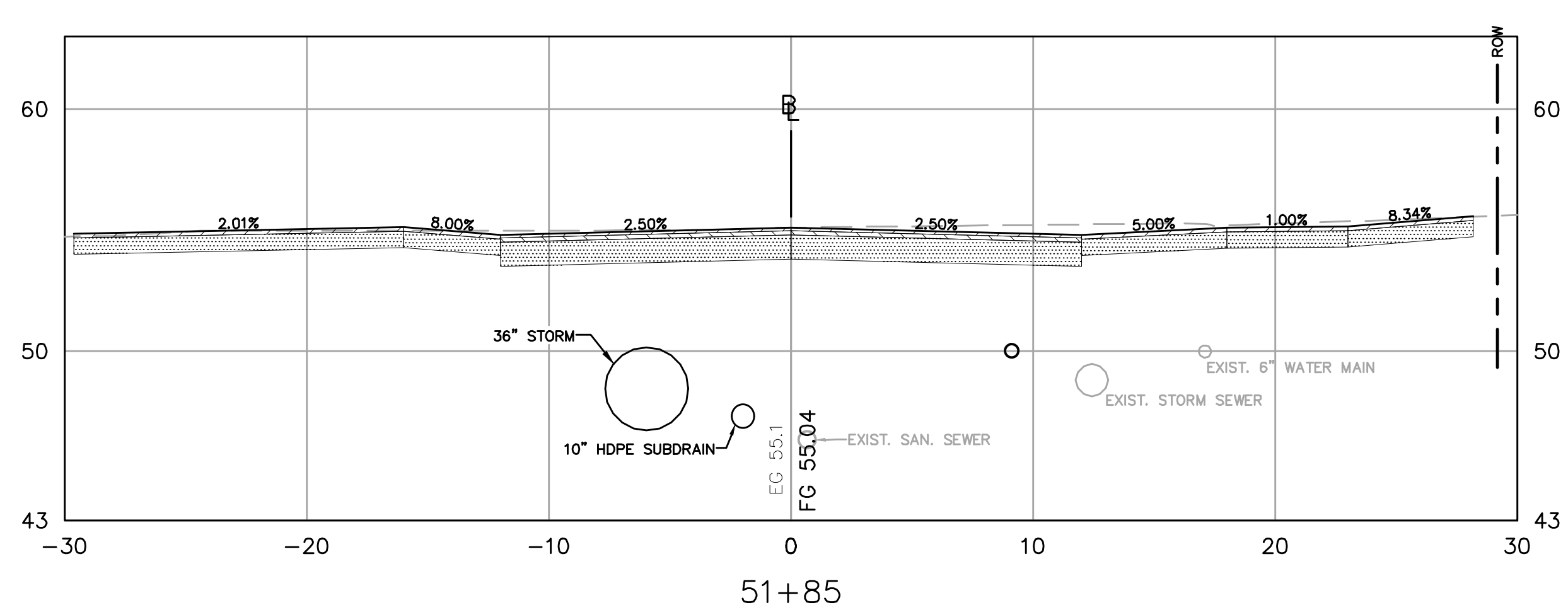
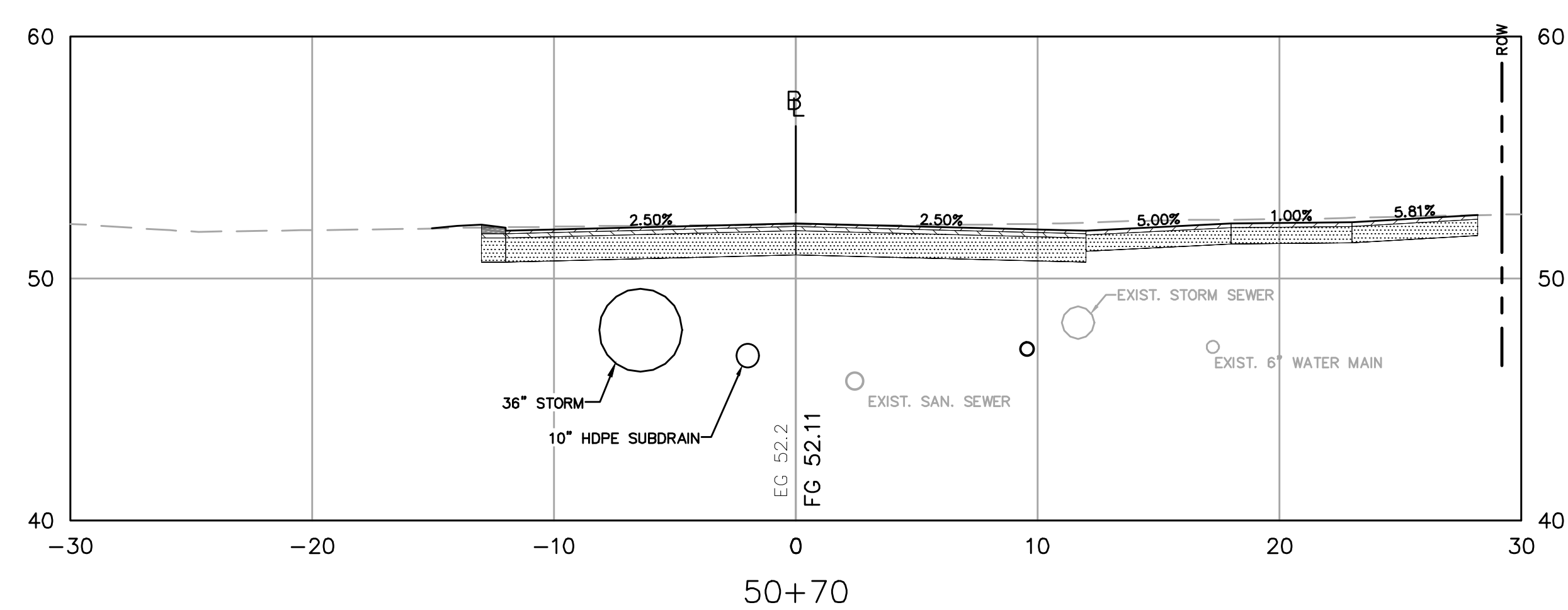
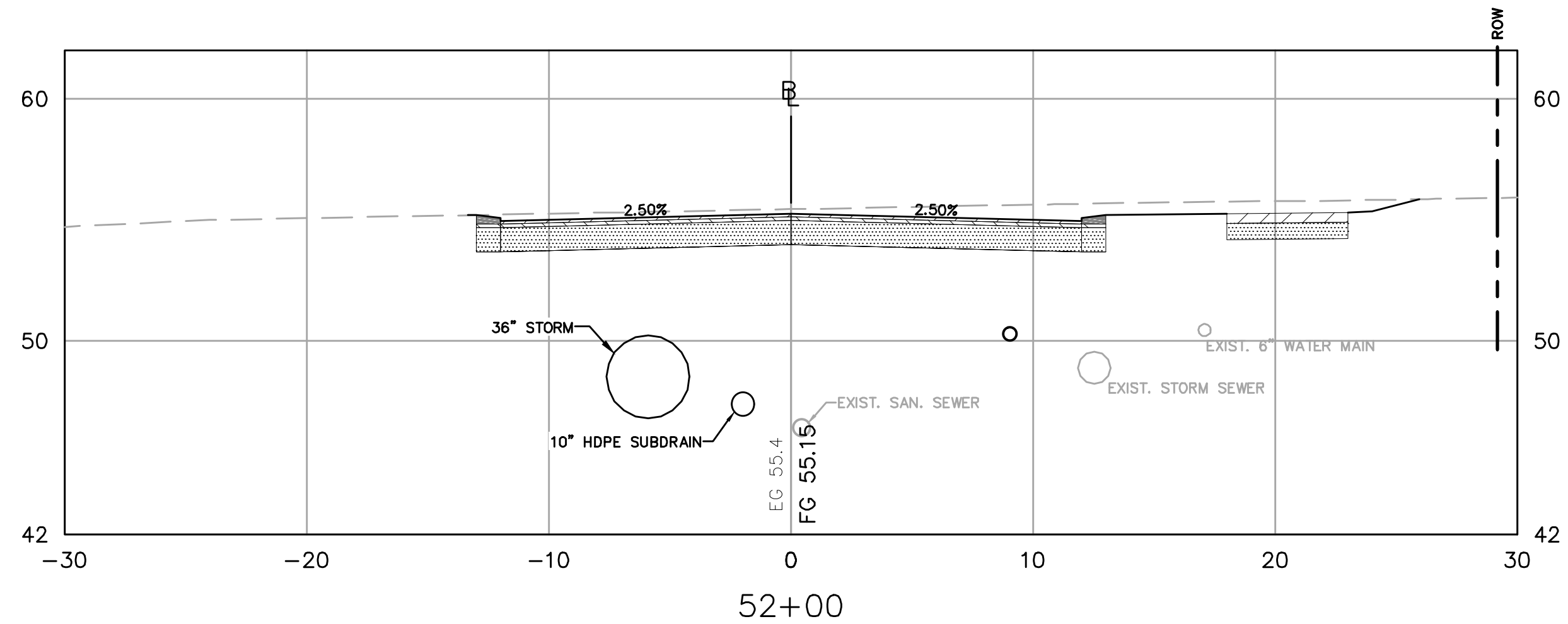
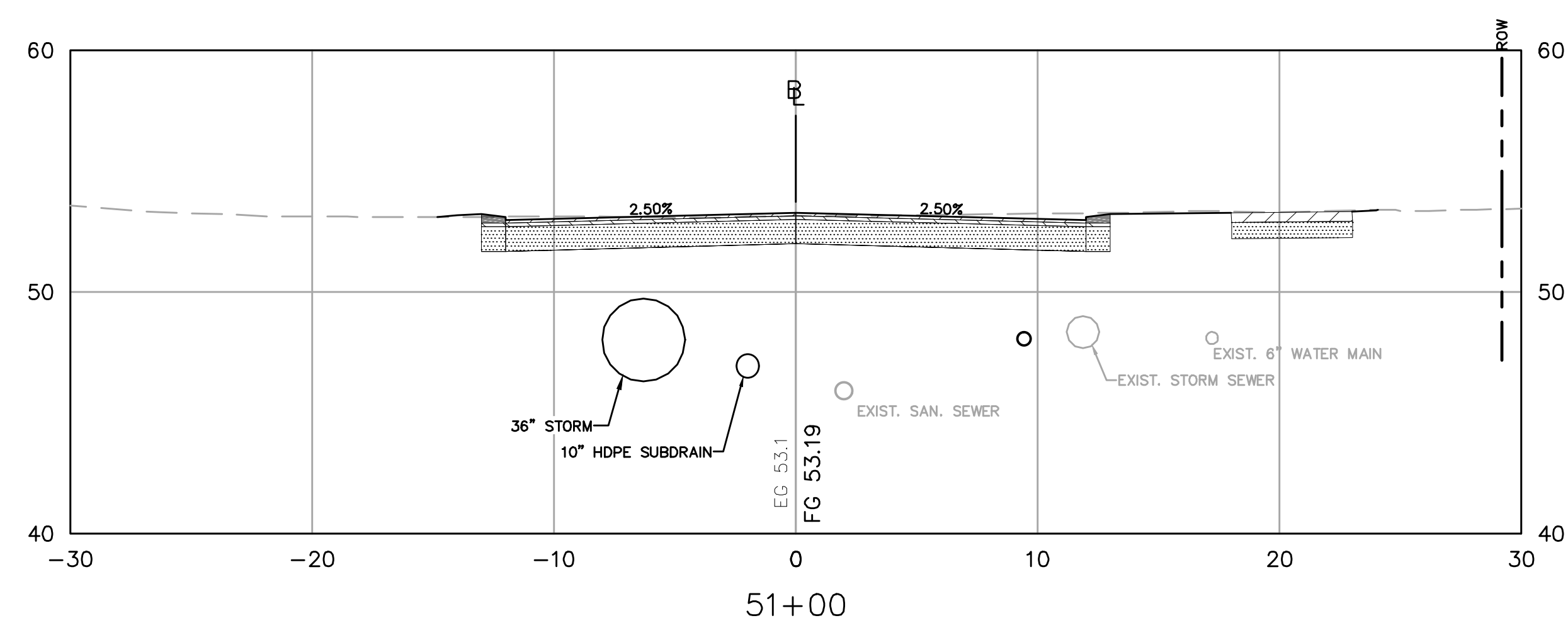
APRIL 2022

REVISIONS:


PREPARED FOR:  
CITY OF NEWBURYPORT  
DEPARTMENT OF PUBLIC SERVICES  
16A PERRY WAY  
NEWBURYPORT, MA 01950

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300 Brickstone Square  
Andover, Massachusetts 01810  
617 896 4300

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SCALE: 1" = 5'  
HORIZ. 0 2.5 5 10 FEET  
VERT. 0 2.5 5 10 FEET  
FILE: 8992300-XSEC.DWG  
DWG. NO:  
JOB. NO: 89923.00 **XS-13**



○ PROPOSED DUCTILE IRON WATER PIPE (SEE PLANS FOR SIZE)

**ISSUED FOR CONSTRUCTION**





**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS

**CROSS SECTIONS - RYAN  
ROAD**  
STA. 52+65 TO STA. 54+25

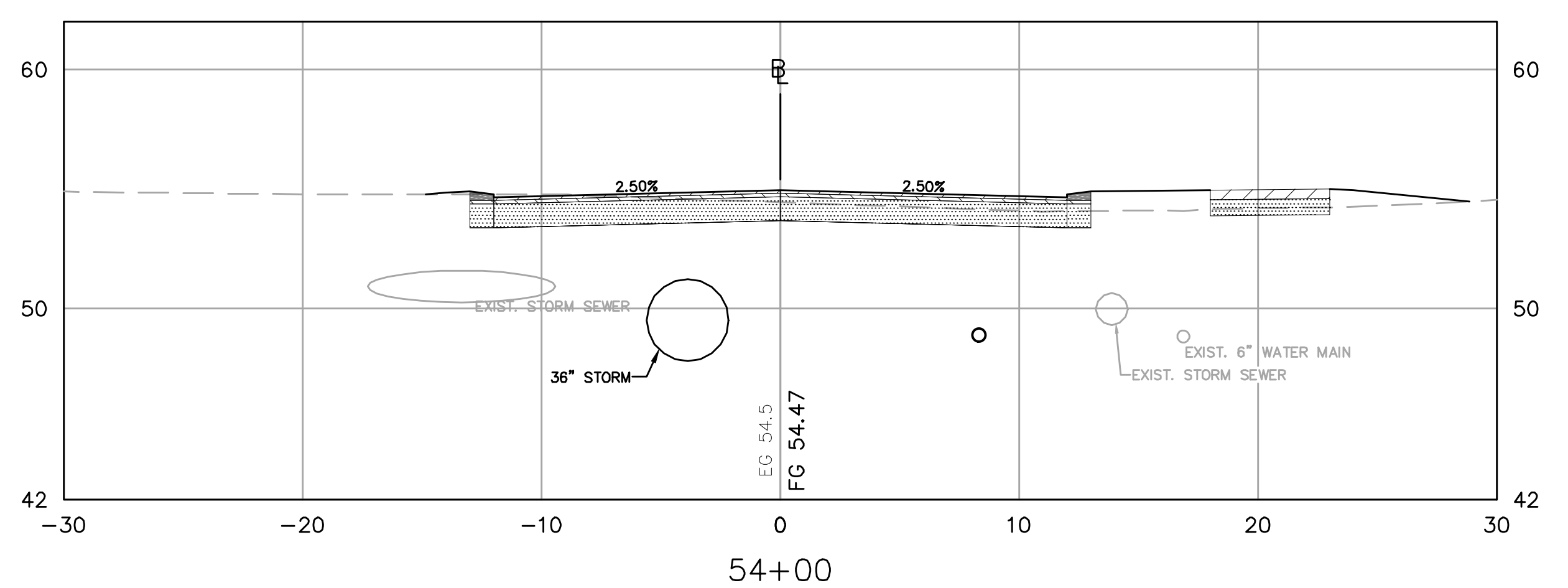
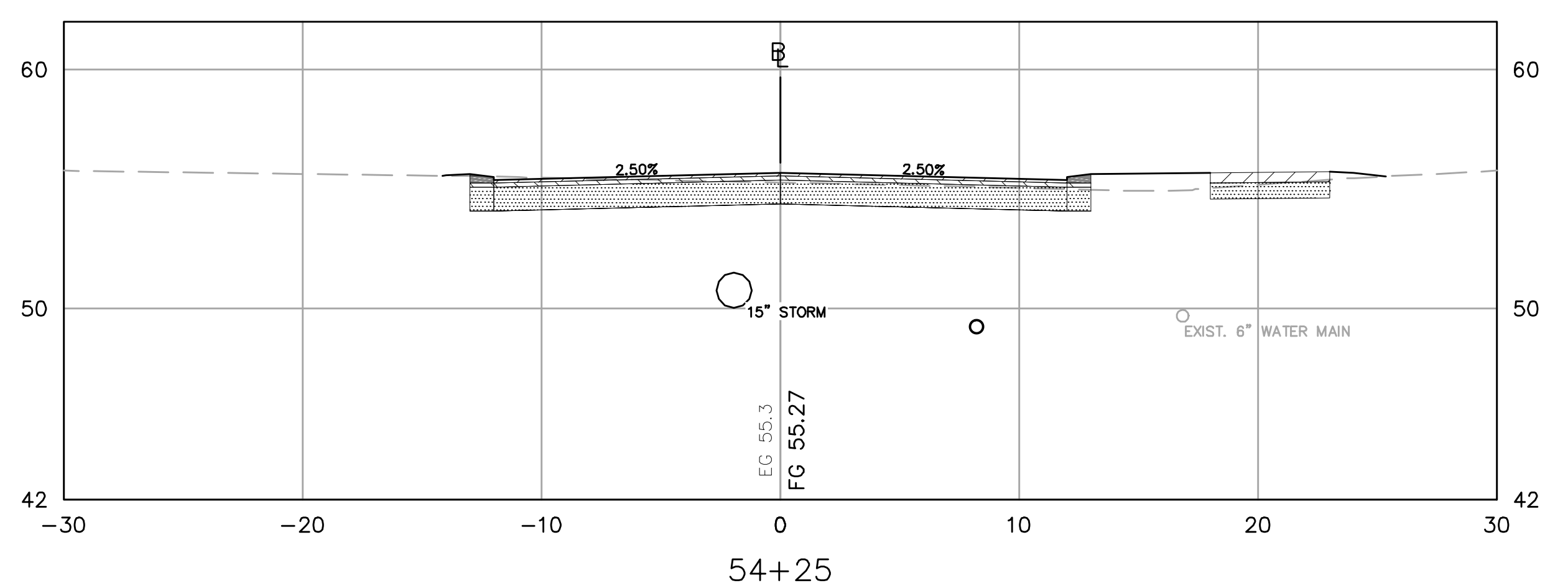
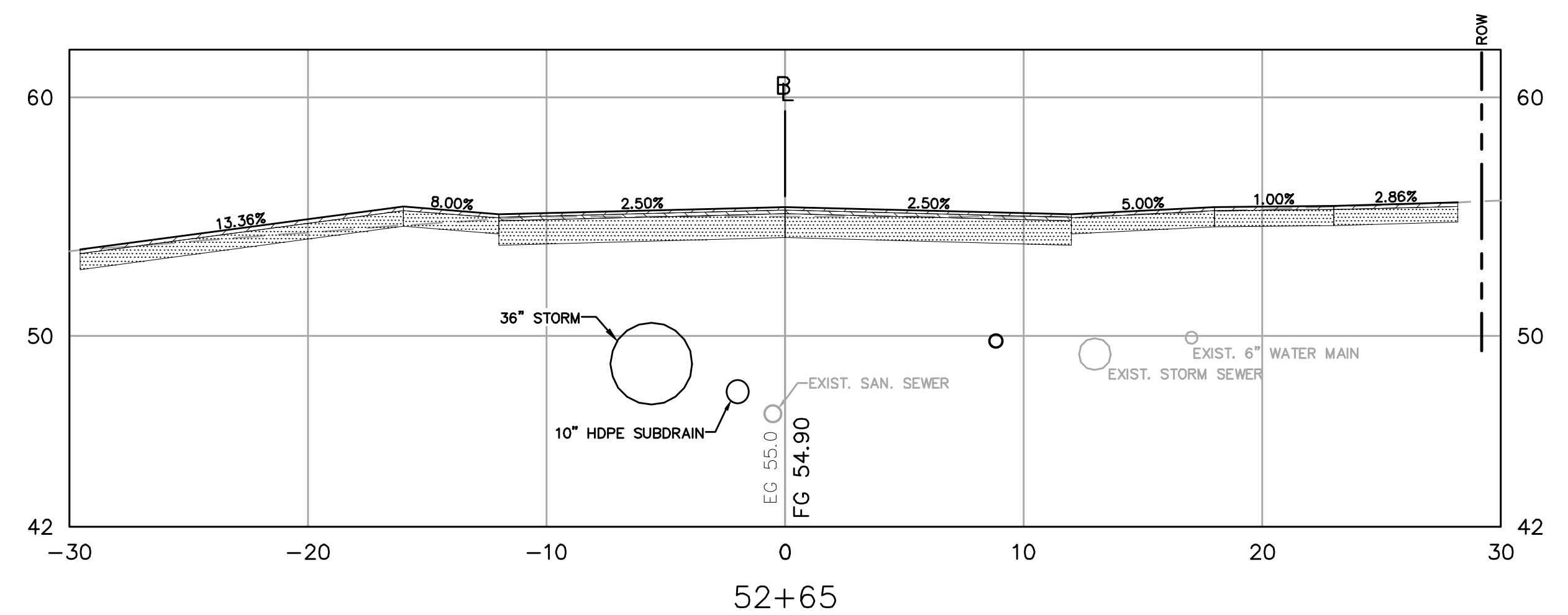
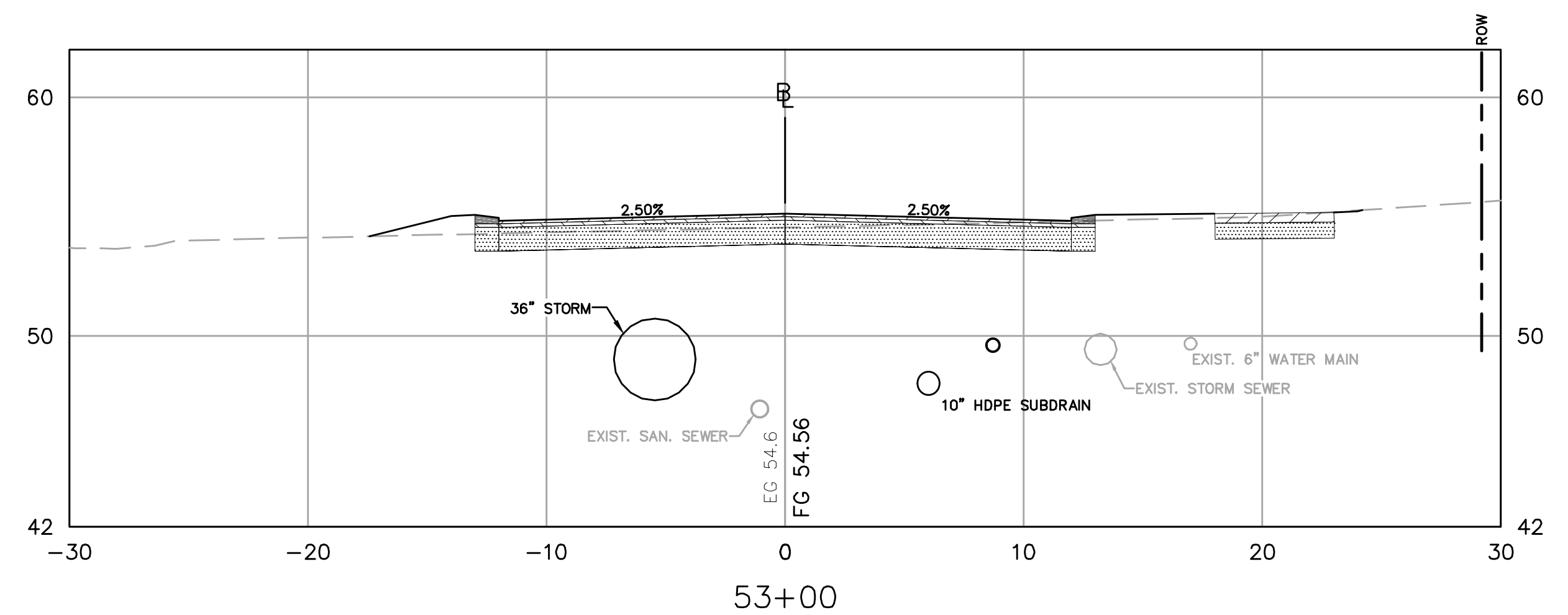
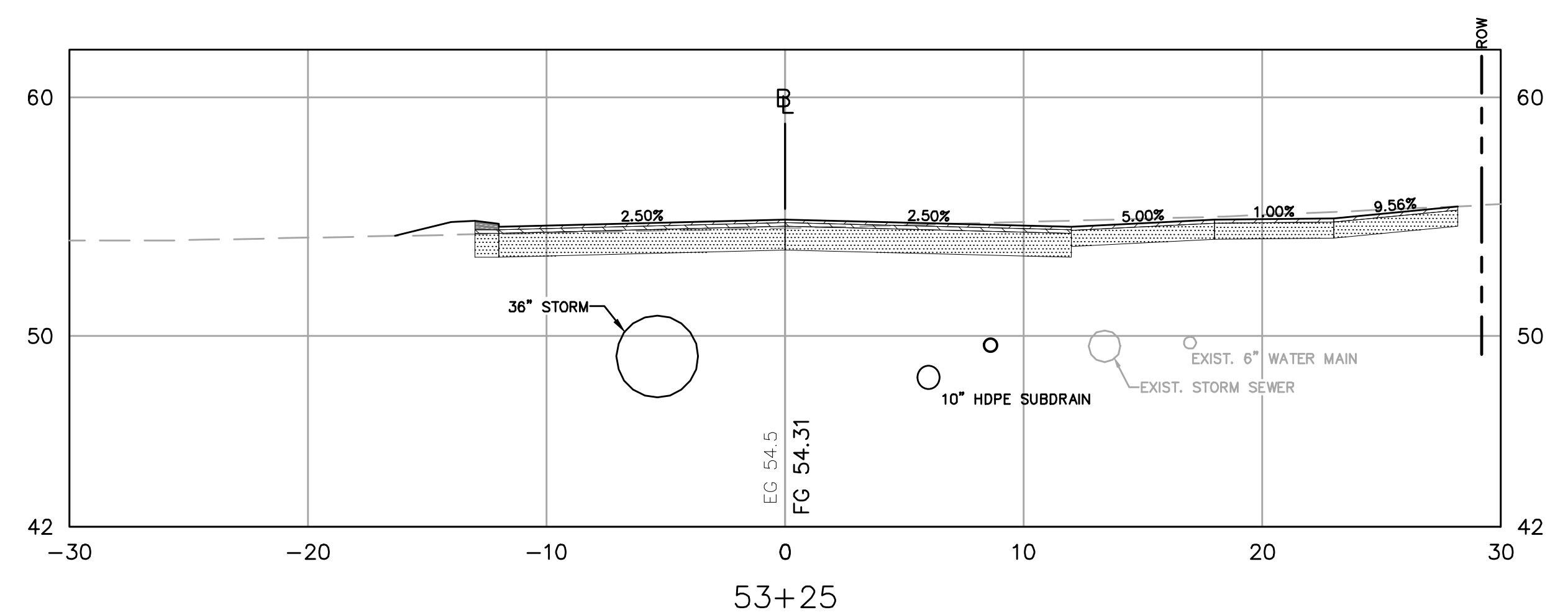
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DEPARTMENT OF PUBLIC SERVICES  
16A PERRY WAY  
NEWBURYPORT, MA 01950

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HORIZ. 0 2.5 5 10 FEET  
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DWG. NO:  
JOB. NO: 89923.00 **XS-14**



○ PROPOSED DUCTILE IRON WATER PIPE (SEE PLANS FOR SIZE)

**ISSUED FOR CONSTRUCTION**





ROADWAY, DRAINAGE & WATER MAIN IMPROVEMENTS - APRIL 2022

**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS

**CROSS SECTIONS - DREW  
STREET**

STA. 62+62 TO STA. 66+00

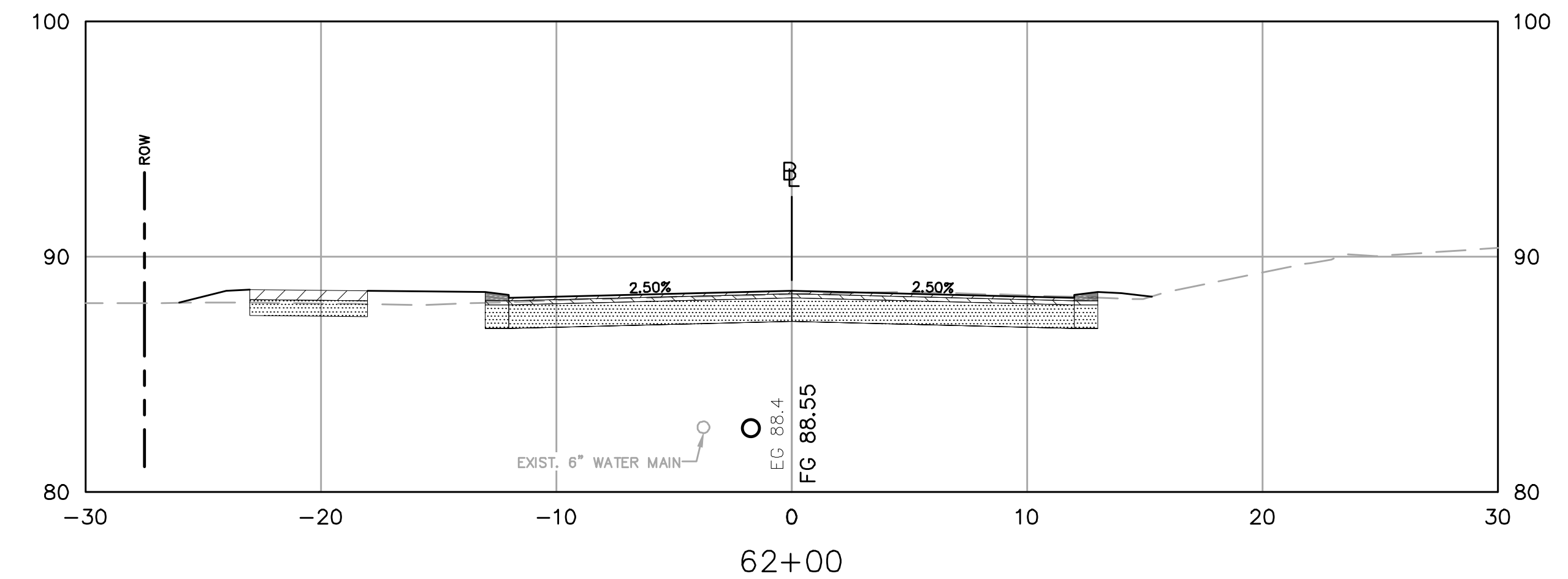
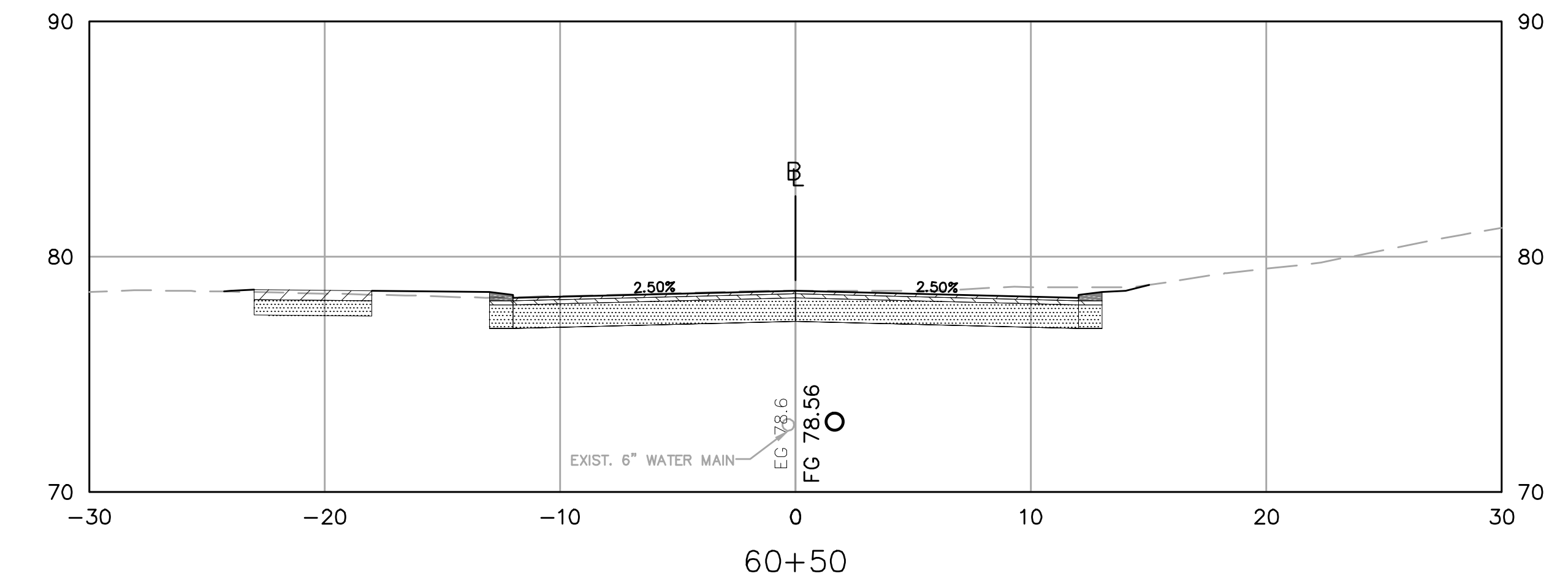
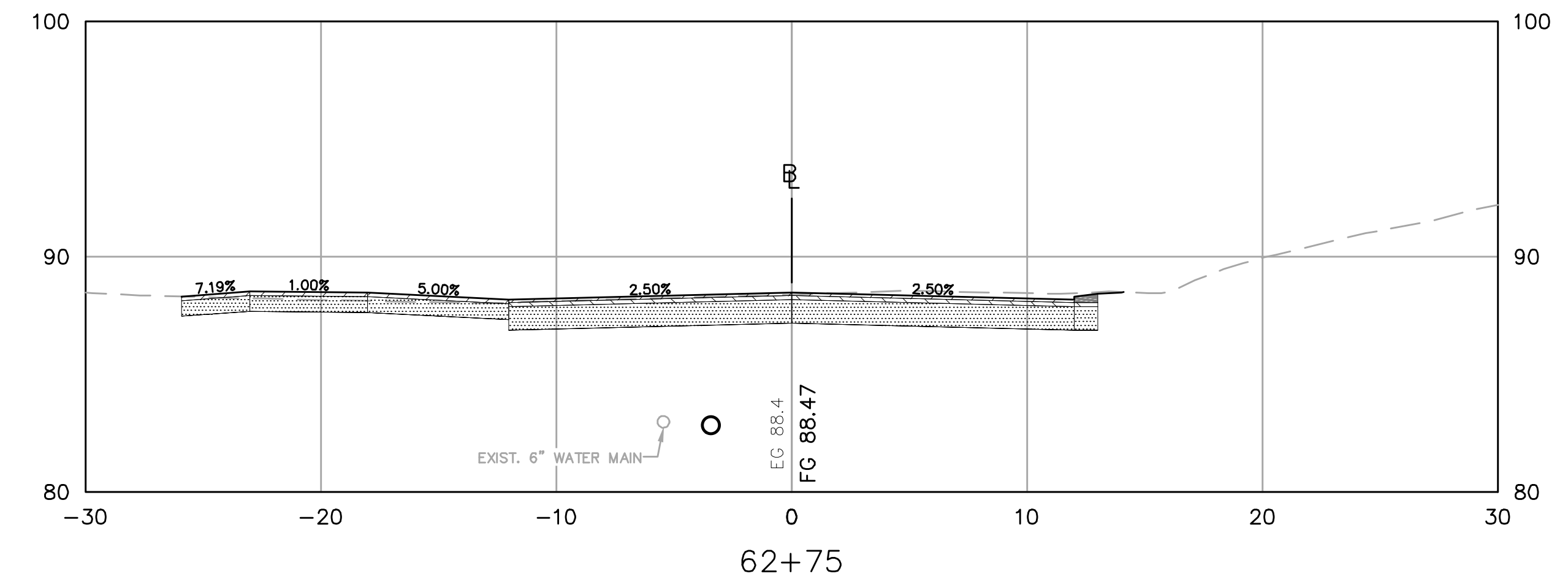
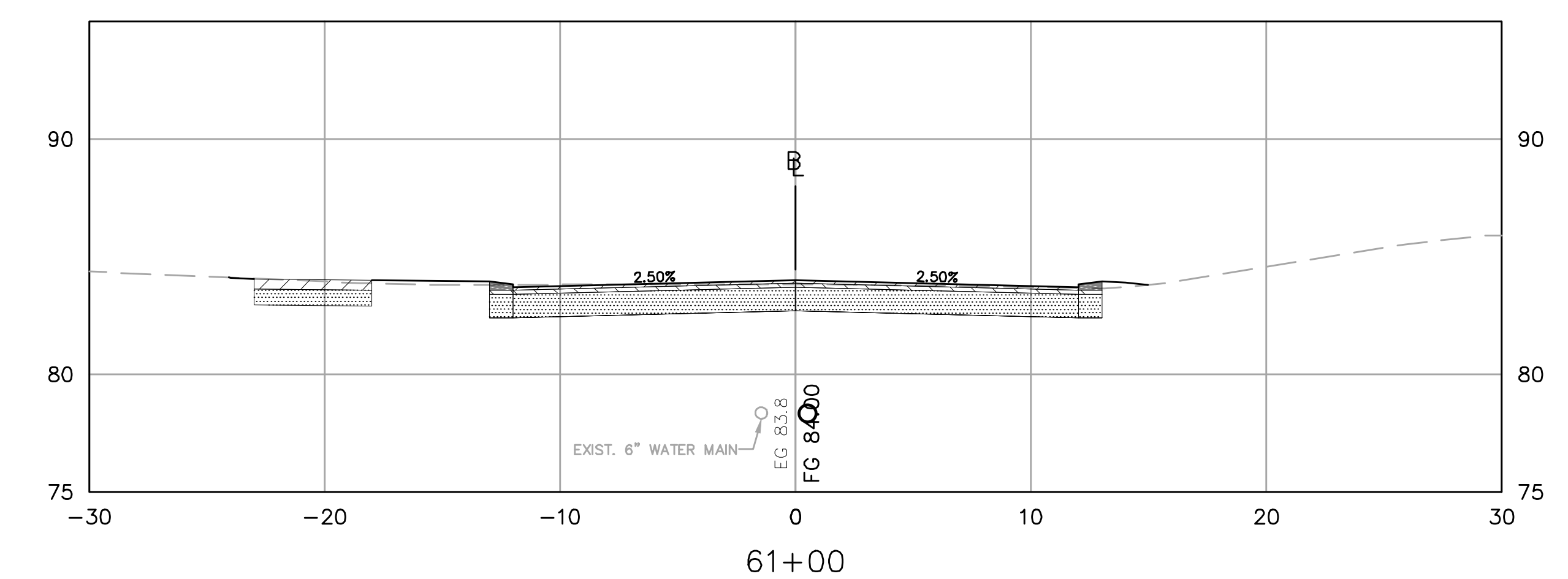
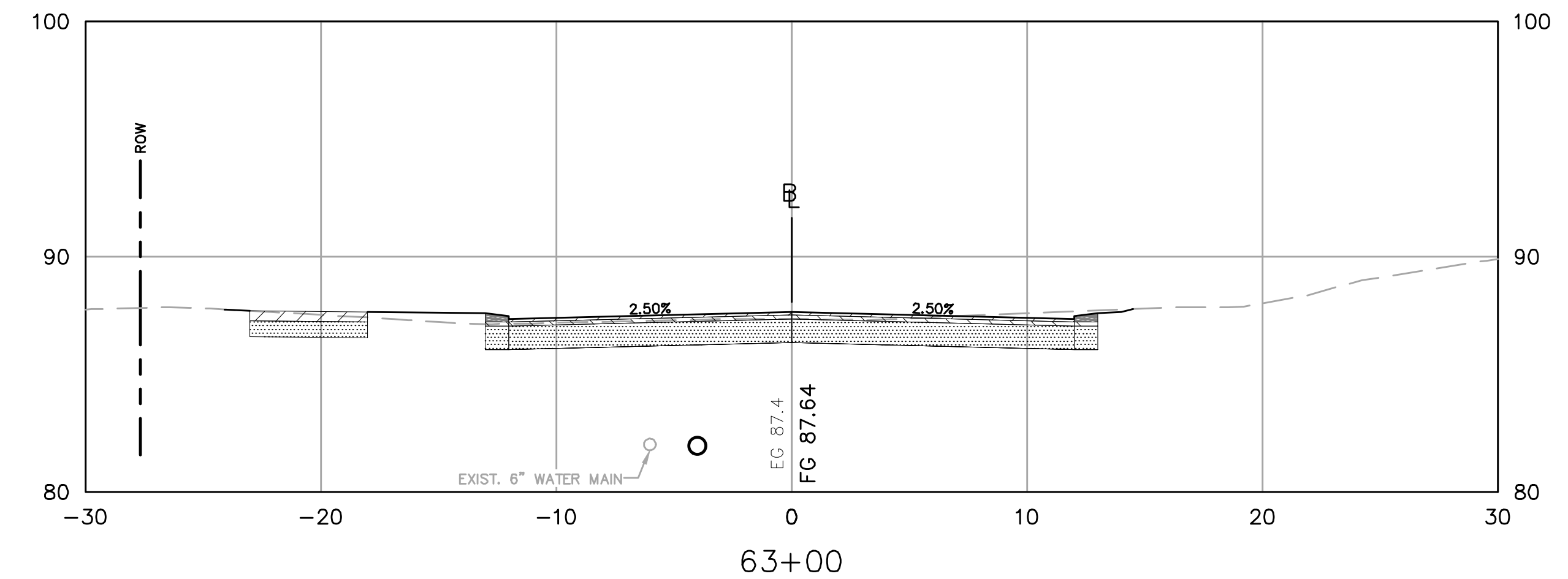
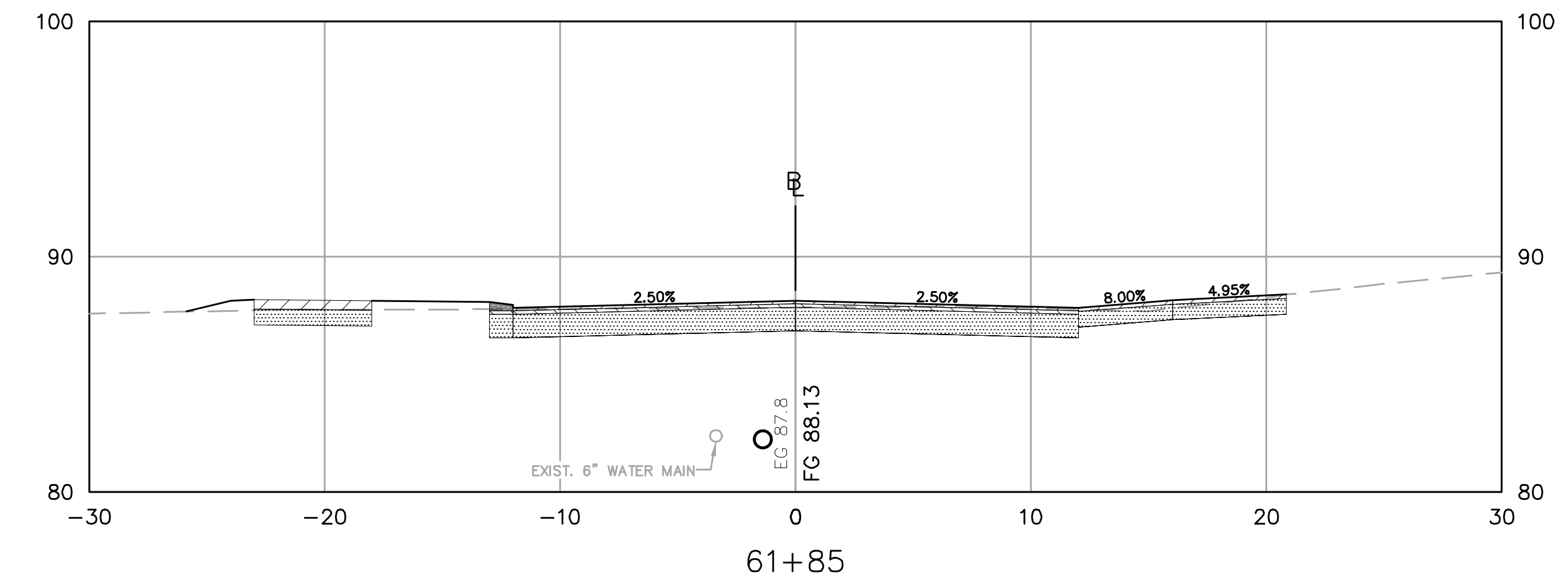
APRIL 2022

REVISIONS:


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DEPARTMENT OF PUBLIC SERVICES  
16A PERRY WAY  
NEWBURYPORT, MA 01950

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Andover, Massachusetts 01810  
617 896 4300

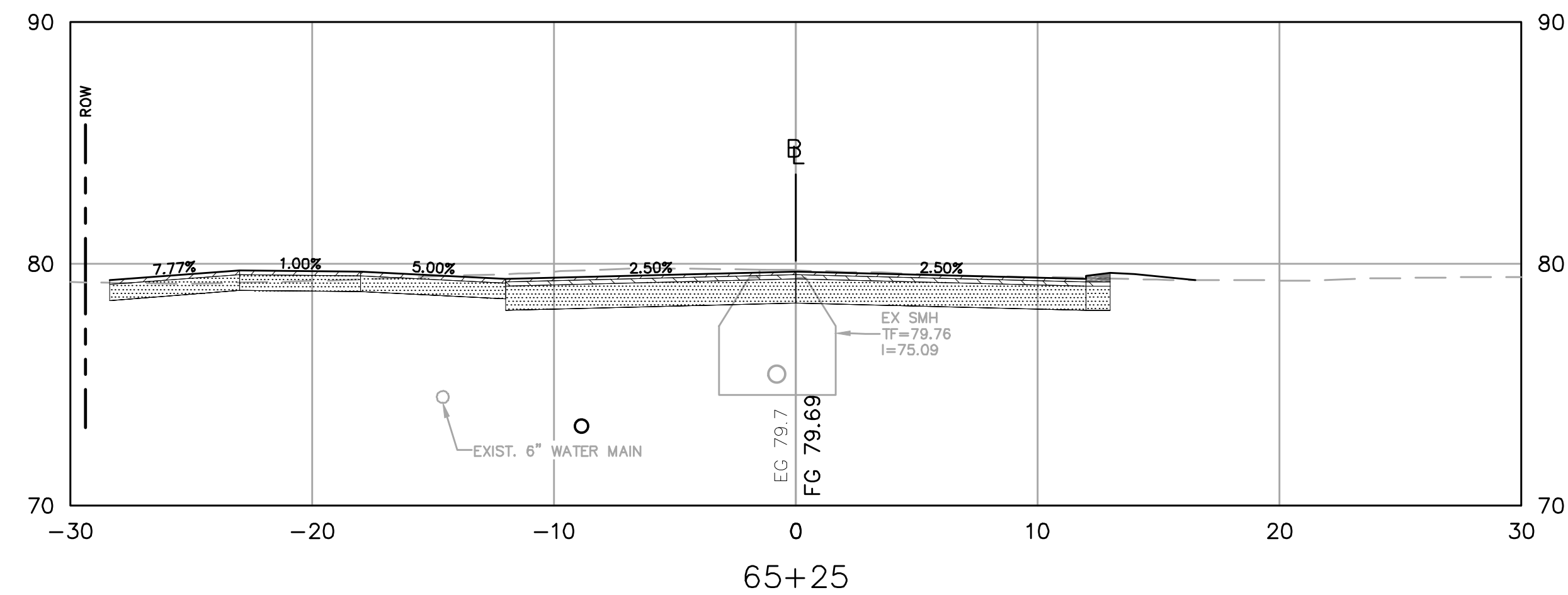
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SCALE: 1" = 5'  
HORIZ. 0 2.5 5 10 FEET  
VERT. 0 2.5 5 10 FEET  
FILE: 8992300-XSEC.DWG  
DWG. NO:  
JOB. NO: 89923.00 **XS-15**



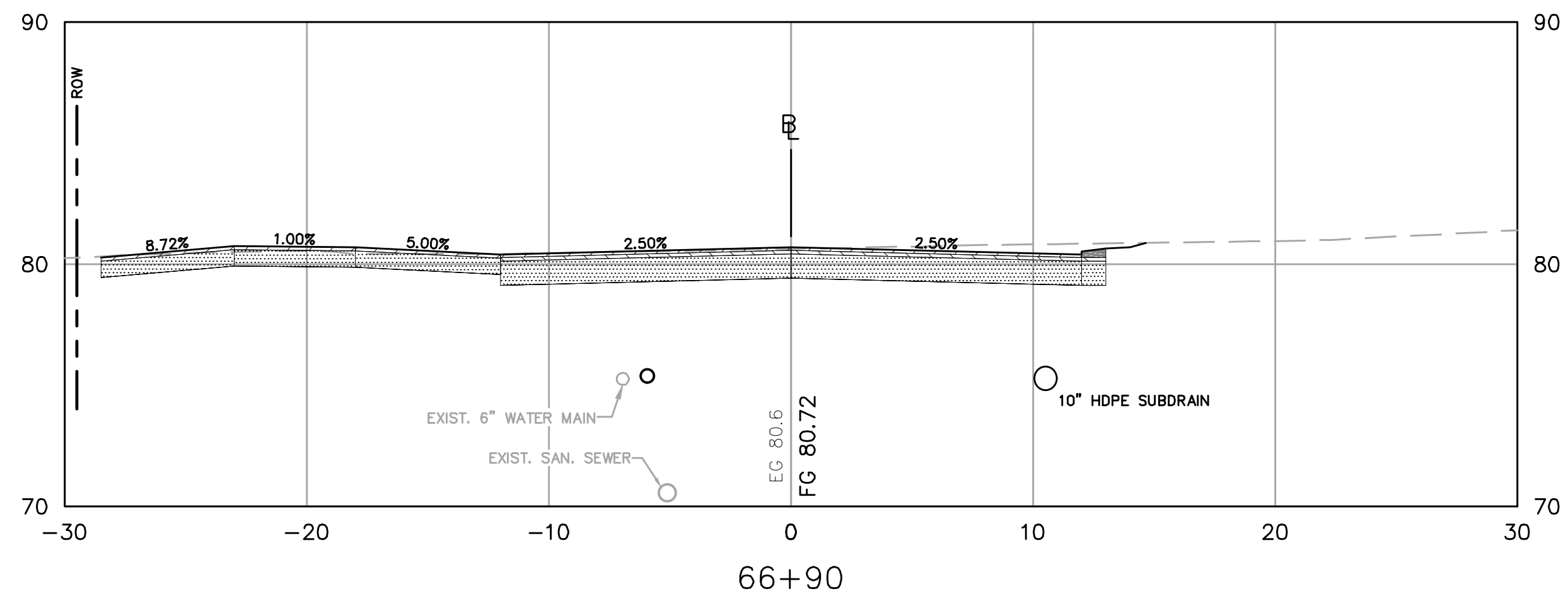
○ PROPOSED DUCTILE IRON WATER PIPE (SEE PLANS FOR SIZE)

**ISSUED FOR CONSTRUCTION**

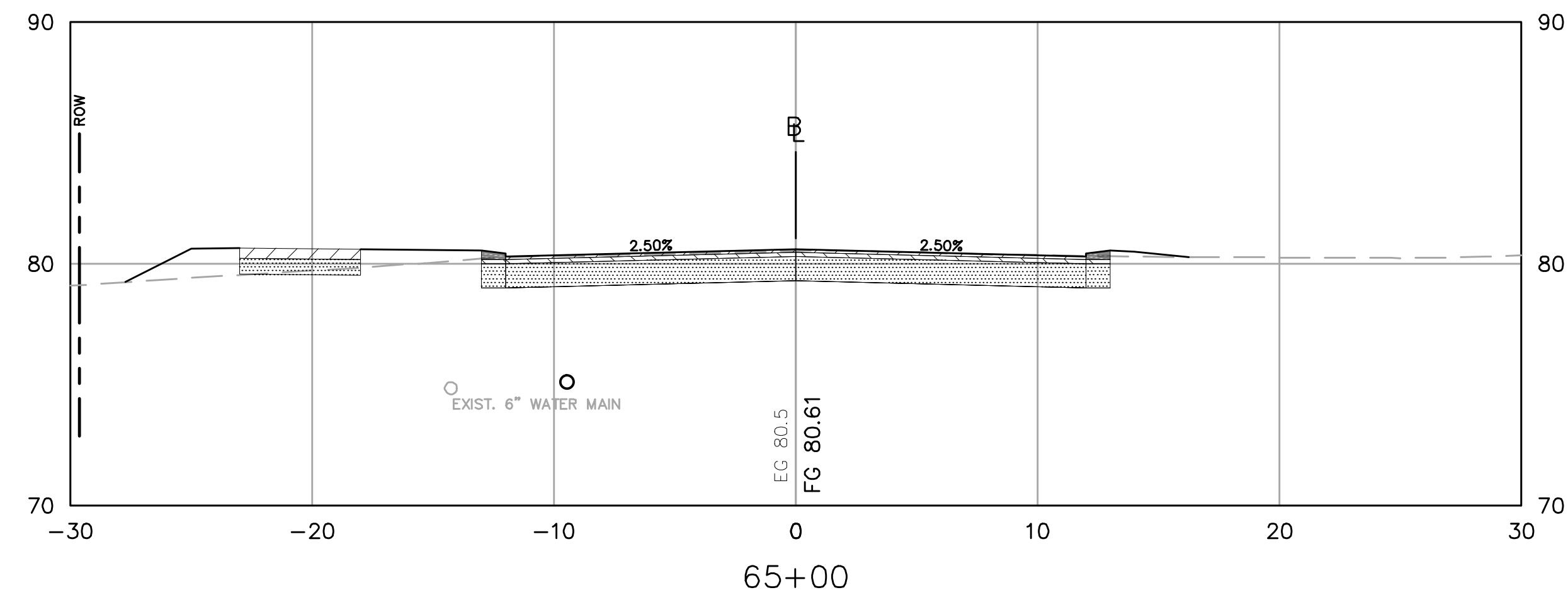




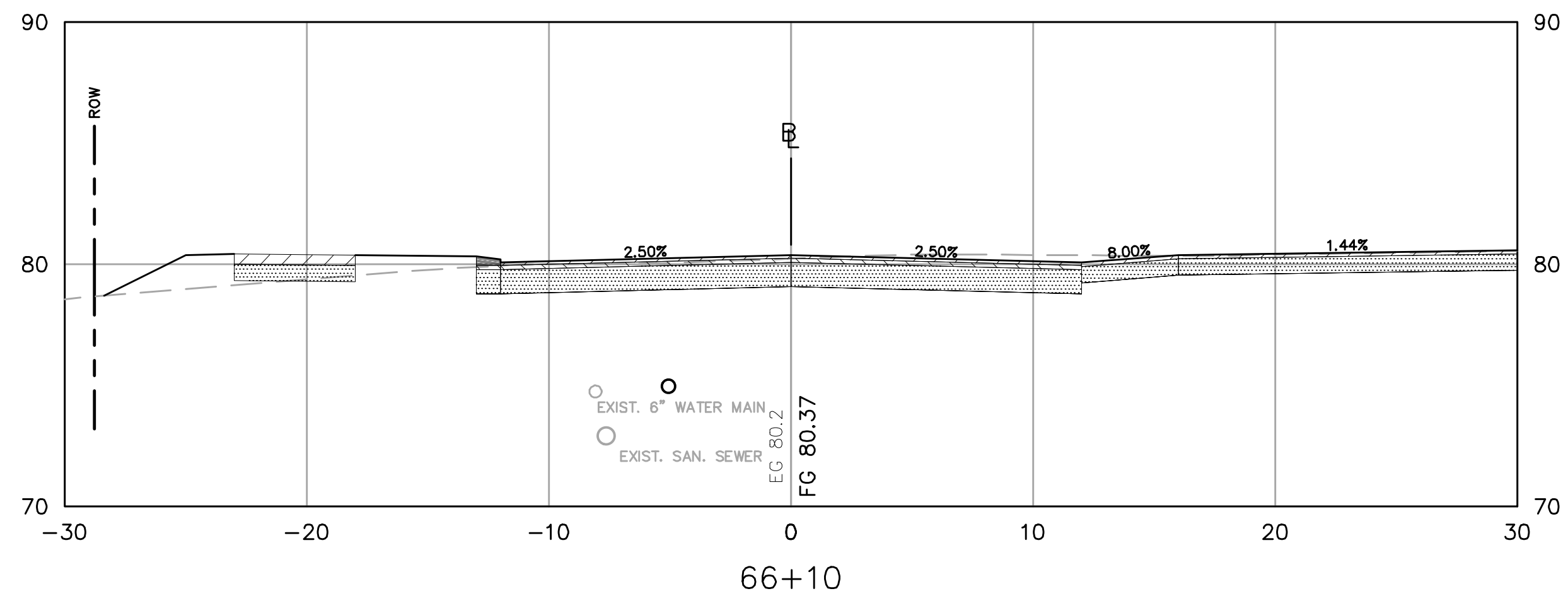
65+25



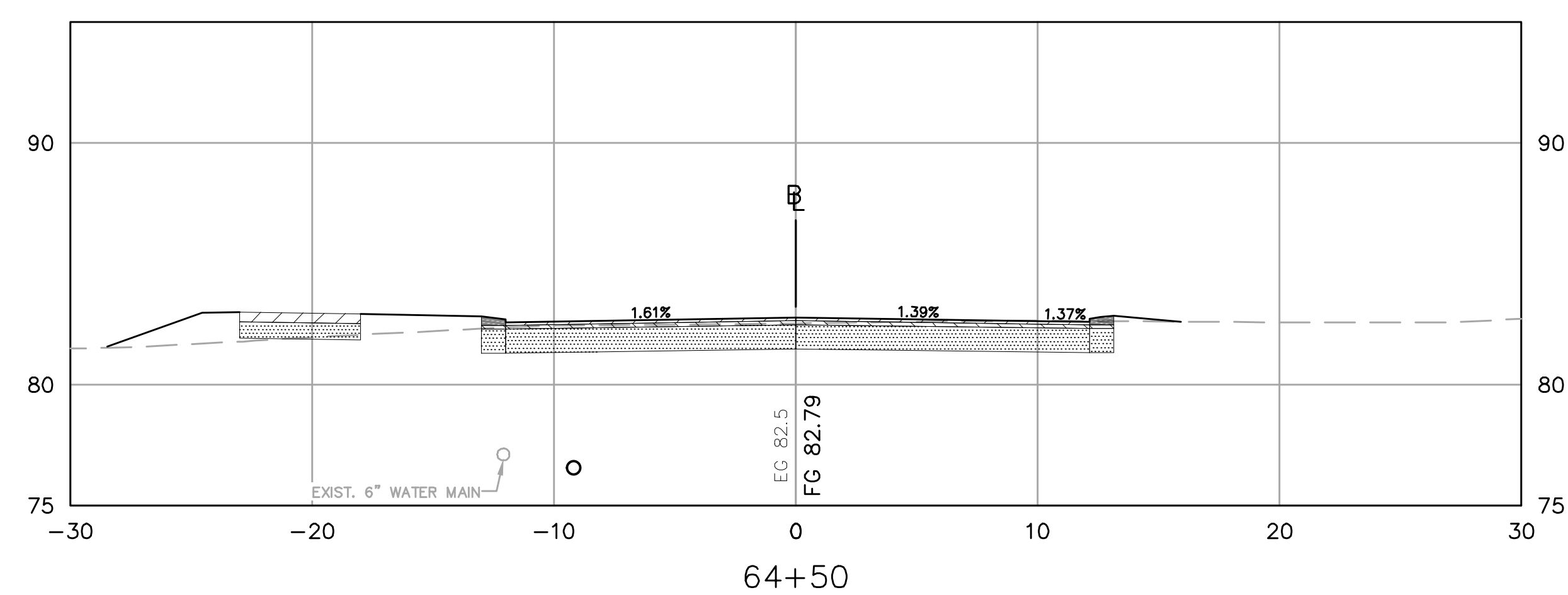
66+90



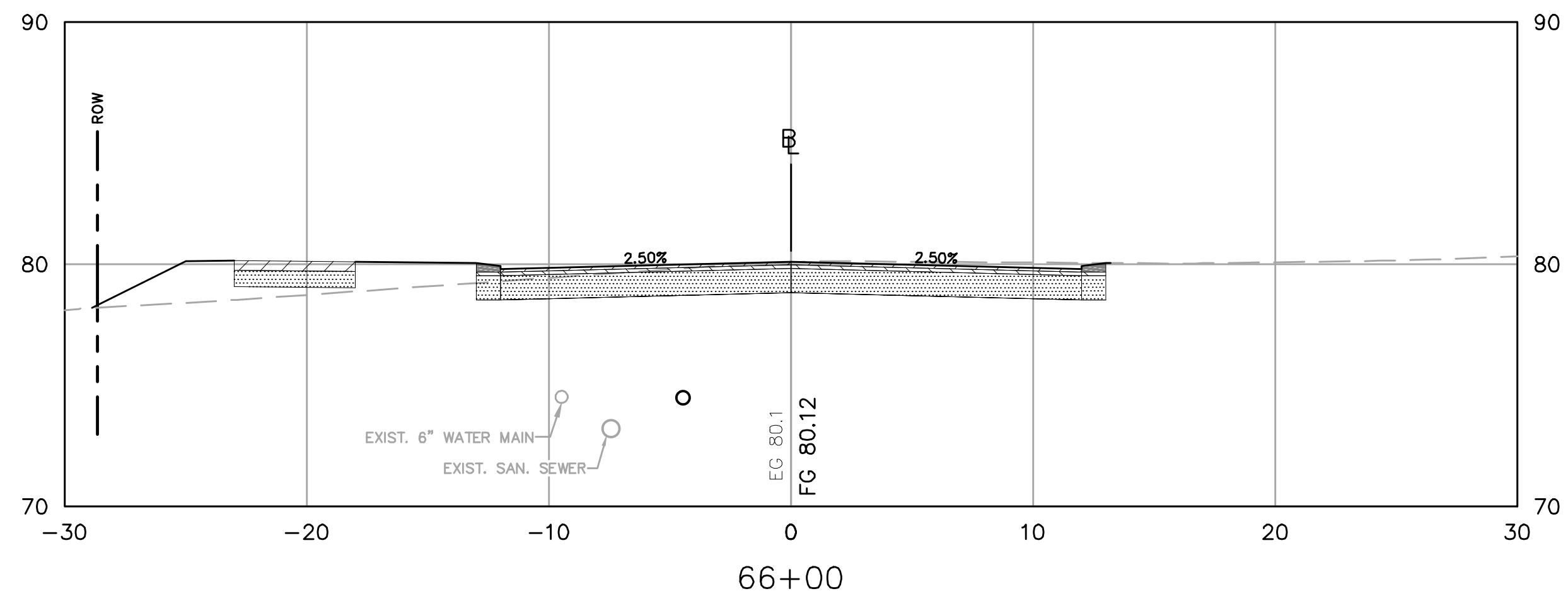
65+00



66+10



64+50



66+00

○ PROPOSED DUCTILE IRON WATER PIPE (SEE PLANS FOR SIZE)

**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS

**CROSS SECTIONS - DREW  
STREET**  
STA. 66+10 TO STA. 68+00

APRIL 2022

REVISIONS:


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16A PERRY WAY  
NEWBURYPORT, MA 01950

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SCALE: 1" = 5'  
HORIZ. 0 2.5 5 10 FEET  
VERT. 0 2.5 5 10 FEET  
FILE: 8992300-XSEC.DWG  
DWG. NO:  
JOB. NO: 89923.00

**ISSUED FOR CONSTRUCTION**

**XS-16**





**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

**PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS**

**CROSS SECTIONS - DREW  
STREET**  
STA. 68+37 TO STA. 70+50

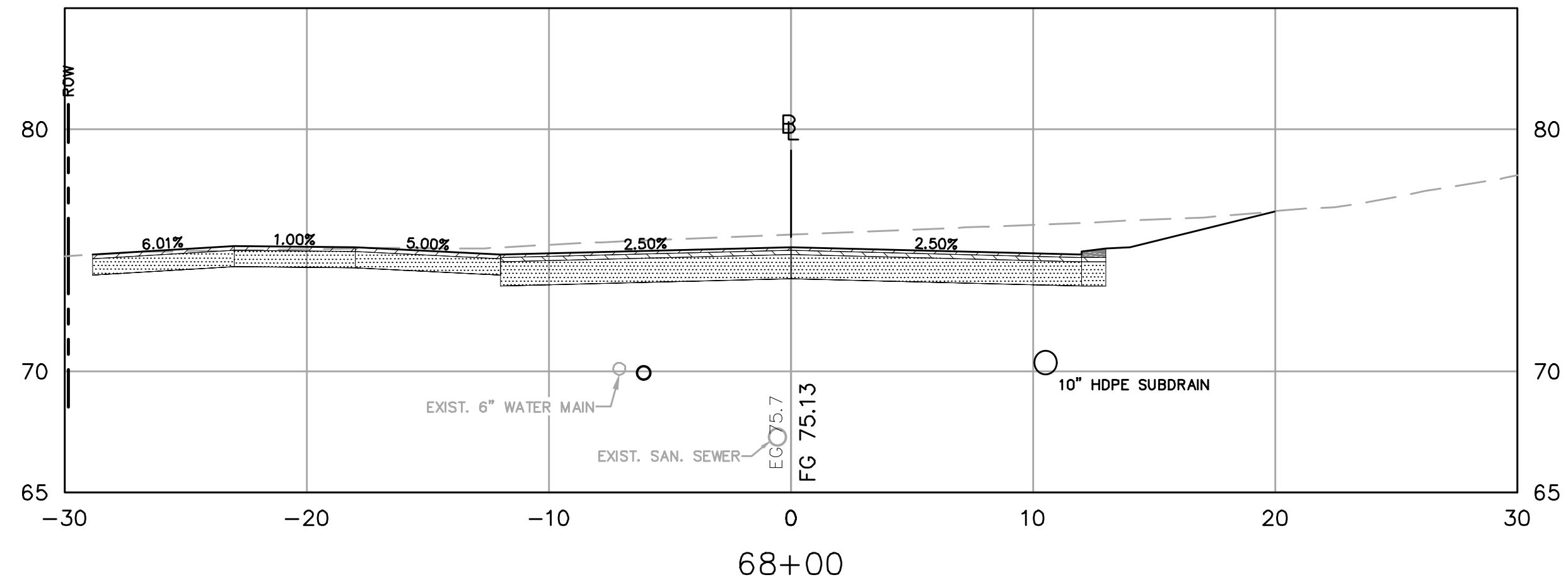
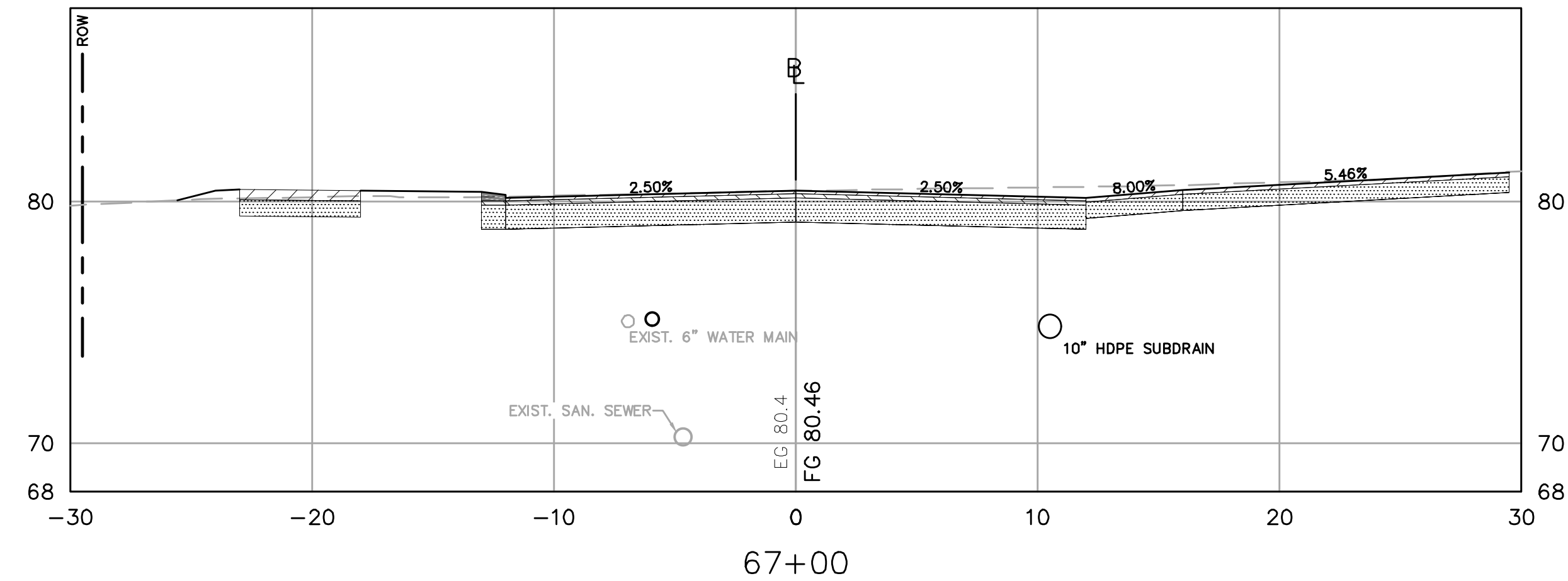
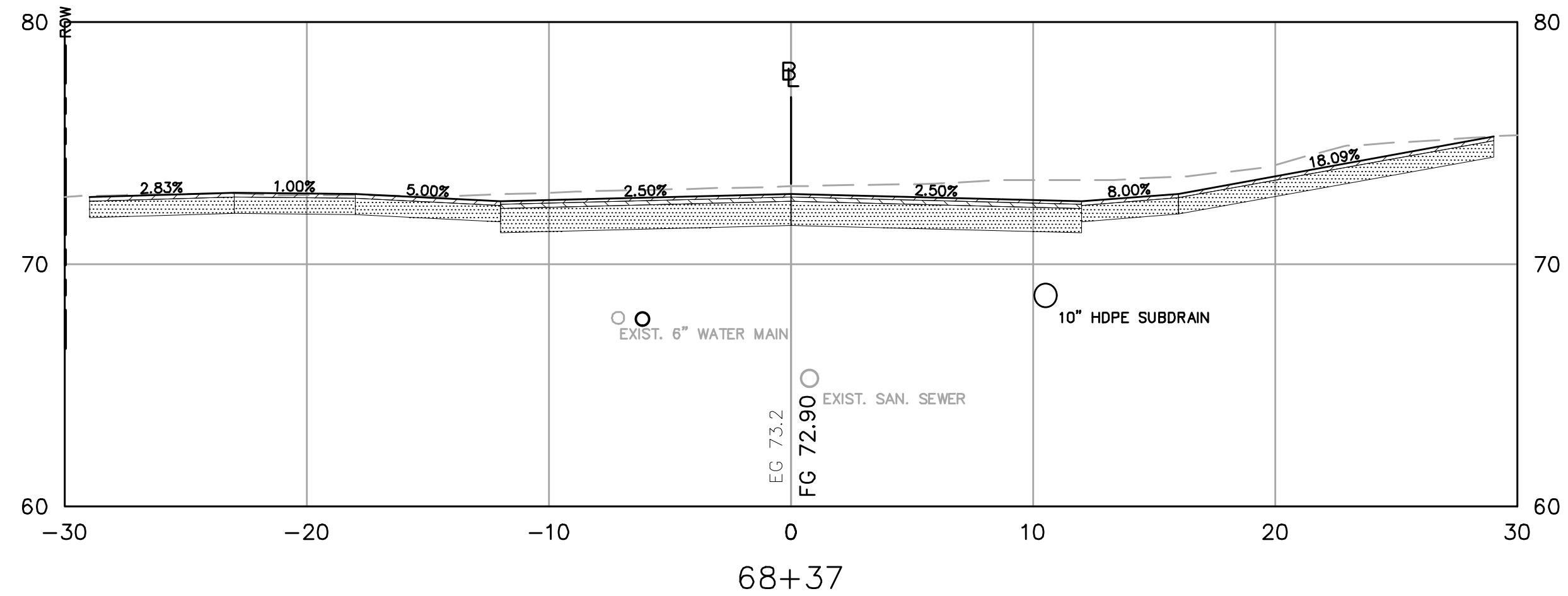
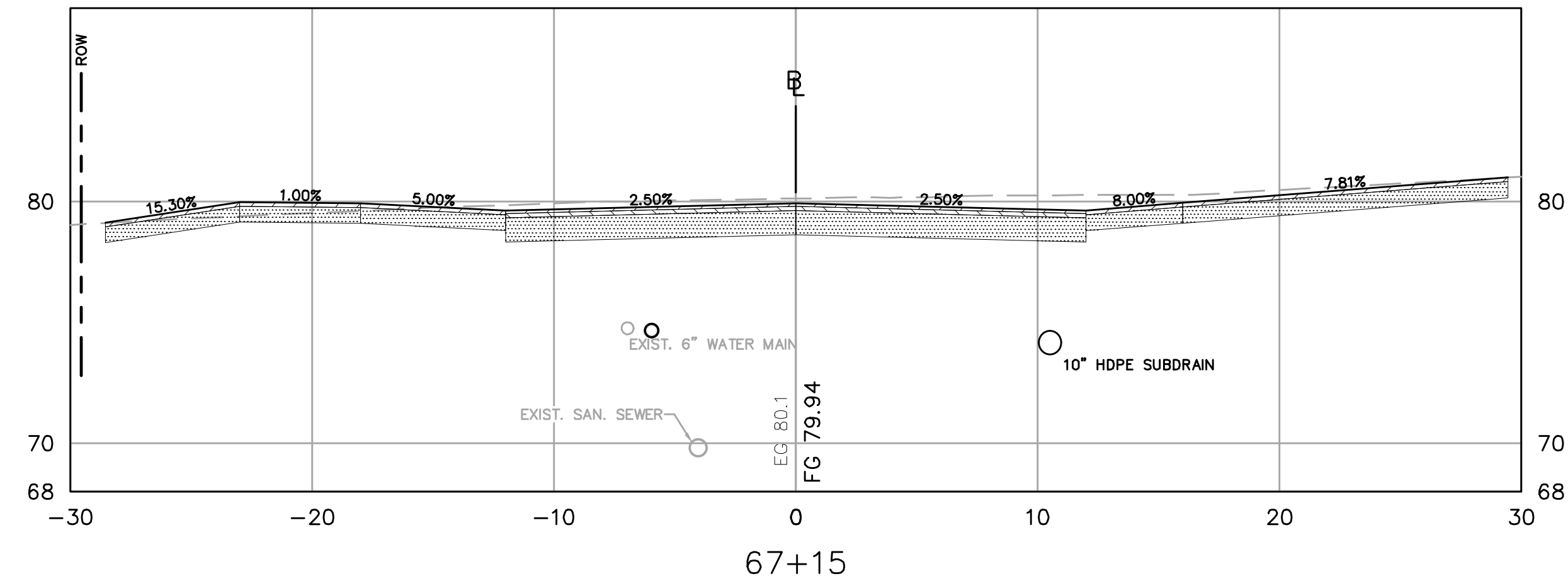
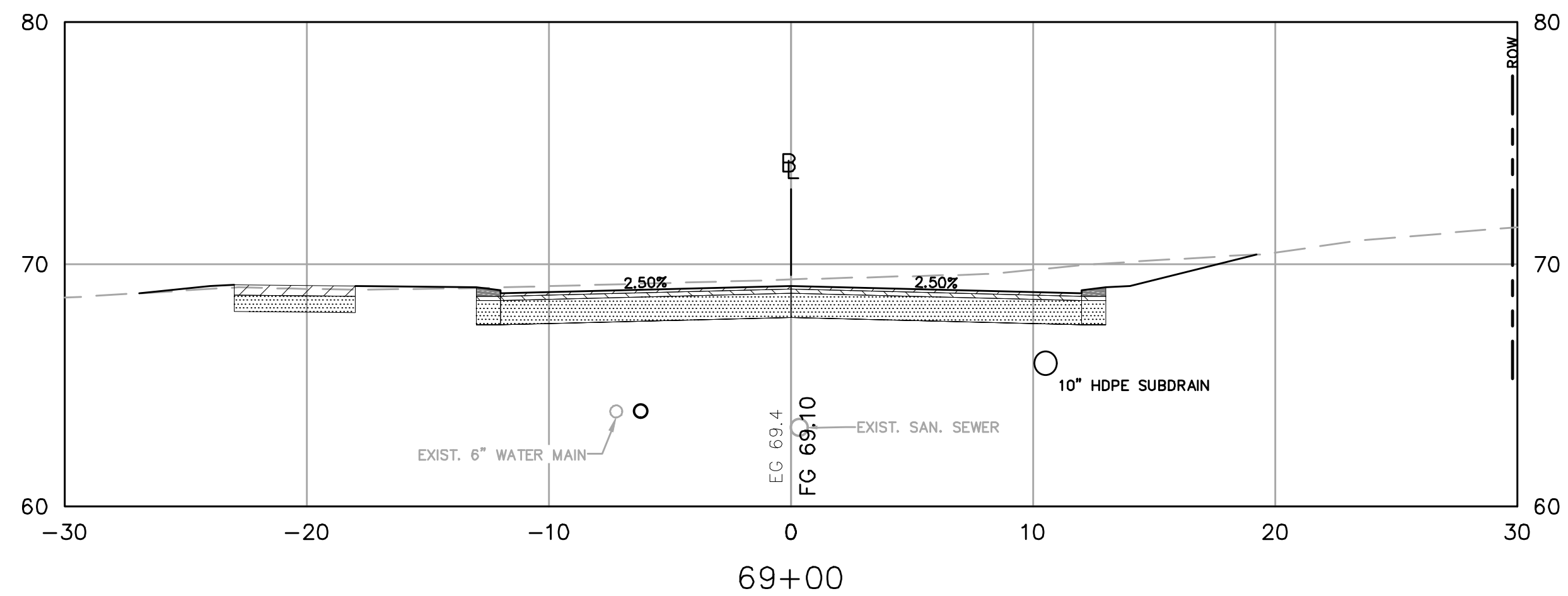
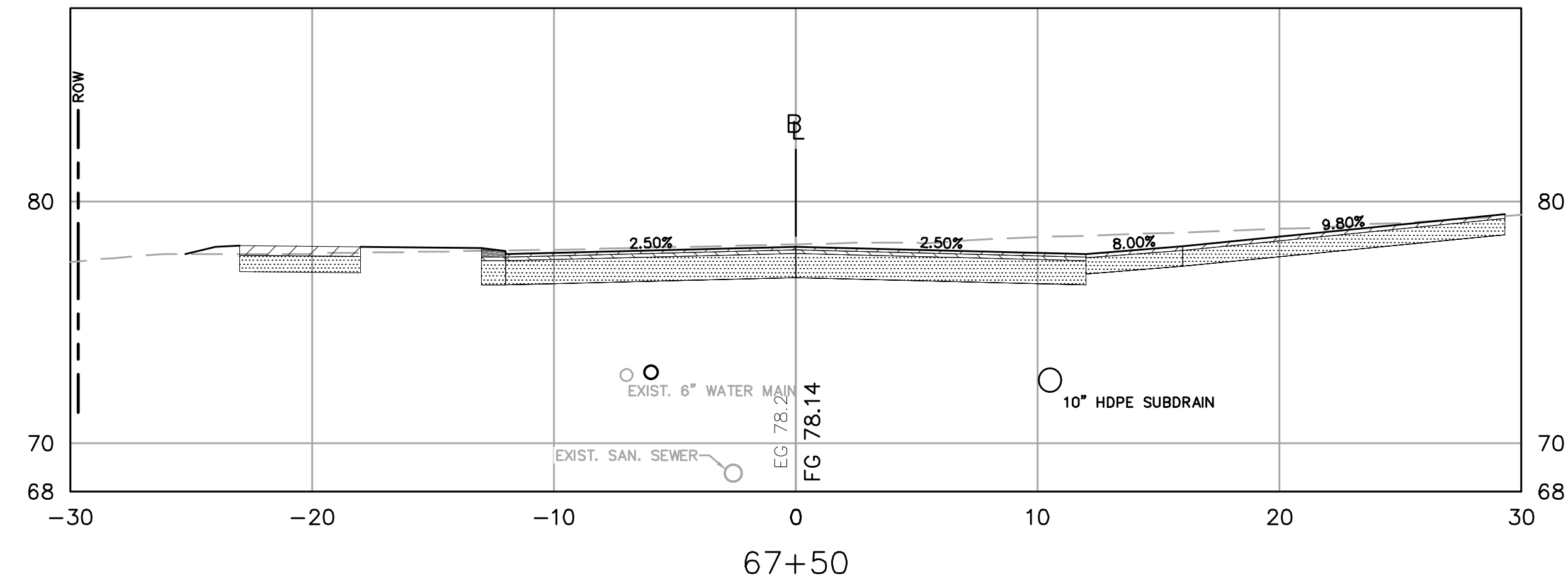
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16A PERRY WAY  
NEWBURYPORT, MA 01950

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617 896 4300

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SCALE: 1" = 5'  
HORIZ. 0 2.5 5 10 FEET  
VERT. 0 2.5 5 10 FEET  
FILE: 8992300-XSEC.DWG  
DWG. NO:  
JOB. NO: 89923.00 **XS-17**



○ PROPOSED DUCTILE IRON WATER PIPE (SEE PLANS FOR SIZE)

**ISSUED FOR CONSTRUCTION**





**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS

**CROSS SECTIONS - DREW  
STREET**

STA. 70+80 TO STA. 73+00

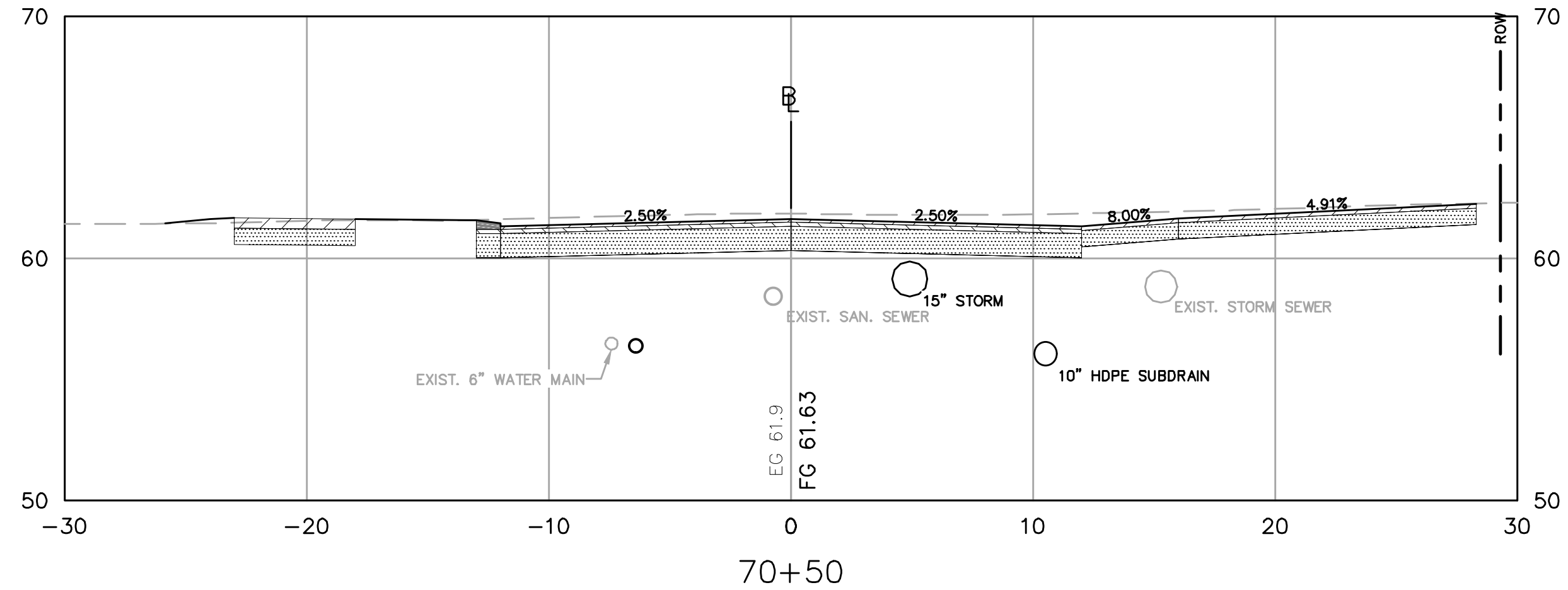
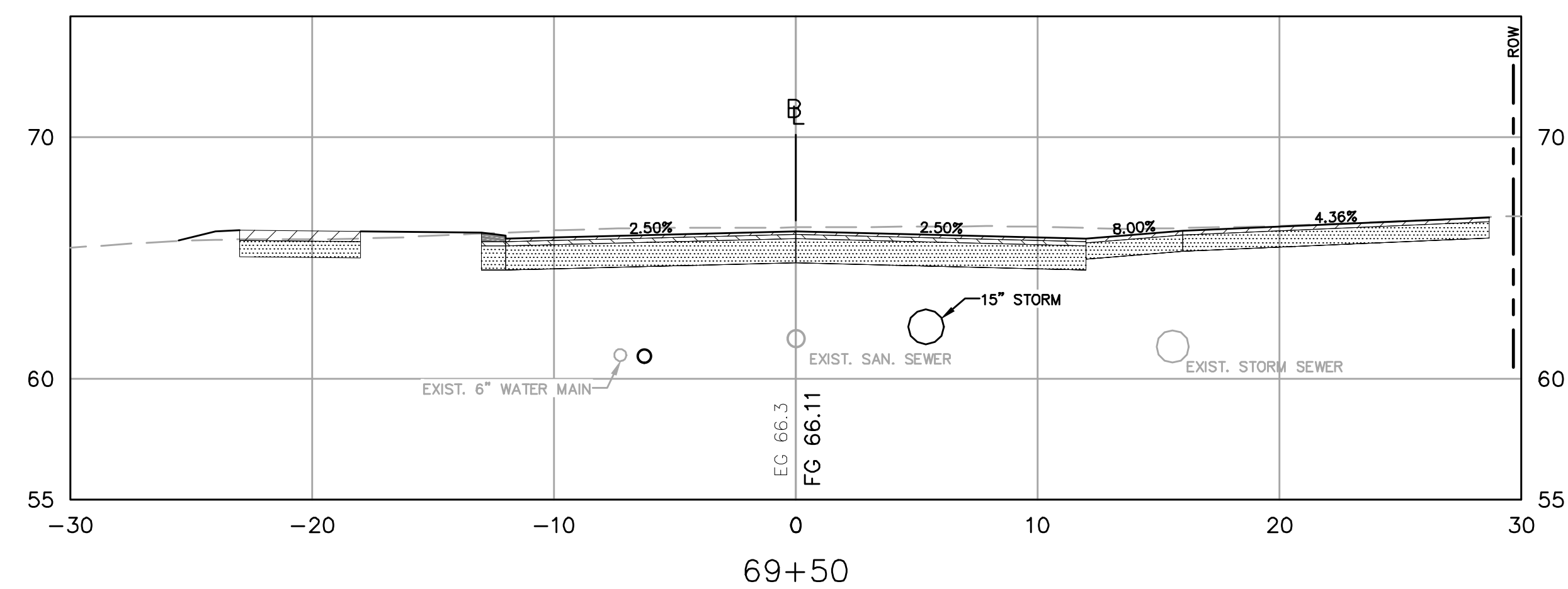
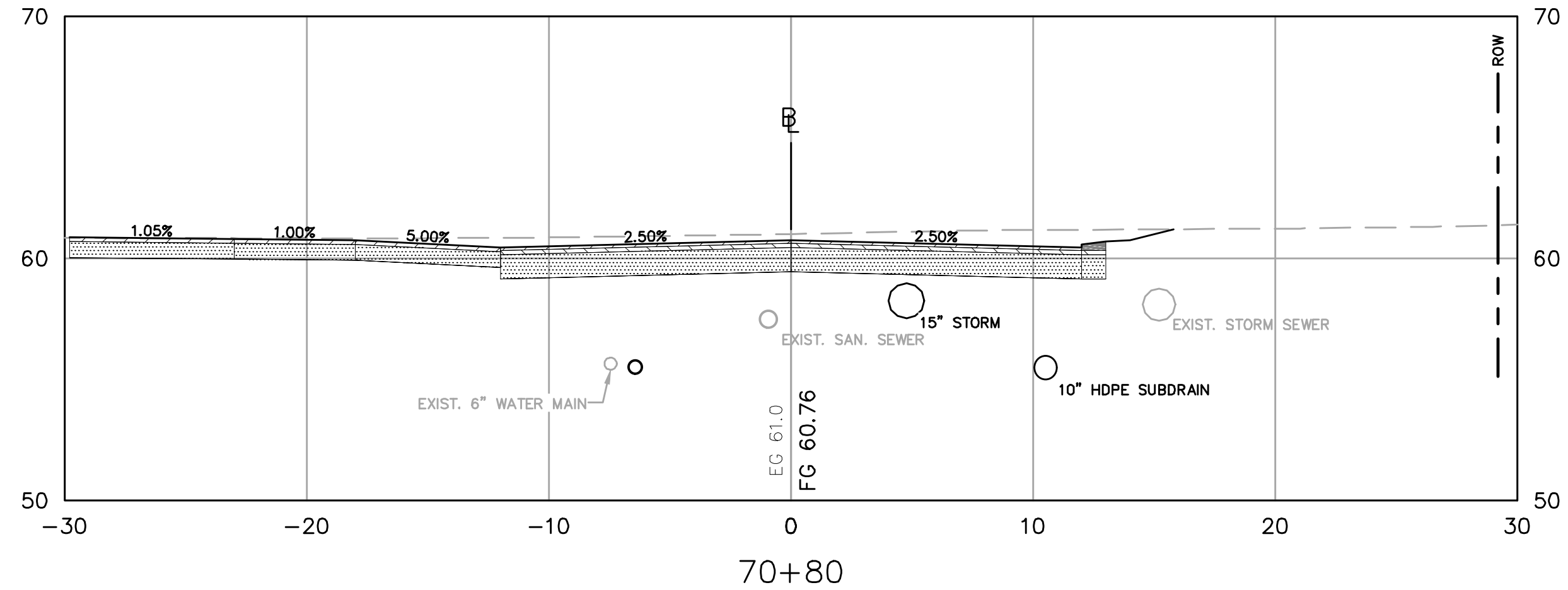
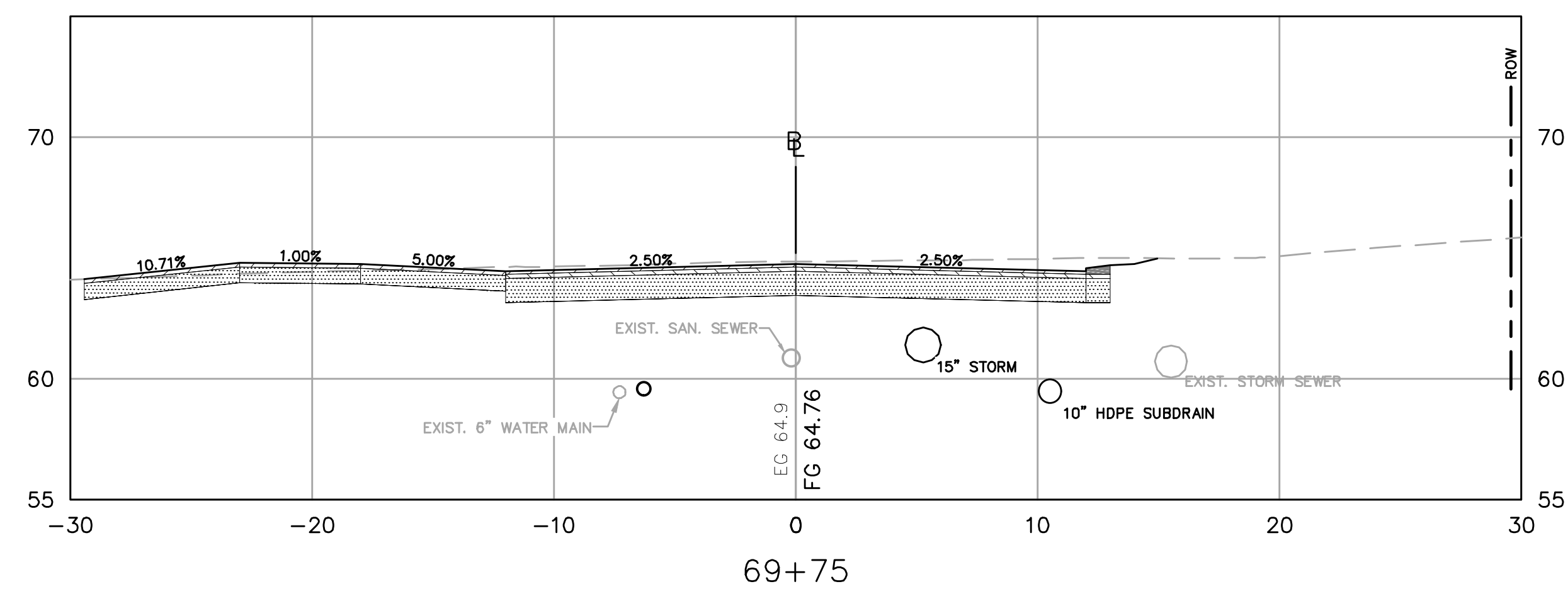
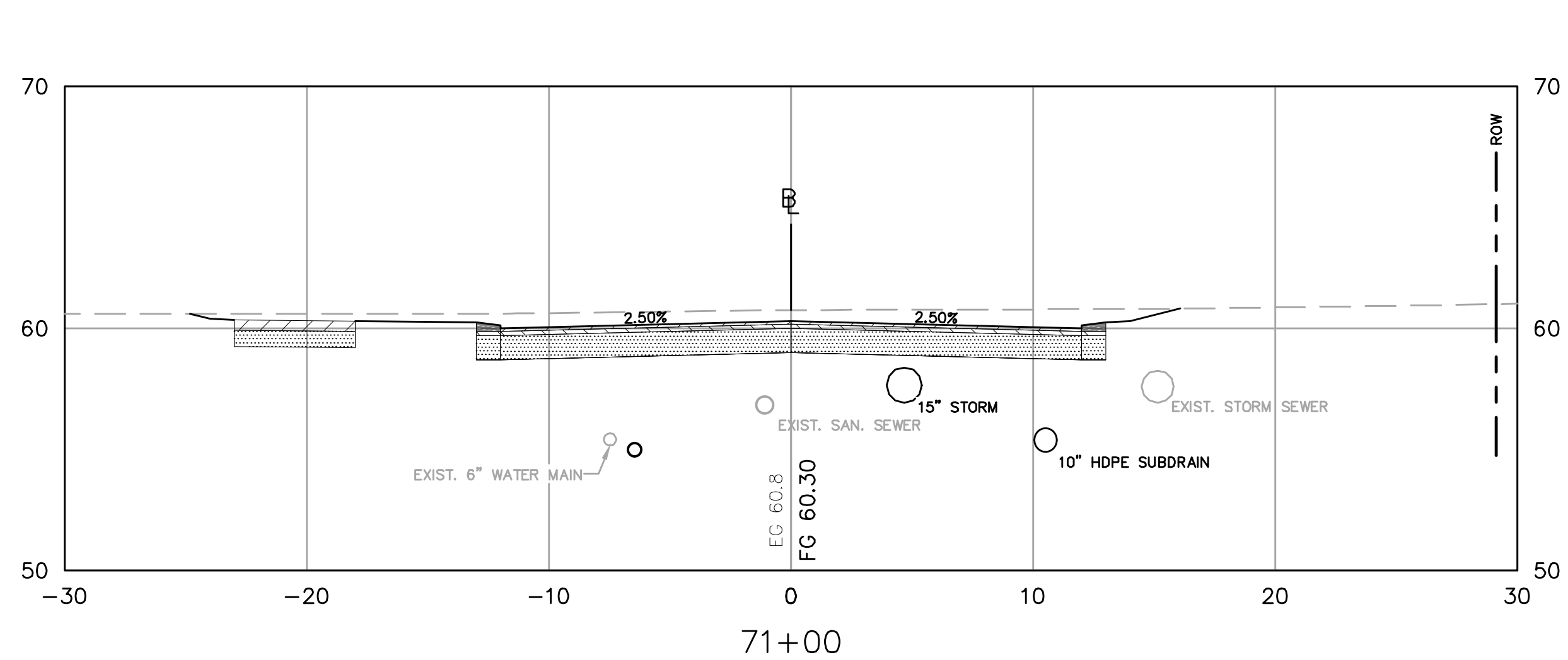
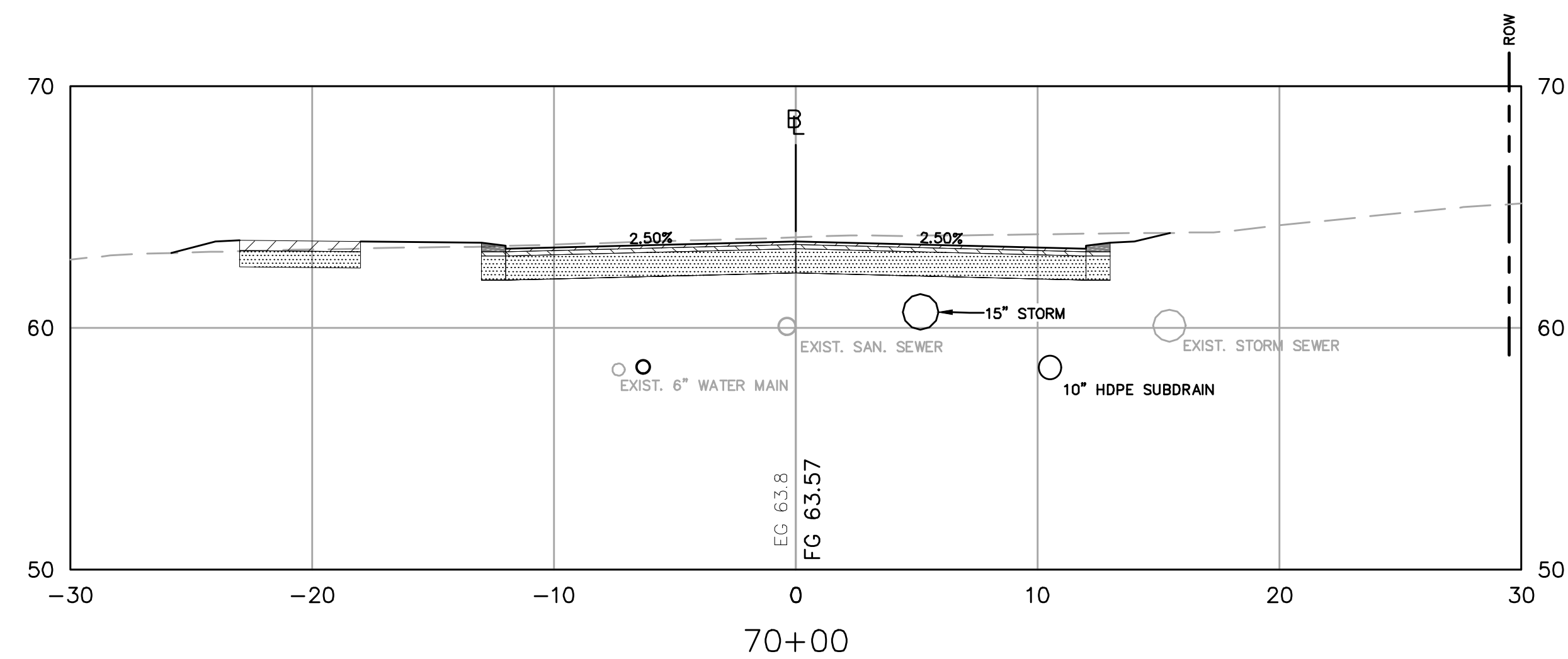
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NEWBURYPORT, MA 01950

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SCALE: 1" = 5'  
HORIZ. 0 2.5 5 10 FEET  
VERT. 0 2.5 5 10 FEET  
FILE: 8992300-XSEC.DWG  
DWG. NO:  
JOB. NO: 89923.00 **XS-18**



○ PROPOSED DUCTILE IRON WATER PIPE (SEE PLANS FOR SIZE)

**ISSUED FOR CONSTRUCTION**





ROADWAY, DRAINAGE & WATER MAIN IMPROVEMENTS - APRIL 2022

**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS

CROSS SECTIONS - DREW  
STREET  
STA. 73+75

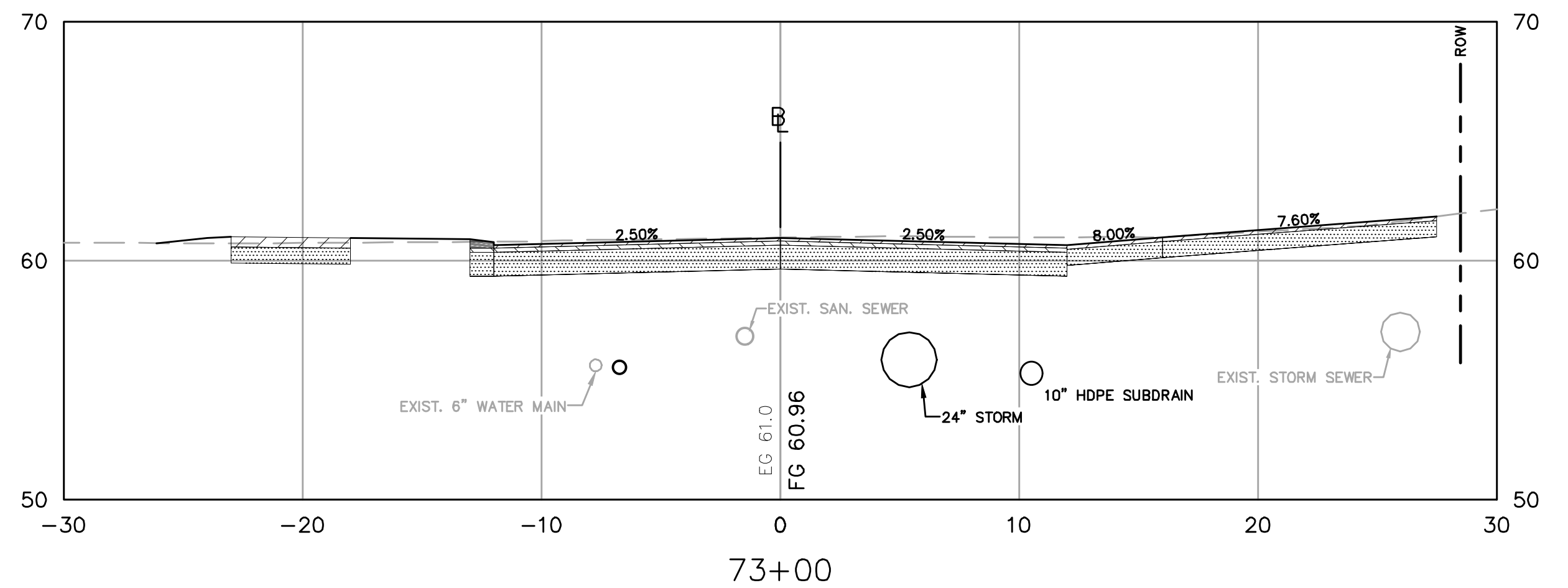
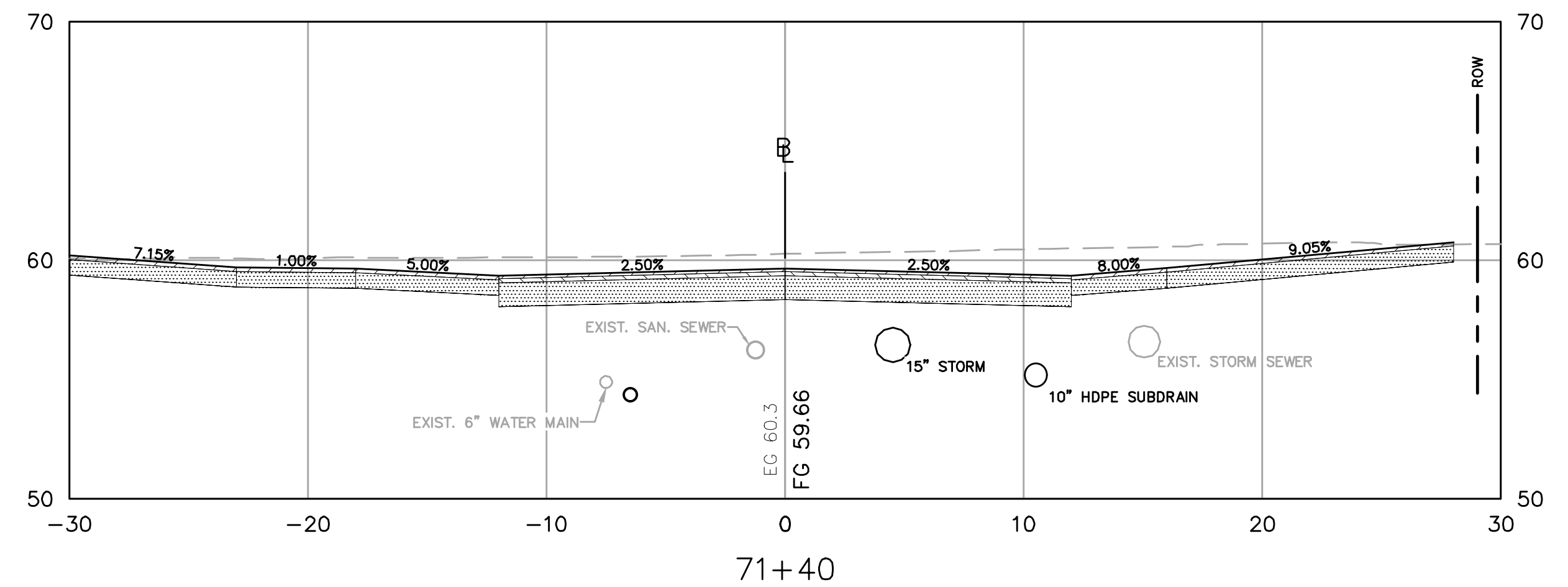
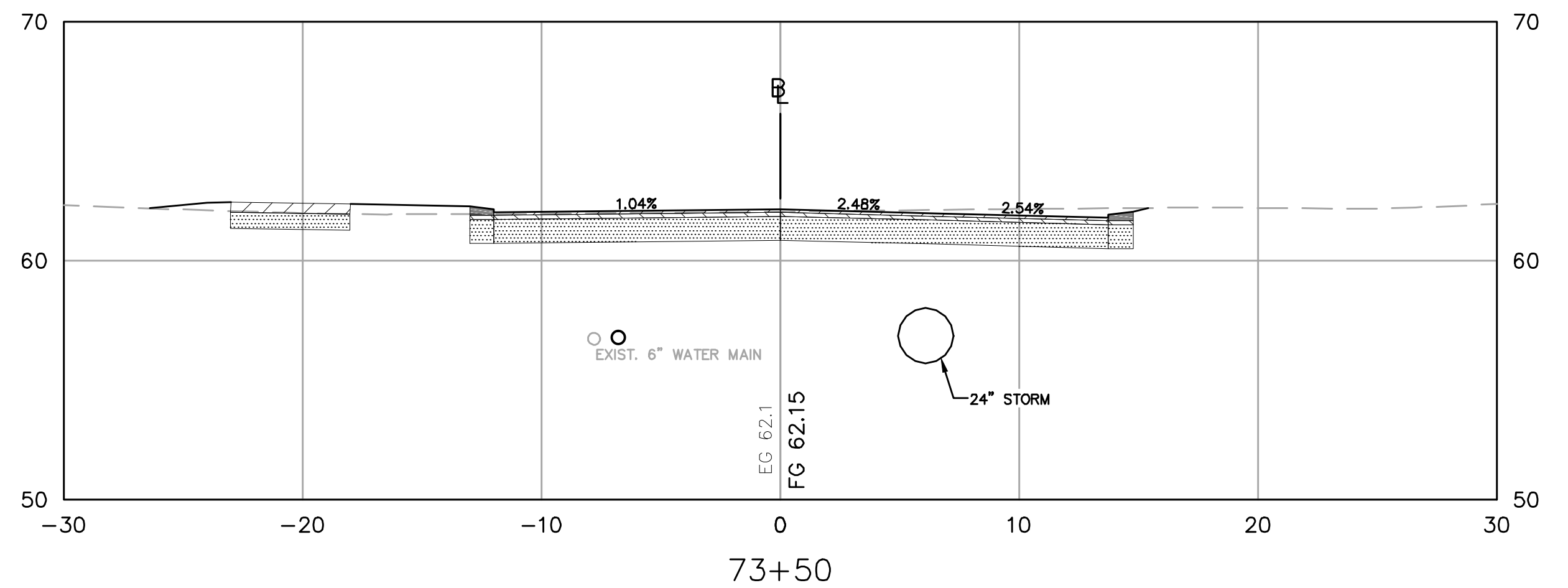
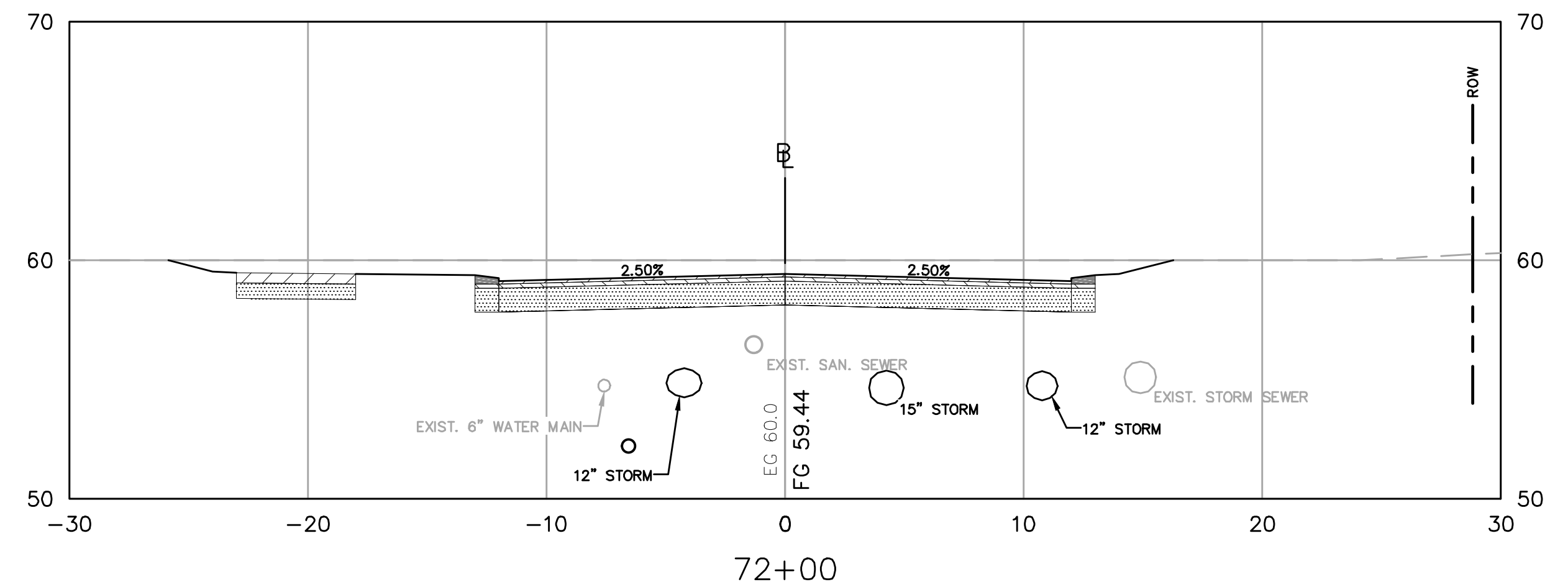
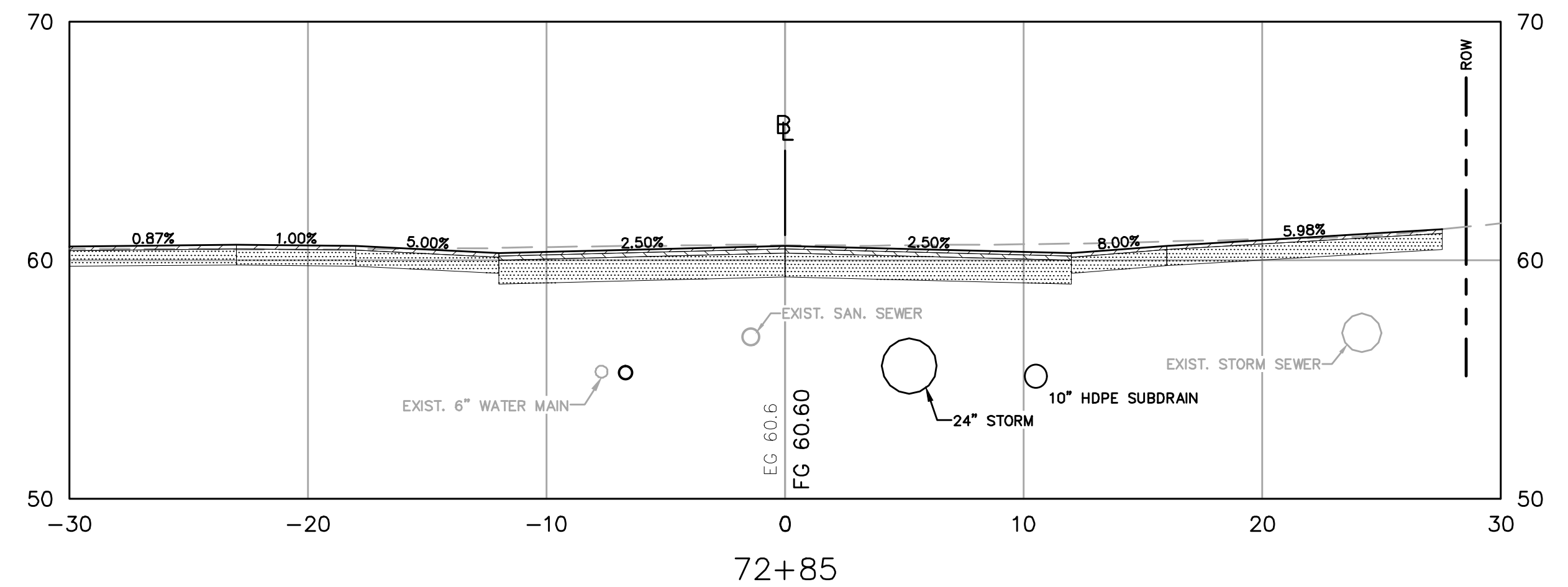
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HORIZ. 0 2.5 5 10 FEET  
VERT. 0 2.5 5 10 FEET  
FILE: 8992300-XSEC.DWG  
DWG. NO:  
JOB. NO: 89923.00 **XS-19**



○ PROPOSED DUCTILE IRON WATER PIPE (SEE PLANS FOR SIZE)

**ISSUED FOR CONSTRUCTION**





**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS

CROSS SECTIONS -  
SULLIVAN DRIVE  
STA. 80+50 TO STA. 82+85

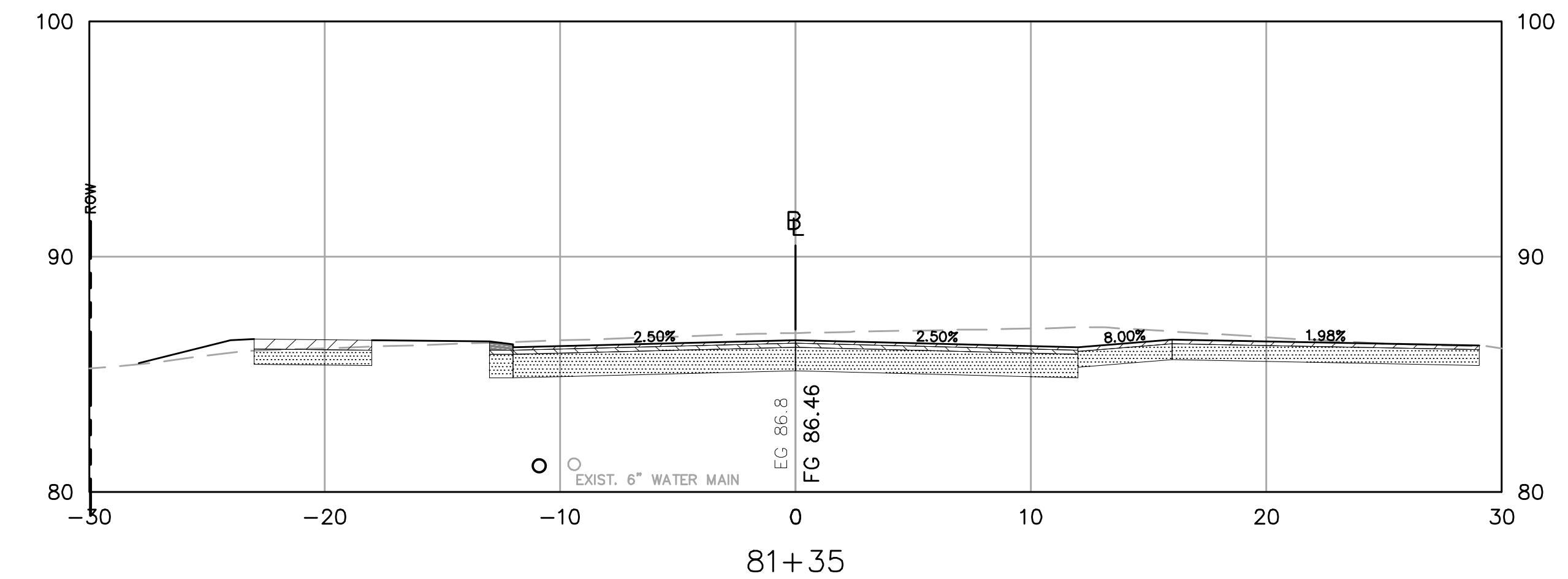
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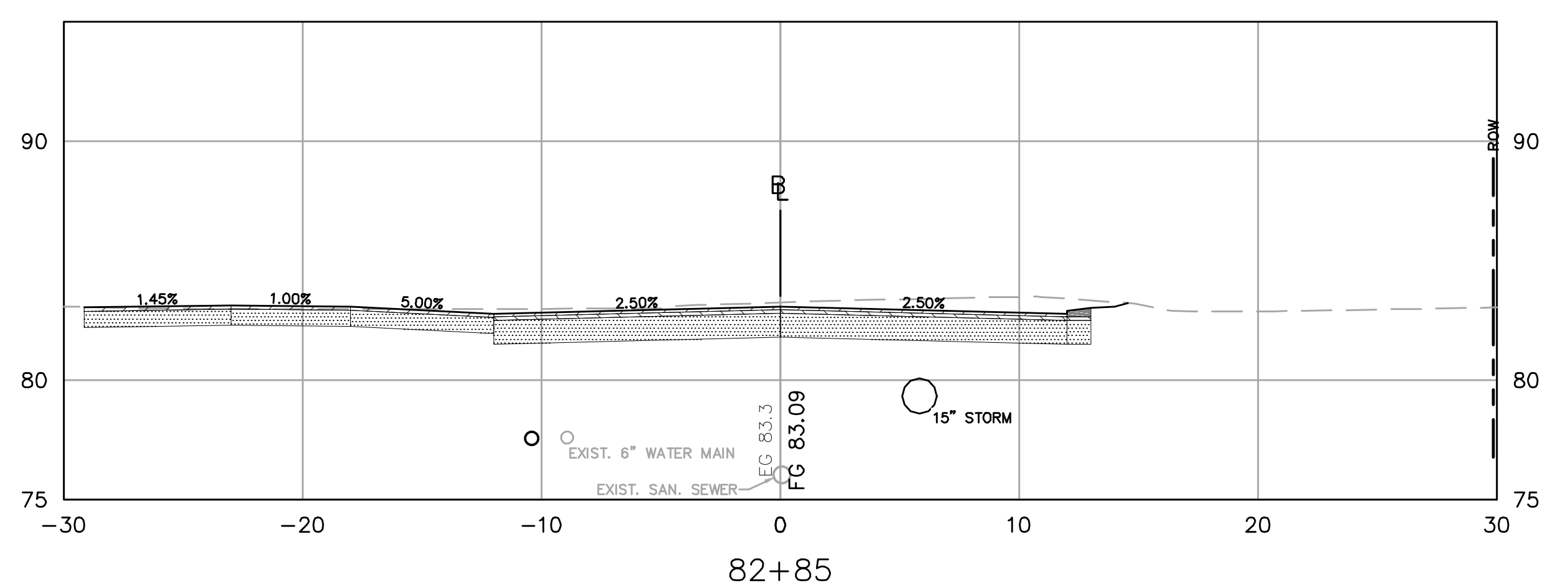

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617 896 4300

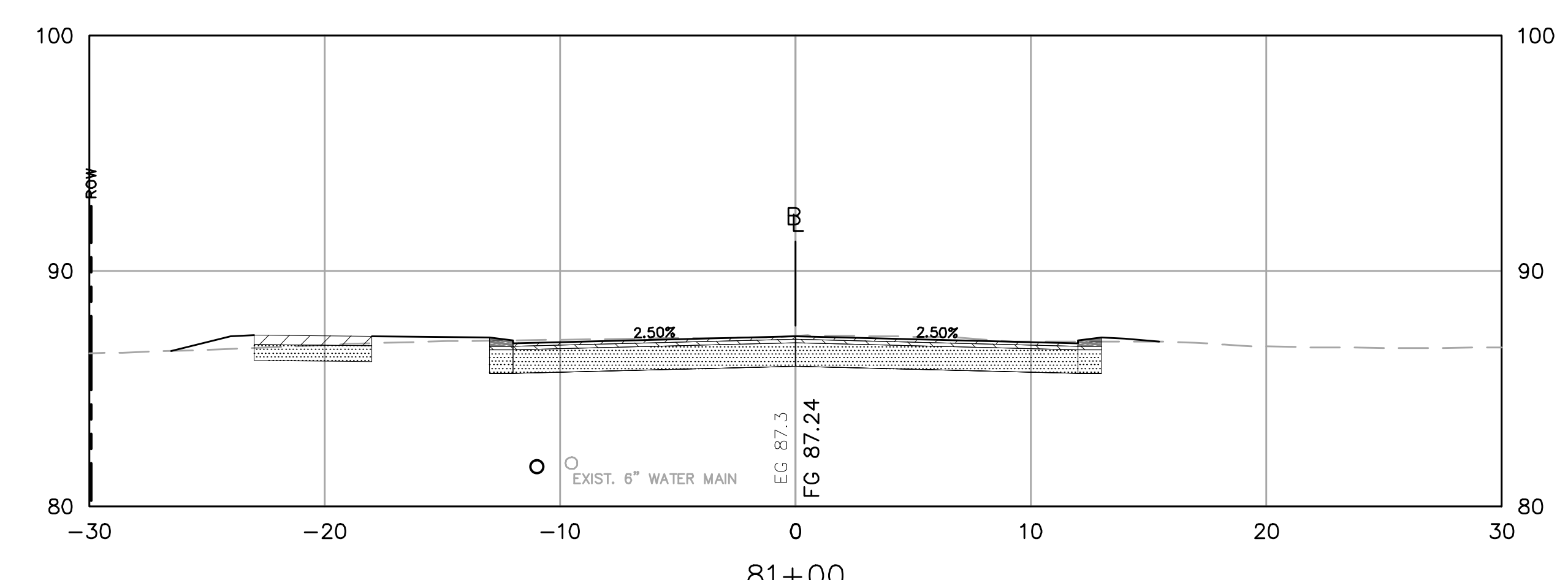
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DWG. NO:  
JOB. NO: 89923.00 **XS-20**



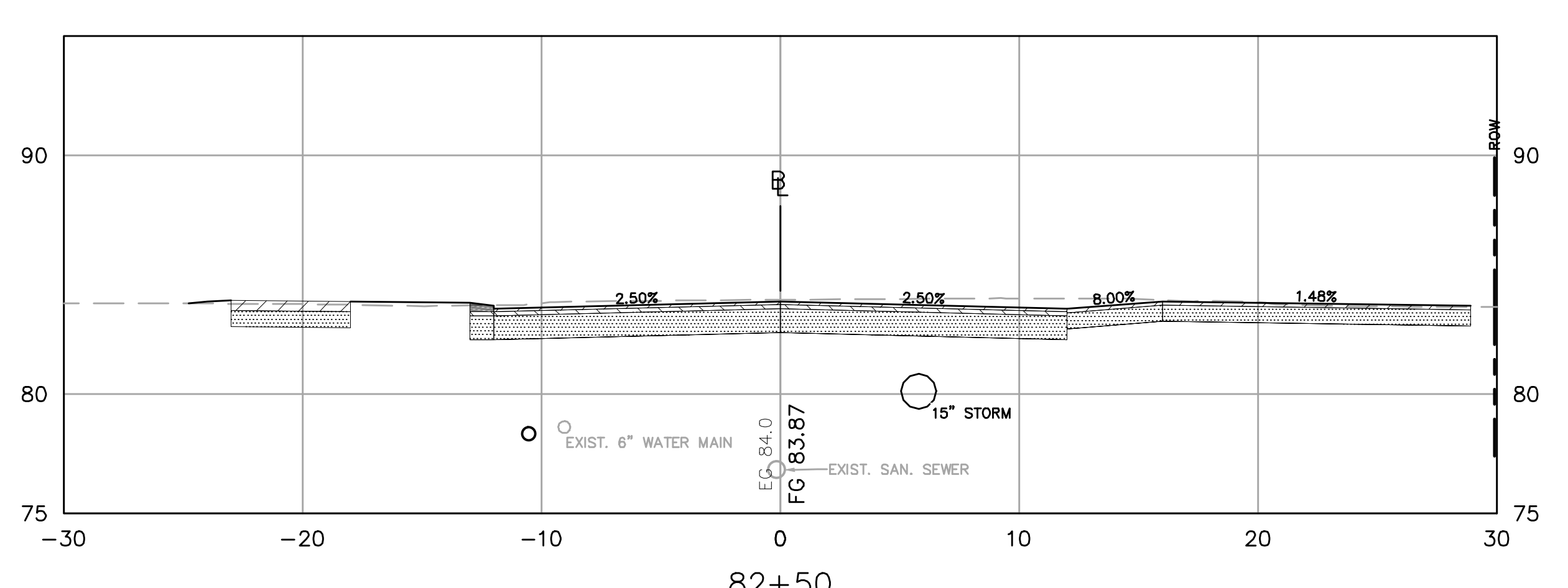
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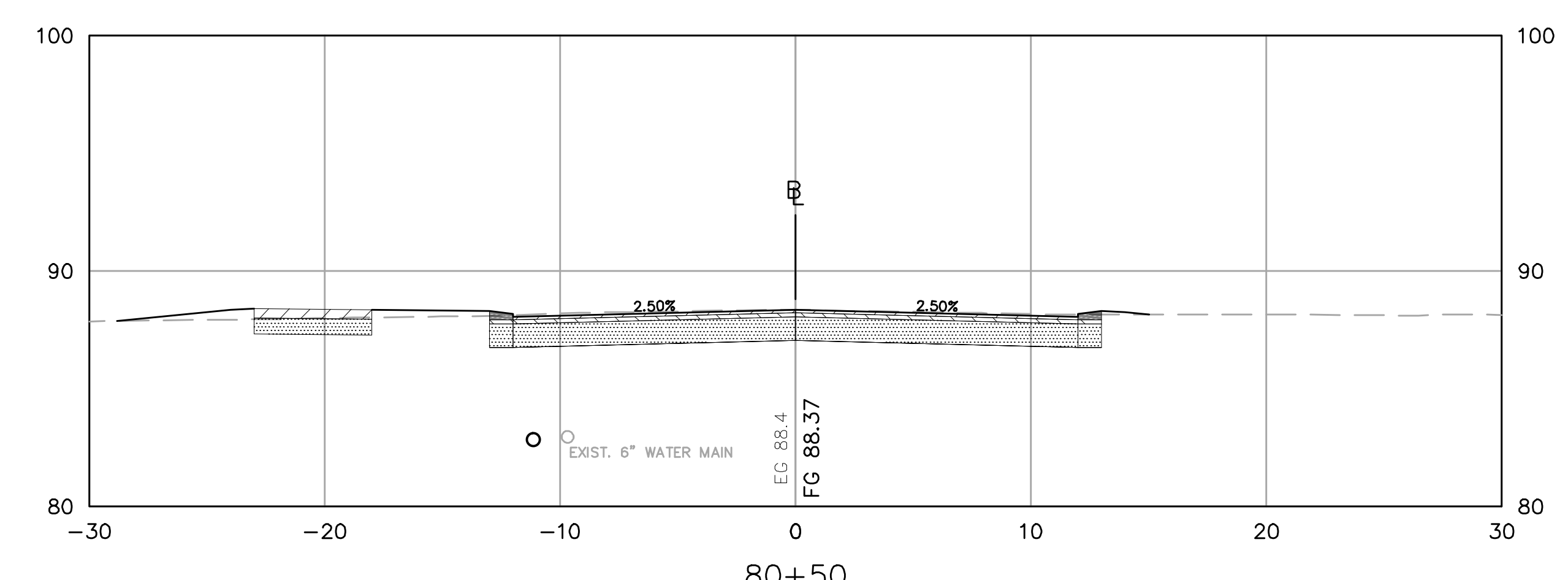
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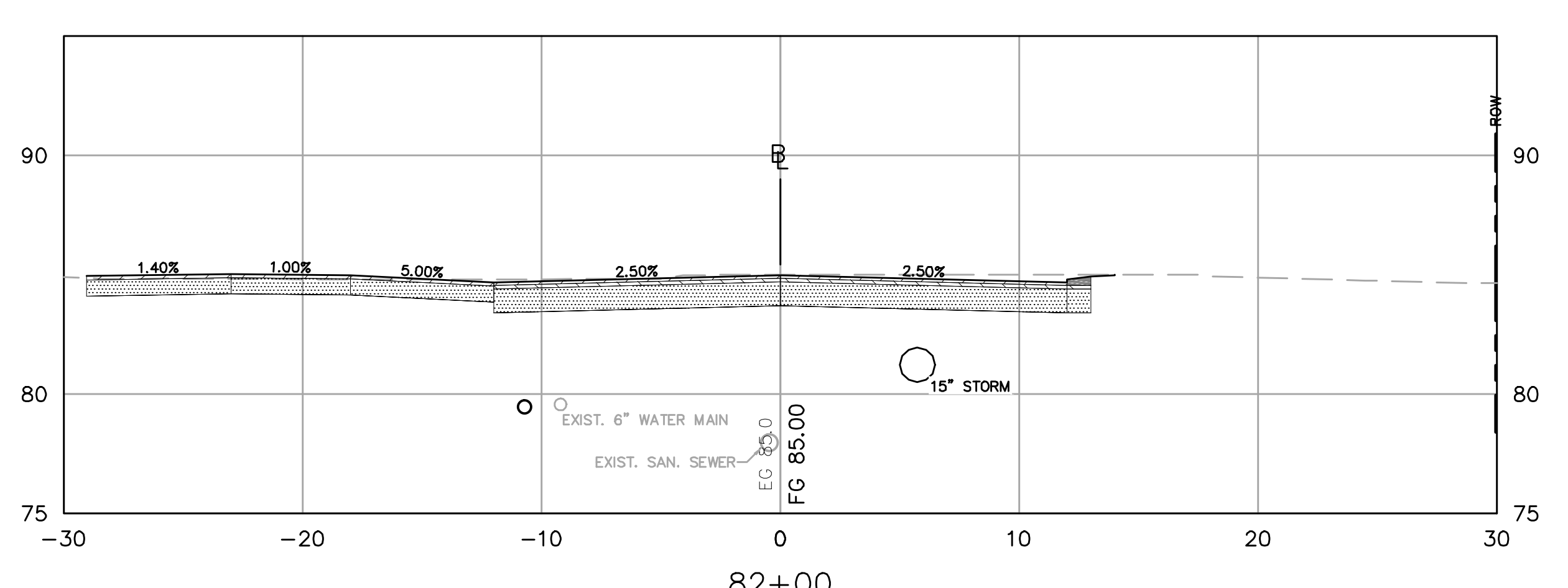
81+00



82+50



80+50



82+00

○ PROPOSED DUCTILE IRON WATER PIPE (SEE PLANS FOR SIZE)

**ISSUED FOR CONSTRUCTION**





**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS

CROSS SECTIONS -  
SULLIVAN DRIVE  
STA. 83+00 TO STA. 85+00

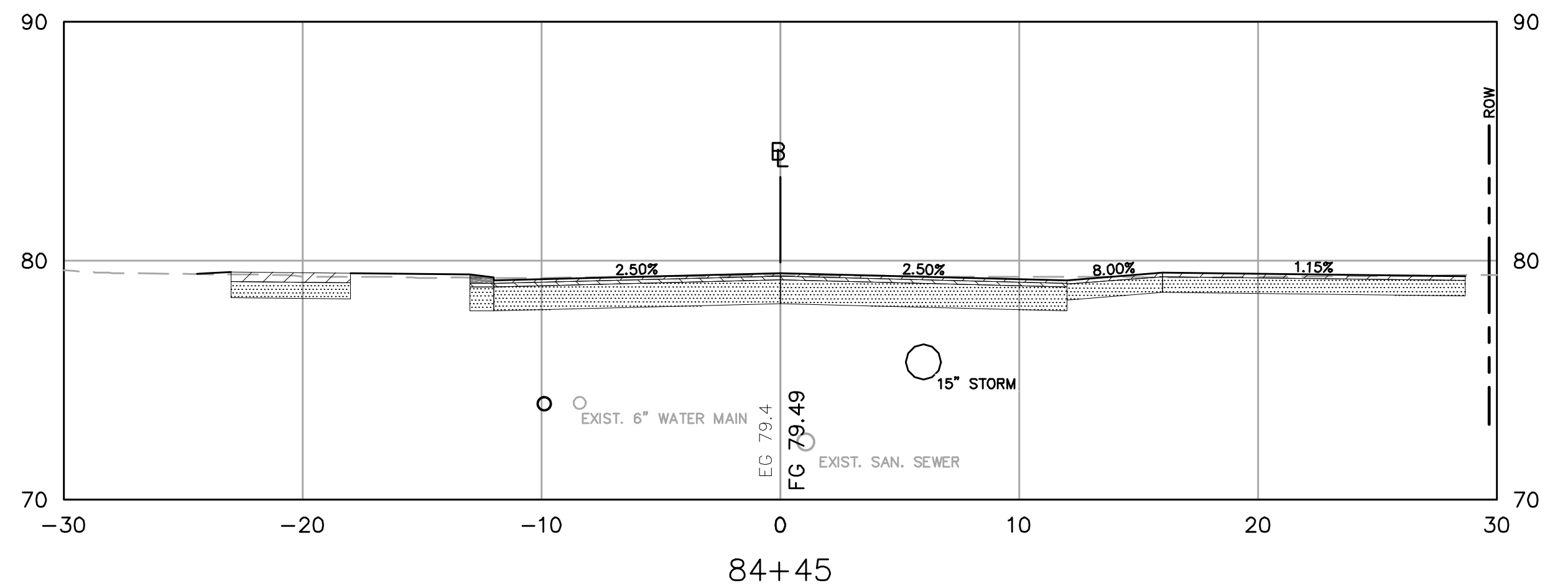
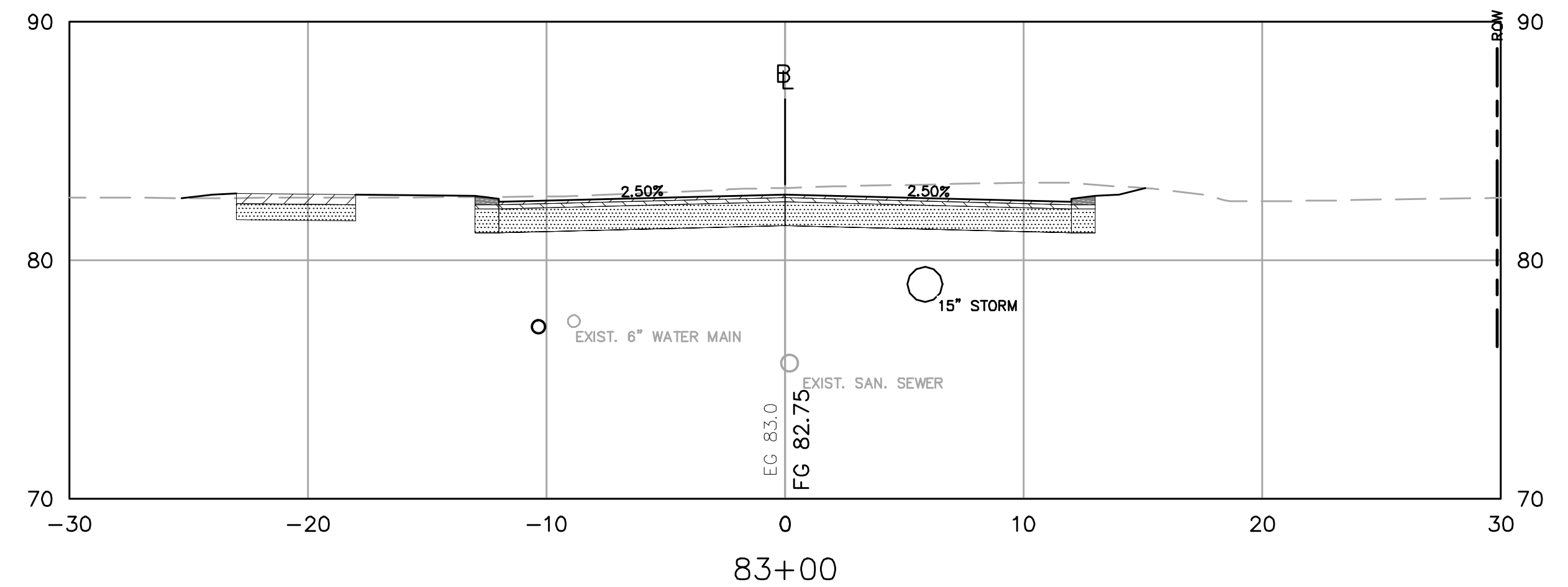
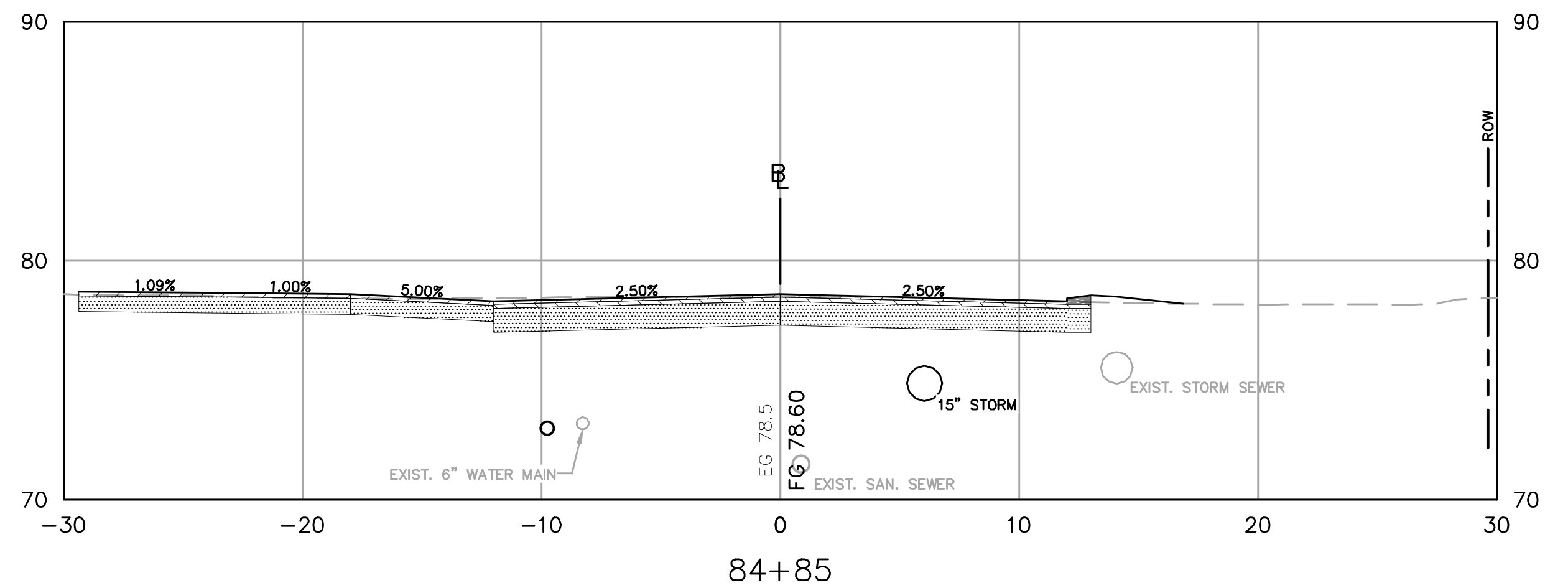
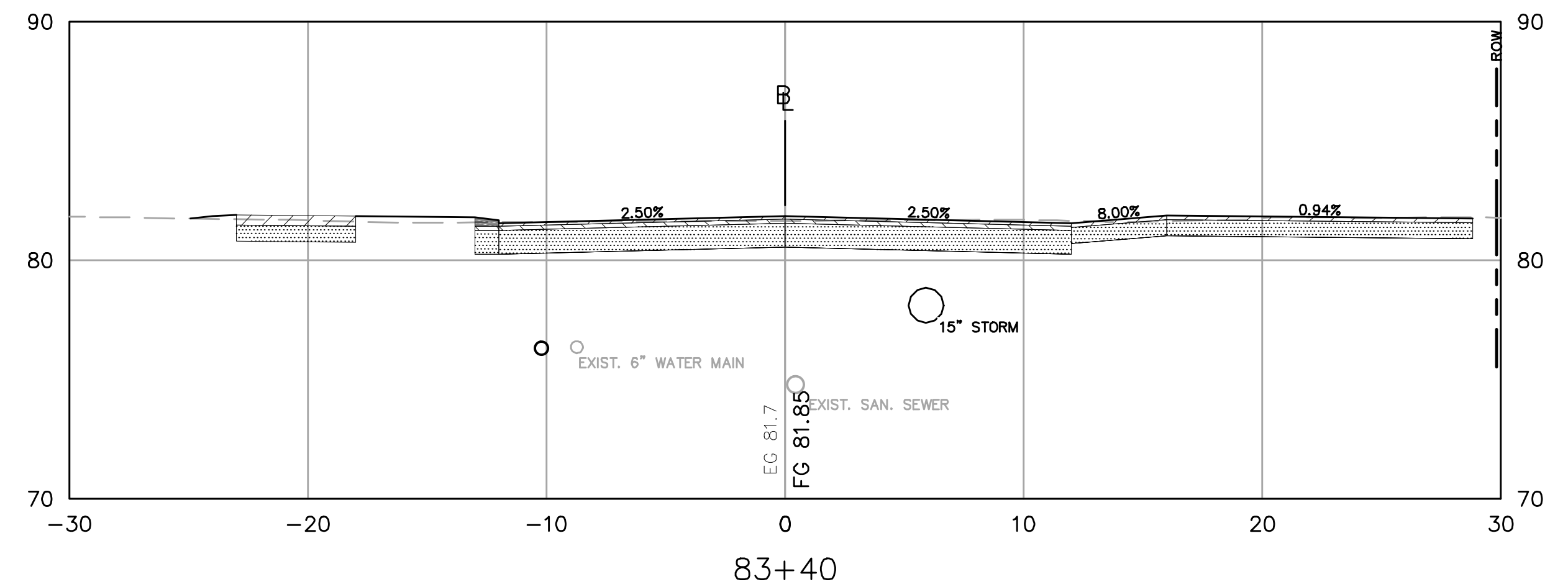
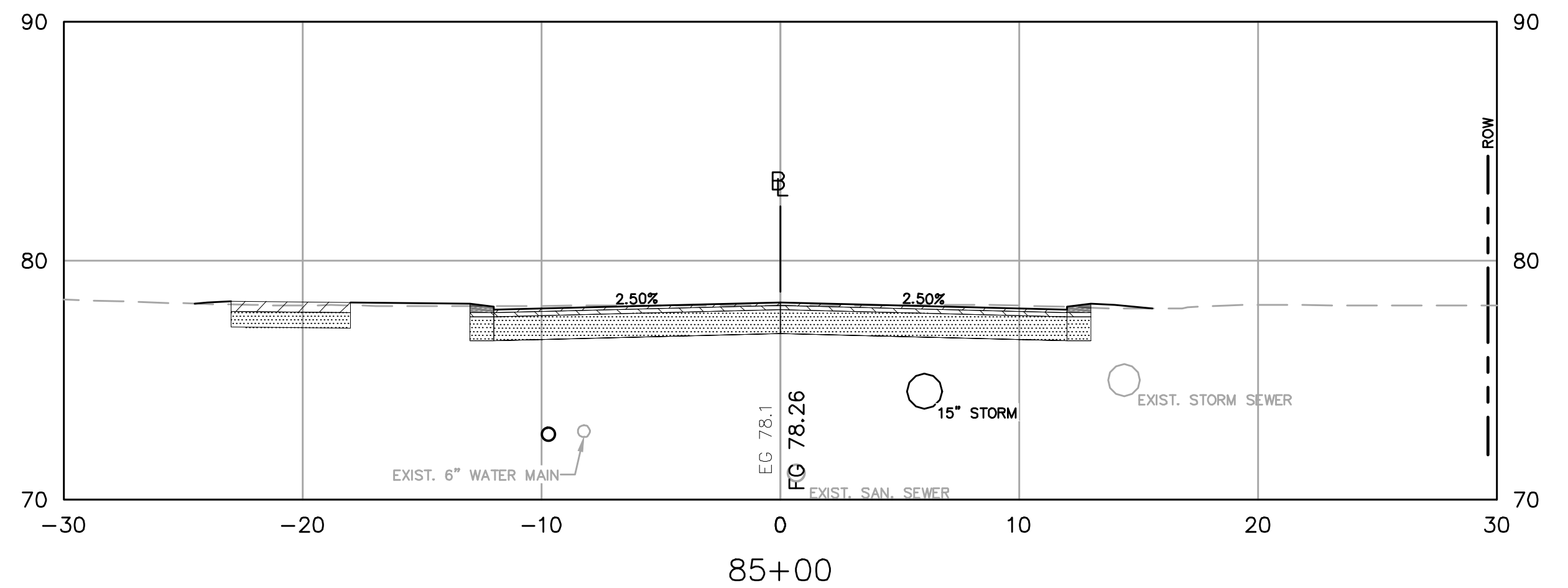
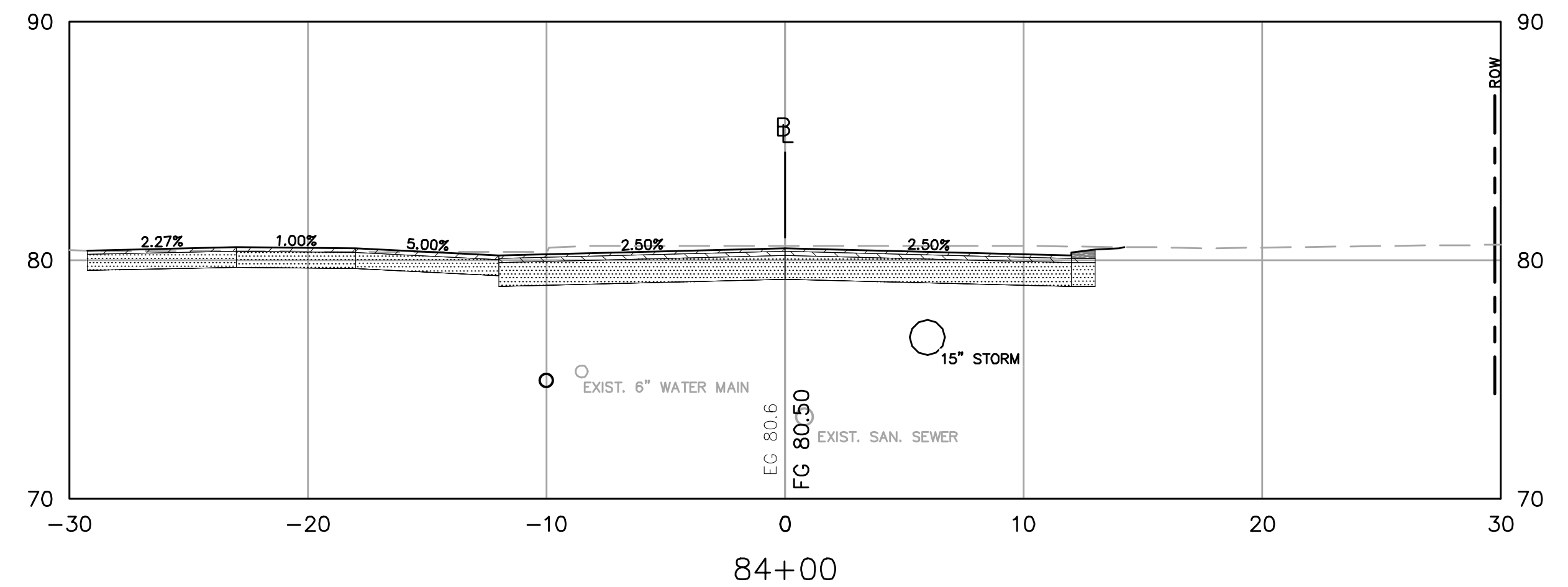
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617 896 4300

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SCALE: 1" = 5'  
HORIZ. 0 2.5 5 10 FEET  
VERT. 0 2.5 5 10 FEET  
FILE: 8992300-XSEC.DWG  
DWG. NO:  
JOB. NO: 89923.00 **XS-21**



○ PROPOSED DUCTILE IRON WATER PIPE (SEE PLANS FOR SIZE)

**ISSUED FOR CONSTRUCTION**





ROADWAY, DRAINAGE & WATER MAIN IMPROVEMENTS - APRIL 2022

**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS

CROSS SECTIONS -  
SULLIVAN DRIVE  
STA. 85+30 TO STA. 88+00

APRIL 2022

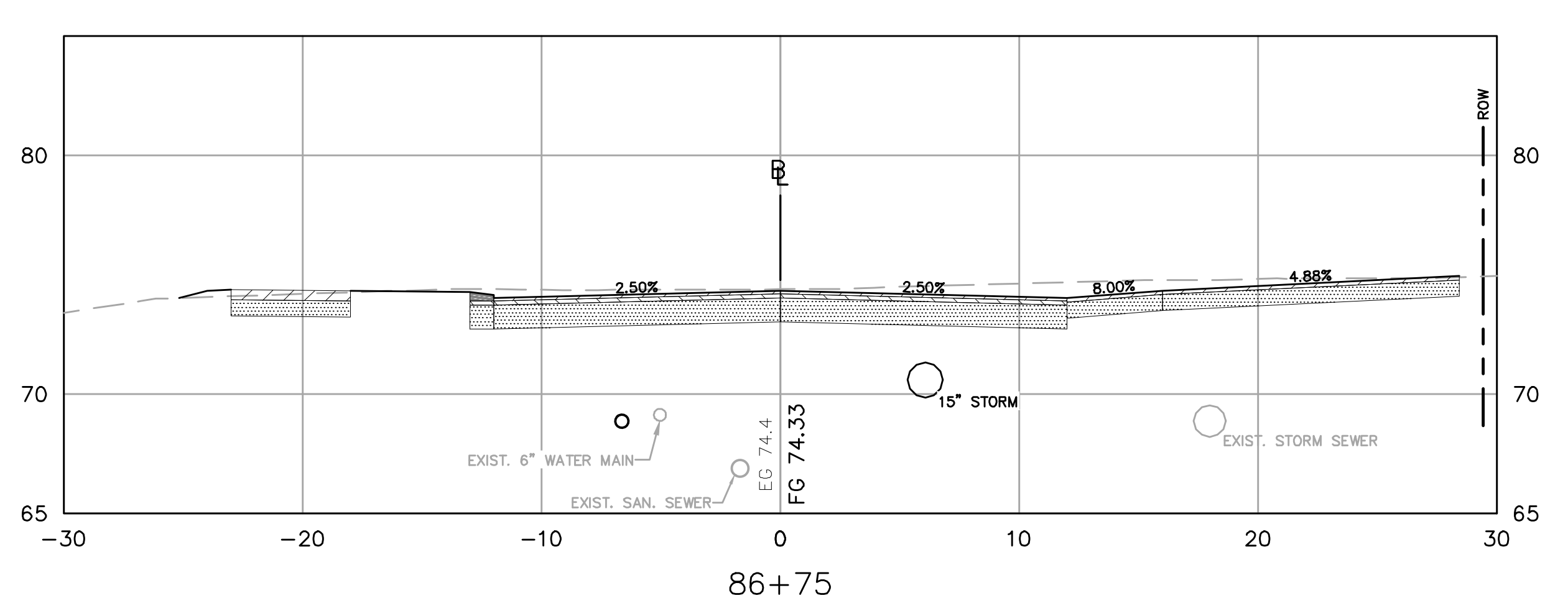
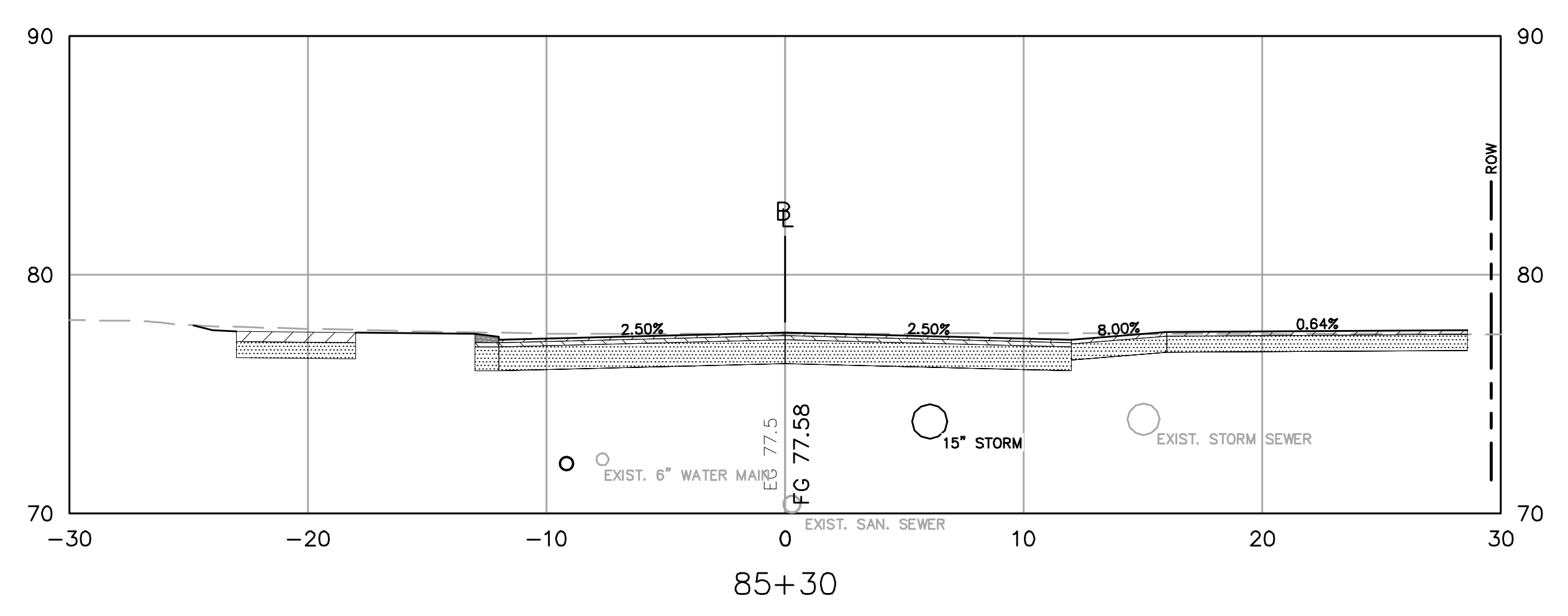
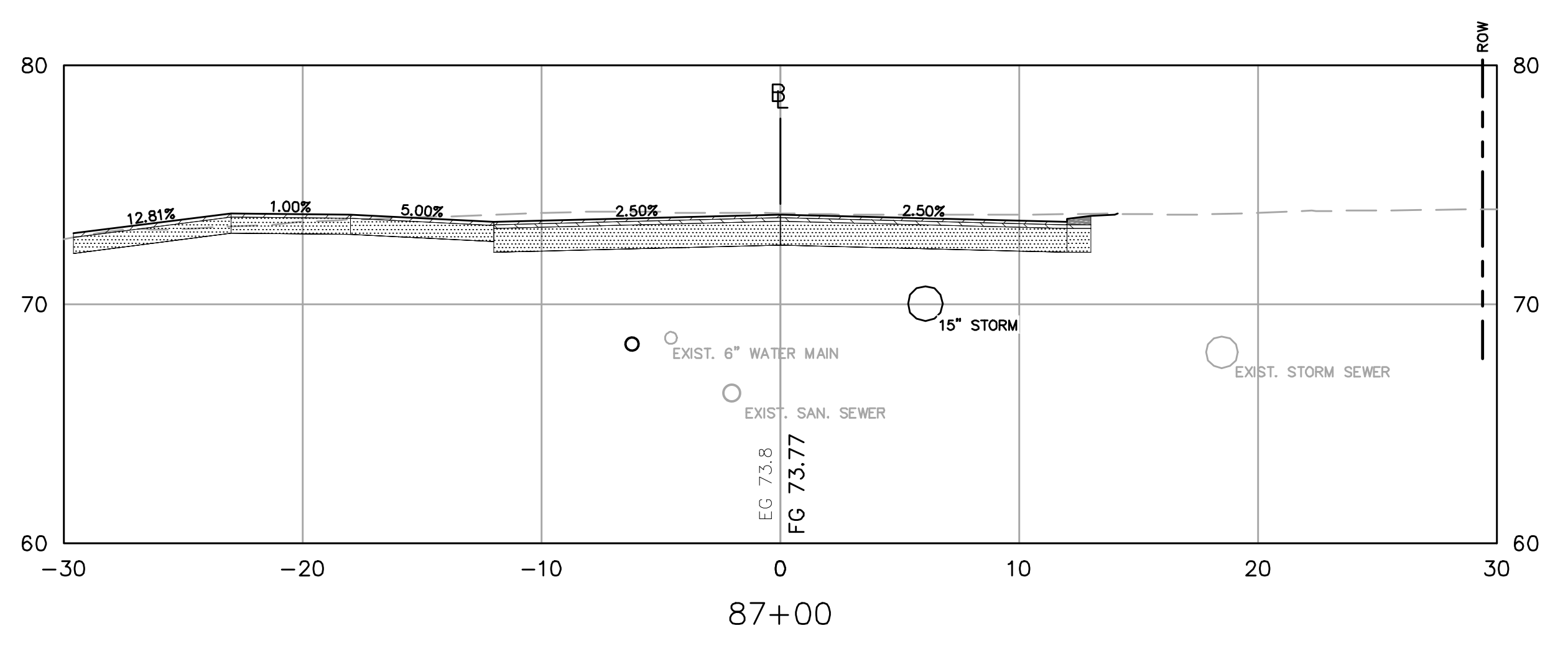
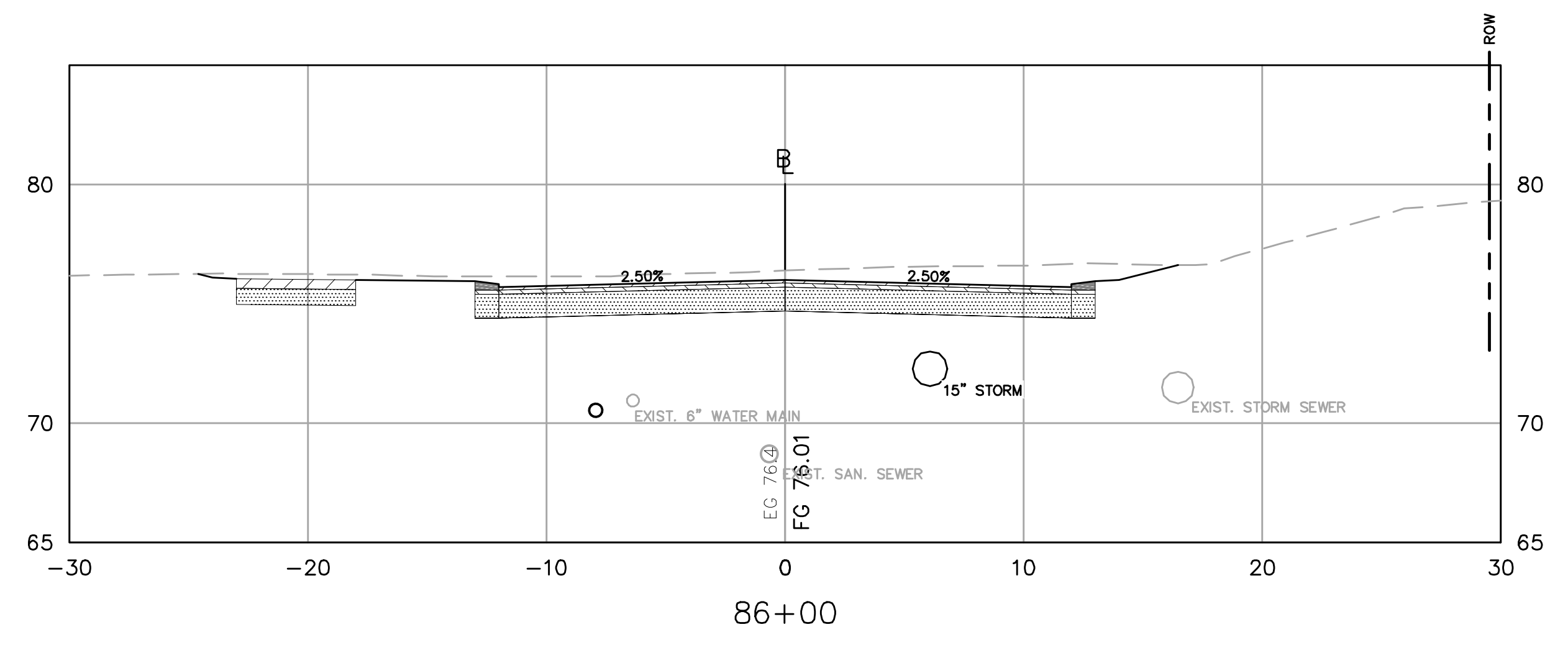
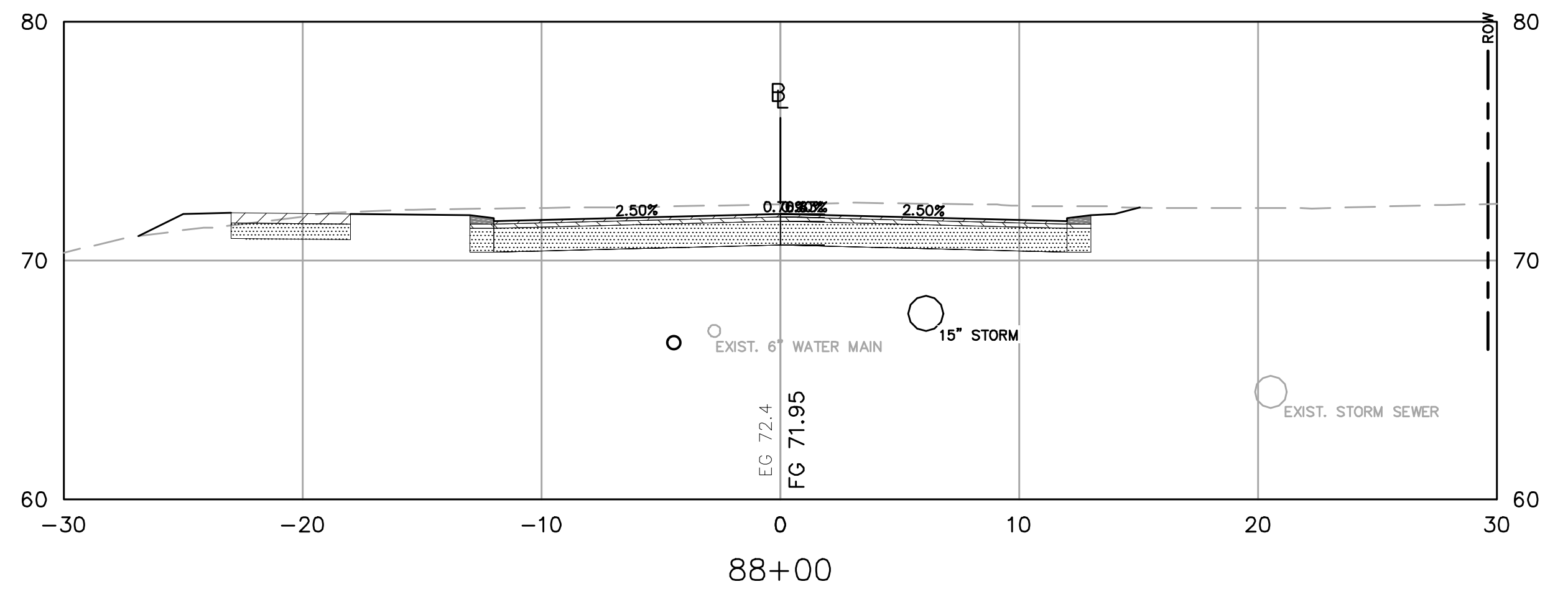
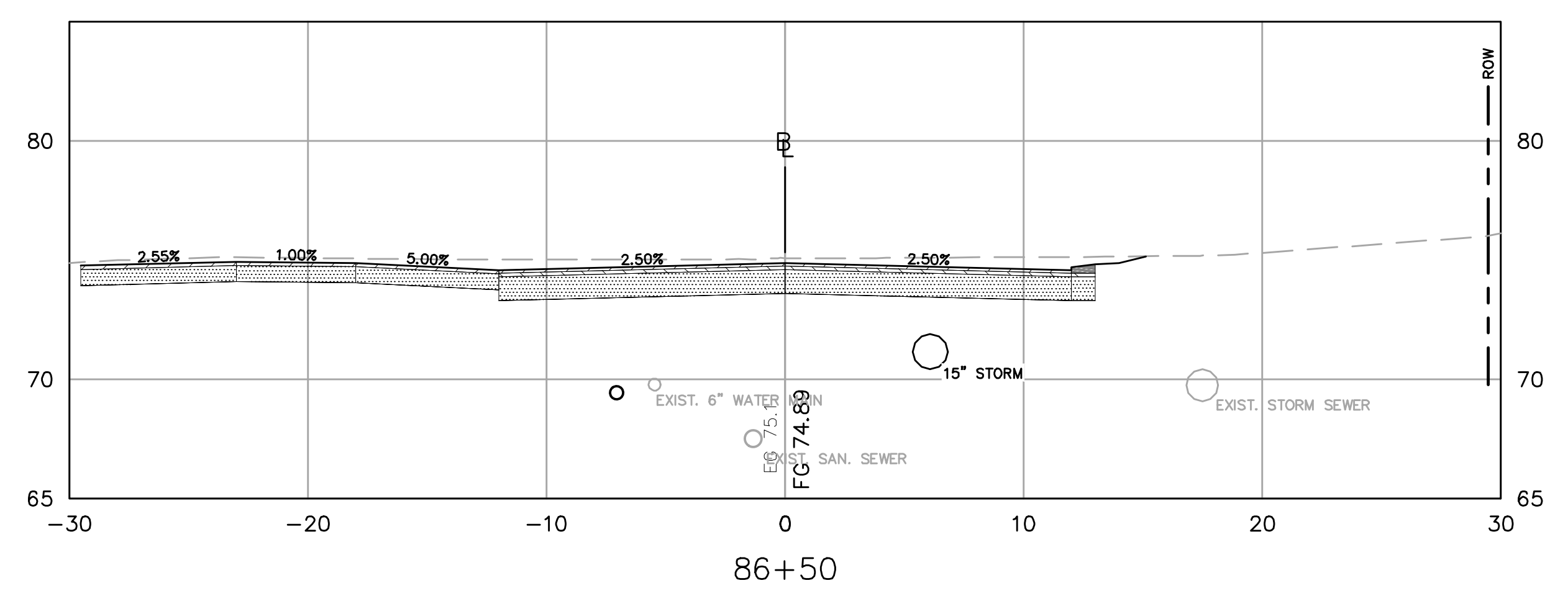
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16A PERRY WAY  
NEWBURYPORT, MA 01950

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Andover, Massachusetts 01810  
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SCALE: 1" = 5'  
HORIZ. 0 2.5 5 10 FEET  
VERT. 0 2.5 5 10 FEET  
FILE: 8992300-XSEC.DWG  
DWG. NO:  
JOB. NO: 89923.00

**XS-22**



○ PROPOSED DUCTILE IRON WATER PIPE (SEE PLANS FOR SIZE)

**ISSUED FOR CONSTRUCTION**





ROADWAY, DRAINAGE & WATER MAIN IMPROVEMENTS - APRIL 2022

**ROADWAY,  
DRAINAGE & WATER  
MAIN  
IMPROVEMENTS**

PHILIPS DRIVE  
NEIGHBORHOOD  
IN  
NEWBURYPORT  
MASSACHUSETTS

CROSS SECTIONS -  
SULLIVAN DRIVE  
STA. 86+25

APRIL 2022

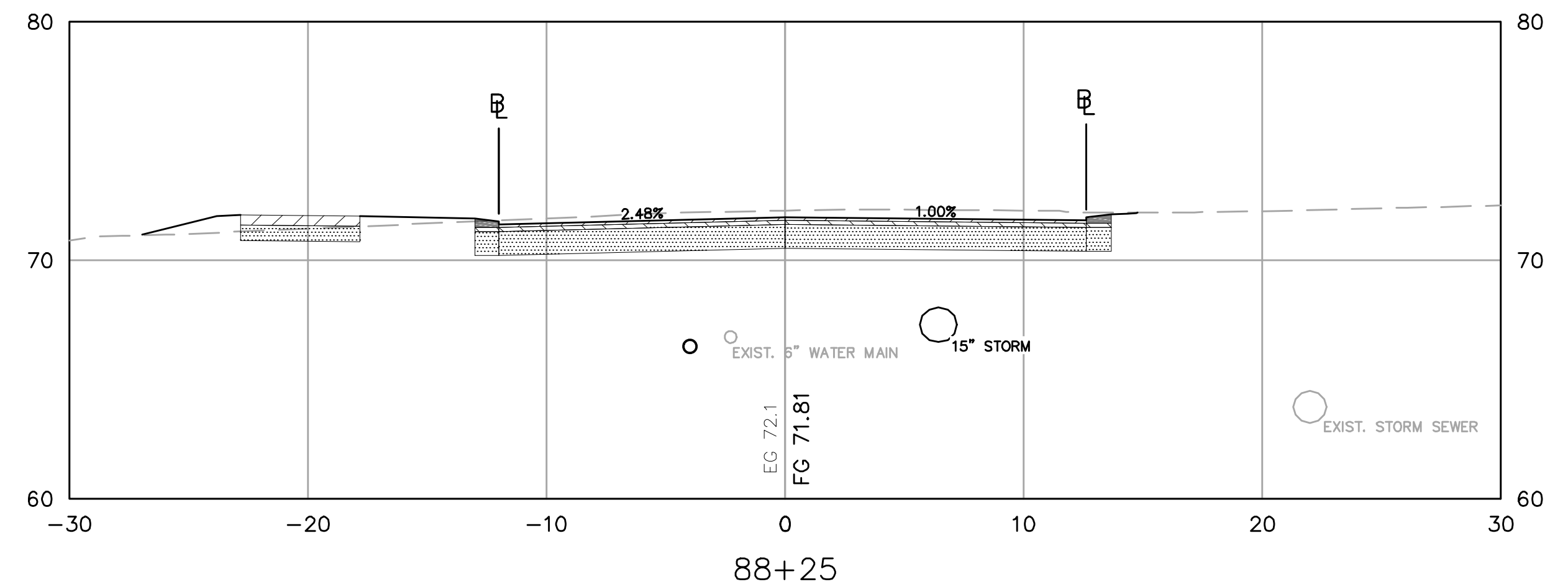
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16A PERRY WAY  
NEWBURYPORT, MA 01950

**BSC GROUP**  
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SCALE: 1" = 5'  
HORIZ. 0 2.5 5 10 FEET  
VERT. 0 2.5 5 10 FEET  
FILE: 8992300-XSEC.DWG  
DWG. NO:  
JOB. NO: 89923.00

**XS-23**



○ PROPOSED DUCTILE IRON WATER PIPE (SEE PLANS FOR SIZE)

**ISSUED FOR CONSTRUCTION**