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 REVISED: 9/27/13 - MANDERSON

# CITY OF CELINA, TEXAS

CONSTRUCTION PLANS FOR

## ADDITION TO THE WASTEWATER COLLECTION SYSTEM

- ABANDONMENT OF CARTER RANCH LIFT STATION NO. 1
- DOE BRANCH TRUNK SEWER EXTENSION
- ~~RECONSTRUCTION OF SHAWNEE LIFT STATION (ADDITIVE ALTERNATE BID)~~

TWDB CWSRF NO. 72149-02

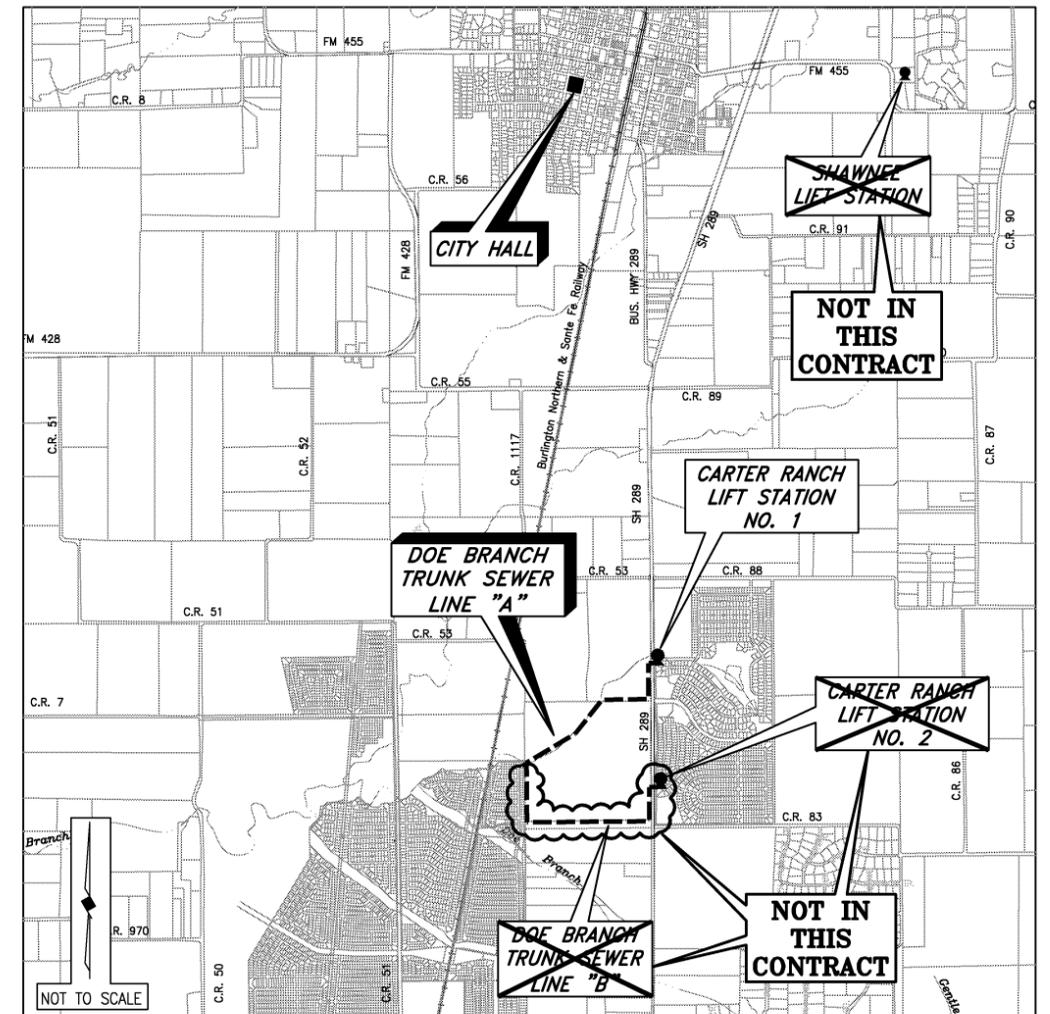
### CITY COUNCIL

- JIM LEWIS, MAYOR  
 LARRY BERG, MAYOR PRO-TEM  
 WAYNE NABORS  
 DEWY ISHAM  
 CARMAEN ROBERTS  
 BILL WEBBER  
 SEAN TERRY  
CITY MANAGER  
 MIKE FOREMAN  
CITY SECRETARY  
 VICKI FAULKNER

**CONTRACTOR:** DICKERSON CONSTRUCTION CO.  
 ADDRESS/PHONE NO. P.O. BOX 181  
 CELINA, TEXAS 75009  
**PROJECT SUPERINTENDENT:** HILAILO MERCADO  
**CITY INSPECTOR:** JOSEPH JOHNSON  
**FINAL CONTRACT AMOUNT:** \$312,247.00  
**FINAL COMPLETION DATE:** JULY 1, 2013



PREPARED BY  
**BIRKHOFF, HENDRICKS & CARTER, L.L.P.**  
 PROFESSIONAL ENGINEERS  
 Texas Firm F526  
 Dallas, Texas  
 August, 2012



LOCATION MAP

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 BY GCH DATE 9/27/13

NOT IN THIS CONTRACT

NOT IN THIS CONTRACT

01-30-2012



**CONFORMED SET**

**GENERAL NOTES**

1. THE CONTRACTOR SHALL HAVE IN HIS POSSESSION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ALL NECESSARY PERMITS, LICENSES, ETC.
2. ALL WORK SHALL CONFORM TO THE N.C.T.C.O.G. STANDARDS AND SPECIFICATIONS, FOURTH EDITION, 2004, UNLESS OTHERWISE INDICATED ON THE PLANS AND SPECIFICATIONS, THE DISTRICT ENGINEER'S DECISION SHALL APPLY. IN THE EVEN OF A CONFLICT WITH N.C.T.C.O.G., THE DESIGN ENGINEER SHALL BE NOTIFIED TO PROVIDE CLARIFICATION.
3. PRIOR TO ANY CONSTRUCTION THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE CONTRACT DOCUMENTS, SPECIFICATIONS, AND PLANS INCLUDING ALL NOTES. FAILURE ON THE PART OF THE CONTRACTOR TO FAMILIARIZE HIMSELF WITH THE DESIGNATED STANDARDS AND SPECIFICATIONS PERTAINING TO THIS WORK SHALL IN NO WAY RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY FOR PERFORMING THE WORK IN ACCORDANCE WITH ALL SUCH STANDARDS AND SPECIFICATIONS.
4. THE OWNERS ENGINEER WILL PERFORM CERTAIN CONSTRUCTION STAKING. REFERENCE THE CONSTRUCTION DOCUMENTS, WHICH OUTLINE THE SCOPE OF THIS SERVICE.
5. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE THE PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
6. IT WILL BE THE RESPONSIBILITY OF EACH CONTRACTOR TO PROTECT ALL EXISTING PUBLIC AND PRIVATE UTILITIES THROUGHOUT THE CONSTRUCTION OF THIS PROJECT. CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANIES FOR LINE LOCATIONS AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL ASSUME FULL LIABILITY TO THOSE COMPANIES FOR ANY DAMAGES CAUSED TO THEIR FACILITIES.  
 CITY OF CELINA, GENERAL INFORMATION (972) 382-2682  
 COSERV (800) 274-4014  
 UPPER TRINITY REGIONAL WATER DISTRICT (972) 219-1228  
 GTE TELECOMMUNICATIONS (800) 344-8377  
 TXU ELECTRIC (817) 992-6204  
 ATMOS ENERGY (FIELD ENGINEER ROBIN RICHARDSON) (972) 485-6204
7. ALL CONTRACTORS MUST CONFINE THEIR ACTIVITIES TO THE WORK AREA. NO ENCRoACHMENTS ONTO ADJACENT DEVELOPED OR UNDEVELOPED PROPERTY AREAS WILL BE ALLOWED UNLESS SPECIFIED IN THE PLANS. ANY DAMAGE RESULTING THEREFROM SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR.
8. OTHER CONSTRUCTION MAY BE UNDERWAY AT THE SAME TIME AND IN THE GENERAL AREA OF THE SUBJECT PROJECT. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY AND COORDINATE WITH OTHER CONTRACTORS TO DETERMINE A CONSTRUCTION SCHEDULE THAT WILL OFFER THE LEAST HINDRANCE TO ALL INVOLVED. THE OWNER'S ENGINEER WILL BE NOTIFIED OF ALL COORDINATION. IN THE EVENT OF A SCHEDULING CONFLICT THE OWNER'S ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
9. CONSTRUCTION INSPECTION WILL BE PERFORMED BY REPRESENTATIVES OF THE OWNER, ENGINEER, GEOTECHNICAL ENGINEER, AND REVIEWING AUTHORITIES AND AGENCIES. UNRESTRICTED ACCESS SHALL BE PROVIDED TO THE THEM AT ALL TIMES. CONTRACTOR IS RESPONSIBLE FOR UNDERSTATING AND SCHEDULING REQUIRED INSPECTIONS.
10. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE AND MAINTAIN ALL NECESSARY WARNING AND SAFETY DEVICES (FLASHING LIGHTS, BARRICADES, SIGNS, ETC., IN CONFORMANCE WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL, LATEST EDITION) TO PROTECT PUBLIC SAFETY AND HEALTH UNTIL THE WORK HAS BEEN COMPLETED AND ACCEPTED BY THE DISTRICT.
11. SEE SPECIAL PROVISION REGARDING SAVING AND PROTECTION OF TREES THAT ARE NOT TO BE CLEARED. (SPECIAL CONDITION PG. #7)
12. IF NATIVE GRASS, LITTLE BLUE STEM-INDIAN GRASS IS PRESENT, THE AREA SHALL BE RESTORED TO ITS ORIGINAL OR HIGHER QUALITY CONDITION.
13. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE CORPS OF ENGINEERS NATIONWIDE PERMIT NO. 12, IF APPLICABLE.

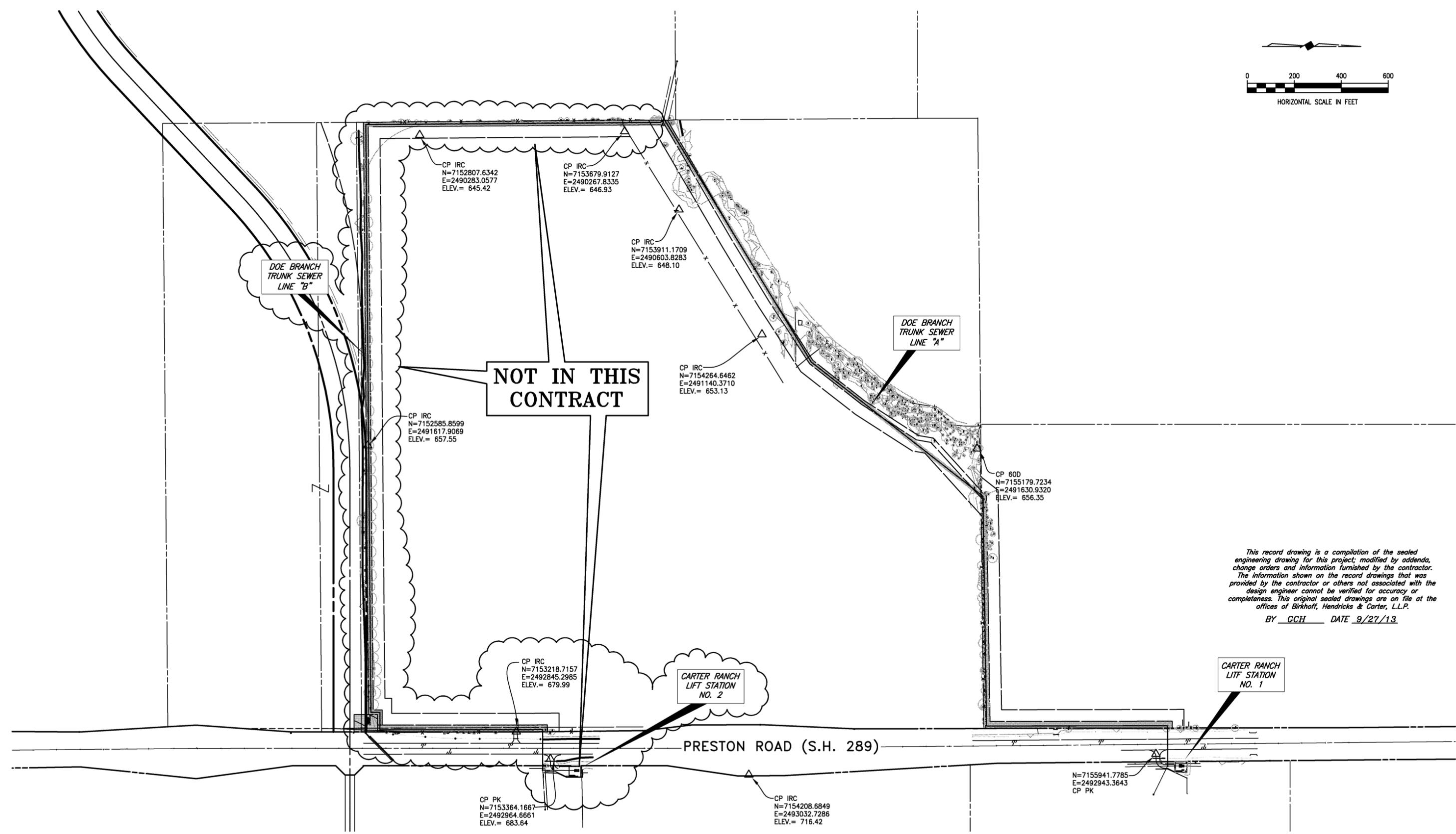
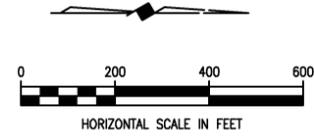
**GENERAL PROJECT NOTES**

1. ALL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" BY THE NORTH TEXAS CENTRAL COUNCIL OF GOVERNMENTS, 4th EDITION AS AMENDED BY THE CITY OF CELINA. THE CONTRACTOR SHALL REFERENCE THE LATEST CITY OF CELINA STANDARD DETAILS PROVIDED IN THE CELINA PUBLIC WORKS DEPARTMENTS "STANDARDS OF DESIGN AND CONSTRUCTION" MANUAL FOR DETAILS NOT PROVIDED IN THESE PLANS. THE CONTRACTOR SHALL POSSESS ONE SET OF THE NCTCOG STANDARD SPECIFICATIONS AND DETAILS AND THE CITY OF CELINA'S "STANDARDS OF DESIGN AND CONSTRUCTION" MANUAL ON THE PROJECT SITE AT ALL TIMES.
2. REASONABLE EFFORT HAS BEEN MADE TO SHOW THE LOCATION OF ALL KNOWN UNDERGROUND UTILITIES AND SERVICE LINES. HOWEVER, THE OWNER ASSUMES NO RESPONSIBILITY FOR FAILURE TO SHOW ANY OR ALL EXISTING SUBSURFACE UTILITIES OR UTILITY LINES, OR TO SHOW THEM IN THEIR EXACT LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES, SERVICE LINES OR THE LIKE, WHICH ARE CROSSED OR EXPOSED BY THE CONSTRUCTION OPERATION.
3. CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES SUFFICIENTLY IN ADVANCE OF CONSTRUCTION SO THAT IF IT IS NECESSARY TO CHANGE OR MOVE UTILITY, THE PROGRESS OF THE WORK WILL NOT BE DELAYED.
4. CONTRACTOR SHALL HAVE AND PAY FOR SUPPORT AND PROTECT ALL POWER, GUY WIRES OR CABLE AND/OR LIGHT POLES IN THE WORK AREA.
5. ANY FENCE REMOVED FOR CONVENIENCE OF CONSTRUCTION SHALL BE REPLACED OR RECONSTRUCTED. NEW MATERIALS SHALL MATCH EXISTING FENCES. WOOD FENCES SHALL BE REPLACED WITH NEW CEDAR WITH THE POSTS MATCHING THE EXISTING POSTS.
6. TEMPORARY FENCING SHALL BE REQUIRED WHERE THERE IS EVIDENCE OF LIVESTOCK AND WHERE DAMAGED OR REMOVED FENCES ARE NOT TO BE REPLACED BY THE END OF THE SAME WORK DAY.
7. THE CONTRACTOR SHALL REPLACE ALL SHRUBS, PLANTS, TREES ETC. THAT ARE REMOVED FOR CONVENIENCE OF CONSTRUCTION AT HIS EXPENSE. NEW SHRUBS, PLANTS, TREES, ETC. SHALL BE EQUAL TO OR BETTER THAN THE EXISTING ONES OR MEET THE NEEDS AND APPROVAL OF THE PROPERTY OWNER AND THE CITY.
8. THE CONTRACTOR SHALL NOT DISPOSE OF WASTE AND ANY MATERIALS INTO STREAMS OR WATERWAYS. THE CONTRACTOR SHALL SECURE ALL EXCAVATION AT THE END OF EACH DAY AND DISPOSE OF ALL EXCESS MATERIALS. DISPOSAL SITE SHALL BE DOCUMENTED AND PROVIDED TO THE CITY.
9. THE CONTRACTOR SHALL OBTAIN TPDES STORM WATER PERMIT, POST ALL PERMITS ON THE CONSTRUCTION SITE, SUBMIT A NOTICE OF INTENT (NOI) AND SUBMIT A NOTICE OF TERMINATION (NOT). THE CONTRACTOR AND HIS SUB-CONTRACTORS SHALL BE THE SOLE OPERATOR AND PERMITEES OF THE CONSTRUCTION SITE.
10. CONTRACTOR SHALL GRADE GROUND AND DITCHES DISTURBED BY CONSTRUCTION TO PREVENT PONDING OF STORM WATER RUNOFF. GRADING SHALL BE SUBSIDIARY TO THE EARTHWORK BID ITEM. TOPSOIL SHALL BE STOCKPILED AND REPLACED TO A MINIMUM DEPTH OF 6-INCHES AND DISC HARROWED TO A MINIMUM DEPTH OF 4-INCHES. CONTRACTOR SHALL REPLACE GRASS AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WITH SOLID SOD. SODDED AREAS SHALL BE WATERED AND MAINTAINED FOR A PERIOD OF NO LESS THAN 72 HOURS. EACH DAY THE CONTRACTOR SHALL WATER THE AREAS UNTIL THE PROPERTY OWNER ASSUMES RESPONSIBILITY OF SODDED AREAS.
11. THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE ALL NECESSARY TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
12. THE CONTRACTOR SHALL PROVIDE ACCESS AT ALL TIMES DURING CONSTRUCTION TO ALL LOCAL RESIDENTS, BUSINESSES, MAIL SERVICE AND TRASH PICK UP.
13. FINISHED GROUND SHALL HAVE NO ROCKS OVER 1 INCH LARGER THAN SURROUNDING UNDISTURBED GROUND.
14. BACKFILL AROUND INSTALLED WET WELL IN 8-INCH LOOSE LIFTS MECHANICALLY COMPOUNDING TO 95% STANDARD PROCTOR WITH MOISTURE CONTENT AT OPTIMUM TO OPTIMUM PLUS 4 POINTS. REMOVE ANY LARGE BOULDERS FOUND IN EXCAVATED MATERIAL. BACKFILL TO TOP OF INSTALLED WET WELL.
15. FLYGT MANUFACTURED TOP COVER SHALL BE 14 THICK TYPE-5086 ALUMINUM DIAMOND PLATE WITH AN INTEGRAL SAFE HATCH ACCESS COVER.
16. THE SIX FOOT WIDE WET WELL AND THE DETACHED VALVE VAULT SHALL BE INSTALLED AS PER THE INSTRUCTIONS OF THE MANUFACTURER.
17. THE CONTRACTOR SHALL REMOVE AND SALVAGE THE PUMPS, VALVES AND OTHER APPURTENANCES FROM THE EXISTING LIFT STATION TO THE CITY OF CELINA.
18. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS OF THE PROPOSED STRUCTURES SEALED AND SIGNED BY A TEXAS LICENSED PROFESSIONAL ENGINEER TO BIRKHOFF HENDRICKS & CARTER LLP FOR REVIEW.
19. WHERE PIPES OR CONDUIT PASS THROUGH THE WALL OF THE WET WELL, THE SPACE BETWEEN THE WET WELL AND THE PIPE SHALL BE SEALED WITH LINK SEALS.
20. THE FOUNDATION OF THE WET WELL SHALL REST ON UNDISTURBED SOIL. OVEREXCAVATION OF THE WET WELL FOUNDATION SHALL BE FILLED WITH 2,500 PSI CONCRETE TO THE ELEVATION SHOWN ON THE PLANS FOR THE BOTTOM OF THE WET WELL FOUNDATION.

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 BY GCH DATE 9/27/13

These plans and related specifications were prepared for construction of this specific project only. Reuse of these documents is not permitted without written authorization of Birkhoff, Hendricks, & Carter, L.L.P.

|   |   |   |   |  |                                    |
|---|---|---|---|--|------------------------------------|
| <p><b>BIRKHOFF, HENDRICKS &amp; CARTER, L.L.P.</b><br/>                 PROFESSIONAL ENGINEERS<br/>                 Texas Firm F526<br/>                 11910 Greenville Ave., Suite 600<br/>                 Dallas, Texas 75243 (214) 361-7900</p> |  |  | <p><b>CITY OF CELINA</b><br/>                 DOE BRANCH TRUNK SEWER EXTENSION<br/>                 GENERAL NOTES</p> | <p>BHC<br/>                 PROJECT NO.<br/>                 2008-110<br/>                 January, 2012</p> | <p>SHEET NO.<br/><br/><b>2</b></p> |
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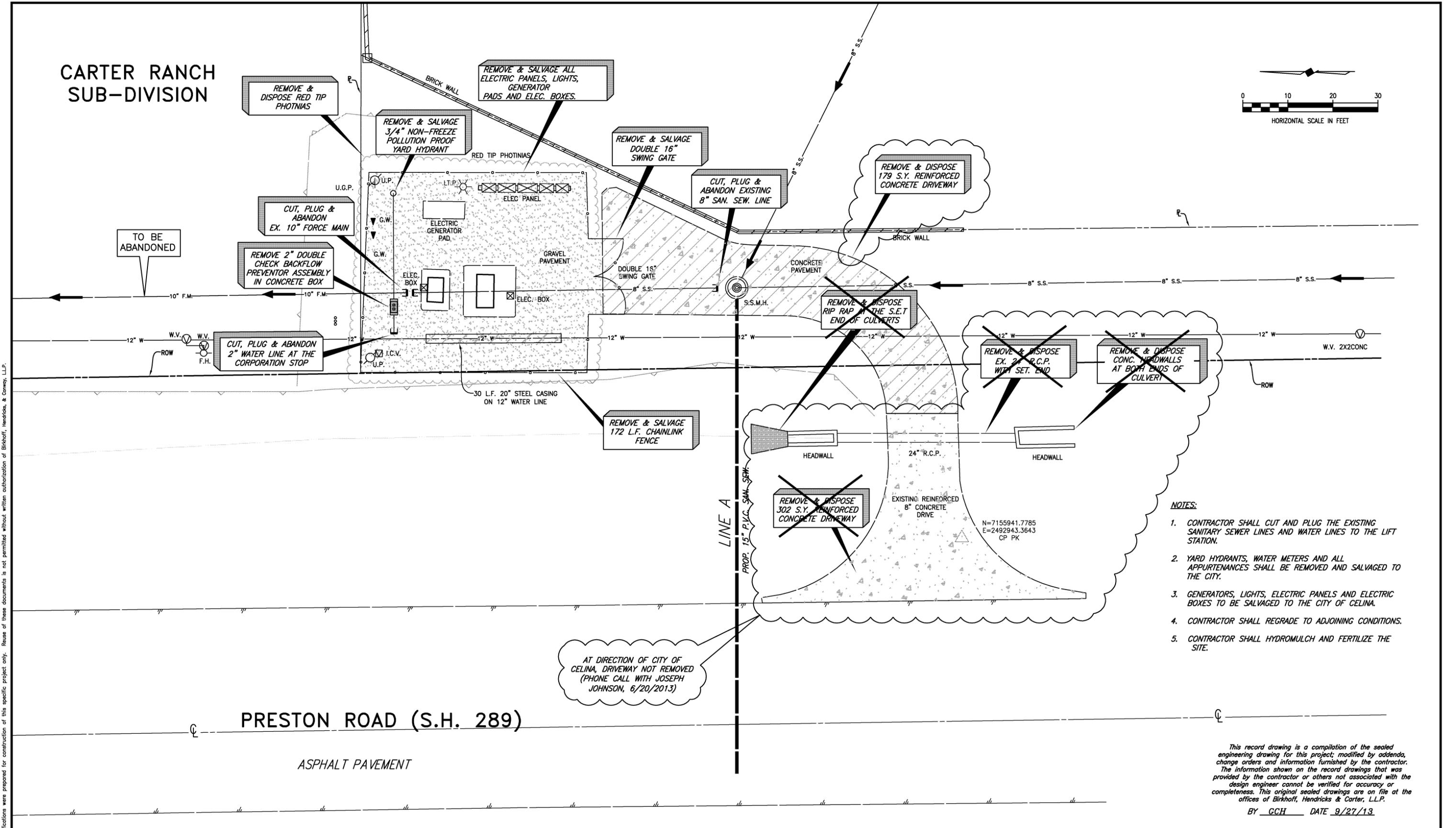
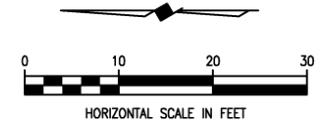
**NOT IN THIS CONTRACT**

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|   |  |  |   |   |                                    |
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|---|--|--|---|---|------------------------------------|

# CARTER RANCH SUB-DIVISION



- NOTES:**
1. CONTRACTOR SHALL CUT AND PLUG THE EXISTING SANITARY SEWER LINES AND WATER LINES TO THE LIFT STATION.
  2. YARD HYDRANTS, WATER METERS AND ALL APPURTENANCES SHALL BE REMOVED AND SALVAGED TO THE CITY.
  3. GENERATORS, LIGHTS, ELECTRIC PANELS AND ELECTRIC BOXES TO BE SALVAGED TO THE CITY OF CELINA.
  4. CONTRACTOR SHALL REGRADE TO ADJOINING CONDITIONS.
  5. CONTRACTOR SHALL HYDROMULCH AND FERTILIZE THE SITE.

AT DIRECTION OF CITY OF CELINA, DRIVEWAY NOT REMOVED (PHONE CALL WITH JOSEPH JOHNSON, 6/20/2013)

PRESTON ROAD (S.H. 289)

ASPHALT PAVEMENT

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**BIRKHOFF, HENDRICKS & CARTER, L.L.P.**  
 PROFESSIONAL ENGINEERS  
 Texas Firm F526  
 11910 Greenville Ave., Suite 600  
 Dallas, Texas 75243 (214) 361-7900

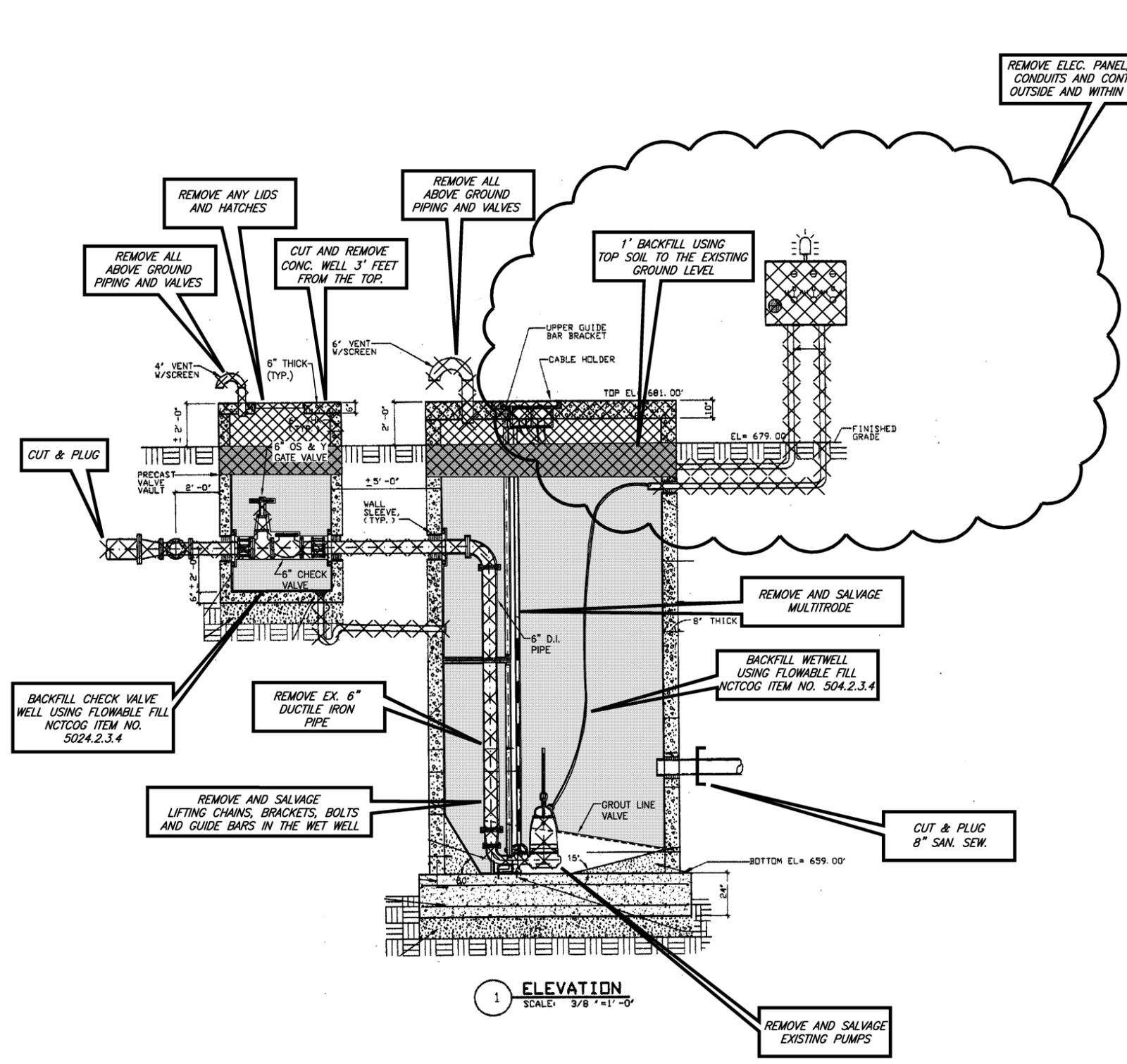


*[Signature]*  
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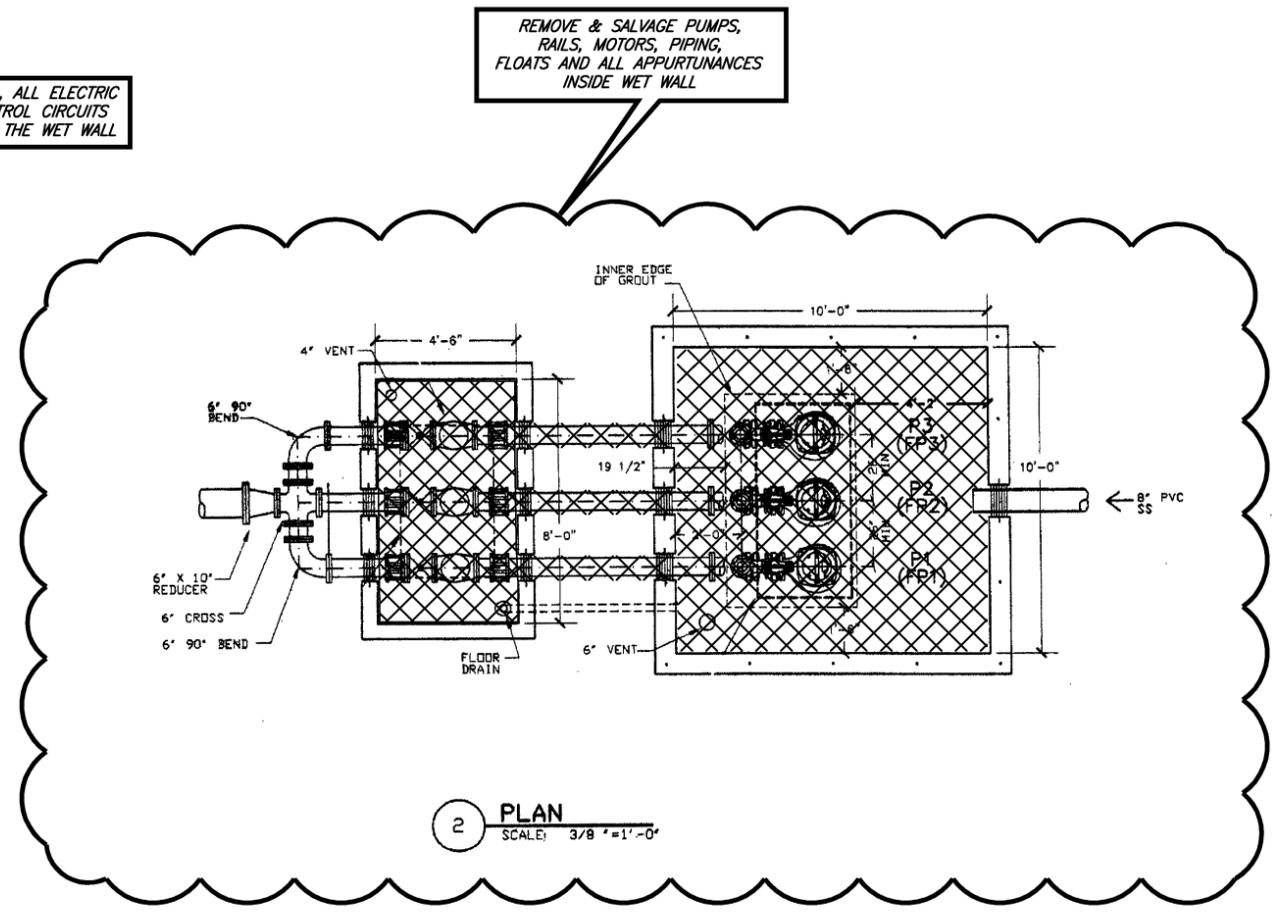
**CITY OF CELINA, TEXAS**  
 CARTER RANCH LIFT STATION 1  
 LIFT STATION 1 DEMOLITION PLAN

|                                |                       |
|--------------------------------|-----------------------|
| BHC<br>PROJECT NO.<br>2008-110 | SHEET NO.<br><b>4</b> |
| January, 2012                  |                       |

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**1 ELEVATION**  
SCALE: 3/8" = 1'-0"



**2 PLAN**  
SCALE: 3/8" = 1'-0"

**LEGEND**

- REMOVE
- BACK FILL USING FLOWABLE FILL MATERIAL
- 1' OF TOP SOIL

**NOTES:**

1. CONTRACTOR SHALL FURNISH, INSTALL AND OPERATE TEMPORARY BYPASS EQUIPMENT TO PROHIBIT FLOWS TO THE LIFT STATION DURING DEMOLITION. DEMOLITION SHALL BE COMPLETED IN (7) CALENDAR DAYS.
2. ALL REMOVED COMPONENTS OF THE LIFT STATION SHALL BE REVIEWED BY THE CITY OF CELINA PRIOR TO DISPOSAL.
3. ALL APPURTENANCE, ANCHORS, PIPES, VALVES, MOTORS, PUMPS, ELECTRICAL ITEMS ETC. . . , SHALL BE REMOVED & SALVAGED BY THE CONTRACTOR TO THE CITY OF CELINA.
4. REMOVE & SALVAGE PUMPS, RAILS, MOTORS, PIPING, FLOATS AND ALL APPURTENANCES INSIDE WET WALL.

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PROFESSIONAL ENGINEERS  
Texas Firm F526  
11910 Greenville Ave., Suite 600  
Dallas, Texas 75243 (214) 361-7900



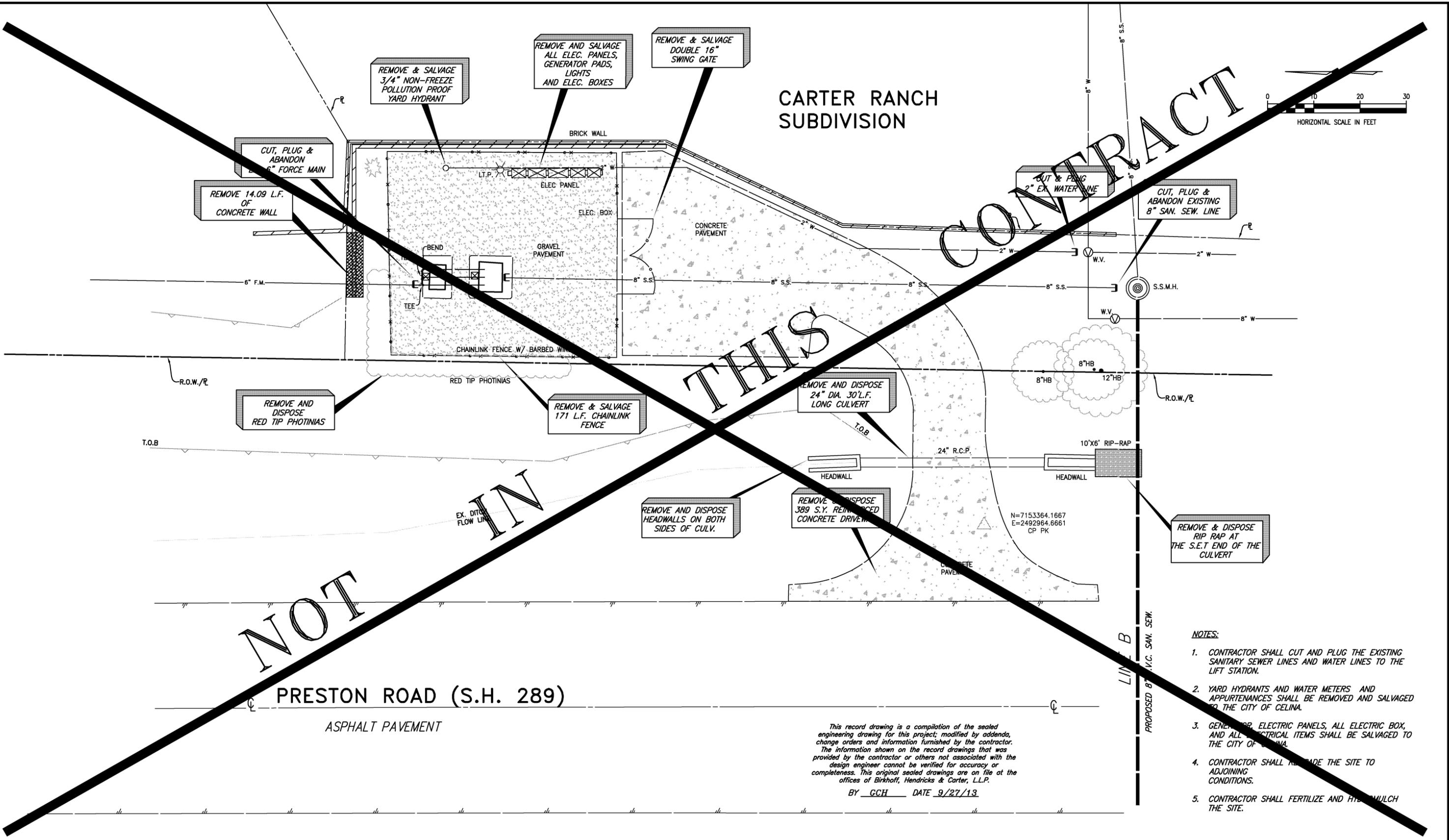
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**CITY OF CELINA, TEXAS**  
CARTER RANCH LIFT STATION 1 RELIEF SEWER  
LIFT STATION 1 DEMOLITION - SECTION

BHC  
PROJECT NO.  
2008-110  
January, 2012

SHEET NO.  
**5**

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- NOTES:**
1. CONTRACTOR SHALL CUT AND PLUG THE EXISTING SANITARY SEWER LINES AND WATER LINES TO THE LIFT STATION.
  2. YARD HYDRANTS AND WATER METERS AND APPURTENANCES SHALL BE REMOVED AND SALVAGED TO THE CITY OF CELINA.
  3. GENERATOR, ELECTRIC PANELS, ALL ELECTRIC BOX, AND ALL ELECTRICAL ITEMS SHALL BE SALVAGED TO THE CITY OF CELINA.
  4. CONTRACTOR SHALL MAKE THE SITE TO ADJOINING CONDITIONS.
  5. CONTRACTOR SHALL FERTILIZE AND HYDRATE MULCH THE SITE.

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|--|--|--|----------------|---|---|-----------------------|
| <b>BIRKHOFF, HENDRICKS &amp; CARTER, L.L.P.</b><br>PROFESSIONAL ENGINEERS<br>Texas Firm F526<br>11910 Greenville Ave., Suite 600<br>Dallas, Texas 75243 (214) 361-7900 |  |  | <br>01-30-2012 | <b>CITY OF CELINA, TEXAS</b><br>CARTER RANCH LIFT STATION 2 RELIEF SEWER LINE<br>LIFT STATION 2 DEMOLITION PLAN | BHC<br>PROJECT NO.<br>2008-110<br>January, 2012 | SHEET NO.<br><b>6</b> |
|--|--|--|----------------|---|---|-----------------------|

CONTRACT

THIS

NOT

REMOVE & SALVAGE ELEC. PANEL, ALL ELECTRIC CONDUITS AND CONTROL CIRCUITS OUTSIDE AND WITHIN THE WET WALL

REMOVE & SALVAGE ALL ABOVE GROUND PIPING AND VALVES

CUT AND REMOVE CONC. WELL 3' FEET FROM THE TOP.

REMOVE ANY LIDS AND HATCHES

1' BACKFILL USING TOP SOIL TO THE EXISTING GROUND LEVEL

CUT & PLUG

BACKFILL CHECKVALVE WELL USING FLOWABLE FILL NCTCOG ITEM NO. 504-2-3-4

REMOVE EX. 6-1/2" DUCTILE IRON PIPE

REMOVE AND SALVAGE LIFTING CHAINS, BRACKETS, BOLTS AND GUIDE BARS IN THE WET WELL

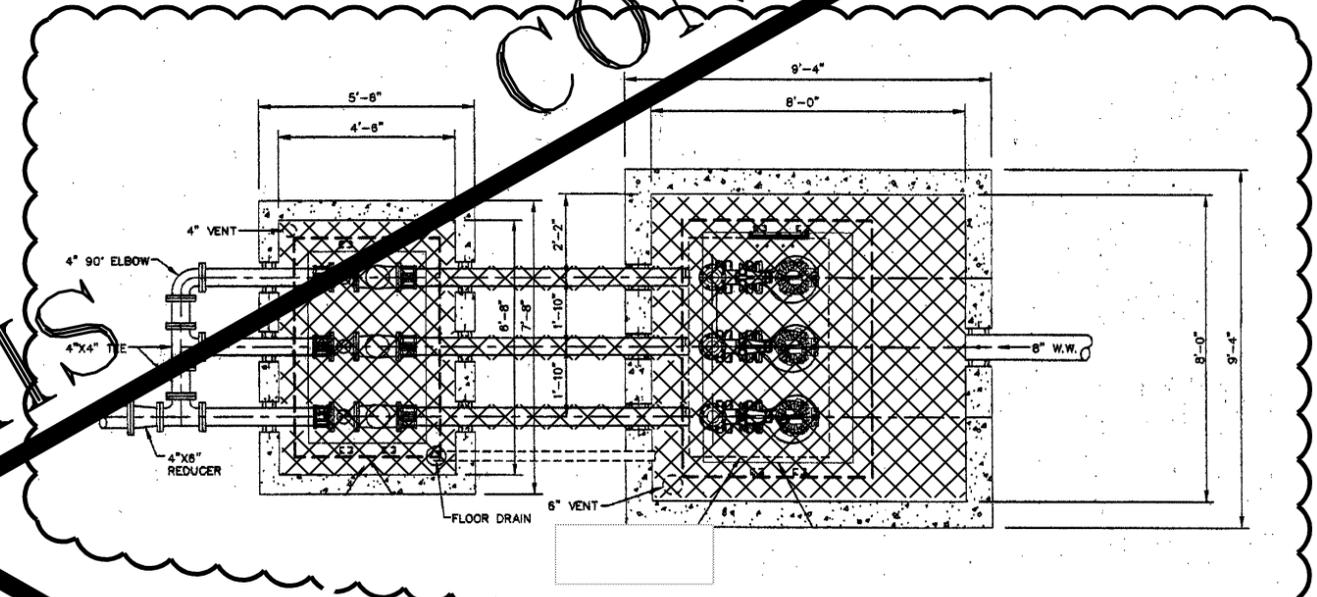
BACK FILL WETWELL USING FLOWABLE FILL NCTCOG ITEM NO. 504.2.3.4

REMOVE AND SALVAGE MULTI-TRODE

CUT & PLUG 8" SAN. SEW.

REMOVE & SALVAGE PUMPS, RAILS, MOTORS, PIPING, FLOATS AND ALL APPURTENANCES INSIDE WET WELL AND DRY WELL

REMOVE EXISTING PUMPS



2 PLAN SCALE: 1/2"=1'-0"

1 SECTION SCALE: 1/2"=1'-0"

LEGEND

- REMOVE (cross-hatched pattern)
BACK FILL USING FLOWABLE FILL MATERIAL (stippled pattern)
1' OF TOP SOIL (dotted pattern)

NOTES:

- 1. CONTRACTOR SHALL FURNISH, INSTALL AND OPERATE TEMPORARY BYPASS EQUIPMENT TO PROHIBIT FLOWS TO THE LIFT STATION DURING DEMOLITION. DEMOLITION SHALL BE COMPLETED IN (7) CALENDAR DAYS.
2. ALL REMOVE COMPONENTS OF THE LIFT STATION SHALL BE REVIEWED BY THE CITY OF CELINA PRIOR TO DISPOSAL.
3. ALL APPURTENANCE, ANCHORS, PIPES, VALVES, MOTORS, PUMPS, ELECTRICAL ITEMS ETC., SHALL BE REMOVED & SALVAGED BY THE CONTRACTOR FOR THE CITY OF CELINA.
4. REMOVE & SALVAGE PUMPS, RAILS, MOTORS, PIPING, FLOATS AND ALL APPURTENANCES INSIDE WET WALL.

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BY GCH DATE 9/27/13

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BIRKHOFF, HENDRICKS & CARTER, L.L.P. PROFESSIONAL ENGINEERS Texas Firm F526 11910 Greenville Ave., Suite 600 Dallas, Texas 75243 (214) 361-7900

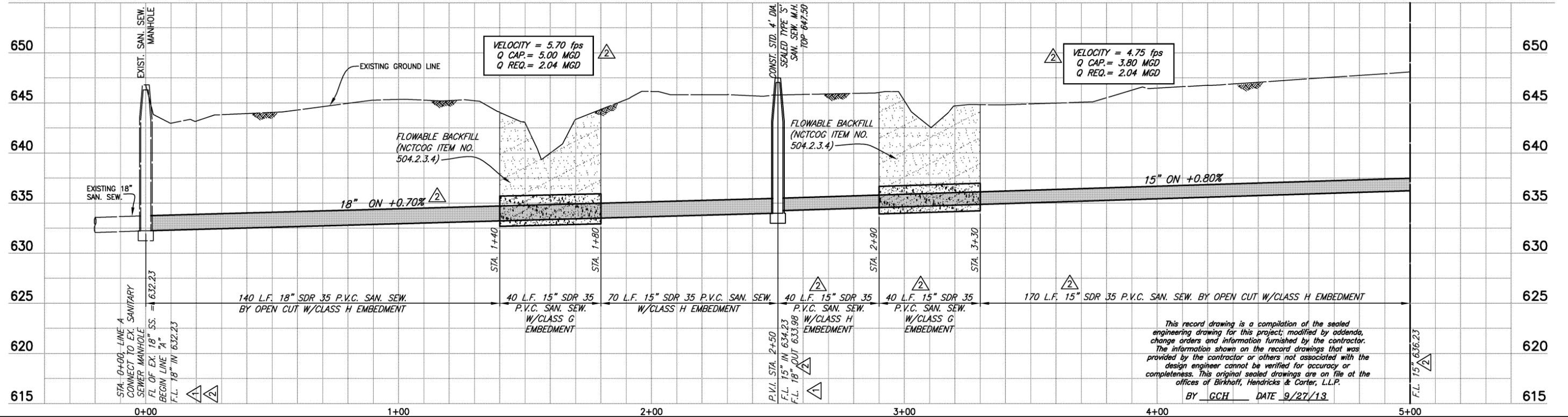
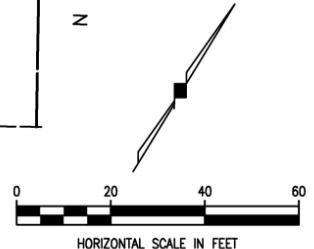
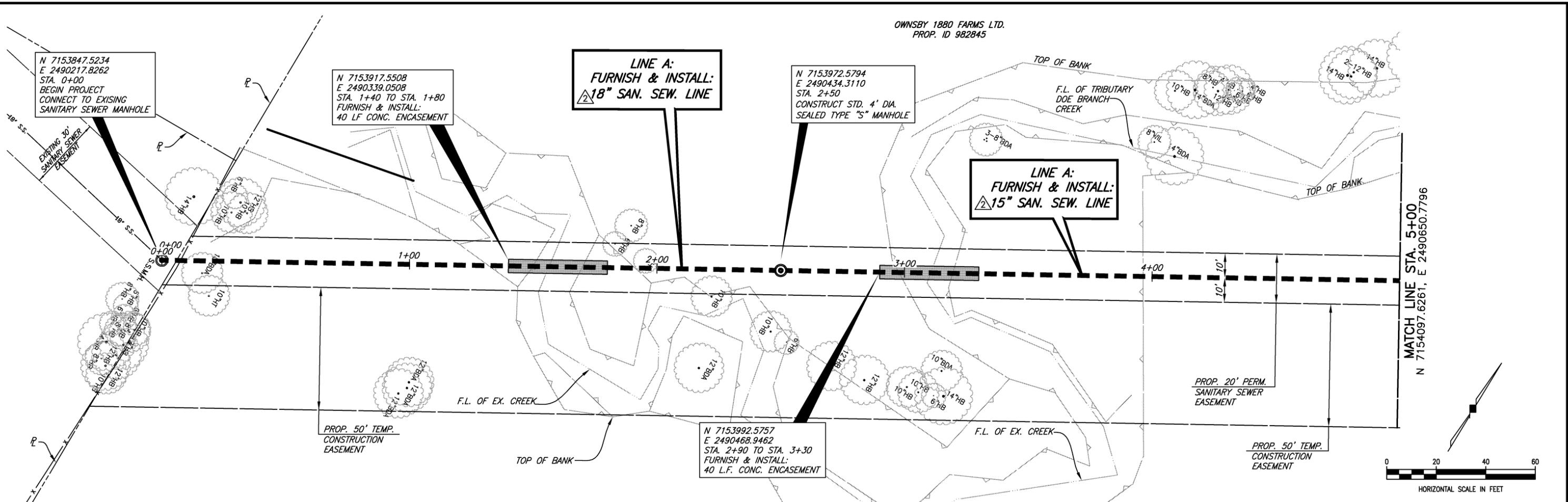


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CITY OF CELINA, TEXAS CARTER RANCH LIFT STATION 2 RELIEF SEWER LINE LIFT STATION 2 DEMOLITION - SECTION

BHC PROJECT NO. 2008-110 SHEET NO. 7 January, 2012

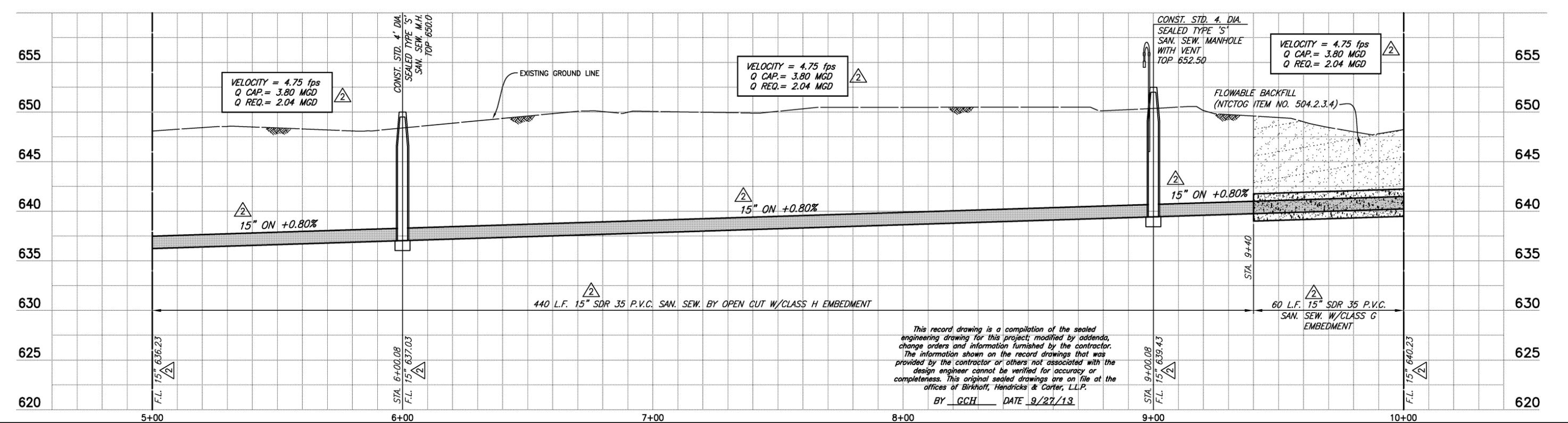
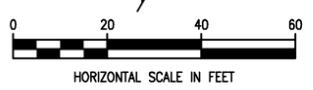
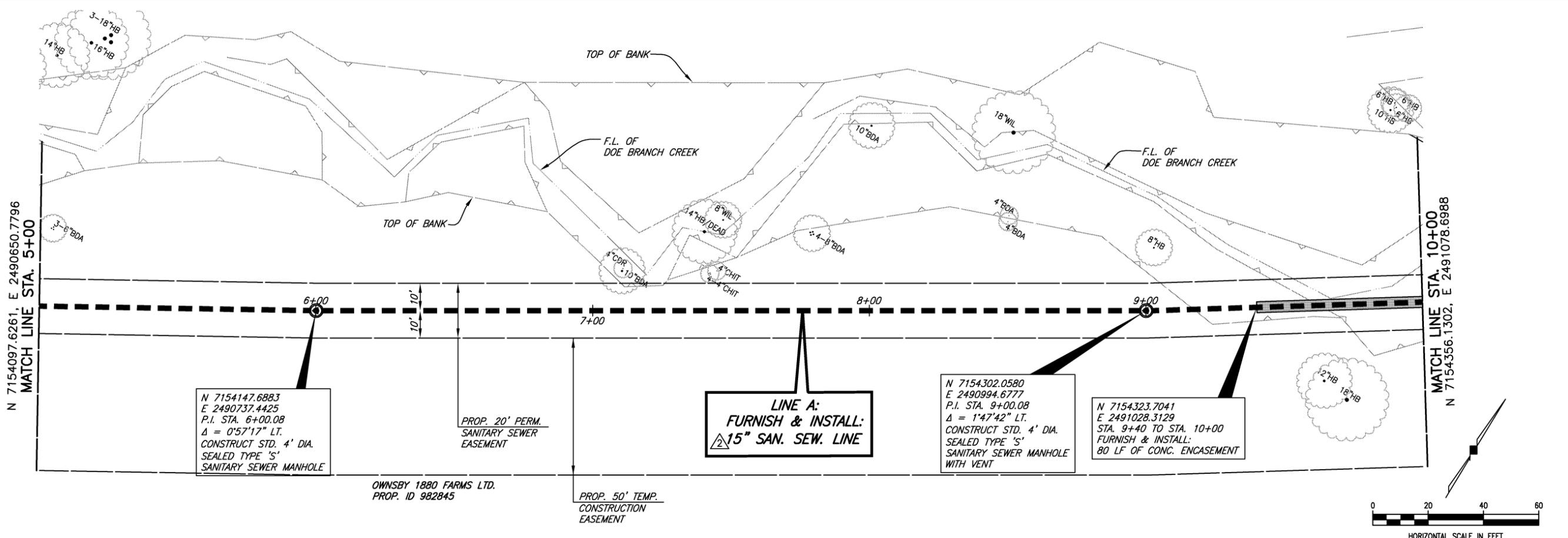
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 BY GCH DATE 9/27/13

|   |   |  |  |   |  |                                |
|---|---|--|--|---|--|--------------------------------|
| <p>ADDENDUM No. 1, CHANGED 12" TO 15"; 15" TO 18" - 03/23/2012<br/>         REVISED FLOW LINE AT STA. 0+00 &amp; STA. 2+50 PER TWDB REVIEW - 02/09/2011</p> | <p><b>BIRKHOFF, HENDRICKS &amp; CARTER, L.L.P.</b><br/>         PROFESSIONAL ENGINEERS<br/>         Texas Firm F526<br/>         11910 Greenville Ave., Suite 600<br/>         Dallas, Texas (214) 361-7900</p> |  |  | <p><b>CITY OF CELINA, TEXAS</b><br/>         DOE BRANCH TRUNK SEWER EXTENSION<br/> <b>SANITARY SEWER LINE "A"</b><br/>         STA. 0+00 TO STA. 5+00</p> | <p>BHC<br/>         PROJECT NO.<br/>         2008-110<br/>         January, 2012</p> | <p>SHEET NO.<br/> <b>8</b></p> |
|---|---|--|--|---|--|--------------------------------|

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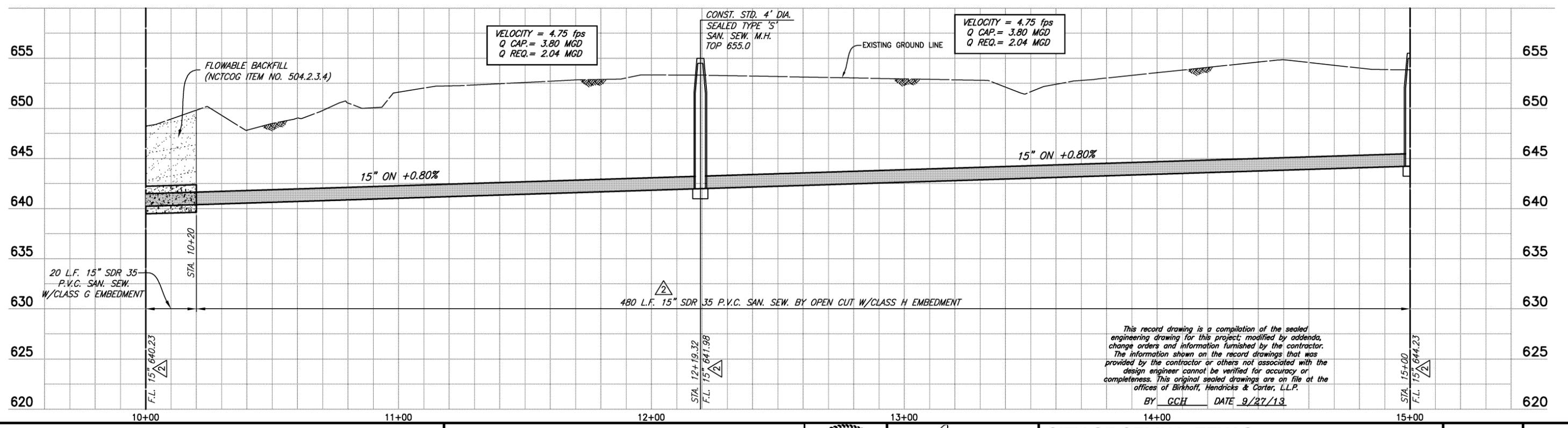
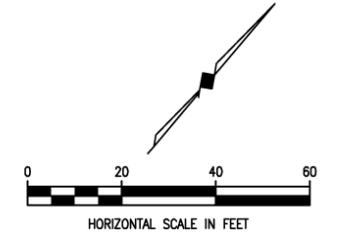
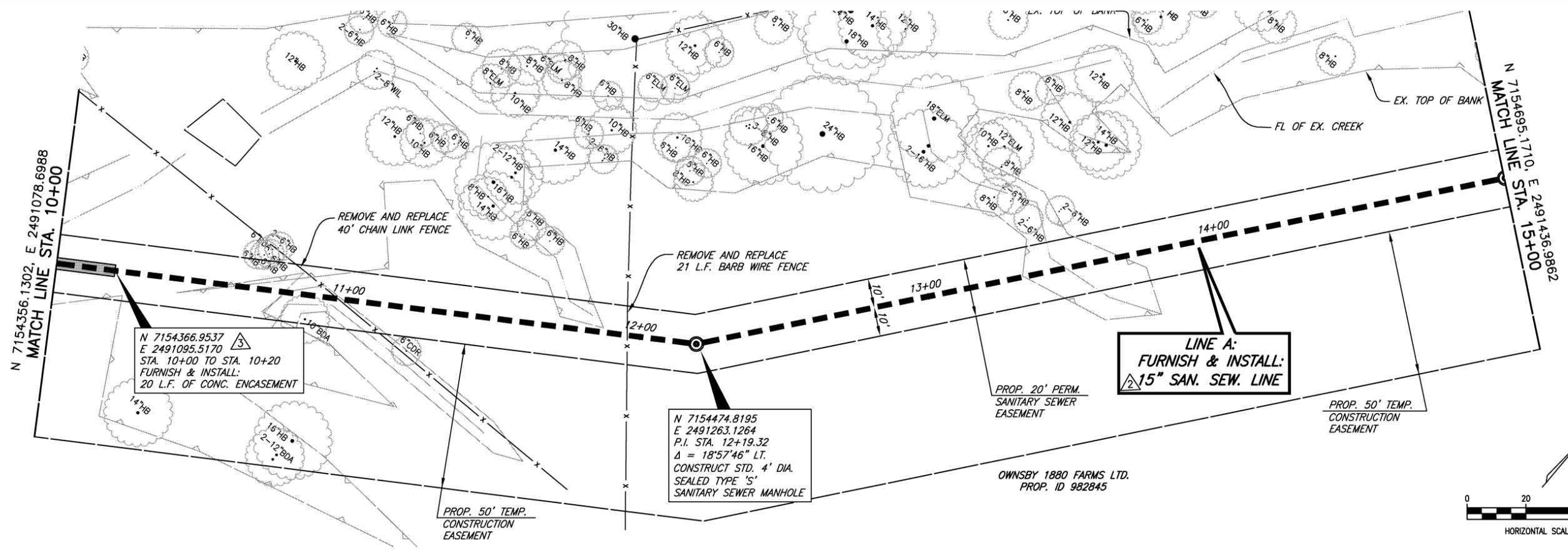


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BY GCH DATE 9/27/13

|   |  |  |  |   |                          |                    |
|---|--|--|--|---|--------------------------|--------------------|
| ADDENDUM No. 1, CHANGED 12" TO 15" - 03/23/2012<br>REVISED: 9/27/13 - KANDERSON | <b>BIRKHOFF, HENDRICKS &amp; CARTER, L.L.P.</b><br>PROFESSIONAL ENGINEERS<br>Texas Firm F526<br>11910 Greenville Ave., Suite 600<br>Dallas, Texas (214) 361-7900 |  |  | <b>CITY OF CELINA, TEXAS</b><br>DOE BRANCH TRUNK SEWER EXTENSION<br>SANITARY SEWER LINE "A"<br>STA. STA. 5+00 TO STA. 10+00 | BHC PROJECT NO. 2008-110 | SHEET NO. <b>9</b> |
|   |  |  |  |   | January, 2012            | SS-201208-01       |

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 BY GCH DATE 9/27/13

△ CORRECTED COORDINATES AT STA. 10+20  
 △ ADDENDUM No. 1, CHANGED 12" to 15" - 03/23/2012

**BIRKHOFF, HENDRICKS & CARTER, L.L.P.**  
 PROFESSIONAL ENGINEERS  
 Texas Firm F526  
 11910 Greenville Ave., Suite 600  
 Dallas, Texas (214) 361-7900

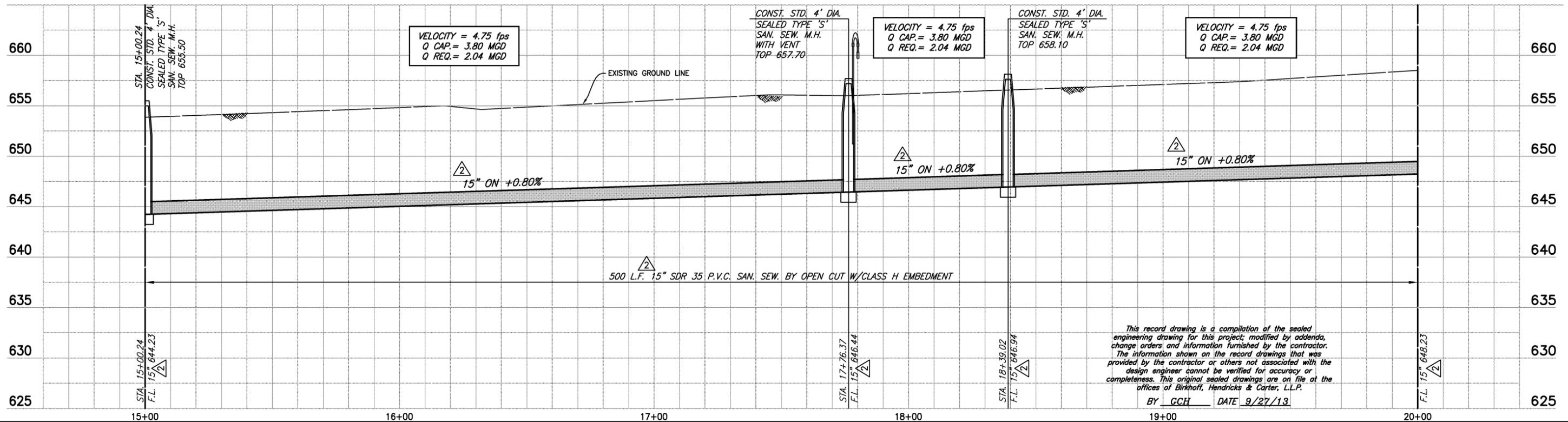
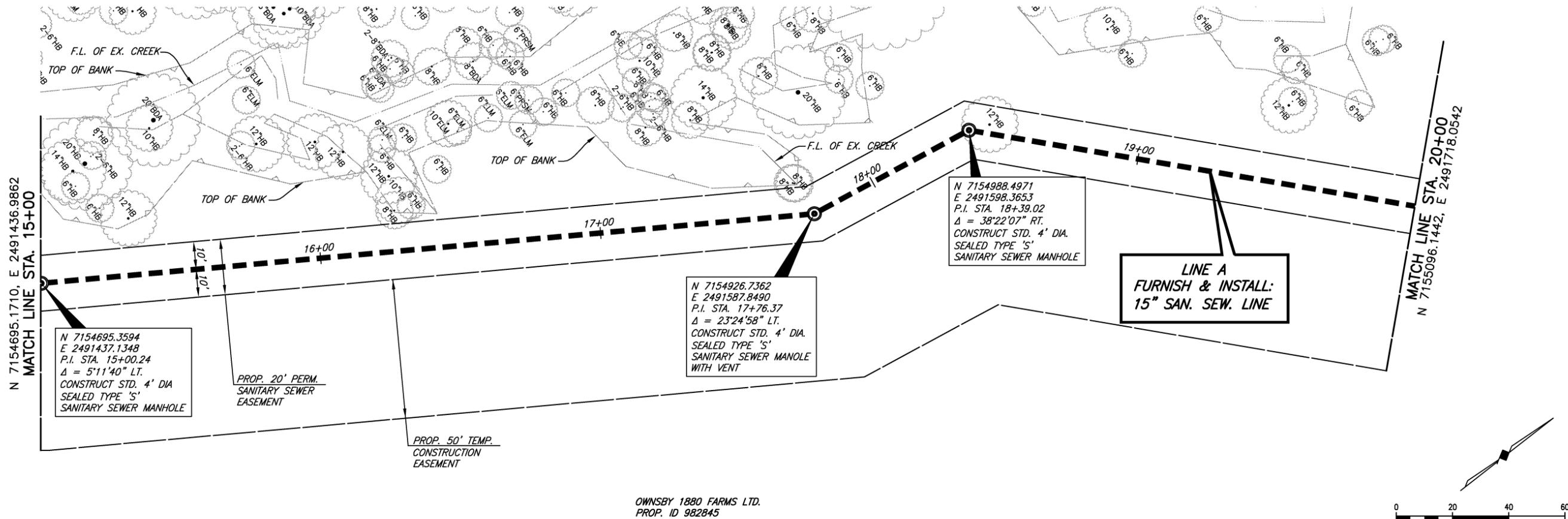


*[Signature]*  
 01-30-2012

**CITY OF CELINA, TEXAS**  
 DOE BRANCH TRUNK SEWER EXTENSION  
 SANITARY SEWER LINE "A"  
 STA. 10+00 TO STA. 15+00

BHC PROJECT NO. 2008-110  
 SHEET NO. **10**  
 January, 2012

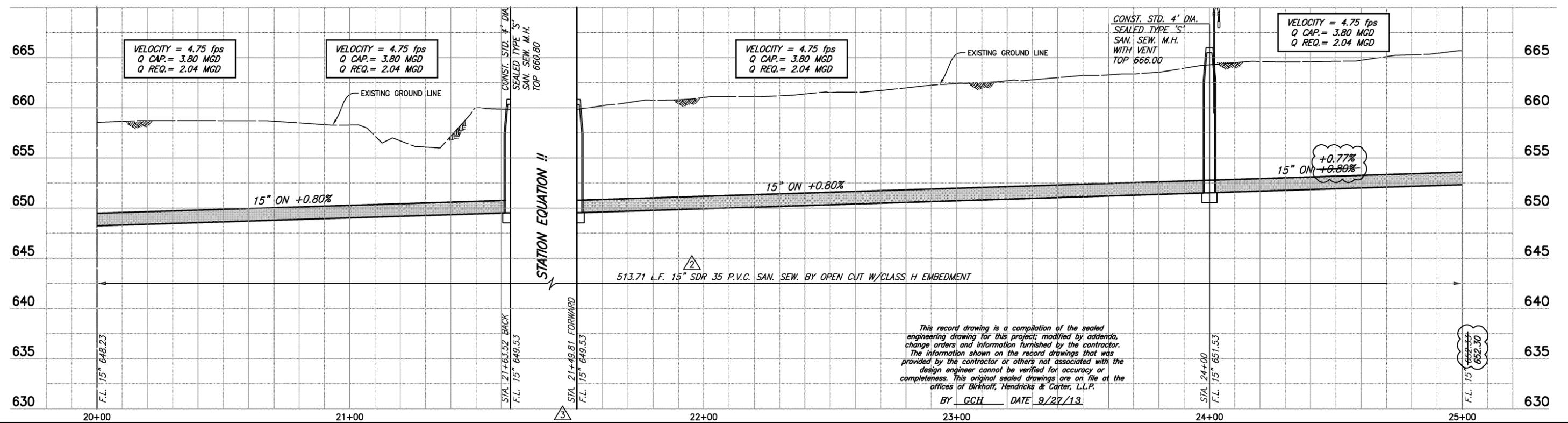
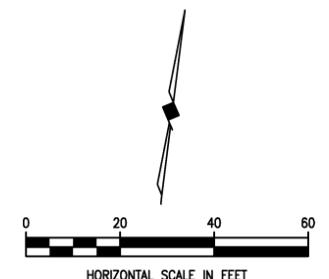
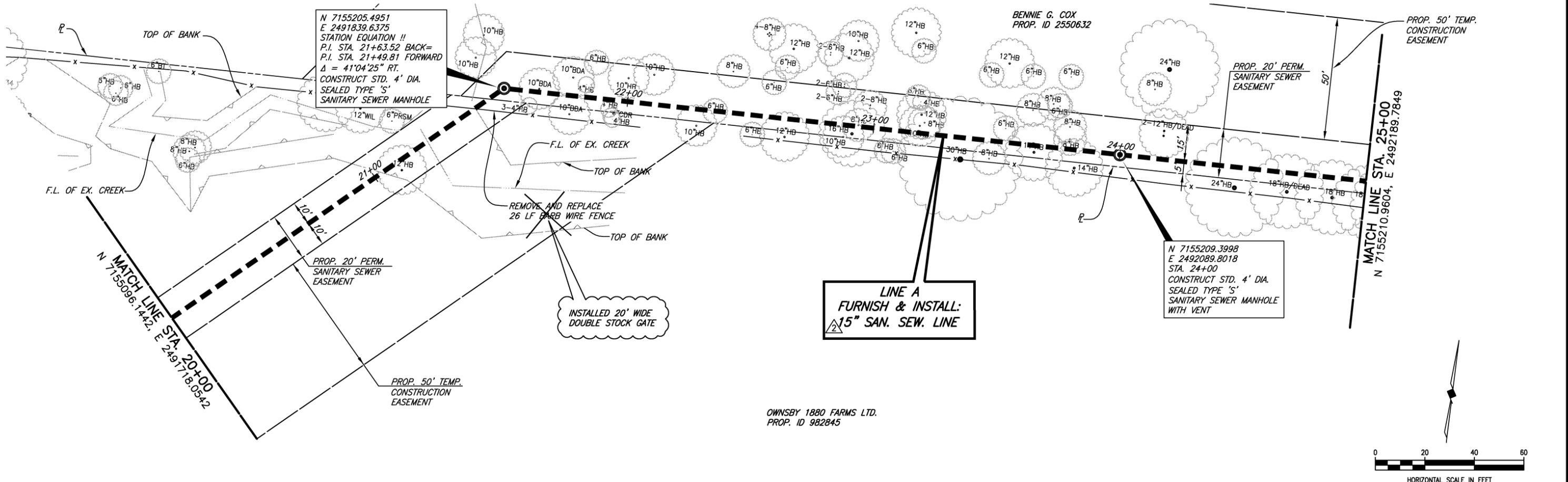
These plans and related specifications were prepared for construction of this specific project only. Reuse of these documents is not permitted without written authorization of Birkhoff, Hendricks, & Carter, L.L.P.



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|   |  |  |  |   |                          |           |
|---|--|--|--|---|--------------------------|-----------|
| ADDENDUM No. 1, CHANGED 12" TO 15" - 03/23/2012<br>REVISED: 9/27/13 - KANDERSON | <b>BIRKHOFF, HENDRICKS &amp; CARTER, L.L.P.</b><br>PROFESSIONAL ENGINEERS<br>Texas Firm F526<br>11910 Greenville Ave., Suite 600<br>Dallas, Texas (214) 361-7900 |  |  | <b>CITY OF CELINA, TEXAS</b><br>DOE BRANCH TRUNK SEWER EXTENSION<br>SANITARY SEWER LINE "A"<br>STA. 15+00 TO STA. 20+00 | BHC PROJECT NO. 2008-110 | SHEET NO. |
|   |  |  |  |   | January, 2012            | <b>11</b> |

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 BY GCH DATE 9/27/13

3 REMOVED STA. 21+64 CALL OUT AT STA. 21+49.81 FORWARD ON PROFILE FOR CLARIFICATION  
 2 ADDENDUM No. 1, CHANGED 12" TO 15" - 03/23/2012

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 Texas Firm F526  
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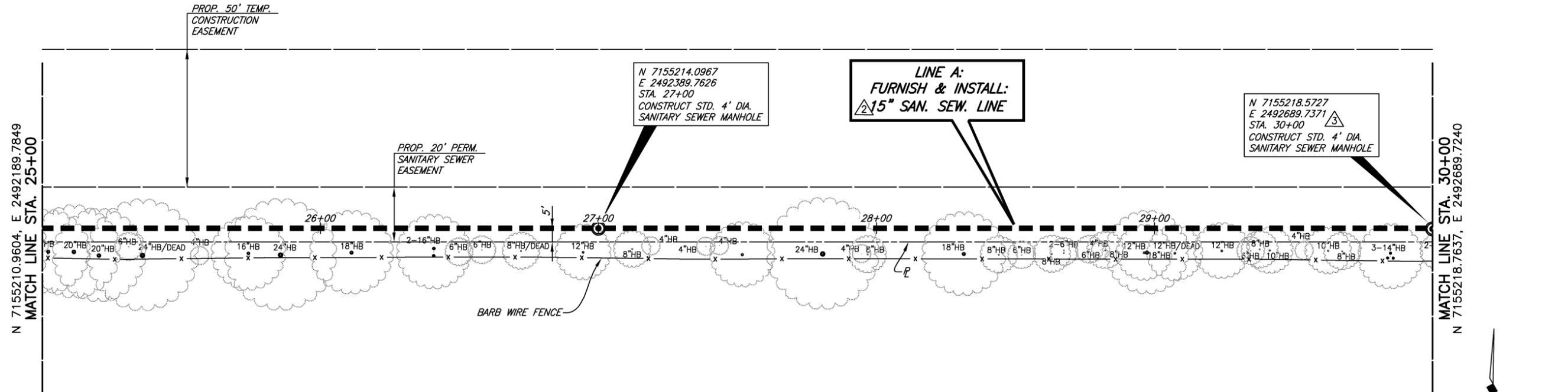
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 01-30-2012

**CITY OF CELINA, TEXAS**  
 DOE BRANCH TRUNK SEWER EXTENSION  
 SANITARY SEWER LINE "A"  
 STA. 20+00 TO STA. 25+00

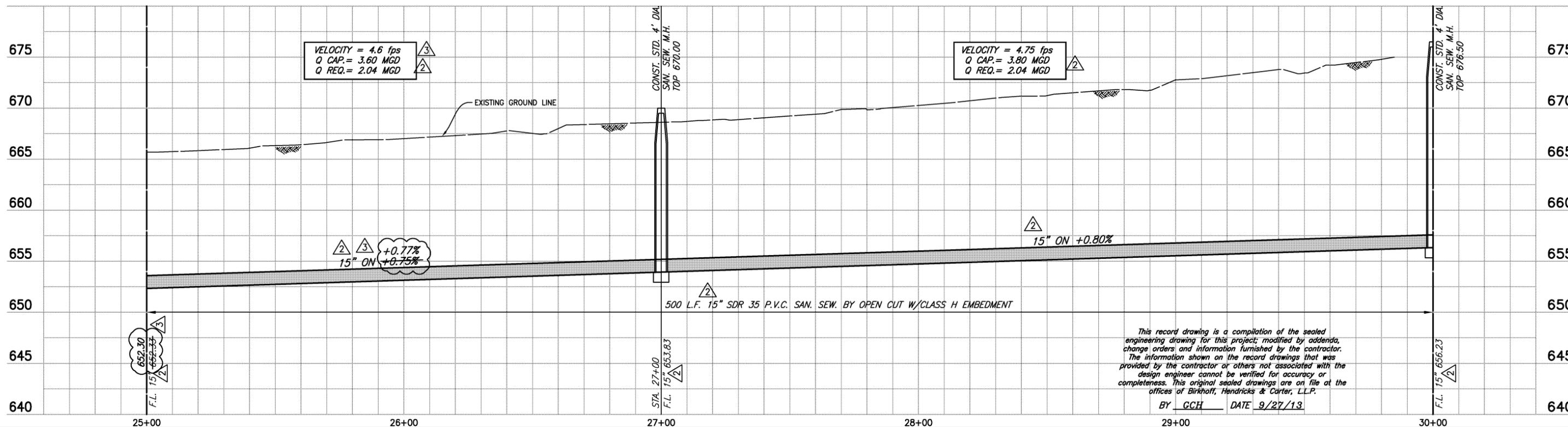
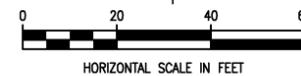
BHC PROJECT NO. 2008-110  
 SHEET NO. **12**  
 January, 2012

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BENNIE G. COX  
PROP. ID. 2550632



OWNSBY 1880 FARMS LTD.  
PROP. ID. 982845



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BY GCH DATE 9/27/13

- 3 CORRECTED FLOW LINE AT STA. 25+00, REVISED M.H. STA. AND COORDINATES AT STA. 30+00, CHANGED SLOPE TO 0.75% FROM STA. 25+00 TO STA. 27+00 AND CORRECTED VELOCITY AND CAPACITY INFORMATION
- 2 ADDENDUM No. 1, CHANGED 12" TO 15" - 03/23/2012

**BIRKHOFF, HENDRICKS & CARTER, L.L.P.**  
PROFESSIONAL ENGINEERS  
Texas Firm F526  
11910 Greenville Ave., Suite 600  
Dallas, Texas (214) 361-7900



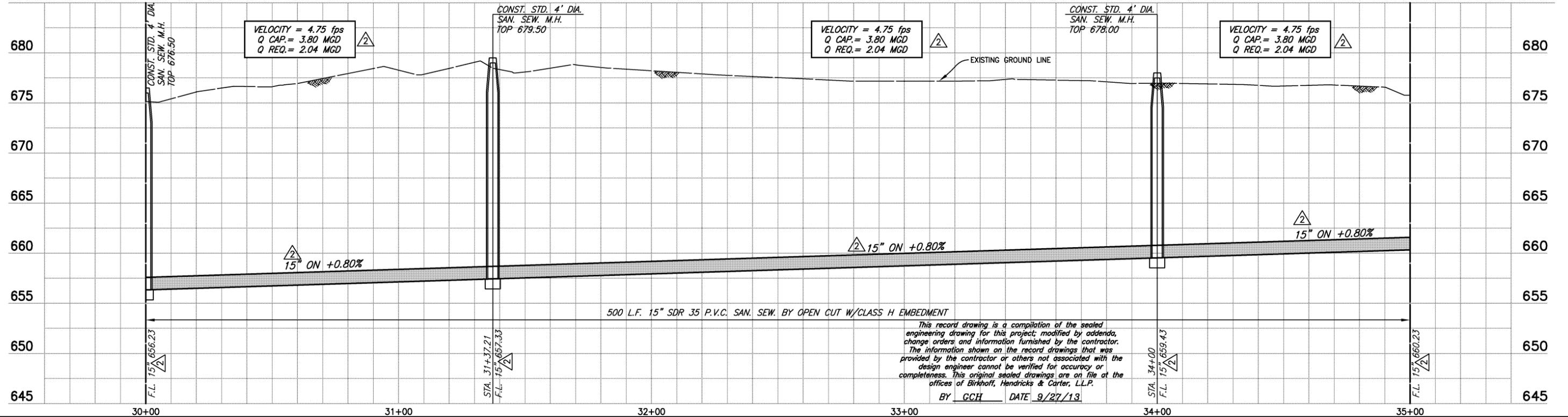
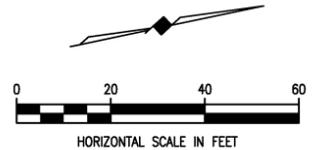
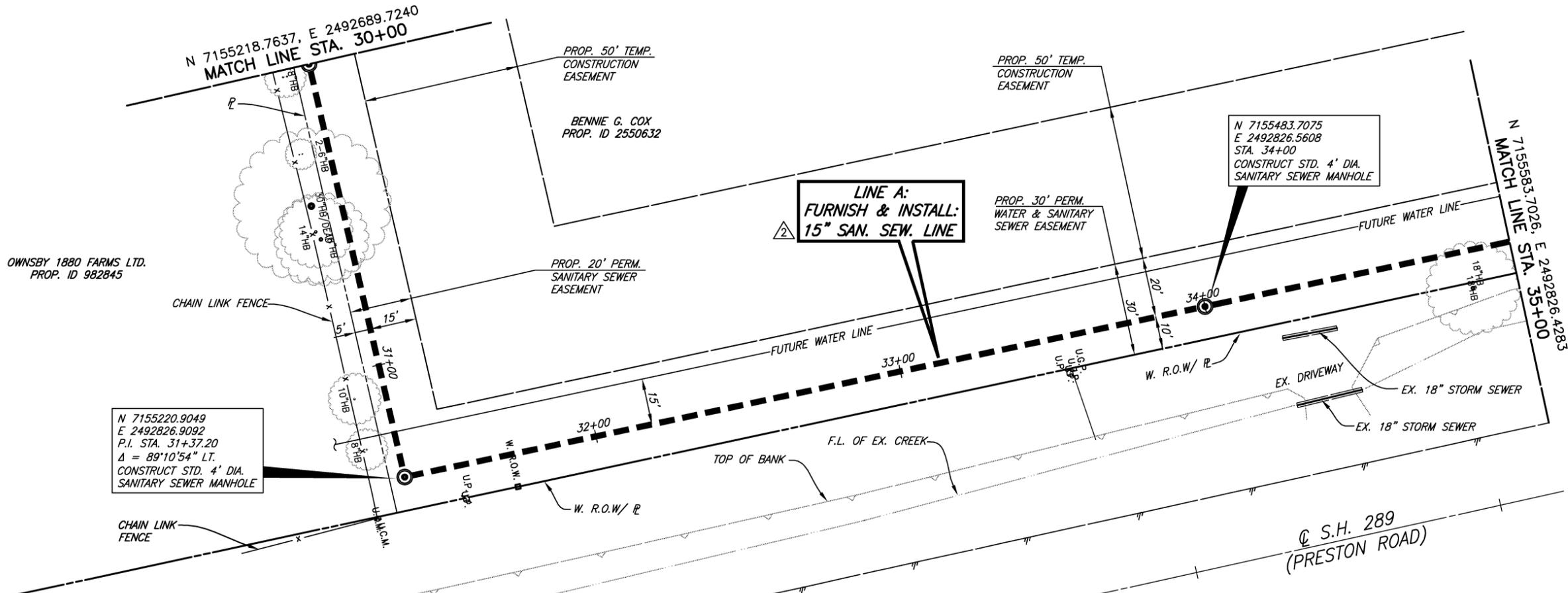
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01-30-2012

**CITY OF CELINA, TEXAS**  
DOE BRANCH TRUNK SEWER EXTENSION  
SANITARY SEWER LINE "A"  
STA. 25+00 TO STA. 30+00

BHC  
PROJECT NO.  
2008-110  
January, 2012

SHEET NO.  
**13**

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| ADDENDUM No. 1, CHANGED 12" TO 15" - 03/23/2012 |
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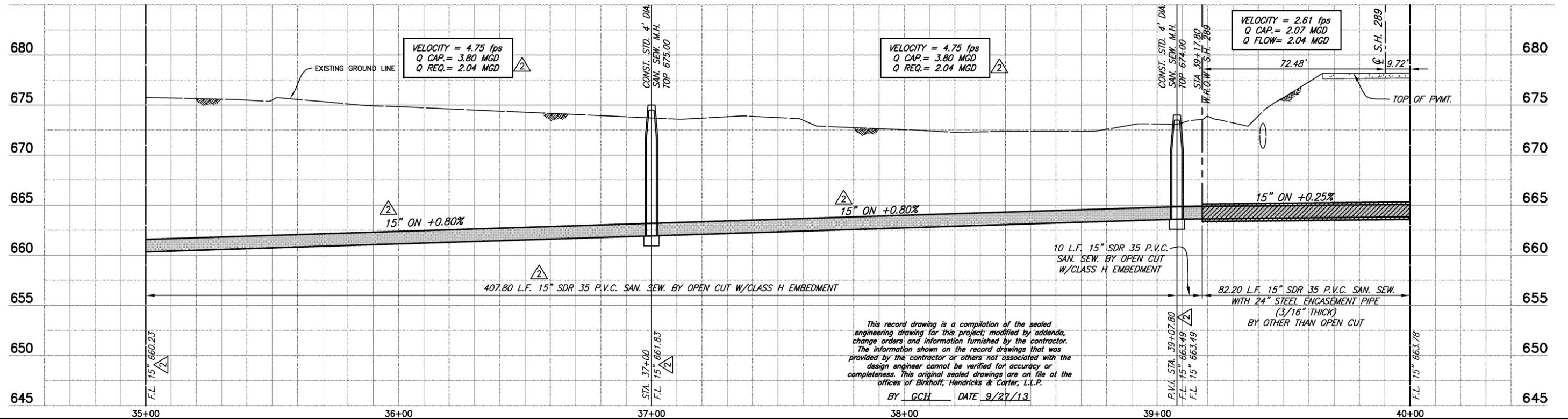
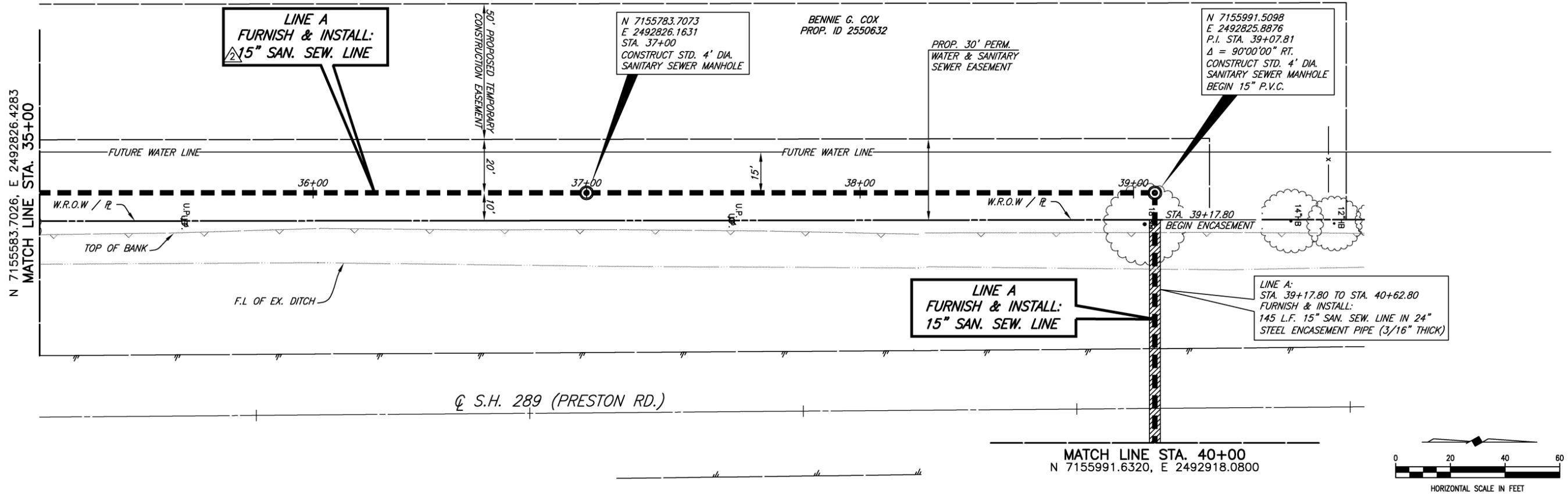
**BIRKHOFF, HENDRICKS & CARTER, L.L.P.**  
 PROFESSIONAL ENGINEERS  
 Texas Firm F526  
 11910 Greenville Ave., Suite 600  
 Dallas, Texas (214) 361-7900

*[Signature]*  
 01-30-2012

**CITY OF CELINA, TEXAS**  
 DOE BRANCH TRUNK SEWER EXTENSION  
 SANITARY SEWER LINE "A"  
 STA. 30+00 TO STA. 35+00

|                          |              |
|--------------------------|--------------|
| BHC PROJECT NO. 2008-110 | SHEET NO. 14 |
| January, 2012            |              |

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| ADDENDUM No. 1, CHANGED 12" TO 15" - 03/23/2012 |
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 PROFESSIONAL ENGINEERS  
 Texas Firm F526  
 11910 Greenville Ave., Suite 600  
 Dallas, Texas (214) 361-7900

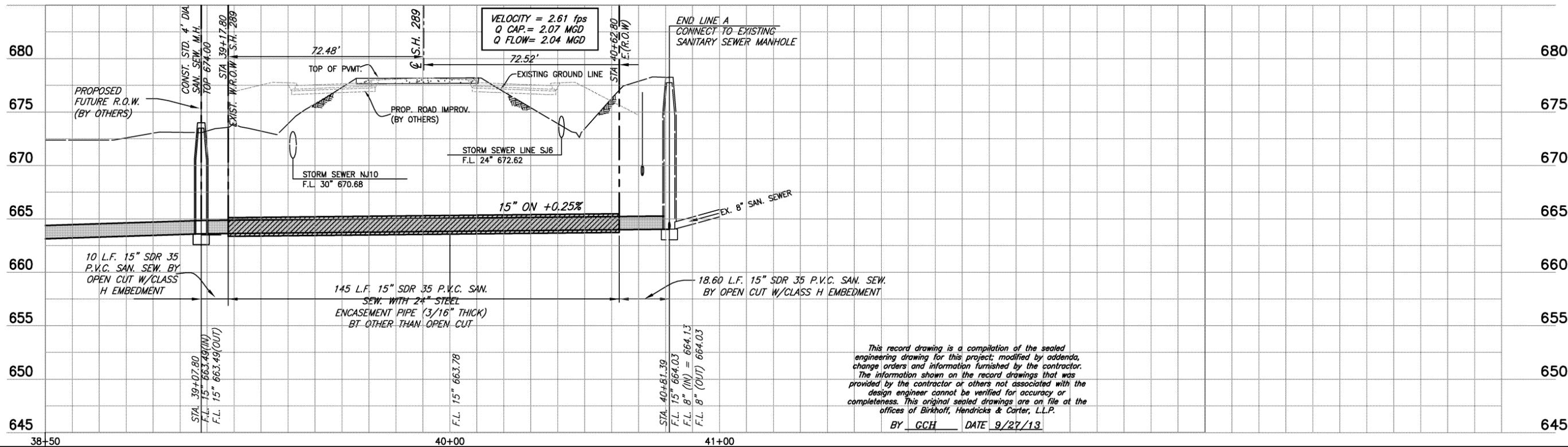
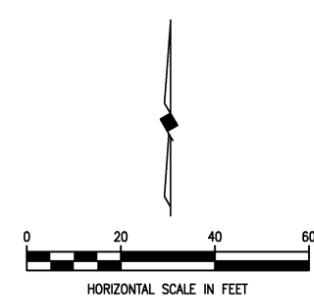
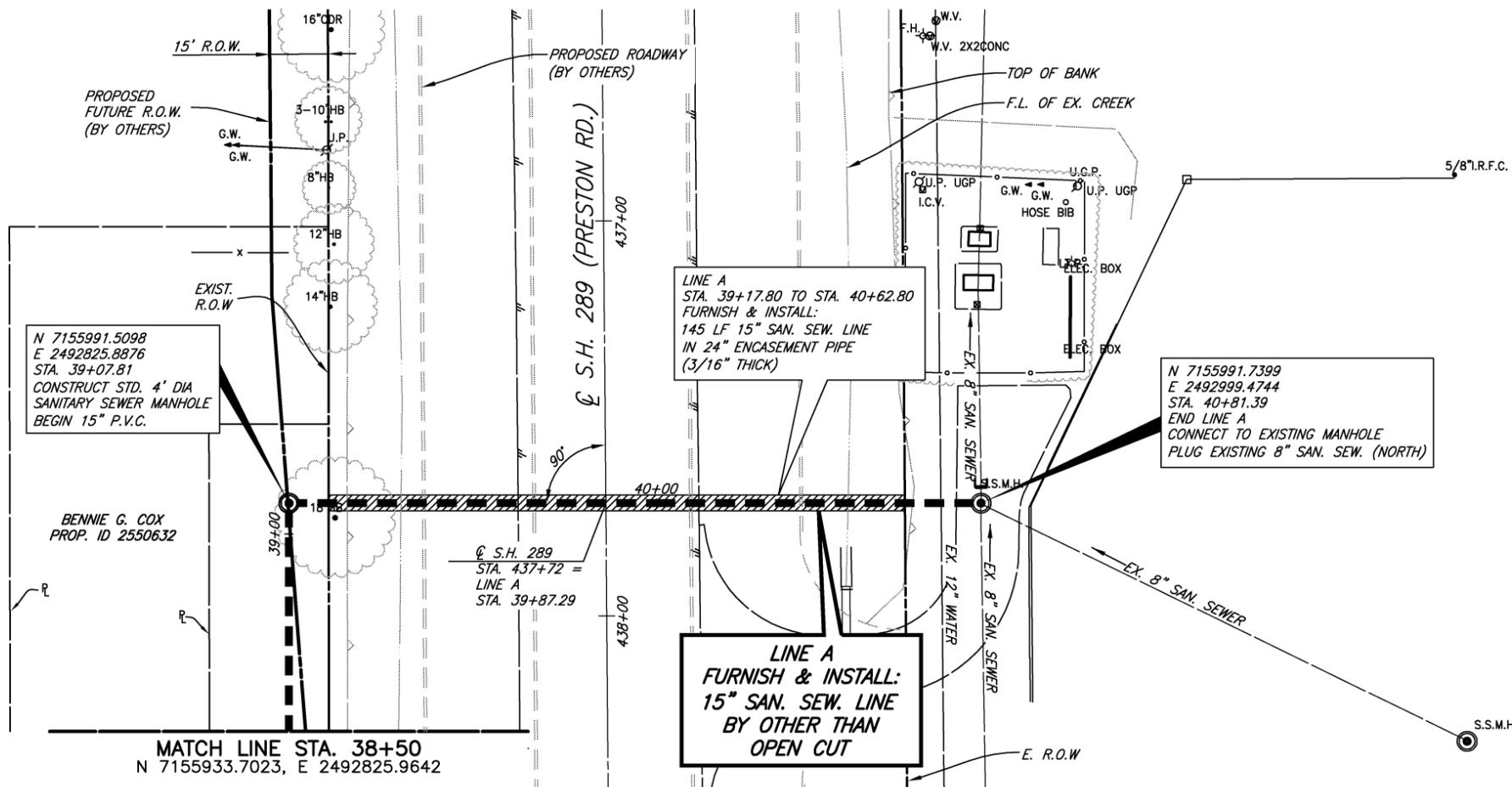
GARY C. HENDRICKS  
 65226  
 REGISTERED PROFESSIONAL ENGINEER

*[Signature]*  
 01-30-2012

**CITY OF CELINA, TEXAS**  
 DOE BRANCH TRUNK SEWER EXTENSION  
 SANITARY SEWER LINE "A"  
 STA. 35+00 TO STA. 40+00

|                          |              |
|--------------------------|--------------|
| BHC PROJECT NO. 2008-110 | SHEET NO. 15 |
| January, 2012            |              |

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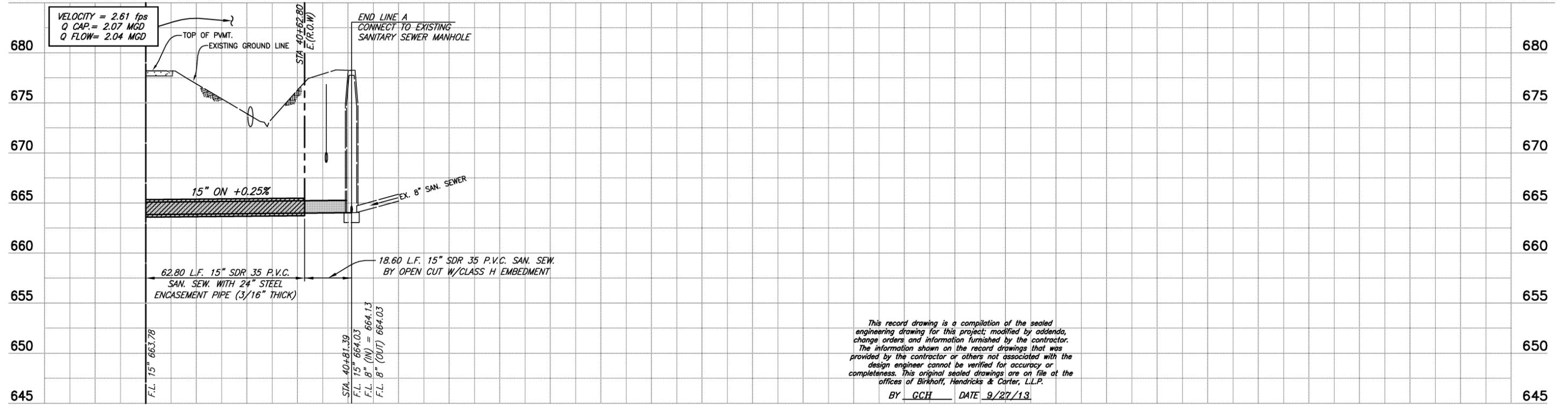
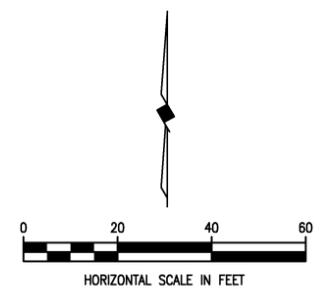
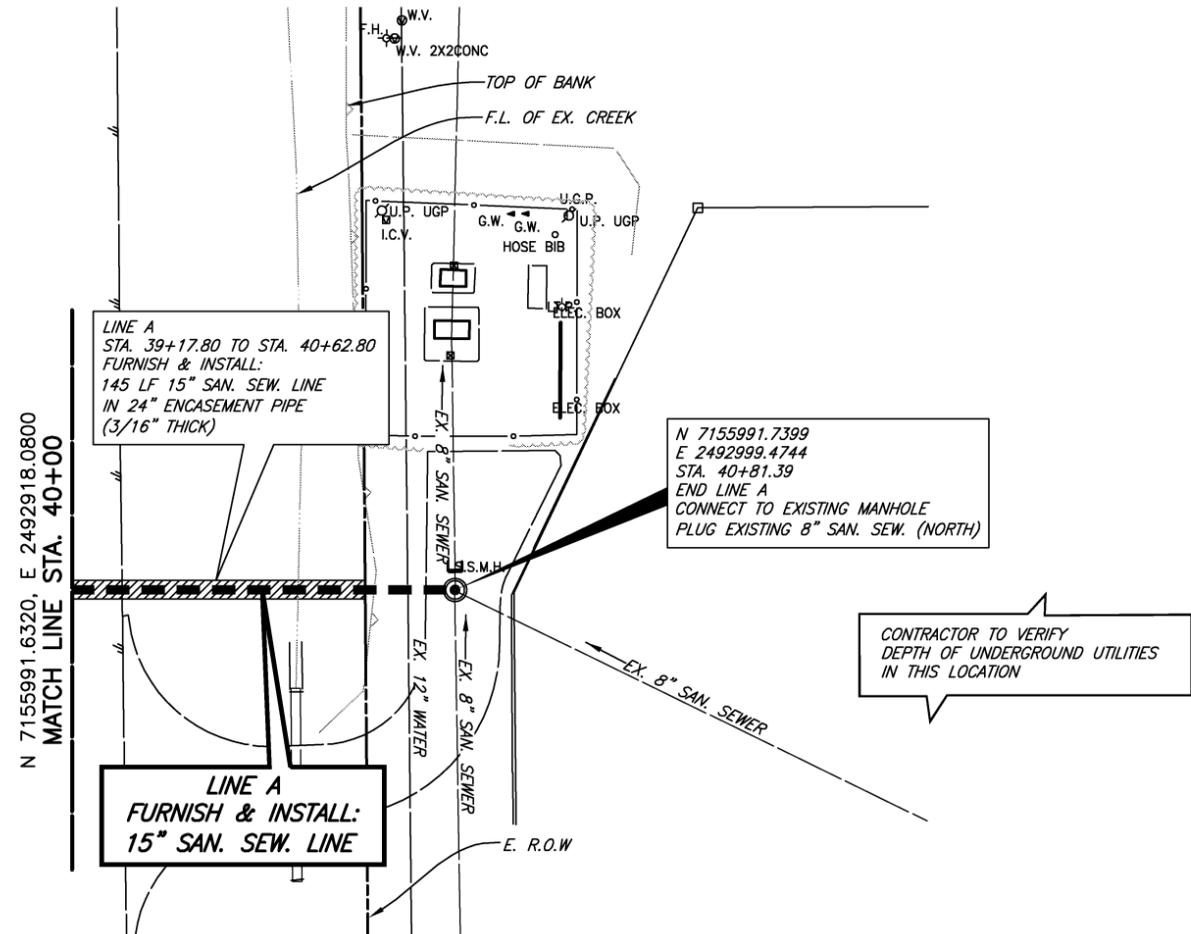


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|--|--|--|---|---|-------------------------|
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|--|--|--|---|---|-------------------------|

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 Dallas, Texas (214) 361-7900

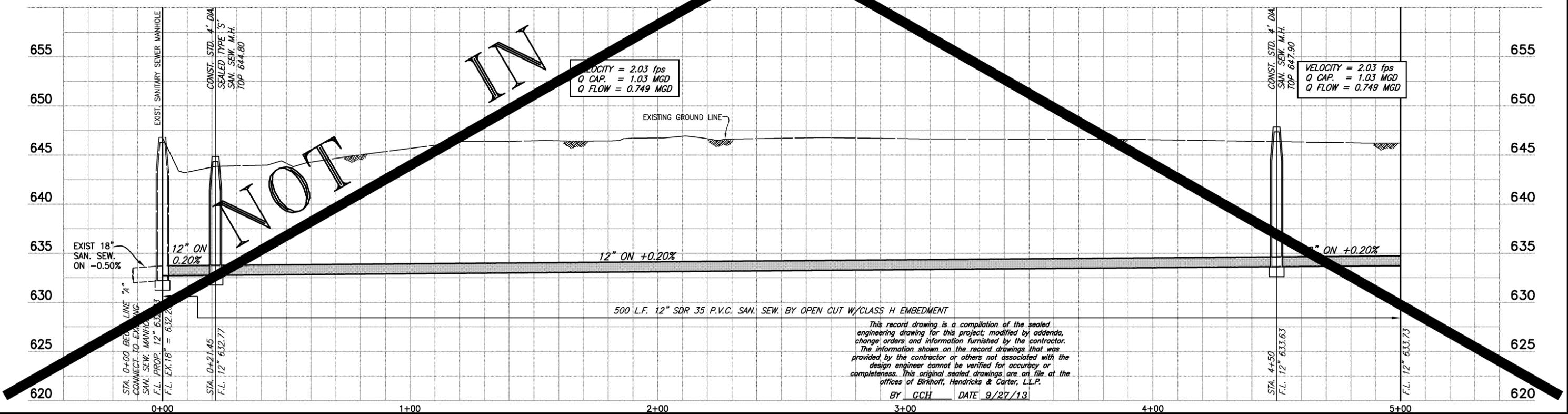
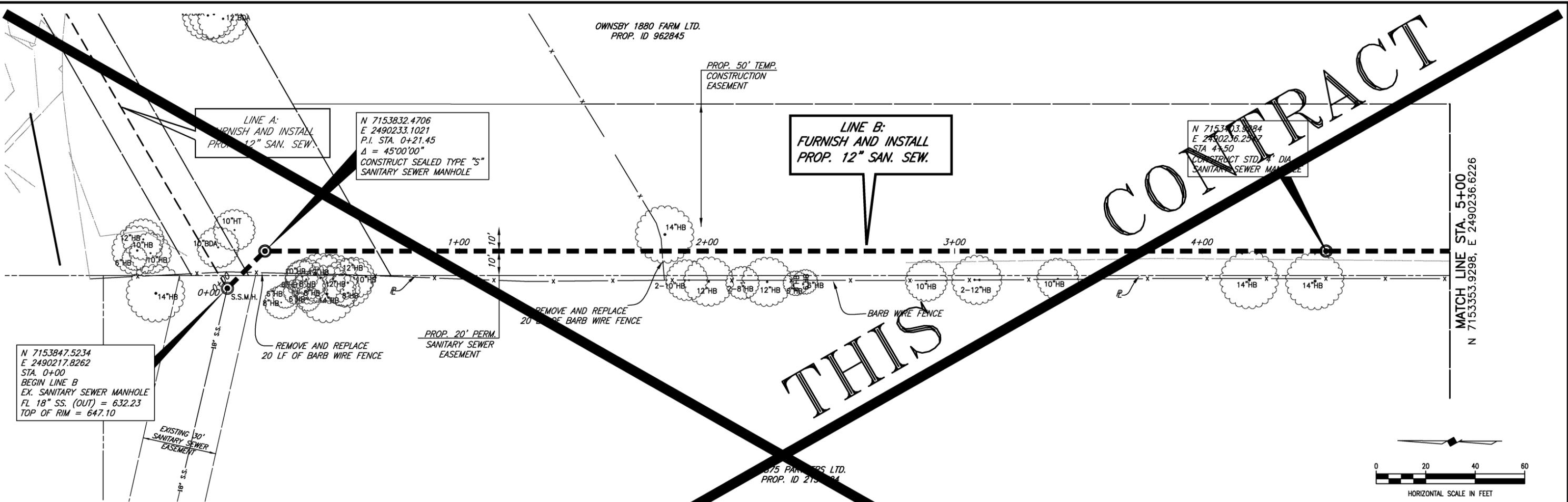


*[Signature]*  
 01-30-2012

**CITY OF CELINA, TEXAS**  
 DOE BRANCH TRUNK SEWER EXTENSION  
 SANITARY SEWER LINE 'A'  
 STA. 40+00 TO STA. 40+81.39

BHC  
 PROJECT NO.  
 2008-110  
 SHEET NO.  
**16**  
 January, 2012

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BY GCH DATE 9/27/13

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 Texas Firm F526  
 11910 Greenville Ave., Suite 600  
 Dallas, Texas (214) 361-7900

*[Signature]*  
01-30-2012

**CITY OF CELINA, TEXAS**  
 CARTER RANCH LIFT STATION 2 (SOUTH) RELIEF SEWER LINE  
 SANITARY SEWER LINE 'B'  
 STA. 0+00 TO STA. 5+00

|                                |                        |
|--------------------------------|------------------------|
| BHC<br>PROJECT NO.<br>2008-110 | SHEET NO.<br><b>17</b> |
| January, 2012                  |                        |

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OWNSBY 1880 FARM LTD.  
PROP. ID. 962845

PROP. 50' TEMP.  
CONSTRUCTION  
EASEMENT

LINE B:  
FURNISH AND INSTALL  
PROP. 12" SAN. SEW.

N 7153003.9392  
E 2490239.1973  
STA. 8+50  
CONSTRUCT STD. 4' DIA.  
SANITARY SEWER MANHOLE

N 7153353.9298, E 2490236.6226  
MATCH LINE STA. 5+00

MATCH LINE STA. 10+00  
N 7152853.9433, E 2490240.3008

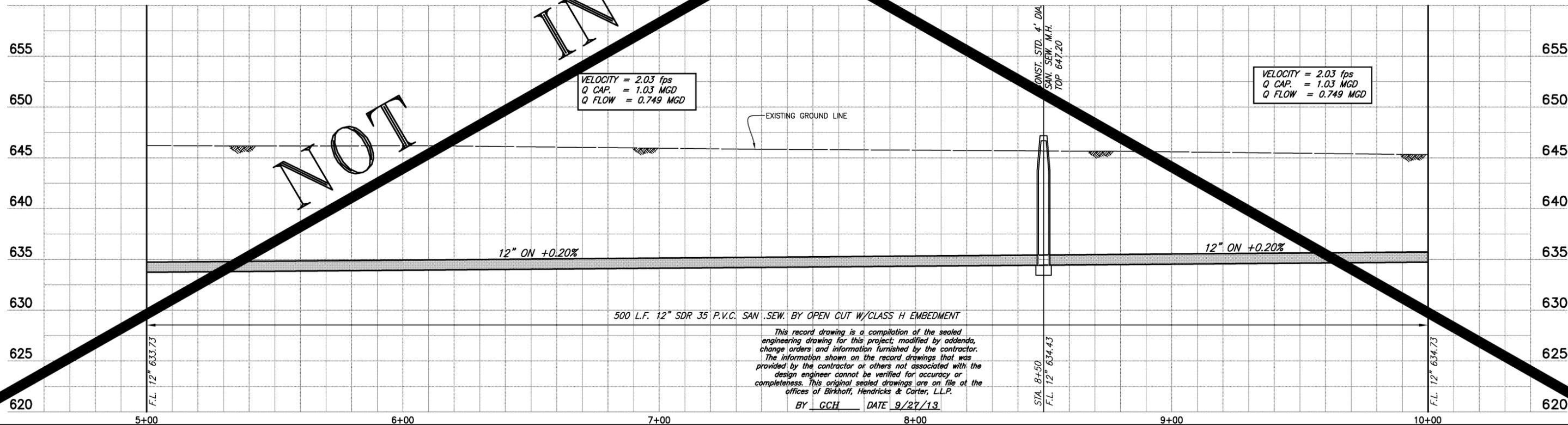
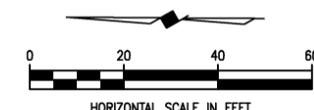
14875 PARTNERS LTD.  
PROP. ID 2137594

CONTRACT

THIS

NOT

IN



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PROFESSIONAL ENGINEERS  
Texas Firm F526  
11910 Greenville Ave., Suite 600  
Dallas, Texas (214) 361-7900

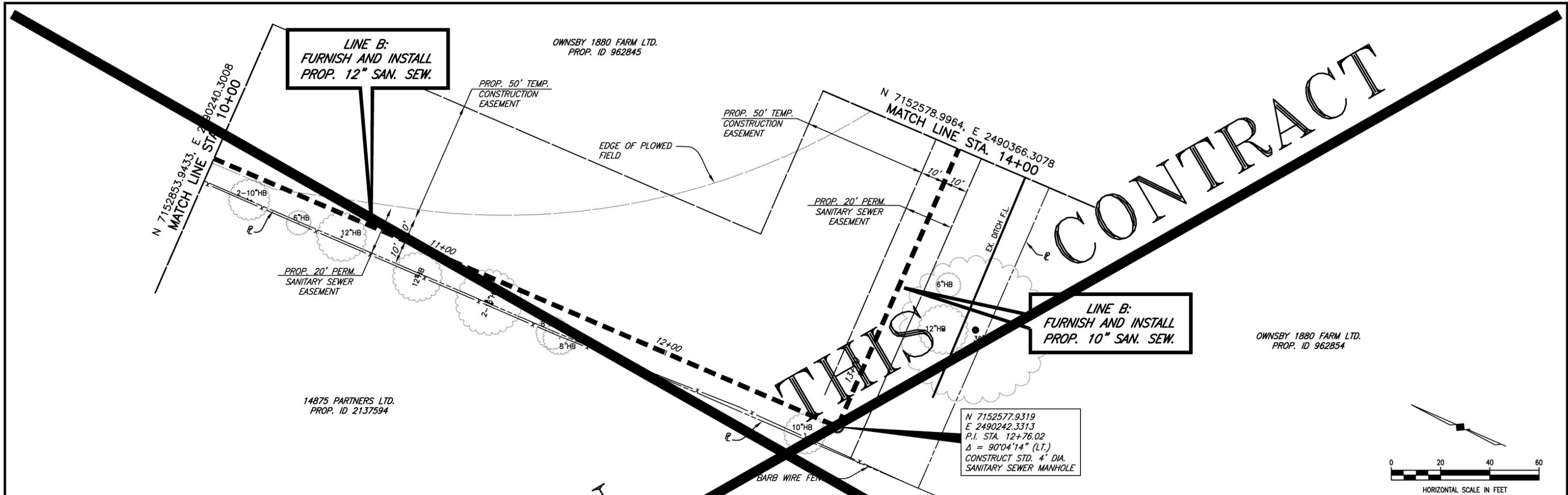


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01-30-2012

**CITY OF CELINA, TEXAS**  
CARTER RANCH LIFT STATION 2 (SOUTH) RELIEF SEWER LINE  
SANITARY SEWER LINE 'B'  
STA. 5+00 TO STA. 10+00

BHC  
PROJECT NO.  
2008-110  
January, 2012  
SHEET NO.  
**18**

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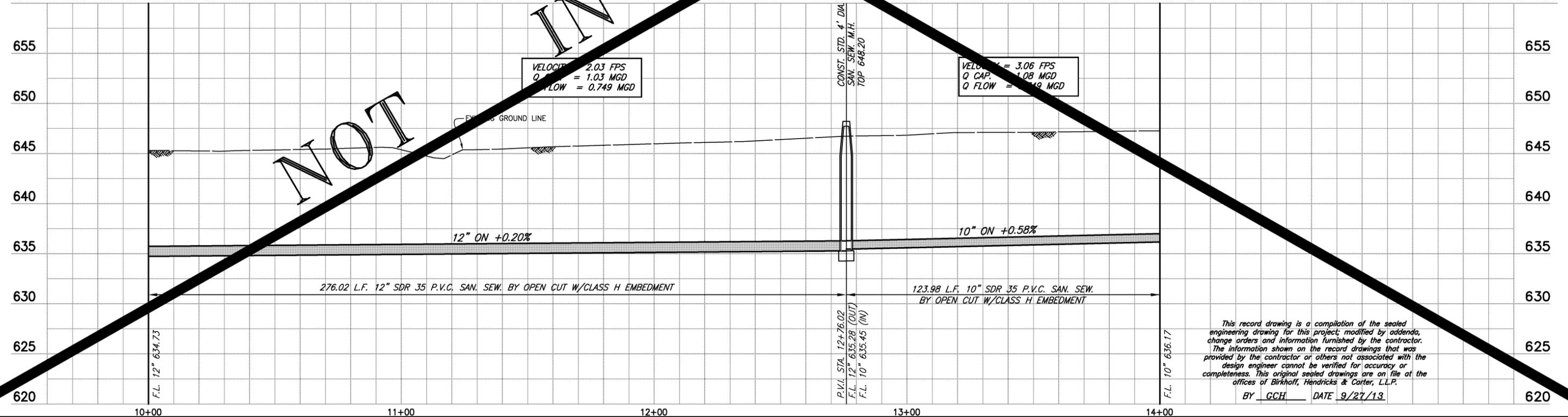


CONTRACT

THIS

NOT

IN



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|  |  |  |                |  |   |                        |
|--|--|--|----------------|--|---|------------------------|
|  | <b>BIRKHOFF, HENDRICKS &amp; CARTER, L.L.P.</b><br>PROFESSIONAL ENGINEERS<br>Texas Firm F526<br>11910 Greenville Ave., Suite 600<br>Dallas, Texas (214) 361-7900 |  | <br>01-30-2012 | <b>CITY OF CELINA, TEXAS</b><br>CARTER RANCH LIFT STATION 2 (SOUTH) RELIEF SEWER LINE<br>SANITARY SEWER LINE 'B'<br>STA. 10+00 TO STA. 14+00 | BHC<br>PROJECT NO.<br>2008-110<br>January, 2012 | SHEET NO.<br><b>19</b> |
|--|--|--|----------------|--|---|------------------------|

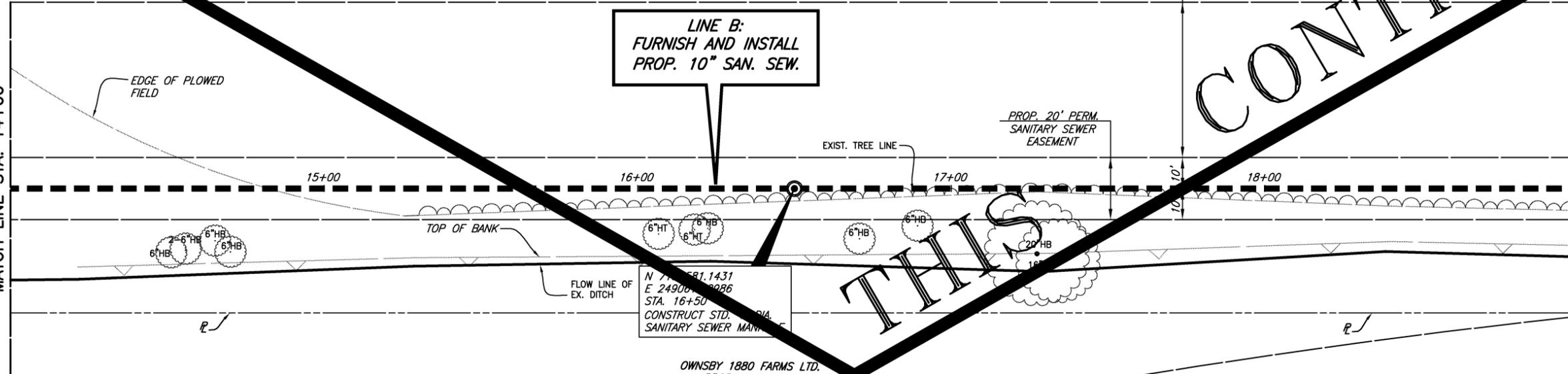
OWNSBY 1880 FARMS LTD.  
PROP. ID 982845

CONTRACT

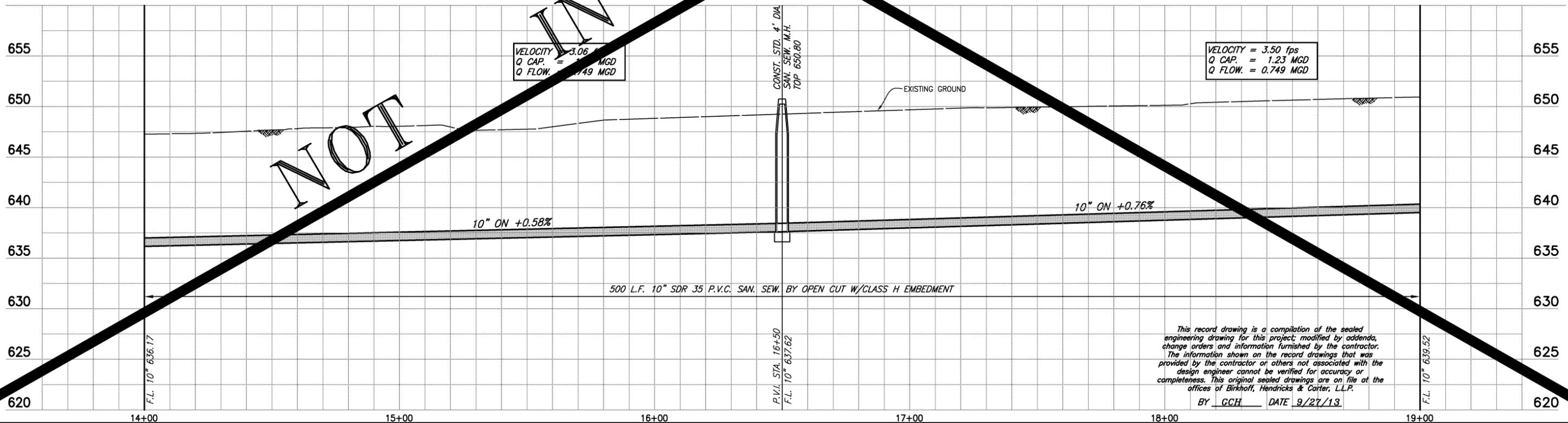
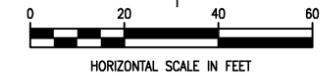
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MATCH LINE STA. 14+00

MATCH LINE STA. 19+00  
N 7152583.2898, E 2490866.2894

LINE B:  
FURNISH AND INSTALL  
PROP. 10" SAN. SEW.



OWNSBY 1880 FARMS LTD.  
PROP. ID 982854



NOT

THIS

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BY GCH DATE 9/27/13

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PROFESSIONAL ENGINEERS  
Texas Firm F526  
11910 Greenville Ave., Suite 600  
Dallas, Texas (214) 361-7900



*[Signature]*  
01-30-2012

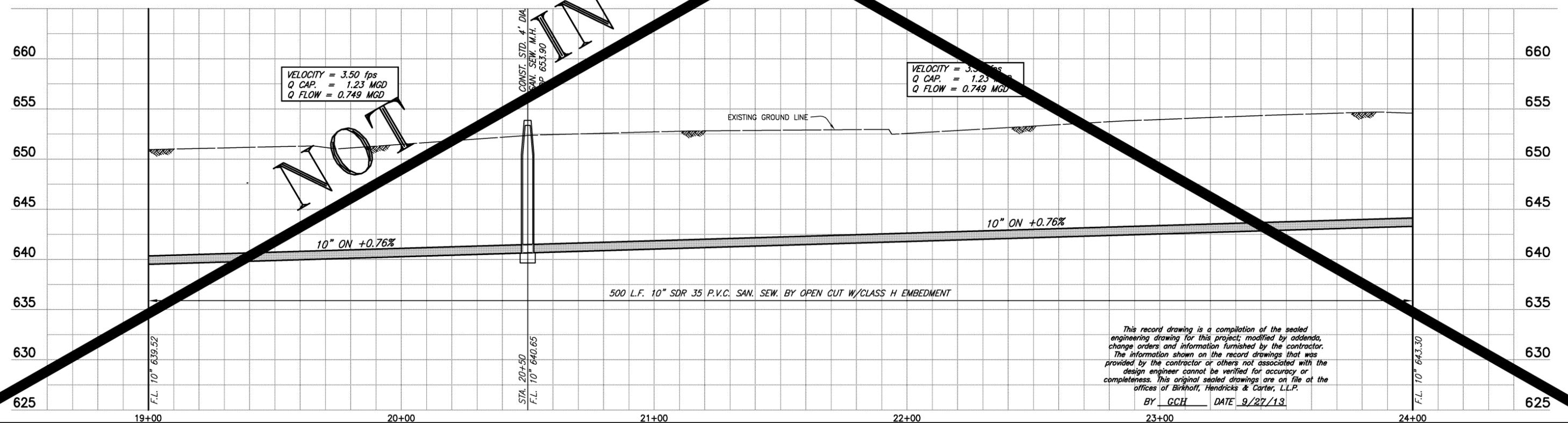
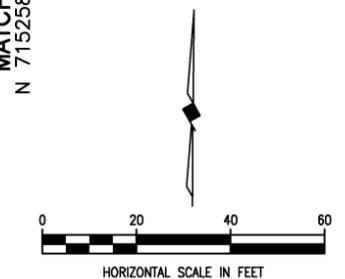
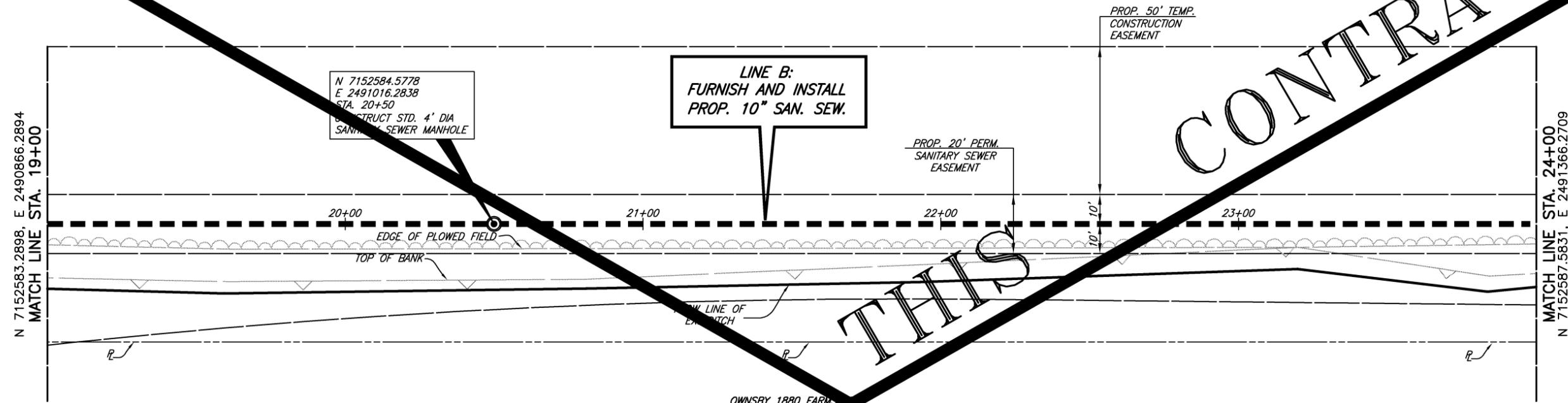
**CITY OF CELINA, TEXAS**  
CARTER RANCH LIFT STATION 2 (SOUTH) RELIEF SEWER LINE  
SANITARY SEWER LINE 'B'  
STA. 14+00 TO STA. 19+00

BHC  
PROJECT NO.  
2008-110  
January, 2012

SHEET NO.  
**20**

OWNSBY 1880 FARMS LTD.  
PROP. ID 982845

CONTRACT



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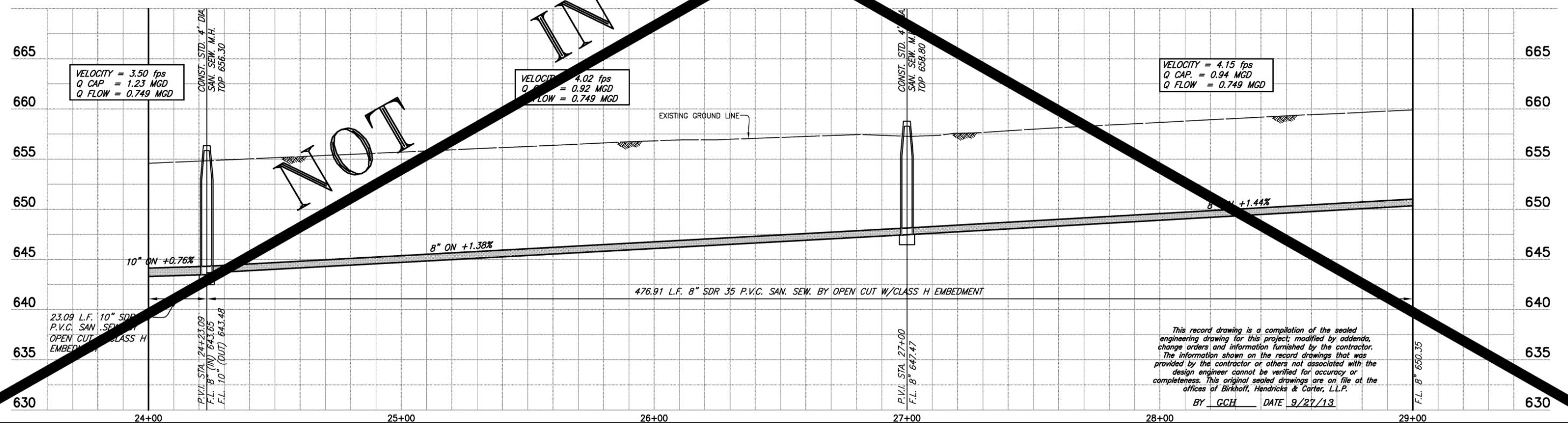
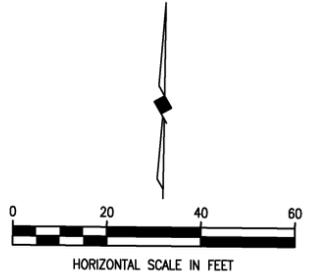
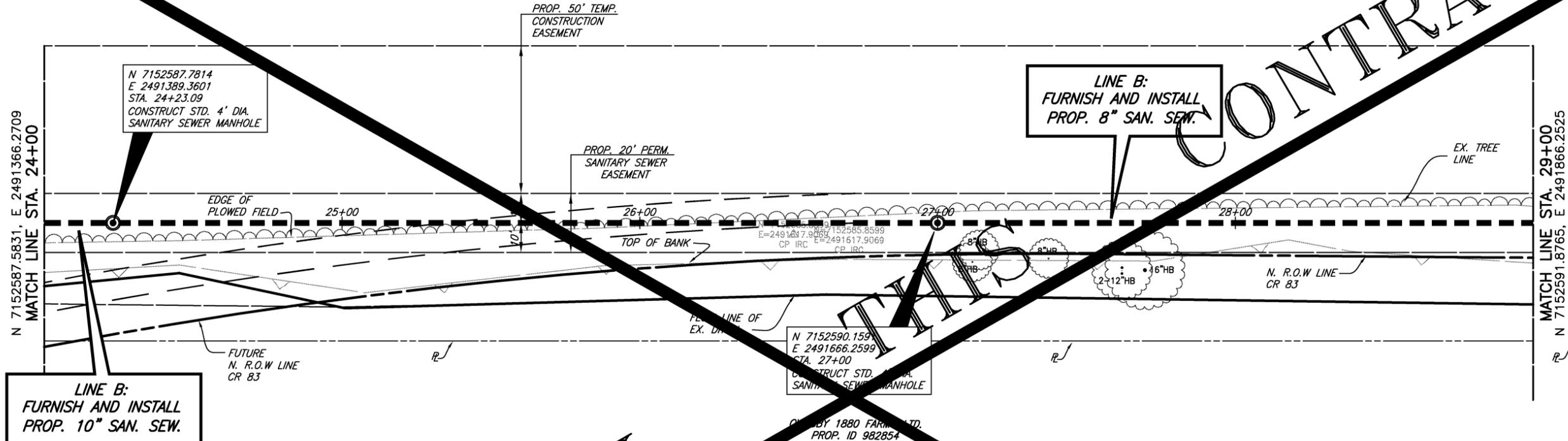
**CITY OF CELINA, TEXAS**  
 CARTER RANCH LIFT STATION 2 (SOUTH) RELIEF SEWER LINE  
 SANITARY SEWER LINE 'B'  
 STA. 19+00 TO STA. 24+00

BHC  
 PROJECT NO.  
 2008-110  
 January, 2012

SHEET NO.  
**21**

OWNSBY 1880 FARMS LTD.  
PROP. ID 982845

CONTRACT



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Dallas, Texas (214) 361-7900



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01-30-2012

**CITY OF CELINA, TEXAS**  
CARTER RANCH LIFT STATION 2 (SOUTH) RELIEF SEWER LINE  
SANITARY SEWER LINE 'B'  
STA. 24+00 TO STA. 29+00

BHC  
PROJECT NO.  
2008-110  
January, 2012

SHEET NO.  
**22**

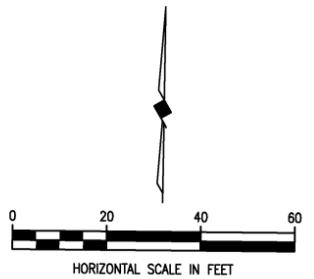
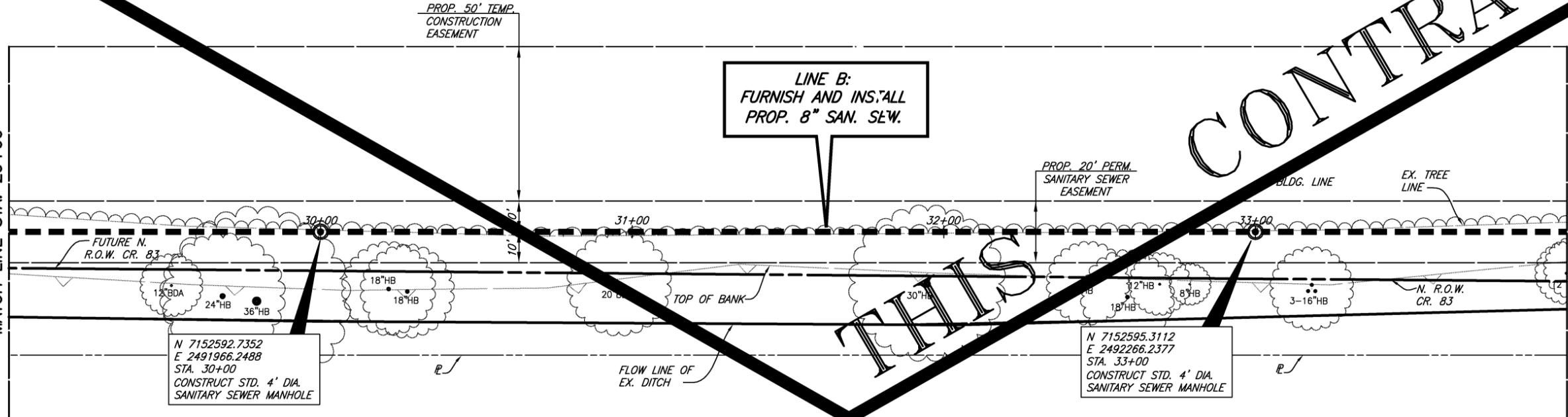
OWNSBY 1880 FARMS LTD.  
PROP. ID 982845

CONTRACT

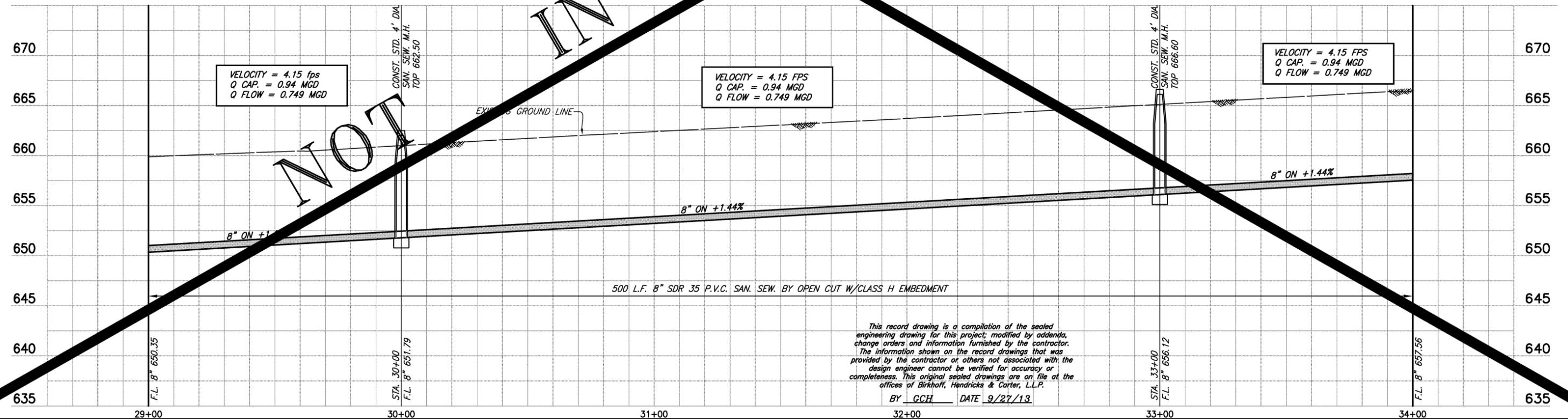
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FURNISH AND INST. ALL  
PROP. 8" SAN. SEW.

N 7152591.8765, E 2491866.2525  
MATCH LINE STA. 29+00

MATCH LINE STA. 34+00  
N 7152596.1698, E 2492366.2341



OWNSBY 1880 FARMS LTD.  
PROP. ID 982854



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Dallas, Texas (214) 361-7900



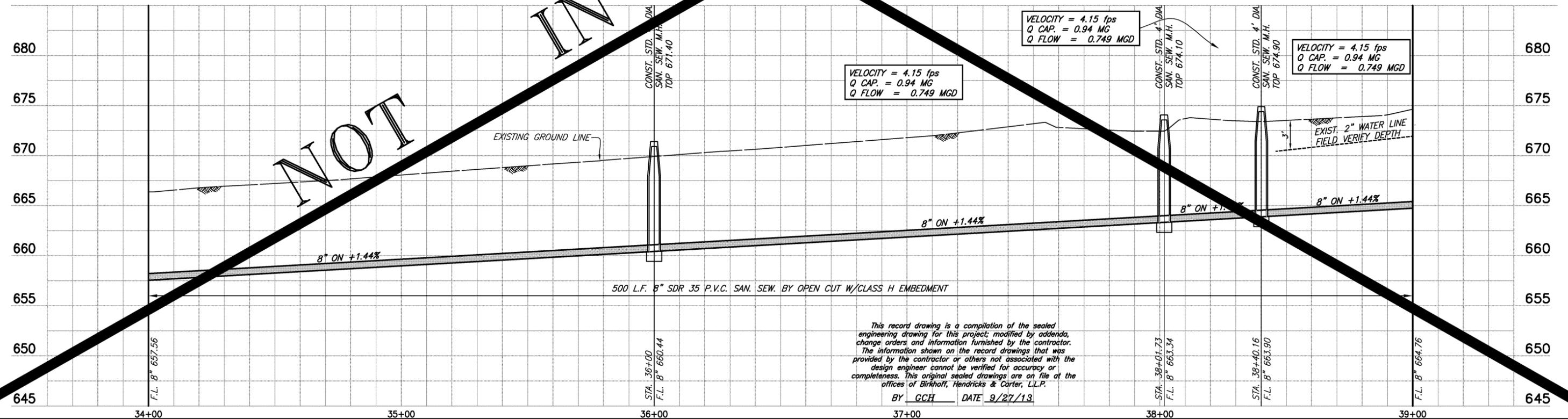
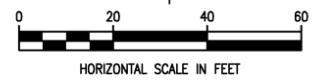
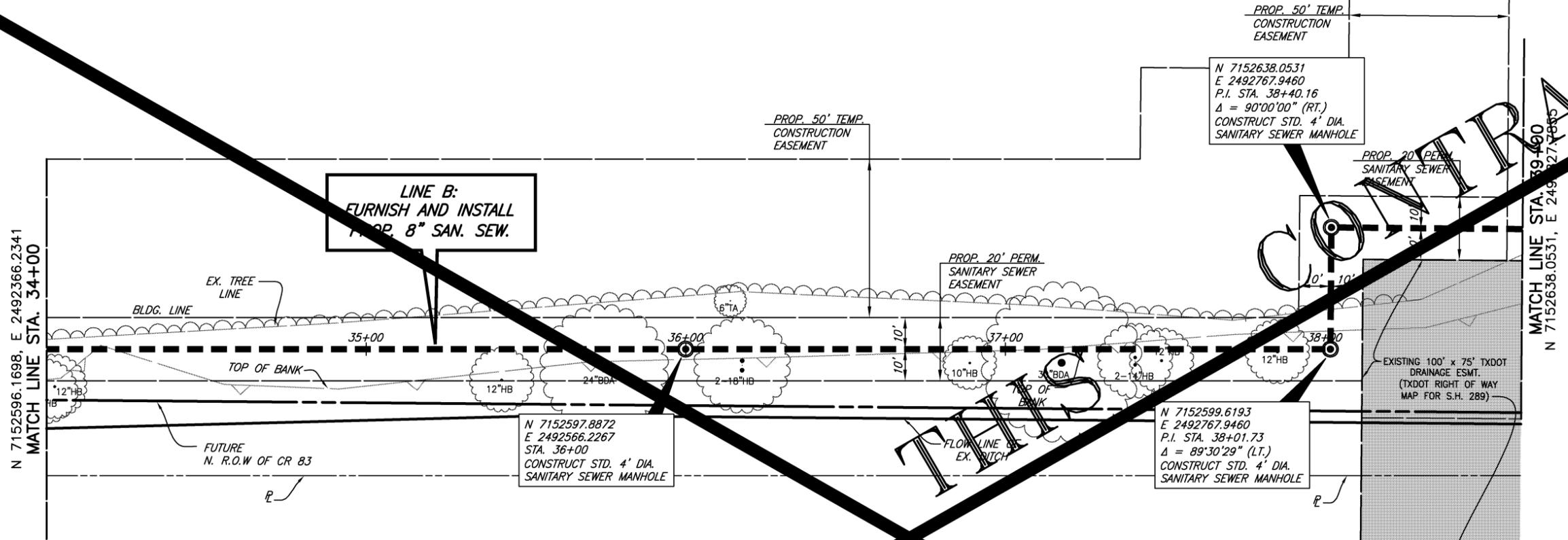
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01-30-2012

**CITY OF CELINA, TEXAS**  
CARTER RANCH LIFT STATION 2 (SOUTH) RELIEF SEWER LINE  
SANITARY SEWER LINE B  
STA 29+00 TO 34+00

BHC  
PROJECT NO.  
2008-110  
January, 2012  
SHEET NO.  
**23**

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OWNSBY 1880 FARMS LTD.  
PROP. ID 982845



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BY GCH DATE 9/27/13

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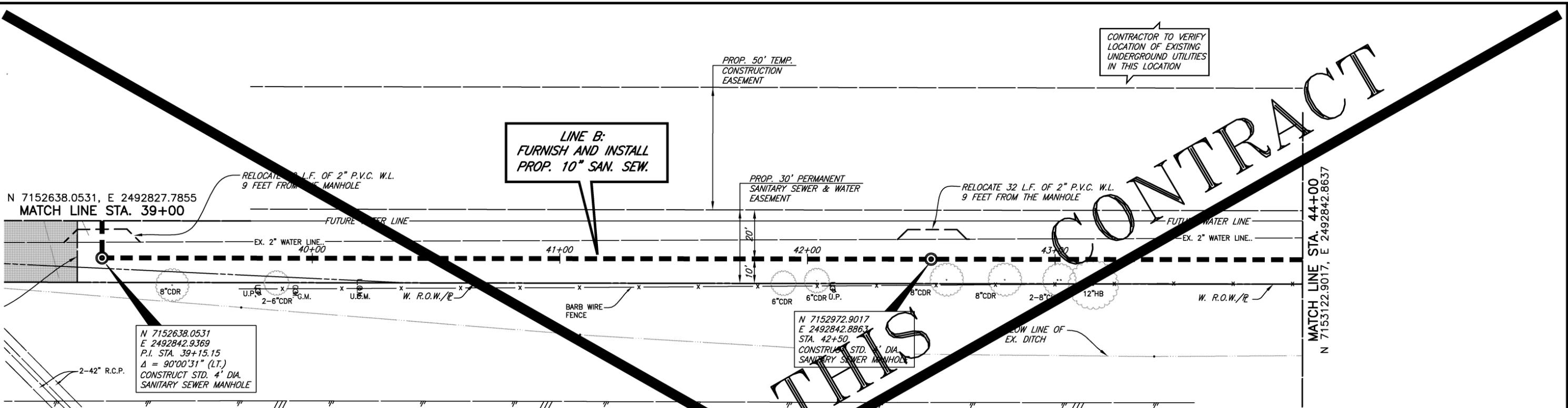
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01-30-2012

**CITY OF CELINA, TEXAS**  
CARTER RANCH LIFT STATION 2 (SOUTH) RELIEF SEWER LINE  
SANITARY SEWER LINE B  
STA 34+00 TO 39+00

BHC  
PROJECT NO.  
2008-110  
January, 2012

SHEET NO.  
**24**

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CONTRACTOR TO VERIFY LOCATION OF EXISTING UNDERGROUND UTILITIES IN THIS LOCATION

LINE B:  
FURNISH AND INSTALL  
PROP. 10" SAN. SEW.

PROP. 50' TEMP.  
CONSTRUCTION  
EASEMENT

PROP. 30' PERMANENT  
SANITARY SEWER & WATER  
EASEMENT

RELOCATE 32 L.F. OF 2" P.V.C. W.L.  
9 FEET FROM THE MANHOLE

RELOCATE 15 L.F. OF 2" P.V.C. W.L.  
9 FEET FROM THE MANHOLE

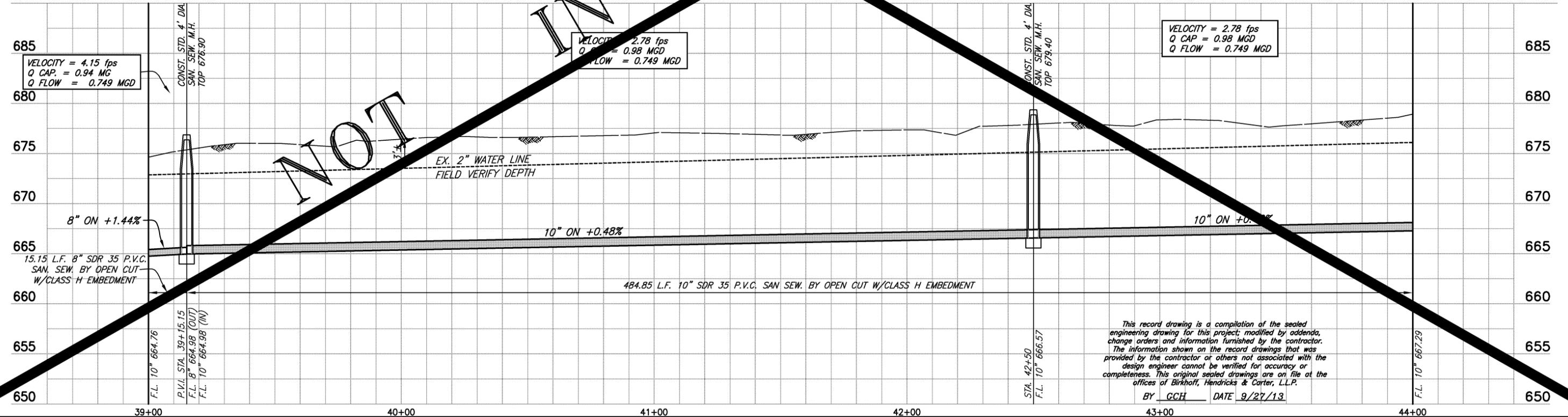
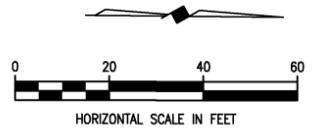
N 7152638.0531, E 2492827.7855  
MATCH LINE STA. 39+00

MATCH LINE STA. 44+00  
N 7153122.9017, E 2492842.8637

N 7152638.0531  
E 2492842.9369  
P.I. STA. 39+15.15  
Δ = 90°00'31" (LT.)  
CONSTRUCT STD. 4' DIA.  
SANITARY SEWER MANHOLE

N 7152972.9017  
E 2492842.8863  
STA. 42+50  
CONSTRUCT STD. 4' DIA.  
SANITARY SEWER MANHOLE

THIS



NOT

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BY GCH DATE 9/27/13

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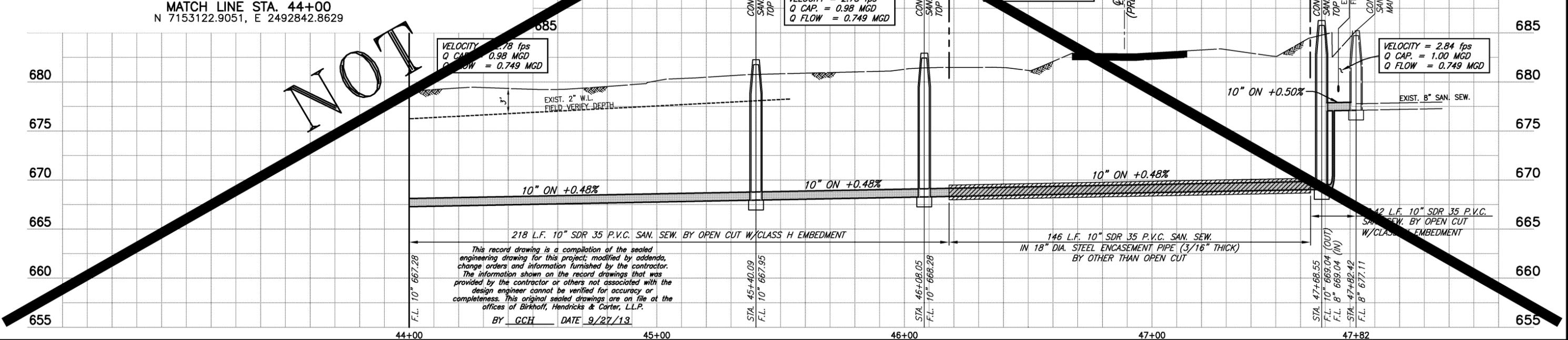
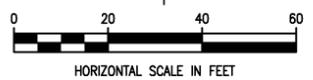
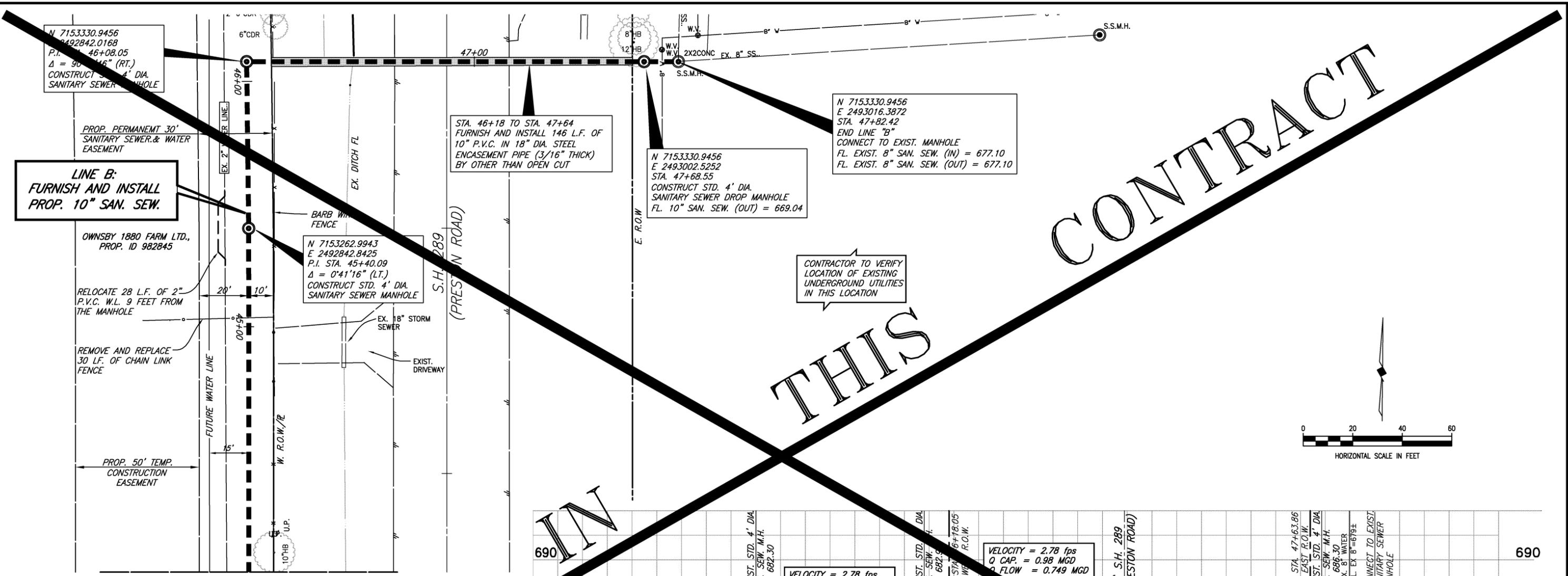
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 Texas Firm F526  
 11910 Greenville Ave., Suite 600  
 Dallas, Texas (214) 361-7900

*[Signature]*  
01-30-2012

**CITY OF CELINA, TEXAS**  
 CARTER RANCH LIFT STATION 2 (SOUTH) RELIEF SEWER LINE  
 SANITARY SEWER LINE B  
 STA 39+00 TO 44+00

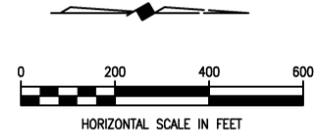
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| BHC PROJECT NO. 2008-110 | SHEET NO. 25 |
| January, 2012            |              |

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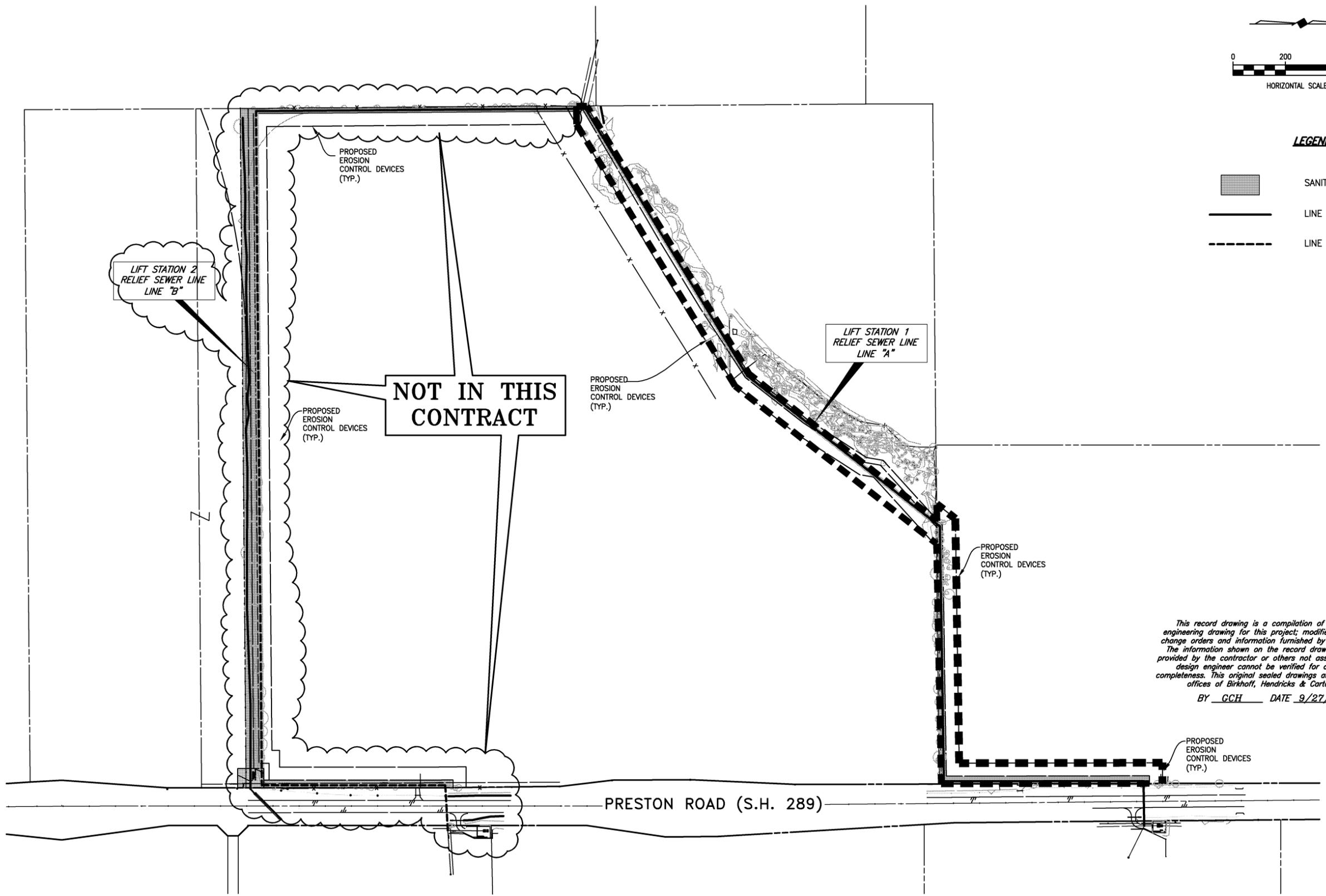
|  |  |  |  |   |   |                        |
|--|--|--|--|---|---|------------------------|
| <b>BIRKHOFF, HENDRICKS &amp; CARTER, L.L.P.</b><br>PROFESSIONAL ENGINEERS<br>Texas Firm F526<br>11910 Greenville Ave., Suite 600<br>Dallas, Texas (214) 361-7900 |  |  |  | <b>CITY OF CELINA, TEXAS</b><br>CARTER RANCH LIFT STATION 2 (SOUTH) RELIEF SEWER LINE<br>SANITARY SEWER LINE B<br>STA 44+00 TO 47+82.42 | BHC<br>PROJECT NO.<br>2008-110<br>January, 2012 | SHEET NO.<br><b>26</b> |
|--|--|--|--|---|---|------------------------|

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**LEGEND**

-  SANITARY SEWER EASEMENT
-  LINE "A"
-  LINE "B"



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BY GCH DATE 9/27/13

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*[Signature]*  
 3/11/2010

**CITY OF CELINA, TEXAS**  
 ADDITION TO WASTEWATER COLLECTION SYSTEM  
 ABANDONMENT OF CARTER RANCH LIFT STATIONS 1 & 2  
 EROSION CONTROL PLAN

BHC  
 PROJECT NO.  
 2008-110  
 January, 2012

SHEET NO.  
**27**

**SITE DESCRIPTION**

PROJECT LIMITS:  
 LINE A: FROM CARTER RANCH LIFT STATION 1, ACROSS S.H. 289, ALONG S.H. 289 WEST RIGHT-OF-WAY LINE, TO THE EX. MANHOLE LOCATED AT THE W. PROP. LINE OF OWNSBY FARM.  
 LINE B: FROM CARTER RANCH LIFT STATION 2, ACROSS S.H. 289, ALONG S.H. 289 WEST RIGHT-OF-WAY LINE, TO THE EX. MANHOLE LOCATED AT THE W. PROP. LINE OF OWNSBY FARM.

PROJECT DESCRIPTION: THE CONSTRUCTION OF A WASTE WATER LINE

**NOT IN THIS CONTRACT**

MAJOR SOIL DISTURBING ACTIVITIES: SOIL DISTURBING ACTIVITIES WILL INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:  
 THE EXCAVATION FOR THE NEW SEWER LINE CONSTRUCTION.  
 AND THE BACKFILLING/FINISHED GRADING AFTER THE COMPLETION OF THE PROJECT

TOTAL DRAINAGE AREA: XX.XX ACRES

TOTAL DRAINAGE AREA TO BE DISTURBED: 16.17 ACRES

WEIGHTED RUNOFF COEFFICIENT PRIOR TO CONSTRUCTION 0.4  
 AFTER CONSTRUCTION 0.4

EXISTING CONDITION OF SOIL & VEGETATIVE COVER AND % OF EXISTING VEGETATIVE COVER: XXX

NAME OF RECEIVING WATERS: N/A

WATER QUALITY: N/A

**EROSION AND SEDIMENT CONTROLS**

**SOIL STABILIZATION PRACTICES:**

- TEMPORARY SEEDING
- PERMANENT PLANTING, SODDING, OR SEEDING
- MULCH SOD
- SOIL RETENTION BLANKET
- BUFFER ZONES
- PRESERVATION OF NATURAL RESOURCES

OTHER: DISTURBED AREAS ON WHICH CONSTRUCTION ACTIVITY HAS CEASED (TEMPORARILY OR FINALLY) SHALL BE EITHER SEEDED OR SODDED WITHIN 14 DAYS UNLESS CONSTRUCTION ACTIVITIES ARE SCHEDULED TO RESUME WITHIN 21 DAYS.

**STRUCTURAL PRACTICES:**

- SILT FENCES
- HAY BALES
- ROCK BERMS
- DIVERSION, INTERCEPTOR, OR PERIMETER DIKES
- DIVERSION DIKE AND SWALE COMBINATIONS
- PIPE SLOPE DRAINS
- PAVED FLUMES
- ROCK BEDDING AT CONSTRUCTION EXIT
- TIMBER MATTING AT CONSTRUCTION EXIT
- CHANNEL LINERS
- SEDIMENT TRAPS
- SEDIMENT FILTERS
- STORM INLET SEDIMENT TRAP
- STONE OUTLET STRUCTURES
- CURBS AND GUTTERS
- STORM SEWERS
- VELOCITY CONTROL DEVICES

OTHER:

**NARRATIVE – SEQUENCE OF CONSTRUCTION (STORM WATER MANAGEMENT) ACTIVITIES:**

- THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:
- 1) PREPARE THE CONSTRUCTION SITE TO RECEIVE AND INSTALL PERIMETER SILT FENCES AND CONSTRUCTION ENTRANCES.
  - 2) PROPOSED SEWER LINE TRENCH EXCAVATION
  - 3) PROPOSED SEWER LINE CONSTRUCTION
  - 4) TRENCH BACKFILLING AND FINISHED GRADING
  - 5) AFTER ALL WORK HAS BEEN COMPLETED, INCLUDING STABILIZATION OF THE SITE, COMPLETION OF A STAND OF GRASS AND AS APPROVED BY THE OWNER, THE CITY SHALL DIRECT THAT ALL TEMPORARY STRUCTURAL EROSION CONTROL DEVICES BE REMOVED AND THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS WITH PERMANENT SODDING OR HYDROMULCH AS REQUIRED. 4 FOOT SOLID SOD BACK OF CURBS, REMAINDER HYDROMULCHED

STORM WATER MANAGEMENT: MANAGEMENT OF THE STORM WATER RUNOFF WILL BE PROVIDED BY THE EXISTING DRAINAGE DITCHES AND CULVERT PIPES ALONG WEST R.O.W OF S.H. 289 AND THE CREEK IN THE PROJECT LOCATION

EARTHWORK: N/A

SIDE SLOPES: N/A

**OTHER EROSION AND SEDIMENT CONTROLS:**

MAINTENANCE: ALL EROSION AND SEDIMENT CONTROLS WILL BE MAINTAINED IN GOOD WORKING ORDER. IF A REPAIR IS NECESSARY, IT WILL BE DONE AT THE EARLIEST DATE POSSIBLE, BUT NO LATER THAN 7 CALENDAR DAYS AFTER THE SURROUNDING EXPOSED GROUND HAS DRIED SUFFICIENTLY TO PREVENT FURTHER DAMAGE FROM HEAVY EQUIPMENT. THE AREAS ADJACENT TO CREEKS AND DRAINAGE WAYS SHALL HAVE PRIORITY FOLLOWED BY DEVICES PROTECTING STORM SEWER INLETS.

INSPECTION: AN INSPECTION WILL BE PERFORMED BY A CONTRACTOR APPROVED INSPECTOR IN ACCORDANCE WITH THE MOST RECENT NPDES REQUIREMENTS. AN INSPECTION AND MAINTENANCE REPORT WILL BE MADE PER EACH INSPECTION. BASED ON THE INSPECTION RESULTS, THE CONTROLS SHALL BE REVISED PER THE INSPECTION REPORT. CITY SHALL REVIEW ALL CONTRACTOR INSPECTIONS. CITY INSPECTOR TO INSPECT EROSION CONTROL DEVICES EVERY 14 CALENDAR DAYS.

WASTE MATERIALS: ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER WILL MEET ALL STATE AND LOCAL CITY SOLID WASTE MANAGEMENT REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN THE DUMPSTER. THE DUMPSTER WILL BE EMPTIED AS NECESSARY OR AS REQUIRED BY LOCAL REGULATION, AND THE TRASH WILL BE HAULED TO A LOCAL LANDFILL. NO CONSTRUCTION WASTE MATERIAL WILL BE BURIED ON SITE.

HAZARDOUS WASTE (INCLUDING SPILL REPORTING): AT A MINIMUM, ANY PRODUCTS IN THE FOLLOWING CATEGORIES ARE CONSIDERED TO BE HAZARDOUS: PAINTS, ACIDS FOR CLEANING MASONRY SURFACES, CLEANING SOLVENTS, ASPHALT PRODUCTS, CHEMICAL ADDITIVES FOR SOIL STABILIZATION, OR CONCRETE CURING COMPOUNDS AND ADDITIVES. IN THE EVENT OF A SPILL WHICH MAY BE HAZARDOUS, THE CONTRACTOR SPILL COORDINATOR SHOULD BE CONTACTED IMMEDIATELY.

SANITARY WASTE: ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS AS NECESSARY OR AS REQUIRED BY LOCAL REGULATION BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

**OFF SITE VEHICLE TRACKING:**

- HAUL ROADS DAMPENED FOR DUST CONTROL
- LOADED HAUL TRUCKS TO BE COVERED WITH TARPAULIN
- EXCESS DIRT ON ROAD REMOVED DAILY
- STABILIZED CONSTRUCTION ENTRANCE

OTHER: THE CONTRACTOR SHALL BE RESPONSIBLE FOR AUGMENTING THESE PLANS WITH OTHER MEASURES FOR ANY OTHER TEMPORARY EROSION CONTROL MEASURES OCCASIONED BY THE WORK, SUCH AS FOR HAUL ROADS AND BORROW PIT ACCESS. ALL CONTINGENT EROSION CONTROL PRACTICES SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION OR CONSTRUCTION.

REMARKS: DISPOSAL AREAS, STOCKPILES, AND HAUL ROADS SHALL BE CONSTRUCTED IN A MANNER THAT WILL MINIMIZE AND CONTROL THE AMOUNT OF SEDIMENT THAT MAY ENTER RECEIVING WATERS. DISPOSAL AREAS SHALL NOT BE LOCATED IN ANY WETLAND, WATER BODY OR STREAM BED CONSTRUCTION STAGING AREAS AND VEHICLE MAINTENANCE AREAS SHALL BE CONSTRUCTED BY THE CONTRACTOR IN A MANNER TO MINIMIZE THE RUNOFF OF POLLUTANTS. ALL WATERWAYS SHALL BE CLEARED AS SOON AS PRACTICABLE OF TEMPORARY EMBANKMENTS, TEMPORARY BRIDGES, MATTING, FALSE WORK, PILING, DEBRIS OR OTHER OBSTRUCTIONS PLACED DURING CONSTRUCTION OPERATIONS THAT ARE NOT A PART OF THE FINISHED WORK. THERE ARE NO HISTORICAL SITES OR ENDANGERED SPECIES IMPACTED BY THIS PROJECT.

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 PROFESSIONAL ENGINEERS  
 Texas Firm F526  
 11910 Greenville Ave., Suite 600  
 Dallas, Texas (214) 361-7900



*[Signature]*  
 3/11/2010

**CITY OF CELINA**  
 CARTER RANCH LIFT STATION RELIEF SEWER LINES

SW3P NOTES

BHC  
 PROJECT NO.  
 2008-110

January, 2012

SHEET NO.

**28**

HAUK ROBERT & SUSAN  
VOL. 4899, PG. 3397  
D.R.C.C.T.



C.P. #1  
60D NAIL  
N 7168666.8384  
E 2498469.1427  
EL. 747.31

**CONTRACT**

**THIS**

**IN**

**NOT**

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BY GCH DATE 9/27/13

**CONSTRUCTION SEQUENCE**

1. EXISTING LIFT STATION TO REMAIN IN OPERATION DURING CONSTRUCTION AND TESTING OF PROPOSED LIFT STATION.
2. ESTABLISH EROSION CONTROL MEASURES.
3. CONSTRUCT THE PROP. LIFT STATION, GRAVITY LINE AND FORCE MAIN TO POINTS SHOWN IN THE PLAN VIEW AND AS INDICATED BY SINGLE LINE HATCH. THE EXISTING LIFT STATION WILL NEED TO BE TURNED OFF DURING CONNECTION OF THE NEW FORCE MAIN TO THE EX. FORCE MAIN. INSTALL A 3-INCH GATE VALVE AT THE END OF THE FORCE MAIN AND MAKE A CONNECTION INTO THE EXISTING FORCE MAIN. CONTRACTOR SHALL INCLUDE IN THE BID THE COST TO PUMP RAW SEWAGE AND TO TRANSPORT RAW SEWAGE AS REQUIRED.
4. TEST AND INSPECT GRAVITY LINE. TEST THE NEW LIFT STATION PUMPS USING WATER PUMPED FROM THE CREEK. IF THE CREEK IS DRY, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN A FIRE HYDRANT METER AND PURCHASE CITY WATER FROM A HYDRANT TO USE FOR TESTING OF THE LIFT STATION AND FORCE MAIN. ONCE TESTING IS COMPLETE, THE EXISTING LIFT STATION CAN BE BROUGHT BACK ONLINE TO PUMP OUT WASTEWATER COLLECTED DURING THE TESTING OF THE NEW LIFT STATION.
5. INSTALL THE REMAINING PORTION OF THE GRAVITY LINE AS SHOWN IN THE PLAN VIEW AND AS INDICATED BY THE CROSS HATCH AND CONNECT TO EXISTING LIFT STATION.
6. ONCE CONSTRUCTION OF THE GRAVITY LINE, FORCE MAIN AND CONNECTIONS ARE COMPLETED, AND THE NEW LIFT STATION CONFIGURATION IS INDEPENDENTLY FUNCTIONAL PLUG THE FORCE MAIN TO THE NORTH AND AT THE EX. LIFT STATION AS INDICATED ON THE PLANS. PLACE 18 INCHES OF CONCRETE IN THE CUT PORTION OF THE FORCE MAIN AND PLACE A MECHANICAL JOINT PLUG AND THRUST BLOCKING ON THE END.
7. COMPLETE ALL SITE IMPROVEMENT.

ESMT. LINE

ROW

10-FOOT D.U.E.

SHAWNEE TRAIL ROW 71-FOOT

EXIST SAN. SEWER

TELE. BOX

EX. 3-FOOT DIA. WET WELL

CHAIN LINK FENCE

EXIST SLAB

ESMT. LINE

EXIST SAN. SEWER

EXIST 3-36" CMP

EXIST FENCE

ROW

CONCRETE PVMT.

CONCRETE PVMT.

SHAWNEE TRAIL

**BIRKHOFF, HENDRICKS & CARTER, L.L.P.**  
PROFESSIONAL ENGINEERS  
Texas Firm F526  
11910 Greenville Ave., Suite 600  
Dallas, Texas (214) 361-7900



*GCH*  
01-30-2012

**CITY OF CELINA, TEXAS**  
SHAWNEE LIFT STATION RECONSTRUCTION  
CONSTRUCTION SEQUENCE  
ADDITIVE ALTERNATE BID

BHC  
PROJECT NO.  
2008-110  
January, 2012

SHEET NO.  
**29**

REVIS: 9/27/13 - KANDERSON

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PLOT SCALE: 1:2

PLOT STYLE: 11x17.ctb

PLOTTED BY: KANDERSON ON 9/27/2013

SS-201208-01

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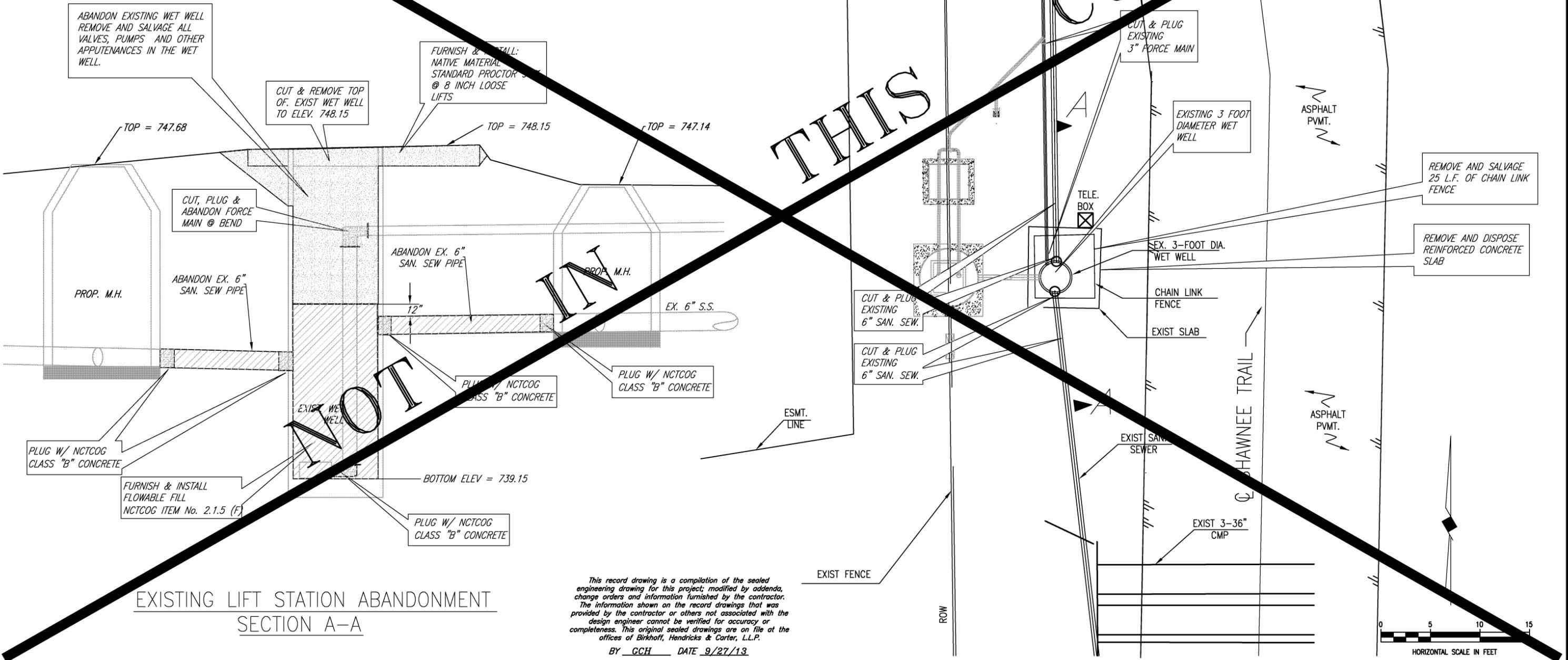
NOTES:

1. CONTRACTOR SHALL CUT AND PLUG THE EXISTING SANITARY SEWER LINES AS INDICATED ON THE PLANS.
2. ALL APPURTENANCES SHALL BE REMOVED AND SALVAGED AND DELIVERED TO THE CITY. THIS INCLUDES LIGHTS, ELECTRIC PANELS, BOXES, PUMPS, MOTORS AND VALVES IF ANY PRESENT.
3. PLUGGING SHALL INCLUDE CLEANING LINE TO A DISTANCE OF 18 INCHES AND PLACING N.C.T.CO.G CLASS "B" CONCRETE IN CLEANED SECTION OF THE LINE AND CAPPING LINE.
4. CONTRACTOR SHALL REGRADE TO THE EXISTING CONDITIONS.
5. CONTRACTOR SHALL FERTILIZE AND HYDROMULCH THE SITE.

HAUK ROBERT & SUSAN  
VOL. 4899, PG. 3397  
D.R.C.C.T.

C.P. #1  
60D NAIL  
N 7168666.8384  
E 2498469.1427  
EL. 747.31

THIS CONTRACT



EXISTING LIFT STATION ABANDONMENT  
SECTION A-A

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REVISD TO ADDITIVE ALTERNATE BID - 3/9/2012

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PLOT SCALE: 1:2

PLOT STYLE: 11x17.ctb

PLOTTED BY: KANDERSON ON 9/27/2013

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PROFESSIONAL ENGINEERS  
Texas Firm F526  
11910 Greenville Ave., Suite 600  
Dallas, Texas (214) 361-7900



*GCH*  
01-30-2012

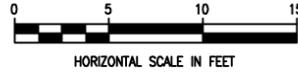
**CITY OF CELINA, TEXAS**  
SHAWNEE LIFT STATION RECONSTRUCTION  
EX. LIFT STATION ABANDONMENT PLAN AND SECTION  
ADDITIVE ALTERNATE BID

BHC  
PROJECT NO.  
2008-110  
January, 2012

SHEET NO.  
**30**

SS-201208-01

HAUK ROBERT & SUSAN  
VOL. 4899, PG. 3397  
D.R.C.C.T.

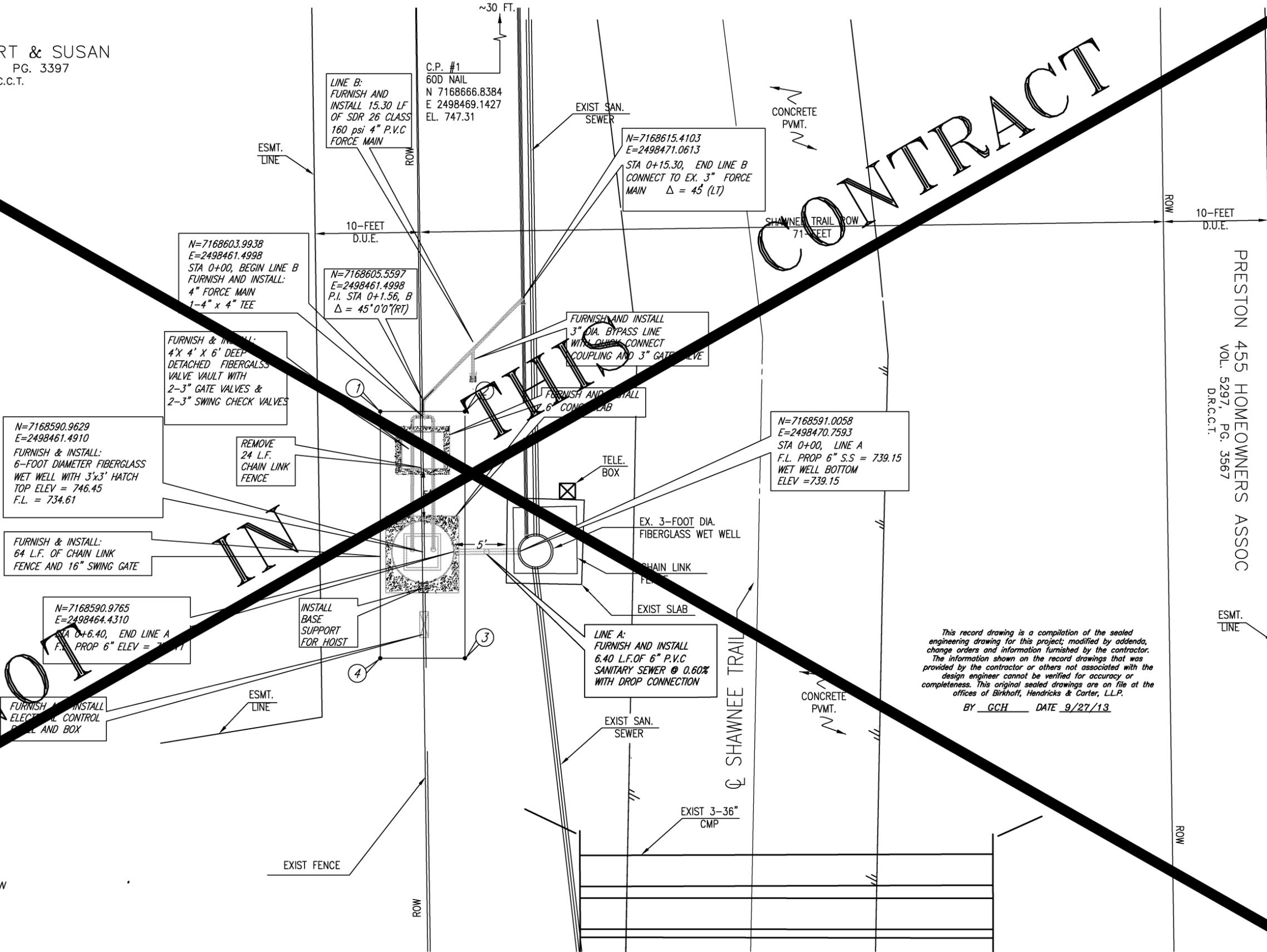


| FENCE COORDINATE TABLE |              |              |
|------------------------|--------------|--------------|
| No.                    | N            | E            |
| 1                      | 7168604.4877 | 2498457.4285 |
| 2                      | 7168604.4877 | 2498465.5079 |
| 3                      | 7168580.7094 | 2498465.5079 |
| 4                      | 7168580.7094 | 2498457.4285 |

CONTRACT

PRESTON 455 HOMEOWNERS ASSOC  
VOL. 5297, PG. 3567  
D.R.C.C.T.

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BY GCH DATE 9/27/13

- NOTES:**
- EXISTING LIFT STATION SHALL REMAIN IN OPERATION DURING CONSTRUCTION OF THE PROPOSED LIFT STATION AND SEWER LINE.
  - EXISTING TELEPHONE LINE TO BE PROTETED AND CAN BE RELOCATED TO SURFACE UNTIL THE EXISTING STATION IS REMOVED.

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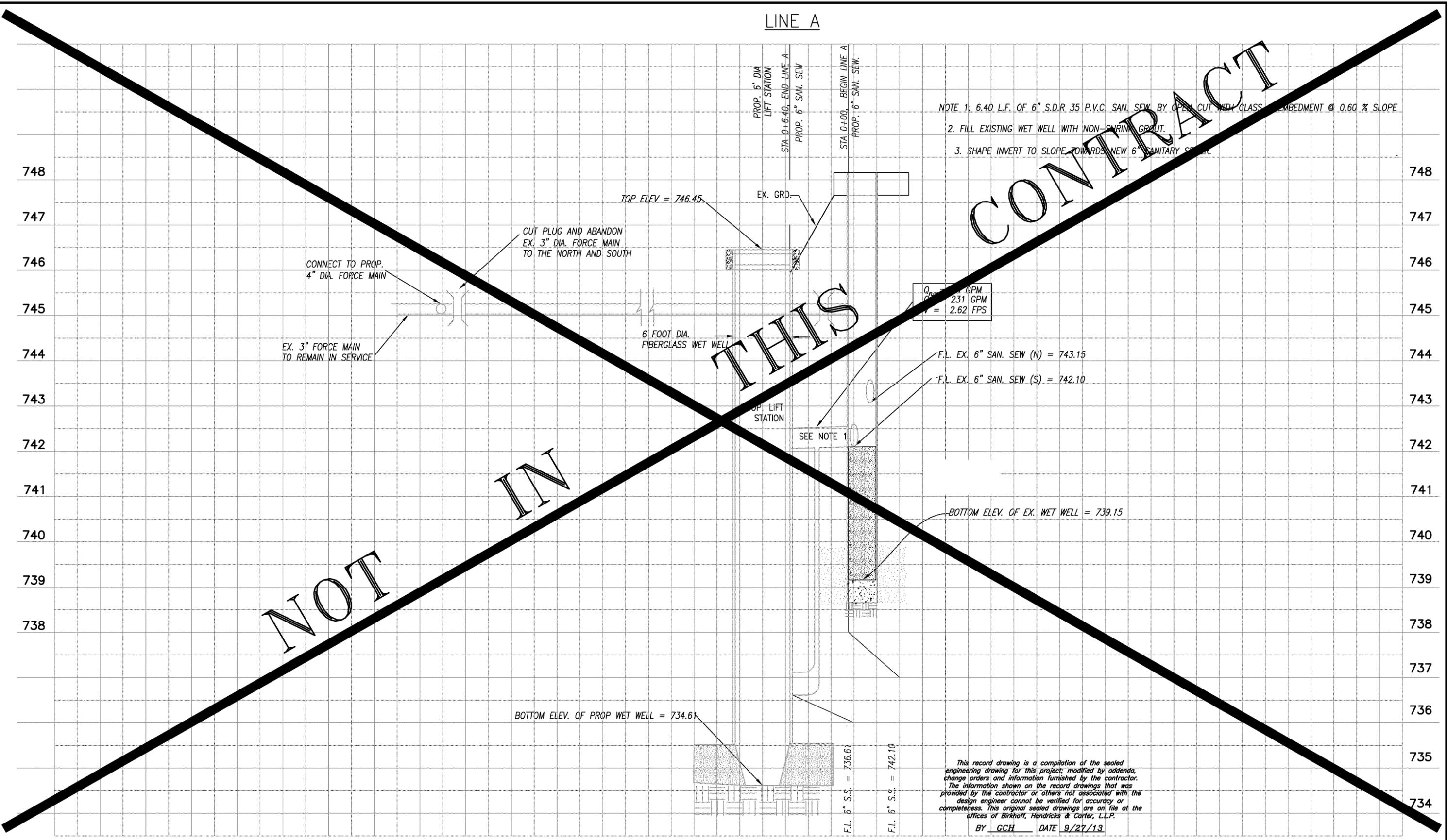


*[Signature]*  
01-30-2012

**CITY OF CELINA, TEXAS**  
SHAWNEE LIFT STATION RECONSTRUCTION  
PROPOSED LIFT STATION PLAN VIEW  
ADDITIVE ALTERNATE BID

BHC PROJECT NO. 2008-110  
January, 2012  
SHEET NO. 31

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REVISD TO ADDITIVE ALTERNATE BID - 3/9/2012

H:\Projects\Celina\2008110\Sheets\32-Gravityline Profiles-MODIFIED.dwg

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*GCH*  
 01-30-2012

**CITY OF CELINA, TEXAS**  
 SHAWNEE LIFT STATION RECONSTRUCTION  
 LINE A - GRAVITY LINE PROFILE  
 ADDITIVE ALTERNATE BID

BHC  
 PROJECT NO.  
 2008-110  
 January, 2012

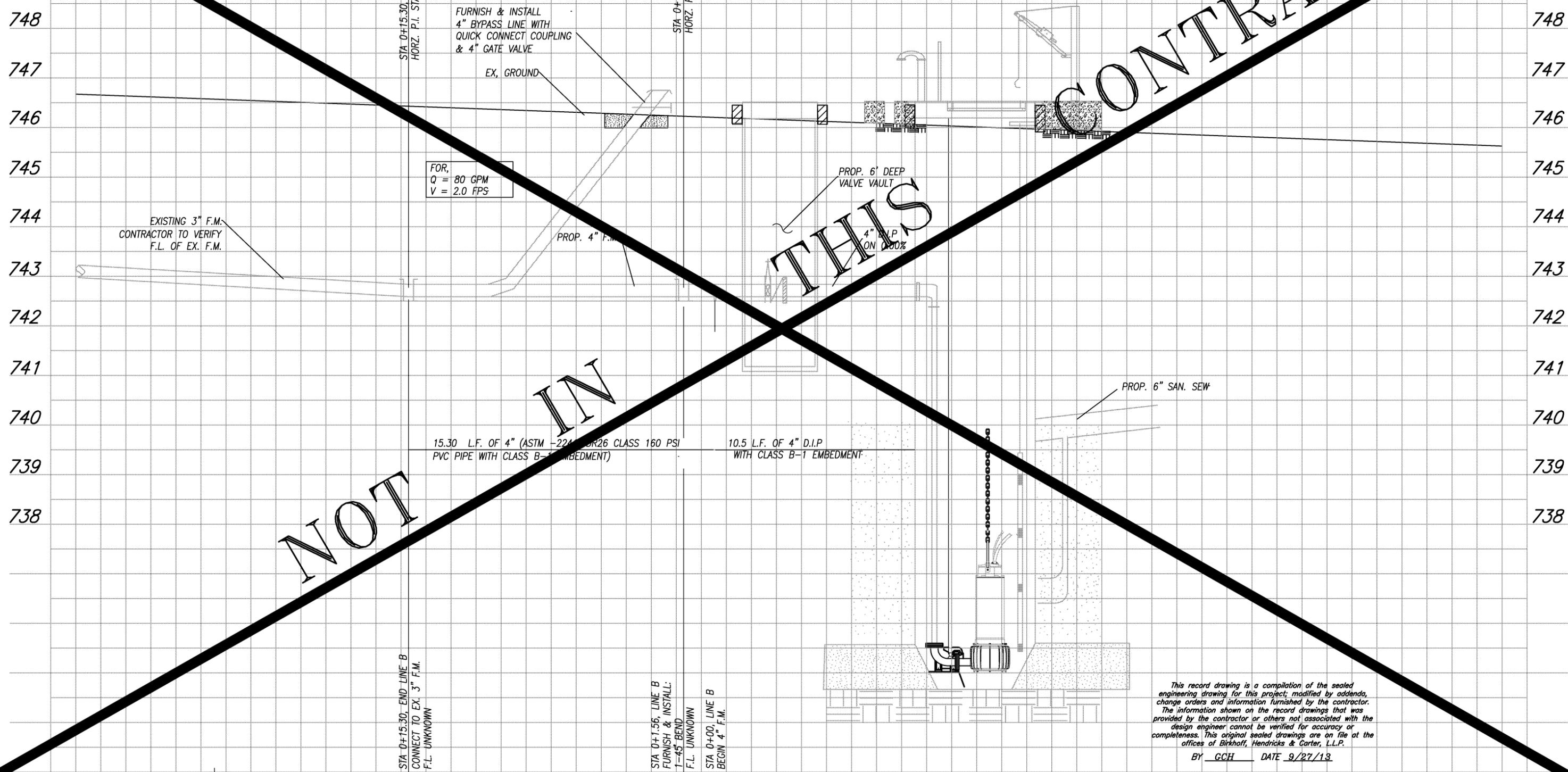
SHEET NO.  
**32**

SS-201208-01

PLOT SCALE: 1:2  
 PLOT STYLE: 11x17.ctb  
 PLOTTED BY: KANDERSON ON 9/27/2013

FORCE MAIN - LINE B

CONTRACT



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BY GCH DATE 9/27/13

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|   |
|---|
| REVISD TO ADDITIVE ALTERNATE BID - 3/9/2012 |
| REVISD: 9/27/13 - KANDERSON                 |

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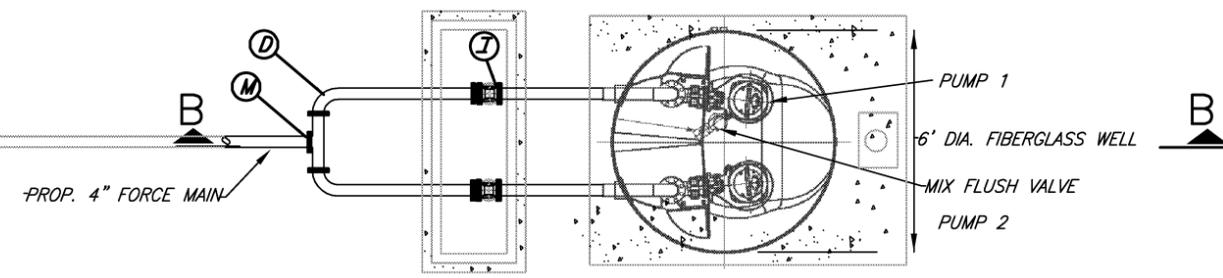


*[Signature]*  
01-30-2012

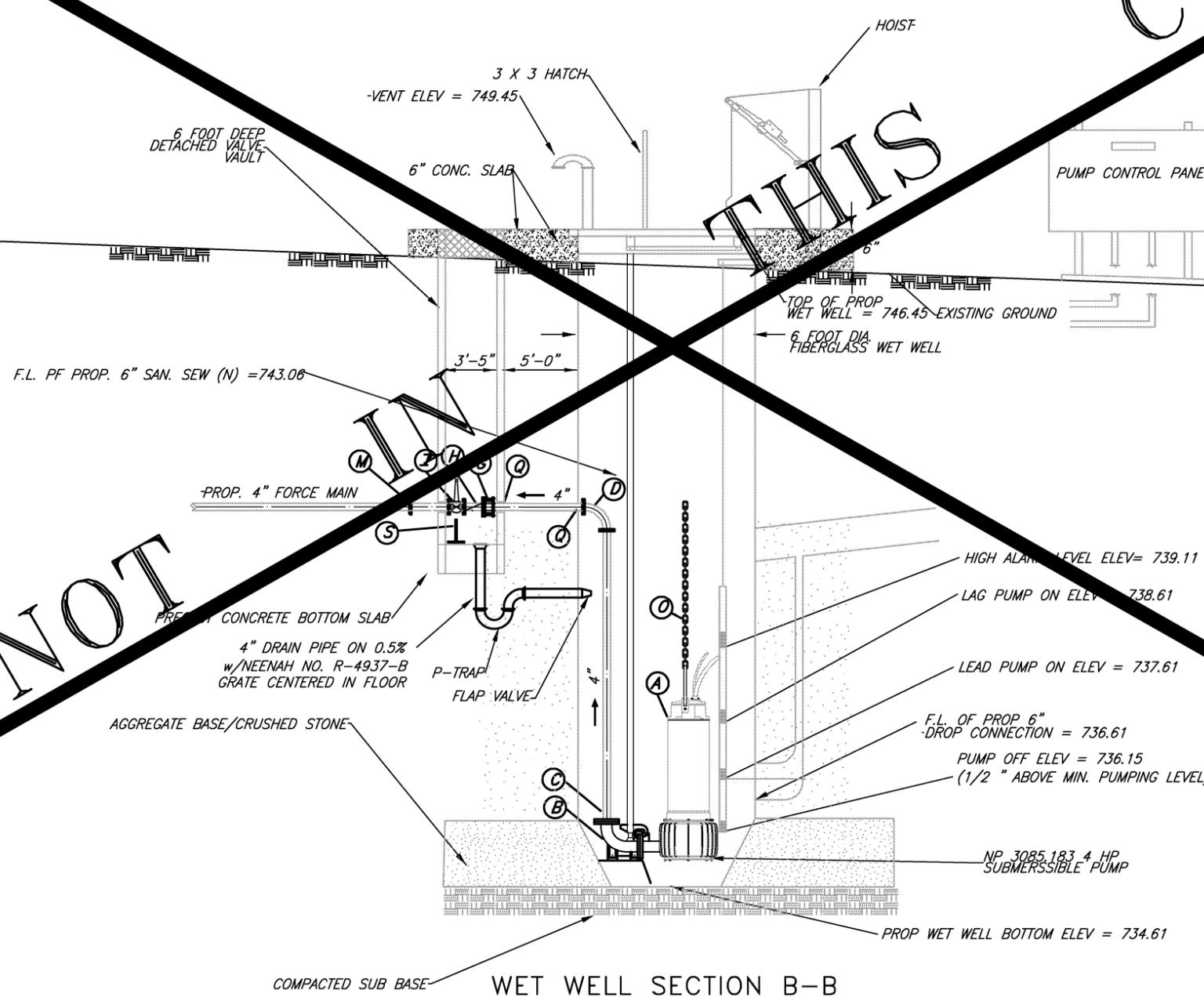
**CITY OF CELINA, TEXAS**  
 SHAWNEE LIFT STATION RECONSTRUCTION  
 LINE B - FORCE MAIN PROFILE  
 ADDITIVE ALTERNATE BID

|                                |           |
|--------------------------------|-----------|
| BHC<br>PROJECT NO.<br>2008-110 | SHEET NO. |
| January, 2012                  | 33        |

CONTRACT



WET WELL PLAN VIEW



WET WELL SECTION B-B

PROPOSED LEGEND

| LETTER | PIPE   | JOINT     | DESCRIPTION                         |
|--------|--------|-----------|-------------------------------------|
| A      | -      | -         | PUMP W/ MOTOR                       |
| B      | -      | FLG.      | 90° BEND (BY PUMP MFG.)             |
| C      | D.I.P. | FLG.      | PIPE SPOOL                          |
| E      | D.I.P. | FLG.      | 90° LONG RADIUS BEND                |
|        |        | FLG.-P.E. | PIPE SPOOL                          |
| G      | -      | FLG.      | THRUST HARNESS                      |
| H      | -      | FLG.      | SWING CHECK VALVE W/ LEVER & WEIGHT |
| I      | -      | -         | GATE VALVE (WHEEL OPERATED)         |
| M      | D.I.P. | FLG.      | 4"x4" TEE                           |
| O      | -      | -         | 304 STAINLESS STEEL LIFTING CHAIN   |
| Q      | -      | -         | WALDORF WITH LINK SEAL              |
| S      | -      | -         | UNISTRONG PIPE SUPPORT              |

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 BY GCH DATE 9/27/13

NOT

THIS

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|  |   |              |                   |   |   |                  |
|--|---|--------------|-------------------|---|---|------------------|
| REVIS: 9/27/13 - KANDERSON<br>H:\Projects\Celina\2008110\Sheets\34A-Prop Wet Well Section-MODIFIED.dwg | BIRKHOFF, HENDRICKS & CARTER, L.L.P.<br>PROFESSIONAL ENGINEERS<br>Texas Firm F526<br>11910 Greenville Ave., Suite 600<br>Dallas, Texas (214) 361-7900 |              | <p>01-30-2012</p> | CITY OF CELINA, TEXAS<br>SHAWNEE LIFT STATION RECONSTRUCTION<br>PROPOSED WET WELL SECTION VIEW<br>FLYGT FIBERGLASS WET WELL STATION<br>ADDITIVE ALTERNATE BID | BHC<br>PROJECT NO.<br>2008-110<br>January, 2012 | SHEET NO.<br>34A |
|  | PLOT SCALE: 1:2<br>PLOT STYLE: 11x17.ctb<br>PLOTTED BY: KANDERSON ON 9/27/2013  | SS-201208-01 |                   |   |   |                  |

CONTRACT

MONITORING AND CONTROLS DETAILS

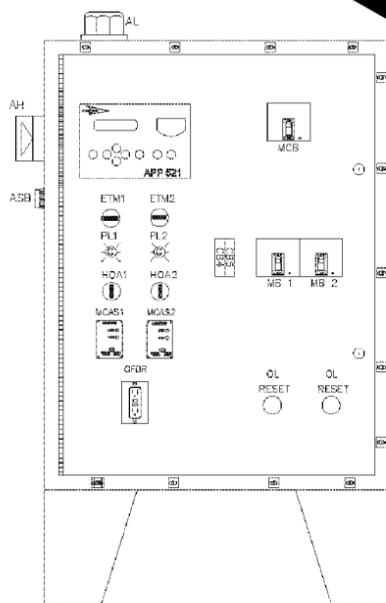
460 V/ 3-PH DUPLEX NEMA 4X304SS PANEL WITH 42" x 30" x 10" ENCLOSURE

2 4x304 SS PANEL

1 ELECTRICAL BOX

3 42"x30"x10" ENCLOSURE

- Enclosure: NEMA 4X 304 Stainless Steel, with aluminum inner door, padlock hasp and 12' legs
Flygt APP-521 duplex pump station controller, including 24vdc power supply
Flygt LS-100 submersible pressure transducer for level control with electronic surge protection
High and low level floats to back up transducer failure
Flygt Mini-CAS 120 relays for pump thermal/seal fail protection
Square D® HDL series circuit breakers, 100% rated (Main, Pump and Control Power)
Square D® NEMA rated motor starters, with melting alloy overloads on three phase panels
Square D® ATV series Variable Frequency Drives for single to three phase conversion on single phase panels
2 KVA control power transformer
Phase Monitor for protection against over/under voltage and phase imbalance
Hand-Off-Auto switches and Pump Run lights for each pump
Current transformers, 1 per pump
Mechanical Elapsed time meters
Service Entrance rated Transient Voltage Surge Suppression
Red-dome style flashing alarm light and horn with silence push-button
Duplex GFI receptacle



N.T.S

NOT

IN

THIS

- The magnetic breakers shall be quick-make and quick-break on manual and automatic operation and have inverse time characteristics secured through the use of bimetallic tripping elements supplemented by a magnetic trip.
Breakers shall be designed so that an overload on one pole automatically trips and opens all legs. Field installed handle ties shall not be acceptable.

A. PUMP CONTROLLER:

GENERAL:

The pump controller shall consist of all the components, hardware and software to provide a trouble-free pump station. The system shall be designed and specifically produced for the control of the pump station. The system shall provide for interface to a central system for remote control and data collection. The controller shall control pumps as a stand alone unit in the event of a communications loss. The controller shall be an Automatic Pump Controller 521 (APP521) as manufactured by ITT Flygt.

OPERATION:

Pump controller shall provide continuous monitoring of the wet well level via analog level signal (4-20mADC) or digital level signal (float switches) as per level sensing. The pump controller shall start and stop pump based upon wet well level and operator programmed set points. The controller shall have provision for a float switch backup in event of analog signal failure. The pump controller shall alternate pumps every cycle, but shall also provide a selectable option to run pumps based on hours run. The pump controller shall monitor pump protection features to provide alarms in the event of impending pump failure including, over temperature, seal failure, pump current, tripped motor protection.

HARDWARE:

The pump controller shall be programmed via built-in operator interface. The interface shall consist of pushbuttons in conjunction with a 2-line LCD backlit display in English. The front panel shall also include LED indicators for controller operation, communication status, alarm status, pump operation, and power indicator status.

The front panel operator interface shall be rated IP65 (applicable to NEMA 4 standard).

The pump controller shall contain a Motorola HCS12, 16 bit 32 MHz processor, with an application memory (flash) of 128kBytes, system memory (flash) of 128kBytes, and a parameter memory (EEPROM) of 8 kBytes. A battery backup shall be included for the real time clock function. A watchdog circuit shall be included to enable backup operation in case of controller failure.

The pump controller shall provide 16 digital inputs, 6 relay outputs, and 3 analog inputs. The inputs/outputs shall meet the following:

- All inputs/outputs shall be optically isolated.
Digital inputs shall be 11-30vdc, selectable logic.
Digital outputs shall have a max load of 2A at 240VAC or 30VDC.
Level analog input shall be 4-20mADC, 0.5% full scale accuracy, 10 bit resolution.
Pump current analog inputs shall be 0-1A AC, 2% full scale accuracy, 10 bit resolution.

N.T.S

The pump controller shall operate from a supply voltage of 24VDC and have a current consumption of 1.1A. The controller shall be protected internally with a fuse rated at 1.1A.

The pump controller shall include an RS-232 communications port. The port shall be available for use as communication interface to dialup modem, leased line modem, GPRS cellular modem, or radio. The pump controller shall be UL listed.

FUNCTIONS:

The pump controller shall operate the pumps in accordance with operator programmed set points. The controller shall also be capable of remote start-stop functions via network. The following information shall be observed on the front panel display:

- Start-stop pump levels
Pump elapsed run time (each pump)
Number of pump starts (each pump)
Pump status (running, stopped or alarm)
Pump current draw (amps)
Overflow accumulated time
Overflow number of events
Alarm delays
Input status

The pump controller shall provide for local display, acknowledgement and remote notification of alarm conditions. The controller shall log up to 100 alarm events. Alarm capabilities shall include:

- Wet Well High Level
Wet Well Low Level
Wet Well Overflow
Pump Over current
Pump Under current
Pump Fail to Start
Pump Over temperature
Pump Seal Fail
Power Failure
Personnel Alarm (adjustable time-delay alarm if not acknowledged by on-site personnel)
Test Alarm (periodic test alarm for communications)

The pump controller shall provide a "maintenance run". A pump which has sat idle for a preset amount of time may be called to run for a user-defined amount of time (0-2 minutes). The pump will shut off if the "Off" level is reached before expiration of the defined run time.

The pump controller shall be capable of receiving an input from a rain gauge or tipping bucket. The input shall be defined as a pulse/measurement of rain selectable by personnel. The controller shall allow for alarming if rain exceeds predefined amounts in 5 minutes and/or 24 hours. The rain information shall be stored by the controller and presented as a trend value to the central system.

The pump controller shall contain a real-time clock and shall time and date stamp all logged data.

N.T.S

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REVISD TO ADDITIVE ALTERNATE BID - 3/9/2012

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PLOT SCALE: 1:2

PLOT STYLE: 11x17.ctb

PLOTTED BY: KANDERSON ON 9/27/2013

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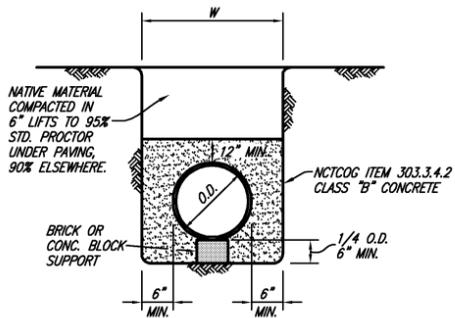
Signature of Gary C. Hendricks, dated 01-30-2012.

CITY OF CELINA, TEXAS SHAWNEE LIFT STATION RECONSTRUCTION MONITORING + CONTROLS ADDITIVE ALTERNATE BID

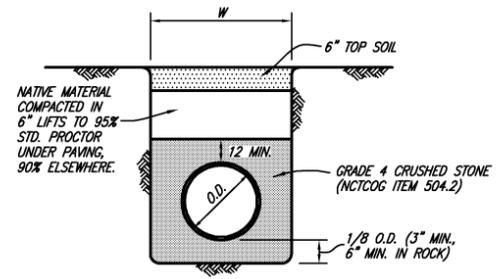
BHC PROJECT NO. 2008-110 January, 2012

SHEET NO. 34B

SS-201208-01

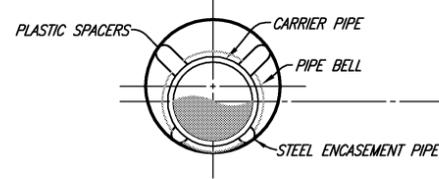


**CLASS G EMBEDMENT**  
CONCRETE ENCASEMENT

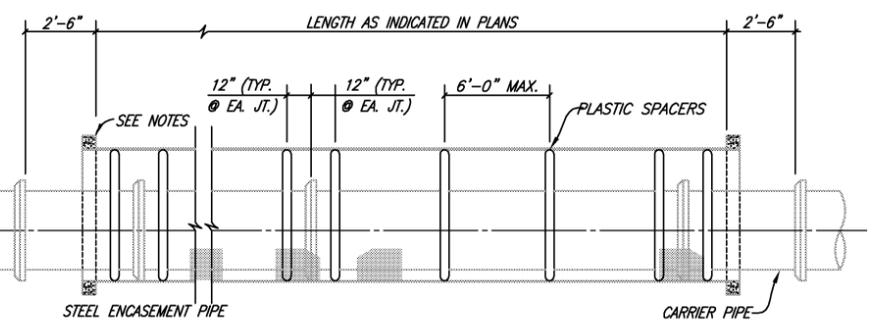


**CLASS H EMBEDMENT**  
STD. P.V.C. SANITARY SEWER

- BORING NOTES:**
1. PREFABRICATED PLASTIC SPACERS MUST BE APPROVED BY THE OWNER.
  2. CONTRACTOR SHALL PROVIDE SUPPORT UNDER CARRIER PIPE TO HAVE MIN. 1" CLEARANCE BETWEEN PIPE BELL AND ENCASEMENT PIPE.
  3. ENDS OF ENCASEMENT PIPE SHALL BE PLUGGED WITH BRICK AND MORTAR FOR ROADWAY CROSSINGS. PLUGS SHALL BE CONSTRUCTED WITH A WEEP HOLE.

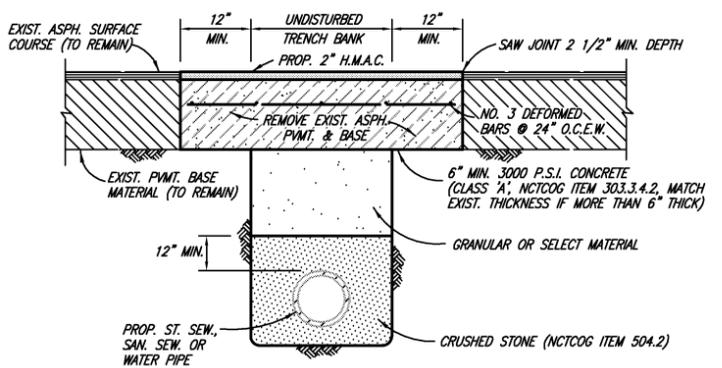


**SECTION**

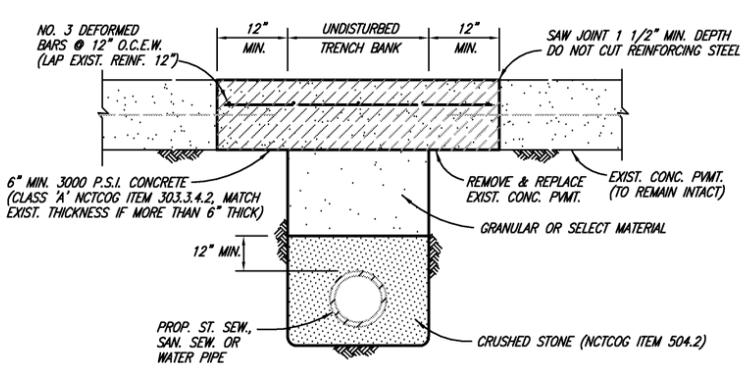


**ELEVATION**

**ENCASED ROAD OR RAILROAD BORE**  
USING PLASTIC SPACERS  
NO SCALE



**ASPHALT STREET REPAIR**  
NO SCALE



**CONCRETE STREET REPAIR**  
NO SCALE

**GRADE 4 CRUSHED STONE GRADATION**

| SIEVE SIZE | % RETAINED |
|------------|------------|
| 1-1/2 INCH | 0          |
| 1 INCH     | 0-5        |
| 1/2 INCH   | 40-75      |
| NO. 4      | 90-100     |
| NO. 8      | 95-100     |

(CRU-STN)

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Texas Firm F526  
11910 Greenville Ave., Suite 600  
Dallas, Texas 75243 (214) 361-7900



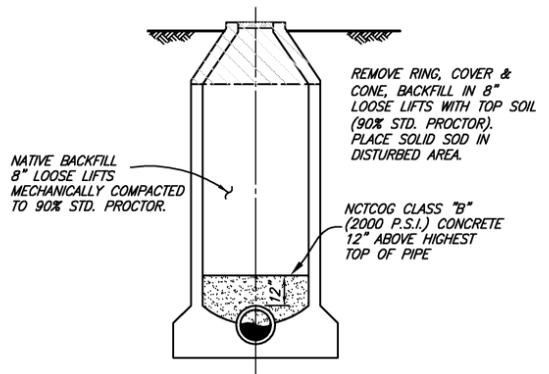
*[Signature]*  
01-30-2012

**CITY OF CELINA**  
DOE BRANCH TRUNK SEWER EXTENSION  
STANDARD CONSTRUCTION DETAILS  
EMBEDMENT

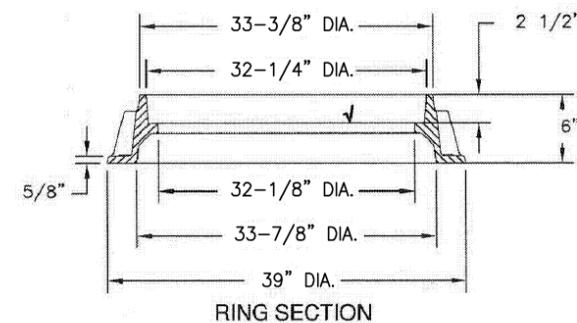
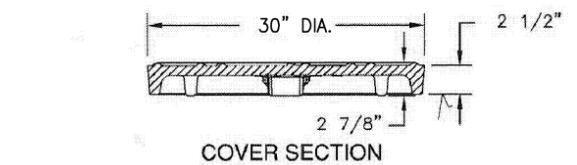
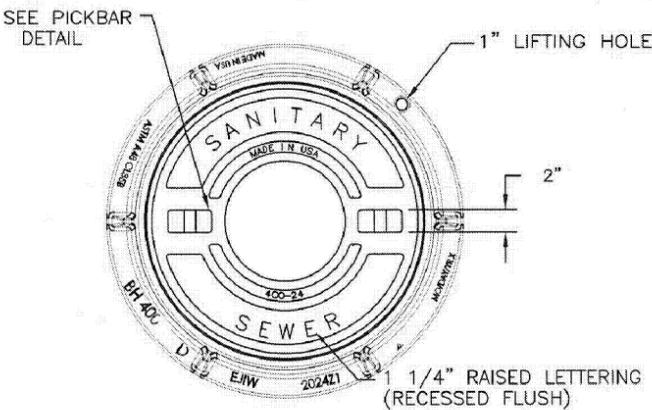
BHC  
PROJECT NO.  
2008-110  
January, 2012

SHEET NO.  
**35**

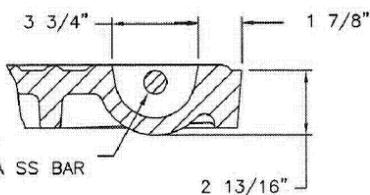
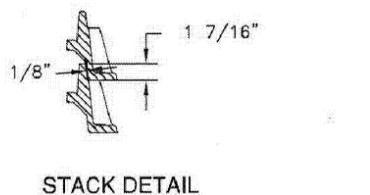
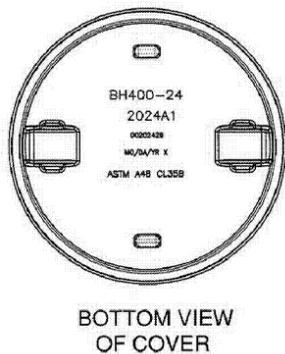
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**MANHOLE ABANDONMENT**  
OUTSIDE PAVEMENT AREA  
(MHABAN)



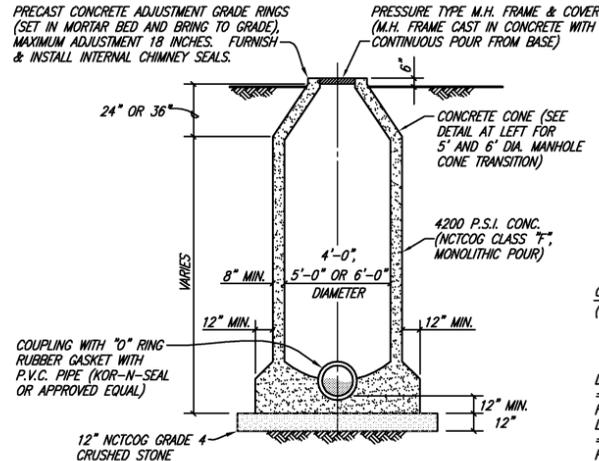
**STANDARD MANHOLE COVER AND FRAME**  
NO SCALE



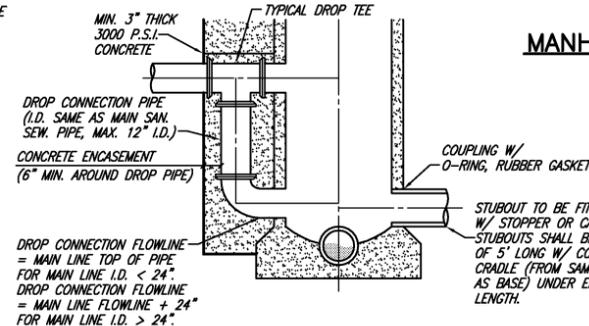
PICKBAR DETAIL

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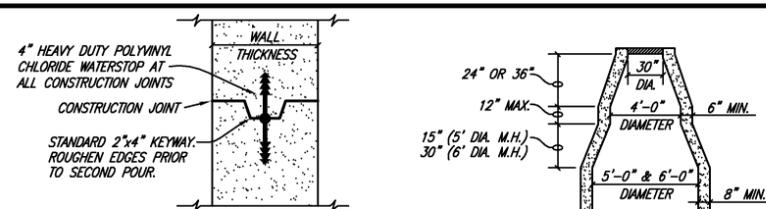
BY GCH DATE 9/27/13



**STANDARD MANHOLE ELEVATION**  
4', 5' & 6' DIAMETER MANHOLES

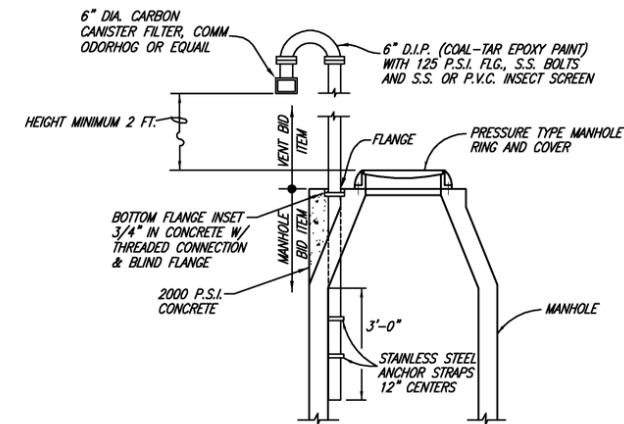


**DROP MANHOLE ELEVATION**  
4', 5' & 6' DIAMETER MANHOLES

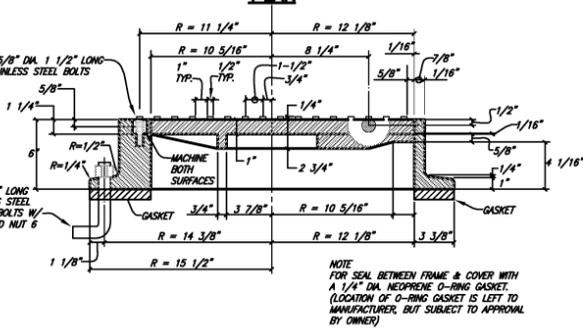
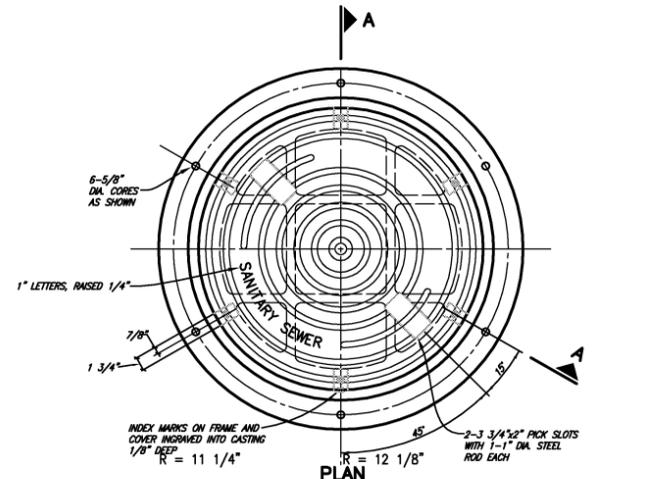


**MANHOLE CONSTRUCTION JOINT**  
KEYWAY WITH WATERSTOP

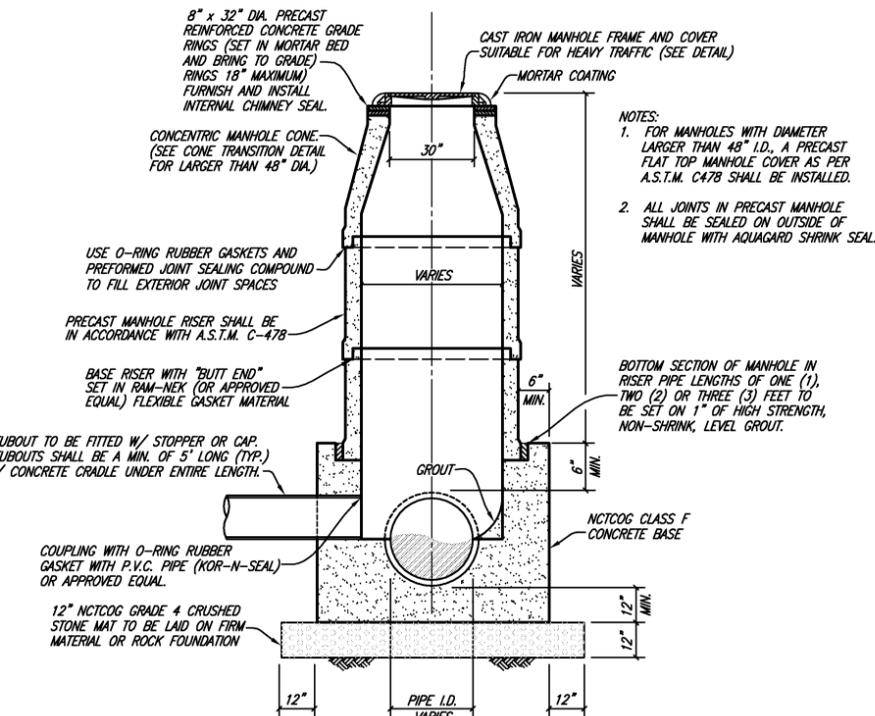
**CONE TRANSITION**  
5' & 6' DIAMETER MANHOLES ONLY



**CONE TOP MANHOLE VENT**  
NO SCALE



**SECTION A-A**  
**TYPE "S" MANHOLE FRAME AND COVER**  
NO SCALE



**PRECAST CONCRETE MANHOLE**  
NO SCALE

**BIRKHOFF, HENDRICKS & CARTER, L.L.P.**  
PROFESSIONAL ENGINEERS  
Texas Firm F526  
11910 Greenville Ave., Suite 600  
Dallas, Texas 75243  
(214) 361-7900



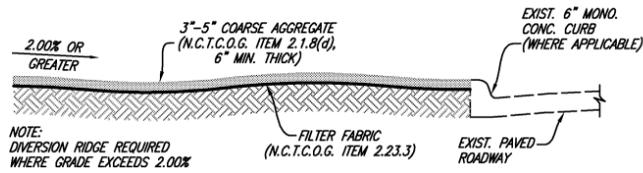
*GCH*  
01-30-2012

**CITY OF CELINA**  
CARTER RANCH LIFT STATION RELIEF SEWER LINES  
STANDARD CONSTRUCTION DETAILS  
SANITARY SEWER / MANHOLES

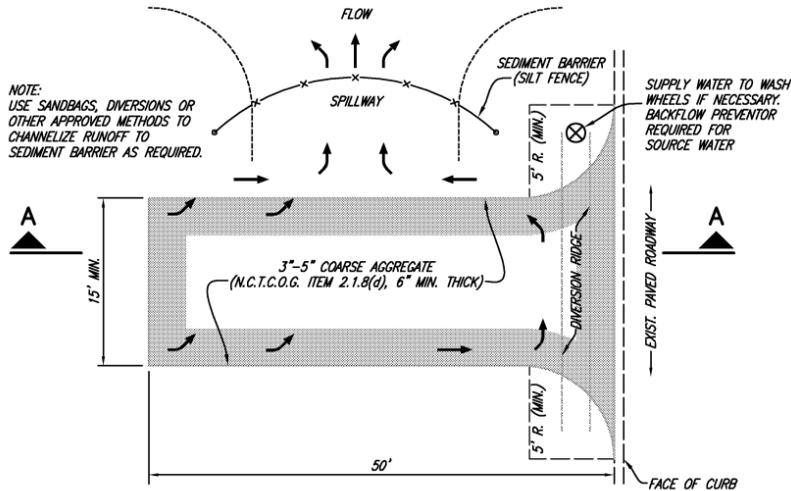
BHC  
PROJECT NO.  
2008-110  
January, 2012

SHEET NO.  
**36**

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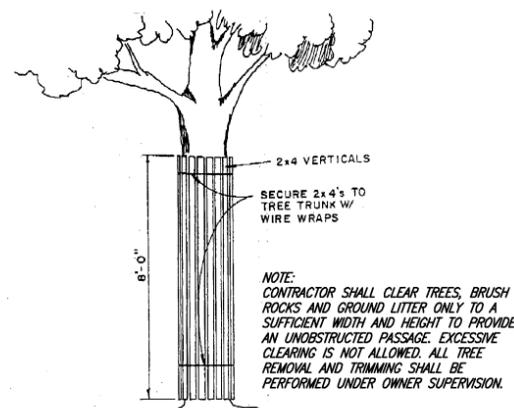


**SECTION A-A**



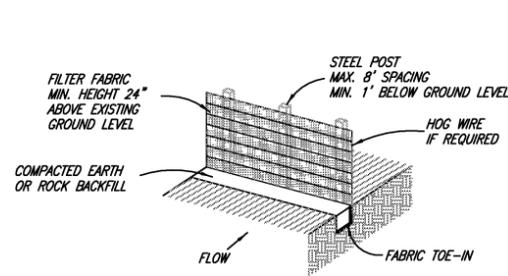
**PLAN  
CONSTRUCTION ENTRANCE ROAD  
FOR EROSION CONTROL**

NO SCALE

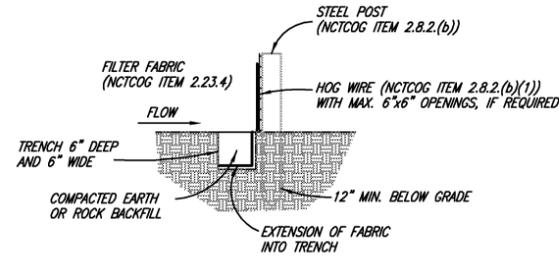


**EXISTING TREE PROTECTION**

NO SCALE



**ISOMETRIC VIEW**

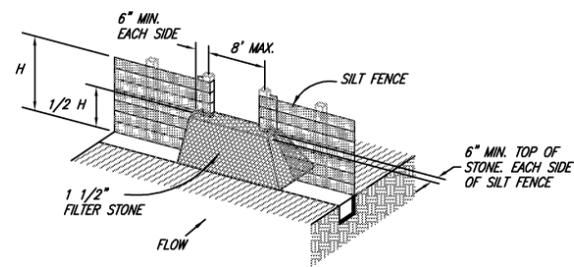


**SECTION VIEW**

**SILT EROSION CONTROL FENCE**

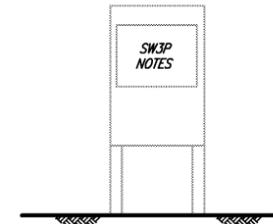
NO SCALE

- SILT FENCE NOTES**
1. THE CONTRACTOR SHALL INSPECT SILT FENCE WEEKLY AND AFTER MAJOR RAIN EVENTS TO ENSURE THAT THE DEVICE IS FUNCTIONING PROPERLY.
  2. THE CONTRACTOR SHALL REMOVE SEDIMENT FROM BEHIND FENCE WHEN THE DEPTH OF SEDIMENT HAS BUILT UP TO ONE-THIRD THE HEIGHT OF THE FENCE ABOVE GRADE.
  3. THE CONTRACTOR SHALL INSPECT THE BASE OF THE FENCE TO ENSURE THAT NO GAPS HAVE DEVELOPED AND RETRENCH AS NECESSARY.
  4. THE CONTRACTOR SHALL INSPECT FENCE POSTS TO ENSURE THAT THEY ARE PROPERLY SUPPORTING THE FENCE. IF NECESSARY, THE CONTRACTOR SHALL RESET AND ADD POSTS.
  5. IF FILTER FABRIC IS RIPPED, DAMAGED OR DETERIORATED, THE CONTRACTOR SHALL REPLACE IT IN ACCORDANCE

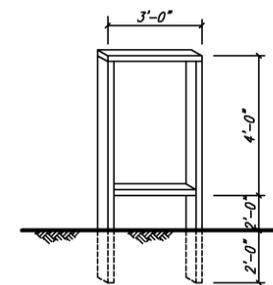


**STONE OVERFLOW STRUCTURE**

NO SCALE



SIGN PANEL 3/4\"/>



**SIGN FRAME**

**SW3P SIGN**

NO SCALE

**STORM WATER POLLUTION PREVENTION NOTES**

1. CONTRACTOR SHALL PROVIDE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED BY A REGISTERED PROFESSIONAL ENGINEER, FOR THE ENTIRE PROJECT UTILIZING EITHER OF THE ALTERNATES SHOWN ABOVE.
2. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO IMPLEMENT THE SWPPP AND TO MAINTAIN THE SILT FENCE THROUGHOUT THE PERIOD OF CONSTRUCTION. PAYMENT SHALL BE BASED ON TWO TIMES THE ACTUAL LENGTH OF PIPE INSTALLED BY OPEN CUT.

*This record drawing is a compilation of the sealed engineering drawing for this project; modified by addenda, change orders and information furnished by the contractor. The information shown on the record drawings that was provided by the contractor or others not associated with the design engineer cannot be verified for accuracy or completeness. This original sealed drawings are on file at the offices of Birkhoff, Hendricks & Carter, L.L.P.*

BY GCH DATE 9/27/13

**BIRKHOFF, HENDRICKS & CARTER, L.L.P.**  
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 Texas Firm F526  
 11910 Greenville Ave., Suite 600  
 Dallas, Texas (214) 361-7900



*[Signature]*  
 01-30-2012

**CITY OF CELINA**  
 CARTER RANCH LIFT STATION RELIEF SEWER LINES

EROSION CONTROL DETAILS

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