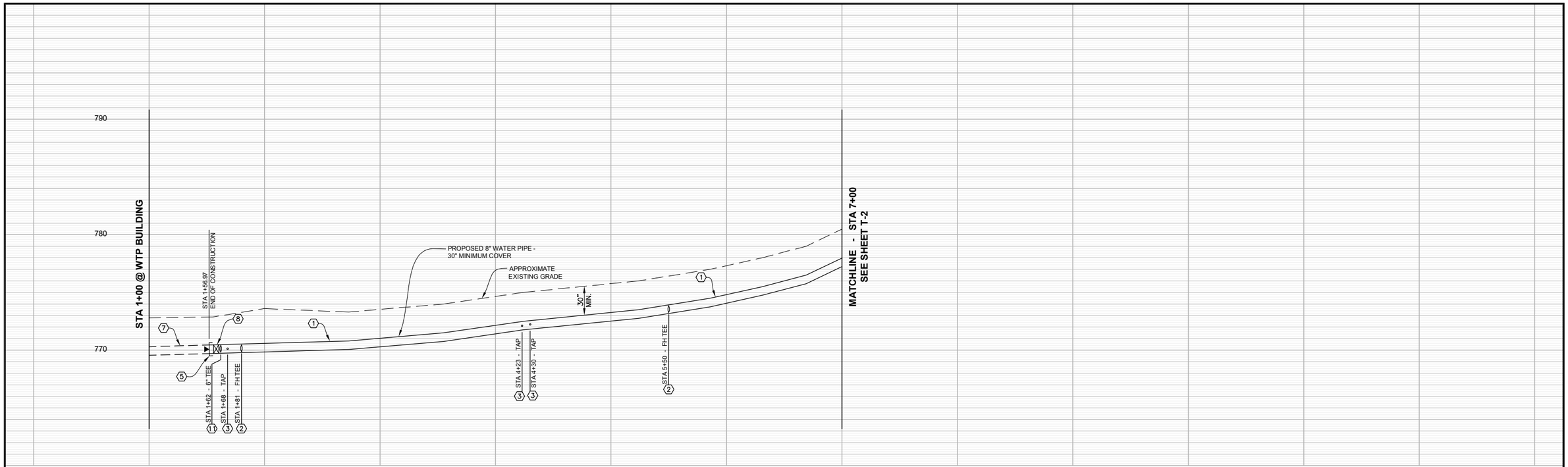
DRAFT ENVIRONMENTAL ASSESSMENT

SANTA BARBARA COUNTY PARKS WATER SYSTEM UPGRADES AT LAKE CACHUMA CAMPGROUND

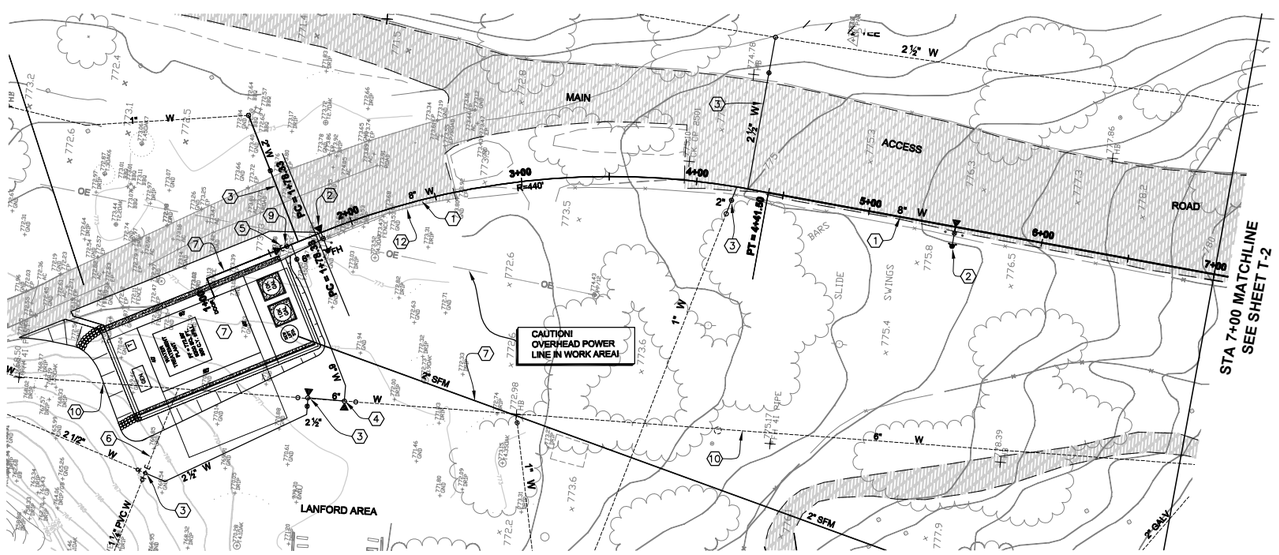
Appendix A
Preliminary Project Designs Set 4

May 2010



TRANSMISSION LINE PROFILE

SCALE: 1" = 40' HORIZ.
1" = 4' VERT.



SCALE: 1" = 40'

GRAPHIC SCALE

0 20 40 80 120 160 200

GENERAL CONSTRUCTION NOTES THIS SHEET:

A. WATER TREATMENT PLANT PLANS AND DETAILS NOT IN CONTRACT.

B. SEWER FORCE MAIN NOT IN CONTRACT.

SPECIFIC CONSTRUCTION NOTES THIS SHEET:

1 CONSTRUCT 8-INCH PVC WATER PIPE, CLASS 200, 30 INCHES MINIMUM COVER, PER TRENCH DETAIL 20 ON SHEET CD-2.

2 CONSTRUCT 6-INCH FIRE HYDRANT ASSEMBLY PER DETAILS 30 AND 32, SHEET CD-3.

3 CONSTRUCT MINOR DISTRIBUTION LINE CONNECTION, SIZE AS SHOWN, PER DETAIL 35, SHEET CD-3.

4 CONSTRUCT CONNECTION TO EXISTING DISTRIBUTION LINE. SIZE AS SHOWN, PER DETAIL 37, SHEET CD-3.

5 CONSTRUCT END CAP AND THRUST BLOCK PER DETAIL 24 ON SHEET CD-2. END OF WORK THIS CONTRACT.

6 ABANDON EXISTING PIPELINE.

7 NOT A PART OF THIS CONTRACT.

8 CONSTRUCT GUARD POSTS PER DETAIL 8 ON SHEET CD-1.

9 CONSTRUCT 8" GATE VALVE PER DETAIL 25 ON SHEET CD-2.

10 THIS PORTION OF EXISTING 6" WATERLINE TO REMAIN IN SERVICE.

11 CONSTRUCT 8"X8"X6" TEE AND THRUST BLOCK PER PIPING DETAILS 24 AND 26 ON SHEET CD-2.

12 RELOCATE EXISTING FENCE AS NECESSARY TO CLEAR PIPELINE.

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NO.	DESCRIPTION	DATE	APPROVED

REVISIONS

REGISTERED PROFESSIONAL ENGINEER ERIC L. FLAHILL No. 33000 Exp.6-30-10 CIVIL STATE OF CALIFORNIA

FLOWERS & ASSOCIATES, INC.
CIVIL ENGINEERS
201 N. Calle Cesar Chavez, Suite 100 Santa Barbara, CA 93103
Telephone (805) 966-2224

BY: _____ DATE: 5/20/09
PROJECT ENGINEER

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COUNTY OF SANTA BARBARA
COUNTY PARKS
610 Mission Canyon Road
Santa Barbara, CA 93105

Design: ELF Check: BS
Drawn: SS
Project Engineer:
Date:

TRANSMISSION PIPELINE PLAN AND PROFILE

LAKE CACHUMA WATER STORAGE AND DISTRIBUTION SYSTEM IMPROVEMENTS
COUNTY OF SANTA BARBARA, CALIFORNIA

T-1

SHT. 9 OF 35

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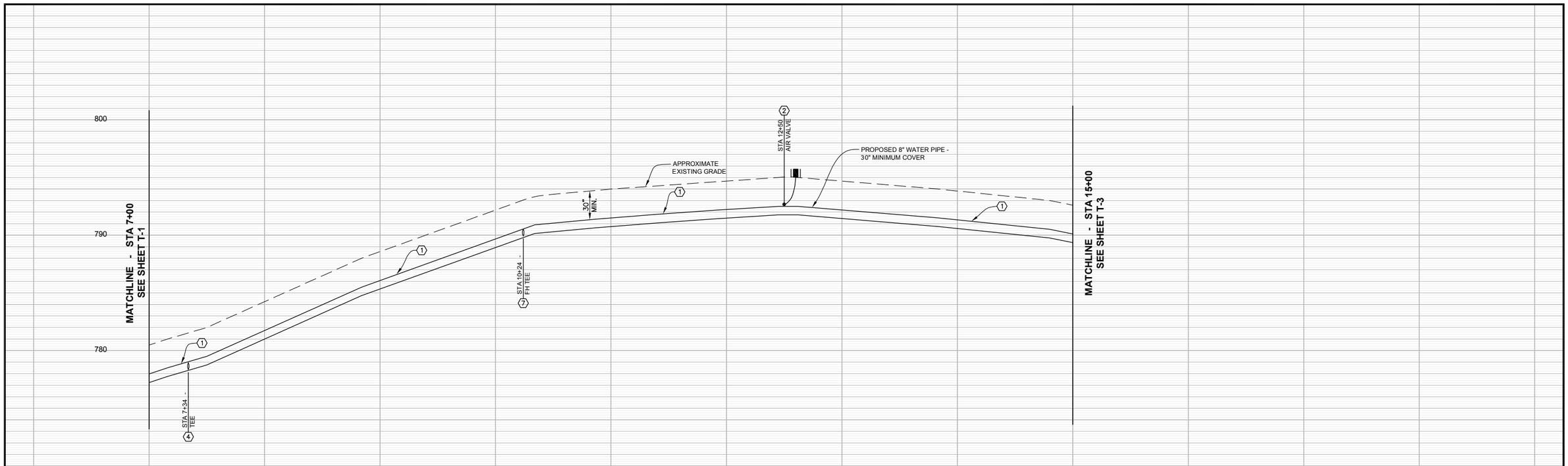
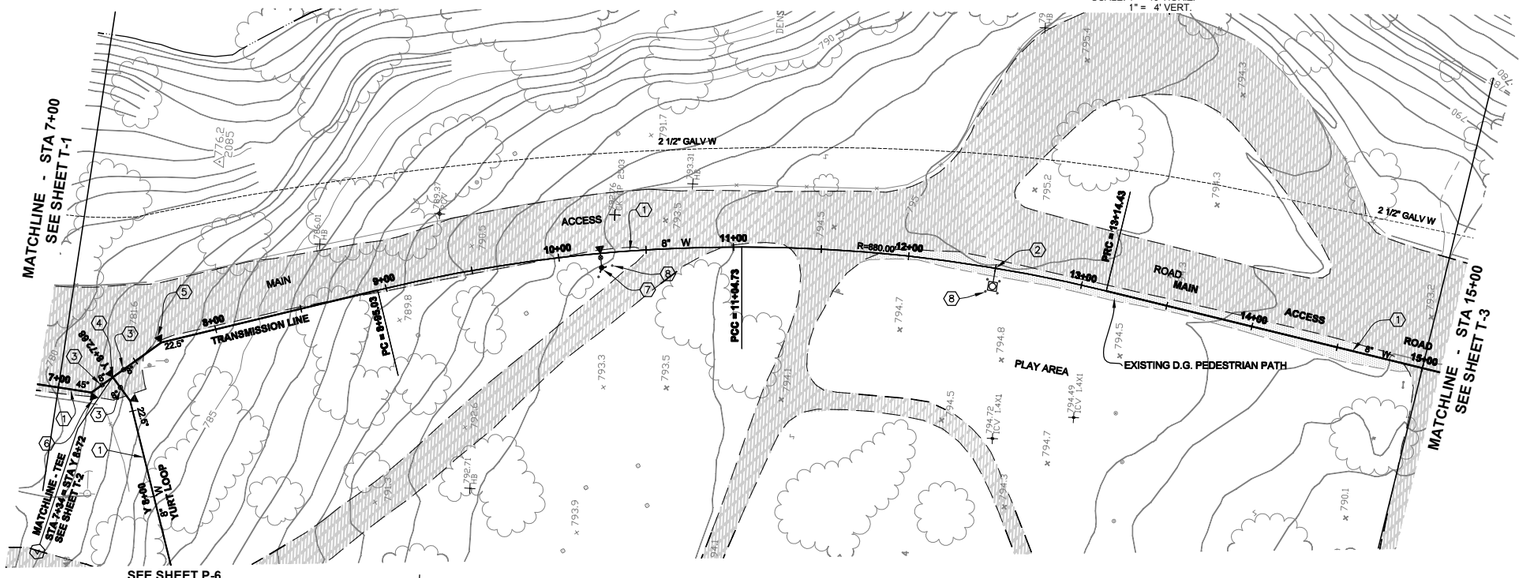


TRANSMISSION LINE PROFILE

SCALE: 1" = 40' HORIZ.
1" = 4' VERT.



SCALE: 1" = 40'

GRAPHIC SCALE

0 20 40 80 120 160 200

SPECIFIC CONSTRUCTION NOTES THIS SHEET:

1. CONSTRUCT 8-INCH PVC WATER PIPE, CLASS 200, 30 INCHES MINIMUM COVER, PER TRENCH DETAIL 20 ON SHEET CD-2.
2. CONSTRUCT 1-INCH AIR VALVE ASSEMBLY PER DETAIL 34, SHEET CD-3.
3. CONSTRUCT 8-INCH GATE VALVE PER DETAIL 25, SHEET CD-2.
4. CONSTRUCT 8" x 8" x 8" TEE AND THRUST BLOCK PER PIPING DETAILS 24 AND 26 ON SHEET CD-2.
5. CONSTRUCT 22½° BEND AND THRUST BLOCK PER DETAIL 24, SHEET CD-2.
6. CONSTRUCT45° BEND AND THRUST BLOCK PER DETAIL 24, SHEET CD-2.
7. CONSTRUCT 6-INCH FIRE HYDRANT ASSEMBLY PER DETAILS 30 AND 32, SHEET CD-3.
8. CONSTRUCT GUARD POSTS PER DETAIL 8, SHEET CD-1.

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201 N. Calle Cesar Chavez, Suite 100 Santa Barbara, CA 93103
Telephone (805) 966-2224

BY: _____ PROJECT ENGINEER DATE: 5/20/09

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COUNTY OF SANTA BARBARA
COUNTY PARKS
610 Mission Canyon Road
Santa Barbara, CA 93105

Design: ELF Check: BS
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Project Engineer:
Date:

TRANSMISSION PIPELINE PLAN AND PROFILE

LAKE CACHUMA WATER STORAGE AND DISTRIBUTION SYSTEM IMPROVEMENTS
COUNTY OF SANTA BARBARA, CALIFORNIA

T-2

SHT. 10 OF 35

PLOTTED: May 20, 2009 – 3:40pm 0352_WSDS_P&P_T1–T8.dwg

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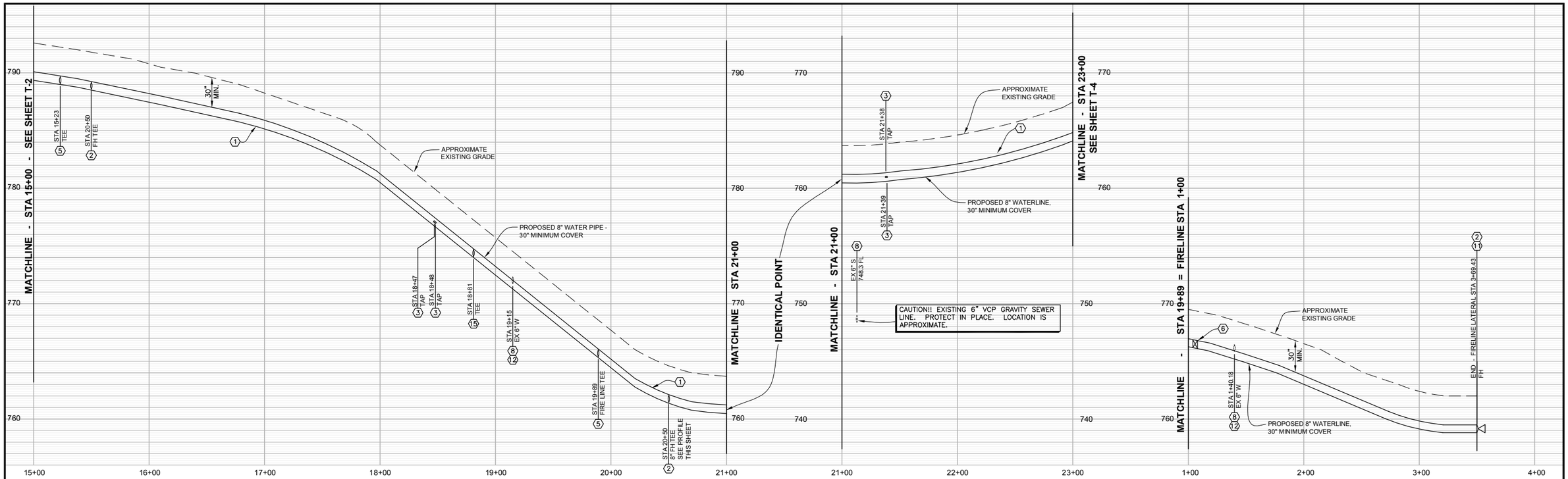
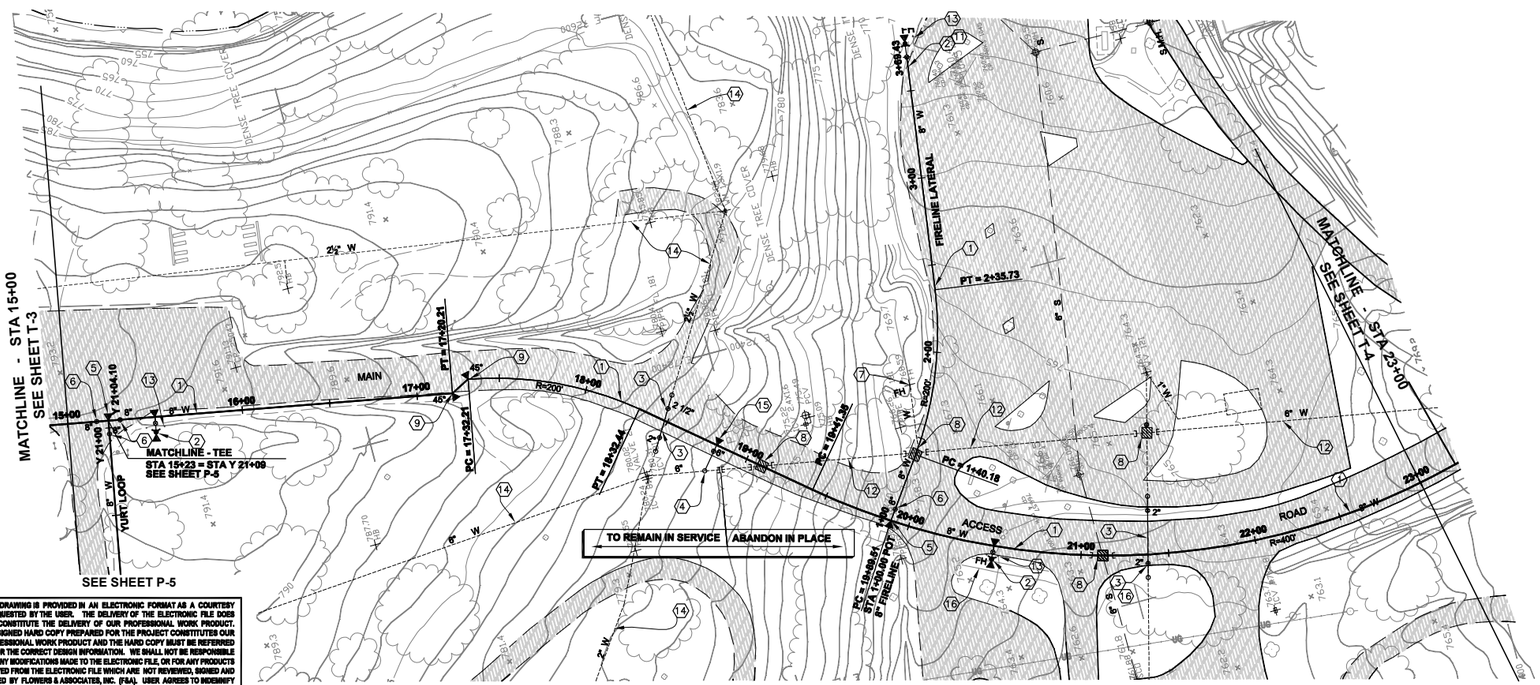


TRANSMISSION LINE PROFILE

SCALE: 1" = 40' HORIZ.
1" = 4' VERT.

FIRELINE LATERAL PROFILE

SCALE: 1" = 40' HORIZ.
1" = 4' VERT.



SPECIFIC CONSTRUCTION NOTES THIS SHEET:

1. CONSTRUCT 8-INCH PVC WATER PIPE, CLASS 200, 30 INCHES MINIMUM COVER, PER TRENCH DETAIL 20 ON SHEET CD-2.
2. CONSTRUCT 6-INCH FIRE HYDRANT ASSEMBLY PER DETAILS 30 AND 32, SHEET CD-3.
3. CONSTRUCT MINOR DISTRIBUTION LINE CONNECTION, SIZE AS SHOWN, PER DETAIL 35, SHEET CD-3. CONSTRUCT TRAFFIC RATED VALVE BOX IN ROAD.
4. CONSTRUCT CONNECTION TO EXISTING DISTRIBUTION LINE, SIZE AS SHOWN, PER DETAIL 37, SHEET CD-3.
5. CONSTRUCT 8" x 8" x 8" TEE AND THRUST BLOCK PER PIPING DETAILS 24 AND 26 ON SHEET CD-2.
6. CONSTRUCT 8-INCH GATE VALVE PER DETAIL 25, SHEET CD-2.
7. REMOVE EXISTING FIRE HYDRANT AND ASSEMBLY.
8. POTHOLE LOCATION OF EXISTING CONDUIT AND REPORT FINDINGS TO ENGINEER PRIOR TO CONSTRUCTION.
9. CONSTRUCT 45° BEND AND THRUST BLOCK PER DETAIL 24, SHEET CD-2.
10. CONSTRUCT END CAP AND THRUST BLOCK PER DETAIL 24, SHEET CD-2.
11. CONSTRUCT 6" X 8" REDUCER AND THRUST BLOCK PER DETAIL 24, SHEET CD-2.
12. ABANDON PIPE PER SPECIFICATIONS. CONTRACTOR TO CUT AND CAP EXISTING WATERLINE AT EDGE OF TRANSMISSION PIPELINE TRENCH AS SHOWN.
13. CONSTRUCT GUARDPOSTSPER DETAIL 8 ON SHEET CD-1.
14. THIS PORTION OF EXISTING WATERLINE TO REMAIN IN SERVICE. CONNECT TO NEW 8" TRANSMISSION PIPELINE AS SHOWN.
15. CONSTRUCT 8"X8"X6" TEE AND THRUST BLOCK PER DETAIL 24, SHEET CD-2. CONNECT 8" TRANSMISSION PIPELINE TO EXISTING 6" WATERLINE AS SHOWN.
16. PROTECT PATH OR REMOVE AND REPLACE AS REQUIRED TO CONSTRUCT IMPROVEMENTS.

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T-3

SHT. 11 OF 35

PLOTTED: May 20, 2009 – 3:41pm 0352_WSDS_P&P_T1–T8.dwg

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