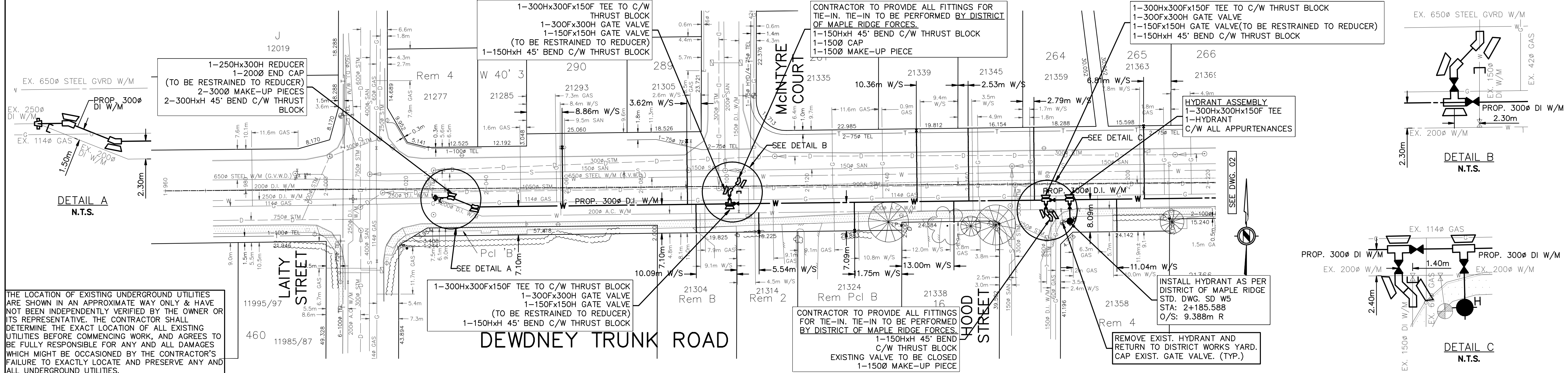


- FIBRE OPTIC NOTES:
- PRESERVE A CONTINUOUS SECTION OF A.C. WATER MAIN FROM LAITY ST TO 216 ST
  - ENSURE ALL VALVES ON THE ABANDONED WATER MAIN ARE LEFT OPEN, AND WELDED OPEN IF POSSIBLE.
  - CLOSE VALVES ON ABANDONED HYDRANT LEADS
  - CRIMP EXISTING COPPER SERVICE CONNECTIONS TO THE ABANDONED WATER MAIN, TO LIMIT WATER INFILTRATION.
  - REPAIR BREAKS TO ABANDONED WATER MAIN WHEN TRANSFERRING HYDRANT, SERVICE AND LATERAL CONNECTIONS WITH EQUAL SIZE (200mm) MAIN.
  - DOCUMENT CONDITION OF ABANDONED WATER MAIN (VISIBLE CONDITION WHEN EXPOSED)
  - CAP EXPOSED EAST AND WEST ENDS OF AC WATER MAIN

- NOTES:
- CONTRACTOR SHALL EXPOSE ALL UTILITY CROSSINGS AND ALL TIE-IN LOCATIONS TO VERIFY LOCATION AND ELEVATION MINIMUM 4 BUSINESS DAYS PRIOR TO WATER MAIN CONSTRUCTION. ANY CONFLICTS OR DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER IN WRITING IMMEDIATELY.
  - PROPOSED PIPE SHALL BE 300MM D.I. UNLESS OTHERWISE SPECIFIED.
  - PROPOSED FITTINGS SHALL BE CLASS 150 D.I. UNLESS OTHERWISE SPECIFIED. UNIFLANGE SERIES 1360 RESTRAINT DEVICES SHALL BE USED AT ALL FITTINGS.
  - FOR ALL CROSSINGS WITH STORM AND SANITARY SEWERS THE WATER MAIN JOINTS ARE TO BE WRAPPED WITH DENSO TAPE AND PASTE 3.0M ON BOTH SIDES OF THE CROSSING.
  - WATER SERVICE TRANSFERS TO BE AS PER THE CORPORATION OF THE DISTRICT OF MAPLE RIDGE DRAWING, NO. SD W7. CONTRACTOR SHALL CONSTRUCT THE WATER SERVICE CONNECTION TO PROPERTY LINE AND CONNECT NEW WATER SERVICE TO EXISTING WATER SERVICE AT PROPERTY LINE AFTER CHLORINATION AND TESTING OF WATER MAIN. WATER SERVICES ARE TO BE INSPECTED BY CONTRACTOR AND IF AND SERVICES REQUIRE REPLACEMENT, THE CONTRACTOR IS RESPONSIBLE TO NOTIFY THE DISTRICT OF MAPLE RIDGE WATER SUPERINTENDENT FOR VERIFICATION.
  - ALL EXISTING VALVE BOXES AND LIDS IN LIMITS OF WORKS ARE TO BE ADJUSTED TO SUIT PROPOSED SURFACE.
  - ALL THRUST BLOCKS SIZES ARE TO BE SIZED AS PER THE CORPORATION OF THE DISTRICT OF MAPLE RIDGE DRAWING NO. SD W2.
  - METER BOXES FOR WATER SERVICES ARE TO BE DETERMINED BY THE DISTRICT OF MAPLE RIDGE.
  - FITTINGS ARE TO BE RESTRAINED A MINIMUM OF 6m ON ALL SIDES.
  - EXISTING 200Ø A/C WATERMAIN ON DEWDNEY TRUNK ROAD TO BE ABANDONED BETWEEN LAITY AND 216 STREET BE PRESERVED FOR USE AS A FIBER OPTIC CONDUIT.



WATERMAIN LENGTH, SIZE, TYPE, AND GRADE	WATERMAIN INVERT ELEVATIONS	CHAINAGE
42.7m-300Ø D.I. W/M @ 1.10%	29.84	2+070.00
30.7m-300Ø D.I. W/M @ 0.47%	30.11	2+080
78.8m-300Ø D.I. W/M @ 0.47%	30.25	2+100.70
207.9m-300Ø D.I. W/M @ 0.47%	30.65	2+179.54



THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY & 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 AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

BENCHMARK:

CONTROL MONUMENT 85H0722 LOCATED AT LOUGHEED HIGHWAY AND LAITY STREET. ELEVATION = 29.299m [NAD83 CSRS]	YTC
CONTROL MONUMENT 85H0757 LOCATED AT LOUGHEED HIGHWAY AND 216 STREET. ELEVATION = 33.586m [NAD83 CSRS]	YTC

**APLIN & MARTIN**  
CONSULTANTS LTD

201-12448 82 Avenue, Surrey, B.C. Canada V3W 3E9  
Tel: (604) 597-9058, Fax: (604) 597-9061, E-mail: general@aplinmartin.com

DRAWN	TWD/RHS
DESIGNED	YTC
CHECKED	YTC
APPROVED	DYC
SCALES	
HORIZ.	1:500
VERT.	1:50

CORPORATION OF THE DISTRICT OF MAPLE RIDGE  
ENGINEERING DEPARTMENT PROJ. 10-114

**WATERMAIN**  
DEWDNEY TRUNK ROAD  
STA 1+960 TO 2+200

DATE	AUGUST 2010
SHEET	01 OF 03
DWG. No.	E03-101-079

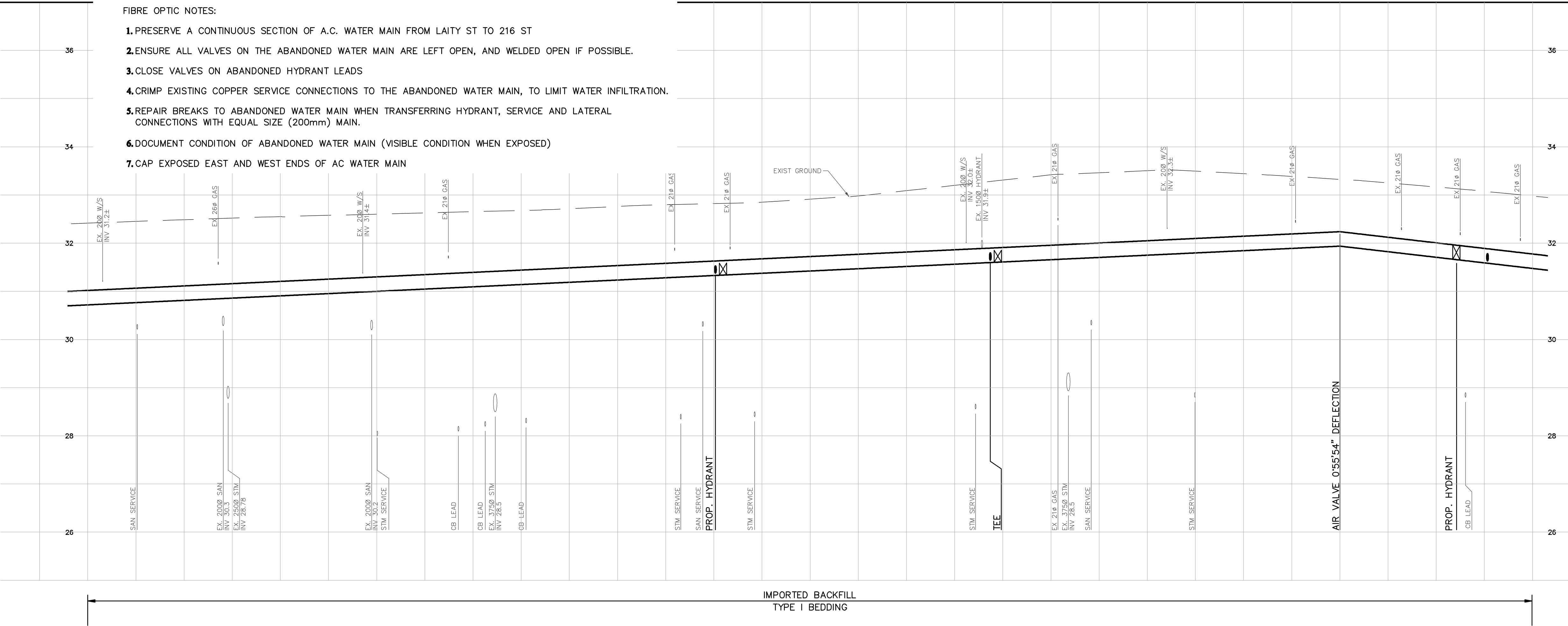
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1. NOTES:

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FIBRE OPTIC NOTES:

- PRESERVE A CONTINUOUS SECTION OF A.C. WATER MAIN FROM LAITY ST TO 216 ST
- ENSURE ALL VALVES ON THE ABANDONED WATER MAIN ARE LEFT OPEN, AND WELDED OPEN IF POSSIBLE.
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- REPAIR BREAKS TO ABANDONED WATER MAIN WHEN TRANSFERRING HYDRANT, SERVICE AND LATERAL CONNECTIONS WITH EQUAL SIZE (200mm) MAIN.
- CONDITION OF ABANDONED WATER MAIN (VISIBLE CONDITION WHEN EXPOSED)
- CAP EXPOSED EAST AND WEST ENDS OF AC WATER MAIN



WATERMAIN LENGTH, SIZE, TYPE, AND GRADE

207.9m-300Ø D.I. W/M @ 0.47%

72.6m-300Ø D.I. W/M @ 0.47%

WATERMAIN INVERT ELEVATIONS

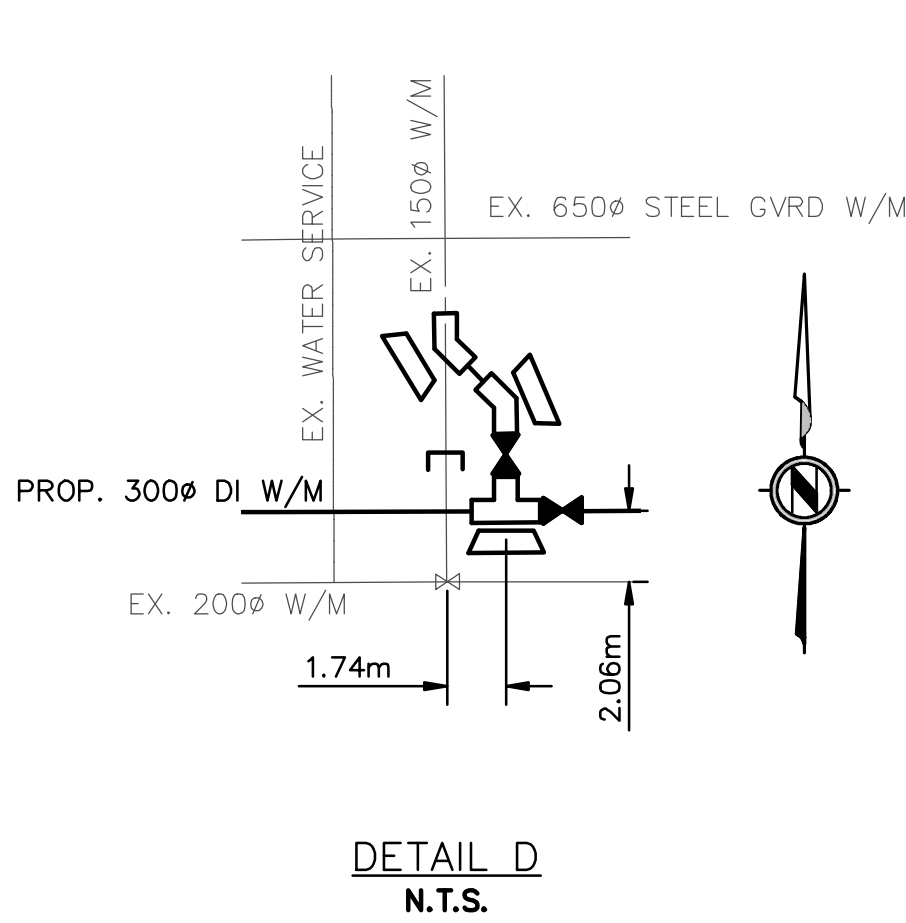
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31.60

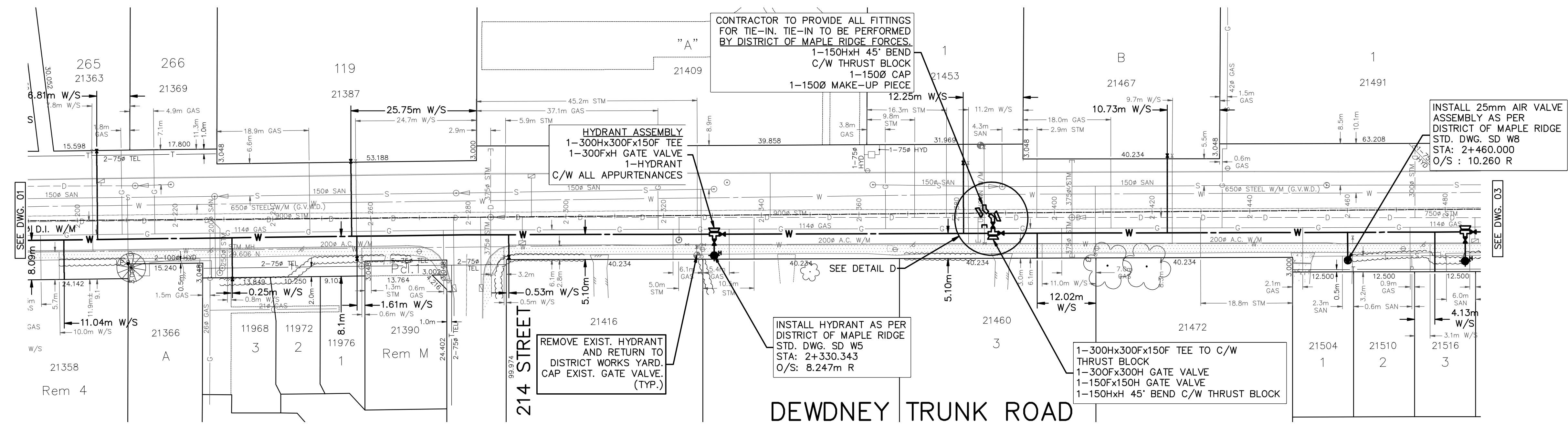
31.94

31.53

CHAINAGE



THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY & 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 AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.



No.	DATE	REVISION	BY
1	08/11/10	75% DESIGN SUBMISSION	YTC

BENCHMARK:  
 CONTROL MONUMENT 85H0722 LOCATED AT LOUGHEED HIGHWAY AND LAITY STREET. ELEVATION = 29.299m [NAD83 CSRS]  
 CONTROL MONUMENT 85H0757 LOCATED AT LOUGHEED HIGHWAY AND 216 STREET. ELEVATION = 33.586m [NAD83 CSRS]

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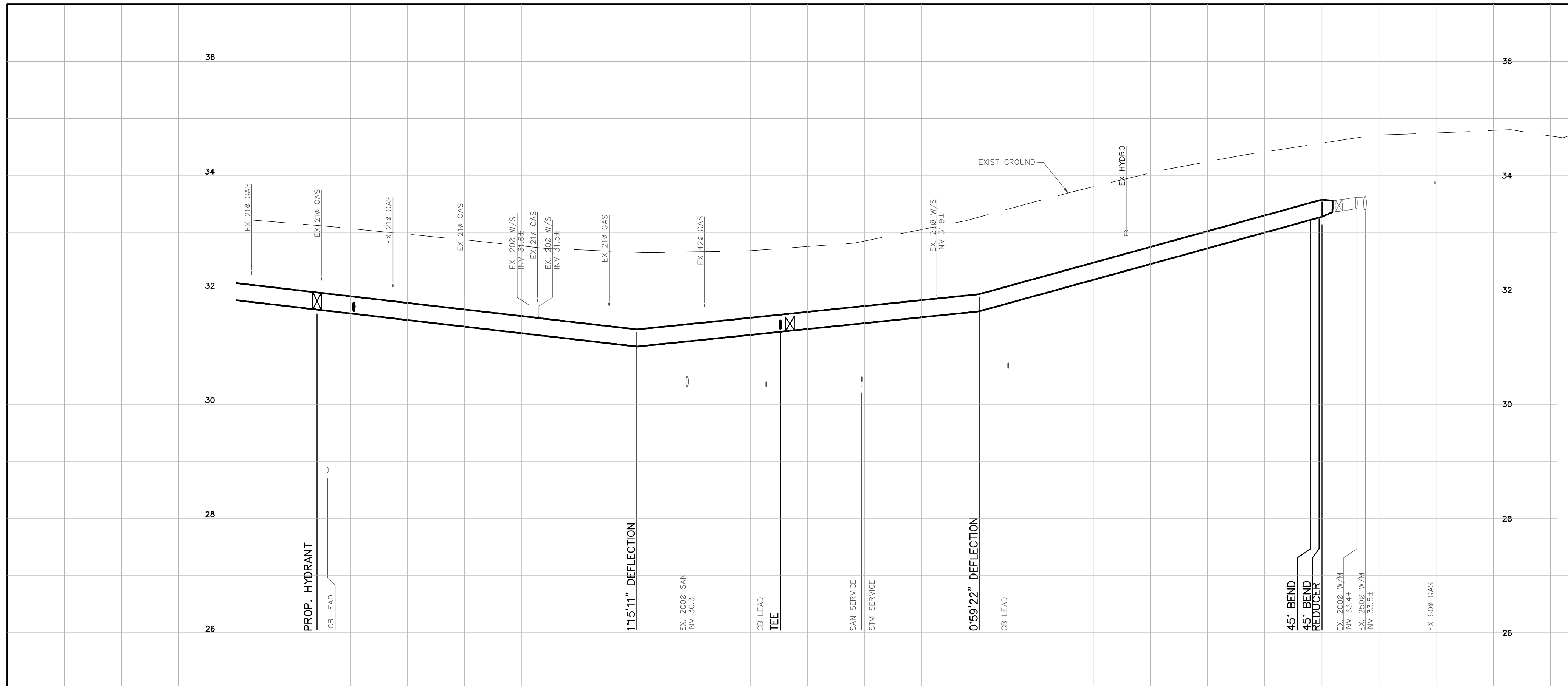
DRAWN TWD/RHS  
 DESIGNED YTC  
 CHECKED YTC  
 APPROVED DYC  
 SCALES  
 HORZ. 1:500  
 VERT. 1:50

SEAL

CORPORATION OF THE DISTRICT OF MAPLE RIDGE  
 ENGINEERING DEPARTMENT  
 PROJ. 10-114

**WATERMAIN**  
 DEWDNEY TRUNK ROAD  
 STA 2+200 TO 2+500

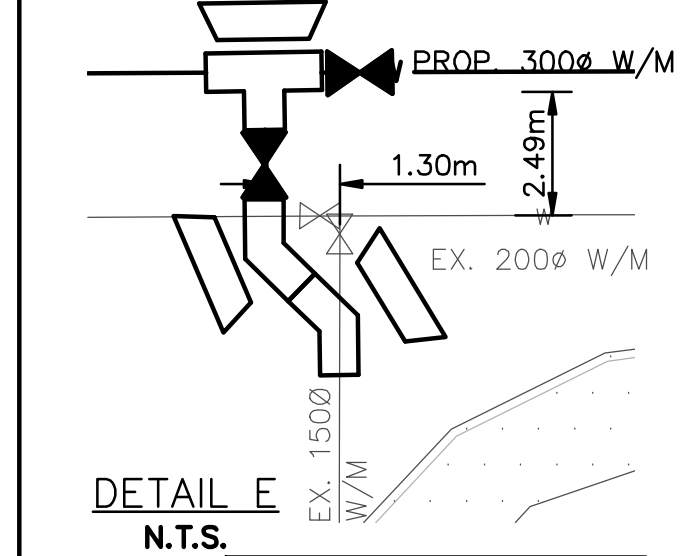
DATE AUGUST 2010  
 SHEET 02 OF 03  
 DWG. No. E03-101-079



- FIBRE OPTIC NOTES:**
1. PRESERVE A CONTINUOUS SECTION OF A.C. WATER MAIN FROM LAITY ST TO 216 ST
  2. ENSURE ALL VALVES ON THE ABANDONED WATER MAIN ARE LEFT OPEN, AND WELDED OPEN IF POSSIBLE.
  3. CLOSE VALVES ON ABANDONED HYDRANT LEADS
  4. CRIMP EXISTING COPPER SERVICE CONNECTIONS TO THE ABANDONED WATER MAIN, TO LIMIT WATER INFILTRATION.
  5. REPAIR BREAKS TO ABANDONED WATER MAIN WHEN TRANSFERRING HYDRANT, SERVICE AND LATERAL CONNECTIONS WITH EQUAL SIZE (200mm) MAIN.
  6. DOCUMENT CONDITION OF ABANDONED WATER MAIN (VISIBLE CONDITION WHEN EXPOSED)
  7. CAP EXPOSED EAST AND WEST ENDS OF AC WATER MAIN

- 1. NOTES:**
2. CONTRACTOR SHALL EXPOSE ALL UTILITY CROSSINGS AND ALL TIE-IN LOCATIONS TO VERIFY LOCATION AND ELEVATION MINIMUM 4 BUSINESS DAYS PRIOR TO WATER MAIN CONSTRUCTION. ANY CONFLICTS OR DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER IN WRITING IMMEDIATELY.
  3. PROPOSED PIPE SHALL BE 300MM D.I. UNLESS OTHERWISE SPECIFIED.
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  5. FOR ALL CROSSINGS WITH STORM AND SANITARY SEWERS THE WATER MAIN JOINTS ARE TO BE WRAPPED WITH DENSO TAPE AND PASTE 3.0M ON BOTH SIDES OF THE CROSSING.
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  7. ALL EXISTING VALVE BOXES AND LIDS IN LIMITS OF WORKS ARE TO BE ADJUSTED TO SUIT PROPOSED SURFACE.
  8. ALL THRUST BLOCKS SIZES ARE TO BE SIZED AS PER THE CORPORATION OF THE DISTRICT OF MAPLE RIDGE DRAWING NO. SD W2.
  9. METER BOXES FOR WATER SERVICES ARE TO BE DETERMINED BY THE DISTRICT OF MAPLE RIDGE.
  10. FITTINGS ARE TO BE RESTRAINED A MINIMUM OF 6m ON ALL SIDES.
  11. EXISTING 200Ø A/C WATERMAIN ON DEWDNEY TRUNK ROAD TO BE ABANDONED BETWEEN LAITY AND 216 STREET BE PRESERVED FOR USE AS A FIBER OPTIC CONDUIT.

WATERMAIN LENGTH, SIZE, TYPE, AND GRADE	WATERMAIN INVERT ELEVATIONS	CHAINAGE
80.2m-300Ø D.I. W/M @ -1.16%	31.01	2+520
25.1m-300Ø D.I. W/M @ 1.03%	31.27	2+540
34.8m-300Ø D.I. W/M @ 1.03%	31.63	2+560
61.8m-300Ø D.I. W/M @ 2.76%	33.28	2+600



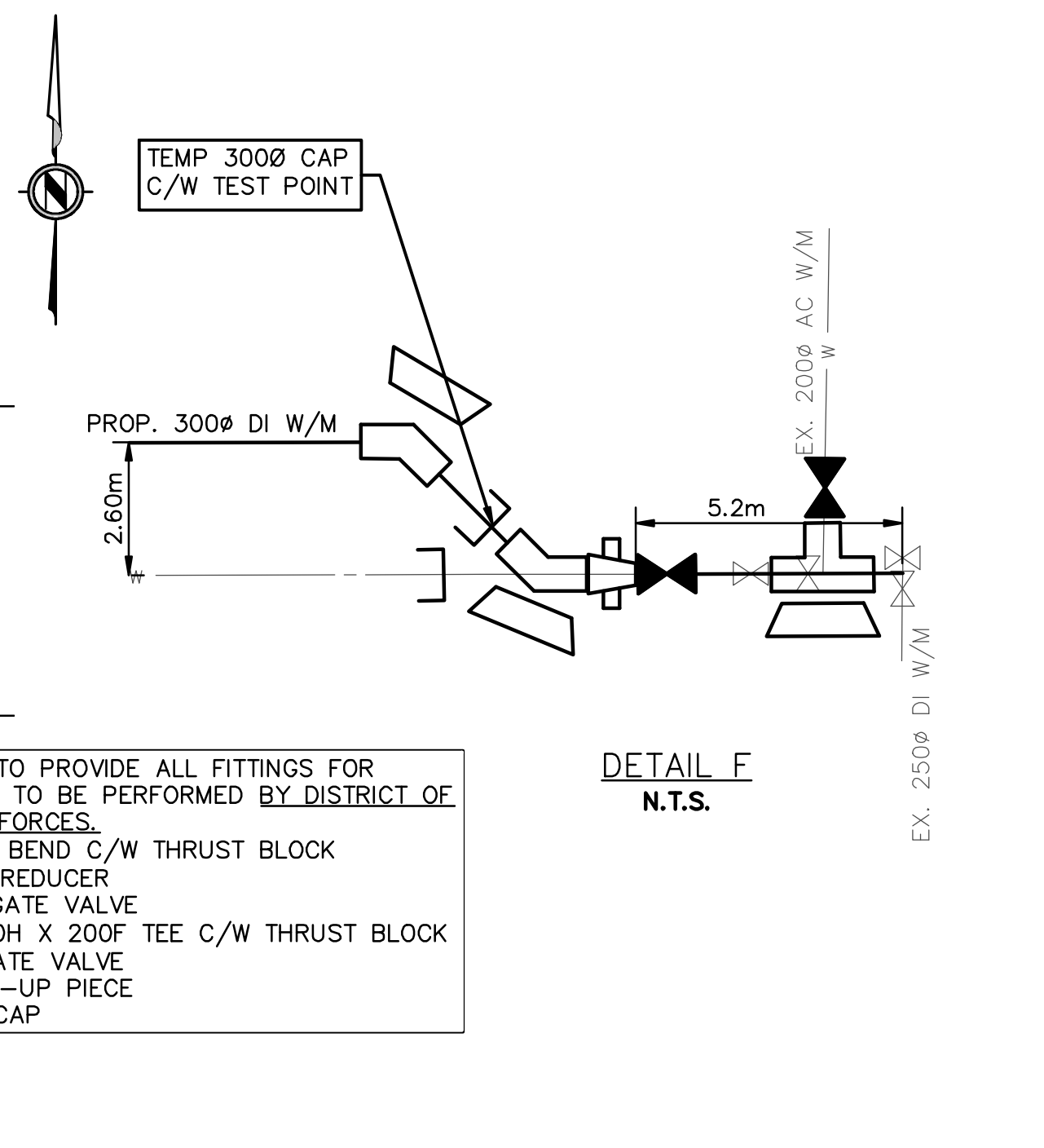
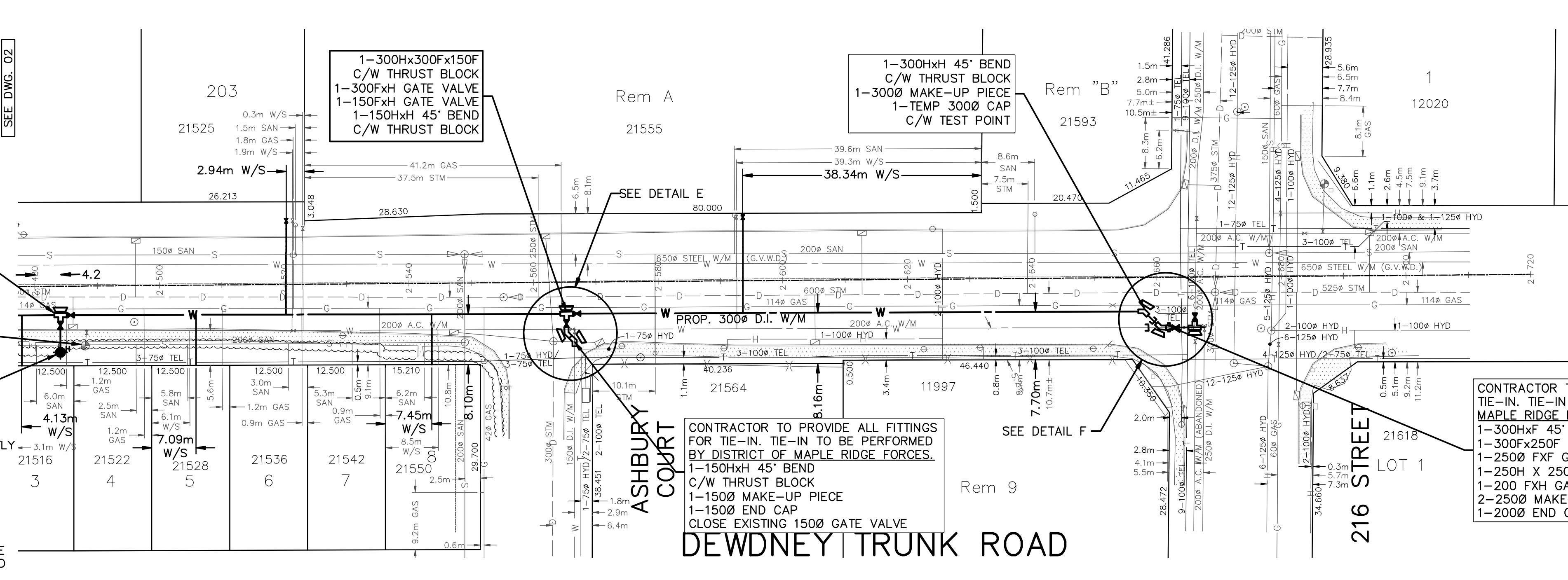
**DETAIL E N.T.S.**

HYDRANT ASSEMBLY  
 1-300x300x150F TEE  
 1-300xH GATE VALVE  
 1-150xH GATE VALVE  
 C/W ALL APPURTENANCES

REMOVE EXIST. HYDRANT AND RETURN TO DISTRICT WORKS YARD. CAP EXIST. GATE VALVE. (TYP.)

INSTALL HYDRANT AS PER DISTRICT OF MAPLE RIDGE STD. DWG. SD W5 STA: 2+484.20 O/S : 10.60 R

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**DETAIL F N.T.S.**

CONTRACTOR TO PROVIDE ALL FITTINGS FOR TIE-IN. TIE-IN TO BE PERFORMED BY DISTRICT OF MAPLE RIDGE FORCES.

1-300x45° BEND C/W THRUST BLOCK  
 1-300x250F REDUCER  
 1-250Ø FXF GATE VALVE  
 1-250H X 250H X 200F TEE C/W THRUST BLOCK  
 1-200 FXH GATE VALVE  
 2-250Ø MAKE-UP PIECE  
 1-200Ø END CAP

No.	DATE	REVISION	BY
1	08/11/10	75% DESIGN SUBMISSION	YTC

**BENCHMARK:**

CONTROL MONUMENT 85H0722 LOCATED AT LOUGHEED HIGHWAY AND LAITY STREET. ELEVATION = 29.299m [NAD83 CSRS]

CONTROL MONUMENT 85H0757 LOCATED AT LOUGHEED HIGHWAY AND 216 STREET. ELEVATION = 33.586m [NAD83 CSRS]

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DRAWN	TWD/RHS
DESIGNED	YTC
CHECKED	YTC
APPROVED	DYC
SCALES	
HORZ.	1:500
VERT.	1:50

**CORPORATION OF THE DISTRICT OF MAPLE RIDGE**  
 ENGINEERING DEPARTMENT  
 PROJ. 10-114

**WATERMAIN**  
 DEWDNEY TRUNK ROAD  
 STA 2+500 TO 2+720

DATE	AUGUST 2010
SHEET	03 OF 03
DWG. No.	E03-101-079

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