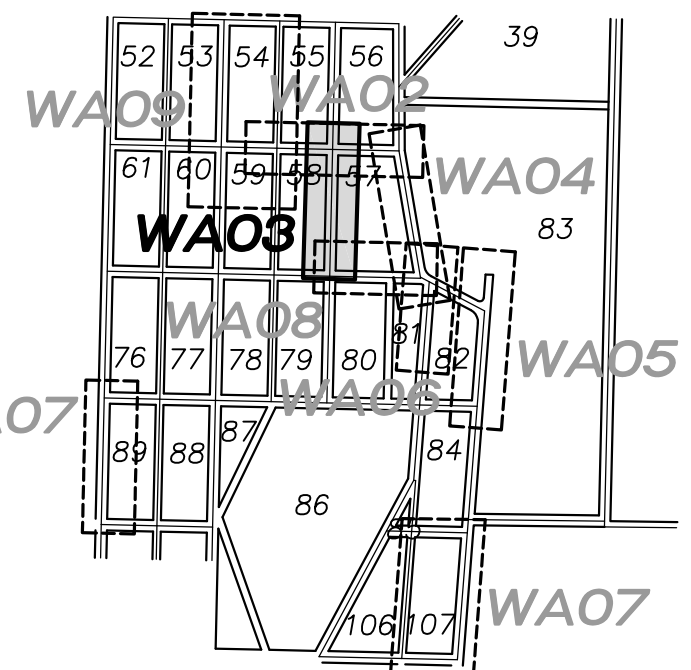
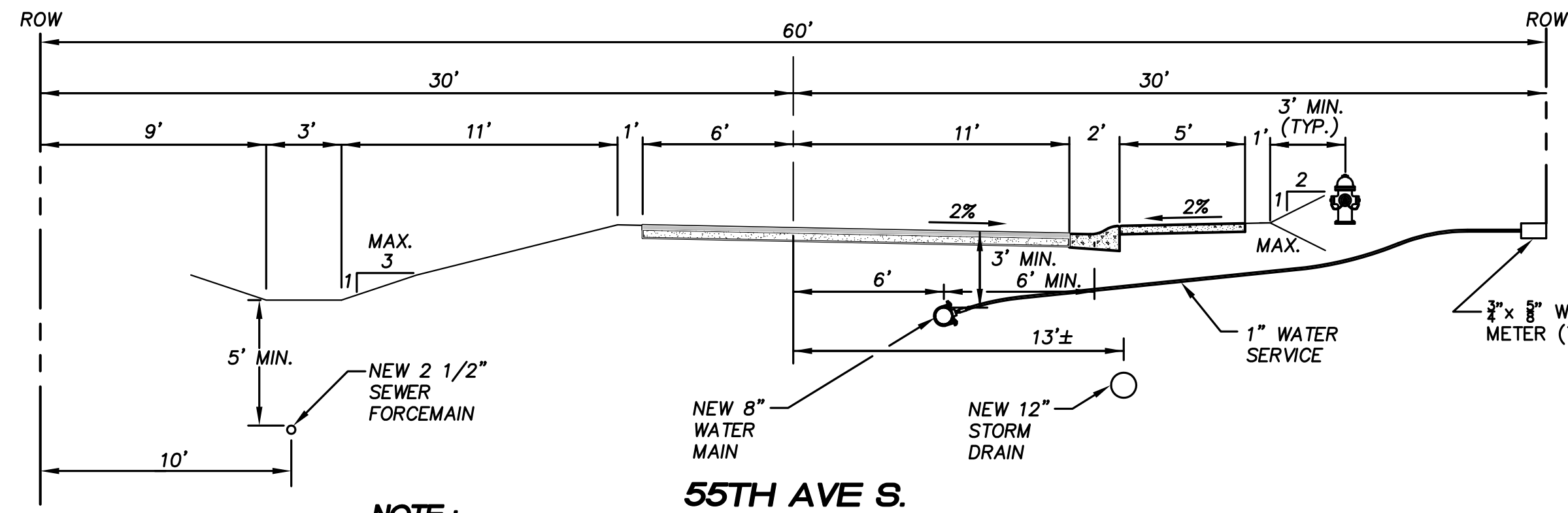


N.W. 1/4, SEC. 26, T. 21 N., R. 4 E., W.M.

- 1 MATCH POINT
118+76.20, 5.0±' L
S. 354TH ST =
53+25.1±, 6.00' R
55TH AVE S.
TAPPING CONNECTION TO EX. 12" WATER
1-12"x8" TAPPING SLEEVE W/ CONC BLOCKING
1-8" GATE VALVE (FLxMJ)
- 3 51+30.00, 6.00' R
1-8"x6" TEE (MJxMJxFL)
1-6" GATE VALVE (FLxMJ)
15LF 6" D.I.P.
1-FIRE HYDRANT ASSEMBLY
- 4 49+21.65, 6.00' R
1-8" PLUG (MJ)
1-3" BLOWOFF ASSEMBLY
W/ CONC. BLOCKING
3'x3'x3" PROTECTIVE PAD
(CONCRETE OR ASPHALT)



LAKEHAVEN UTILITY DISTRICT

Water Plan _____ Sewer Plan _____

Dated _____

APPROVED FOR CONSTRUCTION
SUBJECT TO CHANGES NOTED

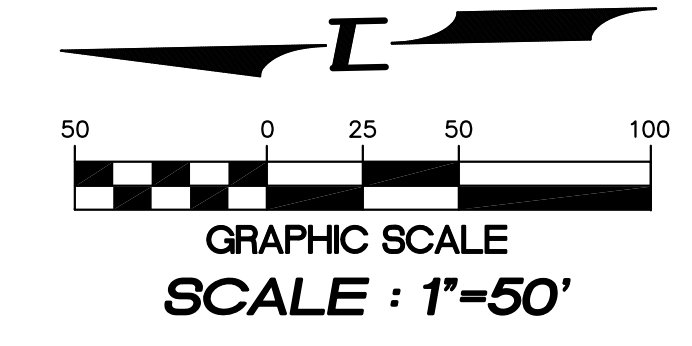
The District's review is not a check of any dimension or quantities and will not relieve the Developer from responsibility for errors of any sort. No changes shall be made in the plans except by the consent of the District.

General Manager/District Engineer _____ Date _____

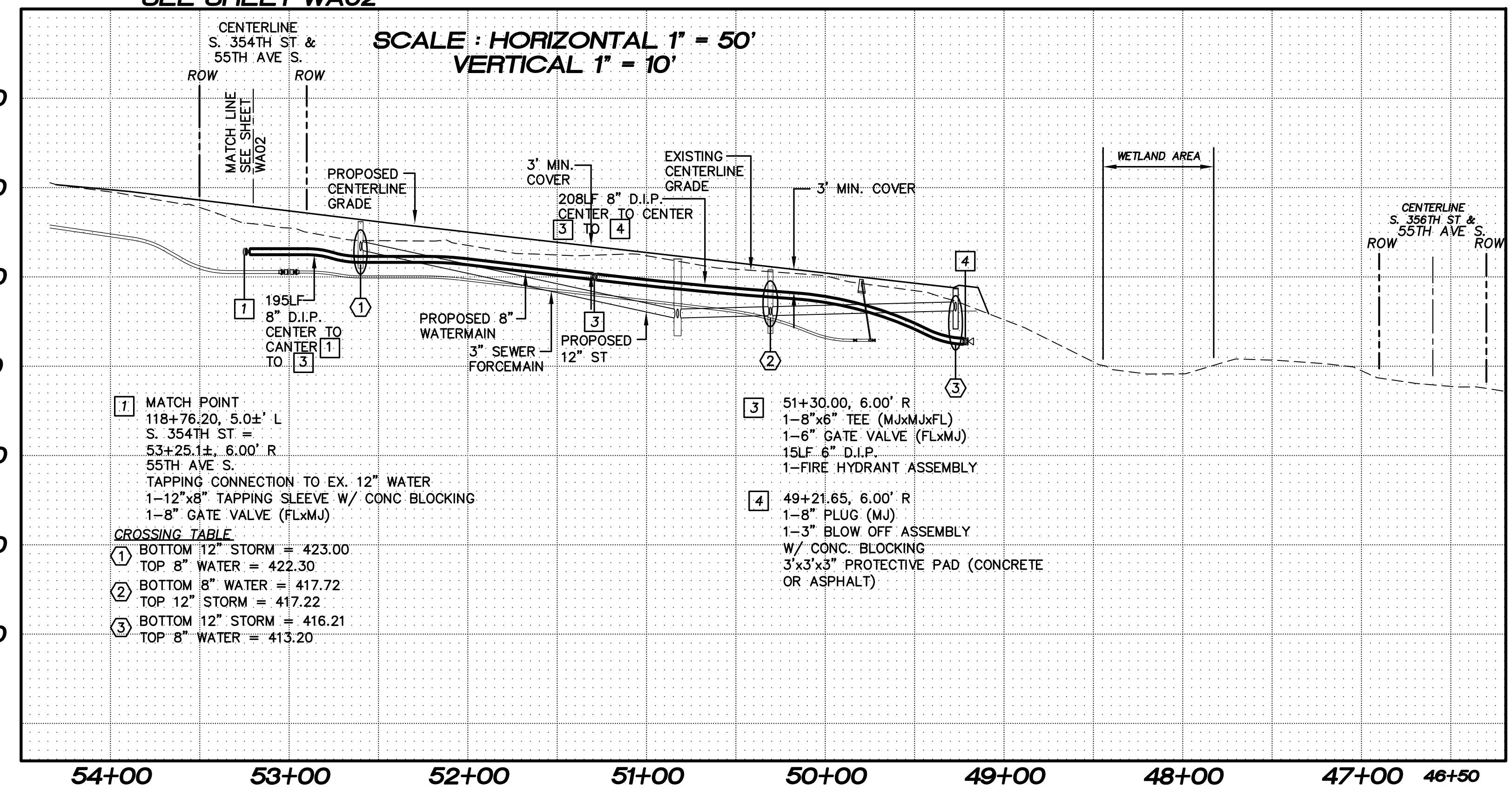
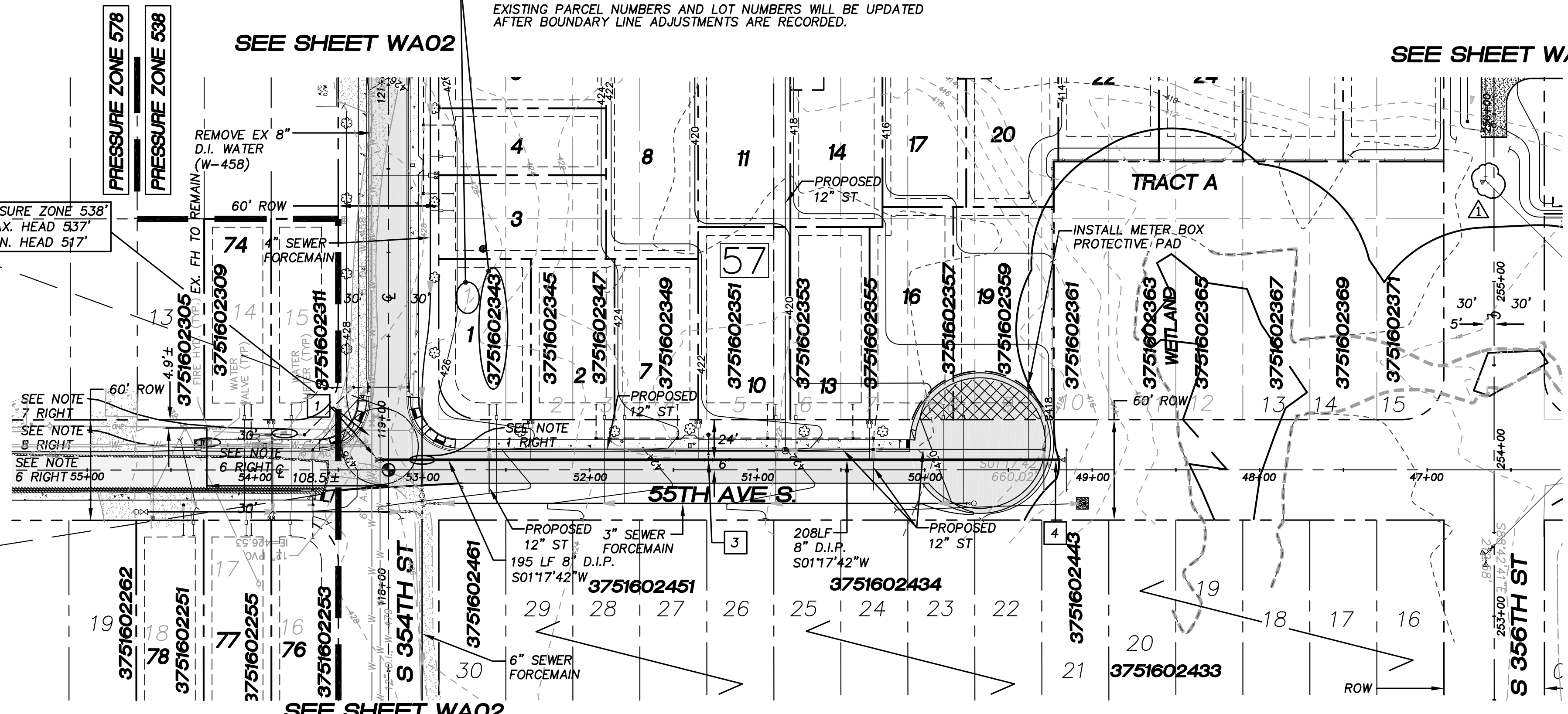
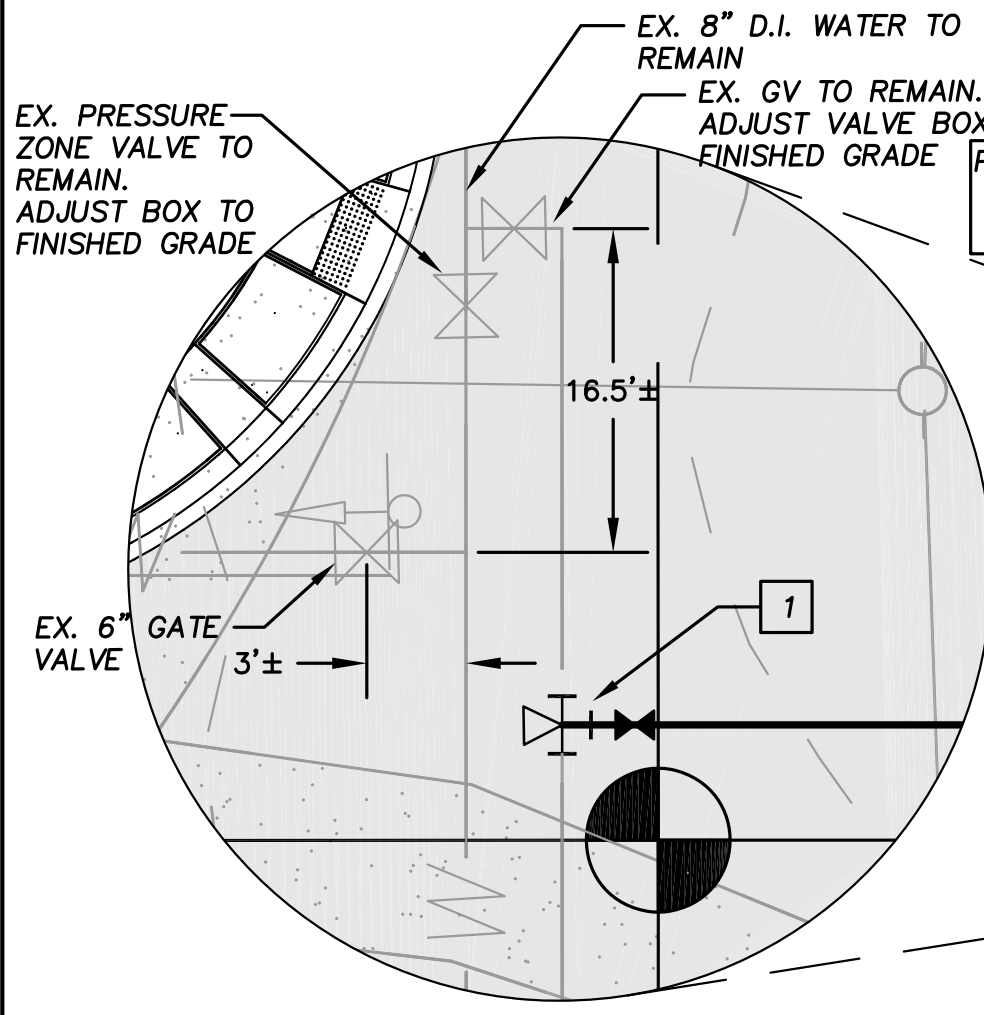
This construction plan will expire one year from plan approval date, if construction has not commenced.

VERTICAL DATUM :
NAVD 88

BENCH MARK :
KING COUNTY SURVEY CONTROL POINT No. 6905,
SW CORNER OF SECTION 27, T 24 N, R 4 E, W.M.,
CONCRETE MONUMENT WITH LEAD AND BRASS TACK,
SET 1.2 FEET BELOW GRADE, IN STANDARD KC MON. CASE.
ELEVATION = 367.06



- NOTE :**
- ALL SEWER FORCEMAIN PIPES ARE DR-11 HDPE PIPES. THE SEWER FORCEMAIN SHALL HAVE 10' MINIMUM HORIZONTAL CLEARANCE BETWEEN WATERMAIN. WHEN CROSSING WITH WATERMAIN, THE SEWER FORCEMAIN SHALL CROSS UNDER AND KEEP MINIMUM 18" VERTICAL CLEARANCE FROM THE WATERMAIN. IF THE EXISTING WATERMAIN IS AC PIPE, IT SHALL BE REPLACED WITH SAME SIZE DUCTILE IRON PIPE 10 FEET EACH SIDE OF SEWER CROSSING BUT NO LESS THAN 2 FEET INTO BOTH TRENCH WALLS (NO CDF CRADLE ALLOWED).
 - WATERMANS DEPICTED IN PROFILE VIEW TO HAVE MINIMUM 3' COVER. WATERMAIN VALVE OPERATING NUT TO HAVE 12" COVER.
 - LOCATIONS OF EXISTING UTILITIES ARE BASED ON FIELD SURVEY DATA. POTHOLE/RESEARCH EXISTING WATERMAIN AND OTHER UTILITIES BEFORE CONSTRUCTION.
 - ALL NEW WATERMANS ARE DUCTILE IRON PIPES WITH MINIMUM CLASS 50.
 - ALL NEW SERVICES TO INDIVIDUAL LOTS ARE 1" (SERVICE & METER) W/ 3/4" x 3/4" REDUCER BUSHINGS. ALL WATER METERS TO BE INSTALLED BY LAKEHAVEN FOLLOWING COMPLETION OF NEW WATERMAIN CONSTRUCTION. UNDER SEPARATE APPLICATIONS, ANY WATER SERVICE CONNECTIONS PROPOSED FROM EXISTING WATERMAIN SHALL BE ENTIRELY INSTALLED BY LAKEHAVEN. DEVELOPER SHOULD SUBMIT APPLICATIONS FOR THESE 'FULL' SERVICE INSTALLATIONS TO LAKEHAVEN AT THE COMMENCEMENT OF CONSTRUCTION.
 - FIELD LOCATE EXISTING 6" WATER MAIN, REROUTE WATER MAIN AROUND NEW STORM STRUCTURES AND PIPES AS REQUIRED FOR CONSTRUCTION. (MIN. 10' EACH SIDE STORM DRAIN CROSSINGS.)
 - SALVAGE EXISTING WATER METERS TO LAKEHAVEN UTILITY DISTRICT.
 - RELOCATE EXISTING GATE VALVE AND VALVE BOX BEHIND SIDEWALK AND EXISTING VALVE BOX RIMS TO BE ADJUSTED TO GRADE. EX. FIRE HYDRANT TO REMAIN.
 - THE MINIMUM SEPARATION BETWEEN (PARALLEL PIPELINES) WATER MAIN, WATER SERVICE LINE AND PRESSURE SEWER FACILITIES (MUST BE BELOW WATER MAIN OR WATER SERVICE) MUST BE MET, ARE AS FOLLOWS: HORIZONTAL ≥ 10' MEASURED EDGE TO EDGE VERTICAL ≥ 18", MEASURED EDGE TO EDGE.
 - THE MINIMUM SEPARATION BETWEEN (CROSSING PIPELINES) WATER MAIN, WATER SERVICE LINE AND PRESSURE SEWER FACILITIES (MUST BE BELOW WATER MAIN OR WATER SERVICE) MUST BE MET, ARE AS FOLLOWS: VERTICAL ≥ 18" MEASURED EDGE TO EDGE



- LEGEND**
- EX. ASPHALT PAVEMENT
 - EX. GRAVEL PAVEMENT
 - EX. WATER MAIN
 - NEW ASPHALT PAVEMENT
 - NEW CONC. SIDEWALK
 - 8" D.I. NEW WATER MAIN
 - NEW GATE VALVE
 - NEW F.H. ASSEMBLY
 - NEW WATER BEND W/ CONC. BLOCKING
 - NEW WATER TEE W/ CONC. BLOCKING
 - NEW WATER METER
 - 428- EX. CONTOUR
 - 406- FINISHED CONTOUR
 - 57 BLOCK NUMBER

- 1 MATCH POINT
118+76.20, 5.0±' L
S. 354TH ST =
53+25.1±, 6.00' R
55TH AVE S.
TAPPING CONNECTION TO EX. 12" WATER
1-12"x8" TAPPING SLEEVE W/ CONC BLOCKING
1-8" GATE VALVE (FLxMJ)
- 2 CROSSING TABLE
1 BOTTOM 12" STORM = 423.00
TOP 8" WATER = 422.30
2 BOTTOM 8" WATER = 417.72
TOP 12" STORM = 417.22
3 BOTTOM 12" STORM = 416.21
TOP 8" WATER = 413.20
- 3 51+30.00, 6.00' R
1-8"x6" TEE (MJxMJxFL)
1-6" GATE VALVE (FLxMJ)
15LF 6" D.I.P.
1-FIRE HYDRANT ASSEMBLY
- 4 49+21.65, 6.00' R
1-8" PLUG (MJ)
1-3" BLOW OFF ASSEMBLY
W/ CONC. BLOCKING
3'x3'x3" PROTECTIVE PAD (CONCRETE OR ASPHALT)

BLOCK 57
(PRESSURE ZONE 538, MAX. HEAD 537', MIN. HEAD 517')

LOT NO.	LOWEST FIXTURE ELEV. (FT.)	HIGHEST FIXTURE ELEV. (FT.)	ESTIMATED MIN. STATIC PRESSURE (PSI.)	ESTIMATED MAX. STATIC PRESSURE (PSI.)
10	421.00'	436.00'	35	50
11	419.00'	434.00'	36	51
13	419.00'	434.00'	36	51
14	417.00'	432.00'	37	52
16	418.00'	433.00'	36	51
17	416.00'	431.00'	37	52
19	418.00'	433.00'	36	51
20	419.00'	434.00'	36	51



15445 53RD AVE. S.
SEATTLE, WA 98188
PHONE: (206) 431-7970
FAX: (206) 388-1648
WEB SITE: PACENG.COM

Pacific Engineering Design, LLC
Civil Engineering and Planning Consultants

LAKEHAVEN UTILITY DISTRICT PROJECT No. 6904025
PEPPER HILL ESTATES
KING COUNTY, WA.

FOR: HIGHLAND PACIFIC HOUSING GROUP I, LLC
1420 5TH AVE, SUITE 2200
SEATTLE, WA 98101-6346
PHONE: (206) 521-5979 FAX: (206) 254-2880

PROJECT NO.: 05052
DRAWN BY: JGC
ISSUE DATE: 07-31-07
SHEET REV.: 03-26-2012

WATER MAIN
55TH AVE. S.
PLAN AND PROFILE

05052WA03.DWG
WA03