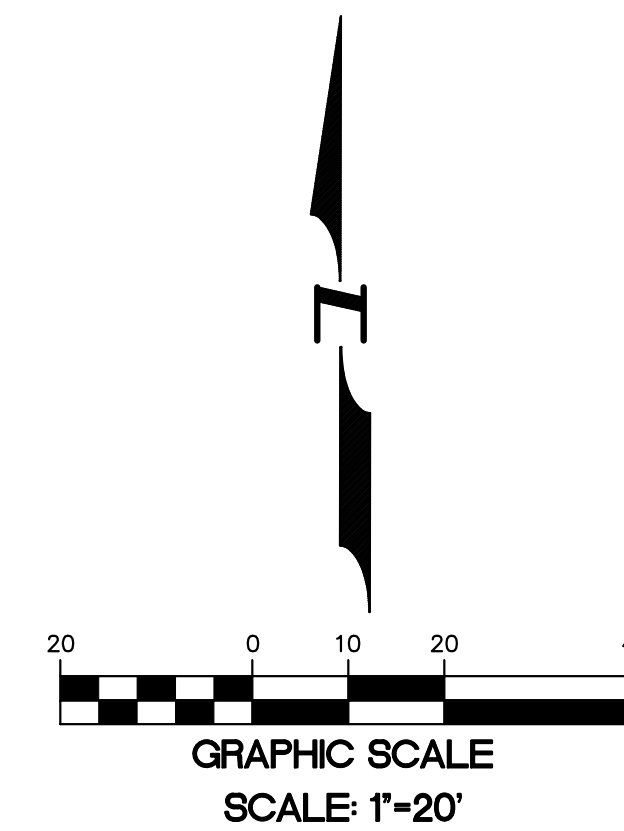
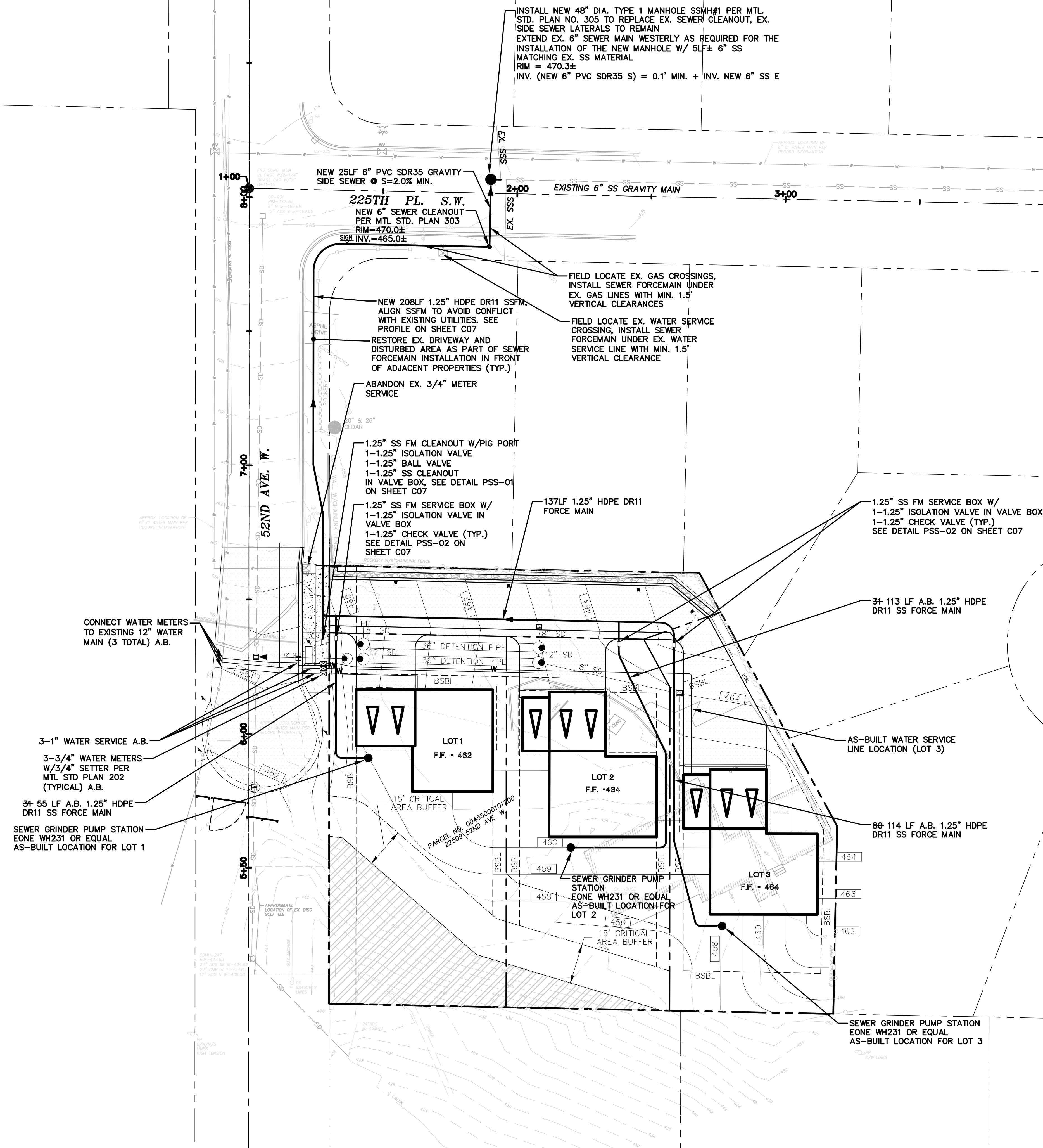


A PORTION OF THE S.W. 1/4 OF THE S.E. 1/4 OF SECTION 28, T. 24 N., R. 4E., W.M.



NOTES:

THE PROPOSED SEWER FORCEMAIN IN PUBLIC RIGHT OF WAYS (52 AVENUE WEST AND 225 PLACE SOUTHWEST) TO THE DISCHARGE MANHOLE TO BE THE MAINTENANCE RESPONSIBILITY OF THE PRIVATE RESIDENCES IT BENEFITS.

SEE SHEET C07 FOR SEWER FORCEMAIN PROFILES  
ALONG 52ND AVENUE WEST AND 225TH PLACE SW.

SEWER FORCEMAIN SIZING:

LOT 3 IS THE MOST DISTANT LOT.  
PUMP OFF AT LOT 3 = 456.0±  
LOW POINT OF FORCEMAIN = 453.0±  
INV. 6" GRAVITY SS AT NEW SSMH#1 = 462.3±

MAXIMUM ELEVATION DIFFERENCE = 9.3'±  
TOTAL LENGTH OF FORCEMAIN = 430'  
ASSUME ALL 3 PUMPS WORKING SIMULTANEOUSLY  
FLOW RATE PER PUMP = 11 GPM.  
TOTAL FLOW RATE = 11 \* 3 = 33 GPM.  
USE 430 LF OF 1.25" HDPE DR 11 FORCEMAIN  
INSIDE DIAMETER OF PIPE = 1.34"  
C = 150

USING HAZEN-WILLIAM'S FORMULA

$$\begin{aligned}\text{FRICTION LOSS} &= 10.44 * L * Q^{** 1.85} / C^{** 1.85} / D^{** 4.8655} \\ &= 10.44 * 430 * 33^{** 1.85} / 150^{** 1.85} / 1.34^{** 4.8655} \\ &= 65.65'\end{aligned}$$

TOTAL REQUIRED HEAD =  $9.3 + 65.65 = 74.95'$   
 TOTAL MAXIMUM AVAILABLE DYNAMIC HEAD OF EONE PUMP =  $185'$   
 AT  $Q = 7.5 \text{ GPM} > 74.95'$ , O.K.  
 AT  $H = 74.95'$ , EONE PUMP OPERATING  $Q = 11.5 \text{ GPM}$ , O.K.

AS-BUILT

AS-BUILT INFORMATION  
PROVIDED BY JUDGE &  
ASSOCIATES (CONTRACTOR)



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Civil Engineering and  
Planning Consultants

**52ND AVENUE WEST SHORT PLAT**  
**#C-16-0009 AS-BUILT**      **CITY OF MOUNTLAKE**

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**COMPOSITE  
UTILITY PLAN  
AS-BUILT WATER  
AND SEWER**

15040CU01.DWG

**C05**

SHEET 05 OF 06