CITY OF TILLAMOOK

SEWER REHABILITATION PROJECT #1

TILLAMOOK, OREGON

CDBG PROJECT NO. P12020

SEPTEMBER 2015 - BID DOCUMENTS

WORK UNDER THIS CONTRACT WILL BE FUNDED IN ITS ENTIRETY WITH FEDERAL GRANT FUNDS FROM THE OREGON COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM.

SEWER PIPELINE REHABILITATION - SHEET INDEX

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1	G01	COVER SHEET
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4	SC01	SURVEY CONTROL PLAN
5	SC02	SURVEY CONTROL PLAN
6	C01	SANITARY SEWER PLAN AND PROFILE, 12TH ST. STA. 10+00-STA. 14+50
7	C02	SANITARY SEWER PLAN AND PROFILE, 12TH ST. STA. 14+50-STA. 18+50
8	C03	SANITARY SEWER PLAN AND PROFILE, 12TH ST. STA. 18+50-STA. 22+50
9	C04	SANITARY SEWER PLAN AND PROFILE, 12TH ST. STA. 22+50-STA. 26+50
10	C05	SANITARY SEWER PLAN AND PROFILE, 12TH ST. STA. 26+50-STA. 30+50
11	C06	SANITARY SEWER PLAN AND PROFILE, 12TH ST. STA. 30+50-STA. 34+50
12	C07	SANITARY SEWER PLAN AND PROFILE, 9TH ST. SPOT REPAIR
13	C08	SANITARY SEWER PLAN AND PROFILE, EVERGREEN DR. STA. 40+00-STA. 44+50
14	C09	SANITARY SEWER PLAN AND PROFILE, EVERGREEN DR. STA. 44+50-STA. 49+00
15	C10	SANITARY SEWER PLAN AND PROFILE, EVERGREEN DR. STA. 49+00-STA. 53+00
16	C11	SANITARY SEWER PLAN AND PROFILE, EVERGREEN DR. STA. 53+00-STA. 57+00
17	C12	SANITARY SEWER PLAN AND PROFILE, EVERGREEN DR. STA. 57+00-STA. 60+00
18	C13	SANITARY SEWER PLAN AND PROFILE, MAPLE LN. STA. 160+00-STA. 164+50
19	C14	SANITARY SEWER PLAN AND PROFILE, MAPLE LN. STA. 164+50-STA. 168+50
20	C15	SANITARY SEWER PLAN AND PROFILE, MAPLE LN. STA. 168+50-STA. 172+50
21	C16	SANITARY SEWER PLAN AND PROFILE, MAPLE LN. STA. 172+50-STA. 175+50
22	C17	SANITARY SEWER PLAN AND PROFILE, WILLIAMS AVE. STA. 80+00-STA. 83+00
23	C18	SANITARY SEWER PLAN AND PROFILE, WILLIAMS AVE. STA. 83+00-STA. 86+00
24	C19	SANITARY SEWER PLAN AND PROFILE, WILLIAMS AVE. STA. 86+00-STA. 90+50
25	C20	SANITARY SEWER PLAN AND PROFILE, WILLIAMS AVE. STA. 90+50-STA. 94+00
26	C21	SANITARY SEWER PLAN AND PROFILE, ALDER LN. STA. 100+00-STA. 103+50
27	C22	SANITARY SEWER PLAN AND PROFILE, ALDER LN. STA. 103+50-STA. 107+00
28	C23	SANITARY SEWER PLAN AND PROFILE, ALDER LN. STA. 107+00-STA. 111+00
29	C24	SANITARY SEWER PLAN AND PROFILE, SPRUCE AVE. STA. 122+00-STA. 126+00
30	C25	SANITARY SEWER PLAN AND PROFILE, SPRUCE AVE. STA. 126+00-STA. 130+00
31	C26	SANITARY SEWER PLAN AND PROFILE, HAWTHORNE LN. STA. 60+00-STA. 64+00
32	C27	SANITARY SEWER PLAN AND PROFILE, HAWTHORNE LN. STA. 64+00-STA. 68+00
33	C28	SANITARY SEWER PLAN AND PROFILE, HAWTHORNE LN. STA. 68+00-STA. 72+00
34	C29	SANITARY SEWER PLAN AND PROFILE, HAWTHORNE LN. STA. 72+00-STA. 76+00
35	C30	SANITARY SEWER PLAN AND PROFILE, WALNUT LN. STA. 140+00-STA. 143+00
36	C31	SANITARY SEWER PLAN AND PROFILE, WALNUT LN. STA. 143+50-STA. 148+00
37	C32	SANITARY SEWER PLAN AND PROFILE, PINE AVE. STA. 180+00-STA. 183+50
38	C33	SANITARY SEWER PLAN AND PROFILE, ALDER LN. STA. 189+50-STA. 192+50
39	C34	SANITARY SEWER PLAN AND PROFILE, ALDER LN. STA. 192+50-STA. 195+50
40	C35	SANITARY SEWER PLAN AND PROFILE, ALDER LN. STA. 200+00-STA. 204+00
41	C36	SANITARY SEWER PLAN AND PROFILE, ALDER LN. STA. 204+00-STA. 207+50
42	C37	SANITARY SEWER PLAN AND PROFILE, BEECH ST. STA. 210+00-STA. 213+00
43	C38	SANITARY SEWER PLAN AND PROFILE, BEECH ST. STA. 213+00-STA. 216+50
44	C39	SANITARY SEWER PLAN AND PROFILE, CYPRESS AVE. STA. 220+00-STA. 223+00
45	C40	SANITARY SEWER PLAN AND PROFILE, CYPRESS AVE. STA. 223+00-STA. 226+00
46	C41	SANITARY SEWER PLAN AND PROFILE, DOGWOOD AVE. STA. 230+00-STA. 233+00
47	C42	SANITARY SEWER PLAN AND PROFILE, DOGWOOD AVE. STA. 233+00-STA. 236+00
48	C43	SANITARY SEWER PLAN AND PROFILE, EVERGREEN DR. STA. 44+50-STA. 49+00
49	C44	SANITARY SEWER PLAN AND PROFILE, EVERGREEN DR. STA. 49+00-STA. 53+00
50	C45	SANITARY SEWER PLAN AND PROFILE, EVERGREEN DR. STA. 53+00-STA. 57+00
51	C46	SANITARY SEWER PLAN AND PROFILE, EVERGREEN DR. STA. 57+00-STA. 60+00
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LIFT STATION REHABILITATION - SHEET INDEX

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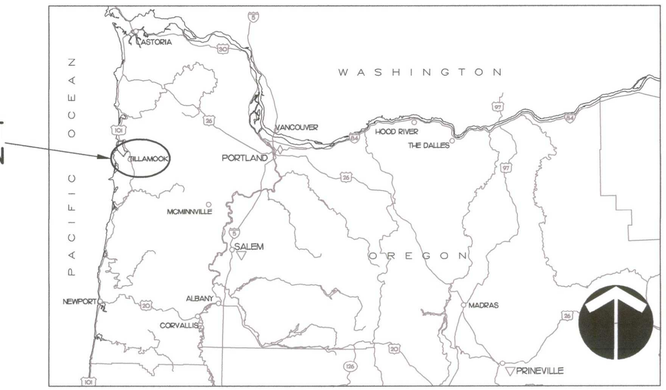
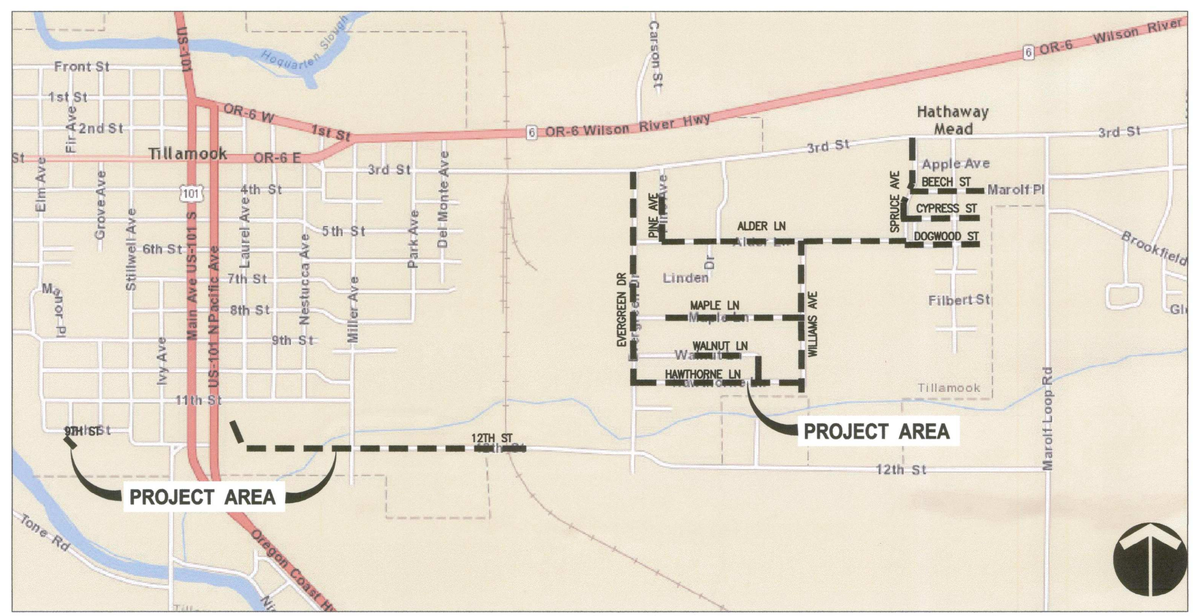
PROJECT LOCATION



REGIONAL MAP
N.T.S.



VICINITY MAP
N.T.S.

CALL 48 HOURS BEFORE YOU DIG
1-800-424-5555
"It's the Law"

NO.	DATE	BY	Checked & Approval	REVISIONS

REGISTERED PROFESSIONAL ENGINEER 70947PE OREGON MAR 12, 2002 TIM B. KRAFT
EXPIRES: 06/30/2017

CITY OF TILLAMOOK
TILLAMOOK SEWER REHABILITATION PROJECT
COVER SHEET
TILLAMOOK, TILLAMOOK COUNTY, OR

otak
HanmiGlobal Partner
700 Washington Street
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Vancouver, WA 98660
Phone: (360) 737-9613
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www.otak.com

Project No. 67522

G01

GENERAL NOTES

1. ATTENTION CONTRACTORS: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER. (NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS (503) 232-1897 OR 1-800-332-2344). AT LEAST TWO (2) BUSINESS DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE OREGON UTILITY NOTIFICATION CENTER OF THE DATE AND LOCATION OF THE PROPOSED CONSTRUCTION, AND THE TYPE OF WORK TO BE PERFORMED.

2. ALL EXISTING FACILITIES TO BE MAINTAINED IN-PLACE BY THE CONTRACTOR UNLESS OTHERWISE SHOWN OR DIRECTED. CONTRACTOR TO LEAVE EXISTING FACILITIES IN AN EQUAL OR BETTER THAN ORIGINAL CONDITION AND TO THE SATISFACTION OF THE ENGINEER.

3. IN ACCORDANCE WITH O.R.S.290.140, IF THE CONTRACTOR FINDS IT NECESSARY TO INTERFERE WITH OR PAVE OVER ANY ESTABLISHED PUBLIC LAND SURVEY CORNER OR ITS ACCESSORIES, WITHIN THE PROJECT LIMITS, THE CONTRACTOR SHALL NOTIFY THE COUNTY SURVEYOR PRIOR TO DOING SO.

4. IN ACCORDANCE WITH O.R.S.290.150, CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ALL SURVEY MONUMENTS DISTURBED OR DESTROYED DURING CONSTRUCTION. REPLACING THE SURVEY MONUMENTS SHALL BE DONE BY A REGISTERED LAND SURVEYOR AT THE EXPENSE OF THE CONTRACTOR.

5. EXISTING UTILITY LOCATIONS SHOWN (PLAN & PROFILE) ARE APPROXIMATE ONLY. NO PREDESIGN POTHOLING WAS DONE TO ESTABLISH THESE LOCATIONS. CONTACT UTILITY COMPANIES FOR PREMARKING. CONTRACTOR TO POTHOLE EXISTING UTILITIES AT CONNECTION & CROSSING LOCATIONS TO VERIFY DEPTH, LOCATION & TYPE OF EXISTING WATER MAIN, SEWER MAIN & STORM MAIN PRIOR TO ORDERING CONNECTION MATERIALS. NOTIFY ENGINEER IMMEDIATELY IF EXISTING CONDITIONS VARY FROM THAT SHOWN. NOTIFY ENGINEER 24 HOURS PRIOR TO POTHOLING.

6. CONTRACTOR SHALL VERIFY ALL CONDITIONS ON THE JOB SITE INCLUDING ALL DIMENSIONS, GRADES, ELEVATIONS, EXTENT AND COMPATIBILITY TO THE EXISTING SITE CONDITIONS, AND WITH THE WORK DESCRIBED ON THE CONTRACT DRAWINGS. ANY DISCREPANCIES OR UNEXPLAINED CONDITIONS THAT AFFECT OR CHANGE THE WORK DESCRIBED IN THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY. CONTRACTOR SHALL NOT PROCEED WITH ANY OF THE WORK IN THE AREA OF DISCREPANCIES UNTIL ALL SUCH DISCREPANCIES ARE RESOLVED. IF THE CONTRACTOR CHOOSES TO DO SO, THEN IT IS UNDERSTOOD THAT HE SHALL BE PROCEEDING AT HIS OWN RISK AND INCUR ALL COST, IF ANY, TO RESOLVE THE ISSUE TO THE SATISFACTION OF THE ENGINEER.

7. TECHNICAL SPECIFICATIONS FOR CONSTRUCTION ARE TO FOLLOW THE CONTRACT SPECIFICATIONS AND THE MOST CURRENT EDITION OF THE IBC, UPC. OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION (ODOT/APWA) SHALL BE REFERENCED WHERE CONTRACT SPECIFICATIONS DO NOT ADDRESS A SPECIFIC ITEM. SEE SPECIFICATIONS FOR CONSTRUCTION METHODS AND OTHER NOTES PERTINENT TO THIS PROJECT.

8. UPON COMPLETION OF CONSTRUCTION OF THE PROJECT, CONTRACTOR TO SUBMIT RECORD DRAWINGS TO THE ENGINEER OR CITY. THE PROJECT SHALL NOT BE CONSIDERED COMPLETE UNTIL RECORD DRAWINGS ARE ACCEPTED BY CITY.

9. CONTRACTOR MAY ENCOUNTER HIGH GROUND-WATER TABLE AT SITE LOCATION. HIGH GROUND-WATER IN COMBINATION WITH BEACH SAND SUBGRADE WILL CAUSE A "QUICK" EFFECT, WHICH WILL RESULT IN THE DESTABILIZATION OF ADJACENT SOILS, UTILITIES AND STRUCTURES. CONTRACTOR SHALL ANTICIPATE AND COORDINATE ANY AND ALL DEWATERING TECHNIQUES NECESSARY AND/OR REQUIRED TO COMPLETE PROJECT AS SPECIFIED IN THE TECHNICAL SPECIFICATIONS. CONTRACTOR SHALL BEAR ALL COSTS PERTAINING TO DEWATERING EFFORTS.

ROADWORK/SITEWORK

10. CONTRACTOR SHALL RESTORE ALL SURFACES TO MATCH EXISTING AND ADJACENT GRADES.

11. ALL DESIGN ELEVATIONS SHOWN SHALL BE CONSIDERED TO BE FINISH SURFACE ELEVATIONS UNLESS OTHERWISE NOTED. ALL SURFACES SHALL BE GRADED SMOOTH AND FREE OF IRREGULARITIES THAT COULD ACCUMULATE SURFACE WATER.

12. THE CONTRACTOR SHALL HAVE A SUFFICIENT NUMBER OF COMPACTION TESTS PERFORMED TO MEET SPECIFICATION REQUIREMENTS AT THE CONTRACTOR'S EXPENSE. TESTS SHALL BE PERFORMED BY A QUALIFIED TESTING AGENCY AND WRITTEN RESULTS SHALL BE PROVIDED TO THE APPROPRIATE AGENCY. SHOULD COMPACTION REQUIREMENTS NOT BE MET, CONTRACTOR SHALL RECOMPACT AND PAY ALL ADDITIONAL TESTING COSTS RELATED TO THE RECOMPACTION.

SIGNAGE

13. CONTRACTOR SHALL ERECT AND MAINTAIN BARRICADES, WARNING SIGNS, TRAFFIC CONES PER ODOT REQUIREMENTS. ACCESS TO EXISTING DRIVEWAYS AND BUSINESSES TO BE MAINTAINED AT ALL TIMES. CONTRACTOR SHALL REPLACE ALL SIGNS REMOVED DURING CONSTRUCTION. CITY TO APPROVE INSTALLATION.

WATER

14. INSPECTION BY ENGINEER OR CITY REPRESENTATIVE OF WATER SYSTEMS PRIOR TO BACKFILL SHALL BE REQUIRED.

15. CONTRACTOR TO COORDINATE PLACEMENT OF WATER SERVICE METER WITH CITY PUBLIC WORKS.

16. WATERLINE FITTINGS MUST BE FULLY RESTRAINED BY THRUST BLOCKS AND APPROVED RESTRAINT SYSTEM UNLESS SPECIFICALLY OTHERWISE INDICATED ON THESE DOCUMENTS.

17. CONNECTION OF NEW WATER SERVICE TO EXISTING MAIN SHALL BE COORDINATED WITH CITY STAFF. ALL WATER MAIN VALVES SHALL ONLY BE OPERATED BY CITY PERSONNEL. NO EXCEPTIONS UNLESS AUTHORIZED IN WRITING BY CITY.

18. POTHOLE EXISTING WATER PIPES FOR CONNECTION OF NEW WATER SYSTEM. ALL INVERT ELEVATIONS, PIPE SIZES AND MATERIALS ARE TO BE MEASURED BY CONTRACTOR PRIOR TO ORDERING ANY MATERIALS FOR THE WATER SYSTEM.

STORM & SEWER

19. POTHOLE EXISTING STORM AND SEWER PIPES FOR CONNECTION OF NEW SYSTEMS. ALL INVERT ELEVATIONS, PIPE SIZES AND MATERIALS ARE TO BE MEASURED BY CONTRACTOR PRIOR TO ORDERING ANY MATERIALS.

20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING ALL CATCH BASINS, CLEANOUTS, MANHOLES, VAULTS, ETC., THAT ARE AFFECTED BY CONSTRUCTION AND/OR FILL TO FINISH GRADE. STORM DRAIN INLET STRUCTURES SHALL BE ADJUSTED SO WATER FLOWS INTO THE STRUCTURE WITHOUT PONDING.

DEMOLITION

21. CONTRACTOR TO DEVELOP A CONSTRUCTION PHASING PLAN AND PROVIDE IT TO THE CITY AND ENGINEER PRIOR TO BEGINNING CONSTRUCTION. PLAN SHALL INDICATE STAGES OF DEMOLITION AND DURATION OF OUTAGES. ALL OUTAGES ARE TO BE KEPT TO A MINIMUM.

TRAFFIC CONTROL

22. THE CONTRACTOR SHALL DEVELOP AND SUBMIT A TRAFFIC CONTROL PLAN FOR REVIEW AND APPROVAL. THE TRAFFIC CONTROL PLAN SHALL DETAIL INTERSECTIONS WITHIN THE PROJECT ZONE, IN ACCORDANCE WITH SECTION 00220 AND SECTION 00225 OF THE PROJECT SPECIFICATIONS.

LEGEND

EXISTING		PROPOSED	
	CATCH BASIN		
	WOODEN POST		
	SANITARY SEWER MANHOLE		SANITARY SEWER MANHOLE
	SANITARY SEWER CLEANOUT		SANITARY SEWER CLEANOUT
	MULTI-USE POWER POLE		
	GUY WIRE		
	AREA DRAIN		
	POWER RISER		
	WATER VALVE		
	WATER METER		
	WATER FIRE HYDRANT		
CM	COMMUNICATIONS RISER		
	CONTROL POINT		
D	STORM DRAIN MANHOLE		
SS SS	MAIN SANITARY SEWER LINE		MAIN SANITARY SEWER LINE
SS SS	SANITARY SEWER LATERAL		SANITARY SEWER LATERAL
COM COM	COMMUNICATIONS LINE		
P P	UNDERGROUND ELECTRIC LINE		
SD SD	STORM SEWER LINE		
W W	WATER LINE		
	EDGE OF ASPHALT		
	EDGE OF GRAVEL		
	RIGHT OF WAY AND TAXLOTS		
	SEDIMENT FENCE	X X X X X	
	GRAVEL RESTORATION		
	CONCRETE RESTORATION		
	LAWN RESTORATION		

SURVEY NOTES

NARRATIVE:
THE PURPOSE OF THIS SURVEY IS TO PROVIDE THE CITY OF TILLAMOOK WITH A TOPOGRAPHIC MAP WITH EMPHASIS ON THE EXISTING SANITARY SEWER LINE AND CORRESPONDING UTILITY CROSSINGS. SURVEY DATA WAS COLLECTED VIA TERRESTRIAL METHODS AND GPS RTK OBSERVATIONS. FIELD TIES TO UTILITIES ARE BASED ON PAINT MARKS OF UTILITY LOCATE ON CALL. TIES WERE MADE WITH TRIMBLE S6 TOTAL STATION TERRESTRIAL OBSERVATIONS BETWEEN THE DATES OF JULY 30-AUGUST 08, 2014.

THE UTILITY COMPANIES WHO PLACE THE PAINT MARKS DO NOT GUARANTEE THEIR SURFACE LOCATES TO BE FREE OF ERRORS OR OMISSIONS, THEREFORE OTAK RESERVES THE SAME LIMITATIONS.

BASIS OF BEARING:
THE BASIS OF BEARING FOR THIS PROJECT IS GRID NORTH. THE HORIZONTAL DATUM IS NAD83(CORS 11) EPOCH 2010.00, PROJECTED ONTO OREGON NORTH ZONE (3601) STATE PLANE (GRID) COORDINATES IN INTERNATIONAL FEET. BEARINGS SHOWN HERE ON ARE GRID.

THE VERTICAL DATUM IS NAVD88(GEOID 12), HOLDING NGS BENCH MARK "C 223" (PID: RD1010) PUBLISHED ORTHOMETRIC ELEVATION OF 55.45'

ABBREVIATIONS

ADA	=	AMERICANS WITH DISABILITIES ACT
AVE	=	AVENUE
BNSF	=	BURLINGTON NORTHERN SANTA FE
BO	=	BLOW OFF
BTM	=	BOTTOM
CARV	=	COMBINATION AIR RELEASE VALVE
CB	=	CATCH BASIN
CIPP	=	CURED IN PLACE PIPE
CL	=	CENTERLINE
CONC	=	CONCRETE
CONN	=	CONNECTION
CSBC	=	CRUSHED SURFACING BASE COURSE
DEC	=	DECIDUOUS
DI	=	DUCTILE IRON
DIP	=	DUCTILE IRON PIPE
DBH	=	DIAMETER AT BREAST HEIGHT
DIA	=	DIAMETER
E	=	EAST, EASTING
ELEV	=	ELEVATION
EOG	=	EDGE OF GRAVEL
EOP	=	EDGE OF PAVEMENT
EX	=	EXISTING
FA	=	FORCED AIR
FF	=	FINISHED FLOOR ELEVATION
FG	=	FINISHED GRADE
FL	=	FLANGE
FM	=	FORCE MAIN
FT	=	FEET
HMA	=	HOT MIX ASPHALT
HORIZ	=	HORIZONTAL
IE	=	INVERT ELEVATION
IPS	=	IRON PIPE SIZE
L	=	LENGTH
LF	=	LINEAR FEET
MAX	=	MAXIMUM
MH	=	MANHOLE
MIN	=	MINIMUM
MJ	=	MECHANICAL JOINT
N	=	NORTH, NORTHING
NIC	=	NOT IN CONTRACT
OC	=	ON CENTER
OHW	=	ORDINARY HIGH WATER
PE	=	PLAIN END
PI	=	POINT OF INTERSECTION
PIP	=	PLASTIC IRRIGATION PIPE
PL	=	PIPELINE
PS	=	PUMP STATION
PT	=	POINT OF TANGENCY
PVC	=	POLYVINYL CHLORIDE
R	=	RADIUS
REQ'D	=	REQUIRED
ROW	=	RIGHT OF WAY
R.R.	=	RAILROAD
S	=	SLOPE
SS	=	SANITARY
SD	=	STORM DRAIN
SDR	=	STANDARD DIMENSION RATIO
STA	=	STATION
STM	=	STORM
TBW	=	TOP BACK OF WALL
TYP	=	TYPICAL
VERT	=	VERTICAL

UTILITY PROVIDERS

- ONE CALL CENTER – CALL BEFORE YOU DIG!

  (800) 332-2344 (ONE-CALL CENTER)
  (877) 668-4001 (ADMINISTRATIVE)

  ATTENTION EXCAVATORS: OREGON LAW REQUIRES COMPLIANCE WITH OAR 952-001-0010 THROUGH OAR 952-001-0090. THESE RULES MAY BE OBTAINED BY CALLING OREGON UTILITY NOTIFICATION CENTER, (503) 232-1987. CONTRACTOR MUST NOTIFY THE CENTER AT LEAST TWO (2) WORKING DAYS BEFORE, BUT NOT MORE THAN TEN (10) DAYS BEFORE COMMENCING EXCAVATION.

- WATER/SEWER/STORM

  TIM LYDA – PUBLIC WORKS DIRECTOR
  210 LAUREL AVE.
  TILLAMOOK, OREGON 97141
  (503) 374-1826 (OFFICE)
  (503) 812-8802 (CELL)

- ELECTRICITY

  TILLAMOOK PEOPLE'S UTILITY DISTRICT
  DEREK MICKELSON
  1115 PACIFIC AVE, TILLAMOOK, OR 97141
  (503) 842-2535 (OFFICE)
  (503) 815-8629 (ENGINEERING DIRECT)
  (800) 422-2535 (TOLL FREE)
  (800) 842-2122 (EMERGENCY)

- TELEPHONE

  CENTURYLINK
  SCOTT SCHIMINESKY
  PACIFIC CITY, OR 97141
  (503) 965-9918

- CABLE TELEVISION

  CHARTER COMMUNICATIONS
  1014 PACIFIC AVE, TILLAMOOK, OR 97141
  (888) 438-2427 (OFFICE)

- GAS

  NORTHWEST NATURAL GAS
  ANDREW YOUNG, P.E.
  220 NW 2ND AVE
  PORTLAND, OR 97209
  (503) 226-4211 (OFFICE)
  (360) 281-6169 (CELL)

CALL 48 HOURS BEFORE YOU DIG
1-800-424-5555
"It's the Law"

NO.	DATE	BY	Checked & Approval	REVISIONS

REGISTERED PROFESSIONAL ENGINEER 70947PE
OREGON MAY 12, 2015
TIM B. KRAFT
9-3-15
EXPIRES: 06/30/2017

CITY OF TILLAMOOK
TILLAMOOK SEWER REHABILITATION PROJECT
GENERAL NOTES AND LEGEND
TILLAMOOK, TILLAMOOK COUNTY, OR

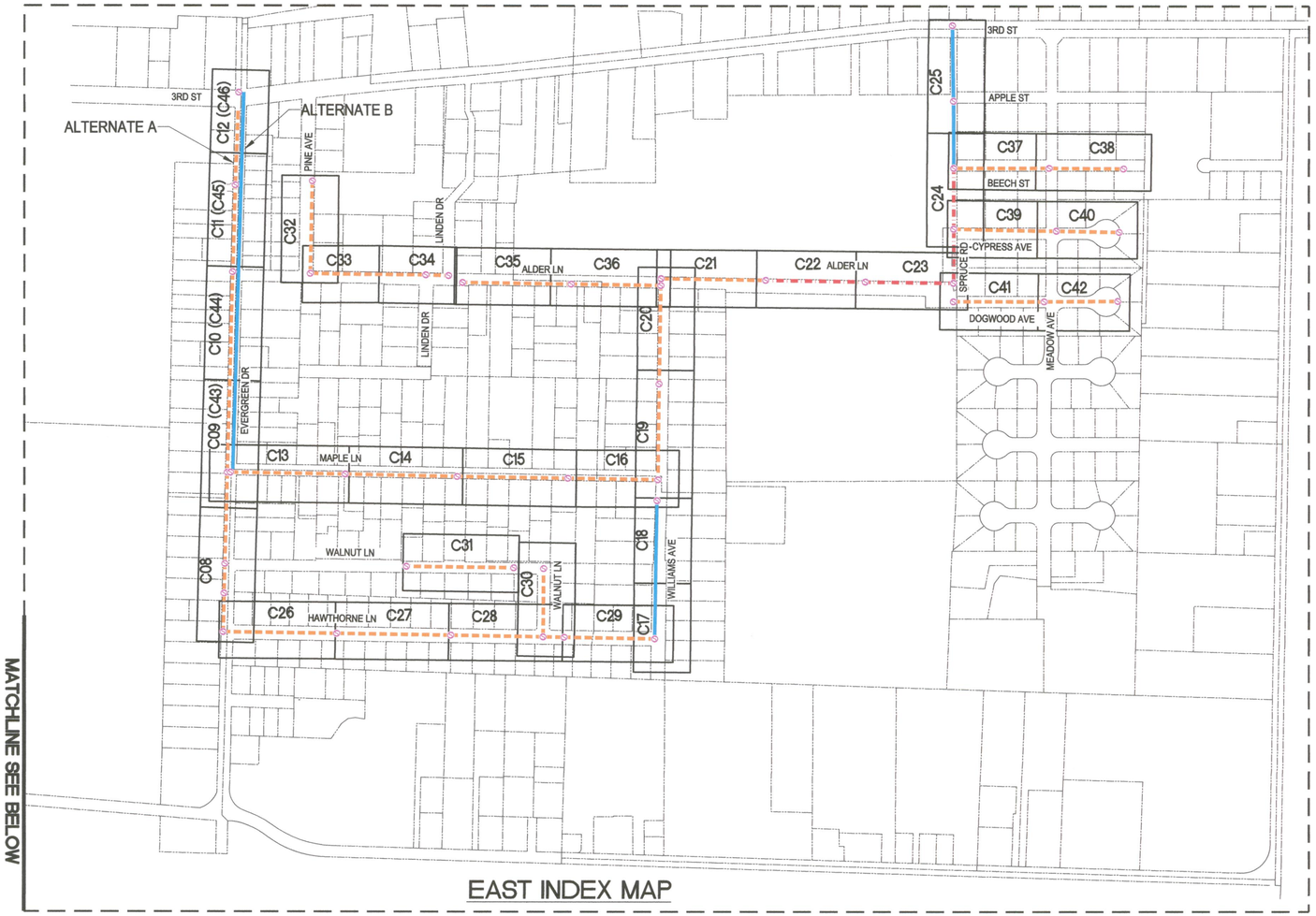
otak
HanmiGlobal Partner
700 Washington Street
Suite 401
Vancouver, WA 98660
Phone: (360) 737-9613
FAX: (360) 737-9651
www.otak.com

Project No. 67522

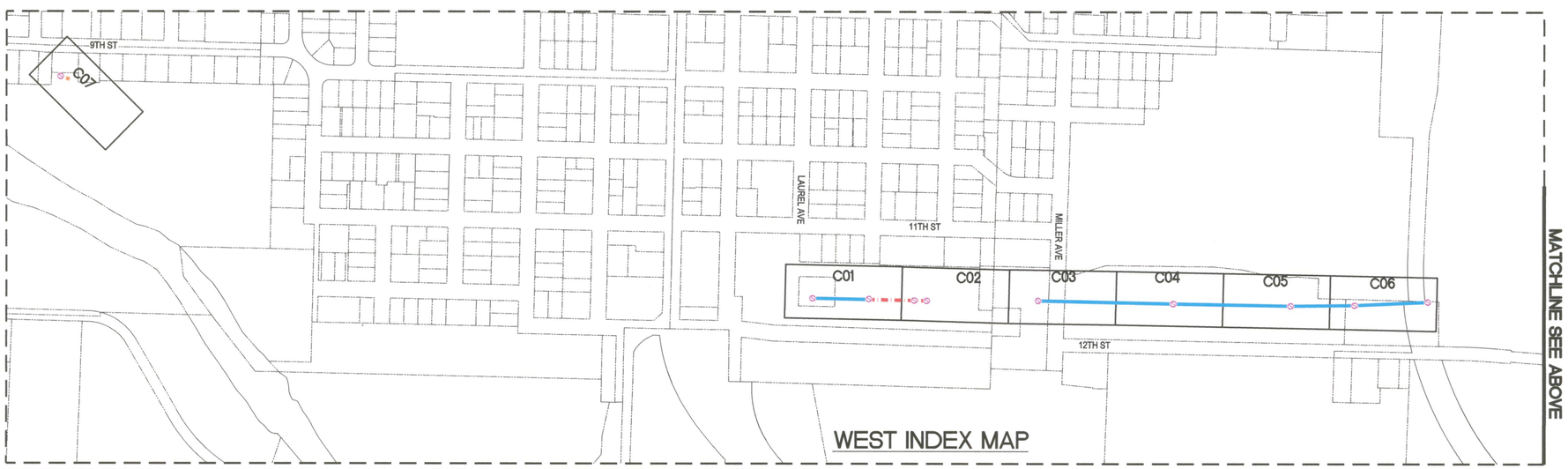
G02

LOCATION	SHEETS	PIPE SIZE*	BID SCHEDULE
12th STREET PS	PS01–PS19	–	BASE BID
12th ST. TRUNK	C01–C06	18–INCH	BASE BID
EVERGREEN DR. – SOUTH	C08–C09	10–INCH	BASE BID
MAPLE LN.	C13–C16	10–INCH	BASE BID
NORTH WILLIAMS AVE.	C19–C20	10–INCH	BASE BID
EVERGREEN DR. – NORTH OPEN CUT	C09–C12	8–INCH	ALTERNATE A
EVERGREEN DR. – NORTH CIPP	(C43–C46)	8–INCH	ALTERNATE B
FM DISCHARGE	C07	18–INCH	BID ADDITIVE #1
EAST ALDER LN.	C21–C23	10–INCH	BID ADDITIVE #1
SPRUCE AVE.	C24–C25	8 & 10–INCH	BID ADDITIVE #2
HAWTHORNE LN.	C26–C29	8–INCH	BID ADDITIVE #3
WALNUT LN.	C30–C31	8–INCH	BID ADDITIVE #3
SOUTH WILLIAMS AVE.	C17–C18	8–INCH	BID ADDITIVE #3
PINE AVE.	C32	8–INCH	BID ADDITIVE #3
WEST ALDER LN.	C33–C36	8–INCH	BID ADDITIVE #3
BEECH ST.	C37–C38	8–INCH	BID ADDITIVE #3
CYPRESS ST.	C39–C40	8–INCH	BID ADDITIVE #3
DOGWOOD ST.	C41–C42	8–INCH	BID ADDITIVE #3

*PROPOSED DIAM. FOR OPEN–CUT AND PIPE BURST, EX. DIAM. FOR CIPP



EAST INDEX MAP



WEST INDEX MAP

LEGEND

- OPEN CUT– SEWER PIPE REPLACEMENT
- PIPE BURSTING– SEWER PIPE REPLACEMENT
- CIPP– SEWER PIPE REHABILITATION
- EXISTING SEWER MANHOLE

250 0 250 500 HORIZ

SCALE IN FEET

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INDEX MAP & BID SCHEDULES
TILLAMOOK, TILLAMOOK COUNTY, OR

otak
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Project No. 67522
G03
Sheet No. 3 of 74

EVERGREEN
CONSTRUCTION CENTERLINE HORIZONTAL CONTROL

NUMBER	BEGIN STATION	LENGTH	BEARING
L9	40+00.00	252.32'	N2°15'48"E
L10	42+52.32	324.01'	N2°42'32"E
L11	45+76.33	705.44'	N2°38'25"E
L12	52+81.77	305.70'	N2°49'29"E
L13	55+87.47	342.79'	N3°09'28"E

HAWTHORNE
CONSTRUCTION CENTERLINE HORIZONTAL CONTROL

NUMBER	BEGIN STATION	LENGTH	BEARING
L14	60+00.00	404.89'	S88°06'37"E
L15	64+04.89	401.40'	S88°02'57"E
L16	68+06.29	324.77'	S87°55'03"E
L17	72+05.66	344.34'	S87°51'07"E

WILLIAMS
CONSTRUCTION CENTERLINE HORIZONTAL CONTROL

NUMBER	BEGIN STATION	LENGTH	BEARING
L18	80+00.00	104.00'	N2°08'08"E
L19	81+04.00	486.17'	N2°01'19"E
L20	85+90.17	73.62'	N3°30'58"E
L21	86+63.79	683.84'	N1°57'35"E
L22	93+47.63	52.37'	N2°35'24"E

ALDER (EAST)
CONSTRUCTION CENTERLINE HORIZONTAL CONTROL

NUMBER	BEGIN STATION	LENGTH	BEARING
L23	100+00.00	381.82'	S88°00'51"E
L24	103+81.82	350.95'	S87°56'45"E
L25	107+32.77	327.23'	S88°08'57"E

SPRUCE
CONSTRUCTION CENTERLINE HORIZONTAL CONTROL

NUMBER	BEGIN STATION	LENGTH	BEARING
L26	120+00.00	72.27'	N0°48'09"E
L27	120+72.27	190.20'	N1°14'12"E
L28	122+62.47	213.96'	N1°13'04"E
L29	124+76.42	236.44'	N0°48'11"E
L30	127+12.87	287.13'	N0°13'27"E

WALNUT
CONSTRUCTION CENTERLINE HORIZONTAL CONTROL

NUMBER	BEGIN STATION	LENGTH	BEARING
L31	140+00.00	261.69'	N1°35'58"E
L32	142+61.69	105.24'	N87°24'16"W
L33	143+66.94	377.75'	N88°09'42"W
L34	147+44.69	315.70'	N88°04'52"W
L35	150+60.39	339.61'	N88°32'24"W

MAPLE
CONSTRUCTION CENTERLINE HORIZONTAL CONTROL

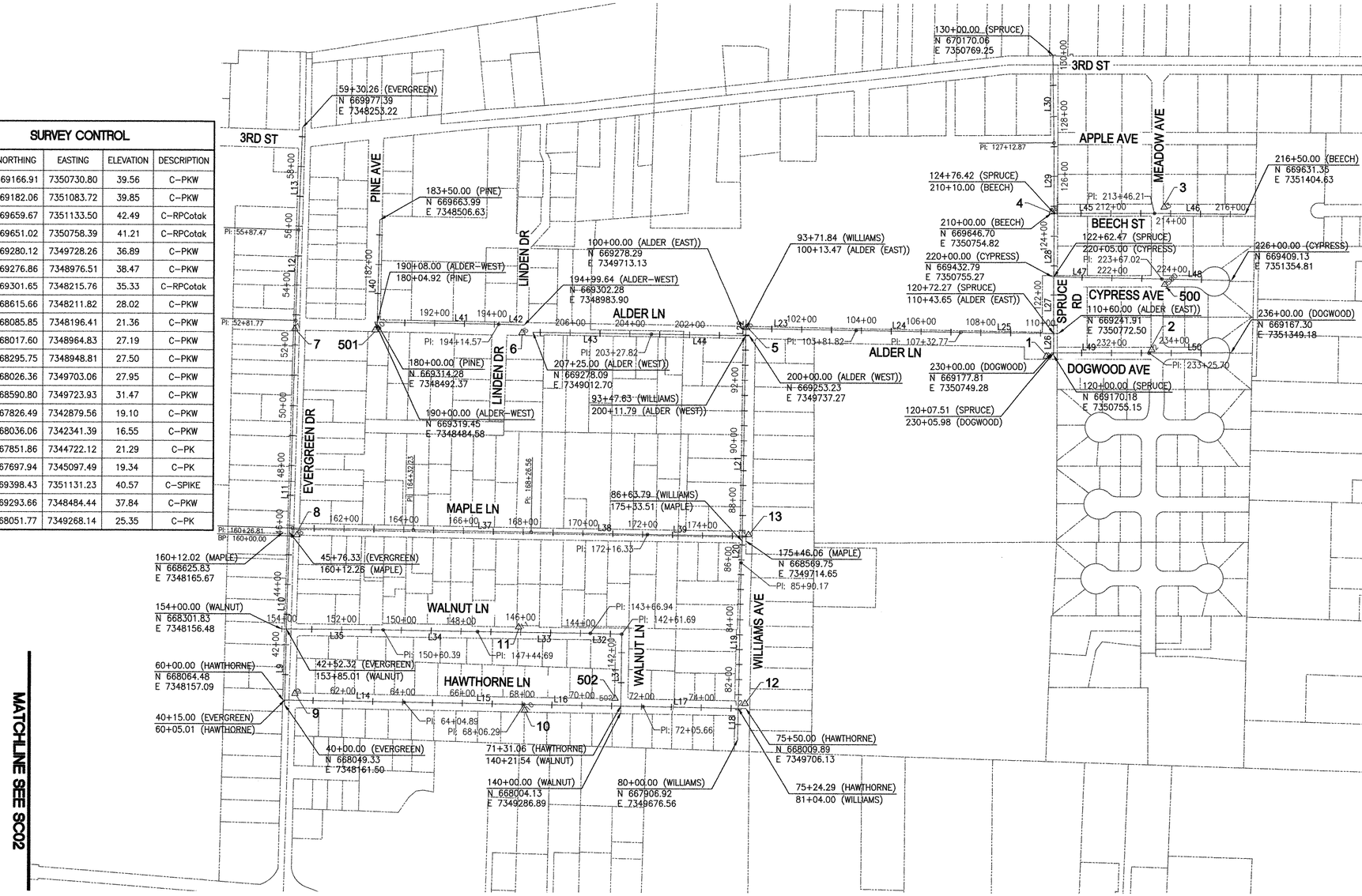
NUMBER	BEGIN STATION	LENGTH	BEARING
L37	164+32.23	394.33'	S88°00'49"E
L38	168+26.56	389.78'	S87°46'12"E
L39	172+16.33	333.67'	S88°03'15"E

PINE
CONSTRUCTION CENTERLINE HORIZONTAL CONTROL

NUMBER	BEGIN STATION	LENGTH	BEARING
L40	180+00.00	350.00'	N2°20'06"E

SURVEY CONTROL

POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	669166.91	7350730.80	39.56	C-PKW
2	669182.06	7351083.72	39.85	C-PKW
3	669659.67	7351133.50	42.49	C-RPCotak
4	669651.02	7350758.39	41.21	C-RPCotak
5	669280.12	7349728.26	36.89	C-PKW
6	669276.86	7348976.51	38.47	C-PKW
7	669301.65	7348215.76	35.33	C-RPCotak
8	668615.66	7348211.82	28.02	C-PKW
9	668085.85	7348196.41	21.36	C-PKW
10	668017.60	7348964.83	27.19	C-PKW
11	668295.75	7348948.81	27.50	C-PKW
12	668026.36	7349703.06	27.95	C-PKW
13	668590.80	7349723.93	31.47	C-PKW
14	667826.49	7342879.56	19.10	C-PKW
15	668036.06	7342341.39	16.55	C-PKW
16	667851.86	7344722.12	21.29	C-PK
17	667697.94	7345097.49	19.34	C-PK
500	669398.43	7351131.23	40.57	C-SPIKE
501	669293.66	7348484.44	37.84	C-PKW
502	668051.77	7349268.14	25.35	C-PK



SURVEY CONTROL MAP

ALDER-WEST
CONSTRUCTION CENTERLINE HORIZONTAL CONTROL

NUMBER	BEGIN STATION	LENGTH	BEARING
L41	190+00.00	414.57'	S88°13'22"E
L42	194+14.57	85.07'	S87°05'31"E

ALDER-WEST
CONSTRUCTION CENTERLINE HORIZONTAL CONTROL

NUMBER	BEGIN STATION	LENGTH	BEARING
L41	190+00.00	414.57'	S88°13'22"E
L42	194+14.57	85.07'	S87°05'31"E

ALDER (WEST)
CONSTRUCTION CENTERLINE HORIZONTAL CONTROL

NUMBER	BEGIN STATION	LENGTH	BEARING
L44	200+00.00	327.82'	N88°01'08"W
L43	203+27.82	397.18'	N88°02'54"W

BEECH
CONSTRUCTION CENTERLINE HORIZONTAL CONTROL

NUMBER	BEGIN STATION	LENGTH	BEARING
L45	210+00.00	346.21'	S88°53'00"E
L46	213+46.21	303.79'	S88°22'35"E

CYPRESS
CONSTRUCTION CENTERLINE HORIZONTAL CONTROL

NUMBER	BEGIN STATION	LENGTH	BEARING
L47	220+00.00	367.02'	S87°44'41"E
L48	223+67.02	232.98'	S87°43'55"E

DOGWOOD
CONSTRUCTION CENTERLINE HORIZONTAL CONTROL

NUMBER	BEGIN STATION	LENGTH	BEARING
L49	230+00.00	325.70'	S88°51'45"E
L50	233+25.70	274.30'	S89°09'19"E

200 0 200 400 HORIZ
SCALE IN FEET

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SC01
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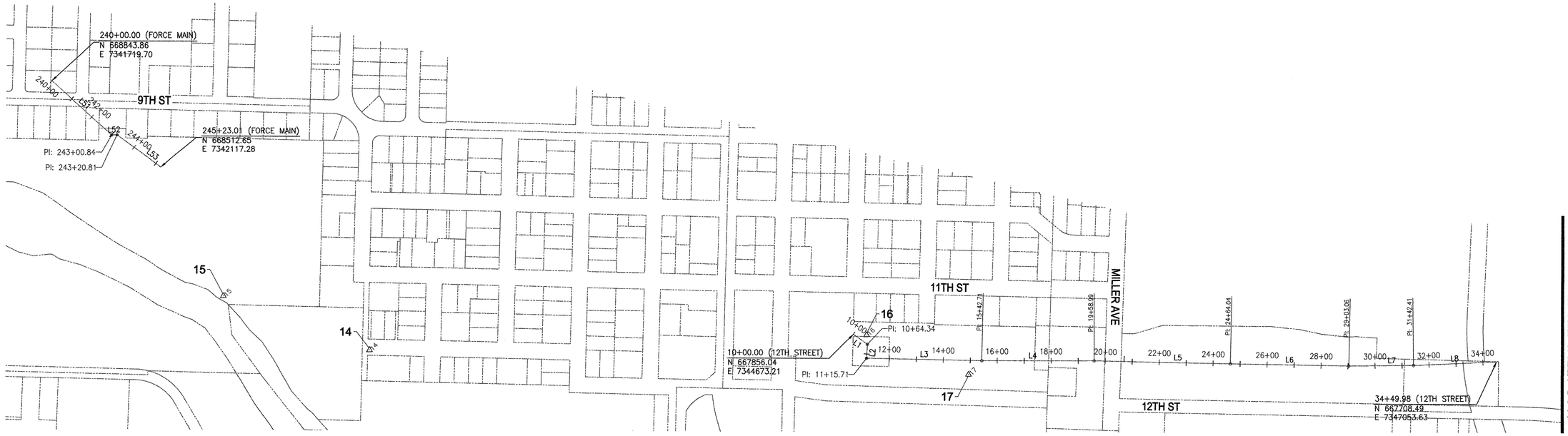

SURVEY CONTROL MAP

12TH STREET CONSTRUCTION CENTERLINE HORIZONTAL CONTROL			
NUMBER	BEGIN STATION	LENGTH	BEARING
L1	10+00.00	64.34'	S52°51'08"E
L2	10+64.34	51.38'	S4°17'51"W
L3	11+15.71	427.00'	S87°40'13"E
L4	15+42.71	416.28'	S88°55'00"E
L5	19+58.99	505.05'	S87°39'32"E
L6	24+64.04	439.02'	S87°48'33"E
L7	29+03.06	239.36'	S89°26'28"E
L8	31+42.41	307.56'	N88°36'08"E
FORCE MAIN CONSTRUCTION CENTERLINE HORIZONTAL CONTROL			
NUMBER	BEGIN STATION	LENGTH	BEARING
L51	240+00.00	300.84'	S46°28'04"E
L52	243+00.84	19.96'	N89°12'28"E
L53	243+20.81	202.21'	S52°04'43"E

SURVEY CONTROL				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
14	667826.49	7342879.56	19.10	C-PKW
15	668036.06	7342341.39	16.55	C-PKW
16	667851.86	7344722.12	21.29	C-PK
17	667697.94	7345097.49	19.34	C-PK

200 0 200 400 HORIZ
SCALE IN FEET

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SC02
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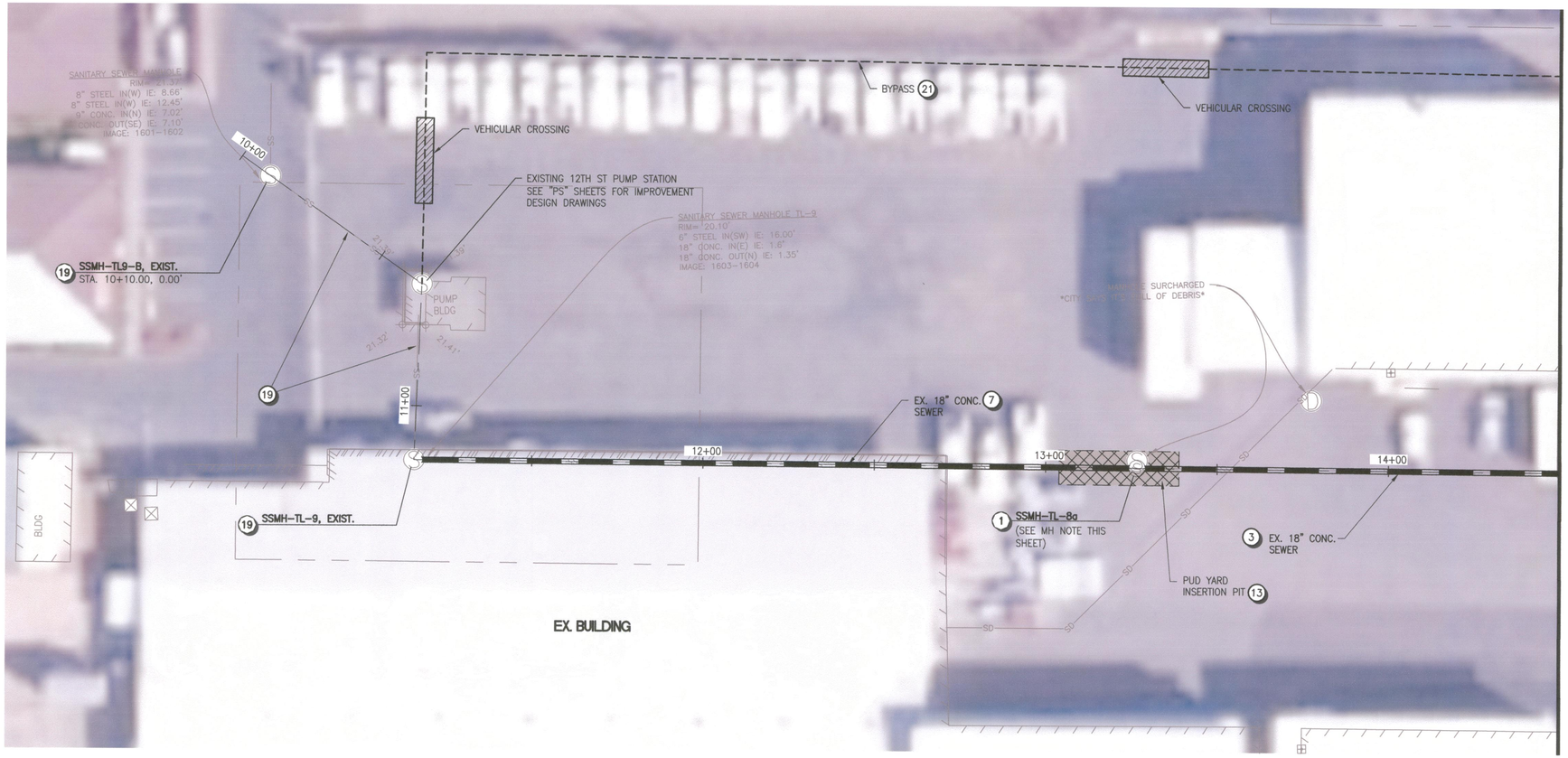
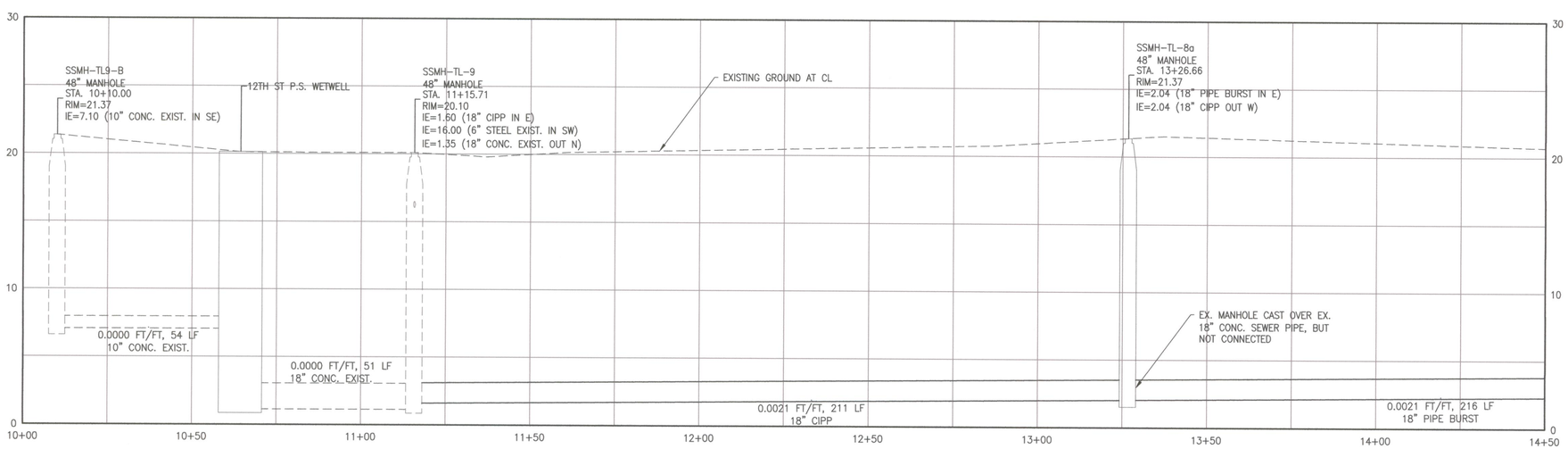


MATCHLINE STA. 14+50 SEE SHEET C02

PLAN



PROFILE

GENERAL NOTES

1. SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL
2. LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

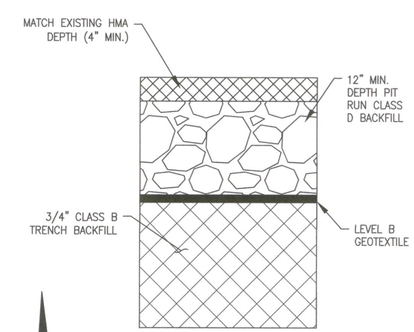
1. INLET PROTECTION PER STD DWG RD1015 ON SHEET D04
2. SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

1. INSTALL SEWER MANHOLE PER COT STD DWG 010 ON SHEET D01
3. EXISTING PIPE TO BE REPLACED BY PIPE BURSTING. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE
7. REHABILITATE EXIST PIPE BY CIPP
13. ANTICIPATED LOCATION OF PIPE BURST PIT. CONTRACTOR TO FIELD VERITY. SAWCUT REQUIRED FOR PITS LOCATED IN PAVEMENT AREAS. BACKFILL MATERIAL AND COMPACTION REQUIREMENTS PER COT STD DWG 590. RESURFACING TO MATCH EXISTING CONDITIONS UNLESS OTHERWISE SPECIFIED.
19. EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION
21. SEWER BYPASS CONFIGURATION REQUIRED BY TPUD. SEE SECTION 490.40 OF SPECIAL PROVISIONS FOR ADDITIONAL TPUD REQUIREMENTS.

MH NOTE

REMOVE EX. MANHOLE AND INSTALL NEW 48" SEWER MANHOLE FOLLOWING PIPE BURSTING OPERATIONS. USE 18" SPOOLS AND COUPLINGS TO CONNECT NEW MANHOLE TO 18" SEWER PIPES.



TPUD TRENCH/PIT RESTORATION SECTION

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C01
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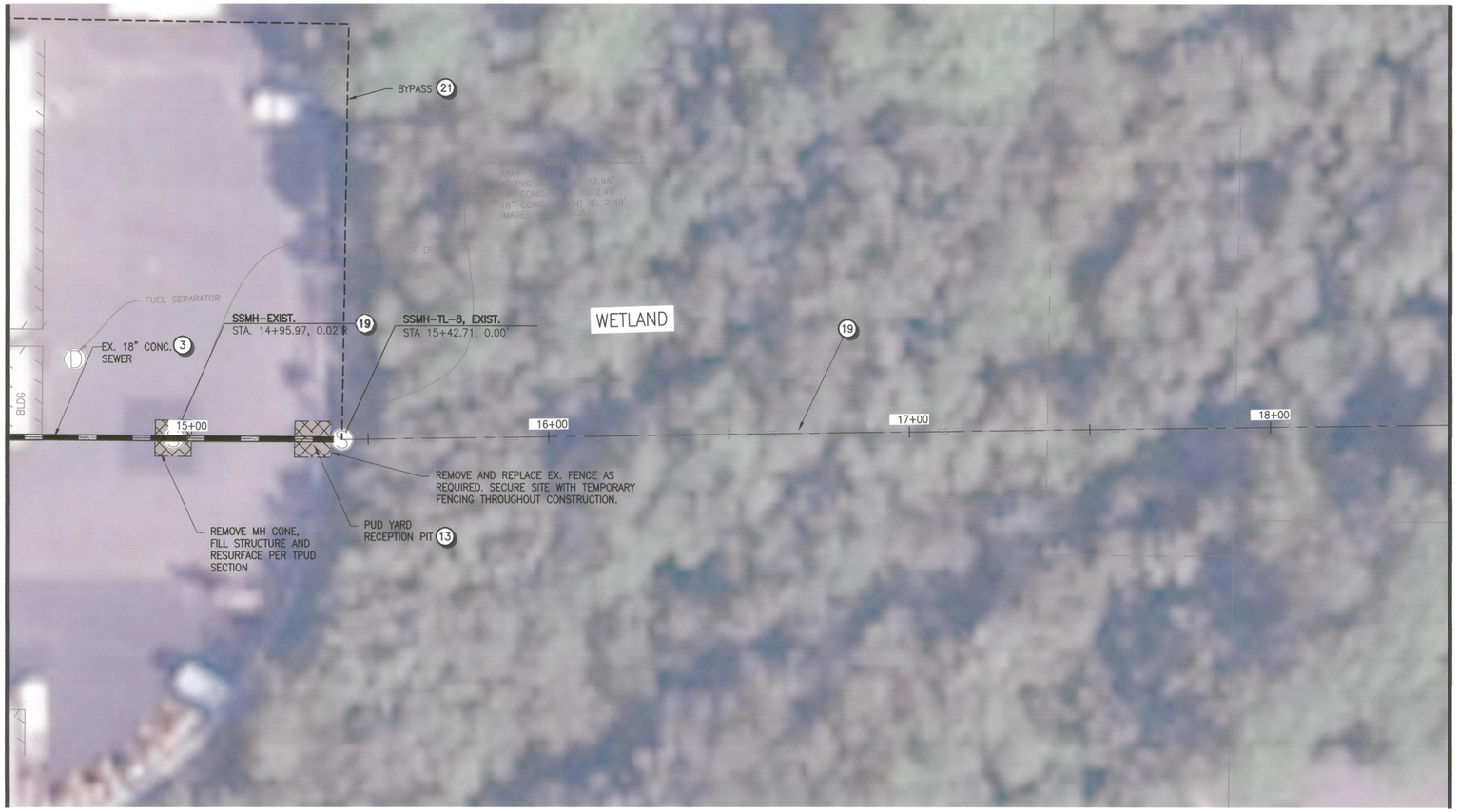
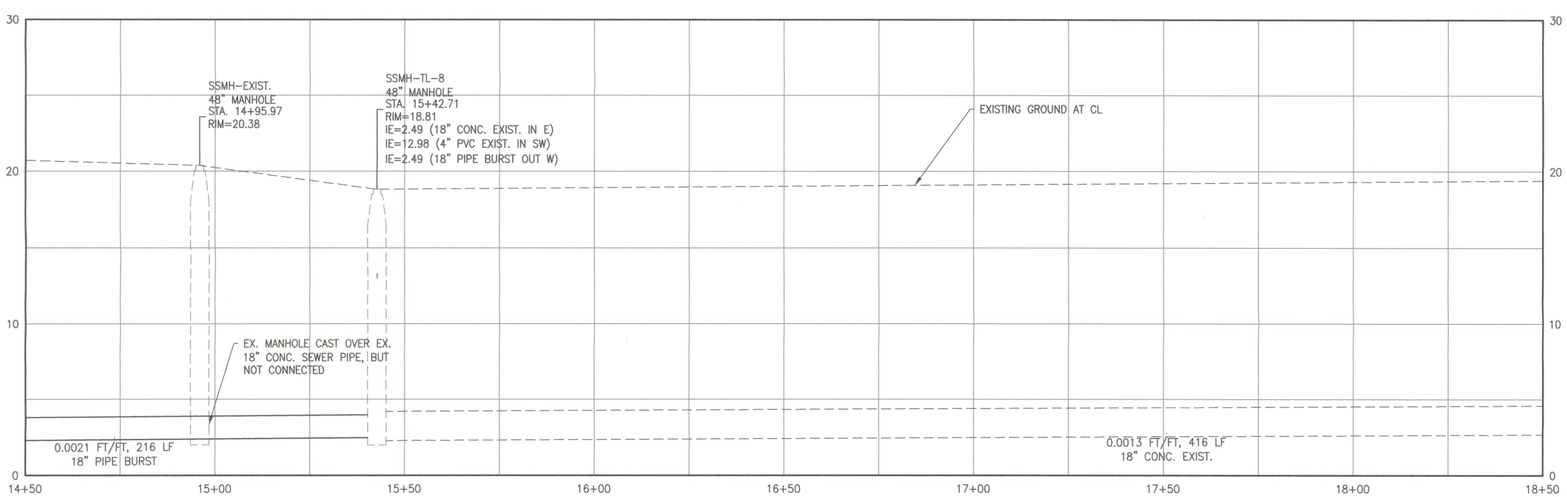
MATCHLINE STA. 14+50 SEE SHEET C01



MATCHLINE STA. 18+50 SEE SHEET C03

PLAN



PROFILE

GENERAL NOTES

1 SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL

2 LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1 INLET PROTECTION PER STD DWG RD1015 ON SHEET D04

2 SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

3 EXISTING PIPE TO BE REPLACED BY PIPE BURSTING. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE

13 ANTICIPATED LOCATION OF PIPE BURST PIT. CONTRACTOR TO FIELD VERITY. SAWCUT REQUIRED FOR PITS LOCATED IN PAVEMENT AREAS. BACKFILL MATERIAL AND COMPACTION REQUIREMENTS PER COT STD DWG 590. RESURFACING TO MATCH EXISTING CONDITIONS UNLESS OTHERWISE SPECIFIED.

19 EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

21 SEWER BYPASS CONFIGURATION REQUIRED BY TPUD. SEE SECTION 490.40 OF SPECIAL PROVISIONS FOR ADDITIONAL TPUD REQUIREMENTS.

** WETLAND PROTECTION NOTE **

EXISTING WETLAND TO BE PROTECTED PER ENVIRONMENTAL PERMIT REQUIREMENTS.

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C02

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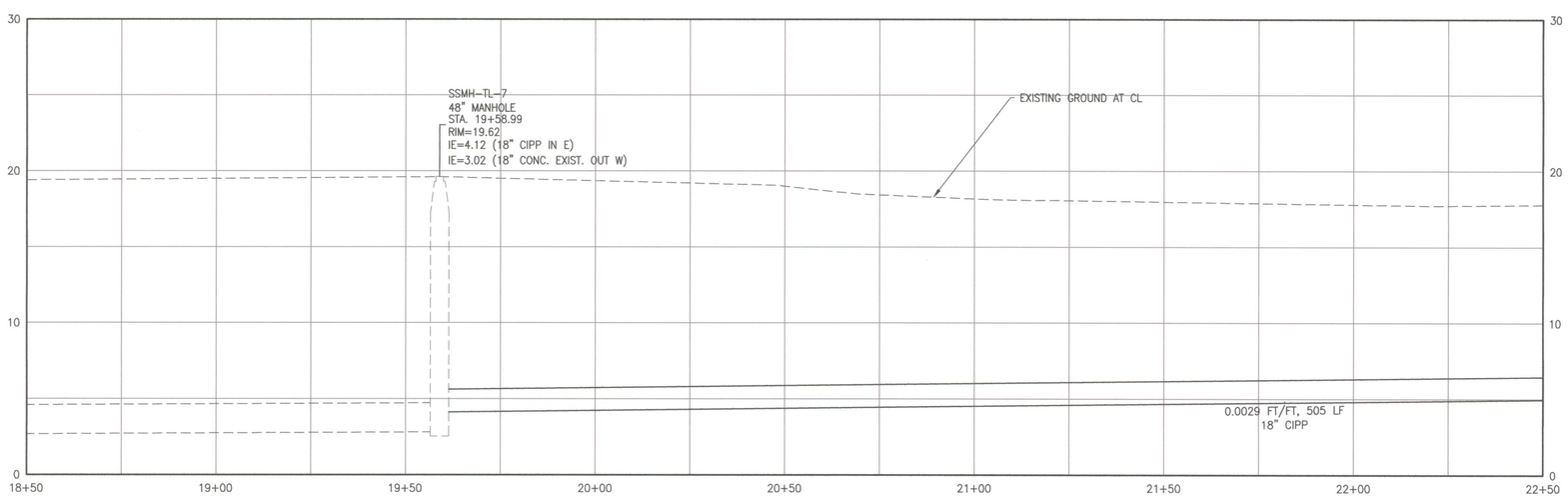
MATCHLINE STA. 18+50 SEE SHEET C02

MATCHLINE STA. 22+50 SEE SHEET C04

PLAN



PROFILE

GENERAL NOTES

1 SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL

2 LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1 INLET PROTECTION PER STD DWG RD1015 ON SHEET D04

2 SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

7 REHABILITATE EXIST PIPE BY CIPP

19 EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

** WETLAND PROTECTION NOTE **

EXISTING WETLAND TO BE PROTECTED PER ENVIRONMENTAL PERMIT REQUIREMENTS.

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C03

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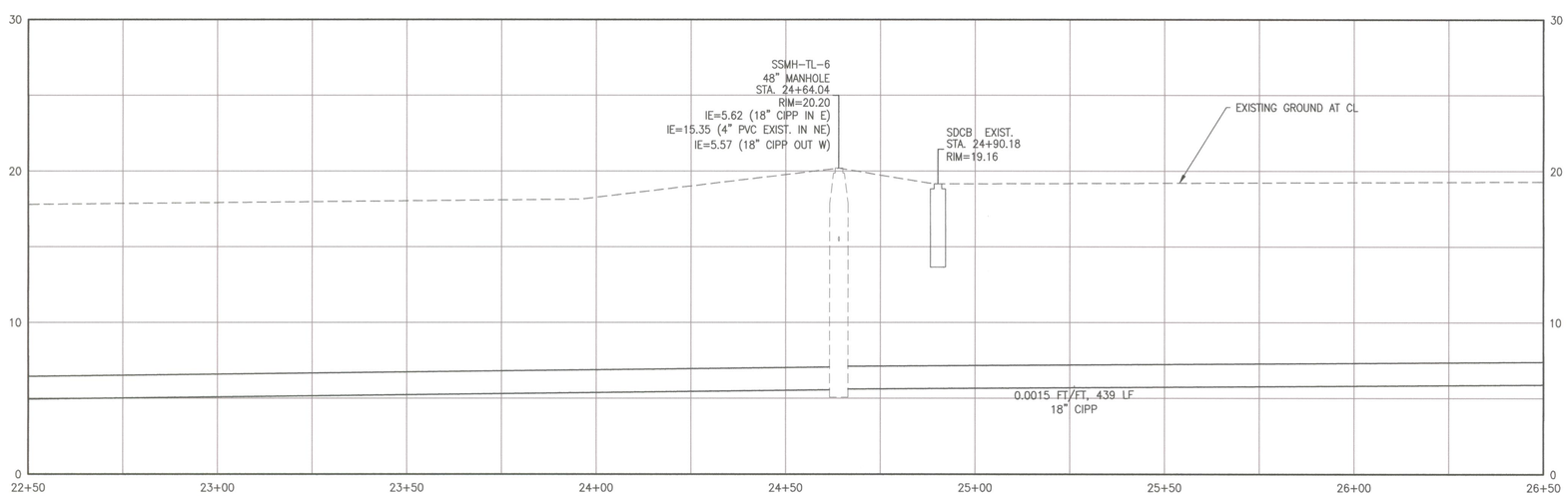
MATCHLINE STA. 22+50 SEE SHEET C03

MATCHLINE STA. 26+50 SEE SHEET C05

PLAN



PROFILE

GENERAL NOTES

1. SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL
2. LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1. INLET PROTECTION PER STD DWG RD1015 ON SHEET D04
2. SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

7. REHABILITATE EXIST PIPE BY CIPP

** WETLAND PROTECTION NOTE **

EXISTING WETLAND TO BE PROTECTED PER ENVIRONMENTAL PERMIT REQUIREMENTS.

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C04

Sheet No. 9 of 74

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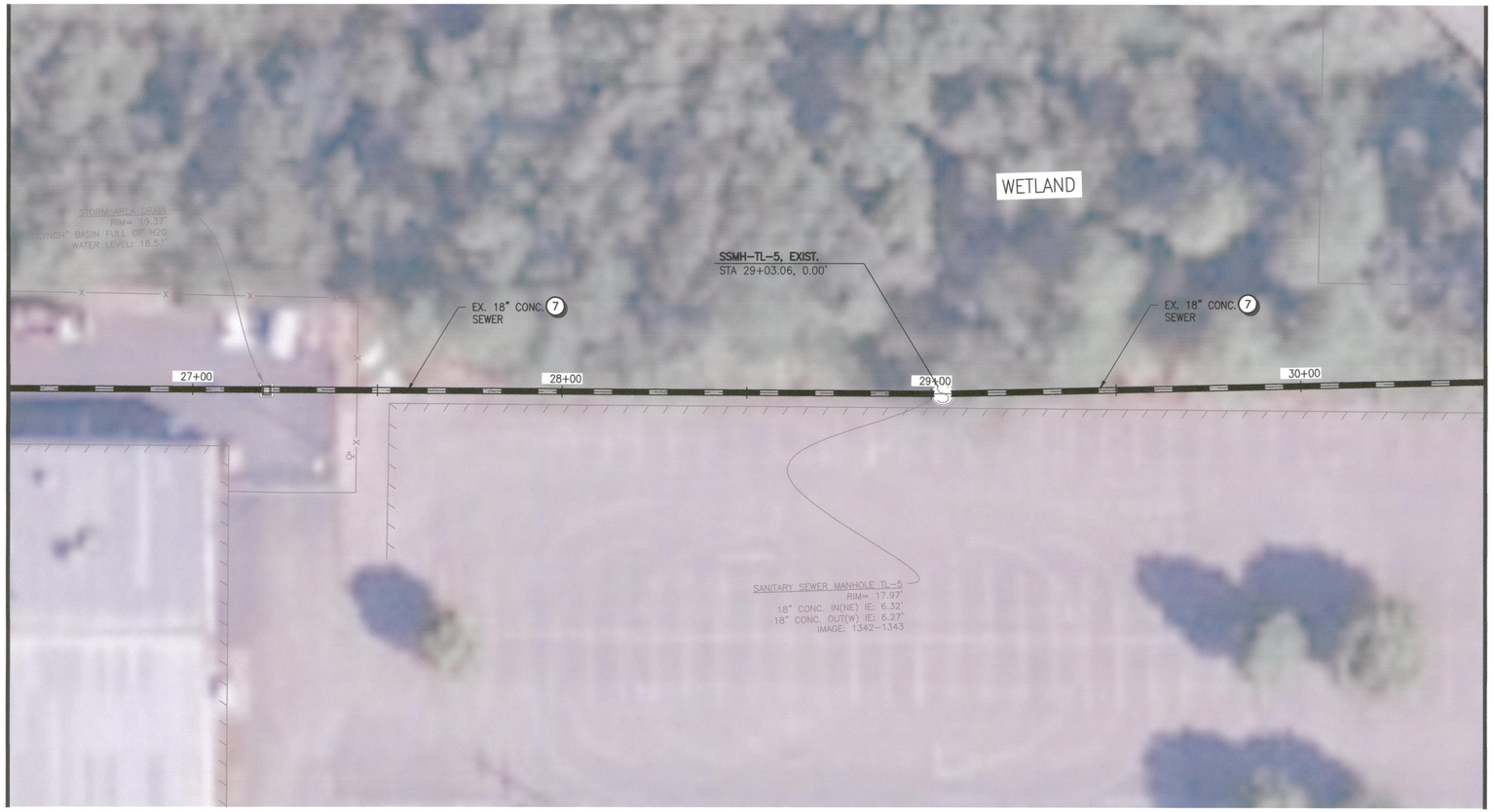
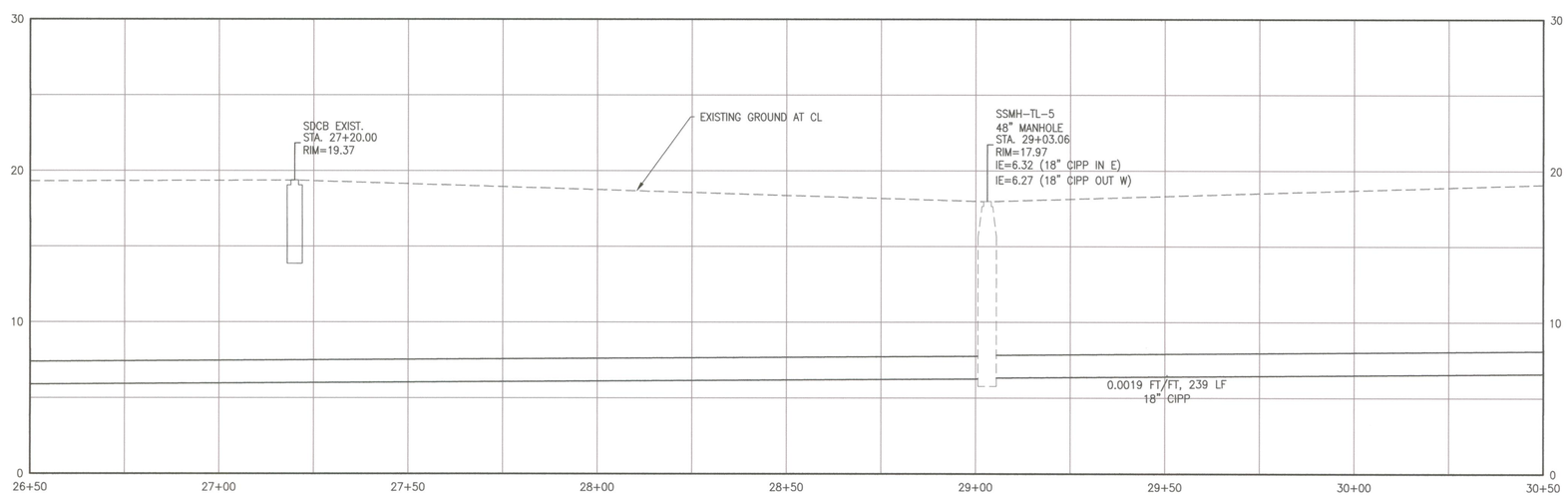
MATCHLINE STA. 26+50 SEE SHEET C04



MATCHLINE STA. 30+50 SEE SHEET C06

PLAN



PROFILE

GENERAL NOTES

1. SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL
2. LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1. INLET PROTECTION PER STD DWG RD1015 ON SHEET D04
2. SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

7. REHABILITATE EXIST PIPE BY CIPP

** WETLAND PROTECTION NOTE **

EXISTING WETLAND TO BE PROTECTED PER ENVIRONMENTAL PERMIT REQUIREMENTS.

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C05

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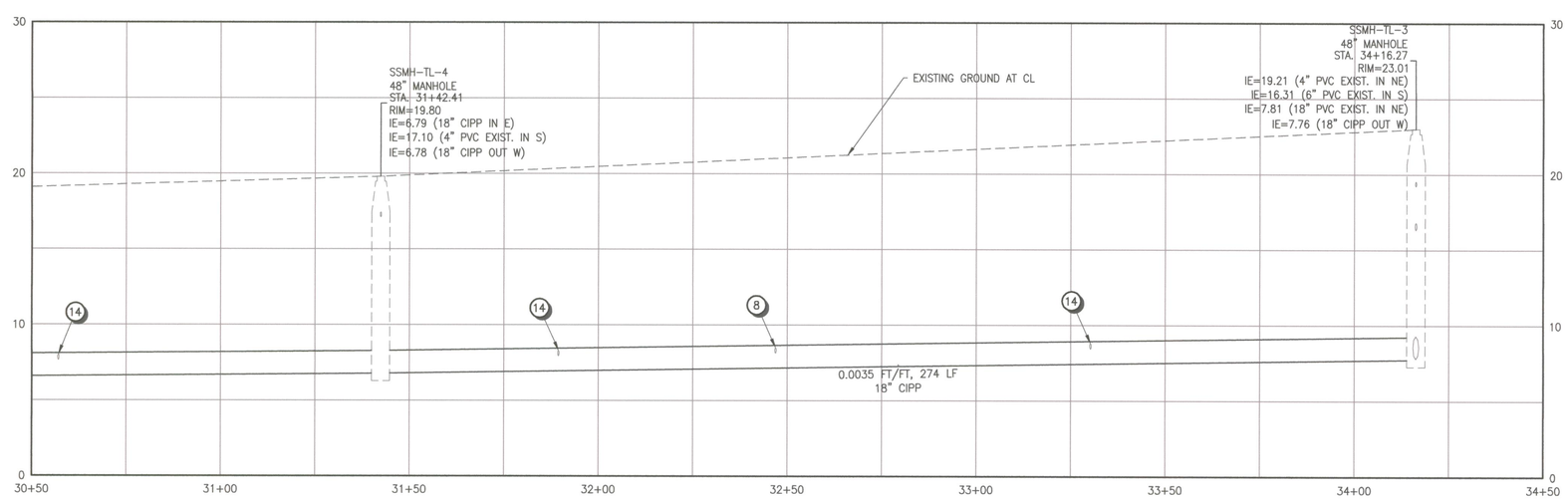
MATCHLINE STA. 30+50 SEE SHEET C05

PLAN



PROFILE

GENERAL NOTES

1. SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL
2. LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1. INLET PROTECTION PER STD DWG RD1015 ON SHEET D04
2. SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

7. REHABILITATE EXIST PIPE BY CIPP
8. EXISTING LATERAL IS CAPPED AND SHALL NOT BE RECONNECTED TO REHABILITATED SEWER MAIN.
14. AFTER MAINLINE CIPP WORK IS ACCEPTED, RECONNECT SERVICE LINE AND INSTALL CURED-IN-PLACE LATERAL LINER ASSEMBLY. LINER ASSEMBLY SHALL EXTEND 3FT MIN. INTO LATERAL. EXISTING LATERAL SIZE AND MATERIAL TYPE SHALL BE VERIFIED BY VIDEO INSPECTION PRIOR TO CIPP WORK.

** WETLAND PROTECTION NOTE **

EXISTING WETLAND TO BE PROTECTED PER ENVIRONMENTAL PERMIT REQUIREMENTS.

SCALE IN FEET: 20 0 20 40 HORIZ; 5 0 5 10 VERT

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Project No. 67522
C06
Sheet No. 11 of 74

Sep 02, 2015 - 4:44pm
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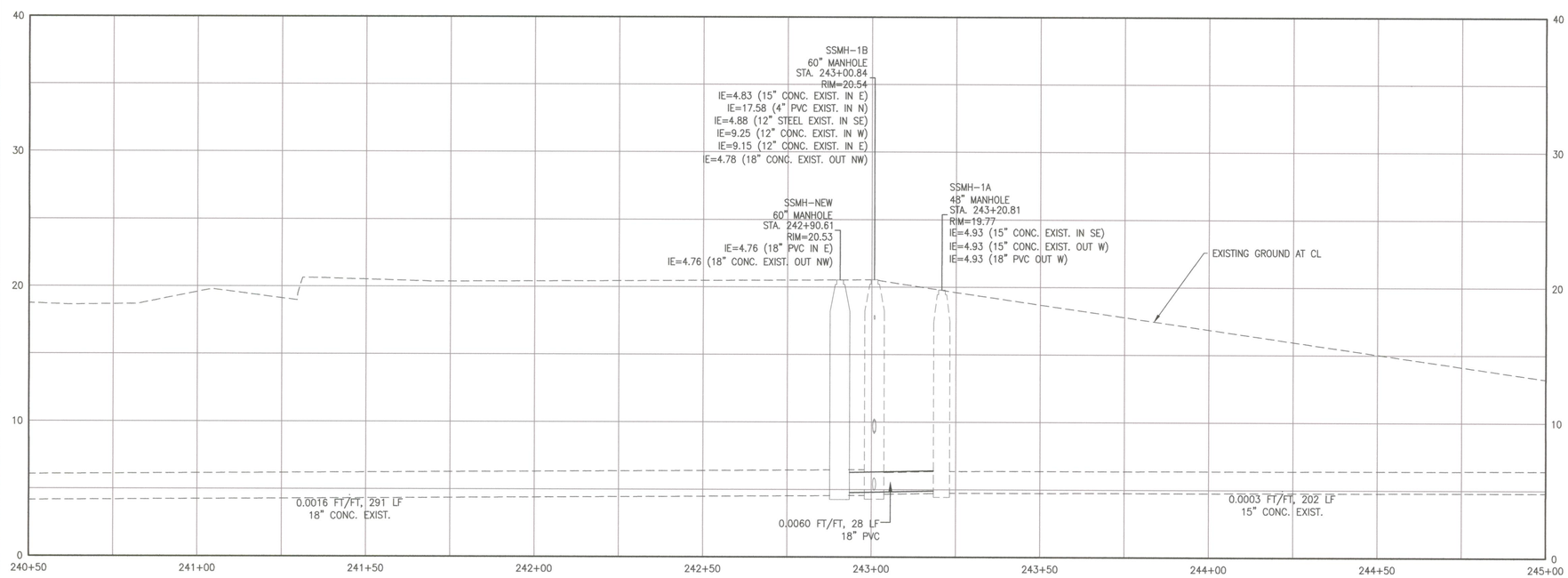
PLAN



PROFILE

GENERAL NOTES

1. SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL
2. LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1. INLET PROTECTION PER STD DWG RD1015 ON SHEET D04
2. SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

5. CONNECT PIPE TO EX. MANHOLE USING KOR-N-SEAL BOOT; VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION. CORE AND RECHANNEL EXIST MANHOLE BASE AS NECESSARY
17. RESURFACE DISTURBED LANDSCAPE AND/OR HARDSCAPE FEATURES TO MATCH EXISTING CONDITIONS. SEE COT STD DWG 590 ON SHEET D02 FOR LANDSCAPE BACKFILL REQUIREMENTS OUTSIDE OF THE RIGHT-OF-WAY.
19. EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

NO.	DATE	BY	Checked & Approval	REVISIONS

REGISTERED PROFESSIONAL ENGINEER 70947PE
OREGON
MAR 12, 2002
TIM B. KRAFT
EXPIRES: 06/30/2017

CITY OF TILLAMOOK
TILLAMOOK SEWER REHABILITATION PROJECT
SANITARY SEWER PLAN AND PROFILE, 9TH ST. SPOT REPAIR
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C07
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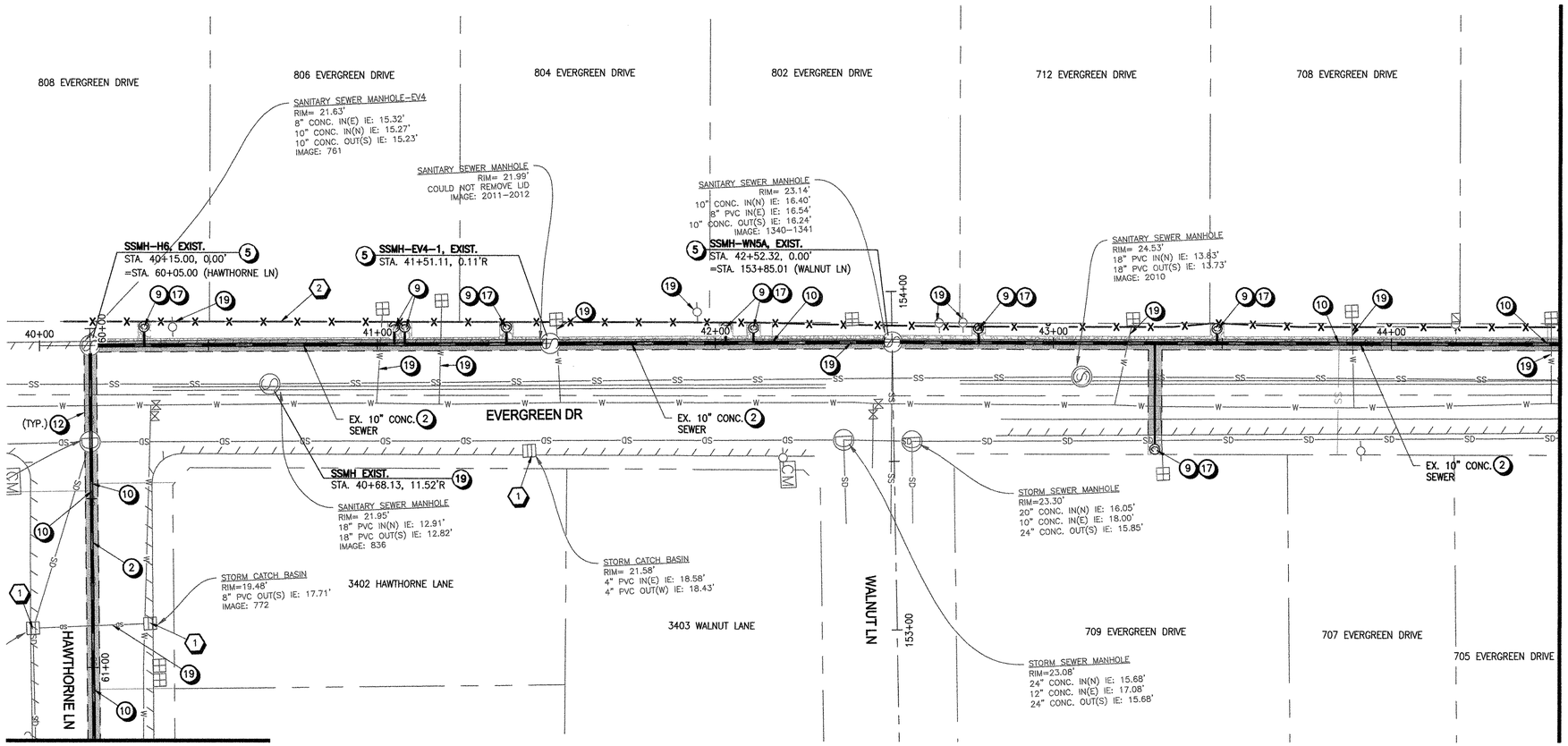

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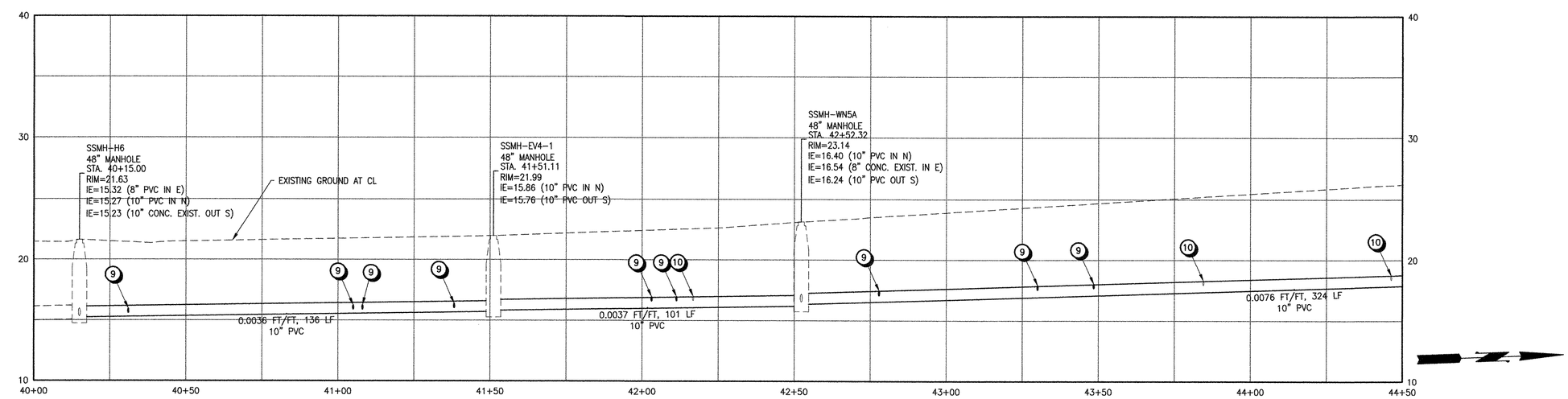

PROFILE

GENERAL NOTES

1. SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL
2. LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1. INLET PROTECTION PER STD DWG RD1015 ON SHEET D04
2. SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

2. REMOVE EXISTING CONCRETE PIPE AND REPLACE WITH GRAVITY SEWER BY OPEN CUT CONSTRUCTION METHODS PER COT STD DWG 590 ON SHEET D02. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE
5. CONNECT PIPE TO EX. MANHOLE USING KOR-N-SEAL BOOT; VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION. CORE AND RECHANNEL EXIST MANHOLE BASE AS NECESSARY
9. INSTALL TEE, REMOVE EXISTING LATERAL AND REPLACE WITH 4" PVC PIPE FROM REHABILITATED SEWER MAIN TO RIGHT-OF-WAY LINE, PER COT STD DWGS 520 AND 590 ON SHEET D02. INSTALL SANITARY SEWER CLEANOUT AT RIGHT-OF-WAY LINE PER DETAIL 500 ON SHEET D02 AND CONNECT TO EXIST LATERAL.
10. INSTALL TEE AND CONNECT EX. SEWER LATERAL TO REHABILITATED SEWER MAIN PER COT STD DWG 520 ON SHEET D02.
12. SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.
17. RESURFACE DISTURBED LANDSCAPE AND/OR HARDSCAPE FEATURES TO MATCH EXISTING CONDITIONS. SEE COT STD DWG 590 ON SHEET D02 FOR LANDSCAPE BACKFILL REQUIREMENTS OUTSIDE OF THE RIGHT-OF-WAY.
19. EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

NO.	DATE	BY	Checked & Approved	REVISIONS

REGISTERED PROFESSIONAL ENGINEER
70947PE
9-3-15
OREGON
MAR 12, 2015
TIM B. KRAFT
EXPIRES: 06/30/2017

CITY OF TILLAMOOK
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C08
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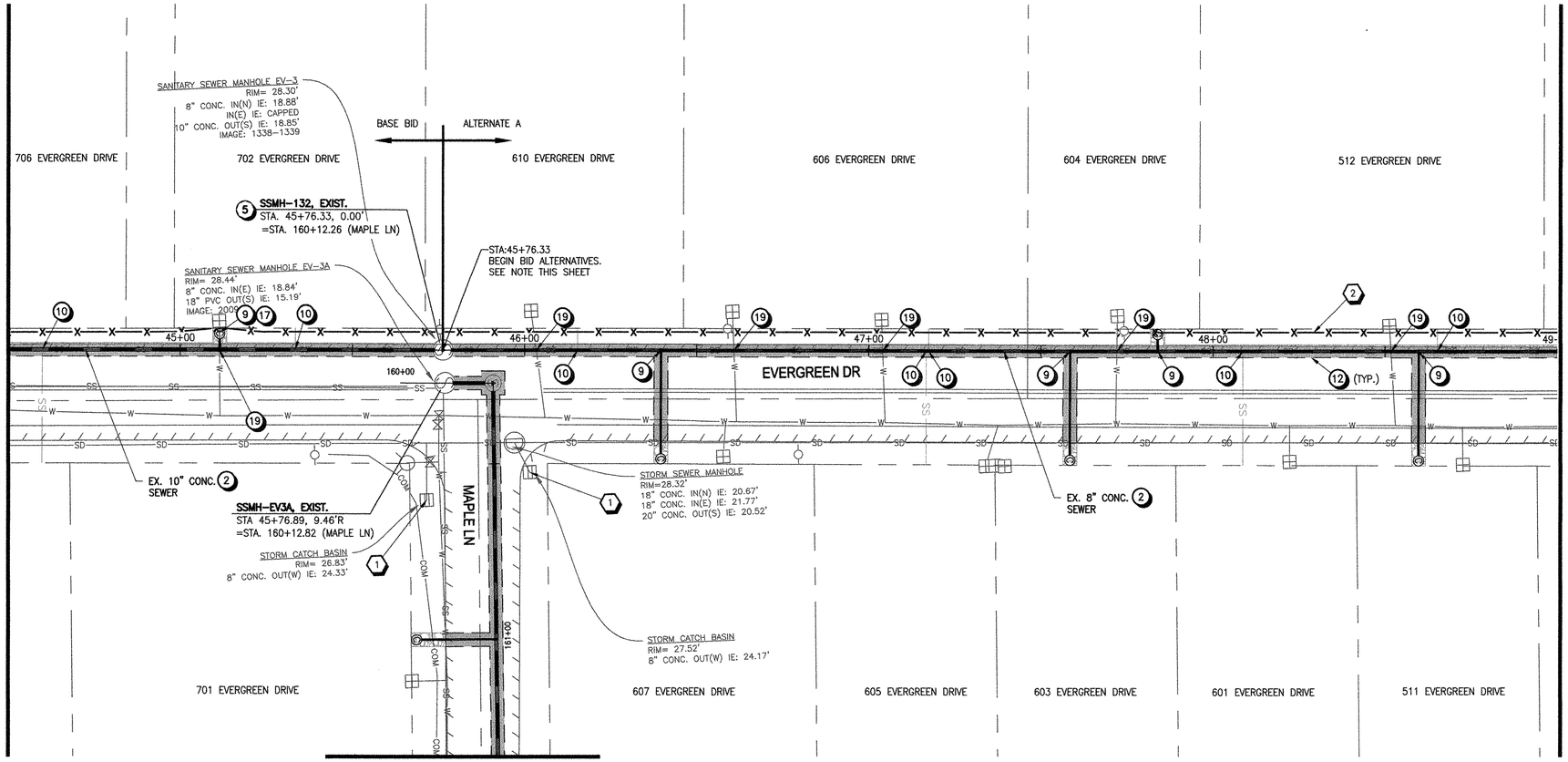

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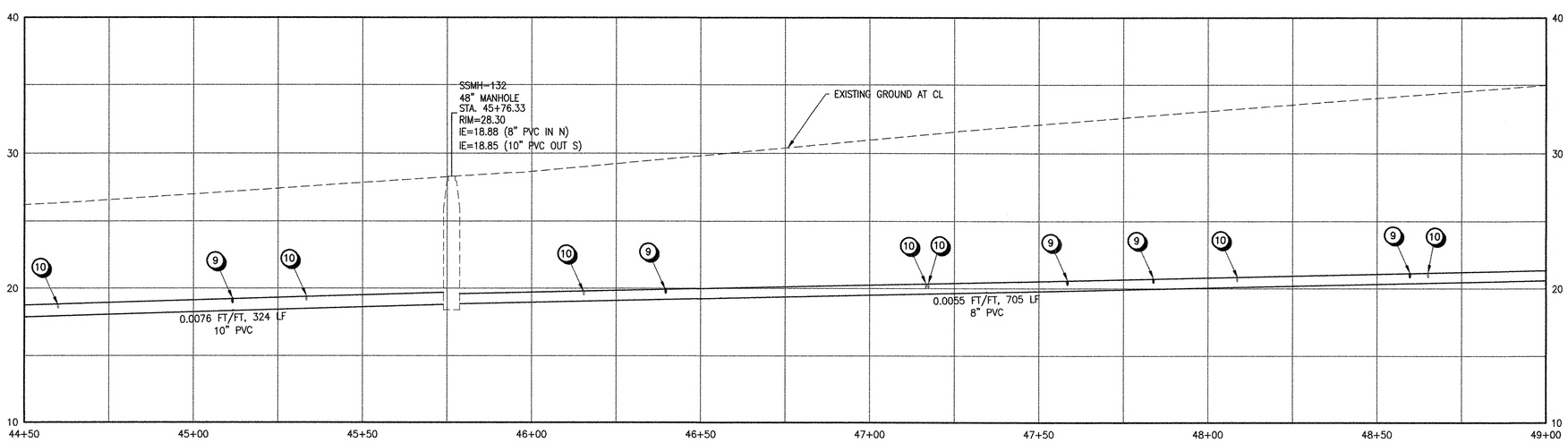

PROFILE

GENERAL NOTES

1 SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL

2 LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1 INLET PROTECTION PER STD DWG RD1015 ON SHEET D04

2 SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

2 REMOVE EXISTING CONCRETE PIPE AND REPLACE WITH GRAVITY SEWER BY OPEN CUT CONSTRUCTION METHODS PER COT STD DWG 590 ON SHEET D02. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE

5 CONNECT PIPE TO EX. MANHOLE USING KOR-N-SEAL BOOT; VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION. CORE AND RECHANNEL EXIST MANHOLE BASE AS NECESSARY

9 INSTALL TEE, REMOVE EXISTING LATERAL AND REPLACE WITH 4" PVC PIPE FROM REHABILITATED SEWER MAIN TO RIGHT-OF-WAY LINE, PER COT STD DWGS 520 AND 590 ON SHEET D02. INSTALL SANITARY SEWER CLEANOUT AT RIGHT-OF-WAY LINE PER DETAIL 500 ON SHEET D02 AND CONNECT TO EXIST LATERAL.

10 INSTALL TEE AND CONNECT EX. SEWER LATERAL TO REHABILITATED SEWER MAIN PER COT STD DWG 520 ON SHEET D02.

12 SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.

17 RESURFACE DISTURBED LANDSCAPE AND/OR HARDSCAPE FEATURES TO MATCH EXISTING CONDITIONS. SEE COT STD DWG 590 ON SHEET D02 FOR LANDSCAPE BACKFILL REQUIREMENTS OUTSIDE OF THE RIGHT-OF-WAY.

19 EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

** BID ALTERNATE NOTES **

BID ALTERNATE A (EVERGREEN DR. NORTH – OPEN CUT) SHOWN. SEE SHEETS C43 TO C46 FOR BID ALTERNATE B (EVERGREEN DR. NORTH – CIPP) PLAN AND PROFILE. LATERAL PLACEMENT LOCATIONS AND QUANTITIES ARE APPROXIMATE. CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION.

NO.	DATE	BY	Checked & Approval	REVISIONS

REGISTERED PROFESSIONAL ENGINEER 70947PE
9-3-15
OREGON MAR. 12, 2013
TIM B. KRAFT
EXPIRES: 06/30/2017

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C09
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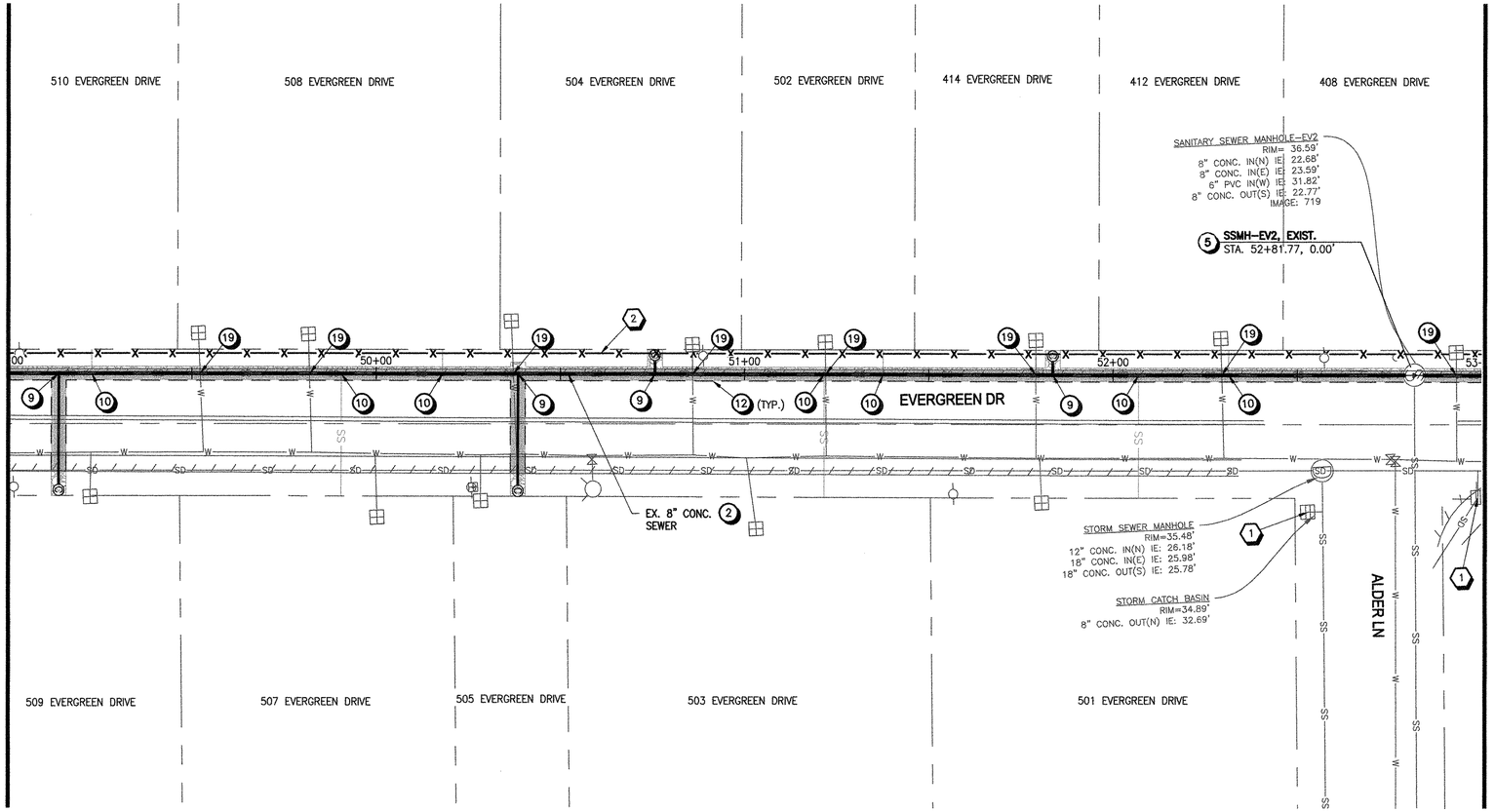
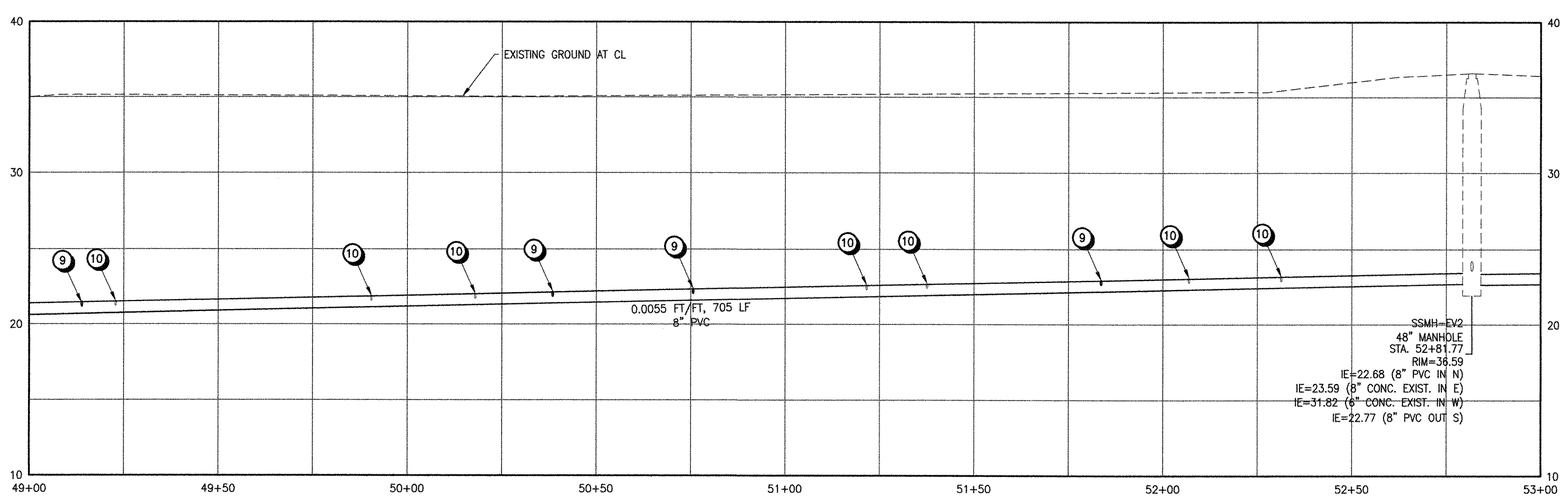


MATCHLINE STA. 49+00 SEE SHEET C09

MATCHLINE STA. 53+00 SEE SHEET C11

PLAN



PROFILE

GENERAL NOTES

1 SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL

2 LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1 INLET PROTECTION PER STD DWG RD1015 ON SHEET D04

2 SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

2 REMOVE EXISTING CONCRETE PIPE AND REPLACE WITH GRAVITY SEWER BY OPEN CUT CONSTRUCTION METHODS PER COT STD DWG 590 ON SHEET D02. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE

5 CONNECT PIPE TO EX. MANHOLE USING KOR-N-SEAL BOOT; VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION. CORE AND RECHANNEL EXIST MANHOLE BASE AS NECESSARY

9 INSTALL TEE, REMOVE EXISTING LATERAL AND REPLACE WITH 4" PVC PIPE FROM REHABILITATED SEWER MAIN TO RIGHT-OF-WAY LINE, PER COT STD DWGS 520 AND 590 ON SHEET D02. INSTALL SANITARY SEWER CLEANOUT AT RIGHT-OF-WAY LINE PER DETAIL 500 ON SHEET D02 AND CONNECT TO EXIST LATERAL.

10 INSTALL TEE AND CONNECT EX. SEWER LATERAL TO REHABILITATED SEWER MAIN PER COT STD DWG 520 ON SHEET D02.

12 SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.

19 EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

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REGISTERED PROFESSIONAL ENGINEER 70947PE
9-3-15
OREGON MAR 12, 2013 TIM B. KRAFT
EXPIRES: 06/30/2017

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C10

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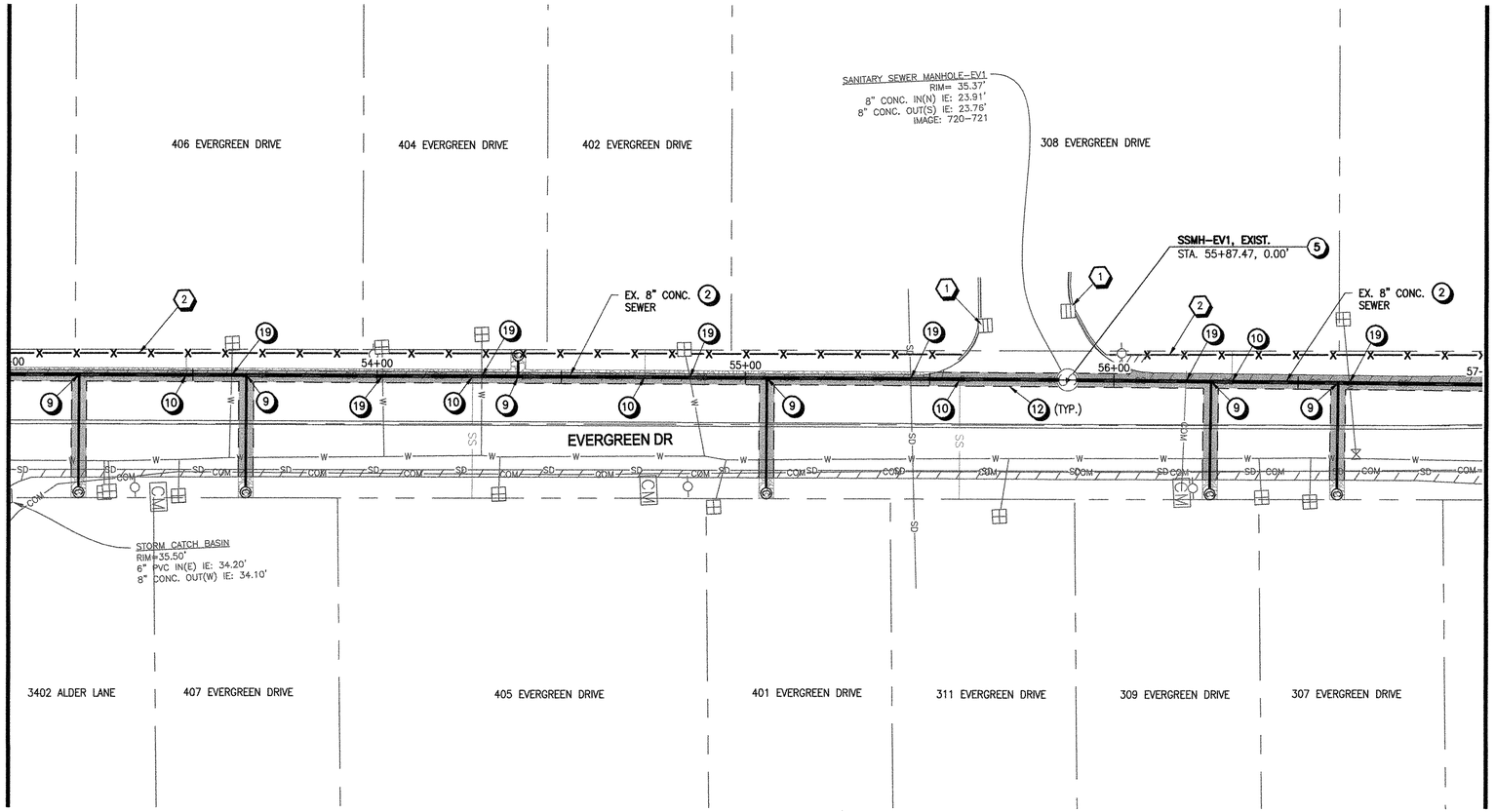

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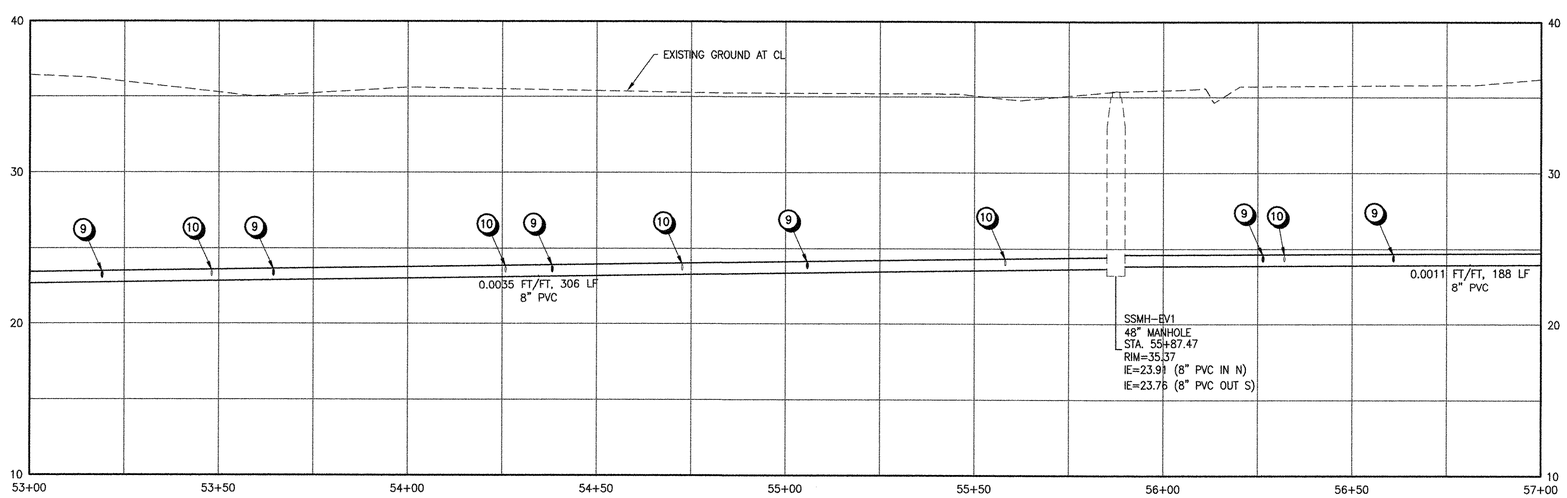

PROFILE

GENERAL NOTES

1 SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL

2 LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1 INLET PROTECTION PER STD DWG RD1015 ON SHEET D04

2 SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

2 REMOVE EXISTING CONCRETE PIPE AND REPLACE WITH GRAVITY SEWER BY OPEN CUT CONSTRUCTION METHODS PER COT STD DWG 590 ON SHEET D02. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE

5 CONNECT PIPE TO EX. MANHOLE USING KOR-N-SEAL BOOT; VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION. CORE AND RECHANNEL EXIST MANHOLE BASE AS NECESSARY

9 INSTALL TEE, REMOVE EXISTING LATERAL AND REPLACE WITH 4" PVC PIPE FROM REHABILITATED SEWER MAIN TO RIGHT-OF-WAY LINE, PER COT STD DWGS 520 AND 590 ON SHEET D02. INSTALL SANITARY SEWER CLEANOUT AT RIGHT-OF-WAY LINE PER DETAIL 500 ON SHEET D02 AND CONNECT TO EXIST LATERAL.

10 CONNECT EXISTING LATERAL TO NEW PVC GRAVITY SEWER. LATERAL SIZE, MATERIAL, AND ELEVATION UNKNOWN, CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION

12 SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.

19 EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

** BID ALTERNATE NOTES **

BID ALTERNATE A (EVERGREEN DR. NORTH – OPEN CUT) SHOWN. SEE SHEETS C43 TO C46 FOR BID ALTERNATE B (EVERGREEN DR. NORTH – CIPP) PLAN AND PROFILE. LATERAL PLACEMENT LOCATIONS AND QUANTITIES ARE APPROXIMATE. CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION.

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MAR 12, 2010
TIM B. KRAFT
EXPIRES: 06/30/2017

CITY OF TILLAMOOK
TILLAMOOK SEWER REHABILITATION PROJECT
SANITARY SEWER PLAN AND PROFILE, EVERGREEN DR. STA. 53+00-STA. 57+00
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Project No. 67522

C11

Sheet No. 16 of 74

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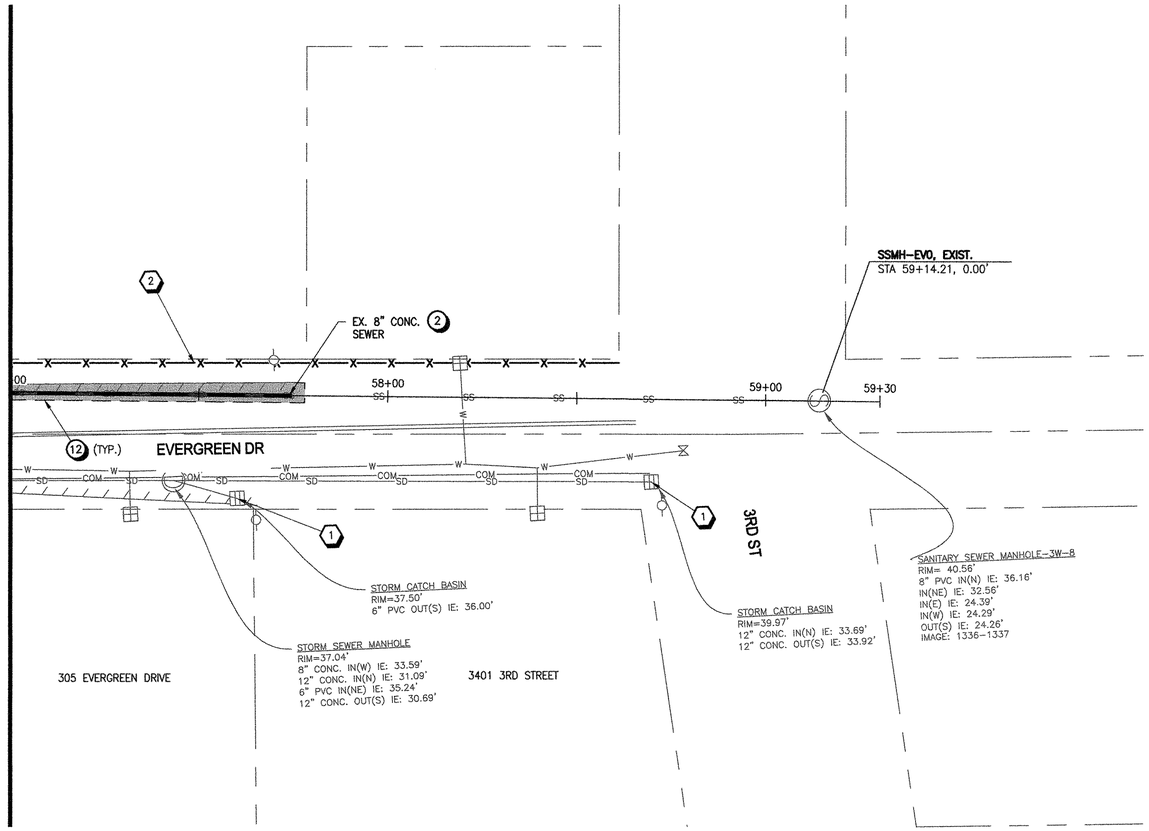

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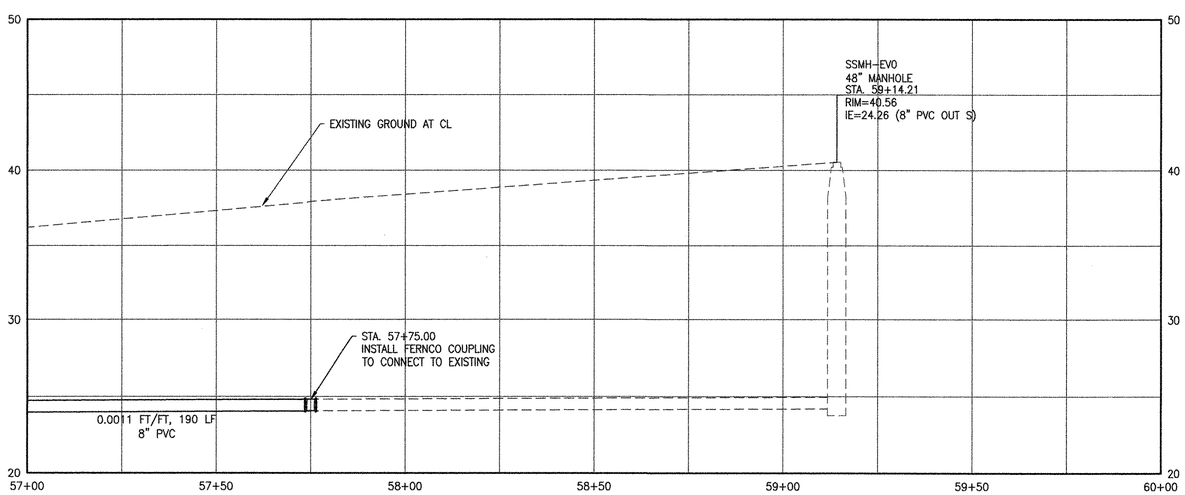

PROFILE

GENERAL NOTES

1. SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL.
2. LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1. INLET PROTECTION PER STD DWG RD1015 ON SHEET D04
2. SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

2. REMOVE EXISTING CONCRETE PIPE AND REPLACE WITH GRAVITY SEWER BY OPEN CUT CONSTRUCTION METHODS PER COT STD DWG 590 ON SHEET D02. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE
5. CONNECT PIPE TO EX. MANHOLE USING KOR-N-SEAL BOOT; VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION. CORE AND RECHANNEL EXIST MANHOLE BASE AS NECESSARY
12. SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.
19. EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

** BID ALTERNATE NOTES **

BID ALTERNATE A (EVERGREEN DR. NORTH – OPEN CUT) SHOWN. SEE SHEETS C43 TO C46 FOR BID ALTERNATE B (EVERGREEN DR. NORTH – CIPP) PLAN AND PROFILE. LATERAL PLACEMENT LOCATIONS AND QUANTITIES ARE APPROXIMATE. CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION.

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REGISTERED PROFESSIONAL ENGINEER 70947PE
OREGON MAR 12, 2010
TIM B. KRAFT
9-3-15
EXPIRES: 06/30/2017

CITY OF TILLAMOOK
TILLAMOOK SEWER REHABILITATION PROJECT
SANITARY SEWER PLAN AND PROFILE, EVERGREEN DR. STA. 57+00-STA. 60+00
TILLAMOOK, TILLAMOOK COUNTY, OR

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Project No. 67522
C12
Sheet No. 17 of 74

Sep 03, 2015 – 10:56am
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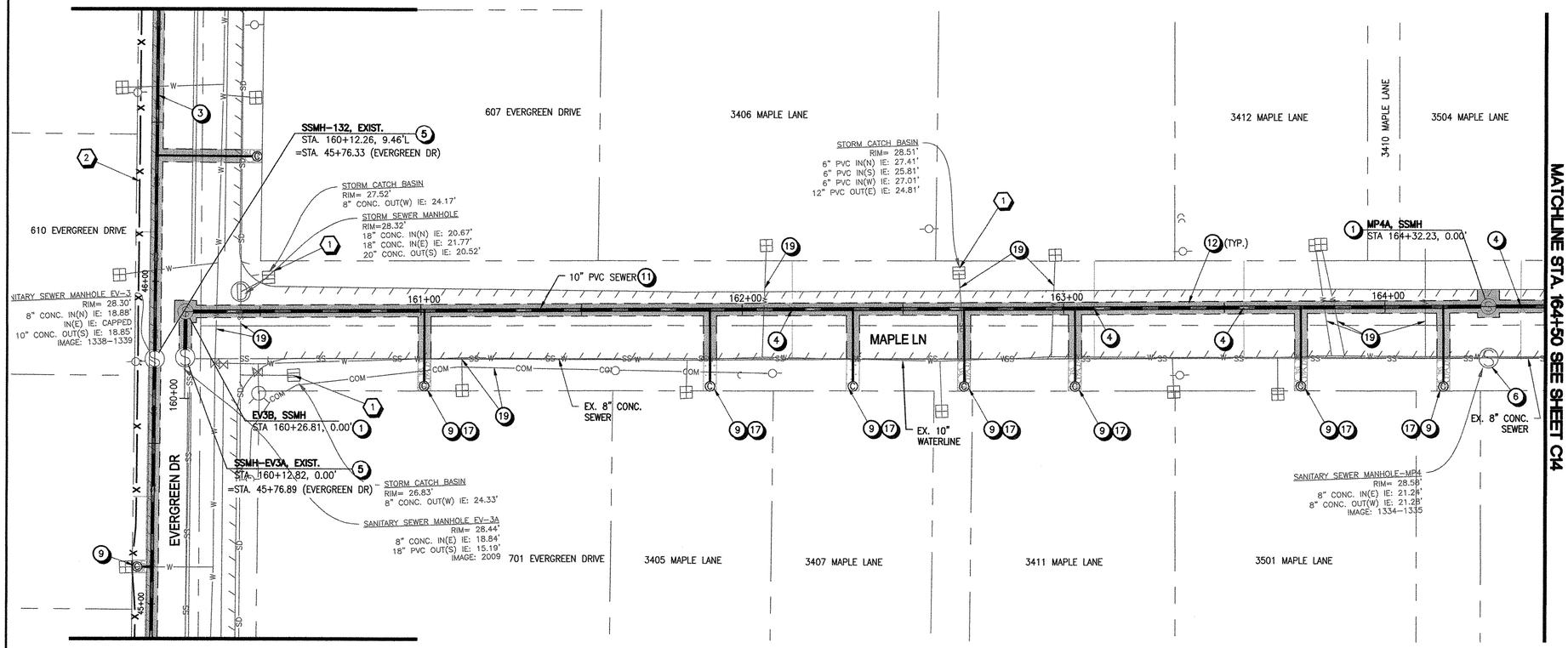

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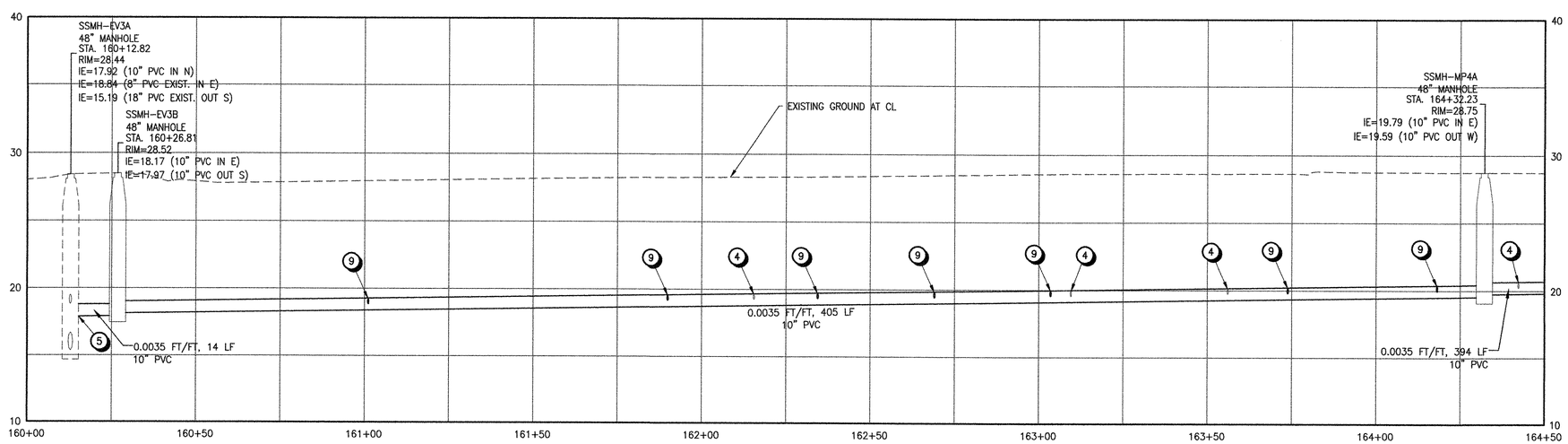
PLAN



PROFILE

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GENERAL NOTES

1 SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL

2 LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1 INLET PROTECTION PER STD DWG RD1015 ON SHEET D04

2 SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

1 INSTALL SEWER MANHOLE PER COT STD DWG 010 ON SHEET D01

3 EXISTING PIPE TO BE REPLACED BY PIPE BURSTING. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE

4 INSTALL TEE AND CONNECT EX. SEWER LATERAL TO NEW SEWER MAIN PER COT STD DWG 520 ON SHEET D02. PLUG EXISTING LATERAL DOWNSTREAM OF CONNECTION POINT.

5 CONNECT PIPE TO EX. MANHOLE USING KOR-N-SEAL BOOT; VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION. CORE AND RECHANNEL EXIST MANHOLE BASE AS NECESSARY

6 FILL AND ABANDON EXISTING MANHOLE AND ABANDON EXISTING GRAVITY SEWER PIPES IN PLACE FOLLOWING ACCEPTANCE OF NEW GRAVITY SEWER.

9 INSTALL TEE, REMOVE EXISTING LATERAL AND REPLACE WITH 4" PVC PIPE FROM REHABILITATED SEWER MAIN TO RIGHT-OF-WAY LINE, PER COT STD DWGS 520 AND 590 ON SHEET D02. INSTALL SANITARY SEWER CLEANOUT AT RIGHT-OF-WAY LINE PER DETAIL 500 ON SHEET D02 AND CONNECT TO EXIST LATERAL.

11 CONSTRUCT NEW GRAVITY SEWER BY OPEN CUT CONSTRUCTION METHODS PER COT STD DWG 590 ON SHEET D02. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE.

12 SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.

17 RESURFACE DISTURBED LANDSCAPE AND/OR HARDSCAPE FEATURES TO MATCH EXISTING CONDITIONS. SEE COT STD DWG 590 ON SHEET D02 FOR LANDSCAPE BACKFILL REQUIREMENTS OUTSIDE OF THE RIGHT-OF-WAY.

19 EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

NO.	DATE	BY	Checked & Approval	REVISIONS

REGISTERED PROFESSIONAL ENGINEER 70947PE OREGON MAR 12, 2002 TIM B. KRAFT
EXPIRES: 06/30/2017

CITY OF TILLAMOOK
TILLAMOOK SEWER REHABILITATION PROJECT
SANITARY SEWER PLAN AND PROFILE, MAPLE LN. STA. 160+00-STA. 164+50
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Project No. 67522
C13
Sheet No. 18 of 74

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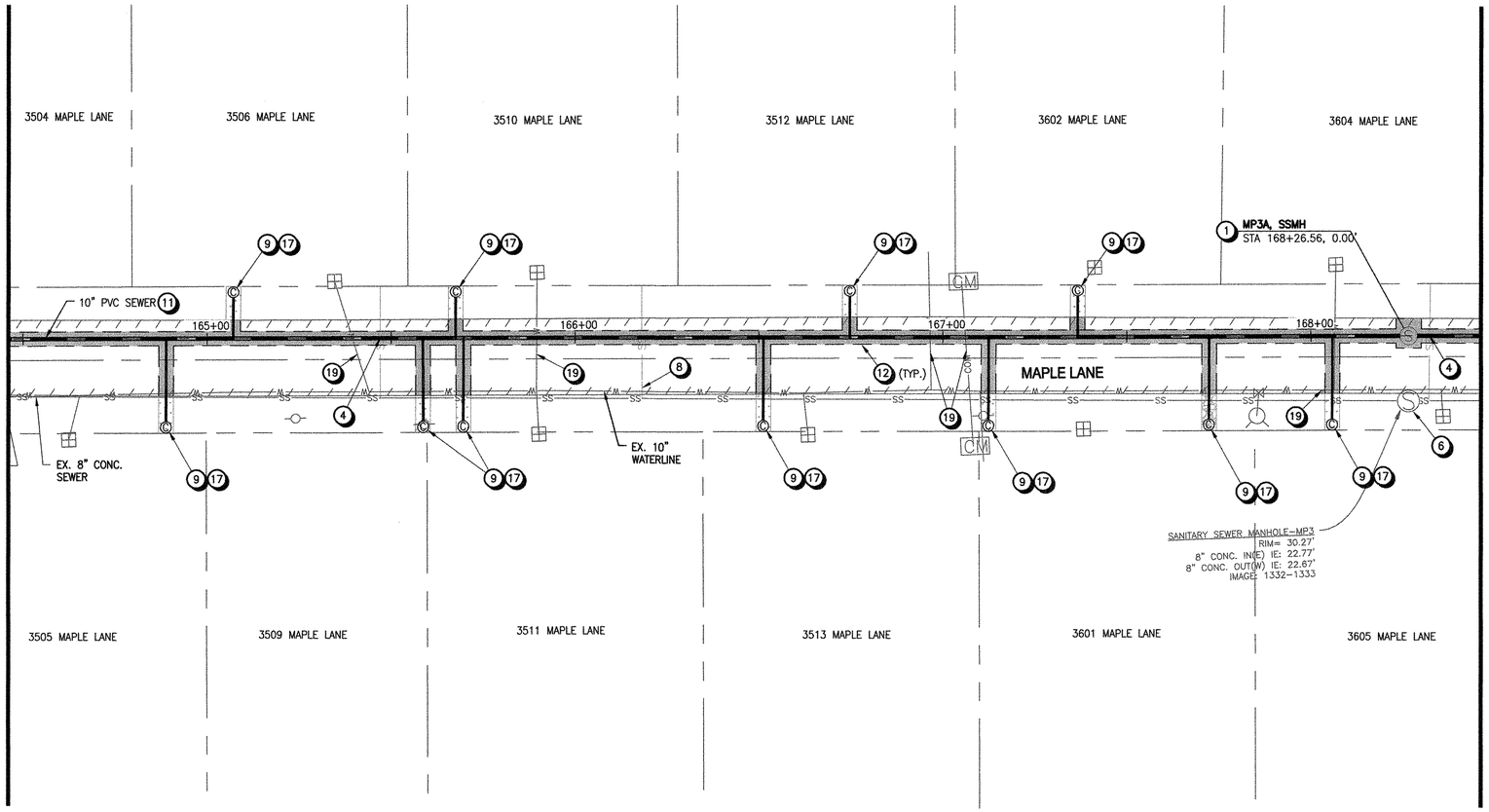

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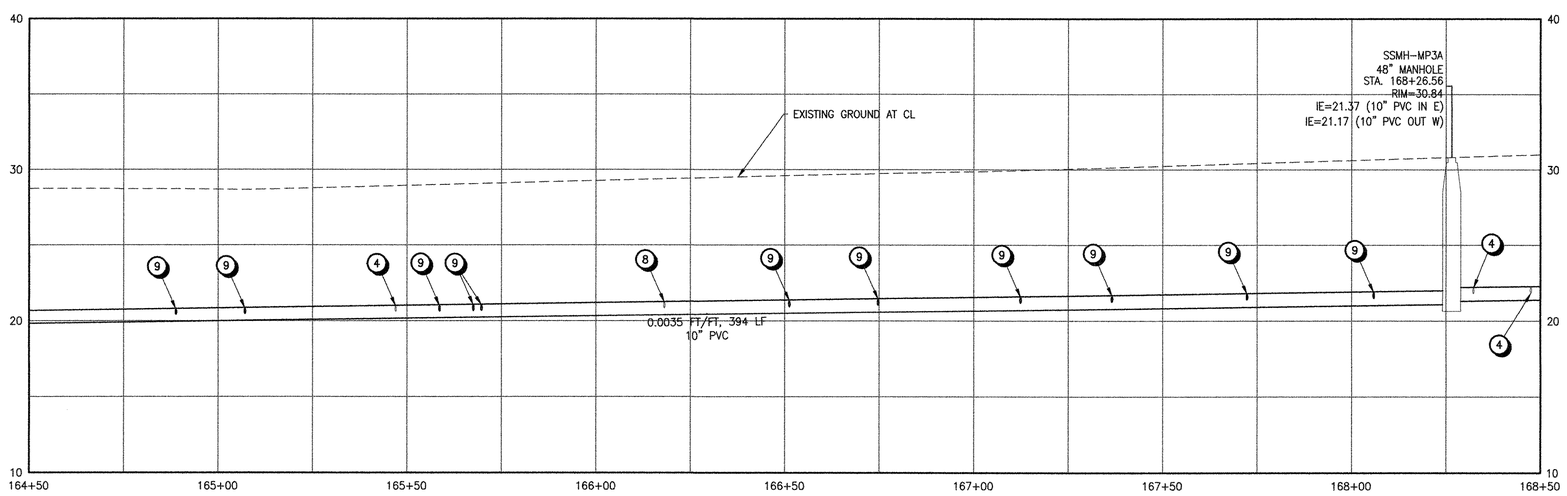

PROFILE

GENERAL NOTES

1. SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL
2. LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1. INLET PROTECTION PER STD DWG RD1015 ON SHEET D04
2. SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

1. INSTALL SEWER MANHOLE PER COT STD DWG 010 ON SHEET D01
4. INSTALL TEE AND CONNECT EX. SEWER LATERAL TO NEW SEWER MAIN PER COT STD DWG 520 ON SHEET D02. PLUG EXISTING LATERAL DOWNSTREAM OF CONNECTION POINT.
6. FILL AND ABANDON EXISTING MANHOLE AND ABANDON EXISTING GRAVITY SEWER PIPES IN PLACE FOLLOWING ACCEPTANCE OF NEW GRAVITY SEWER.
8. EXISTING LATERAL IS CAPPED AND SHALL NOT BE RECONNECTED TO REHABILITATED SEWER MAIN.
9. INSTALL TEE, REMOVE EXISTING LATERAL AND REPLACE WITH 4" PVC PIPE FROM REHABILITATED SEWER MAIN TO RIGHT-OF-WAY LINE, PER COT STD DWGS 520 AND 590 ON SHEET D02. INSTALL SANITARY SEWER CLEANOUT AT RIGHT-OF-WAY LINE PER DETAIL 500 ON SHEET D02 AND CONNECT TO EXIST LATERAL.
11. CONSTRUCT NEW GRAVITY SEWER BY OPEN CUT CONSTRUCTION METHODS PER COT STD DWG 590 ON SHEET D02. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE.
12. SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.
17. RESURFACE DISTURBED LANDSCAPE AND/OR HARDSCAPE FEATURES TO MATCH EXISTING CONDITIONS. SEE COT STD DWG 590 ON SHEET D02 FOR LANDSCAPE BACKFILL REQUIREMENTS OUTSIDE OF THE RIGHT-OF-WAY.
19. EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

NO.	DATE	BY	Checked / Approved	REVISIONS

REGISTERED PROFESSIONAL ENGINEER 70947PE
9-3-15
OREGON MAR 12, 2013
TIM B. KRAFT
EXPIRES: 06/30/2017

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C14

Sheet No. 19 of 74

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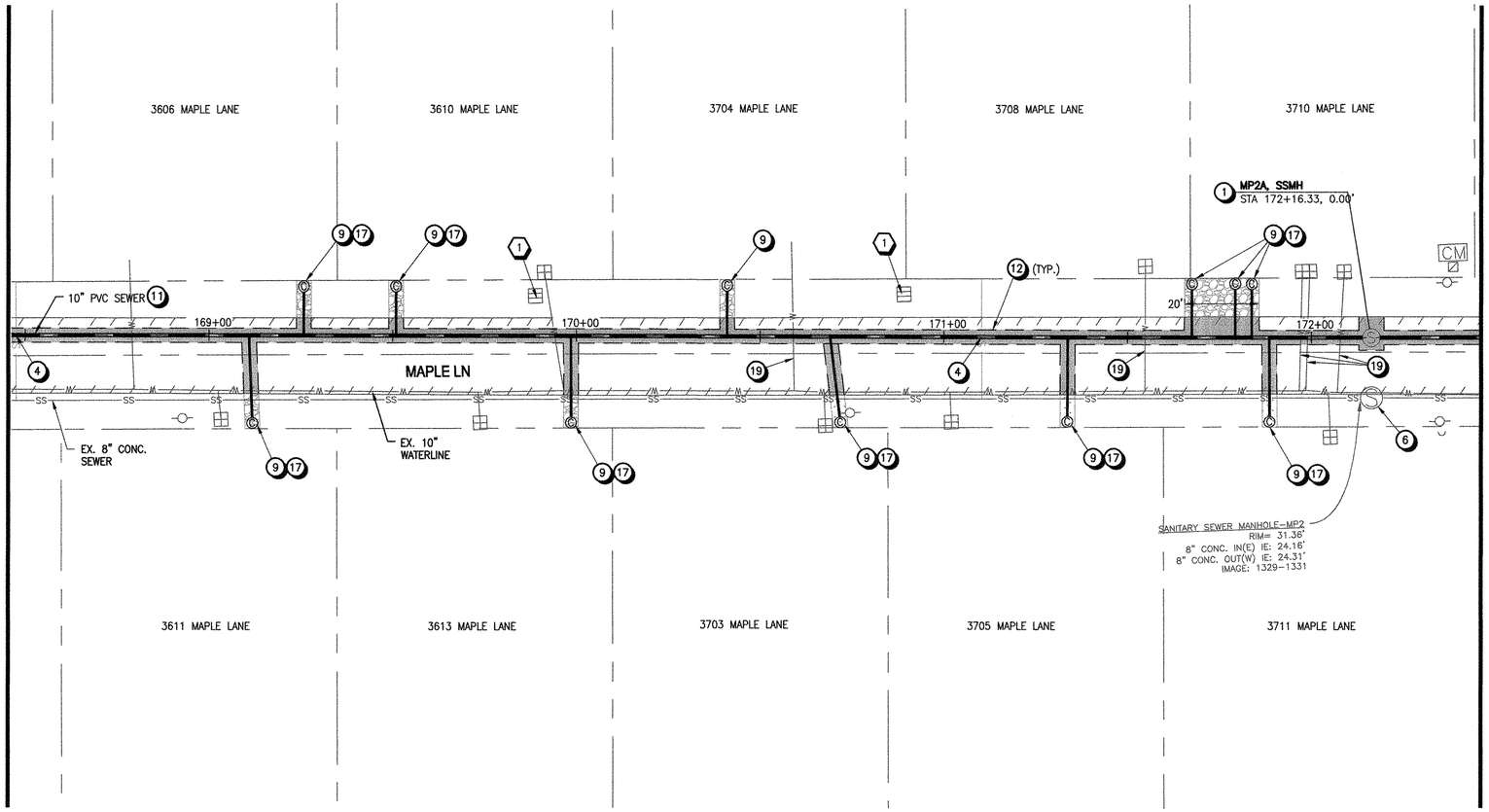

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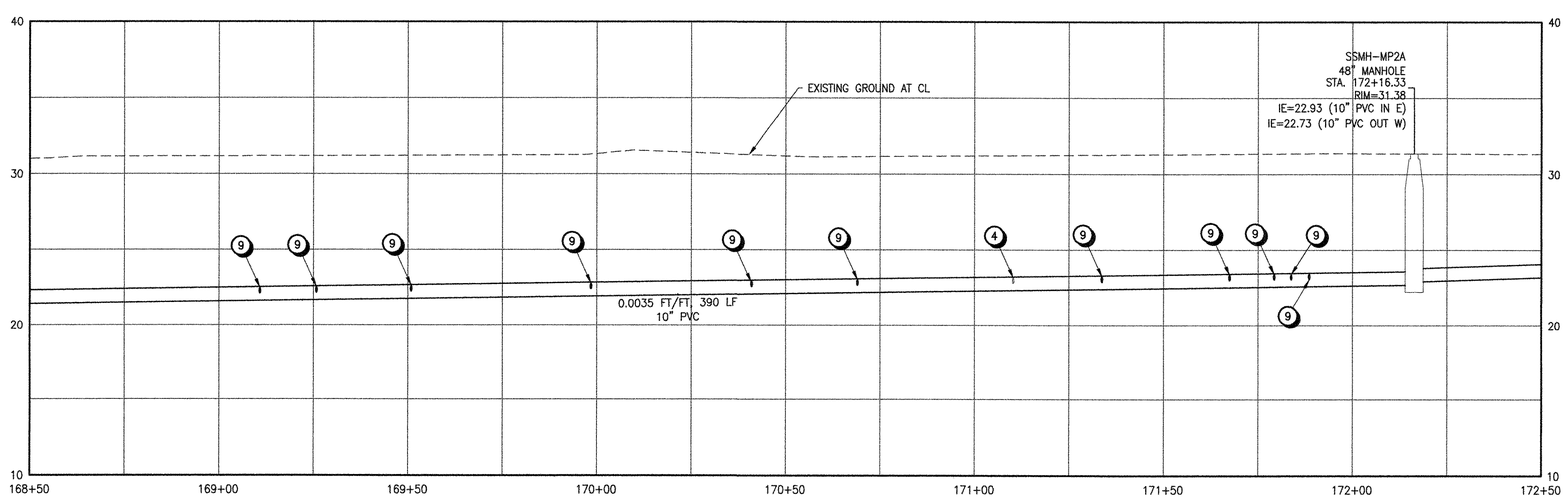

PROFILE

GENERAL NOTES

1. SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL
2. LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1. INLET PROTECTION PER STD DWG RD1015 ON SHEET D04
2. SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

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12. SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.
17. RESURFACE DISTURBED LANDSCAPE AND/OR HARDSCAPE FEATURES TO MATCH EXISTING CONDITIONS. SEE COT STD DWG 590 ON SHEET D02 FOR LANDSCAPE BACKFILL REQUIREMENTS OUTSIDE OF THE RIGHT-OF-WAY.
19. EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

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EXPIRES: 06/30/2017

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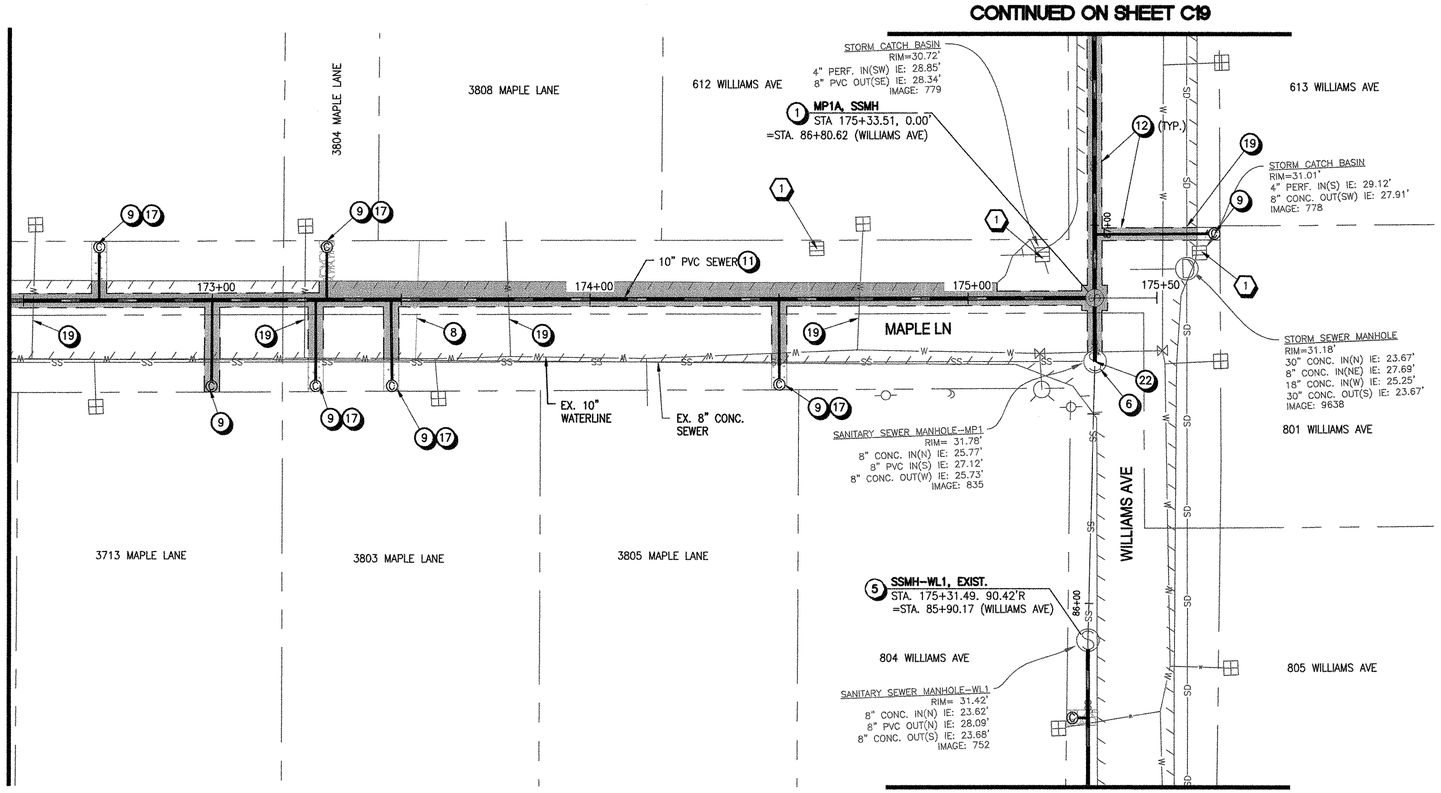

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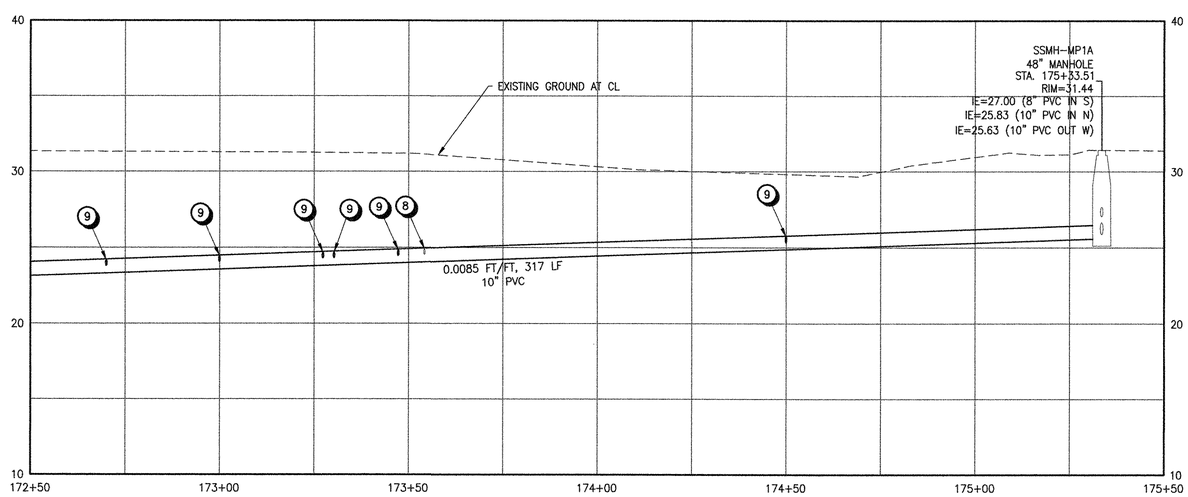

PROFILE

GENERAL NOTES

1. SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL
2. LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1. INLET PROTECTION PER STD DWG RD1015 ON SHEET D04
2. SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

1. INSTALL SEWER MANHOLE PER COT STD DWG 010 ON SHEET D01
5. CONNECT PIPE TO EX. MANHOLE USING KOR-N-SEAL BOOT; VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION. CORE AND RECHANNEL EXIST MANHOLE BASE AS NECESSARY
6. FILL AND ABANDON EXISTING MANHOLE AND ABANDON EXISTING GRAVITY SEWER PIPES IN PLACE FOLLOWING ACCEPTANCE OF NEW GRAVITY SEWER.
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17. RESURFACE DISTURBED LANDSCAPE AND/OR HARDSCAPE FEATURES TO MATCH EXISTING CONDITIONS. SEE COT STD DWG 590 ON SHEET D02 FOR LANDSCAPE BACKFILL REQUIREMENTS OUTSIDE OF THE RIGHT-OF-WAY.
19. EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION
22. CONNECT TO EXISTING OVERFLOW PIPE AT ELEVATION 27.12

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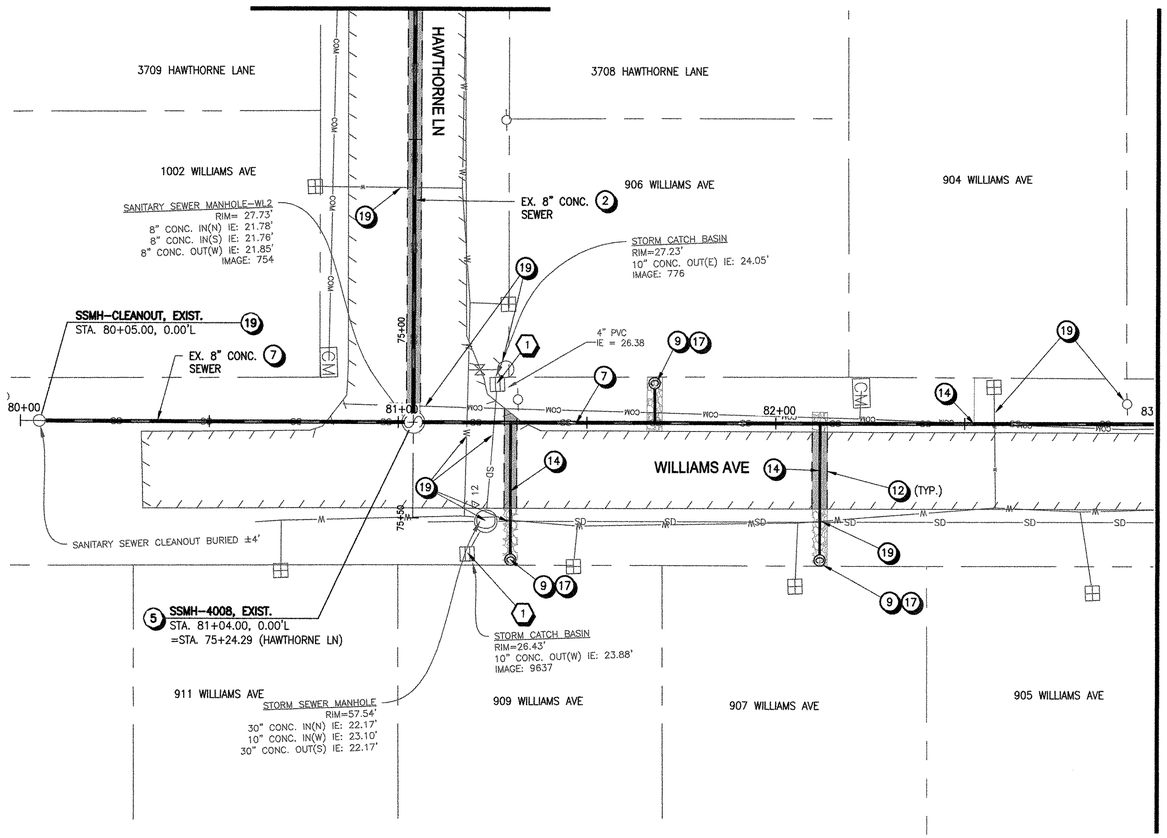

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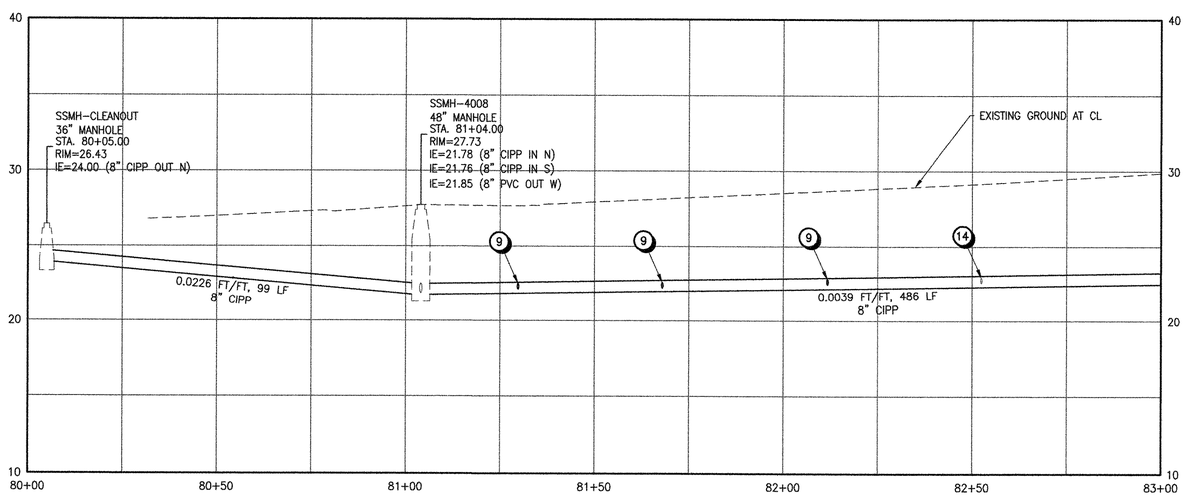

PROFILE

GENERAL NOTES

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2 LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1 INLET PROTECTION PER STD DWG RD1015 ON SHEET D04

2 SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

2 REMOVE EXISTING CONCRETE PIPE AND REPLACE WITH GRAVITY SEWER BY OPEN CUT CONSTRUCTION METHODS PER COT STD DWG 590 ON SHEET D02. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE

5 CONNECT PIPE TO EX. MANHOLE USING KOR-N-SEAL BOOT; VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION. CORE AND RECHANNEL EXIST MANHOLE BASE AS NECESSARY

7 REHABILITATE EXIST PIPE BY CIPP

9 INSTALL TEE, REMOVE EXISTING LATERAL AND REPLACE WITH 4" PVC PIPE FROM REHABILITATED SEWER MAIN TO RIGHT-OF-WAY LINE, PER COT STD DWGS 520 AND 590 ON SHEET D02. INSTALL SANITARY SEWER CLEANOUT AT RIGHT-OF-WAY LINE PER DETAIL 500 ON SHEET D02 AND CONNECT TO EXIST LATERAL.

12 SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.

14 AFTER MAINLINE CIPP WORK IS ACCEPTED, RECONNECT SERVICE LINE AND INSTALL CURED-IN-PLACE LATERAL LINER ASSEMBLY. LINER ASSEMBLY SHALL EXTEND 3FT MIN. INTO LATERAL. EXISTING LATERAL SIZE AND MATERIAL TYPE SHALL BE VERIFIED BY VIDEO INSPECTION PRIOR TO CIPP WORK.

17 RESURFACE DISTURBED LANDSCAPE AND/OR HARDSCAPE FEATURES TO MATCH EXISTING CONDITIONS. SEE COT STD DWG 590 ON SHEET D02 FOR LANDSCAPE BACKFILL REQUIREMENTS OUTSIDE OF THE RIGHT-OF-WAY.

19 EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

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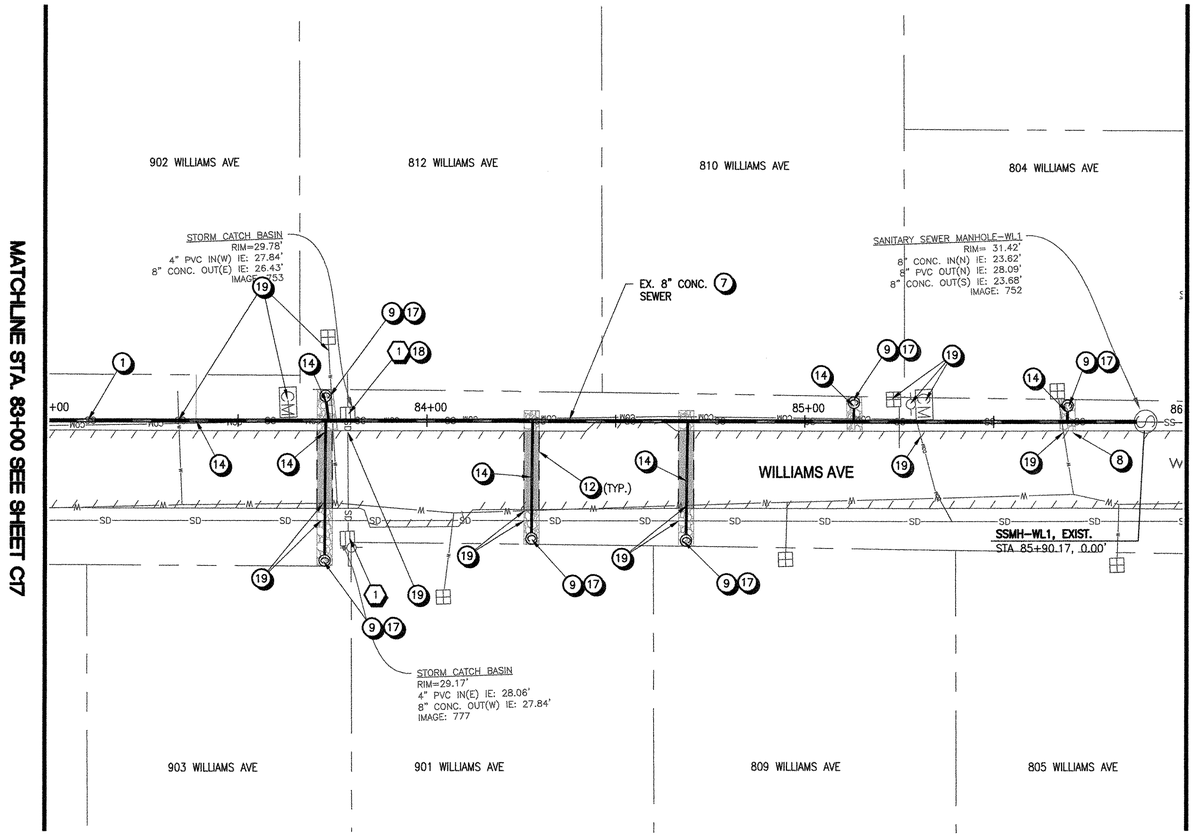

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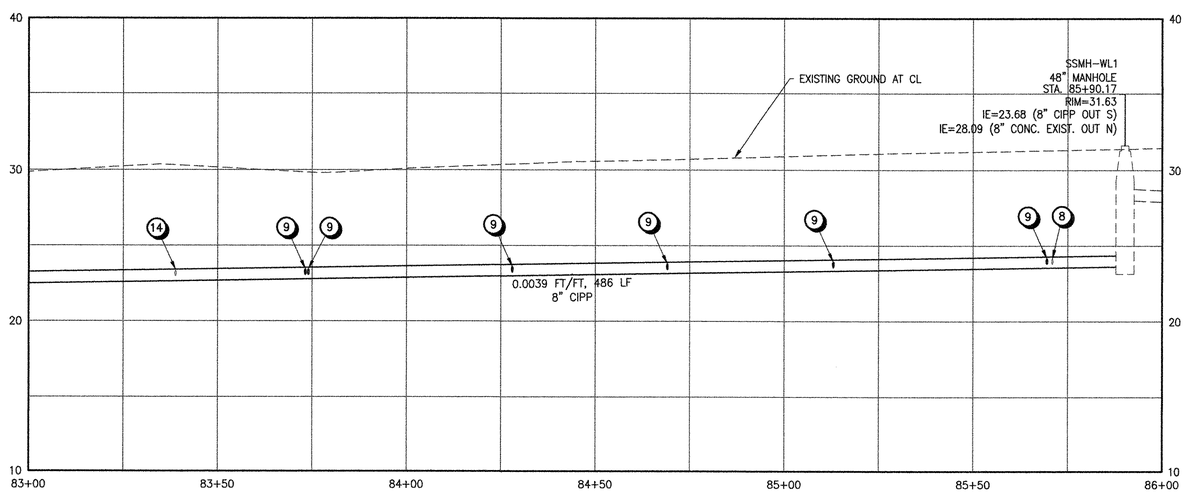

PROFILE

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EROSION CONTROL NOTES

1 INLET PROTECTION PER STD DWG RD1015 ON SHEET D04

2 SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

1 INSTALL SEWER MANHOLE PER COT STD DWG 010 ON SHEET D01

5 CONNECT PIPE TO EX. MANHOLE USING KOR-N-SEAL BOOT; VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION. CORE AND RECHANNEL EXIST MANHOLE BASE AS NECESSARY

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18 EXISTING STRUCTURE TO REMAIN. CONTRACTOR TO REMOVE, PROTECT, AND REPLACE STRUCTURE AS REQUIRED FOR INSTALLATION OF SANITARY SEWER IMPROVEMENTS

19 EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

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TIM B. KRAFT

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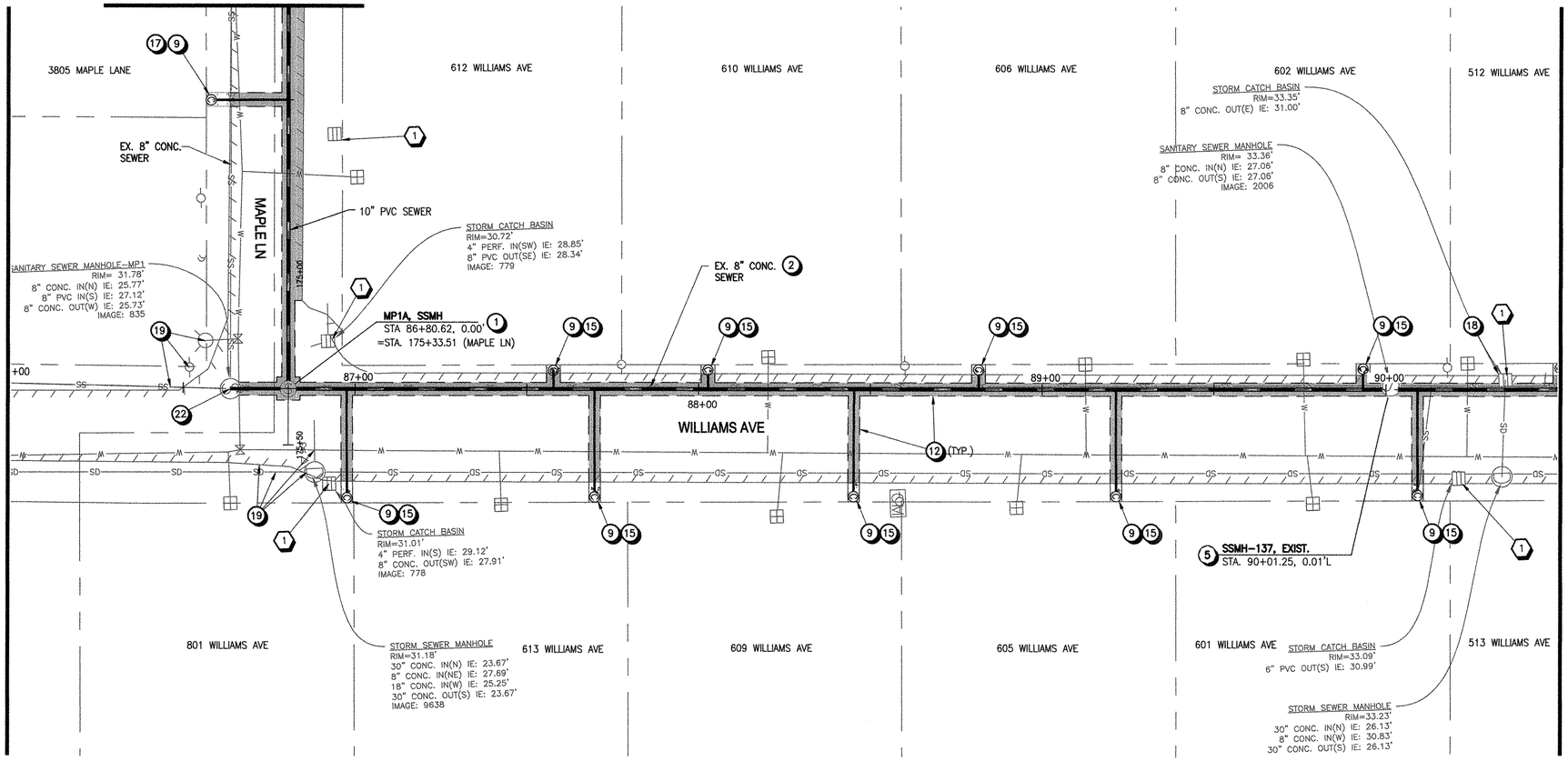

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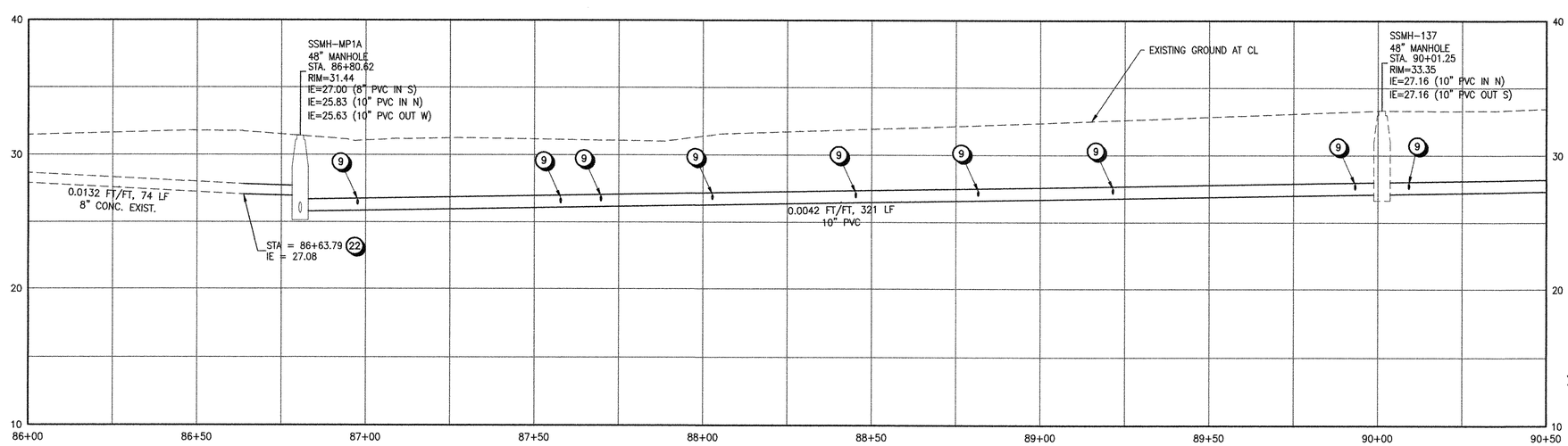

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GENERAL NOTES

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10 INSTALL TEE AND CONNECT EX. SEWER LATERAL TO REHABILITATED SEWER MAIN PER COT STD DWG 520 ON SHEET D02.

12 SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.

15 REMOVE AND REPLACE EXISTING CURB AND SIDEWALK PER COT STD DWG 2110-ST ON SHEET D03, LIMITS PER PLAN

18 EXISTING STRUCTURE TO REMAIN. CONTRACTOR TO REMOVE, PROTECT, AND REPLACE STRUCTURE AS REQUIRED FOR INSTALLATION OF SANITARY SEWER IMPROVEMENTS

19 EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

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REGISTERED PROFESSIONAL ENGINEER 70947PE OREGON MAR 12, 2002 TIM B. KRAFT
9-3-15
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CITY OF TILLAMOOK
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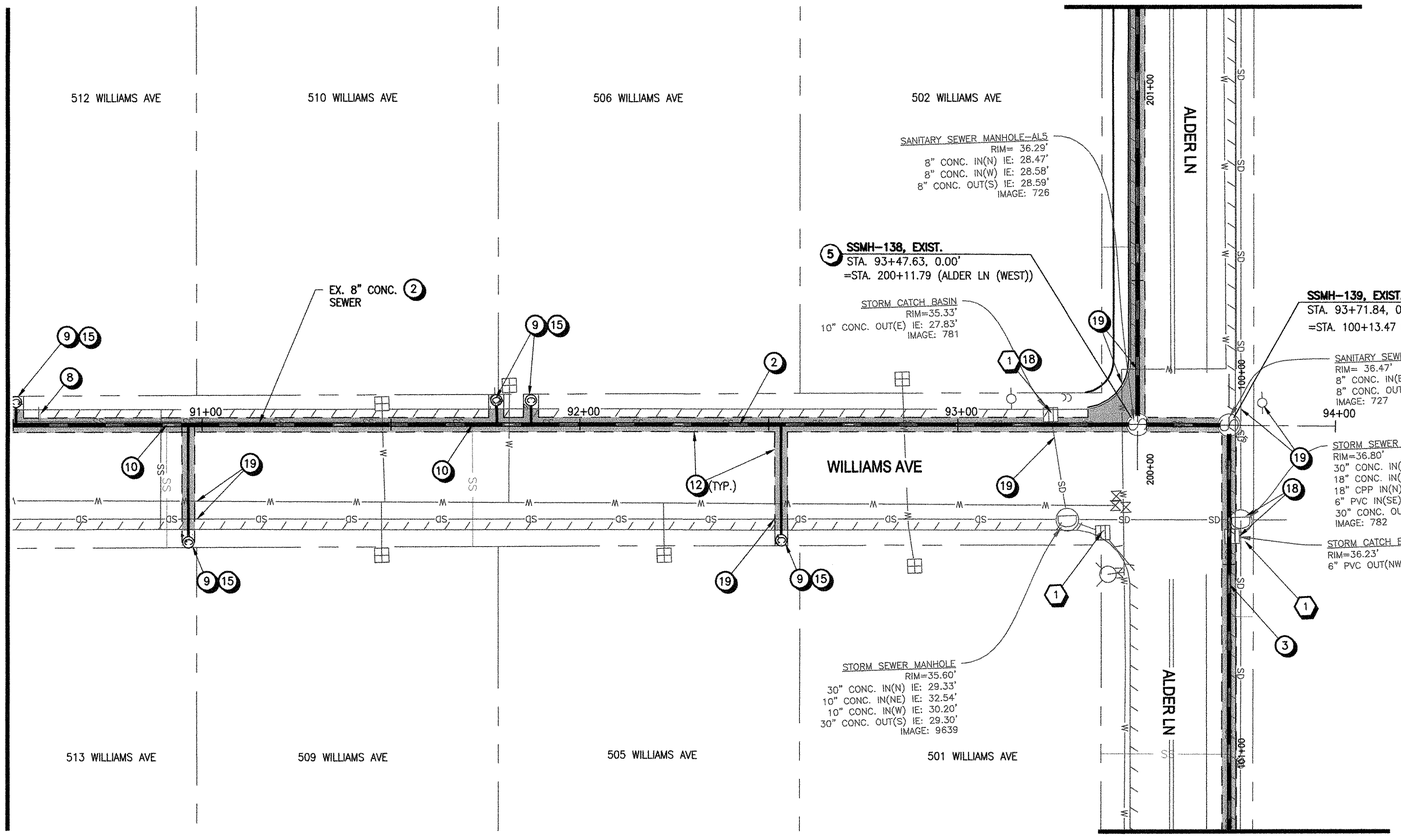

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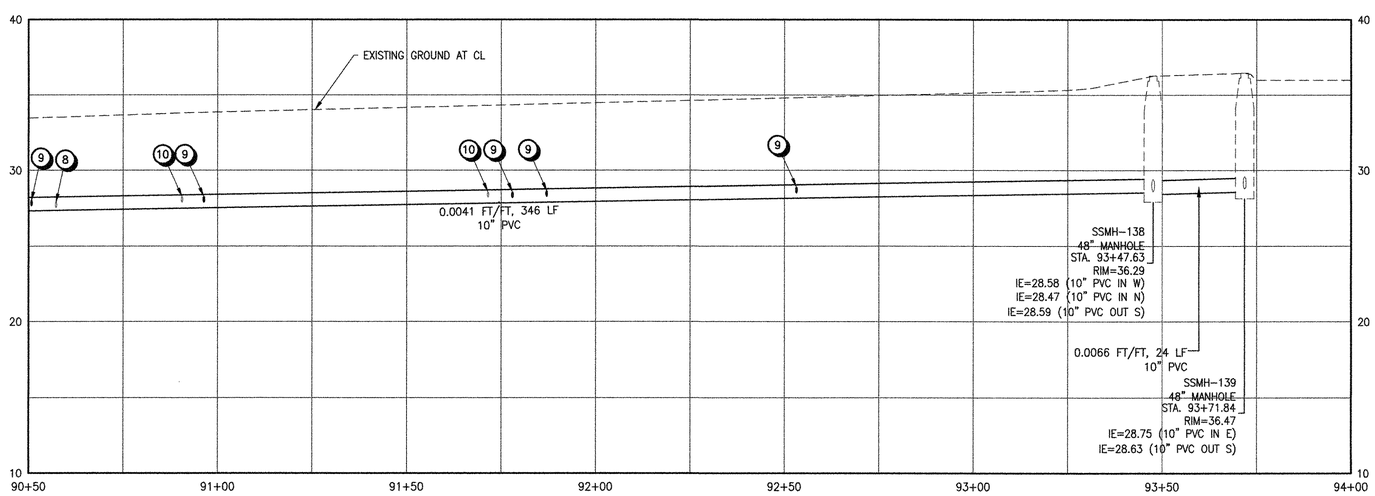

PROFILE

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1 SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL

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3 EXISTING PIPE TO BE REPLACED BY PIPE BURSTING. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE

5 CONNECT PIPE TO EX. MANHOLE USING KOR-N-SEAL BOOT; VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION. CORE AND RECHANNEL EXIST MANHOLE BASE AS NECESSARY

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12 SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.

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MAR 12, 2008
TIM B. KRAFT
EXPIRES: 06/30/2017

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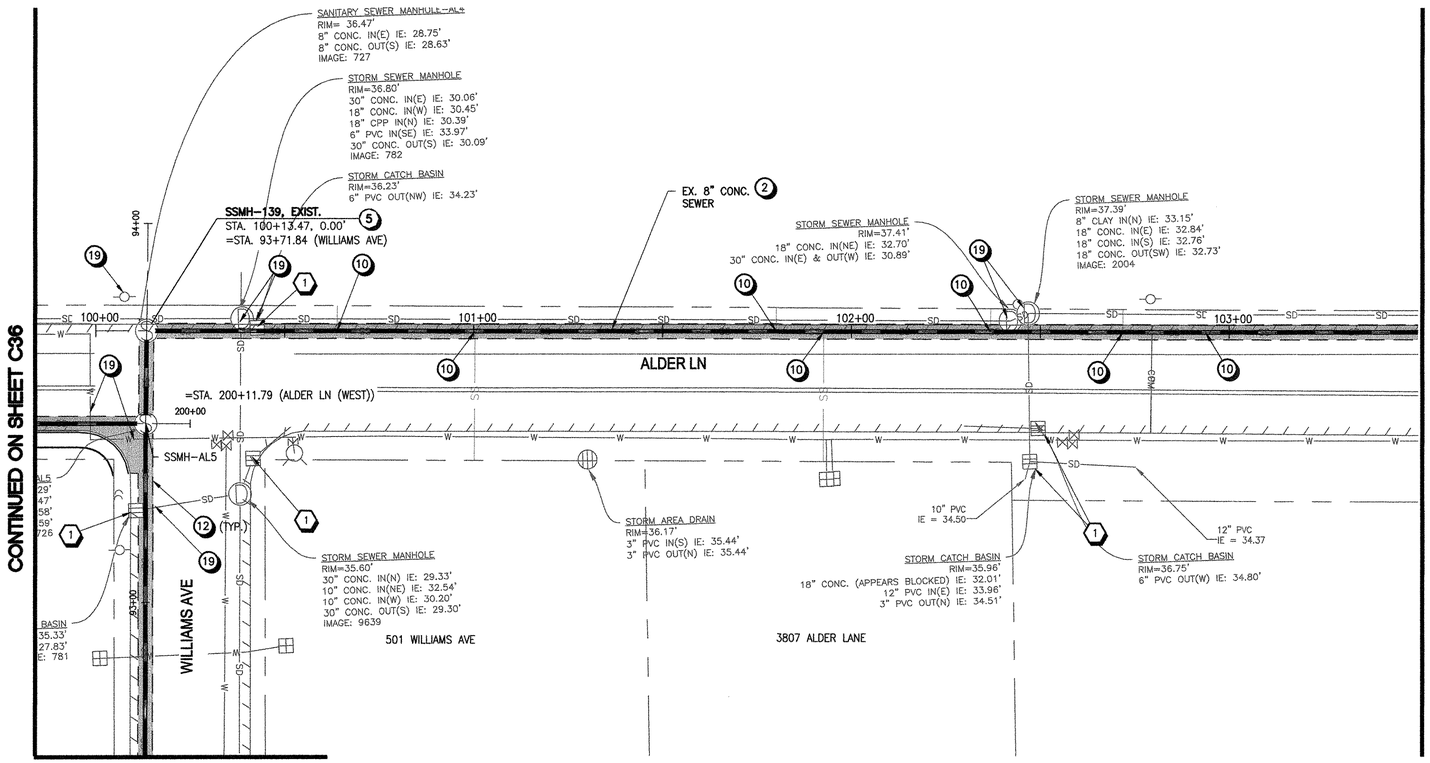

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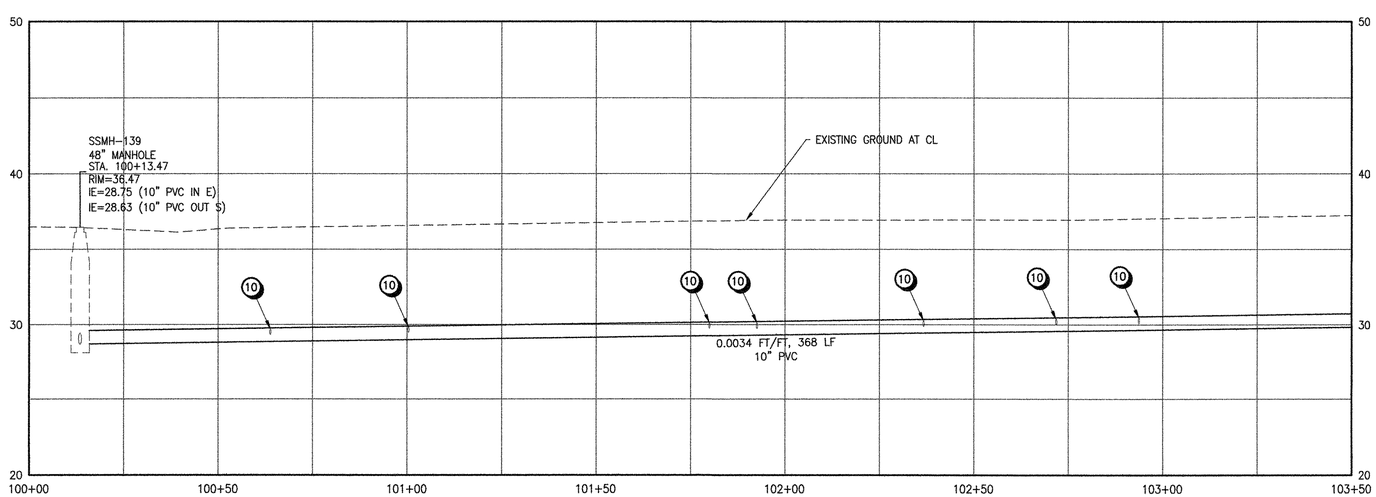
PLAN



PROFILE

GENERAL NOTES

1 SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL

2 LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1 INLET PROTECTION PER STD DWG RD1015 ON SHEET D04

2 SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

2 REMOVE EXISTING CONCRETE PIPE AND REPLACE WITH GRAVITY SEWER BY OPEN CUT CONSTRUCTION METHODS PER COT STD DWG 590 ON SHEET D02. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE

5 CONNECT PIPE TO EX. MANHOLE USING KOR-N-SEAL BOOT; VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION. CORE AND RECHANNEL EXIST MANHOLE BASE AS NECESSARY

10 INSTALL TEE AND CONNECT EX. SEWER LATERAL TO REHABILITATED SEWER MAIN PER COT STD DWG 520 ON SHEET D02.

12 SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.

19 EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

NO.	DATE	BY	Checked & Approved	REVISIONS

REGISTERED PROFESSIONAL ENGINEER 70947PE OREGON MAR 12, 2008 TIM B. KRAFT

EXPIRES: 06/30/2017

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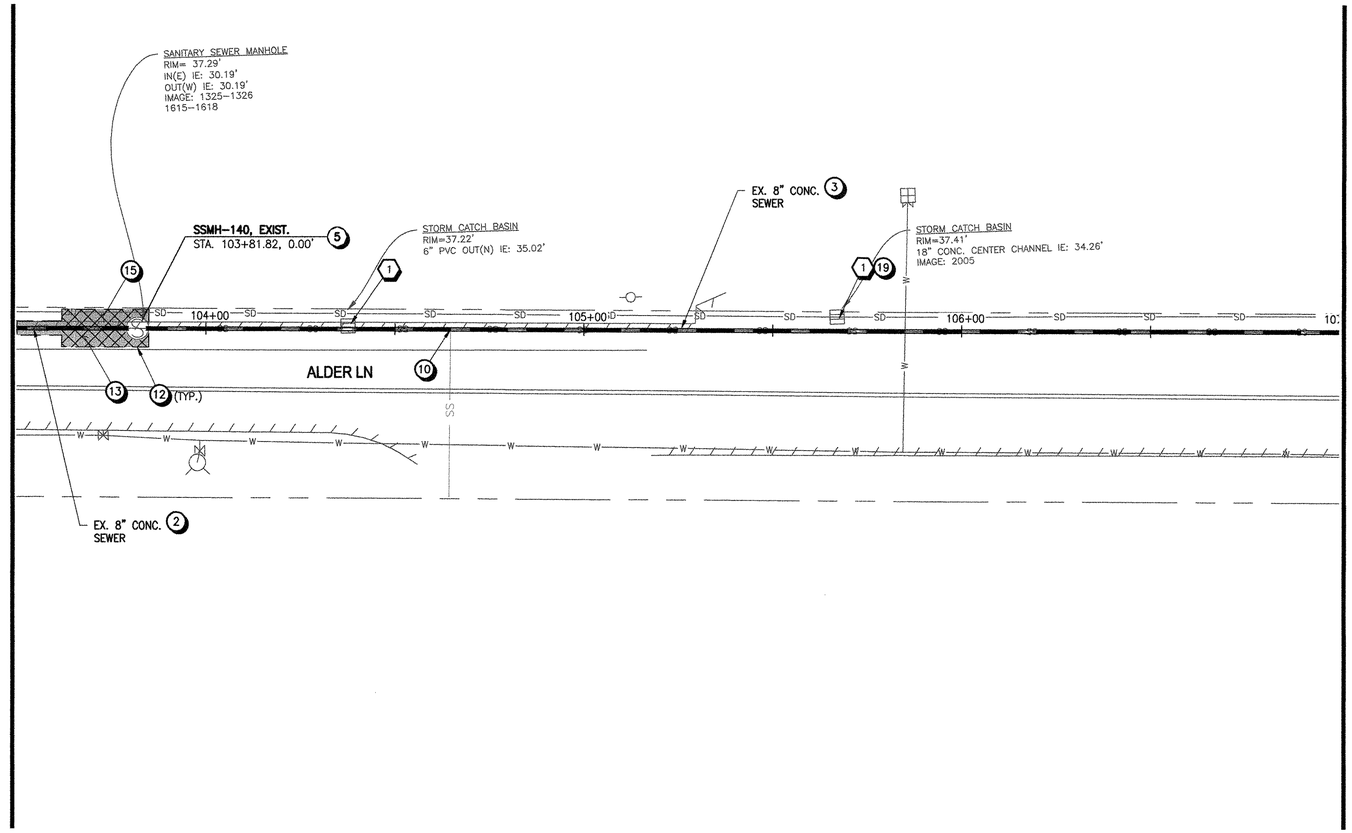

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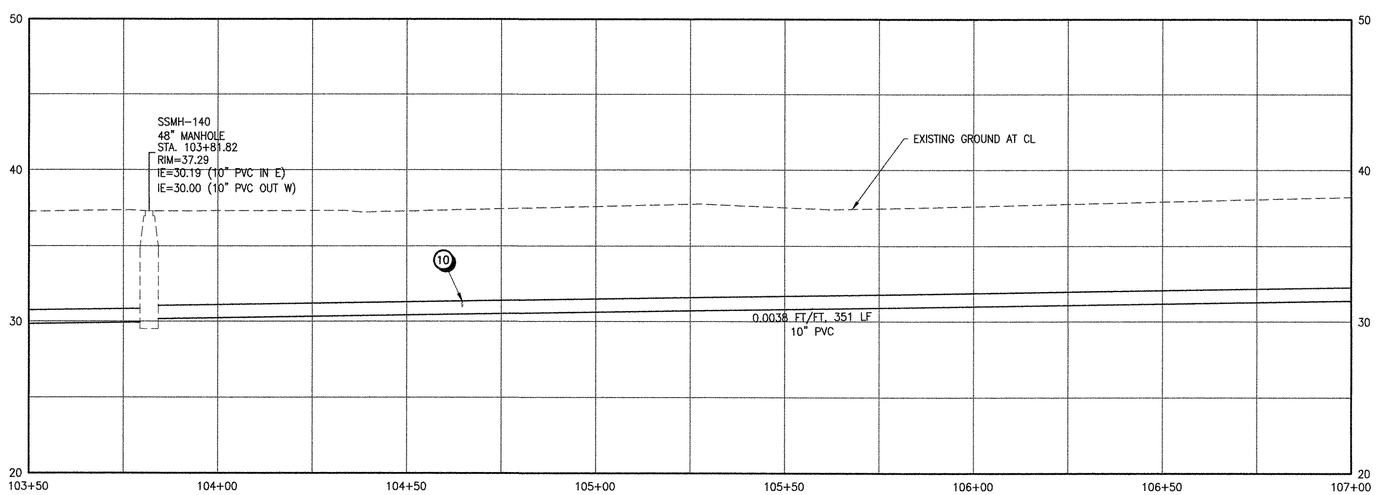

PROFILE

GENERAL NOTES

1 SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL

2 LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1 INLET PROTECTION PER STD DWG RD1015 ON SHEET D04

2 SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

2 REMOVE EXISTING CONCRETE PIPE AND REPLACE WITH GRAVITY SEWER BY OPEN CUT CONSTRUCTION METHODS PER COT STD DWG 590 ON SHEET D02. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE

3 EXISTING PIPE TO BE REPLACED BY PIPE BURSTING. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE

5 CONNECT PIPE TO EX. MANHOLE USING KOR-N-SEAL BOOT; VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION. CORE AND RECHANNEL EXIST MANHOLE BASE AS NECESSARY

10 INSTALL TEE AND CONNECT EX. SEWER LATERAL TO REHABILITATED SEWER MAIN PER COT STD DWG 520 ON SHEET D02.

12 SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.

13 ANTICIPATED LOCATION OF PIPE BURST PIT. CONTRACTOR TO FIELD VERITY. SAWCUT REQUIRED FOR PITS LOCATED IN PAVEMENT AREAS. BACKFILL MATERIAL AND COMPACTION REQUIREMENTS PER COT STD DWG 590. RESURFACING TO MATCH EXISTING CONDITIONS UNLESS OTHERWISE SPECIFIED.

15 REMOVE AND REPLACE EXISTING CURB AND SIDEWALK PER COT STD DWG 2110-ST ON SHEET D03, LIMITS PER PLAN

19 EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

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REGISTERED PROFESSIONAL ENGINEER 70947PE OREGON MAR 12, 2013 TIM B. KRAFT

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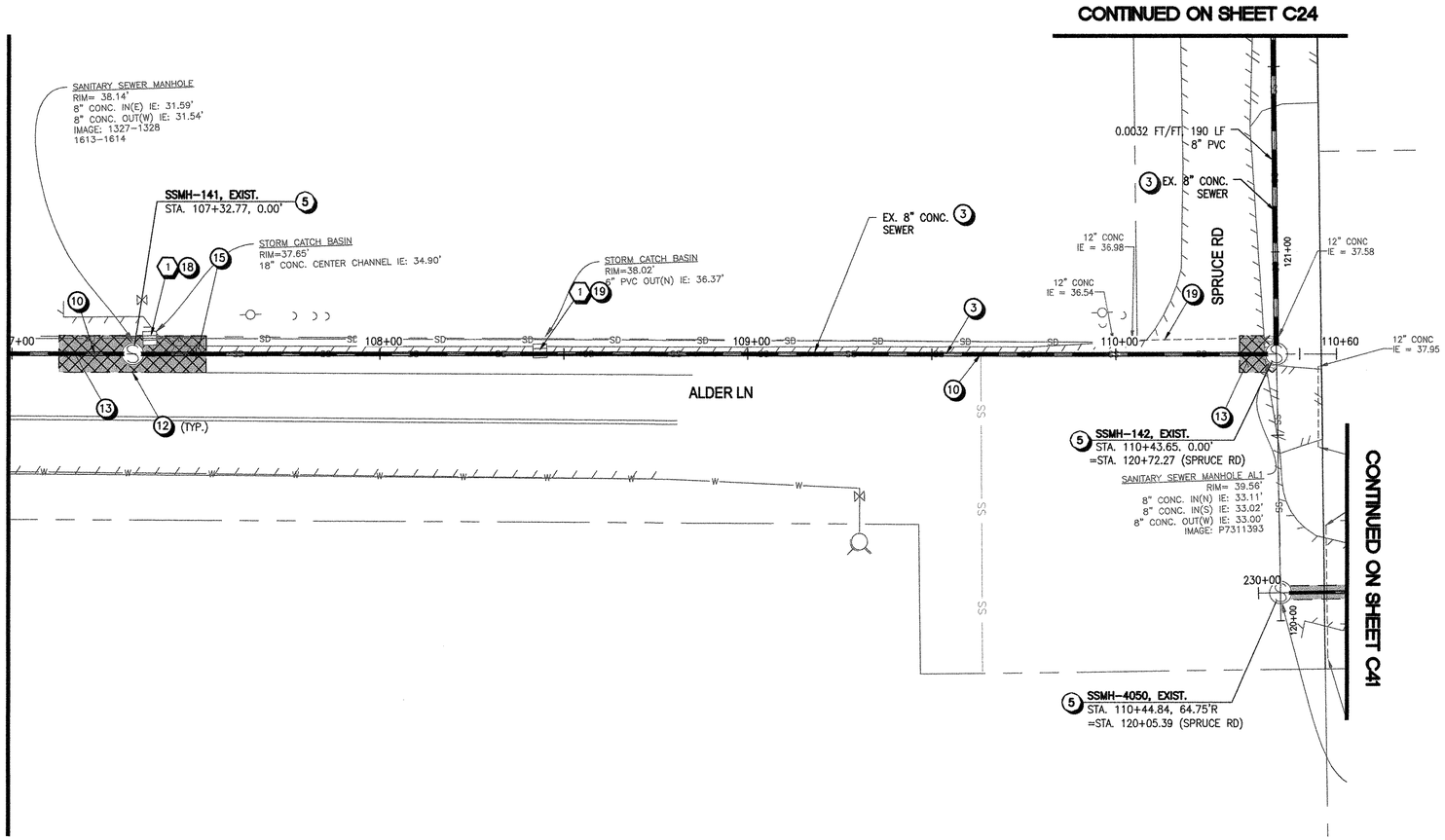

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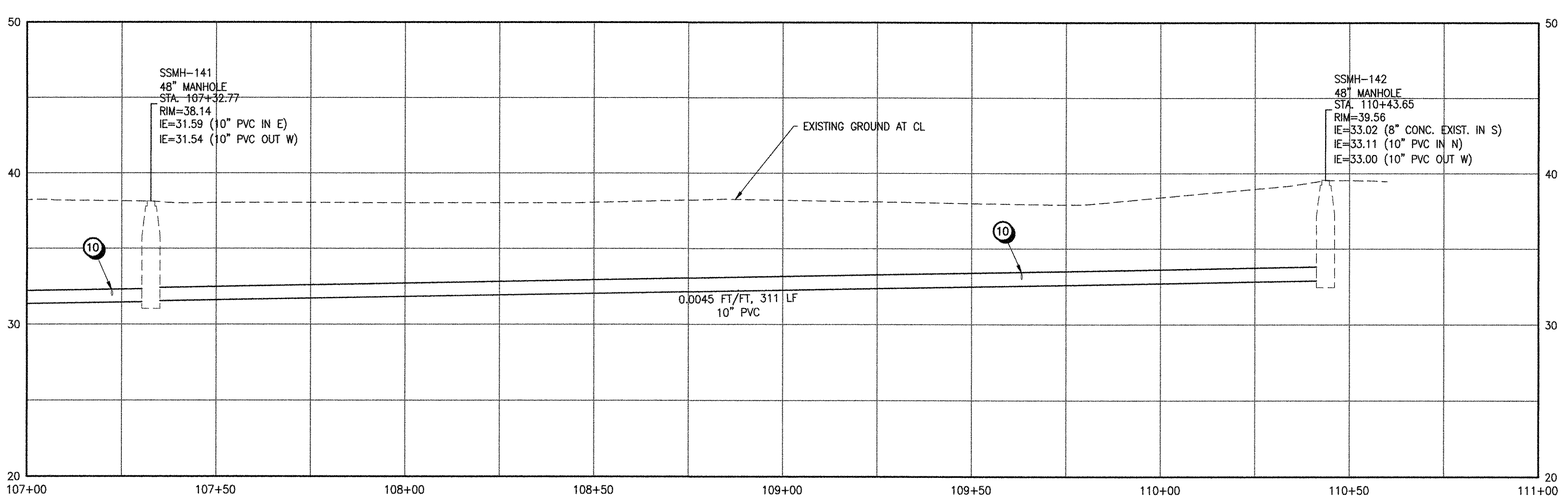

PROFILE

GENERAL NOTES

1. SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL
2. LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1. INLET PROTECTION PER STD DWG RD1015 ON SHEET D04
2. SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

3. EXISTING PIPE TO BE REPLACED BY PIPE BURSTING. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE
5. CONNECT PIPE TO EX. MANHOLE USING KOR-N-SEAL BOOT; VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION. CORE AND RECHANNEL EXIST MANHOLE BASE AS NECESSARY
10. INSTALL TEE AND CONNECT EX. SEWER LATERAL TO REHABILITATED SEWER MAIN PER COT STD DWG 520 ON SHEET D02.
12. SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.
13. ANTICIPATED LOCATION OF PIPE BURST PIT. CONTRACTOR TO FIELD VERITY. SAWCUT REQUIRED FOR PITS LOCATED IN PAVEMENT AREAS. BACKFILL MATERIAL AND COMPACTION REQUIREMENTS PER COT STD DWG 590. RESURFACING TO MATCH EXISTING CONDITIONS UNLESS OTHERWISE SPECIFIED.
15. REMOVE AND REPLACE EXISTING CURB AND SIDEWALK PER COT STD DWG 2110-ST ON SHEET D03, LIMITS PER PLAN
18. EXISTING STRUCTURE TO REMAIN. CONTRACTOR TO REMOVE, PROTECT, AND REPLACE STRUCTURE AS REQUIRED FOR INSTALLATION OF SANITARY SEWER IMPROVEMENTS
19. EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

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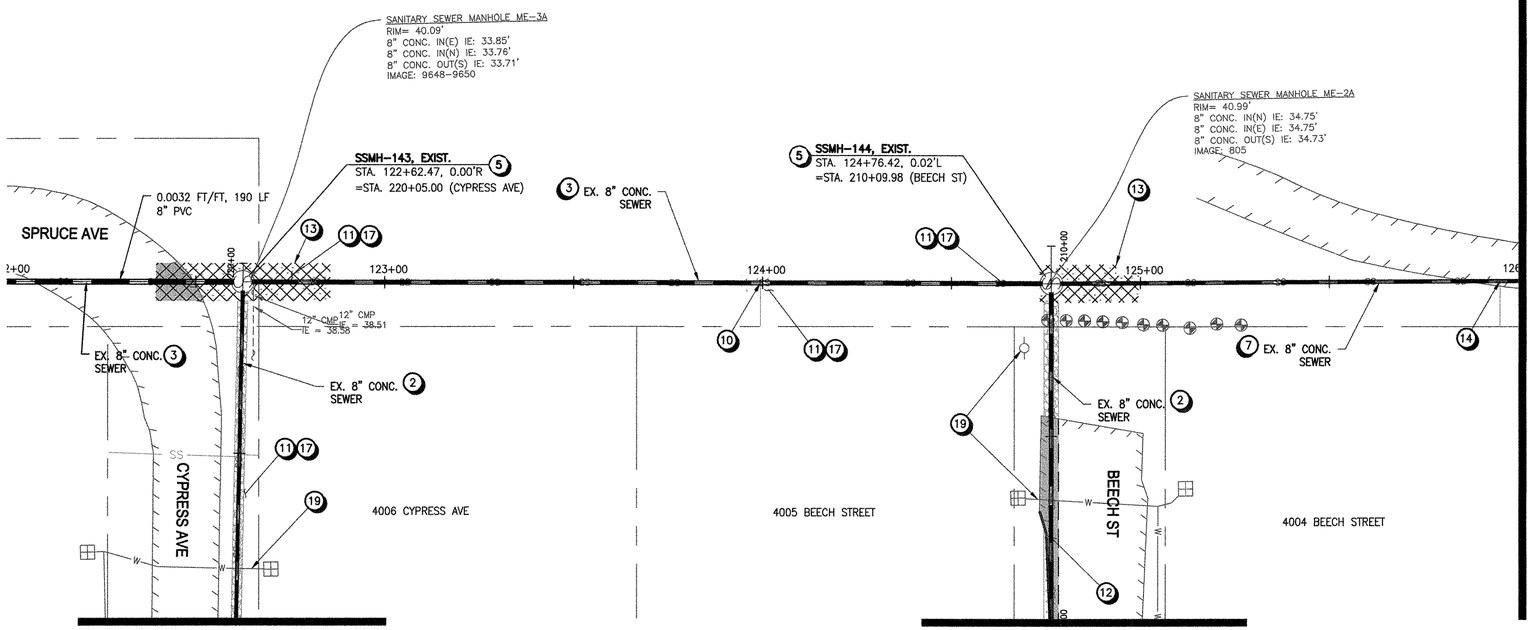

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PLAN

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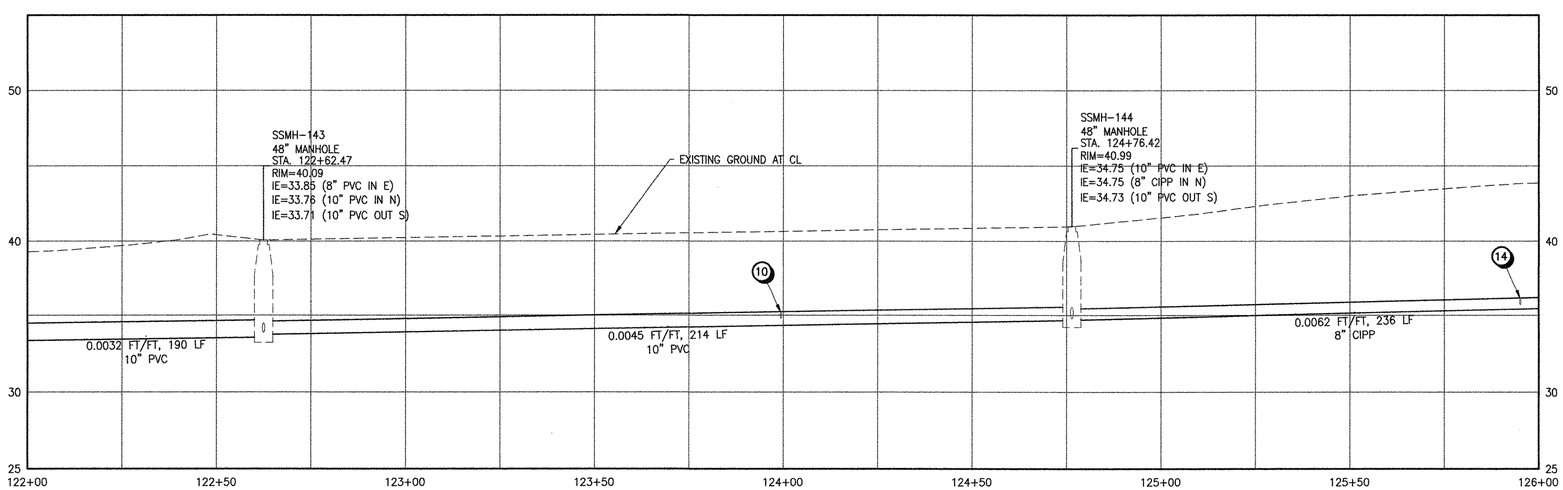

PROFILE

GENERAL NOTES

1 SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL

2 LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1 INLET PROTECTION PER STD DWG RD1015 ON SHEET D04

2 SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

2 REMOVE EXISTING CONCRETE PIPE AND REPLACE WITH GRAVITY SEWER BY OPEN CUT CONSTRUCTION METHODS PER COT STD DWG 590 ON SHEET D02. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE

3 EXISTING PIPE TO BE REPLACED BY PIPE BURSTING. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE

5 CONNECT PIPE TO EX. MANHOLE USING KOR-N-SEAL BOOT; VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION. CORE AND RECHANNEL EXIST MANHOLE BASE AS NECESSARY

7 REHABILITATE EXIST PIPE BY CIPP

10 INSTALL TEE AND CONNECT EX. SEWER LATERAL TO REHABILITATED SEWER MAIN PER COT STD DWG 520 ON SHEET D02.

11 CONSTRUCT NEW GRAVITY SEWER BY OPEN CUT CONSTRUCTION METHODS PER COT STD DWG 590 ON SHEET D02. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE.

12 SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.

13 ANTICIPATED LOCATION OF PIPE BURST PIT. CONTRACTOR TO FIELD VERITY. SAWCUT REQUIRED FOR PITS LOCATED IN PAVEMENT AREAS. BACKFILL MATERIAL AND COMPACTION REQUIREMENTS PER COT STD DWG 590. RESURFACING TO MATCH EXISTING CONDITIONS UNLESS OTHERWISE SPECIFIED.

14 AFTER MAINLINE CIPP WORK IS ACCEPTED, RECONNECT SERVICE LINE AND INSTALL CURED-IN-PLACE LATERAL LINER ASSEMBLY. LINER ASSEMBLY SHALL EXTEND 3FT MIN. INTO LATERAL. EXISTING LATERAL SIZE AND MATERIAL TYPE SHALL BE VERIFIED BY VIDEO INSPECTION PRIOR TO CIPP WORK.

17 RESURFACE DISTURBED LANDSCAPE AND/OR HARDSCAPE FEATURES TO MATCH EXISTING CONDITIONS. SEE COT STD DWG 590 ON SHEET D02 FOR LANDSCAPE BACKFILL REQUIREMENTS OUTSIDE OF THE RIGHT-OF-WAY.

19 EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

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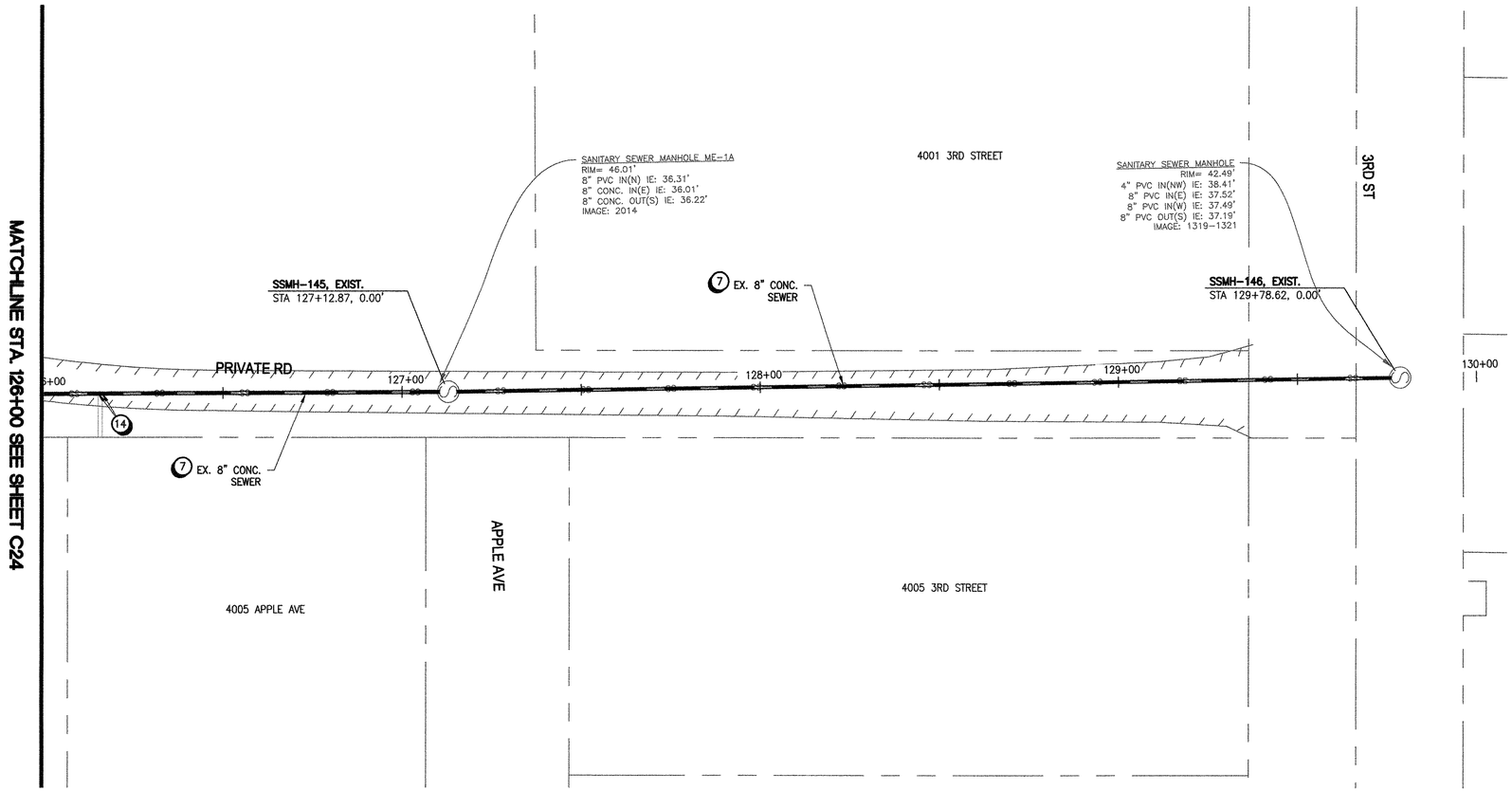

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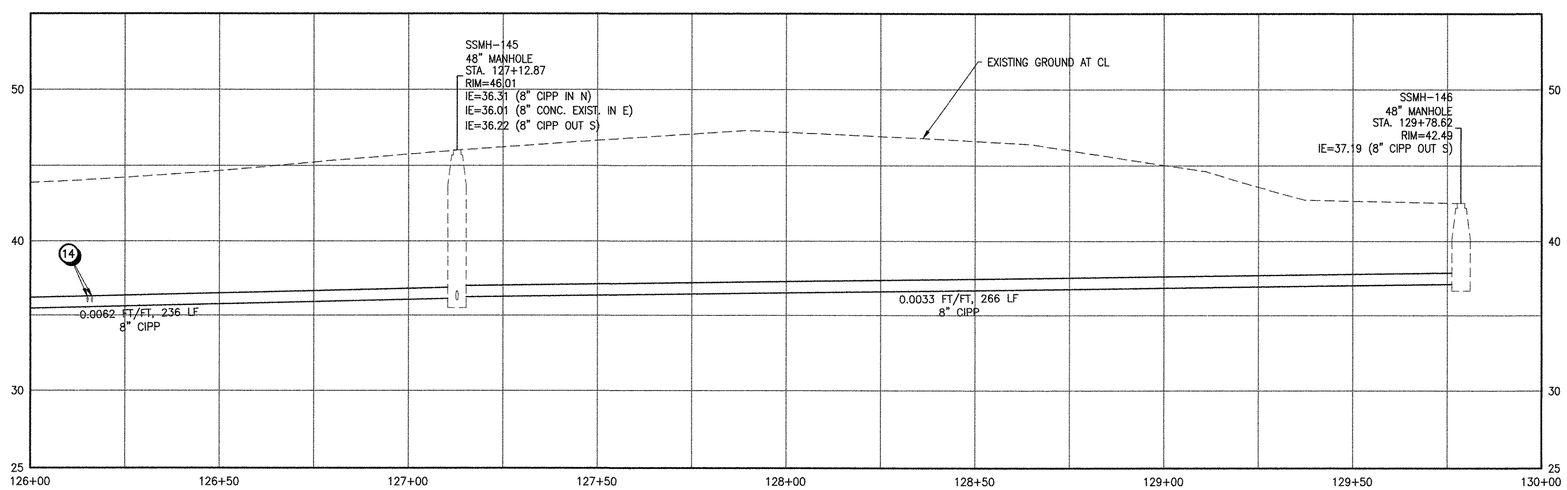

PROFILE

GENERAL NOTES

1. SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL
2. LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1. INLET PROTECTION PER STD DWG RD1015 ON SHEET D04
2. SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

7. REHABILITATE EXIST PIPE BY CIPP
14. AFTER MAINLINE CIPP WORK IS ACCEPTED, RECONNECT SERVICE LINE AND INSTALL CURED-IN-PLACE LATERAL LINER ASSEMBLY. LINER ASSEMBLY SHALL EXTEND 3FT MIN. INTO LATERAL. EXISTING LATERAL SIZE AND MATERIAL TYPE SHALL BE VERIFIED BY VIDEO INSPECTION PRIOR TO CIPP WORK.

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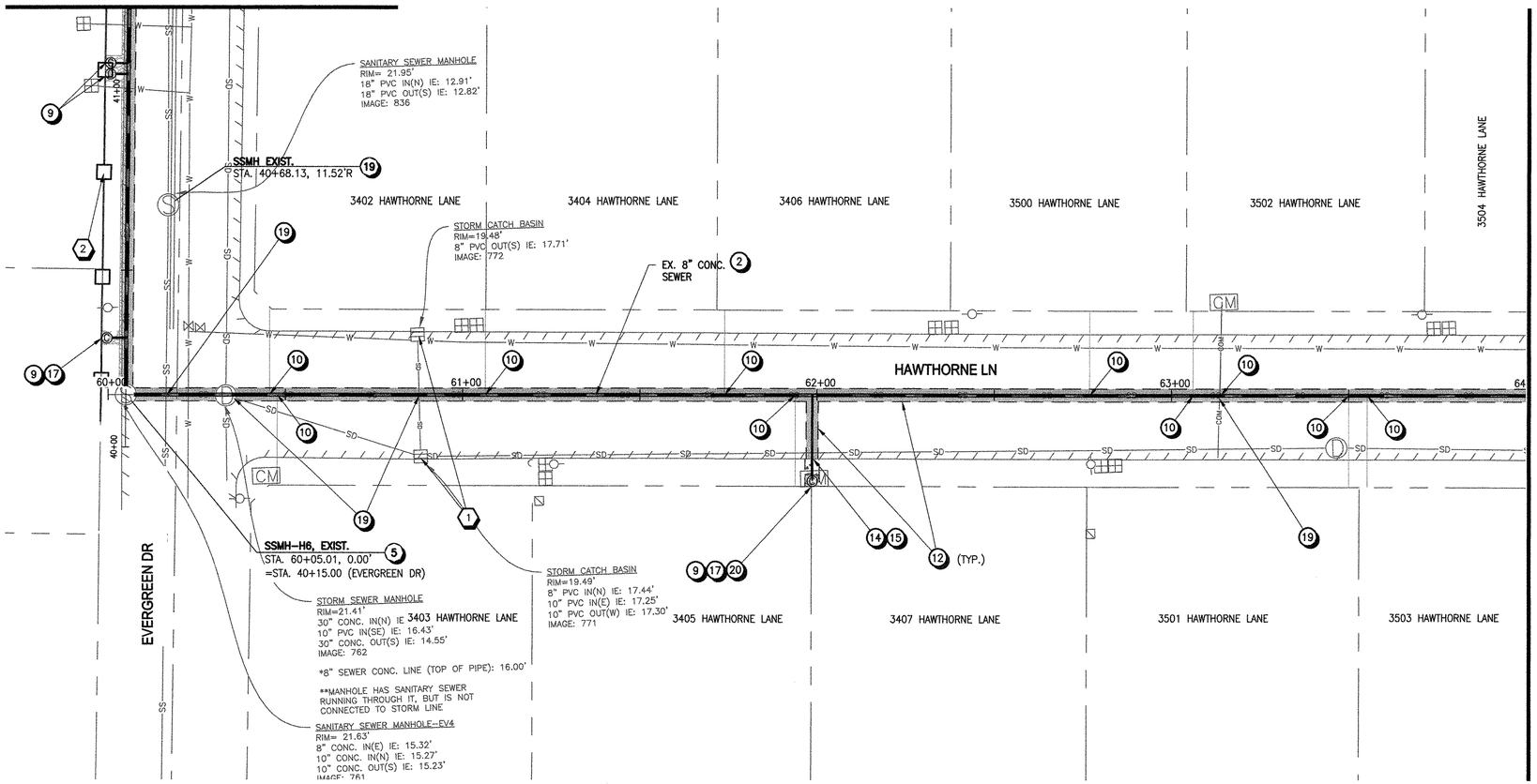

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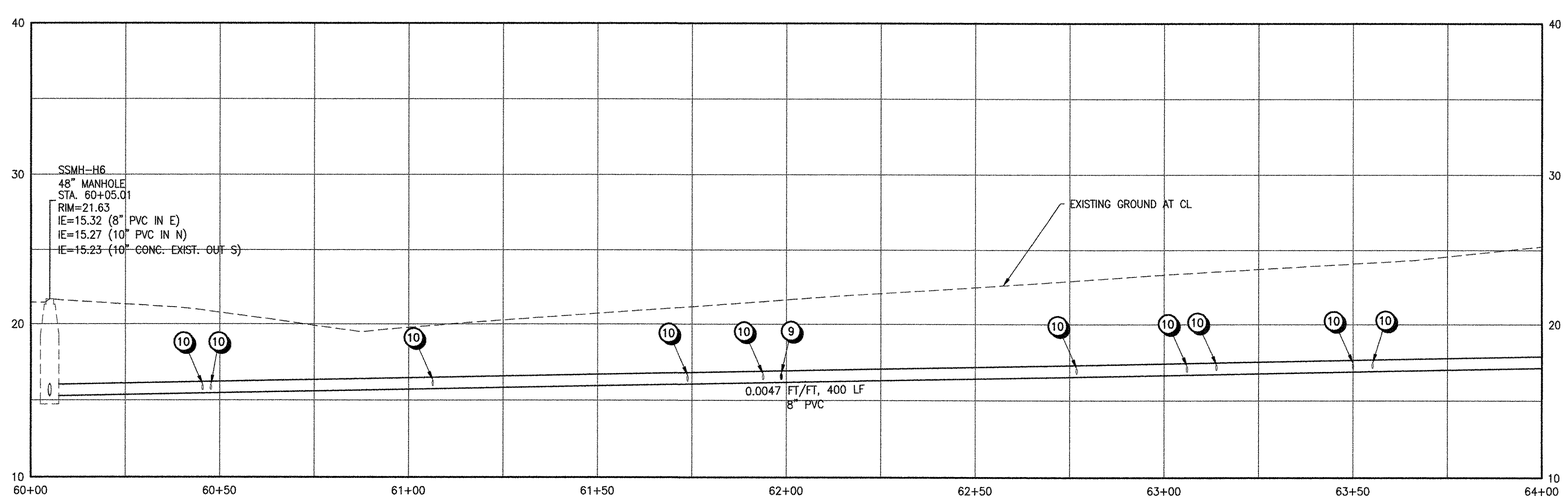

PROFILE

GENERAL NOTES

1. SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL
2. LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1. INLET PROTECTION PER STD DWG RD1015 ON SHEET D04
2. SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

5. CONNECT PIPE TO EX. MANHOLE USING KOR-N-SEAL BOOT; VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION. CORE AND RECHANNEL EXIST MANHOLE BASE AS NECESSARY
9. INSTALL TEE, REMOVE EXISTING LATERAL AND REPLACE WITH 4" PVC PIPE FROM REHABILITATED SEWER MAIN TO RIGHT-OF-WAY LINE, PER COT STD DWGS 520 AND 590 ON SHEET D02. INSTALL SANITARY SEWER CLEANOUT AT RIGHT-OF-WAY LINE PER DETAIL 500 ON SHEET D02 AND CONNECT TO EXIST LATERAL.
10. INSTALL TEE AND CONNECT EX. SEWER LATERAL TO REHABILITATED SEWER MAIN PER COT STD DWG 520 ON SHEET D02.
12. SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.
14. AFTER MAINLINE CIPP WORK IS ACCEPTED, RECONNECT SERVICE LINE AND INSTALL CURED-IN-PLACE LATERAL LINER ASSEMBLY. LINER ASSEMBLY SHALL EXTEND 3FT MIN. INTO LATERAL. EXISTING LATERAL SIZE AND MATERIAL TYPE SHALL BE VERIFIED BY VIDEO INSPECTION PRIOR TO CIPP WORK.
15. REMOVE AND REPLACE EXISTING CURB AND SIDEWALK PER COT STD DWG 2110-ST ON SHEET D03, LIMITS PER PLAN
17. RESURFACE DISTURBED LANDSCAPE AND/OR HARDSCAPE FEATURES TO MATCH EXISTING CONDITIONS. SEE COT STD DWG 590 ON SHEET D02 FOR LANDSCAPE BACKFILL REQUIREMENTS OUTSIDE OF THE RIGHT-OF-WAY.
19. EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION
20. INSTALL BACKWATER VALVE UPSTREAM OF SANITARY SEWER CLEANOUT

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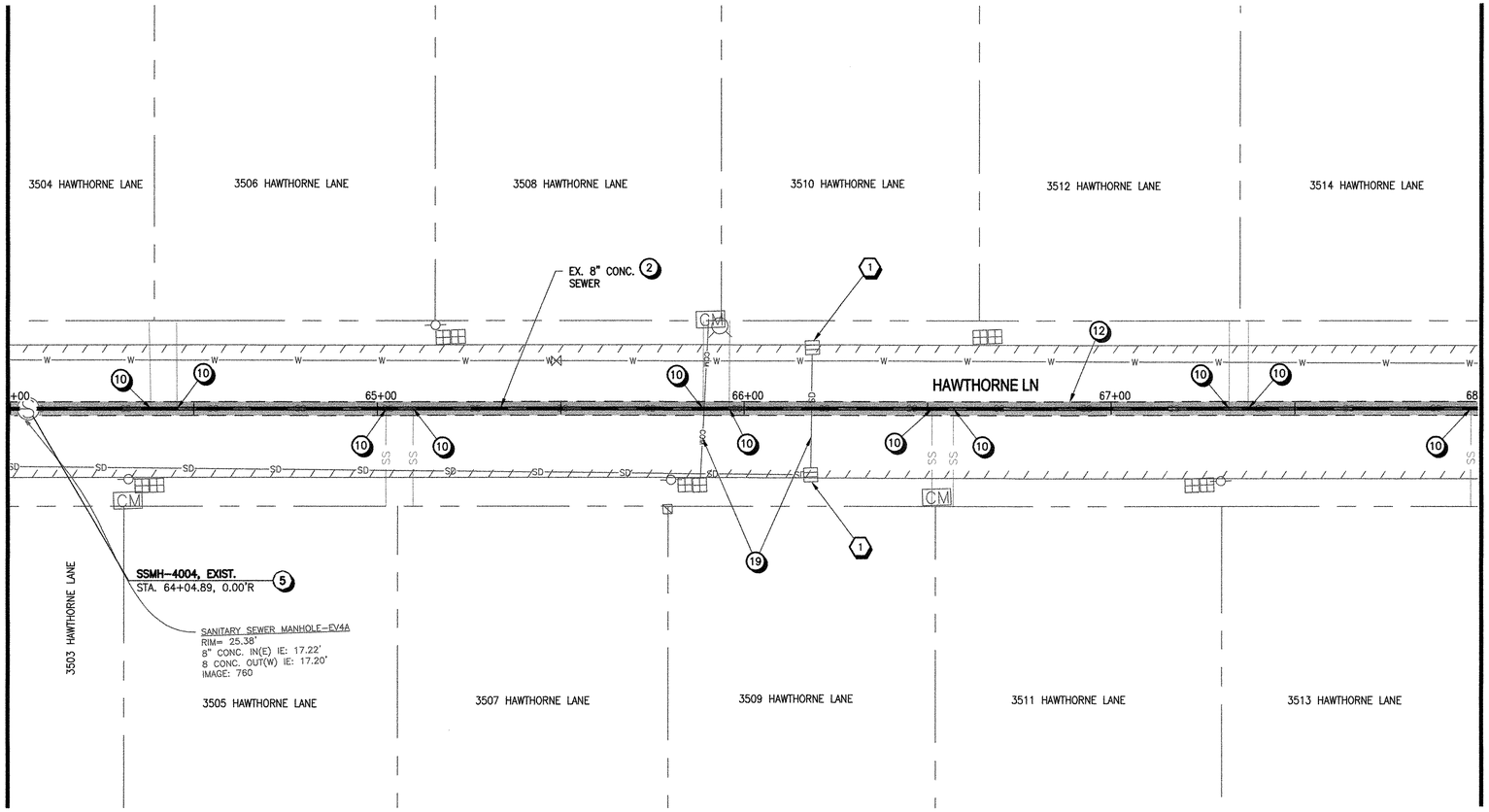

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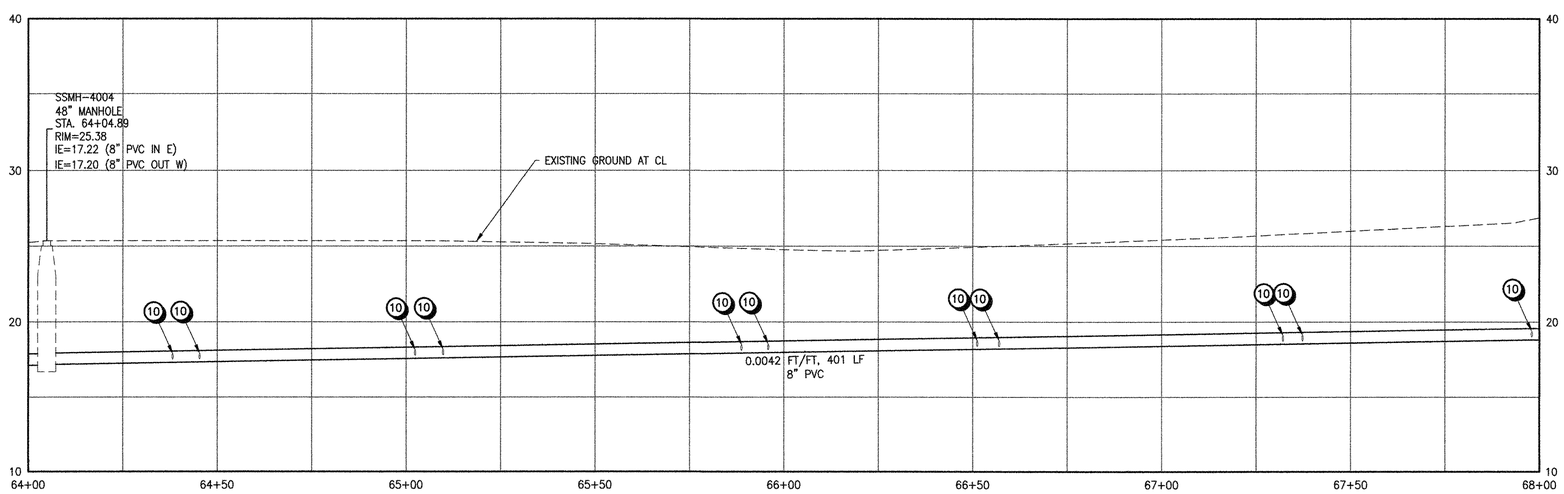

PROFILE

GENERAL NOTES

1. SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL
2. LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1. INLET PROTECTION PER STD DWG RD1015 ON SHEET D04
2. SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

2. REMOVE EXISTING CONCRETE PIPE AND REPLACE WITH GRAVITY SEWER BY OPEN CUT CONSTRUCTION METHODS PER COT STD DWG 590 ON SHEET D02. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE
5. CONNECT PIPE TO EX. MANHOLE USING KOR-N-SEAL BOOT; VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION. CORE AND RECHANNEL EXIST MANHOLE BASE AS NECESSARY
10. INSTALL TEE AND CONNECT EX. SEWER LATERAL TO REHABILITATED SEWER MAIN PER COT STD DWG 520 ON SHEET D02.
12. SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.
19. EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

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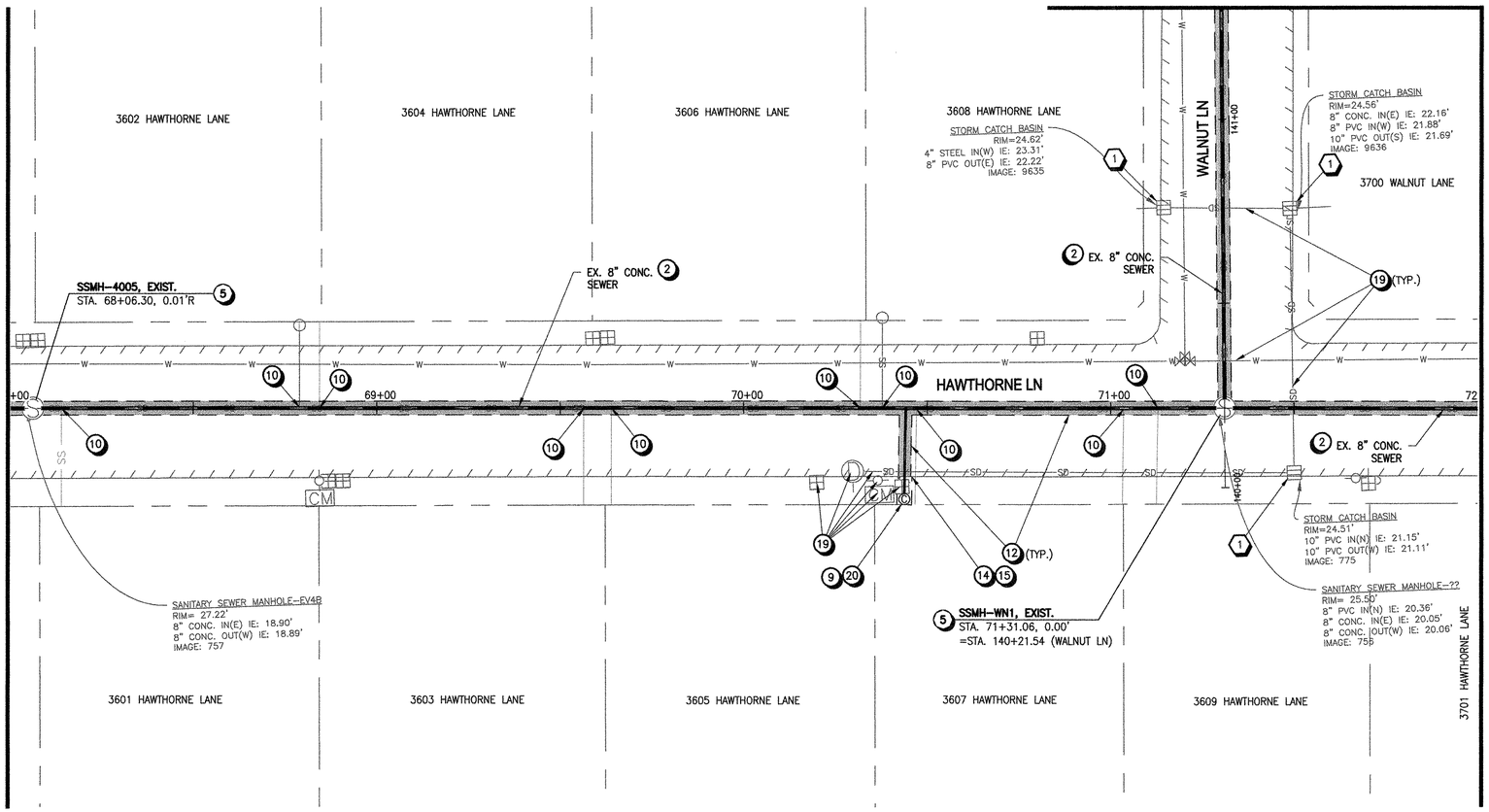

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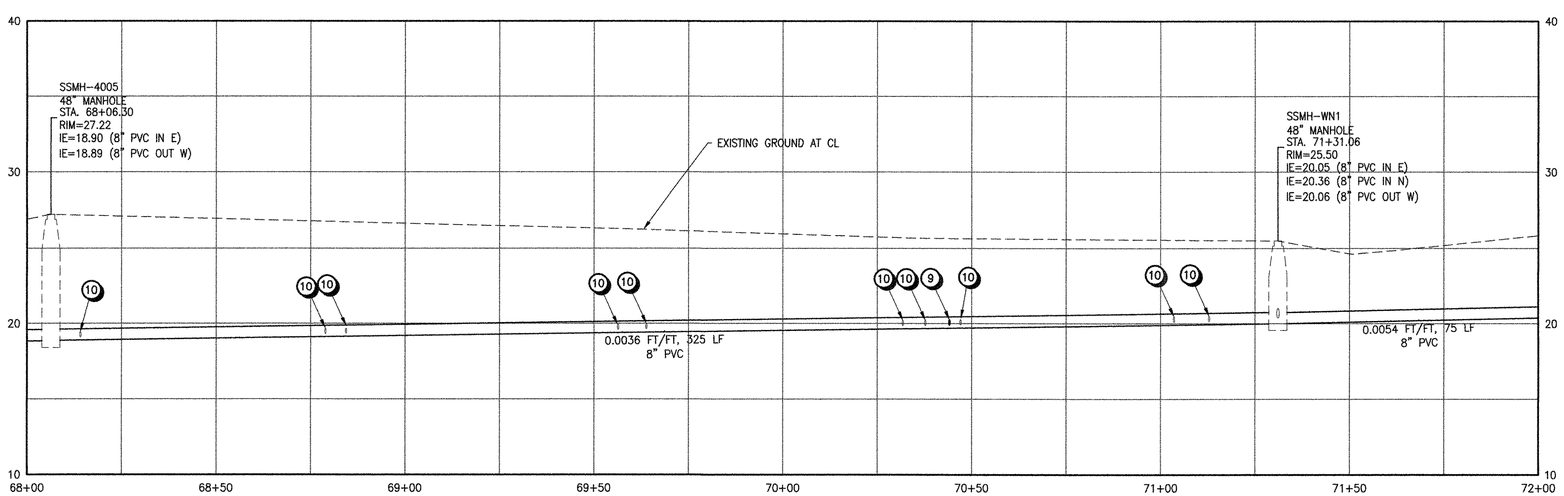

PROFILE

GENERAL NOTES

1 SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL

2 LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1 INLET PROTECTION PER STD DWG RD1015 ON SHEET D04

2 SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

2 REMOVE EXISTING CONCRETE PIPE AND REPLACE WITH GRAVITY SEWER BY OPEN CUT CONSTRUCTION METHODS PER COT STD DWG 590 ON SHEET D02. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE

5 CONNECT PIPE TO EX. MANHOLE USING KOR-N-SEAL BOOT; VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION. CORE AND RECHANNEL EXIST MANHOLE BASE AS NECESSARY

9 INSTALL TEE, REMOVE EXISTING LATERAL AND REPLACE WITH 4" PVC PIPE FROM REHABILITATED SEWER MAIN TO RIGHT-OF-WAY LINE, PER COT STD DWGS 520 AND 590 ON SHEET D02. INSTALL SANITARY SEWER CLEANOUT AT RIGHT-OF-WAY LINE PER DETAIL 500 ON SHEET D02 AND CONNECT TO EXIST LATERAL.

10 INSTALL TEE AND CONNECT EX. SEWER LATERAL TO REHABILITATED SEWER MAIN PER COT STD DWG 520 ON SHEET D02.

12 SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.

14 AFTER MAINLINE CIPP WORK IS ACCEPTED, RECONNECT SERVICE LINE AND INSTALL CURED-IN-PLACE LATERAL LINER ASSEMBLY. LINER ASSEMBLY SHALL EXTEND 3FT MIN. INTO LATERAL. EXISTING LATERAL SIZE AND MATERIAL TYPE SHALL BE VERIFIED BY VIDEO INSPECTION PRIOR TO CIPP WORK.

15 REMOVE AND REPLACE EXISTING CURB AND SIDEWALK PER COT STD DWG 2110-ST ON SHEET D03, LIMITS PER PLAN

19 EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

20 INSTALL BACKWATER VALVE UPSTREAM OF SANITARY SEWER CLEANOUT

NO.	DATE	BY	Checked & Approval	REVISIONS

REGISTERED PROFESSIONAL ENGINEER 70947PE OREGON MAR 12, 2002 TIM B. KRAFT

EXPIRES: 06/30/2017

CITY OF TILLAMOOK
TILLAMOOK SEWER REHABILITATION PROJECT
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C28

Sheet No. 33 of 74

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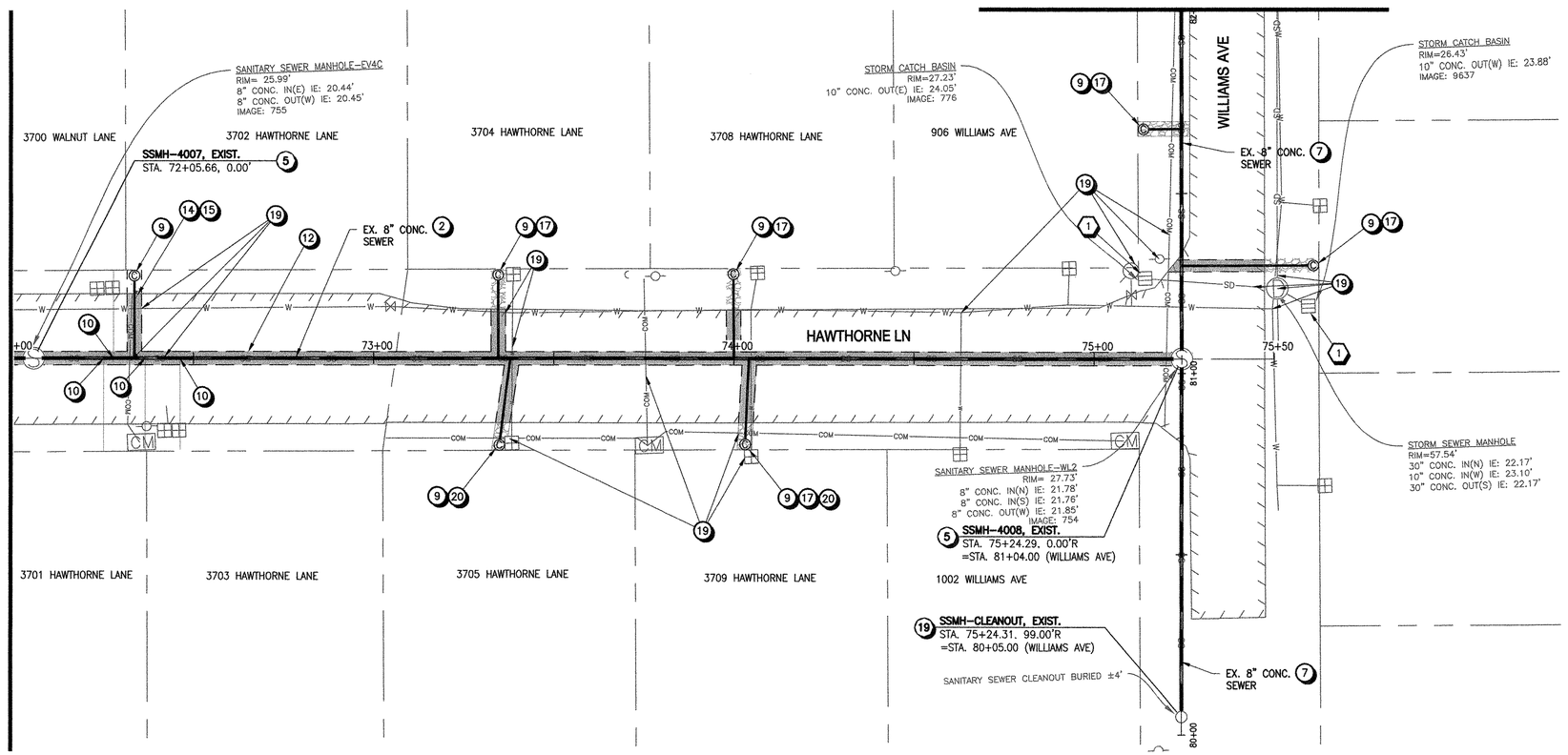

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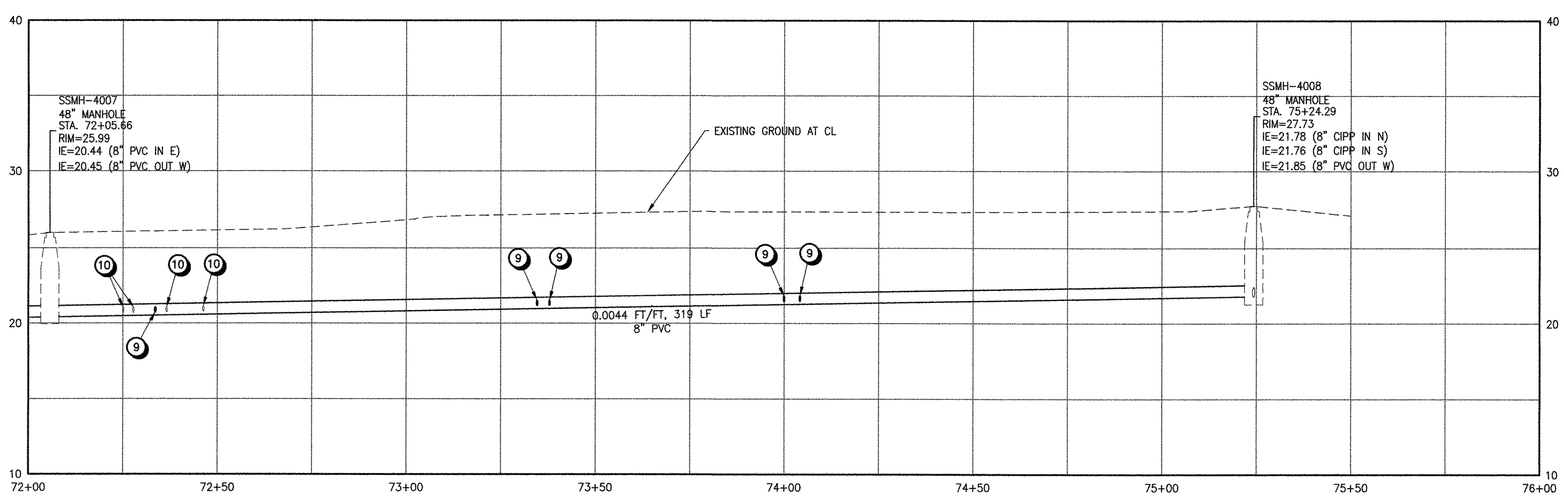

PROFILE

MATCHLINE STA. 72+00 SEE SHEET C28

GENERAL NOTES

1 SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL

2 LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1 INLET PROTECTION PER STD DWG RD1015 ON SHEET D04

2 SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

2 REMOVE EXISTING CONCRETE PIPE AND REPLACE WITH GRAVITY SEWER BY OPEN CUT CONSTRUCTION METHODS PER COT STD DWG 590 ON SHEET D02. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE

5 CONNECT PIPE TO EX. MANHOLE USING KOR-N-SEAL BOOT; VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION. CORE AND RECHANNEL EXIST MANHOLE BASE AS NECESSARY

7 REHABILITATE EXIST PIPE BY CIPP

9 INSTALL TEE, REMOVE EXISTING LATERAL AND REPLACE WITH 4" PVC PIPE FROM REHABILITATED SEWER MAIN TO RIGHT-OF-WAY LINE, PER COT STD DWGS 520 AND 590 ON SHEET D02. INSTALL SANITARY SEWER CLEANOUT AT RIGHT-OF-WAY LINE PER DETAIL 500 ON SHEET D02 AND CONNECT TO EXIST LATERAL.

10 INSTALL TEE AND CONNECT EX. SEWER LATERAL TO REHABILITATED SEWER MAIN PER COT STD DWG 520 ON SHEET D02.

12 SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.

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15 REMOVE AND REPLACE EXISTING CURB AND SIDEWALK PER COT STD DWG 2110-ST ON SHEET D03, LIMITS PER PLAN

17 RESURFACE DISTURBED LANDSCAPE AND/OR HARDSCAPE FEATURES TO MATCH EXISTING CONDITIONS. SEE COT STD DWG 590 ON SHEET D02 FOR LANDSCAPE BACKFILL REQUIREMENTS OUTSIDE OF THE RIGHT-OF-WAY.

19 EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

20 INSTALL BACKWATER VALVE UPSTREAM OF SANITARY SEWER CLEANOUT

NO.	DATE	BY	Checked / Approval	REVISIONS

REGISTERED PROFESSIONAL ENGINEER
70047PE
OREGON
MAR 12, 2013
TIM B. KRAFT
EXPIRES: 06/30/2017

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C29

Sheet No. 34 of 74

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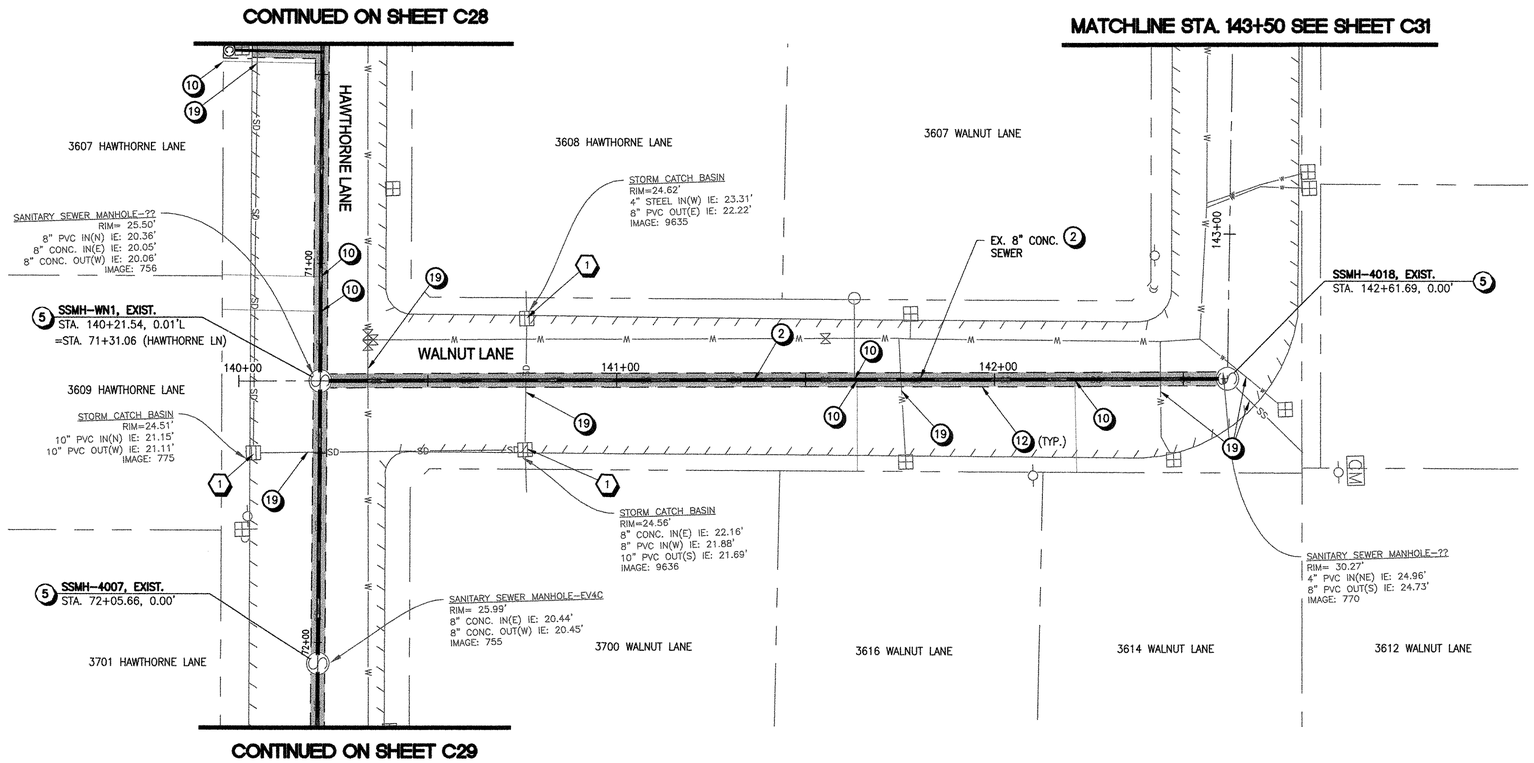
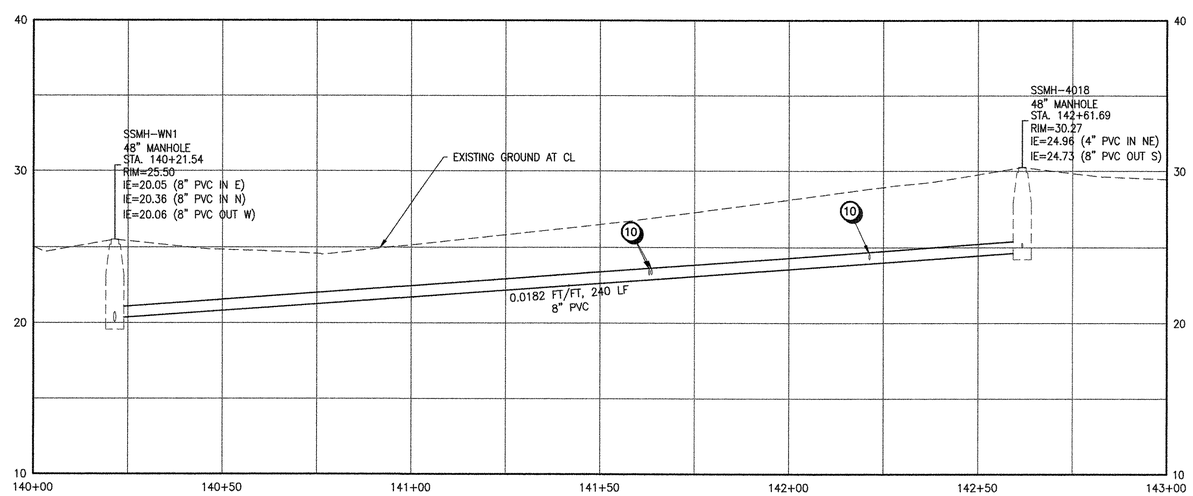


PLAN



PROFILE

GENERAL NOTES

1. SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL
2. LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1. INLET PROTECTION PER STD DWG RD1015 ON SHEET D04
2. SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

2. REMOVE EXISTING CONCRETE PIPE AND REPLACE WITH GRAVITY SEWER BY OPEN CUT CONSTRUCTION METHODS PER COT STD DWG 590 ON SHEET D02. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE
5. CONNECT PIPE TO EX. MANHOLE USING KOR-N-SEAL BOOT; VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION. CORE AND RECHANNEL EXIST MANHOLE BASE AS NECESSARY
10. INSTALL TEE AND CONNECT EX. SEWER LATERAL TO REHABILITATED SEWER MAIN PER COT STD DWG 520 ON SHEET D02.
12. SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.
19. EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

NO.	DATE	BY	Checked & Approval	REVISIONS

REGISTERED PROFESSIONAL ENGINEER
70947PE
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OREGON
MAR 12, 2013
TIM B. KRAFT
EXPIRES: 06/30/2017

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Sheet No. 35 of 74

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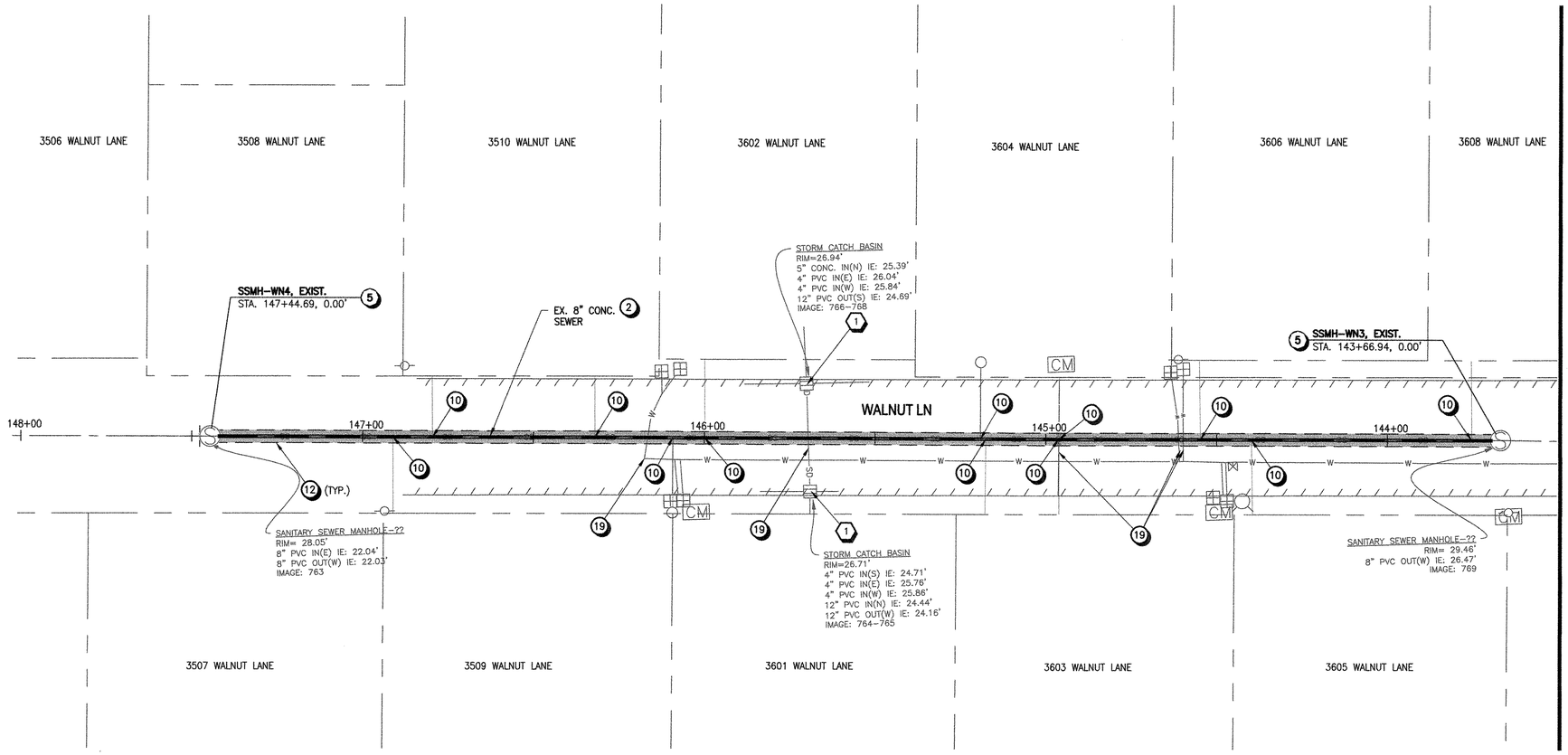
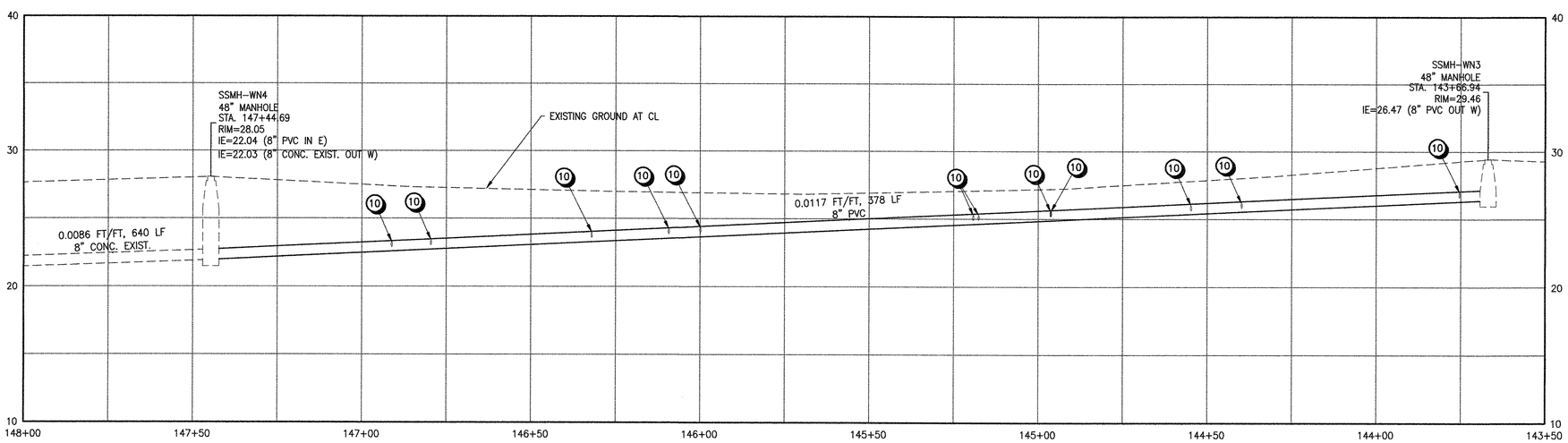


MATCHLINE STA. 143+50 SEE SHEET C30

PLAN



PROFILE

GENERAL NOTES

1. SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL
2. LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1. INLET PROTECTION PER STD DWG RD1015 ON SHEET D04
2. SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

2 REMOVE EXISTING CONCRETE PIPE AND REPLACE WITH GRAVITY SEWER BY OPEN CUT CONSTRUCTION METHODS PER COT STD DWG 590 ON SHEET D02. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE

5 CONNECT PIPE TO EX. MANHOLE USING KOR-N-SEAL BOOT; VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION. CORE AND RECHANNEL EXIST MANHOLE BASE AS NECESSARY

10 INSTALL TEE AND CONNECT EX. SEWER LATERAL TO REHABILITATED SEWER MAIN PER COT STD DWG 520 ON SHEET D02.

12 SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.

19 EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

NO.	DATE	BY	Checked & Approval	REVISIONS

REGISTERED PROFESSIONAL ENGINEER 70947PE OREGON MAR. 12, 2013 TIM B. KRAFT

EXPIRES: 06/30/2017

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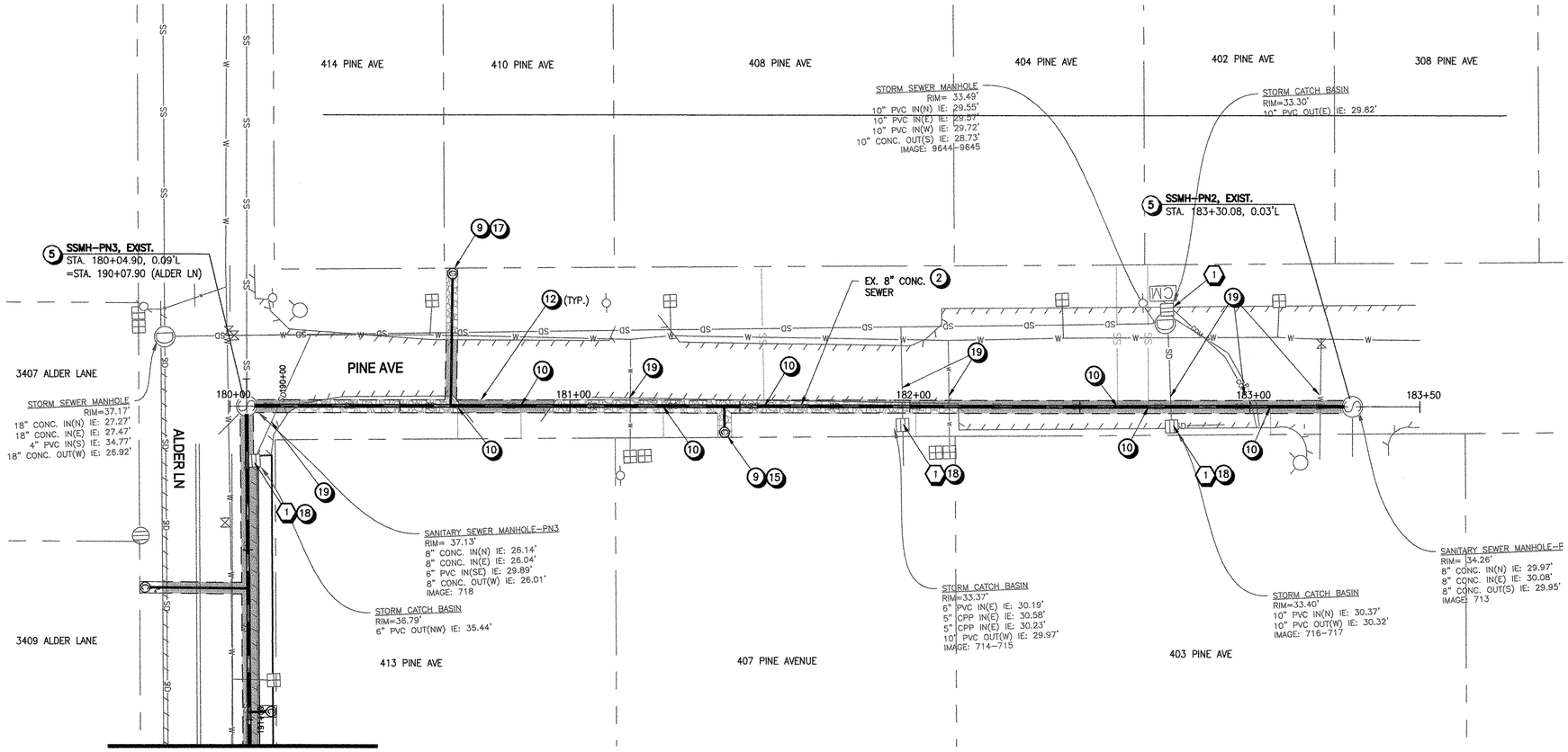

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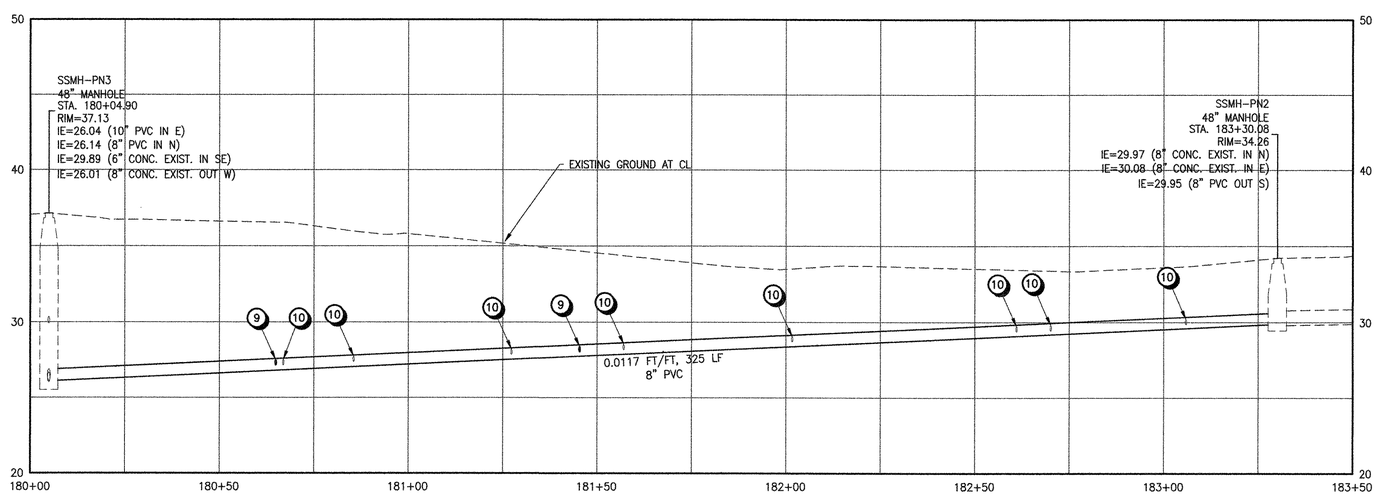

PROFILE

GENERAL NOTES

1. SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL
2. LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1. INLET PROTECTION PER STD DWG RD1015 ON SHEET D04
2. SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

2. REMOVE EXISTING CONCRETE PIPE AND REPLACE WITH GRAVITY SEWER BY OPEN CUT CONSTRUCTION METHODS PER COT STD DWG 590 ON SHEET D02. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE
5. CONNECT PIPE TO EX. MANHOLE USING KOR-N-SEAL BOOT; VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION. CORE AND RECHANNEL EXIST MANHOLE BASE AS NECESSARY
9. INSTALL TEE, REMOVE EXISTING LATERAL AND REPLACE WITH 4" PVC PIPE FROM REHABILITATED SEWER MAIN TO RIGHT-OF-WAY LINE, PER COT STD DWGS 520 AND 590 ON SHEET D02. INSTALL SANITARY SEWER CLEANOUT AT RIGHT-OF-WAY LINE PER DETAIL 500 ON SHEET D02 AND CONNECT TO EXIST LATERAL.
10. INSTALL TEE AND CONNECT EX. SEWER LATERAL TO REHABILITATED SEWER MAIN PER COT STD DWG 520 ON SHEET D02.
12. SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.
15. REMOVE AND REPLACE EXISTING CURB AND SIDEWALK PER COT STD DWG 2110-ST ON SHEET D03, LIMITS PER PLAN
17. RESURFACE DISTURBED LANDSCAPE AND/OR HARDSCAPE FEATURES TO MATCH EXISTING CONDITIONS. SEE COT STD DWG 590 ON SHEET D02 FOR LANDSCAPE BACKFILL REQUIREMENTS OUTSIDE OF THE RIGHT-OF-WAY.
18. EXISTING STRUCTURE TO REMAIN. CONTRACTOR TO REMOVE, PROTECT, AND REPLACE STRUCTURE AS REQUIRED FOR INSTALLATION OF SANITARY SEWER IMPROVEMENTS
19. EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

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REGISTERED PROFESSIONAL ENGINEER 70947PE 9-3-15 OREGON MAR 12, 2013 TIM B. KRAFT

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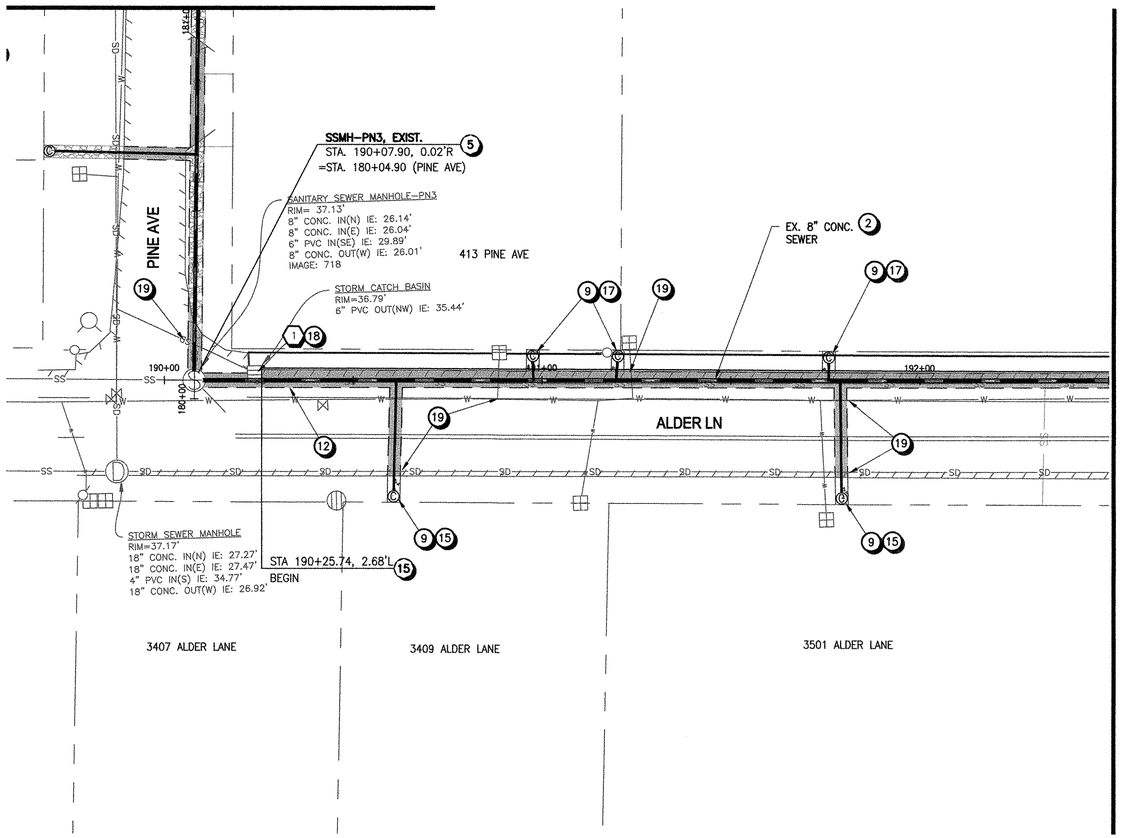

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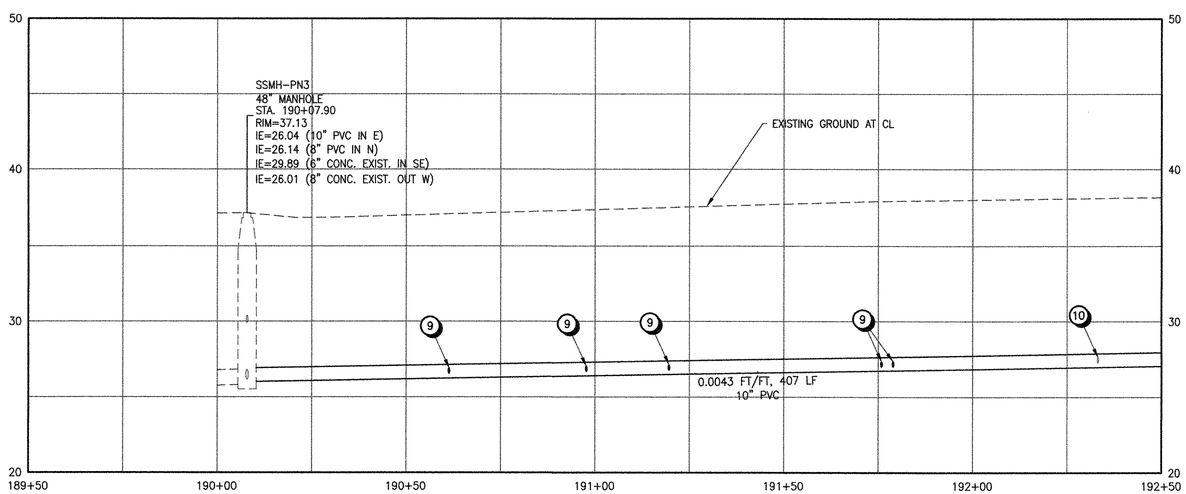

PROFILE

GENERAL NOTES

1 SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL

2 LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1 INLET PROTECTION PER STD DWG RD1015 ON SHEET D04

2 SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

2 REMOVE EXISTING CONCRETE PIPE AND REPLACE WITH GRAVITY SEWER BY OPEN CUT CONSTRUCTION METHODS PER COT STD DWG 590 ON SHEET D02. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE

5 CONNECT PIPE TO EX. MANHOLE USING KOR-N-SEAL BOOT; VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION. CORE AND RECHANNEL EXIST MANHOLE BASE AS NECESSARY

9 INSTALL TEE, REMOVE EXISTING LATERAL AND REPLACE WITH 4" PVC PIPE FROM REHABILITATED SEWER MAIN TO RIGHT-OF-WAY LINE, PER COT STD DWGS 520 AND 590 ON SHEET D02. INSTALL SANITARY SEWER CLEANOUT AT RIGHT-OF-WAY LINE PER DETAIL 500 ON SHEET D02 AND CONNECT TO EXIST LATERAL.

10 INSTALL TEE AND CONNECT EX. SEWER LATERAL TO REHABILITATED SEWER MAIN PER COT STD DWG 520 ON SHEET D02.

12 SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.

15 REMOVE AND REPLACE EXISTING CURB AND SIDEWALK PER COT STD DWG 2110-ST ON SHEET D03, LIMITS PER PLAN

17 RESURFACE DISTURBED LANDSCAPE AND/OR HARDSCAPE FEATURES TO MATCH EXISTING CONDITIONS. SEE COT STD DWG 590 ON SHEET D02 FOR LANDSCAPE BACKFILL REQUIREMENTS OUTSIDE OF THE RIGHT-OF-WAY.

18 EXISTING STRUCTURE TO REMAIN. CONTRACTOR TO REMOVE, PROTECT, AND REPLACE STRUCTURE AS REQUIRED FOR INSTALLATION OF SANITARY SEWER IMPROVEMENTS

19 EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

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REGISTERED PROFESSIONAL ENGINEER 70947PE OREGON MAR 12, 2013 TIM B. KRAFT

EXPIRES: 06/30/2017

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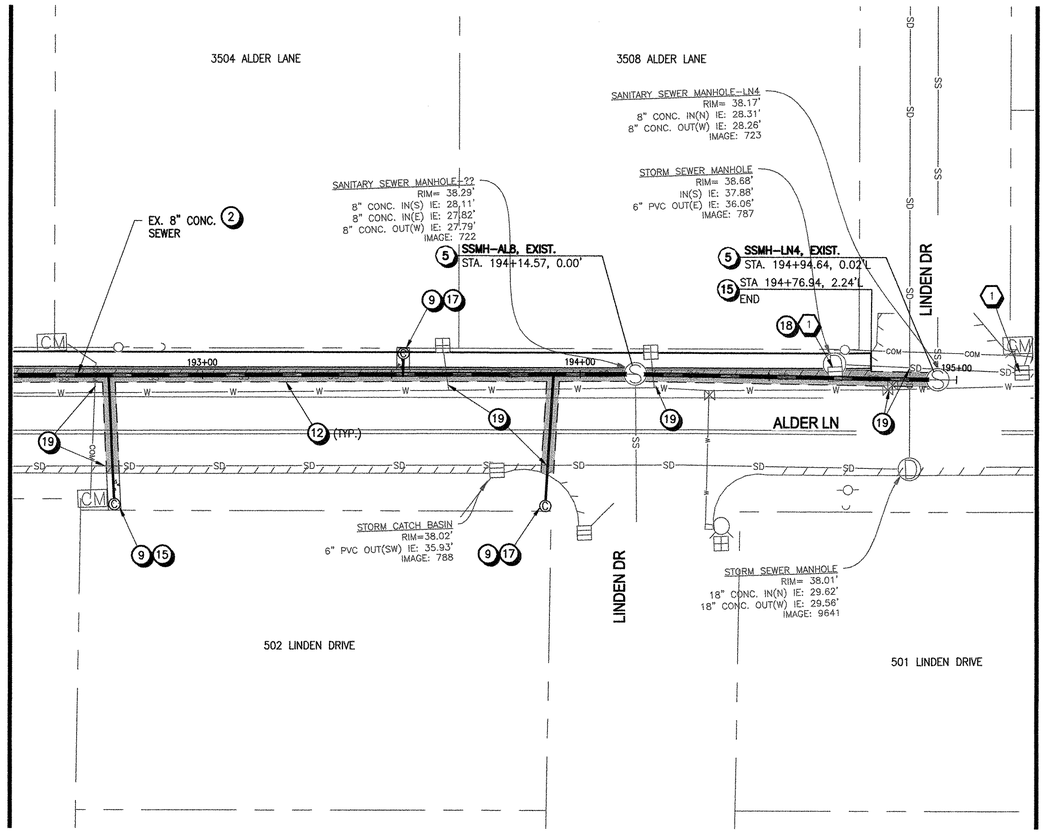

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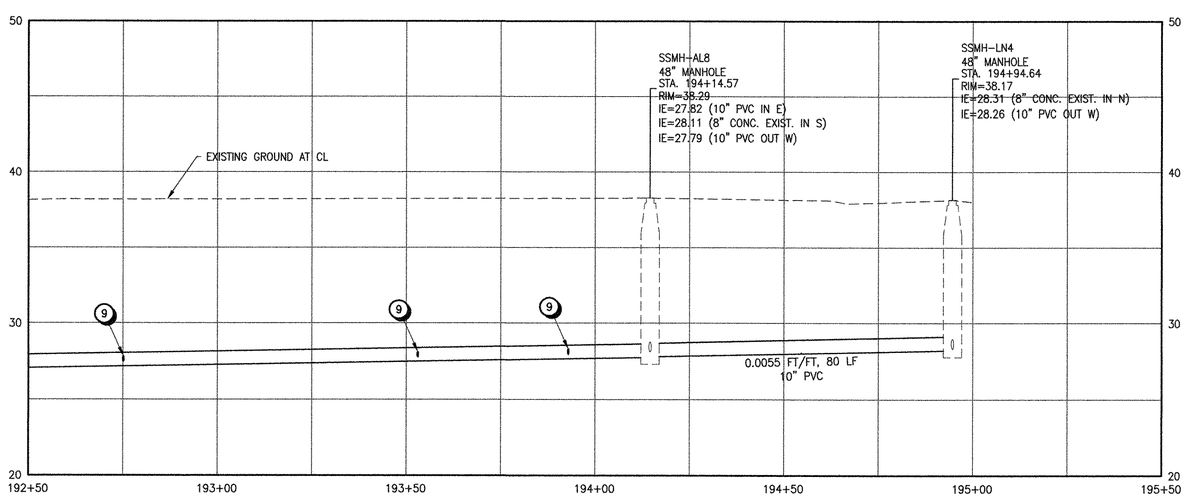

PROFILE

GENERAL NOTES

1. SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL
2. LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1. INLET PROTECTION PER STD DWG RD1015 ON SHEET D04
2. SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

2. REMOVE EXISTING CONCRETE PIPE AND REPLACE WITH GRAVITY SEWER BY OPEN CUT CONSTRUCTION METHODS PER COT STD DWG 590 ON SHEET D02. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE
5. CONNECT PIPE TO EX. MANHOLE USING KOR-N-SEAL BOOT; VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION. CORE AND RECHANNEL EXIST MANHOLE BASE AS NECESSARY
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15. REMOVE AND REPLACE EXISTING CURB AND SIDEWALK PER COT STD DWG 2110-ST ON SHEET D03, LIMITS PER PLAN
17. RESURFACE DISTURBED LANDSCAPE AND/OR HARDSCAPE FEATURES TO MATCH EXISTING CONDITIONS. SEE COT STD DWG 590 ON SHEET D02 FOR LANDSCAPE BACKFILL REQUIREMENTS OUTSIDE OF THE RIGHT-OF-WAY.
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19. EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

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REGISTERED PROFESSIONAL ENGINEER 70947PE OREGON MAR. 12, 2013 TIM B. KRAFT

EXPIRES: 06/30/2017

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Project No. 67522

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Sheet No. 39 of 74

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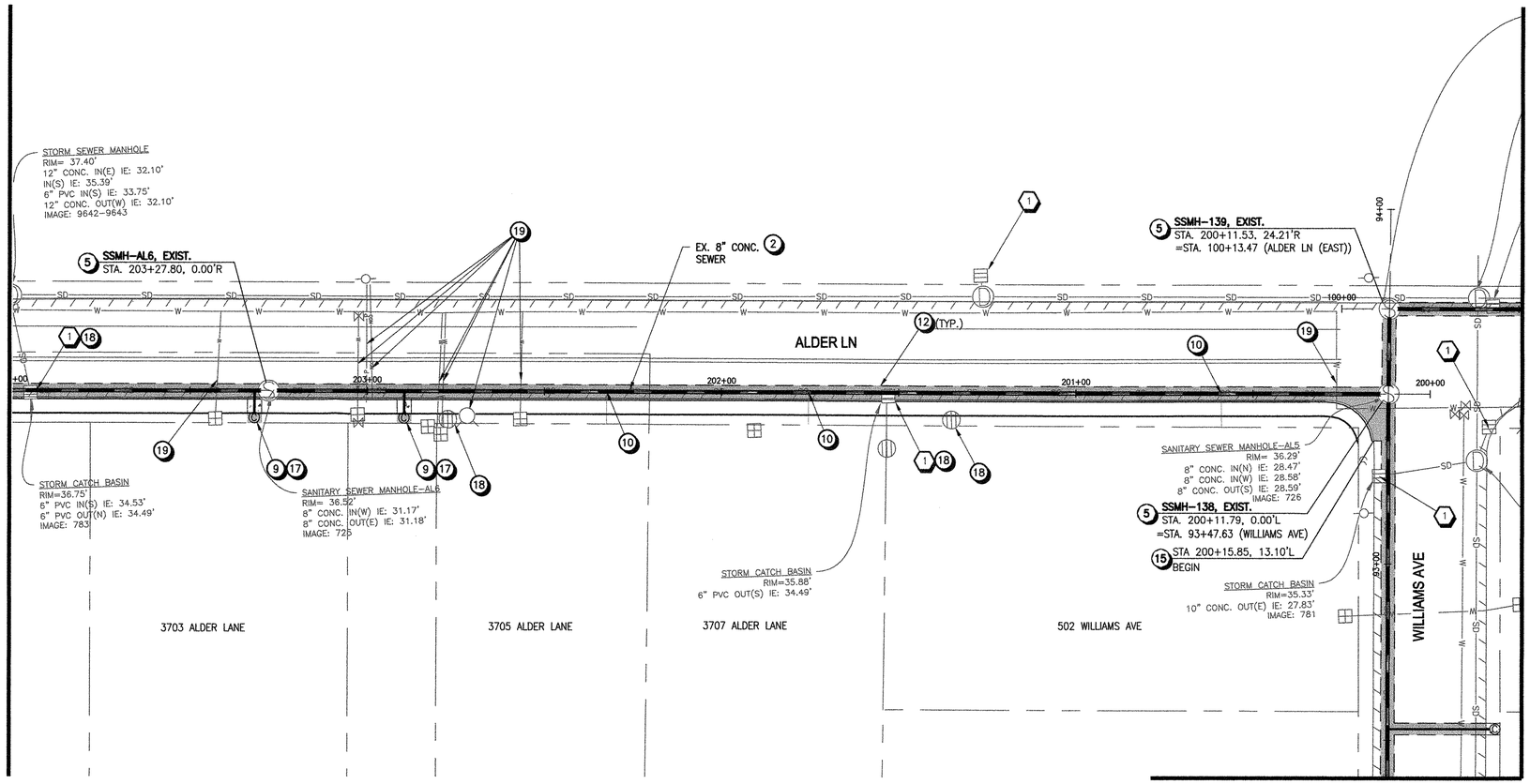

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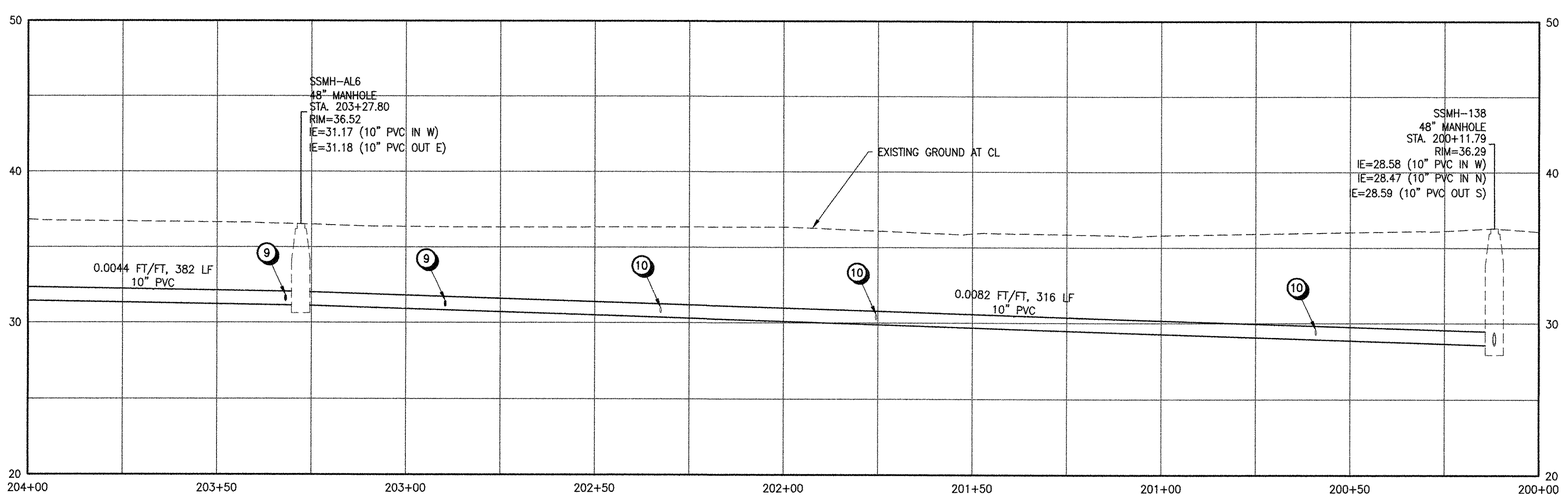

PROFILE

GENERAL NOTES

1 SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL

2 LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1 INLET PROTECTION PER STD DWG RD1015 ON SHEET D04

2 SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

2 REMOVE EXISTING CONCRETE PIPE AND REPLACE WITH GRAVITY SEWER BY OPEN CUT CONSTRUCTION METHODS PER COT STD DWG 590 ON SHEET D02. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE

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12 SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.

15 REMOVE AND REPLACE EXISTING CURB AND SIDEWALK PER COT STD DWG 2110-ST ON SHEET D03, LIMITS PER PLAN

17 RESURFACE DISTURBED LANDSCAPE AND/OR HARDSCAPE FEATURES TO MATCH EXISTING CONDITIONS. SEE COT STD DWG 590 ON SHEET D02 FOR LANDSCAPE BACKFILL REQUIREMENTS OUTSIDE OF THE RIGHT-OF-WAY.

18 EXISTING STRUCTURE TO REMAIN. CONTRACTOR TO REMOVE, PROTECT, AND REPLACE STRUCTURE AS REQUIRED FOR INSTALLATION OF SANITARY SEWER IMPROVEMENTS

19 EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

NO.	DATE	BY	Checked & Approved	REVISIONS

REGISTERED PROFESSIONAL ENGINEER 70947PE OREGON MAR. 12, 2013 TIM B. KRAFT
EXPIRES: 06/30/2017

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C35

Sep 02, 2015 - 4:06pm
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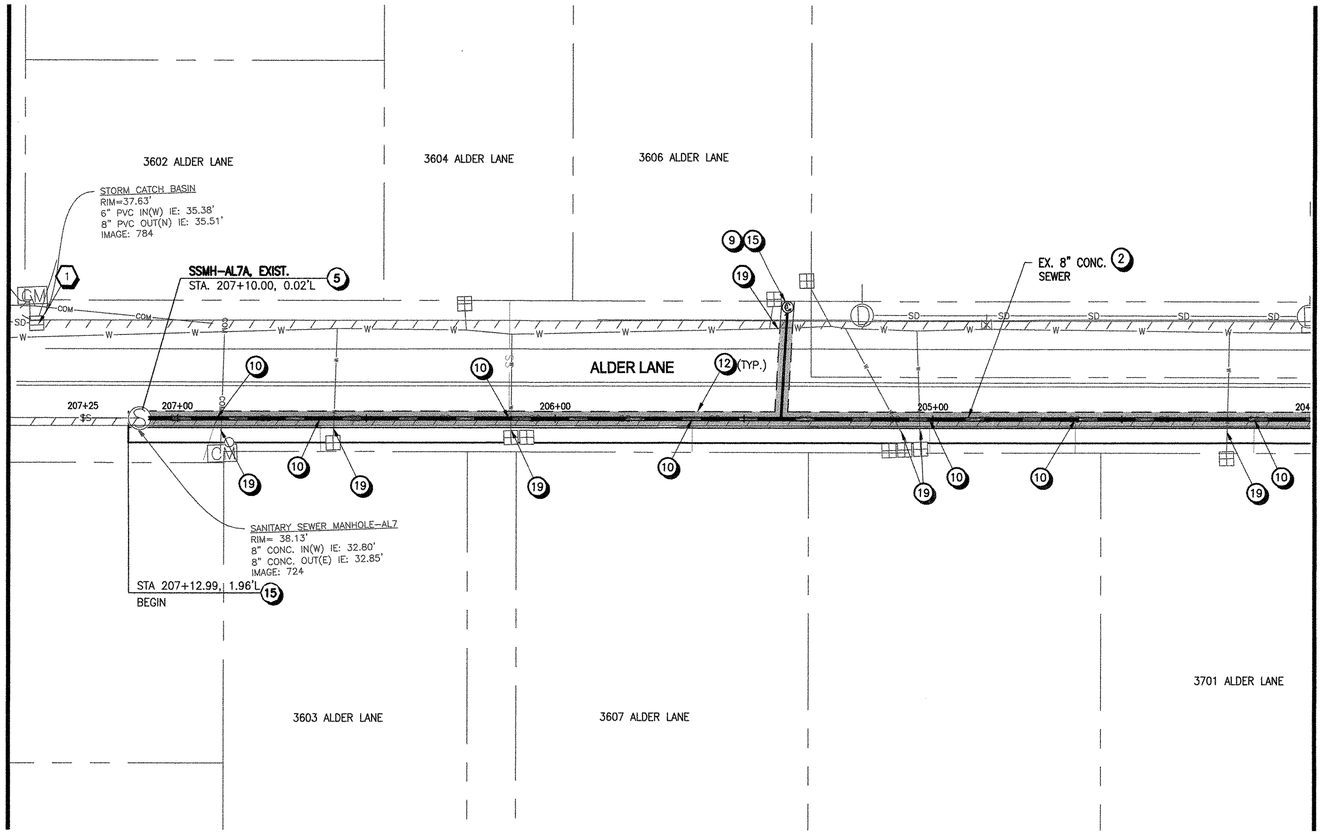

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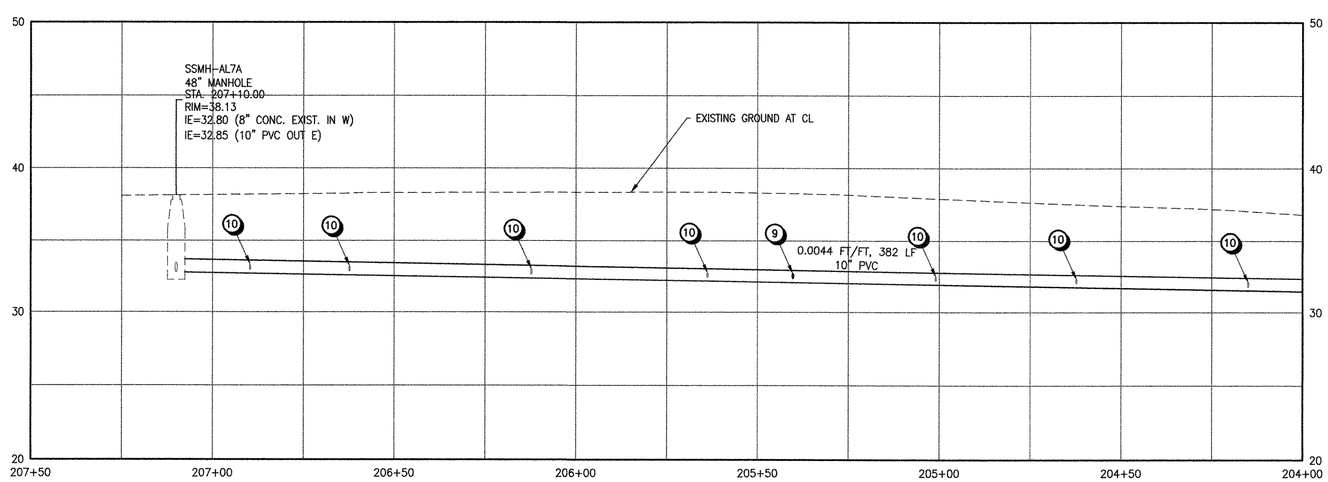
PLAN



PROFILE

GENERAL NOTES

1 SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL

2 LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1 INLET PROTECTION PER STD DWG RD1015 ON SHEET D04

2 SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

2 REMOVE EXISTING CONCRETE PIPE AND REPLACE WITH GRAVITY SEWER BY OPEN CUT CONSTRUCTION METHODS PER COT STD DWG 590 ON SHEET D02. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE

5 CONNECT PIPE TO EX. MANHOLE USING KOR-N-SEAL BOOT; VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION. CORE AND RECHANNEL EXIST MANHOLE BASE AS NECESSARY

9 INSTALL TEE, REMOVE EXISTING LATERAL AND REPLACE WITH 4" PVC PIPE FROM REHABILITATED SEWER MAIN TO RIGHT-OF-WAY LINE, PER COT STD DWGS 520 AND 590 ON SHEET D02. INSTALL SANITARY SEWER CLEANOUT AT RIGHT-OF-WAY LINE PER DETAIL 500 ON SHEET D02 AND CONNECT TO EXIST LATERAL.

10 INSTALL TEE AND CONNECT EX. SEWER LATERAL TO REHABILITATED SEWER MAIN PER COT STD DWG 520 ON SHEET D02.

12 SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.

15 REMOVE AND REPLACE EXISTING CURB AND SIDEWALK PER COT STD DWG 2110-ST ON SHEET D03, LIMITS PER PLAN

19 EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

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C36

Sheet No. 41 of 74

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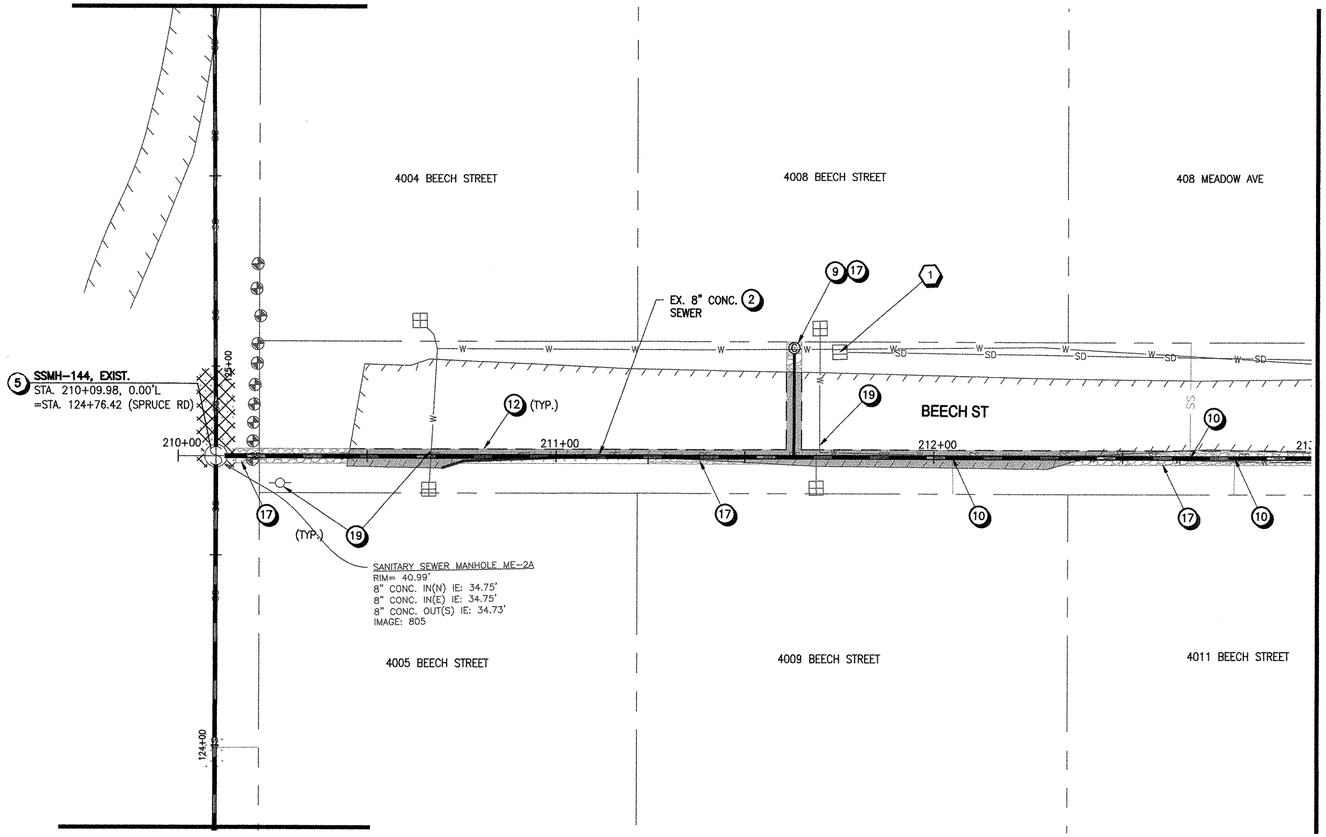

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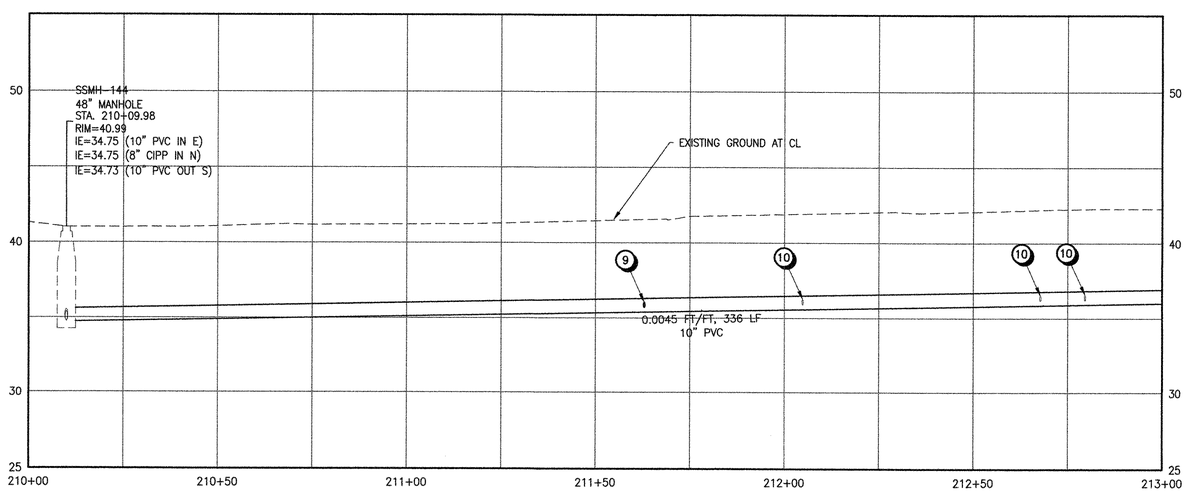

PROFILE

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EROSION CONTROL NOTES

1 INLET PROTECTION PER STD DWG RD1015 ON SHEET D04

2 SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

2 REMOVE EXISTING CONCRETE PIPE AND REPLACE WITH GRAVITY SEWER BY OPEN CUT CONSTRUCTION METHODS PER COT STD DWG 590 ON SHEET D02. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE

5 CONNECT PIPE TO EX. MANHOLE USING KOR-N-SEAL BOOT; VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION. CORE AND RECHANNEL EXIST MANHOLE BASE AS NECESSARY

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10 INSTALL TEE AND CONNECT EX. SEWER LATERAL TO REHABILITATED SEWER MAIN PER COT STD DWG 520 ON SHEET D02.

12 SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.

17 RESURFACE DISTURBED LANDSCAPE AND/OR HARDSCAPE FEATURES TO MATCH EXISTING CONDITIONS. SEE COT STD DWG 590 ON SHEET D02 FOR LANDSCAPE BACKFILL REQUIREMENTS OUTSIDE OF THE RIGHT-OF-WAY.

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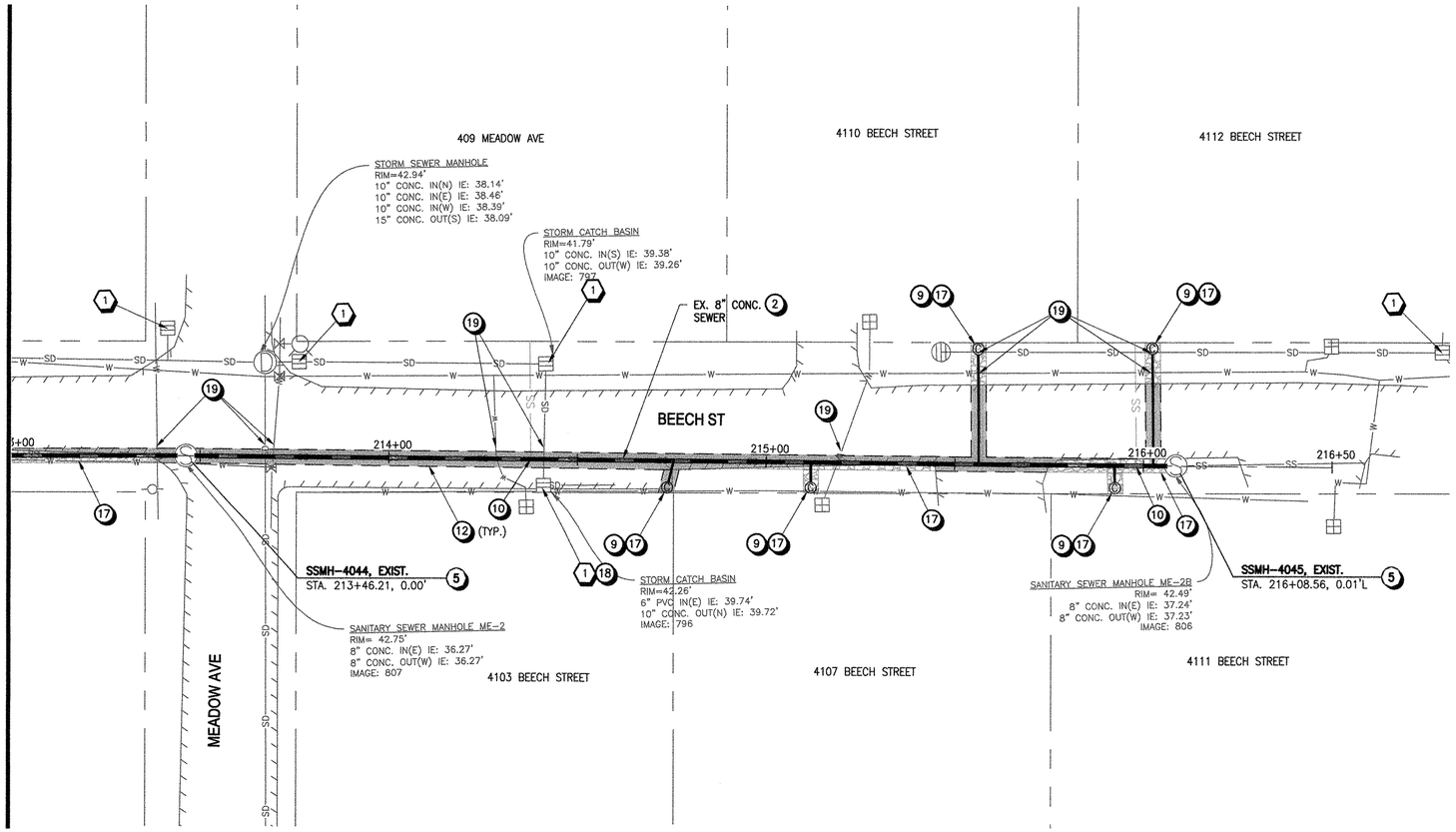

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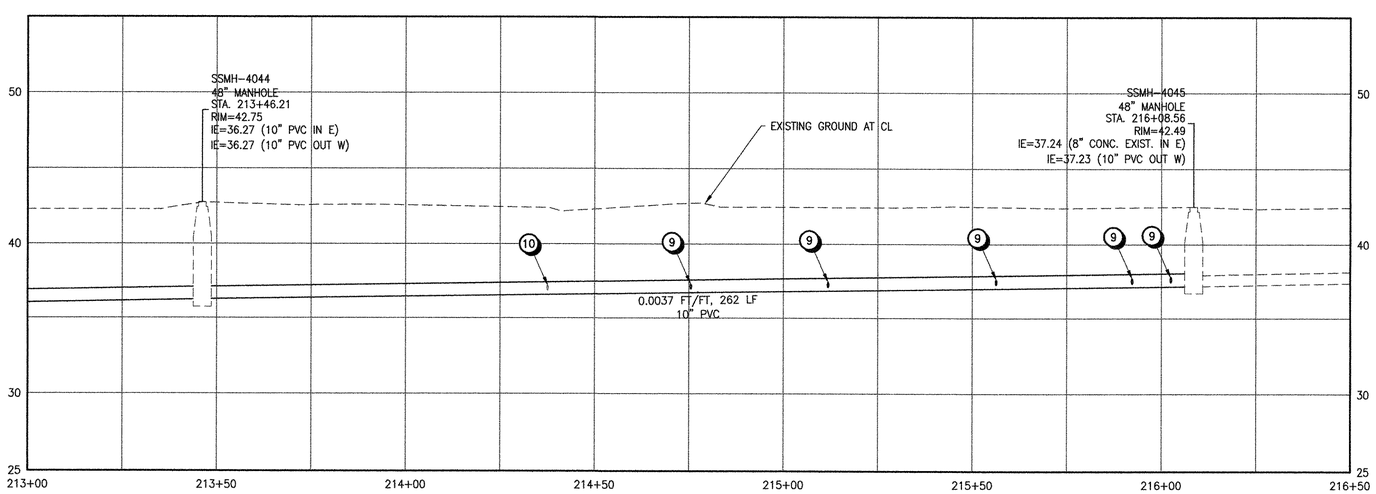

PROFILE

GENERAL NOTES

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EROSION CONTROL NOTES

1 INLET PROTECTION PER STD DWG RD1015 ON SHEET D04

2 SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

2 REMOVE EXISTING CONCRETE PIPE AND REPLACE WITH GRAVITY SEWER BY OPEN CUT CONSTRUCTION METHODS PER COT STD DWG 590 ON SHEET D02. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE

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10 INSTALL TEE AND CONNECT EX. SEWER LATERAL TO REHABILITATED SEWER MAIN PER COT STD DWG 520 ON SHEET D02.

12 SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.

17 RESURFACE DISTURBED LANDSCAPE AND/OR HARDSCAPE FEATURES TO MATCH EXISTING CONDITIONS. SEE COT STD DWG 590 ON SHEET D02 FOR LANDSCAPE BACKFILL REQUIREMENTS OUTSIDE OF THE RIGHT-OF-WAY.

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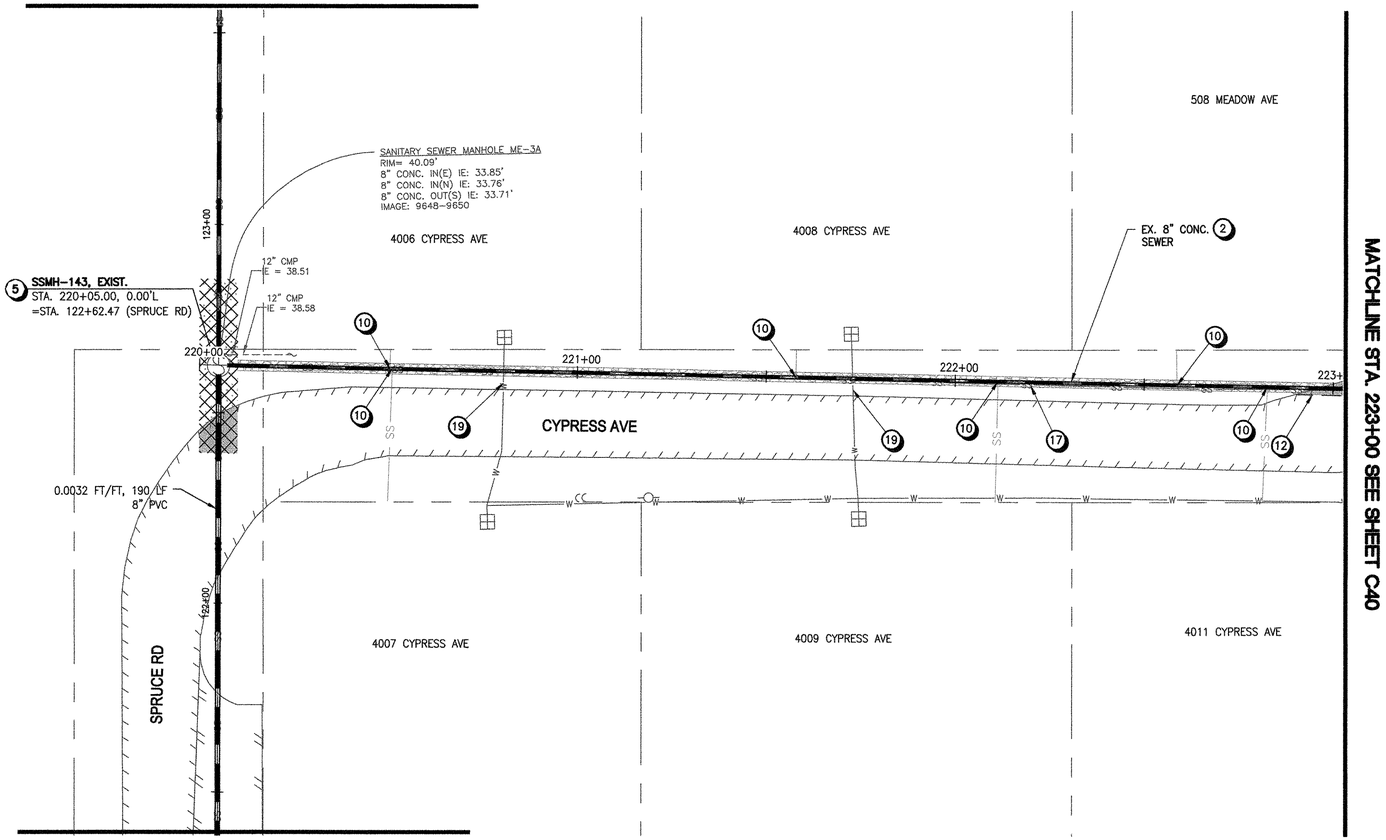

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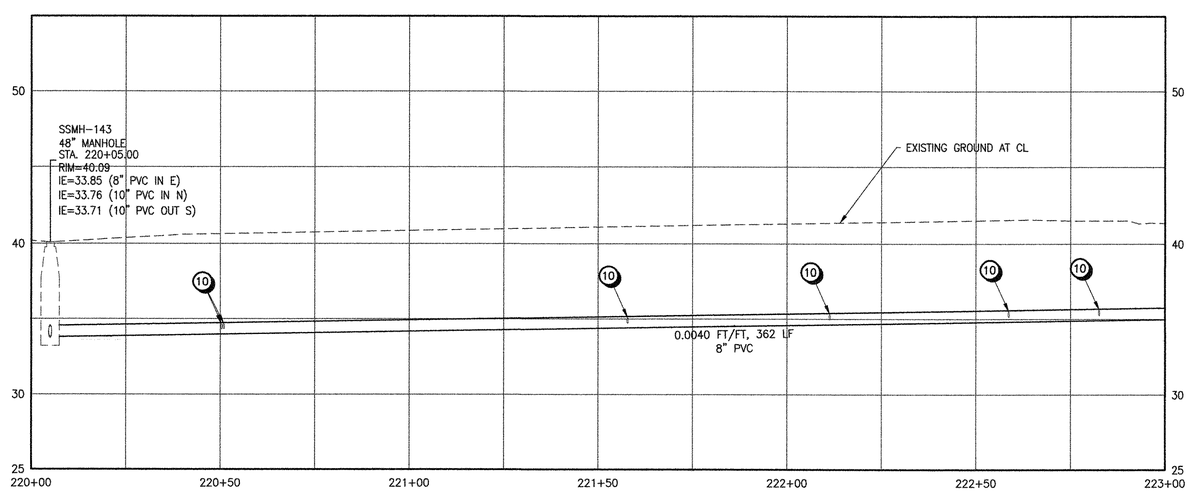

PROFILE

GENERAL NOTES

1 SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL

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EROSION CONTROL NOTES

1 INLET PROTECTION PER STD DWG RD1015 ON SHEET D04

2 SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

2 REMOVE EXISTING CONCRETE PIPE AND REPLACE WITH GRAVITY SEWER BY OPEN CUT CONSTRUCTION METHODS PER COT STD DWG 590 ON SHEET D02. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE

5 CONNECT PIPE TO EX. MANHOLE USING KOR-N-SEAL BOOT; VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION. CORE AND RECHANNEL EXIST MANHOLE BASE AS NECESSARY

10 INSTALL TEE AND CONNECT EX. SEWER LATERAL TO REHABILITATED SEWER MAIN PER COT STD DWG 520 ON SHEET D02.

12 SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.

17 RESURFACE DISTURBED LANDSCAPE AND/OR HARDSCAPE FEATURES TO MATCH EXISTING CONDITIONS. SEE COT STD DWG 590 ON SHEET D02 FOR LANDSCAPE BACKFILL REQUIREMENTS OUTSIDE OF THE RIGHT-OF-WAY.

19 EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

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REGISTERED PROFESSIONAL ENGINEER 70947PE OREGON MAR. 12, 2013 TIM B. KRAFT

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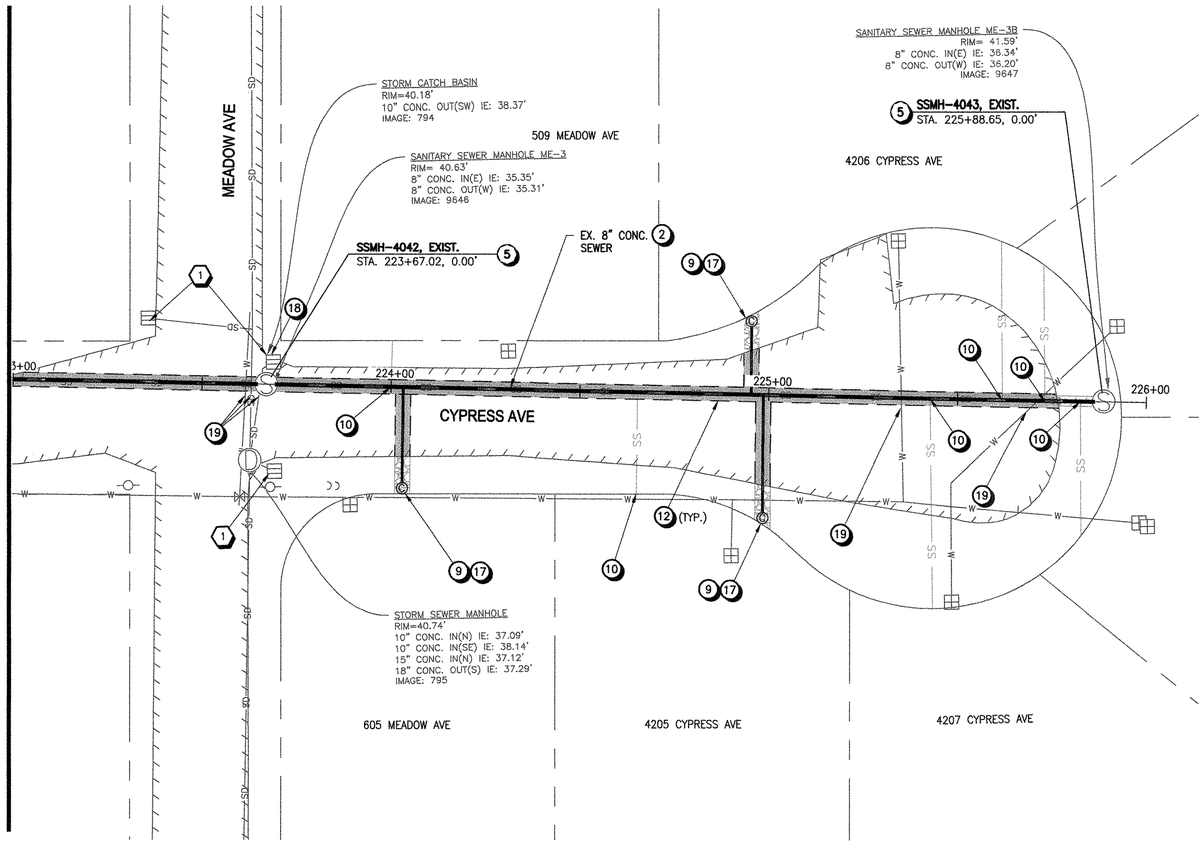

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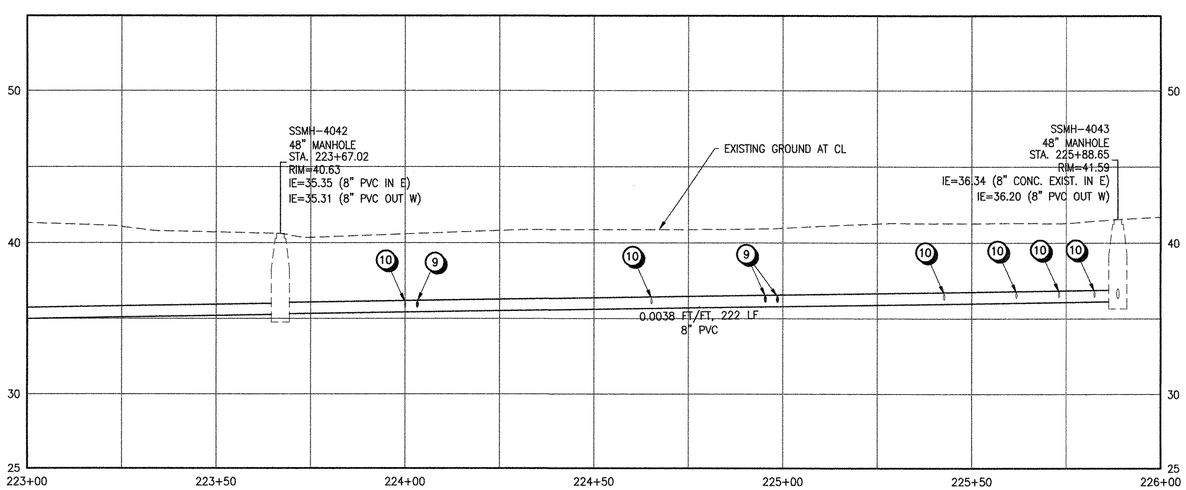

PROFILE

GENERAL NOTES

1 SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL

2 LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1 INLET PROTECTION PER STD DWG RD1015 ON SHEET D04

2 SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

2 REMOVE EXISTING CONCRETE PIPE AND REPLACE WITH GRAVITY SEWER BY OPEN CUT CONSTRUCTION METHODS PER COT STD DWG 590 ON SHEET D02. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE

5 CONNECT PIPE TO EX. MANHOLE USING KOR-N-SEAL BOOT; VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION. CORE AND RECHANNEL EXIST MANHOLE BASE AS NECESSARY

9 INSTALL TEE, REMOVE EXISTING LATERAL AND REPLACE WITH 4" PVC PIPE FROM REHABILITATED SEWER MAIN TO RIGHT-OF-WAY LINE, PER COT STD DWGS 520 AND 590 ON SHEET D02. INSTALL SANITARY SEWER CLEANOUT AT RIGHT-OF-WAY LINE PER DETAIL 500 ON SHEET D02 AND CONNECT TO EXIST LATERAL.

10 INSTALL TEE AND CONNECT EX. SEWER LATERAL TO REHABILITATED SEWER MAIN PER COT STD DWG 520 ON SHEET D02.

12 SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.

17 RESURFACE DISTURBED LANDSCAPE AND/OR HARDSCAPE FEATURES TO MATCH EXISTING CONDITIONS. SEE COT STD DWG 590 ON SHEET D02 FOR LANDSCAPE BACKFILL REQUIREMENTS OUTSIDE OF THE RIGHT-OF-WAY.

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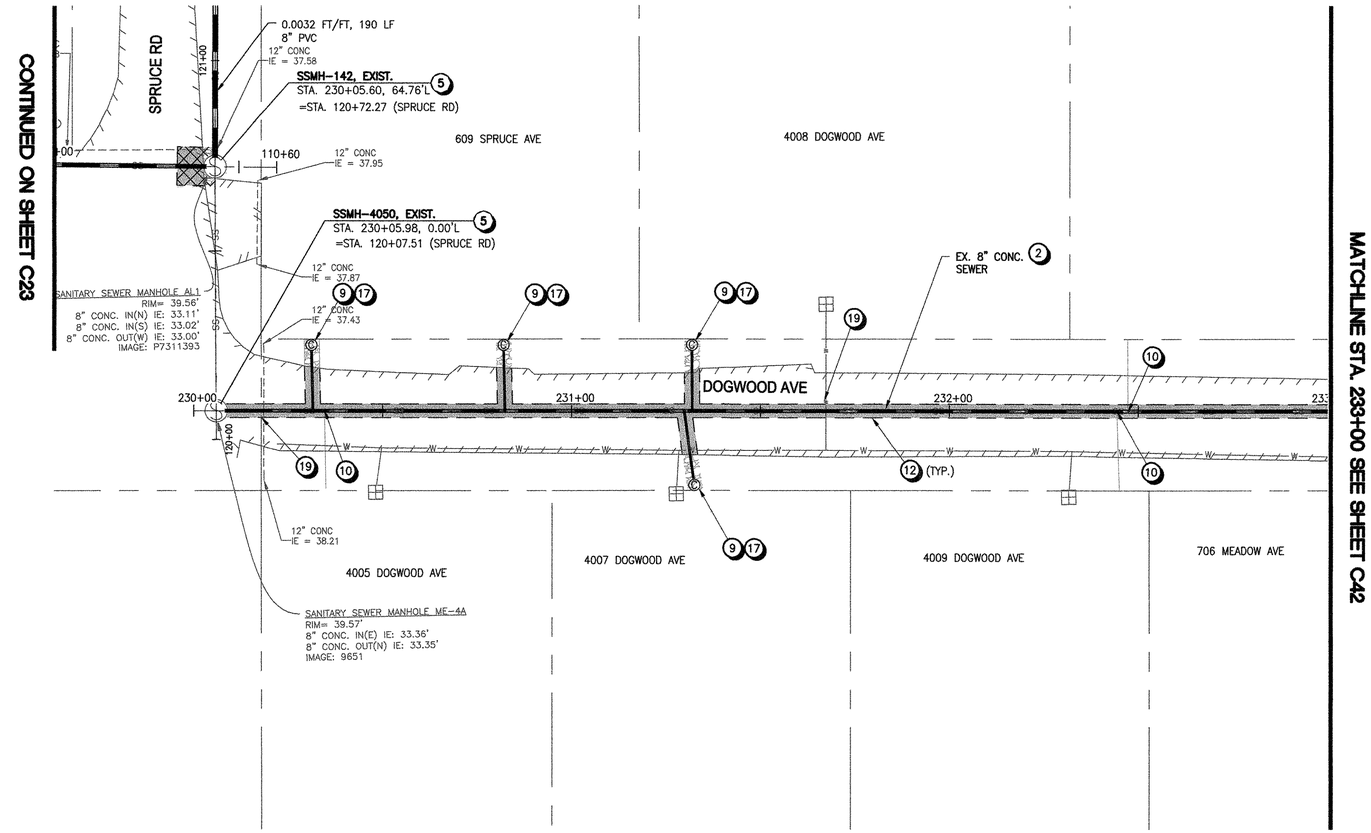

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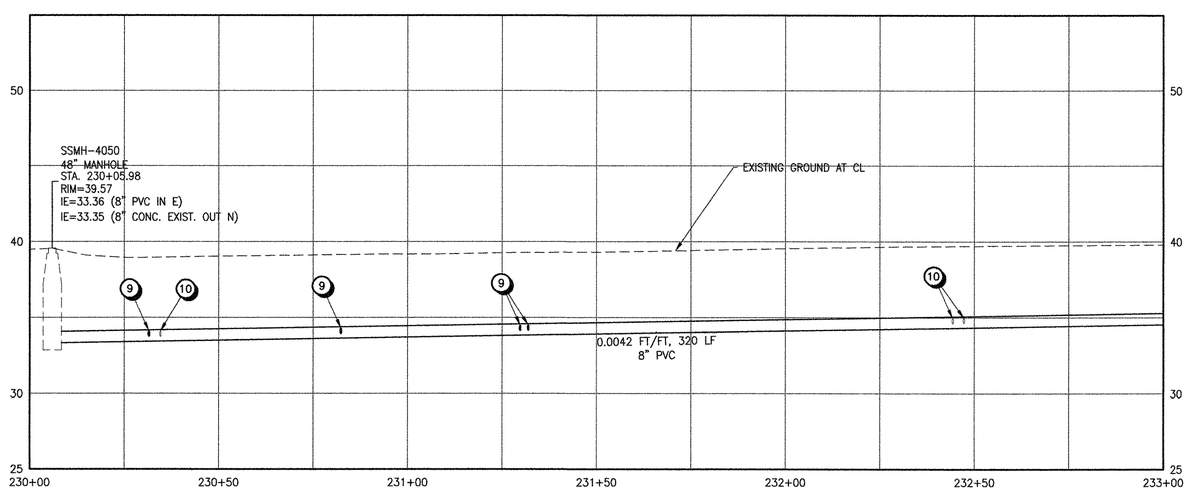

PROFILE

GENERAL NOTES

1. SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL
2. LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1. INLET PROTECTION PER STD DWG RD1015 ON SHEET D04
2. SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

2. REMOVE EXISTING CONCRETE PIPE AND REPLACE WITH GRAVITY SEWER BY OPEN CUT CONSTRUCTION METHODS PER COT STD DWG 590 ON SHEET D02. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE
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12. SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.
17. RESURFACE DISTURBED LANDSCAPE AND/OR HARDSCAPE FEATURES TO MATCH EXISTING CONDITIONS. SEE COT STD DWG 590 ON SHEET D02 FOR LANDSCAPE BACKFILL REQUIREMENTS OUTSIDE OF THE RIGHT-OF-WAY.
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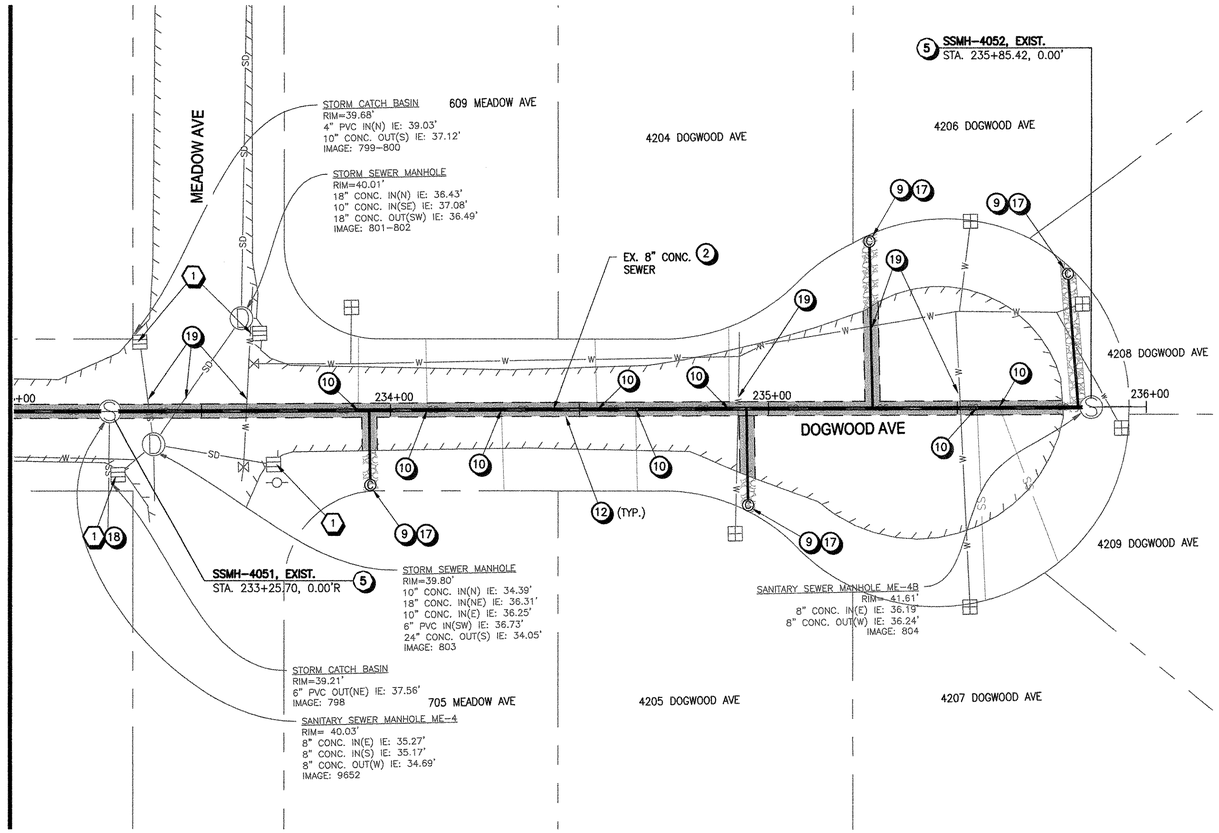

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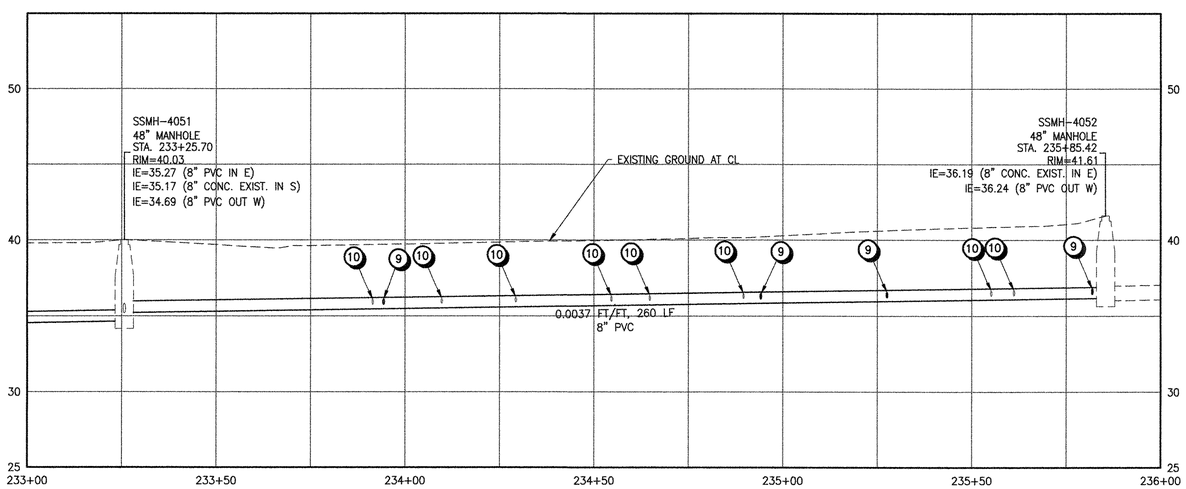

PROFILE

GENERAL NOTES

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EROSION CONTROL NOTES

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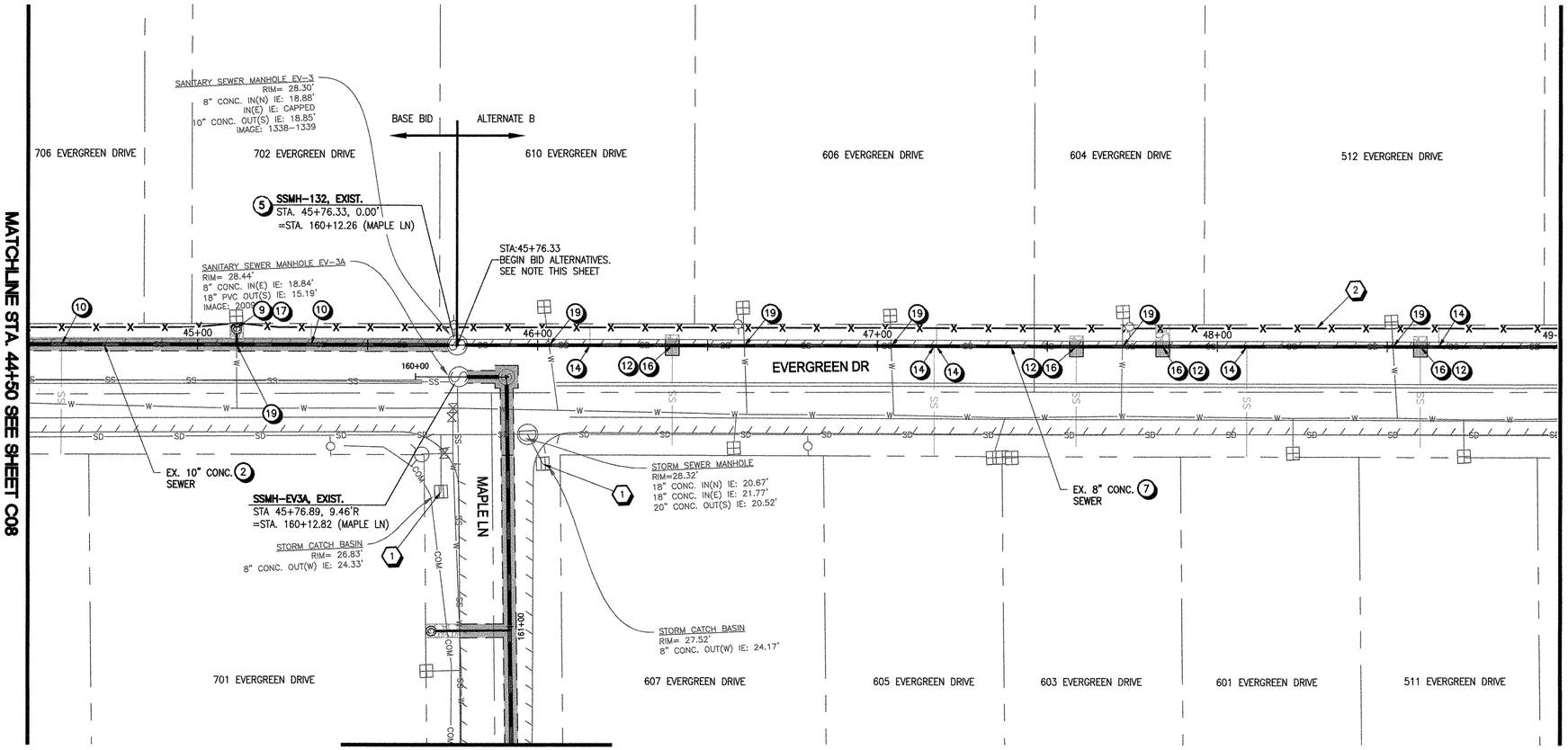
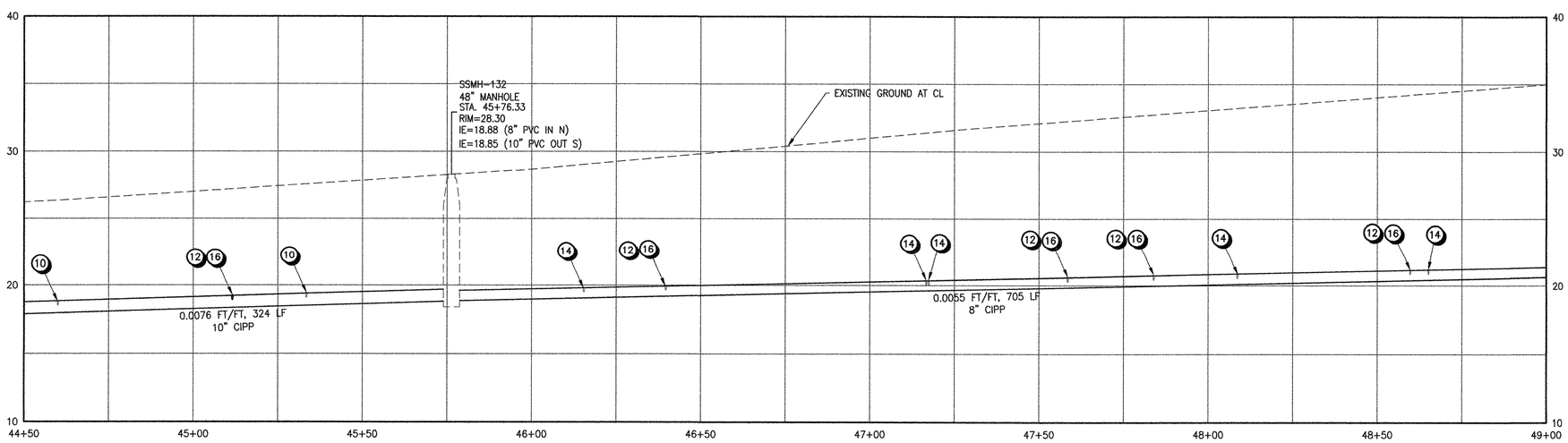


CONTINUED ON SHEET C13

PLAN



PROFILE

GENERAL NOTES

1 SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL

2 LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1 INLET PROTECTION PER STD DWG RD1015 ON SHEET D04

2 SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

2 REMOVE EXISTING CONCRETE PIPE AND REPLACE WITH GRAVITY SEWER BY OPEN CUT CONSTRUCTION METHODS PER COT STD DWG 590 ON SHEET D02. SEE PROFILE FOR PROPOSED PIPE SIZE AND MATERIAL TYPE

5 CONNECT PIPE TO EX. MANHOLE USING KOR-N-SEAL BOOT; VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION. CORE AND RECHANNEL EXIST MANHOLE BASE AS NECESSARY

7 REHABILITATE EXIST PIPE BY CIPP

10 INSTALL TEE AND CONNECT EX. SEWER LATERAL TO REHABILITATED SEWER MAIN PER COT STD DWG 520 ON SHEET D02.

12 SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.

14 AFTER MAINLINE CIPP WORK IS ACCEPTED, RECONNECT SERVICE LINE AND INSTALL CURED-IN-PLACE LATERAL LINER ASSEMBLY. LINER ASSEMBLY SHALL EXTEND 3FT MIN. INTO LATERAL. EXISTING LATERAL SIZE AND MATERIAL TYPE SHALL BE VERIFIED BY VIDEO INSPECTION PRIOR TO CIPP WORK.

16 EXCAVATE AND RECONNECT SERVICE LATERAL TO SERVICE MAINLINE WITH SADDLE CONNECTION. INSTALL CURED-IN-PLACE LATERAL LINER ASSEMBLY FOLLOWING SADDLE CONNECTION AND MAINLINE CIPP WORK.

17 RESURFACE DISTURBED LANDSCAPE AND/OR HARDSCAPE FEATURES TO MATCH EXISTING CONDITIONS. SEE COT STD DWG 590 ON SHEET D02 FOR LANDSCAPE BACKFILL REQUIREMENTS OUTSIDE OF THE RIGHT-OF-WAY.

19 EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

** BID ALTERNATE NOTES **

BID ALTERNATE B (EVERGREEN DR. NORTH - CIPP) SHOWN. SEE SHEETS C09 TO C12 FOR BID ALTERNATE A (EVERGREEN DR. NORTH - OPEN CUT) PLAN AND PROFILE. LOCATIONS WHERE LATERAL RECONNECTIONS BY SADDLE EXCAVATION ARE REQUIRED DUE TO EX. OFFSET LATERALS SHALL BE VERIFIED BY CONTRACTOR PRIOR TO CIPP WORK.

NO.	DATE	BY	Checked & Approval	REVISIONS

REGISTERED PROFESSIONAL ENGINEER 70947PE OREGON MAR. 12, 2008 TIM B. KRAFT

EXPIRES: 06/30/2017

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C43

Sheet No. 48 of 74

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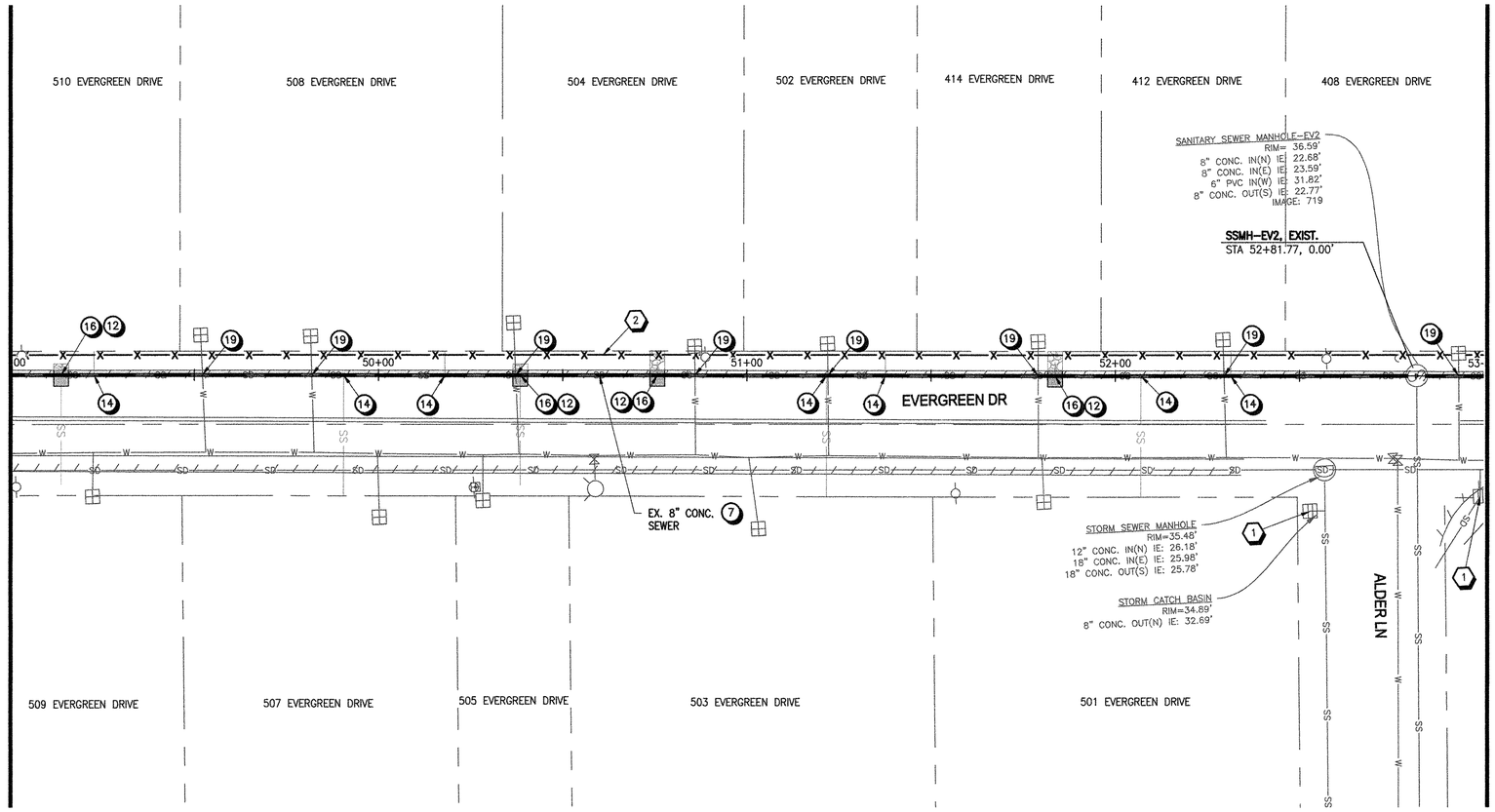
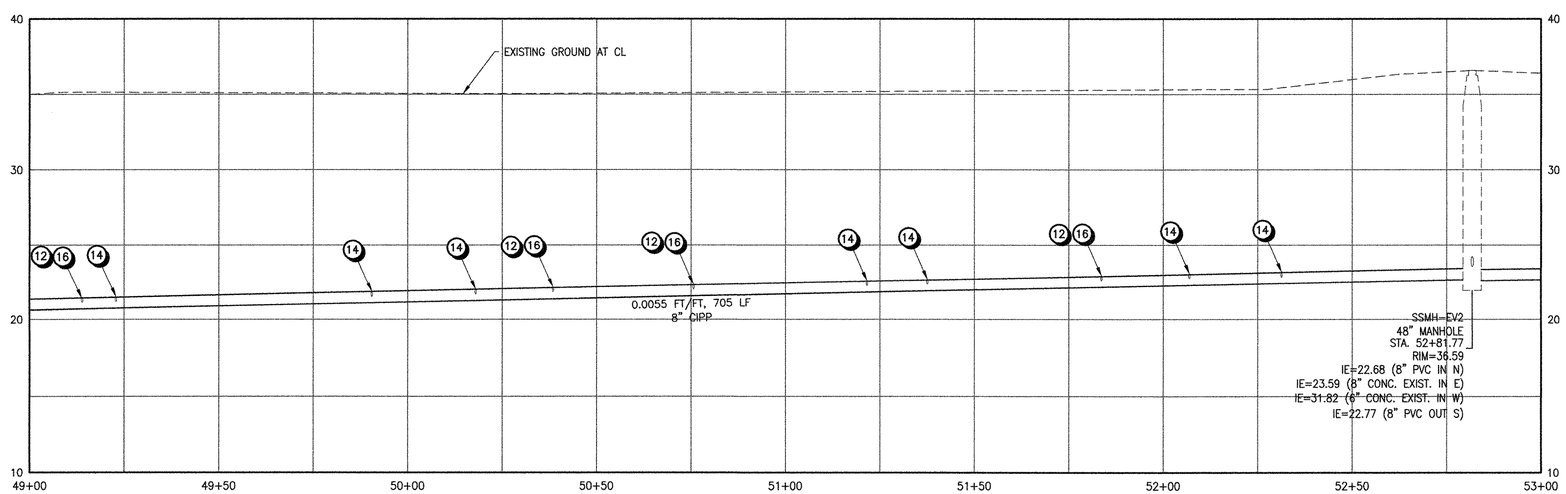


MATCHLINE STA. 49+00 SEE SHEET C43

MATCHLINE STA. 53+00 SEE SHEET C45

PLAN



PROFILE

GENERAL NOTES

1. SEE SURVEY CONTROL PLANS ("SC" SHEETS) FOR DEFINITION OF CONSTRUCTION BASELINE STATIONING AND VERTICAL CONTROL
2. LOCATIONS OF LATERALS ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS REPORTED IN TV INSPECTION VIDEOS

EROSION CONTROL NOTES

1. INLET PROTECTION PER STD DWG RD1015 ON SHEET D04
2. SEDIMENT FENCE PER STD DWG RD1040 ON SHEET D04

KEY NOTES

7. REHABILITATE EXIST PIPE BY CIPP
12. SAWCUT EXISTING ASPHALT PAVEMENT FOR TRENCHING AND RESTORATION. RESURFACE PER COT STD DWG 600 ON SHEET D02.
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19. EXISTING UTILITY TO REMAIN. CONTRACTOR TO PROTECT AND SUPPORT DURING CONSTRUCTION

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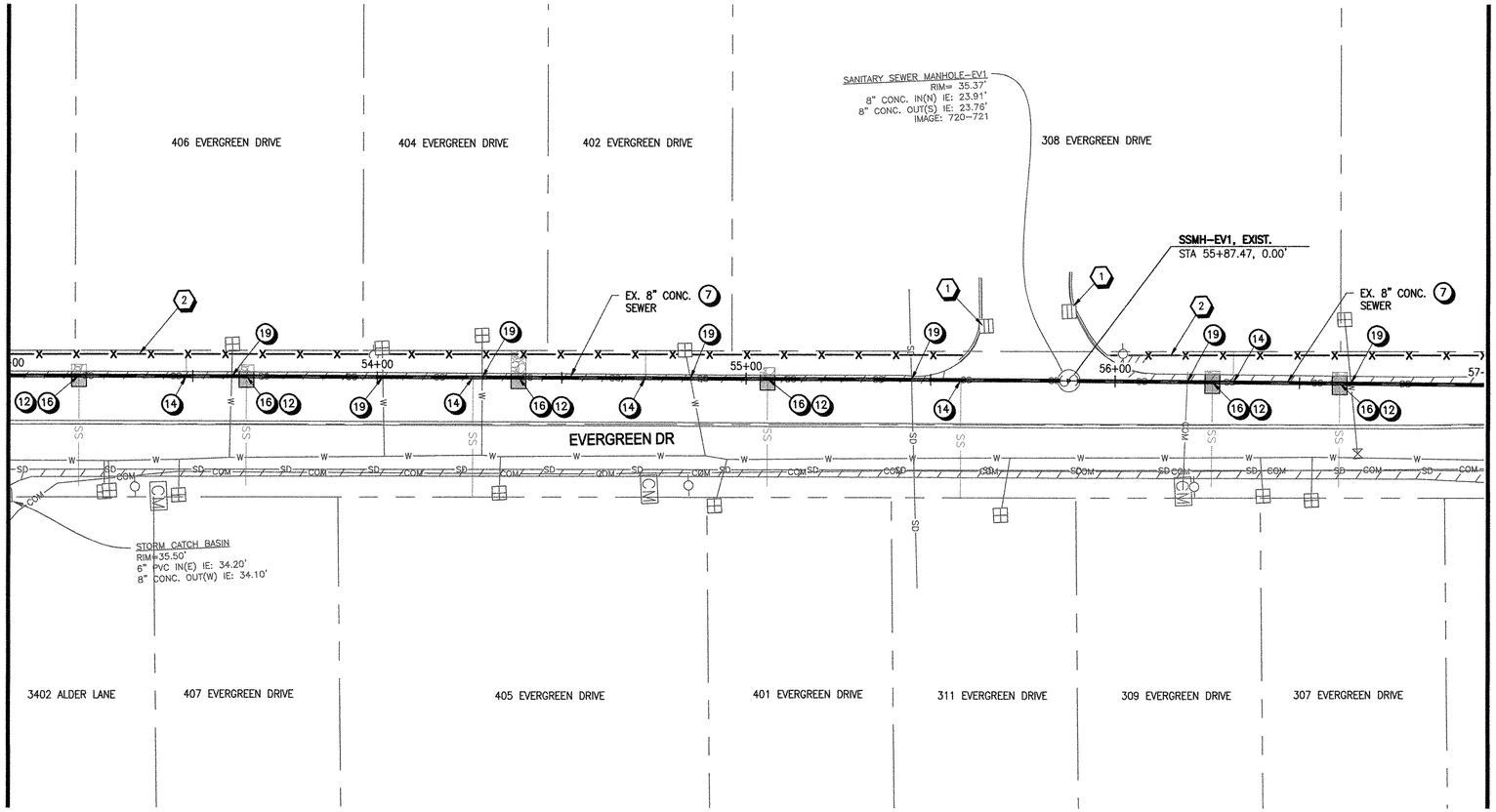
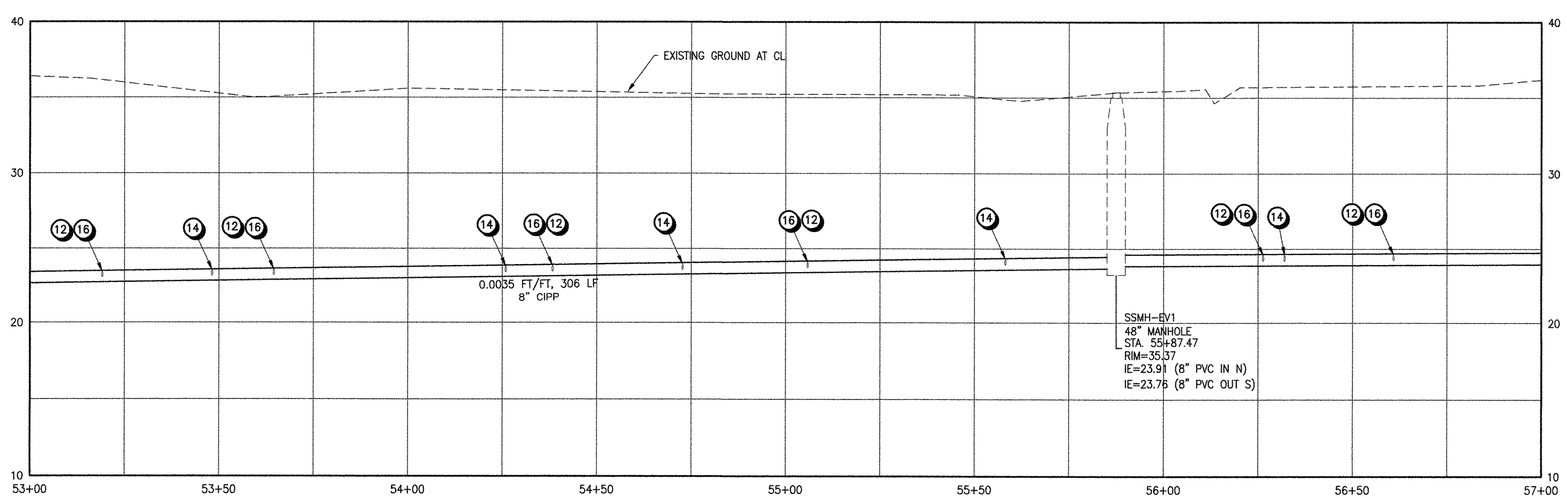
MATCHLINE STA. 53+00 SEE SHEET C44



MATCHLINE STA. 57+00 SEE SHEET C46

PLAN



PROFILE

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EXPIRES: 06/30/2017

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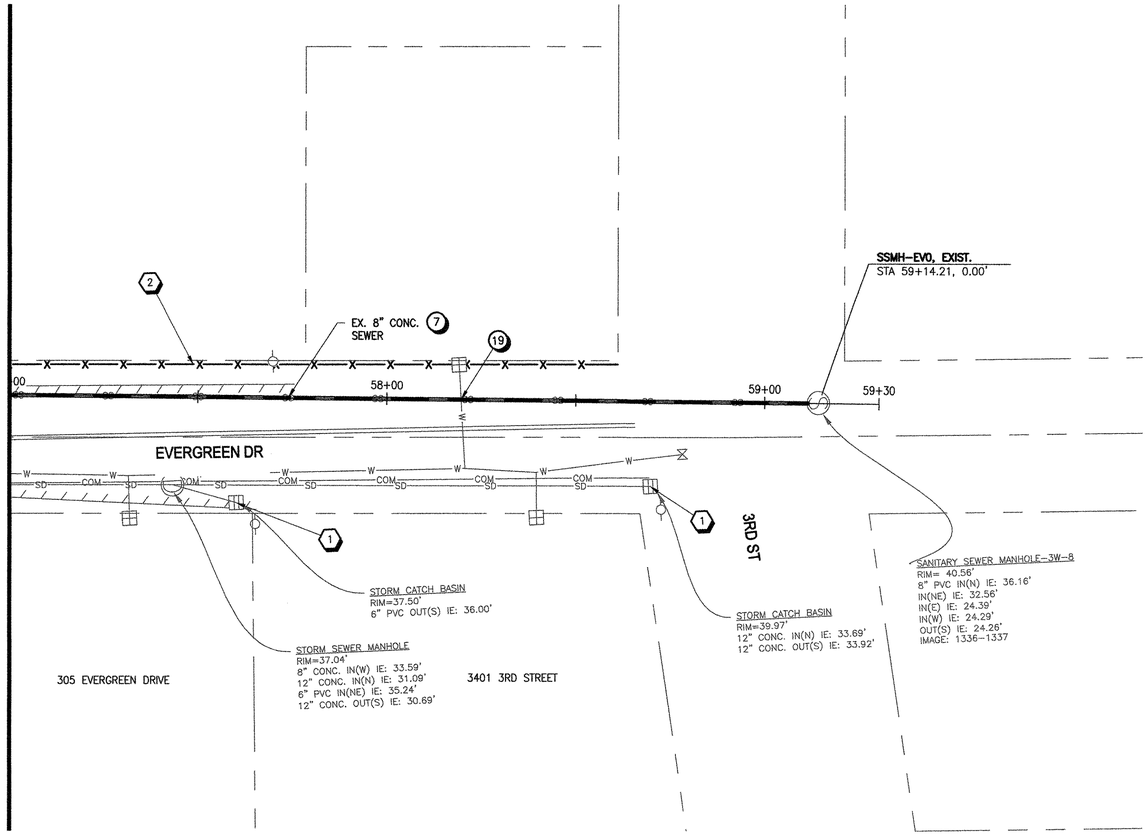
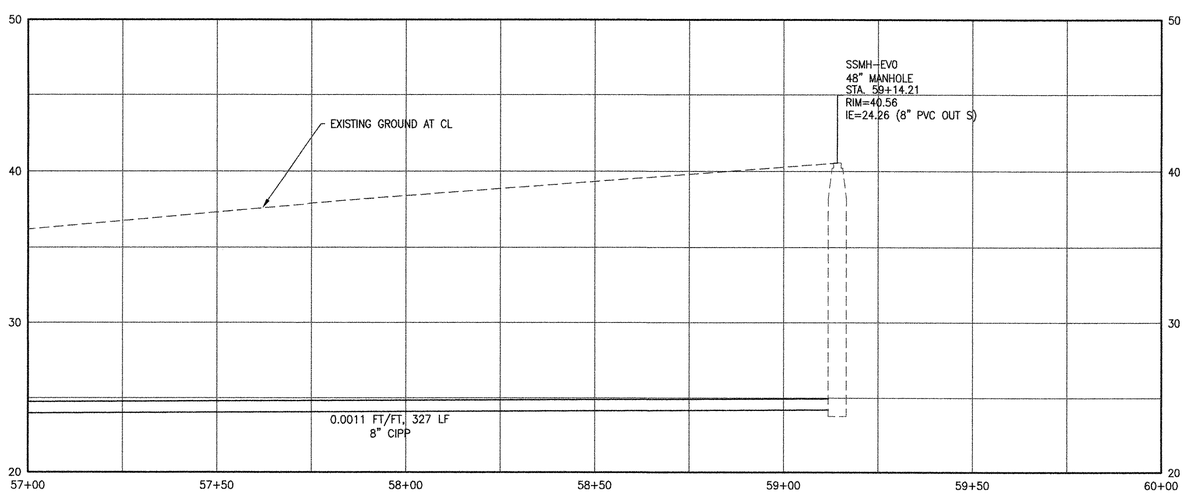
MATCHLINE STA. 57+00 SEE SHEET C45



PLAN



PROFILE

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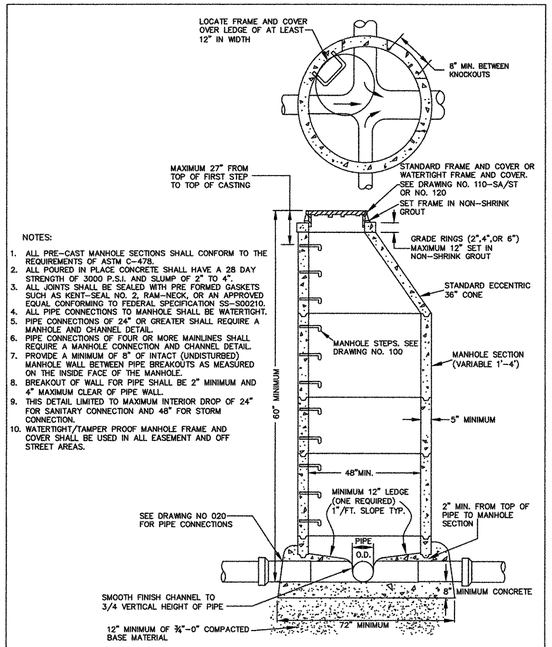


NOTES:

1. ALL PRE-CAST MANHOLE SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-478.
2. ALL POURED IN PLACE CONCRETE SHALL HAVE A 28 DAY STRENGTH OF 3000 P.S.I. AND SLUMP OF 2" TO 4".
3. ALL JOINTS SHALL BE SEALED WITH PRE FORMED GASKETS SUCH AS KENT-SEAL NO. 2, RAM-NECK, OR AN APPROVED EQUAL CONFORMING TO FEDERAL SPECIFICATION SS-S00210.
4. ALL PIPE CONNECTIONS TO MANHOLE SHALL BE WATERTIGHT.
5. PIPE CONNECTIONS OF 24" OR GREATER SHALL REQUIRE A MANHOLE AND CHANNEL DETAIL.
6. PIPE CONNECTIONS OF FOUR OR MORE MAINLINES SHALL REQUIRE A MANHOLE CONNECTION AND CHANNEL DETAIL.
7. PROVIDE A MINIMUM OF 8" OF INTACT (UNDISTURBED) MANHOLE WALL BETWEEN PIPE BREAKOUTS AS MEASURED ON THE INSIDE FACE OF THE MANHOLE.
8. BREAKOUT OF WALL FOR PIPE SHALL BE 2" MINIMUM AND 4" MAXIMUM CLEAR OF PIPE WALL.
9. THIS DETAIL LIMITED TO MAXIMUM INTERIOR DROP OF 24" FOR SANITARY CONNECTION AND 48" FOR STORM CONNECTION.
10. WATERTIGHT/TAMPER PROOF MANHOLE FRAME AND COVER SHALL BE USED IN ALL EASEMENT AND OFF STREET AREAS.

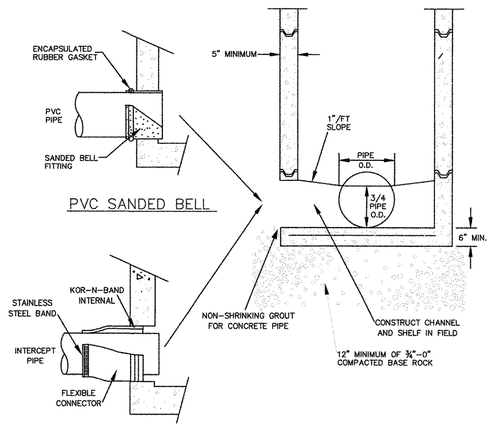
City of Tillamook The Dairylands

STANDARD MANHOLE

DRAWING NO. 010 REVISED 10-2014

NOTES:

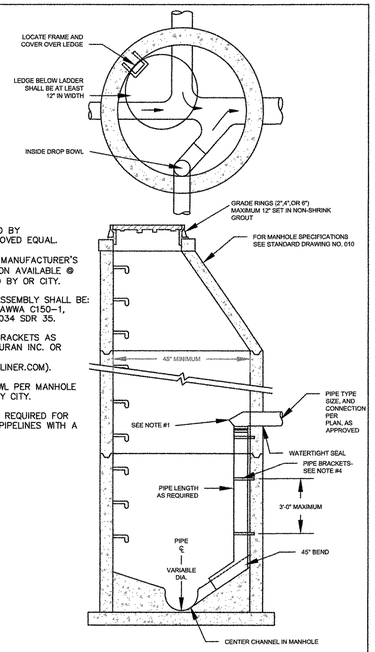
1. ALL PRE-CAST MANHOLE SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-478 AND APPLICABLE PROVISIONS OF STANDARD DRAWING NO. 010.
2. INSTALL PIPE WITH PIPE JOINT 2'± OUTSIDE OF MANHOLE WALL.



City of Tillamook The Dairylands

PRECAST CONCRETE MANHOLE BASE

DRAWING NO. 020 REVISED 10-2014



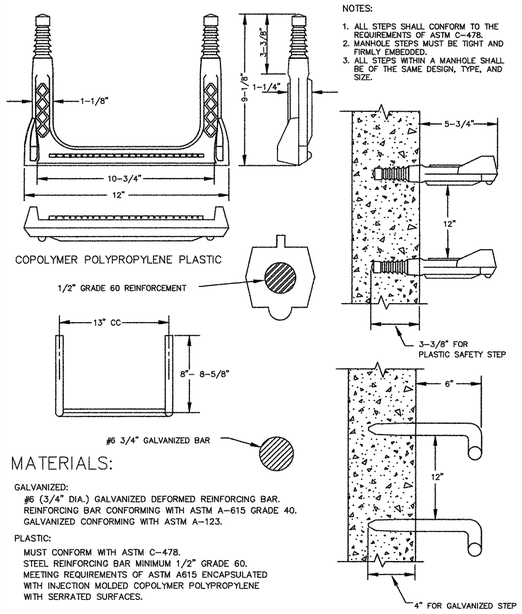
NOTES:

1. DROP BOWL AS MANUFACTURED BY RELINER-DURAN INC. OR APPROVED EQUAL.
2. DROP BOWL TO BE SIZED PER MANUFACTURER'S RECOMMENDATIONS (INFORMATION AVAILABLE @ RELINER.COM) OR AS REQUIRED BY OR CITY.
3. PIPE AND FITTING FOR DROP ASSEMBLY SHALL BE: DUCTILE IRON ANSI A21.50-1, AWWA C150-1, AWWA C-900 OR PVC ASTM 3034 SDR 35.
4. STAINLESS ADJUSTABLE PIPE BRACKETS AS MANUFACTURED BY RELINER-DURAN INC. OR APPROVED EQUAL. (INFORMATION AVAILABLE @ RELINER.COM).
5. NO MORE THAN ONE DROP BOWL PER MANHOLE WITHOUT WRITTEN APPROVAL BY CITY.
6. WRITTEN APPROVAL BY CITY IS REQUIRED FOR DROP BOWL INSTALLATION ON PIPELINES WITH A SLOPE OF 5% OR GREATER.

City of Tillamook The Dairylands

INSIDE DROP MANHOLE WITH BOWL

DRAWING NO. 090 REVISED 10-2014



NOTES:

1. ALL STEPS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-478.
2. MANHOLE STEPS MUST BE TIGHT AND FIRMLY EMBEDDED.
3. ALL STEPS WITHIN A MANHOLE SHALL BE OF THE SAME DESIGN, TYPE, AND SIZE.

MATERIALS:

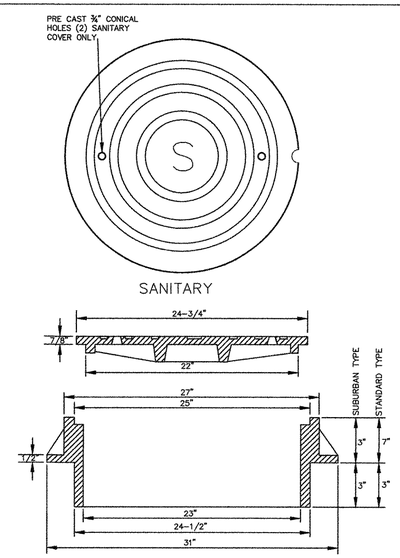
GALVANIZED:
#6 (3/4" DIA.) GALVANIZED DEFORMED REINFORCING BAR. REINFORCING BAR CONFORMING WITH ASTM A-615 GRADE 40. GALVANIZED CONFORMING WITH ASTM A-123.

PLASTIC:
MUST CONFORM WITH ASTM C-478.
STEEL REINFORCING BAR MINIMUM 1/2" GRADE 60.
MEETING REQUIREMENTS OF ASTM A615 ENCAPSULATED WITH INJECTION MOLDED COPOLYMER POLYPROPYLENE WITH SERRATED SURFACES.

City of Tillamook The Dairylands

MANHOLE STEP

DRAWING NO. 100 REVISED 10-2014



NOTES:

1. SUBURBAN TYPE NOT FOR USE IN TRAFFIC AREAS OF COLLECTOR AND ARTERIAL STREETS
2. COVER AND FRAME SHALL BE GRAY CAST IRON ASTM A-48 CLASS 30.
3. COVER AND FRAME TO BE MACHINED TO A TRUE BEARING ALL AROUND.
4. NOTCH LID FOR LIFTING HOOK.

City of Tillamook The Dairylands

SUBURBAN AND STANDARD MANHOLE FRAME AND COVER SANITARY

DRAWING NO. 110 REVISED 10-2014

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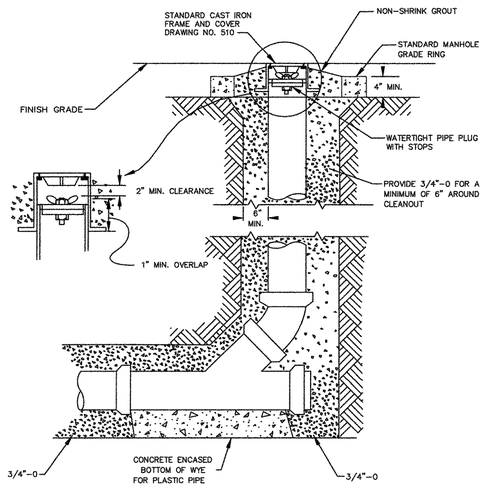
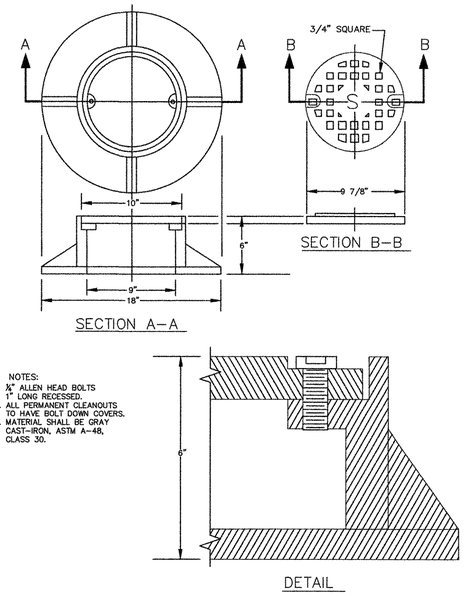


NOTE:
1. CONCRETE ENCASE ENTIRE WYE SECTION AND 45° BEND IF CONCRETE PIPE
2. STAND PIPE TO BE SAME SIZE AS MAINLINE UP TO AND INCLUDING 8" PIPE. MAINLINE GREATER THAN 8" SHALL HAVE A 8" STANDPIPE.

City of Tillamook

STANDARD CLEANOUT

DRAWING NO. 500 REVISED 10-2014

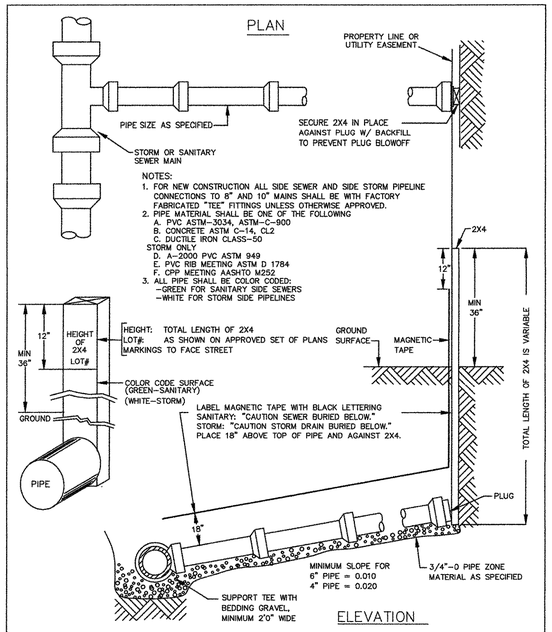


NOTES:
1. ¾" ALLEN HEAD BOLTS 1" LONG RECESSED.
2. ALL PERMANENT CLEANOUTS TO HAVE BOLT DOWN COVERS.
3. MATERIAL SHALL BE GRAY CAST-IRON, ASTM A-48, CLASS 30.

City of Tillamook

CLEANOUT FRAME AND COVER

DRAWING NO. 510 REVISED 10-2014

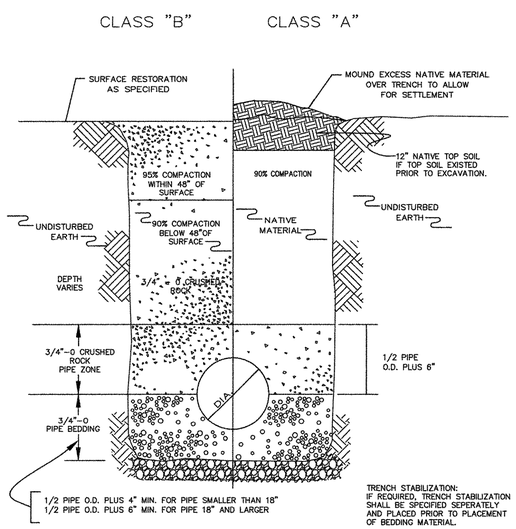


NOTES:
1. FOR NEW CONSTRUCTION ALL SIDE SEWER AND SIDE STORM PIPELINE CONNECTIONS TO 8" AND 10" MAINS SHALL BE WITH FACTORY FABRICATED "TEE" FITTINGS UNLESS OTHERWISE APPROVED.
2. PIPE MATERIAL SHALL BE ONE OF THE FOLLOWING
   A. PVC ASTM-3034, ASTM-C-900
   B. CONCRETE ASTM C-14, CL2
   C. DUCTILE IRON CLASS-50
   STORM ONLY
   D. A-2000 PVC ASTM 949
   E. PVC RIB MEETING ASTM D 1784
   F. CPP MEETING AASHTO M252
3. ALL PIPE SHALL BE COLOR CODED:
   -GREEN FOR SANITARY SIDE SEWERS
   -WHITE FOR STORM SIDE PIPELINES

City of Tillamook

SIDE SEWER / SIDE STORM PIPELINE

DRAWING NO. 520 REVISED 10-2014

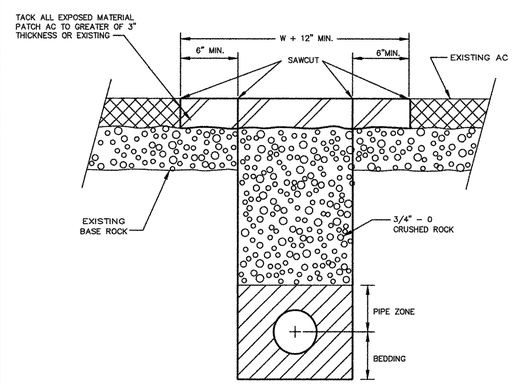


NOTE:
ALL COMPACTTION REQUIREMENTS PER AASHTO T-99 AND ODOT/APWA SPEC 00405.

City of Tillamook

TRENCH BACKFILL DETAILS

DRAWING NO. 590 REVISED 10-2014



NOTE:
1. TEE CUT TO BE DONE AFTER EXCAVATION AND BACKFILL OF TRENCH.
2. SEE DRAWING NO. 590 FOR BEDDING, PIPE ZONE, AND TRENCH BACKFILL.

City of Tillamook

T-CUT ASPHALT DETAILS

DRAWING NO. 600 REVISED 10-2014

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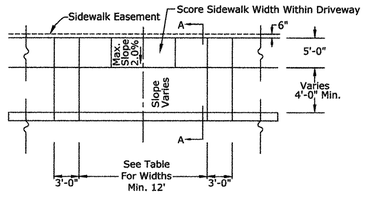
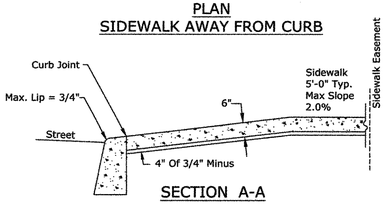


PLAN
SIDEWALK AWAY FROM CURB



SECTION A-A

Vertical curb preferred. see (2020-ST & 2030-ST). See 2010-ST for mountable curb and gutter if warranted.

DRIVEWAY WIDTH TABLE		
LAND USE	MINIMUM DRIVEWAY WIDTH	MAXIMUM DRIVEWAY WIDTH
See Code of Ord. 155.022 Detail on Driveway Spacing.	10 Feet	24 Feet

NOTE: RESIDENTIAL DRIVEWAYS

1) Concrete Shall Be Oregon Standard Commercial Grade Concrete (3,000 psi).

2) Curb Joints Shall Be Troweled With A Minimum 1/2" Radius Along Back Of Curb.

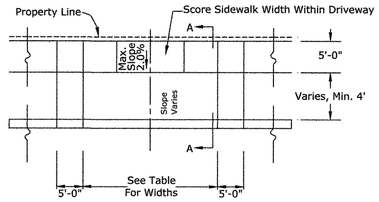
3) Expansion Joints Shall Be 1/2" Premolded Asphalt Impregnated Material Or Equal, Extending From Subgrade To Finsh Grade.

4) Contraction Joint Spacing Shall Be A Max. Of 10'.

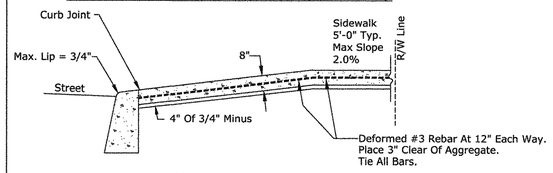
City of Tillamook The Dairylands

RESIDENTIAL DRIVEWAY (WITH PLANTER STRIP)

DRAWING NO. 1020–ST REVISED 12–2014



PLAN
SIDEWALK AWAY FROM CURB (Preferred)



SECTION A-A

NOTE: Vertical Curb preferred. See 2020-ST & 2030-ST, also 2010-ST for mountable curb and gutter if warranted.

NOTE: COMMERCIAL DRIVEWAYS

1) Concrete Shall Be Oregon Standard Commercial Grade Concrete (3,000 psi).

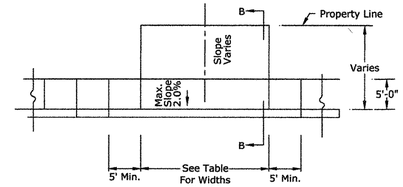
2) Curb Joint Shall Be Troweled With A Minimum 1/2" Radius Along Back Of Curb.

3) Expansion Joints Shall Be 1/2" Premolded Asphalt Impregnated Material Or Equal. Extending From Subgrade To Finsh Grade.

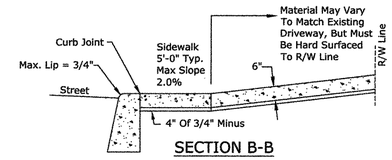
4) Contraction Joint Spacing Shall Be A Max. Of 10'.

City of Tillamook The Dairylands

COMMERCIAL DRIVEWAY (WITH PLANTER STRIP)



PLAN
SIDEWALK NEXT TO CURB



SECTION B-B

DRIVEWAY WIDTH TABLE		
LAND USE	MINIMUM DRIVEWAY WIDTH	MAXIMUM DRIVEWAY WIDTH
See Code of Ord. 155.022 Detail on Driveway Spacing.	10 Feet	24 Feet

NOTE: RESIDENTIAL DRIVEWAYS

1) Concrete Shall Be Oregon Standard Commercial Grade Concrete (3,000 psi).

2) Curb Joints Shall Be Troweled With A Minimum 1/2" Radius Along Back Of Curb.

3) Expansion Joints Shall Be 1/2" Premolded Asphalt Impregnated Material Or Equal, Extending From Subgrade To Finsh Grade.

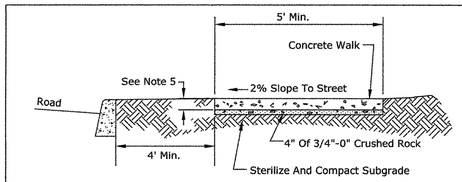
4) Contraction Joint Spacing Shall Be A Max. Of 10'.

5) 15' Minimum Separation Between Driveways.

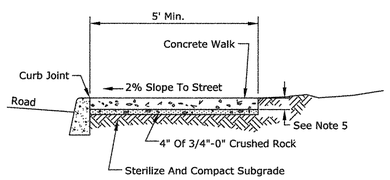
City of Tillamook The Dairylands

RESIDENTIAL DRIVEWAY (CURBTIGHT SIDEWALK)

DRAWING NO. 1040–ST REVISED 12–2014



SIDEWALK AWAY FROM CURB



SIDEWALK ADJACENT TO CURB

Notes:

1. Concrete Shall Be Oregon Standard Commercial Grade Concrete (3,000 psi).
2. Panel Dimensions To Be Nominal 5 Feet Or As Directed By Engineer. Perimeters Of Each Panel Shall Be Trowel Finished (shined). All Panels Shall Have A Broom Finish. Panels shall be scored in 2', 2.25' or 2.5' squares.
3. Expansion Joints To Be Placed Adjacent To Driveway Approaches, Utility Vaults, Drainage Inlets, Sidewalk Ramps, Curb Joints And At Spacing Not To Exceed 200 Feet.
4. Sidewalk Edges Shall Be Troweled With A Minimum 1/2" Radius.
5. Sidewalk Shall Have A Minimum Thickness Of 6 Inches (See Structural Sections In Standard Drawings 1020-ST And 1030-ST) If Mountable Curb is Used, Or If Sidewalk Is Intended As Portion Of Driveway. Otherwise Sidewalk Shall Have Minimum Thickness Of 4 Inches.
6. Drain Blockouts In Curbs Shall Be Extended To Back Of Sidewalk With 3" Dia. Plastic Pipe At 2% Slope. Construction Joint To Be Placed Over Pipe.
7. At Each CG-30 And CG-48 Inlet Location, Place A 10 Ft. Long #4 Bar Centered Between Back Of The Inlet Structure And Back Of Walk. Install Joints And Rebar At Direction Of Engineer.

City of Tillamook The Dairylands

P.C. CONCRETE SIDEWALK DETAIL

DRAWING NO. 2110–ST REVISED 10–2014

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NO.	DATE	BY	Checked & Approval	REVISIONS

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CITY STANDARD DETAILS
TILLAMOOK, TILLAMOOK COUNTY, OR

otak
HanmiGlobal Partner
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Suite 401
Vancouver, WA 98660
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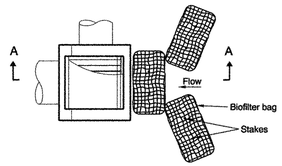
Project No. 67522

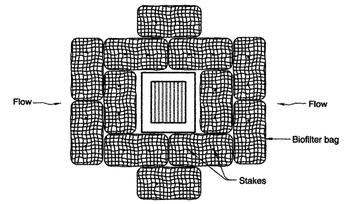
D03

Sheet No. 54 of 74

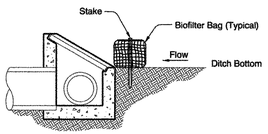
rd1015.dgn 03-03-2015



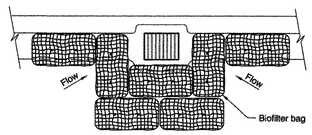
PLAN
DITCH INLET



PLAN
AREA DRAIN



SECTION A-A
DITCH INLET



PLAN
CATCH BASIN

BIOFILTER BAGS - TYPE 4

Note:

1. Stake biofilter bags with 2"X2" wood stakes, use a minimum 2 stakes per bag. Drive stakes a minimum of 6" into the ground and flush with the top of the bags.
2. Omit stakes when bags are placed on pavement surface.
3. Overlap all bag joints 6".

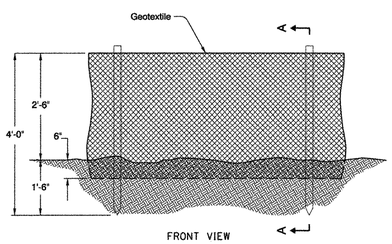
CALC. BOOK NO. N/A	BASELINE REPORT DATE 03-MAR-2015
The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.	NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications OREGON STANDARD DRAWINGS INLET PROTECTION TYPE 4 2015

DATE	REVISION DESCRIPTION

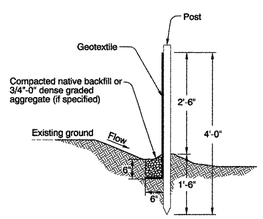
Effective Date: June 1, 2015 - November 30, 2015 RD1015

RD1015

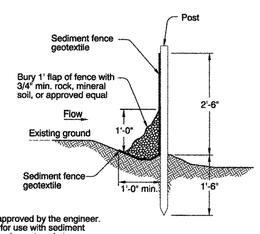
rd1040.dgn 03-03-2015



FRONT VIEW



SECTION A-A

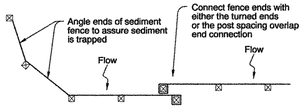


NOTES:

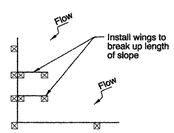
1. Use must be approved by the engineer.
2. Not approved for use with sediment fencing with sewn-in post pockets.

SEDIMENT FENCE AND GEOTEXTILE BURY DETAIL - TYPE 1

SEDIMENT ALTERNATE FENCE W/O TRENCHING - TYPE 2



PLAN VIEW



TERMINATION AT CORNER OR PROPERTY LINE

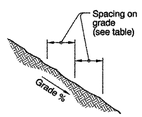


TABLE 1
FENCE SPACING
FOR GENERAL APPLICATION

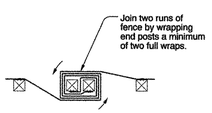
INSTALL PARALLEL ALONG CONTOURS AS FOLLOWS	
GRADE	MAXIMUM SPACING ON GRADE
Grade < 10%	300'
10% ≤ Grade < 15%	150'
15% ≤ Grade < 20%	100'
20% ≤ Grade < 30%	50'
30% ≤ Grade	25'

TABLE 2

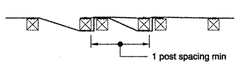
POST SPACING	
6'	Sediment Fence with Geotextile elongation less than 50%
4'	Sediment Fence with Geotextile elongation 50% or more

NOTES:

1. Use 2" X 2" wood fence posts.
2. Posts to be installed on downhill side of sediment fence. Position posts to prevent separation from geotextile.
3. Compact filter fabric trench backfill and soil on uphill side of fence.
4. Locate fence no closer than three feet to the toe of a slope.
5. Wing spacing shall comply with table 1.



TURNED ENDS CONNECTION



POST SPACING OVERLAP CONNECTION

GEOTEXTILE END CONNECTIONS

CALC. BOOK NO. N/A	BASELINE REPORT DATE 03-MAR-2015
The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.	NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications OREGON STANDARD DRAWINGS SEDIMENT FENCE 2015

DATE	REVISION DESCRIPTION

Effective Date: June 1, 2015 - November 30, 2015 RD1040

RD1040

NO.	DATE	BY	Checked & Approval	REVISIONS

CITY OF TILLAMOOK
TILLAMOOK SEWER REHABILITATION PROJECT
EROSION CONTROL STANDARD DETAILS
TILLAMOOK, TILLAMOOK COUNTY, OR

otak
HanmiGlobal Partner
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Project No. 67522
D04
Sheet No. 55 of 74

12TH ST PUMP STATION -IMPROVEMENT PROJECT
TILLAMOOK, OREGON

CDBG PROJECT #P12020

PROJECT TEAM

OWNER: CITY OF TILLAMOOK
210 LAUREL AVENUE
TILLAMOOK, OR 97141
PAUL WYNTERGREEN, CITY MGR
(503)842-2472 EXT. 3460

CIVIL ENGINEER: TIM KRAFT, P.E.
OTAK, INC.
700 WASHINGTON STREET
SUITE 401
VANCOUVER, WA 98660
(360)906-6793

SURVEYOR: DALE BARRETT, P.L.S.
OTAK, INC.
4253-A HWY 101 N.
SEASIDE, OR 97138
(503) 738-3425

PROJECT BENCHMARK

THE VERTICAL DATUM IS NAVD88:
A MAG NAIL SET FLUSH IN ASPHALT NORTH 35' OF EXISTING PUMP HOUSE HAS AN ORTHOMETRIC ELEVATION OF 21.29'

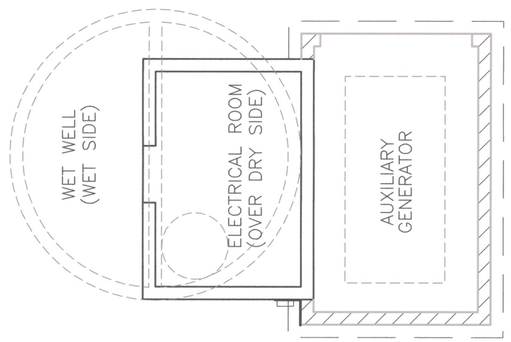
SCOPE OF PROJECT

2 – 20HP XYLEM NT 3153 LT 3~413 OR APPROVED EQUAL
2 – VFD PUMP CONTROLS – XYLEM SMART RUN SR311 OR APPROVED EQUAL
1 – DEMOLITION OF AUXILIARY GEN. BLDG.
1 – ELECTRICAL REVISIONS – PLANS

PROJECT DATUM

THE BASIS OF BEARING FOR THIS PROJECT IS GRID NORTH. THE HORIZONTAL DATUM IS NAD83(CORS 11) EPOCH 2010.00, PROJECTED ONTO OREGON NORTH ZONE (3601) STATE PLANE (GRID) COORDINATES IN INTERNATIONAL FEET. BEARINGS SHOWN HERE ARE ON GRID.

THE VERTICAL DATUM IS NAVD88(GEOID 12), HOLDING NGS BENCH MARK "C 223" (PID: RD1010) PUBLISHED ORTHOMETRIC ELEVATION OF 55.45'



PUMP STATION SCHEMATIC LAYOUT
SCALE 1"=4'-0"

TILLAMOOK VICINITY MAP
NOT TO SCALE

SHEET INDEX

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57	PS02	PUMP STATION DESCRIPTION AND DATA
58	PS03	CONSTRUCTION NOTES
59	PS04	BUILDING DEMOLITION PLAN
60	PS05	BUILDING DEMOLITION NOTES
61	PS06	EXISTING WET-DRY PLAN VIEW
62	PS07	EXISTING WET-DRY PROFILE VIEW SOUTH
63	PS08	EXISTING FORCE MAIN ELEVATIONS SOUTH
64	PS09	EXISTING DRY SIDE PROFILE VIEW WEST
65	PS10	WET-DRY PLAN VIEW
66	PS11	WET-DRY PROFILE VIEW
67	PS12	DRY SIDE PROFILE VIEW
68	PS13	PUMP CURVES
69	PS14	PROPOSED POWER SCHEMATIC
70	PS15	PUMP STATION OPERATIONAL NOTES
71	PS16	K/J POWER CONDUITS (INFO ONLY)
72	PS17	K/J POWER CONDUITS (INFO ONLY)
73	PS18	K/J POWER CONDUITS (INFO ONLY)
74	PS19	K/J POWER CONDUITS (INFO ONLY)

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  (877) 668-4001 (ADMINISTRATIVE)

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- WATER/SEWER/STORM

  TIM LYDA – PUBLIC WORKS DIRECTOR
  210 LAUREL AVE.
  TILLAMOOK, OREGON 97141
  (503) 374-1826 (OFFICE)
  (503) 812-8802 (CELL)

- ELECTRICITY

  TILLAMOOK PEOPLE'S UTILITY DISTRICT
  DEREK MICKELSON
  1115 PACIFIC AVE, TILLAMOOK, OR 97141
  (503) 842-2535 (OFFICE)
  (503) 815-8629 (ENGINEERING DIRECT)
  (800) 422-2535 (TOLL FREE)
  (800) 842-2122 (EMERGENCY)

- TELEPHONE

  CENTURYLINK
  SCOTT SCHIMINESKY
  PACIFIC CITY, OR 97141
  (503) 965-9918

- CABLE TELEVISION

  CHARTER COMMUNICATIONS
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  (888) 438-2427 (OFFICE)

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  NORTHWEST NATURAL GAS
  ANDREW YOUNG, P.E.
  220 NW 2ND AVE
  PORTLAND, OR 97209
  (503) 226-4211 (OFFICE)
  (360) 281-6169 (CELL)

NO.	DATE	BY	Checked & Approval	REVISIONS

REGISTERED PROFESSIONAL ENGINEER
70947PE
OREGON
MAR 12, 2002
TIM B. KRAFT
EXPIRES: 06/30/2017

CITY OF TILLAMOOK
TILLAMOOK SEWER REHABILITATION PROJECT
12TH STREET PUMP STATION
WET-DRY PROFILE VIEW
TILLAMOOK, TILLAMOOK COUNTY, OR

otak
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Suite 401
Vancouver, WA 98660
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Project No. 67522

PS01

Sheet No. 56 of 74

Sep 02, 2015 – 2:22pm
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PUMP STATION DESCRIPTION

DESIGN

THE FOLLOWING DESCRIPTIVE INFORMATION IS INTENDED TO PROVIDE DESIGN CRITERIA BACKGROUND. THERE ARE NO ANTICIPATED CHANGES TO THE FORCE MAIN FLOW AT THIS STATION:

PUMPING SYSTEM

THIS PUMP STATION WAS INSTALLED IN 1957, AND HAS BEEN IN CONTINUOUS OPERATION FOR 58 YEARS. THIS STATION IS AN EPA, DRY-WELL/WET-WELL STATION OF CONCRETE CONSTRUCTION.

THE 2001 UP-GRADE CONSISTS OF REPLACING THE PUMP IMPELLERS. IN 2004, ANOTHER UPGRADE INVOLVED REPLACING THE LEVEL CONTROL WITH A NEW BUBBLER SYSTEM.

THE PUMP AND SYSTEM CURVE FOUND IN THE WWTP FACILITIES PLAN (2005) ALONG WITH THE INFORMATION GIVEN IN SECTION 4.5.1 REGARDING THE 12TH ST PUMP STATION FLOWS, INDICATES THAT DESIGN CONDITIONS REQUIRE APPROXIMATELY 58 FEET OF TDH @ 2400 GPM FOR ONE PUMP. THIS INFORMATION FROM THE PUMP CURVE AND FACILITES PLAN IS INACCURATE AND SHOULD NOT BE RELIED UPON.

THROUGH RESEARCH, OTAK HAS LOCATED THE CORRECT PUMP CURVE FOR THIS STATION, TAKEN PRESSURE READINGS AT THE PUMP, CALCULATED THE FORCE MAIN CONDITIONS, AND DONE WIRE-TO-WATER CALCULATIONS. OUR CURRENT CALCULATIONS (2015) INDICATE THAT THE PUMPS ARE OPERATING AT 37 FEET OF TDH @ 1200 GPM. THIS INFORMATION FITS THE CORRECT PUMP CURVE. GIVEN THE CAPABILITIES OF NEW VARIABLE FREQUENCY DRIVES, WE ARE ABLE TO MEET THE 1200 GPM AT 1755 RPM.

WITH THIS PUMP STATION UPGRADE, THE GRAVITY FLOWS INTO THE PUMP STATION FROM 2 SOURCES WILL BE MONITORED. FURTHER, FLOW MONITORING WILL BE ADDED TO THE FORCE MAIN PIPING. THIS WILL GIVE THE CITY REAL-TIME INFORMATION FOR ACTUAL FLOWS INTO AND OUT OF THE STATION, WITH TOTALIZATION. ACTUAL FLOWS CAN BE RECORDED AND THE VFDS ADJUSTED IF NECESSARY. BOTH CORRECT PUMP CURVE AND THE PROPOSED CURVE ARE INCLUDED IN THESE PLANS.

PUMP INTAKE

THE PUMP INTAKE (SUCTION) IS 8" DIAMETER IN THE WET-WELL, REDUCED TO 6" DIAMETER AT THE PUMP. THE SUCTION PIPE TYPE IS FLANGED DUCTILE IRON. THE PUMP INTAKE CONDITIONS SHALL REMAIN THE SAME.

WET-WELL

THE DRY-WELL/WET-WELL WAS CONSTRUCTED IN 1957, AS THE BELOW GROUND PART OF THE STATION. IT IS A CIRCULAR SHAPE, 14.0' DIAMETER WITH PUMP INTAKES THROUGH THE SEPARATION WALL, INTO THE DRY-WELL. A CONCRETE FILLET WAS PLACED BELOW THE SEWER MAIN INFLOW LOCATION, SLOPING DOWNWARD TO THE PUMP INTAKES.

EXISTING FORCE MAIN - SIZE/ALIGNMENT

NO IMPROVEMENTS WERE MADE NOR ARE PLANNED TO THE EXISTING FORCE MAIN.

OUR RECORDS INDICATE THAT THE ORIGINAL (1957) FORCE MAIN IS CONSTRUCTED OF 12" DIAMETER AC TRANSITE PIPE FOR 277 FT. EXTENDING THE FORCE MAIN, A NEW SECTION, 2,570 FT OF 12" DUCTILE IRON PIPE WAS ADDED (1975). TOTAL FORCE MAIN LENGTH IS NOW 2,847 FT. THE RECEIVING MANHOLE IS IN A FIELD, WHERE THE INFLUENT THEN TRAVELS BY GRAVITY TO THE WASTEWATER TREATMENT PLANT. NO ORIGINAL PROFILE EXISTS FOR THIS FORCE MAIN. AN APPROXIMATE FORCE MAIN PROFILE IS NOW SHOWN IN THESE PLANS. SEE SHEET PS09.

OVERFLOW POINT

THE OVERFLOW POINT APPEARS TO BE THE DISCHARGE MANHOLE IN THE FIELD. THIS MH HAS A RIM ELEVATION OF ±20.54'. NO UPGRADES WERE INCORPORATED HERE.

STANDBY POWER

THE PUMP STATION, WHILE OWNED AND OPERATED BY THE CITY OF TILLAMOOK, IS LOCATED IN THE TILLAMOOK PEOPLE'S UTILITY DISTRICT YARD (TPUD). THE CITY HAS AN OLDER CONSOLIDATED ALLIS CHAMBERS MILITARY SURPLUS MODEL GENERATOR LOCATED IN THE EAST SIDE OF THE PUMP STATION BUILDING. WITH THIS UPGRADE, DE-COMMISSION AND REMOVE THE OLD STANDBY GENERATOR AND PROVIDE STANDBY POWER FROM THE NEW TPUD CATERPILLAR LARGE STATIONARY GENERATOR LOCATED IN AN ADJACENT BLOCK BUILDING.

FURTHER STANDBY POWER MAY COME FROM CITY INSTALLED MOBILE GENERATOR PLUG AT PUMP STATION.

INSPECTION OF PUMP STATION UPGRADE

THE CONSTRUCTION OF THE NEW PUMPS, VALVES AND CONTROLS FOR THE STATION SHALL BE INSPECTED PER OAR 340-52-015(1) (E). DURING THE INSPECTION AND INITIAL START-UP AND ACCEPTANCE TESTING, INTERIM CONTROL LEVELS SHALL BE ESTABLISHED BY THE CITY AND RECORDED WITH CITY STAFF PRESENT AND DOCUMENTED.

REVIEW BY AGENCIES WITH ADMINISTRATIVE AUTHORITY

THE CITY OF TILLAMOOK, THROUGH TIM LYDA (PUBLIC WORKS DIRECTOR) ALONG WITH OTHER COLLECTION SYSTEM PERSONNEL WILL MAKE PERIODIC SITE VISITS, AND OBSERVE THE STATION OPERATION. THEY WILL ALSO REVIEW THE UPGRADE DOCUMENTS. WITH THE EXCEPTION OF OREGON DEQ, THERE HAVE BEEN NO OTHER AGENCIES IDENTIFIED WITH ADMINISTRATIVE AUTHORITY REGARDING THIS PUMP STATION.

DESIGN DATA (EXISTING ORIGINAL EQUIPMENT)

(SOURCE: 2005 WWTP FACILITIES PLAN BY KENNEDY-JENKS)

PUMP STATION	**LOCATION • TPUD YARD, TILLAMOOK, OREGON**
TYPE	DUPLEX – VERTICAL COUPLED
PUMP TYPE	PEERLESS, 1957 VINTAGE, VERTICAL CENTRIFUGAL, NON-CLOG
CAPACITY ONE PUMP	1,200 GPM @ 65 FT TOTAL DYNAMIC HEAD
PUMP HP (EACH)	20.0 HP
LEVEL CONTROL TYPE	BUBBLER
DISCHARGE MH	IN FIELD SOUTH OF ELM AVENUE, WEST OF 10TH STREET. MANHOLE SHOWS NO SIGN OF CORROSION.
AVG. TIME TO OVERFLOW	WWTP FAC. PLAN 3 HRS
ALARM TELEMETRY TYPE	SCADA AUTO DIALER – VISUAL AND AUDIBLE ALARM AT STATION
ALARMS ON STATION	HIGH WATER LEVEL, LOSS OF POWER, THERMAL OVERLOAD
EPA RELIABILITY CLASS	CLASS 1 WITH STATIONARY AND MOBILE GENERATORS

GENERATOR	
TYPE	CONSOLIDATED AC – TO BE REPLACED BY TPUD CATERPILLAR, PLUS MOBILE IF NEEDED
SIZE	3 PHASE
FUEL	UNKNOWN
TANK CAPACITY	UNKNOWN
RUN TIME	UNLIMITED WHEN SWITCHED TO NEW TPUD OR MOBILE
MOBILITY	TRAILER MOUNTED GENERATORS AVAILABLE IF STATIONARY INOPERABLE
TRANSFER SWITCH	MANUAL, MOUNTED INSIDE PS BUILDING, EXISTING, THIS WILL CHANGE TO TPUD BUILDING IN FUTURE. FURTHER, THE CITY WILL HAVE THE CAPABILITY TO PLUG IN A MOBILE GENERATOR AT THE STATION, SHOULD TPUD GO DOWN.

FORCE MAIN	
MATERIAL	12" DIAMETER AC TRANSITE AND DUCTILE IRON
LENGTH	2,847 LINEAL FEET, EXISTING
PROFILE	GRADUALLY DESCENDING TO DISCHARGE MH
AIR RELEASE VALVES	NONE
SULFIDE CONTROL SYSTEM	NONE

DESIGN DATA (NEW EQUIPMENT)

PUMP STATION	
TYPE	DUPLEX – VERTICAL COUPLED
PUMP TYPE	XYLEM, WITH SMART DRIVE, VFD
CAPACITY	1,300 GPM @ 40 FT TOTAL DYNAMIC HEAD
PUMP HP	20.0 HP
LEVEL CONTROL TYPE	TRANSDUCER, FLOAT OVER-RIDE
ALARM TELEMETRY TYPE	SCADA (EXISTING)
EPA RELIABILITY CLASS	CLASS 1 WITH GENERATOR

FORCE MAIN	**EXISTING - NO CHANGES**

NO.	DATE	BY	Checked & Approval	REVISIONS

CITY OF TILLAMOOK
TILLAMOOK SEWER REHABILITATION PROJECT
12TH STREET PUMP STATION
PUMP STATION DESCRIPTION & DATA
TILLAMOOK, TILLAMOOK COUNTY, OR

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Project No. 67522

PS02

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CONSTRUCTION NOTES FOR TILLAMOOK - 12TH ST. PUMP STATION

SAFETY FIRST

1. CONTRACTOR SHALL HAVE AN APPROVED SAFETY PLAN AND TRAINED PERSONNEL. ALL WASTEWATER OPERATION AND MAINTENANCE WORK MUST CONFORM TO THE "CONFINED SPACE REGULATION" (OSHA STANDARD 29 CFR 1910.146) WHICH WERE ADOPTED BY THE STATE OF OREGON IN JANUARY 1993. A RESCUE PLAN MUST ACCOMPANY THE APPROVED SAFETY PLAN. THE CITY CANNOT BE RESPONSIBLE FOR CONTRACTOR OR CONTRACTOR PERSONNEL SAFETY.
2. CONTRACTOR SHALL RE-CONNECT FRESH AIR SUPPLY DUCTING ON DRY SIDE WITH FLEXIBLE BOOTS OR REMOVABLE SECTION.
3. WASTEWATER IS INHERENTLY DANGEROUS. CONTRACTOR SHALL KEEP WORK AREA CLEAN.
4. THIS EQUIPMENT CONTAINS ELECTRICAL AND MECHANICAL HAZARDS WHICH MAY CAUSE INJURY OR DEATH IF OPERATED WITHOUT SYSTEM KNOWLEDGE OR CARELESSNESS.
5. IT IS CRITICAL THAT LOCK-OUT/TAG-OUT PROCEDURES BE ESTABLISHED AND FOLLOWED DURING EQUIPMENT UP-GRADE.

GENERAL NOTES

1. THIS IS A KEY PUMP STATION REQUIRED TO OPERATE CONTINUALLY. CONTRACTOR SHALL COORDINATE ANY PUMP-AROUND INSTALLATION WITH THE CITY OF TILLAMOOK PUBLIC WORKS DEPARTMENT.
2. THIS PUMP STATION IS LOCATED IN THE TILLAMOOK PUBLIC UTILITIES (TPUD) TRUCK YARD. ACCESS AND WORK AT STATION MUST FOLLOW TPUD REQUIREMENTS AS SET FORTH IN THE SPECIAL PROVISIONS.
3. CONTRACTOR MUST COORDINATE ALL ACTIVITIES, SEQUENCING, AND PRODUCT INSTALLATION WITH THE CITY OF TILLAMOOK PUBLIC WORKS DEPARTMENT.
4. CONTRACTOR RECORD DRAWINGS SHALL BE PROVIDED TO ENGINEER AT COMPLETION OF PS UP-GRADES.
5. PUMPS, CONTROLS, PADS, PIPING, SCHEDULES, REQUIRE SUBMITTALS FOR ENGINEER AND CITY APPROVAL.
6. MOTORS, PIPING, VALVES SHALL HAVE A LIFTING EYE OR APPARATUS ATTACHED TO EACH, TO FACILITATE REMOVAL AND INSTALLATION.
7. ANY UNDERGROUND IMPROVEMENTS MUST BE DOCUMENTED AS TO LOCATION BY CONTRACTOR'S SURVEYOR AND IN FORMAT ACCEPTABLE TO CITY.

SEQUENCING NOTES

1. IF A PUMP-AROUND IS NOT ESTABLISHED – ONLY ONE PUMP ASSEMBLY AND EXISTING PIPING MAY BE REMOVED AND REPLACED.
2. THE NEW PUMP AND PIPING ASSEMBLY MUST HAVE THE ELECTRICAL EQUIPMENT INSTALLED AND OPERABLE, SUCH THAT THE NEW PUMP CAN OPERATE INDEPENDENTLY OF THE OTHER PUMP. (BY CORRECT SEQUENCING, A PUMP AROUND SYSTEM MAY NOT NEED TO BE INSTALLED.)

PUMP/MOTOR INSTALLATION NOTES

1. AFTER INSTALLATION, VIBRATION TESTING AT SHUT-OFF, DESIGN, AND RUN-OUT SHALL BE REQUIRED. RESULTS SHALL ACCOMPANY PUMP/CONTROL LITERATURE, AND BE INCORPORATED INTO THE O&M MANUAL PER DEQ.
2. ALL PIPING MUST BE FLANGED DUCTILE IRON PIPE INSIDE THE DRY WELL SIDE. NO PVC OR OTHER MATERIALS WITHOUT ENGINEER'S APPROVAL.
3. FITTINGS MUST BE EQUAL TO ADJACENT PIPE, OR TYLER CLASS 350, WHICHEVER IS MORE STRINGENT.
4. PRIOR TO NEW EQUIPMENT INSTALLATION, THE DRY SIDE OF THE PUMP STATION MUST BE PRESSURE CLEANED AND DRY BEFORE INSTALLATION OF ANY CONCRETE HOUSEKEEPING PADS. CONTRACTOR ADVISED THIS MAY REQUIRE SPECIAL EQUIPMENT.
5. EMERGENCY FLOAT SYSTEM IN WET-WELL MUST CONTINUE TO OPERATE THROUGHOUT THE PUMP, CONTROLS, AND PIPING CHANGEOVER.
6. HOUSEKEEPING PADS SHALL BE REPLACED. REPLACEMENT OF REINFORCED CONCRETE PADS AND FLOOR ANCHORING, OR REBAR SHALL BE CLEAN, DRY AND TIGHT.
7. HANGING TRANSDUCER(S) MUST BE SET APPROXIMATELY 1.0' ABOVE FLOOR OF WET SIDE OF WET-WELL. LEVEL TO BE ADJUSTED THROUGH THE VFD OR HMI ONLY. EXISTING BUBBLER LEVEL CONTROL SHALL NOT BE REMOVED UNTIL ELECTRONIC LEVEL CONTROL IS INSTALLED AND OPERATING CORRECTLY FOR EACH NEW PUMP AND CONTROLS.
8. REDUNDANCY IS CRITICAL AT THIS STATION. SINCE INDEPENDENT OPERATION OF PUMPS IS REQUIRED, EACH VFD OR SMART DRIVE SHALL OPERATE OFF OF A DEDICATED TRANSDUCER.
9. EXISTING SEAL WATER IS TO BE REMOVED FROM PUMPING AREA AND CAPPED IN THE ELECTRICAL BUILDING.
10. ELECTRICAL CONNECTIONS TO SCADA AND OR AUTO-DIAL ALARM SYSTEM MUST BE COORDINATED WITH THE CITY.
11. CONTRACTOR SHALL BUDGET A MINIMUM OF 8 HOURS TRAINING TIME, IN TWO 4 HOUR SESSIONS FOR PUBLIC WORKS STAFF TRAINING IN PUMP, VFD OPERATION.

SPECIFICATION REFERENCES

1. PROJECT SPECIFICATIONS SHALL TAKE PRECEDENCE. WHERE THESE SPECIFICATIONS ARE SILENT, THE MOST CURRENT EDITION OF ODOT APWA SPECIFICATIONS SHALL BE USED.
2. PUMP TESTING BY VENDOR SHALL RE REQUIRED AT THE END OF THE PROJECT. RESULTS SHALL BE INCORPORATED INTO THE VENDOR SUPPLIED O&M MANUALS AS A BASELINE FOR FUTURE TESTING.
3. UPON COMPLETION OF PROJECT – PUMP/CONTROL VENDOR SHALL PROVIDE THE OWNER WITH FOUR (4) COPIES OF THE OPERATIONS AND MAINTENANCE MANUALS. ONE (1) COPY TO ENGINEER.

ORS AND TECHNICAL NOTES

1. ATTENTION CONTRACTORS: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER. (NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS (503) 232-1897 OR 1-800-332-2344). AT LEAST TWO (2) BUSINESS DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE OREGON UTILITY NOTIFICATION CENTER OF THE DATE AND LOCATION OF THE PROPOSED CONSTRUCTION, AND THE TYPE OF WORK TO BE PERFORMED
2. ALL EXISTING FACILITIES TO BE MAINTAINED IN-PLACE BY THE CONTRACTOR UNLESS OTHERWISE SHOWN OR DIRECTED. CONTRACTOR TO LEAVE EXISTING FACILITIES IN AN EQUAL OR BETTER THAN ORIGINAL CONDITION AND TO THE SATISFACTION OF THE ENGINEER.
3. IN ACCORDANCE WITH O.R.S.290.140, IF THE CONTRACTOR FINDS IT NECESSARY TO INTERFERE WITH OR PAVE OVER ANY ESTABLISHED PUBLIC LAND SURVEY CORNER OR ITS ACCESSORIES, WITHIN THE PROJECT LIMITS, THE CONTRACTOR SHALL NOTIFY THE COUNTY SURVEYOR PRIOR TO DOING SO.
4. IN ACCORDANCE WITH O.R.S.290.150, CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ALL SURVEY MONUMENTS DISTURBED OR DESTROYED DURING CONSTRUCTION. REPLACING THE SURVEY MONUMENTS SHALL BE DONE BY A REGISTERED LAND SURVEYOR AT THE EXPENSE OF THE CONTRACTOR.
5. EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE ONLY. CONTACT UTILITY COMPANIES FOR PREMARKING. POTHOLE ALL UTILITY CROSSINGS BEFORE CONSTRUCTION TO PREVENT GRADE AND ALIGNMENT CONFLICTS.
6. TECHNICAL SPECIFICATIONS FOR CONSTRUCTION ARE TO FOLLOW THE MOST CURRENT EDITION OF THE AMERICAN PUBLIC WORKS ASSOCIATION (APWA) SPECIFICATIONS. SEE SPEC'S FOR CONSTRUCTION METHODS AND OTHER NOTES PERTINENT TO THIS PROJECT.
7. ALL FINAL DESIGNS AND SPECIFICATIONS TO BE APPROVED BY DEQ, LOCAL AGENCY AND OTHER ASSOCIATED UTILITIES PRIOR TO ANY CONSTRUCTION.
8. UPON COMPLETION OF CONSTRUCTION OF THE PROJECT, CONTRACTOR TO SUBMIT RECORD DRAWINGS TO THE ENGINEER OR CITY.

NO.	DATE	BY	Checked Approval	REVISIONS

REGISTERED PROFESSIONAL ENGINEER 70947PE OREGON MAR. 12, 2013 TIM B. KRAFT

EXPIRES: 06/30/2017

CITY OF TILLAMOOK
TILLAMOOK SEWER REHABILITATION PROJECT
12TH STREET PUMP STATION
CONSTRUCTION NOTES
TILLAMOOK, TILLAMOOK COUNTY, OR

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PS03

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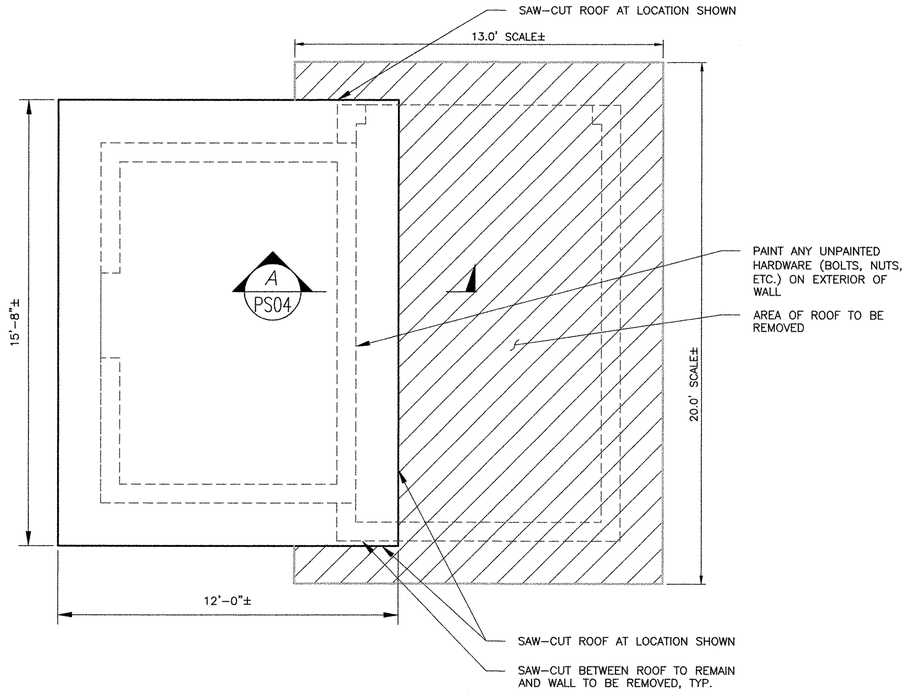
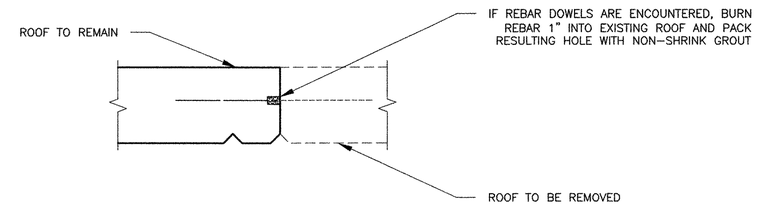


PUMP HOUSE DEMOLITION ROOF PLAN VIEW

SCALE 3/8"=1'-0"

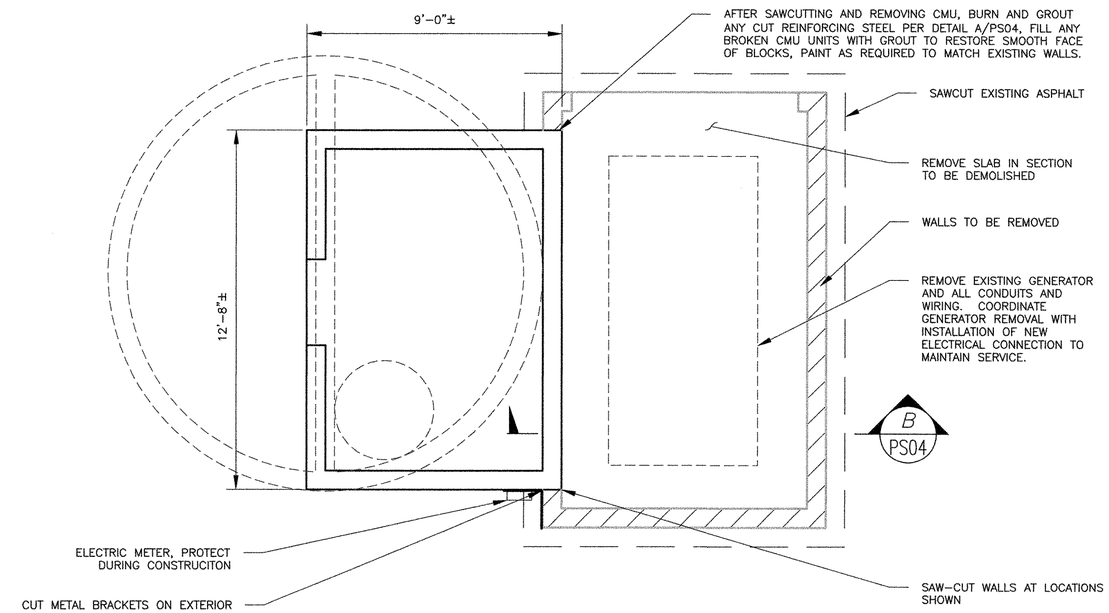
DEMOLITION NOTES:

1. THE DESIGN AND CONSTRUCTION OF THIS PROJECT IS GOVERENED BY THE 2013 OREGON STRUCTURAL SPECIALTY CODE (OSSC) BASED ON THE 2012 INTERNATIONAL BUILDING CODE (IBC) WITH AMENDMENTS.
2. THE STRUCTURAL DRAWINGS ARE INTENDED TO SHOW THE GENERAL CHARACTER AND EXTENT OF THE PROJECT ARE NOT INTENDED TO SHOW ALL DETAILS OF THE WORK USE DETAILS MARKED "TYPICAL" WHEREVER THEY APPLY.
3. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING DETAILS AND ACCURACY OF THE WORK; FOR CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS; FOR TECHNIQUES OF DEMOLITION; AND FOR PERFORMING WORK IN A SAFE AND SECURE MANNER.
4. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND ALL JOB RELATED SAFETY STANDARDS SUCH AS OSHA.
5. THE CONTRACTOR IS RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE STRUCTURE DURING CONSTRUCTION AND SHALL PROVIDE TEMPORARY SHORING, BRACING AND OTHER ELEMENTS REQUIRED TO MAINTAIN STABILITY UNTIL THE STRUCTURE IS COMPLETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE FAMILIAR WITH WORK REQUIRED IN THE CONSTRUCTION DOCUMENTS AND REQUIREMENTS FOR EXECUTING IT PROPERLY.
6. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE. CONFLICTS BETWEEN THE DRAWINGS AND THE ACTUAL SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
7. CONTRACTOR SHALL PATCH ALL HOLES IN CMU WALL WITH GROUT, INCLUDING BUT NOT LIMITED TO HOLES EXPOSED BY REMOVING CMU AND HOLES EXPOSED AND CREATED BY REMOVING CONDUIT.
8. GENERATOR DISCONNECT SHALL BE INCLUDED IN POWER CONDUCTOR RE-CONFIGURATION PLAN BY STATE OF OREGON, ELECTRICAL ENGINEER. THIS REMOVAL AND DISCONNECT ALSO INCLUDES THE EXISTING TRANSFER SWITCH INSIDE CONTROL (PS) BUILDING.



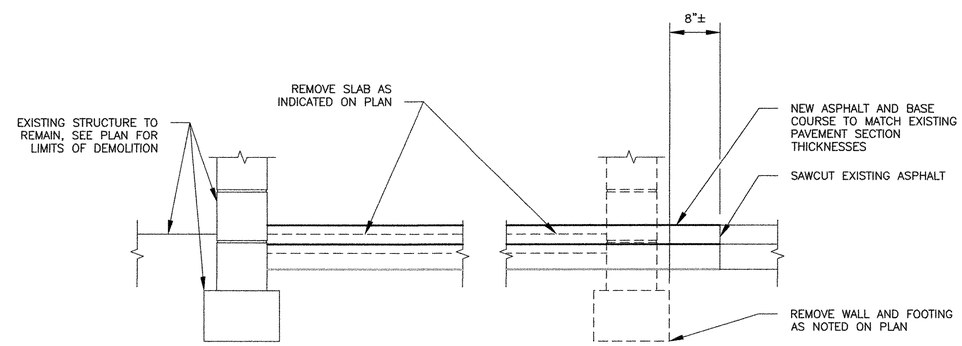
A/PS05 PUMP HOUSE ROOF CUTTING SECTION

SCALE 1/2"=1'-0"



PUMP HOUSE DEMOLITION PLAN VIEW

SCALE 3/8"=1'-0"



B/PS04 PUMP HOUSE FOUNDATION DETAIL

SCALE 1"=1'-0"

NO.	DATE	BY	Checked & Approval	REVISIONS

STRUCTURAL REGISTERED PROFESSIONAL ENGINEER 66914 OREGON MAY 15, 2001 DOUGLAS L. SARKKINEN, P.E.
9-2-15
EXPIRES: 6-30-2016

CITY OF TILLAMOOK
TILLAMOOK SEWER REHABILITATION PROJECT
12TH STREET PUMP STATION
WET-DRY PROFILE VIEW
TILLAMOOK, TILLAMOOK COUNTY, OR

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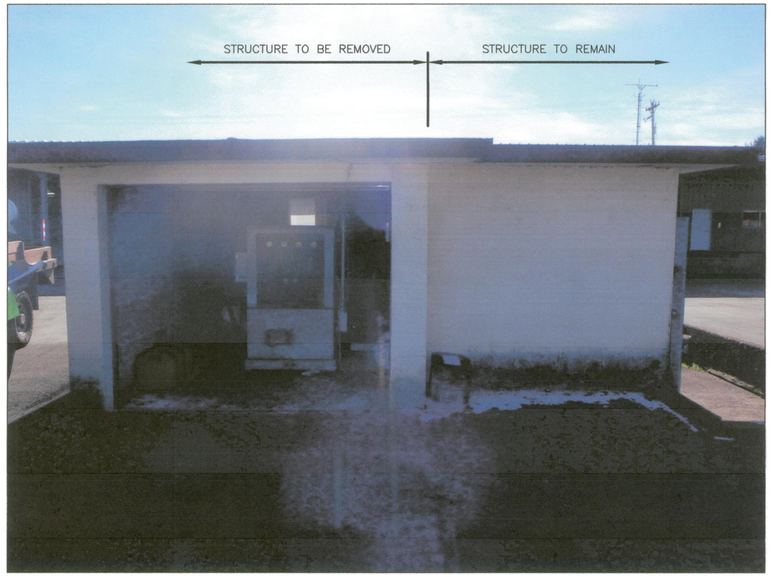
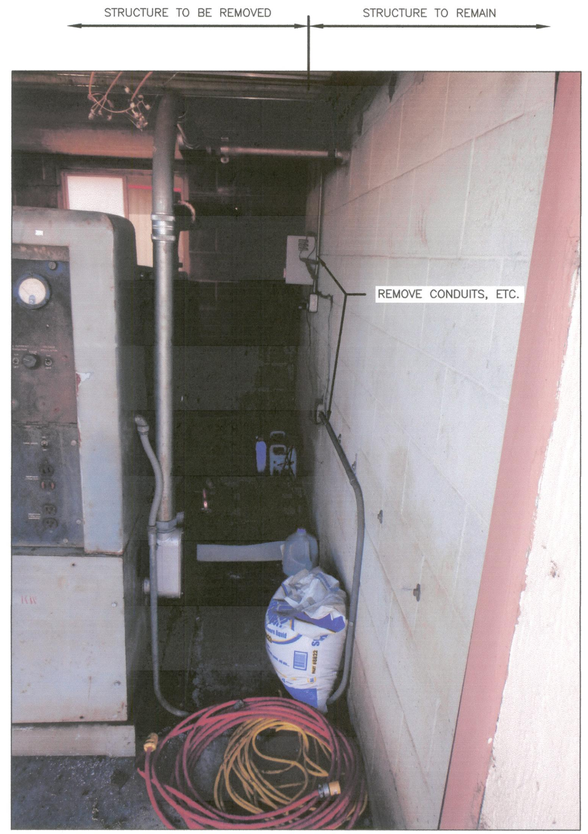


NORTH SIDE OF PUMP HOUSE, LOOKING SOUTH

SCALE N.T.S.

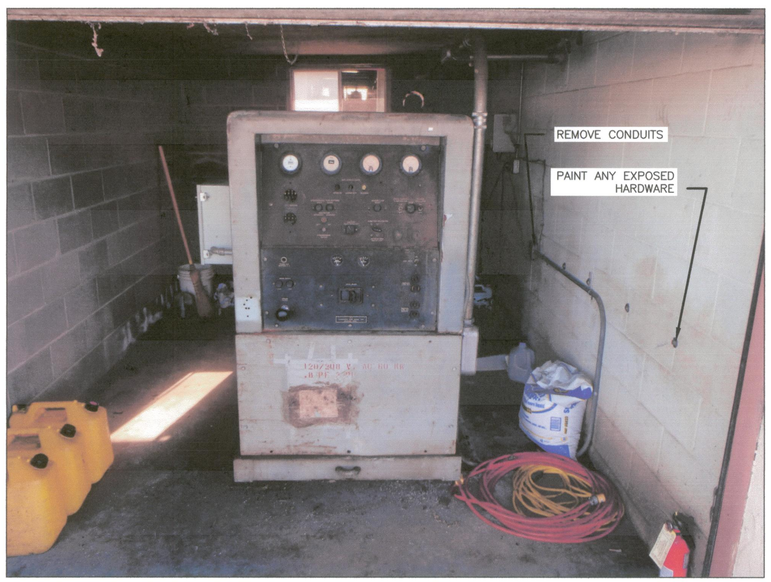


EAST WALL TO REMAIN, LOOKING SOUTH

SCALE N.T.S.

SOUTH WALL TO BE REMOVED, LOOKING NORTHEAST

SCALE N.T.S.



EXISTING GENERATOR TO BE REMOVED, LOOKING SOUTH

SCALE N.T.S.

EAST WALL TO REMAIN, LOOKING SOUTHWEST

SCALE N.T.S.

NO.	DATE	BY	Checked	REVISIONS

STRUCTURAL
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66914
OREGON
MAY 15, 2001
DOUGLAS L. SARKKINEN, P.E.
9-2-15
EXPIRES: 6-30-2016

CITY OF TILLAMOOK
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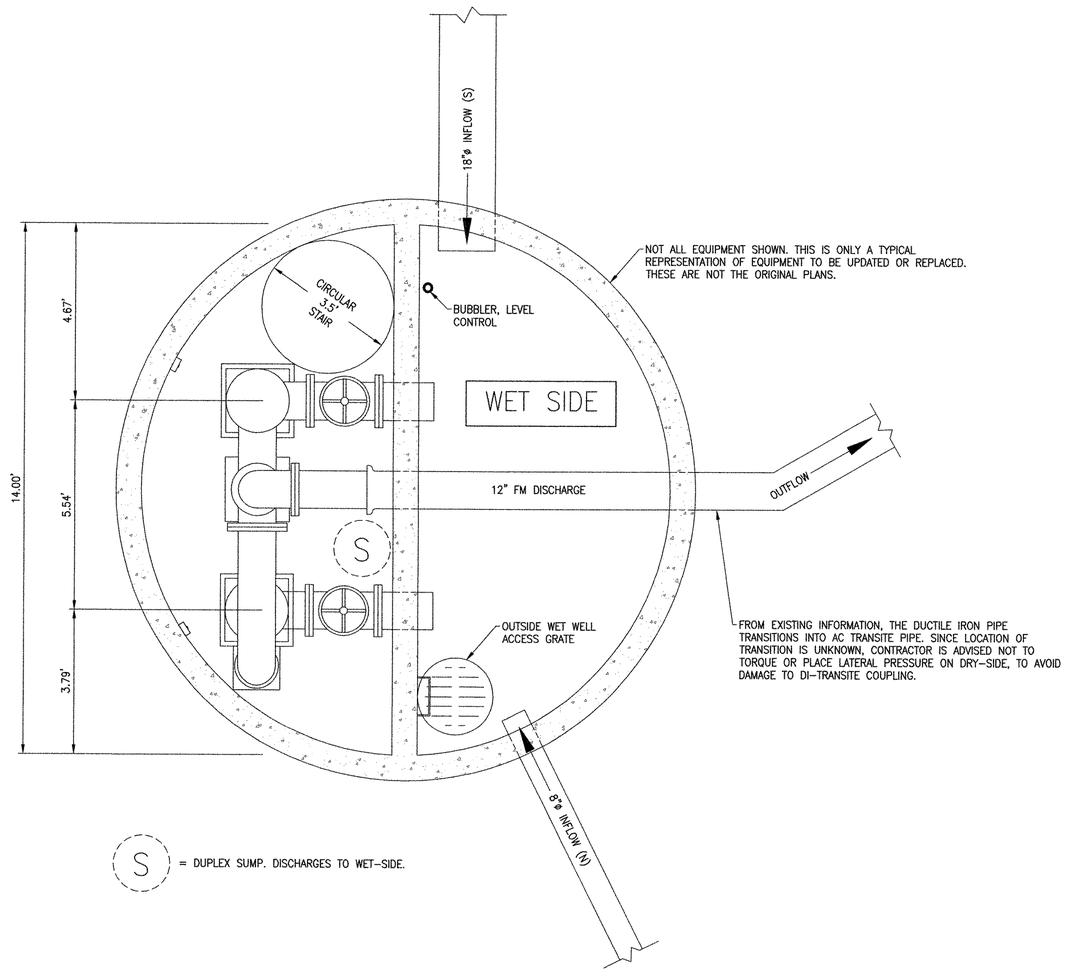

EXISTING WET-DRY PLAN VIEW

SCALE 1" = 2'

NO.	DATE	BY	Checked Approval	REVISIONS

REGISTERED PROFESSIONAL ENGINEER 70947PE OREGON MAR 12, 2008 TIM B. KRAFT

EXPIRES: 06/30/2017

CITY OF TILLAMOOK
TILLAMOOK SEWER REHABILITATION PROJECT
12TH STREET PUMP STATION
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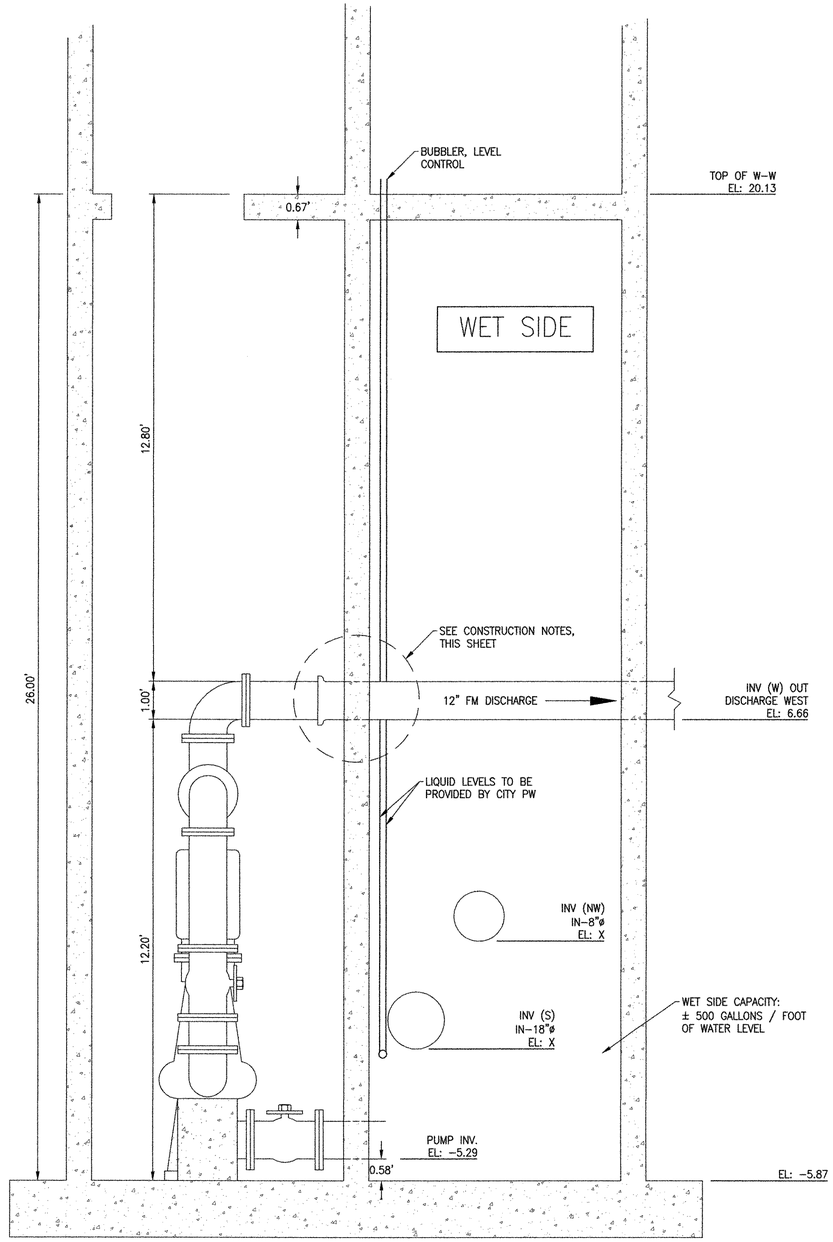

EXISTING WET-DRY SIDE PROFILE VIEW - SOUTH ELEVATION

SCALE 1" = 2'

CONSTRUCTION NOTES:

1. NOT ALL EQUIPMENT SHOWN. THIS IS ONLY A TYPICAL REPRESENTATION OF EQUIPMENT TO BE UPDATED OR REPLACED. THESE ARE NOT THE ORIGINAL PLANS.
2. THE 12"ø DI FORCE MAIN AS SHOWN IS FROM OBSERVATION. OUTSIDE OF THE WET-WELL, IT APPEARS TO TRANSITION FROM DI TO AC TRANSITE PIPE. CONTRACTOR IS ADVISED NOT TO TORQUE OR PLACE LATERAL PRESSURE ON DRY SIDE TO AVOID DAMAGE TO DI-TRANSITE COUPLING.
3. IT IS CRITICAL THAT LOCK-OUT-TAG OUT PROCEDURES BE ESTABLISHED AND FOLLOWED DURING EQUIPMENT UPGRADE.
4. INVERTS "IN" TO WET WELL TO BE MEASURED AND RECORDED DURING MAINTENANCE OR CLEANING.

NO.	DATE	BY	Checked & Approval	REVISIONS

REGISTERED PROFESSIONAL ENGINEER 70947PE OREGON MAR 12, 2002 TIM B. KRAFT

EXPIRES: 06/30/2017

CITY OF TILLAMOOK
TILLAMOOK SEWER REHABILITATION PROJECT
12TH STREET PUMP STATION
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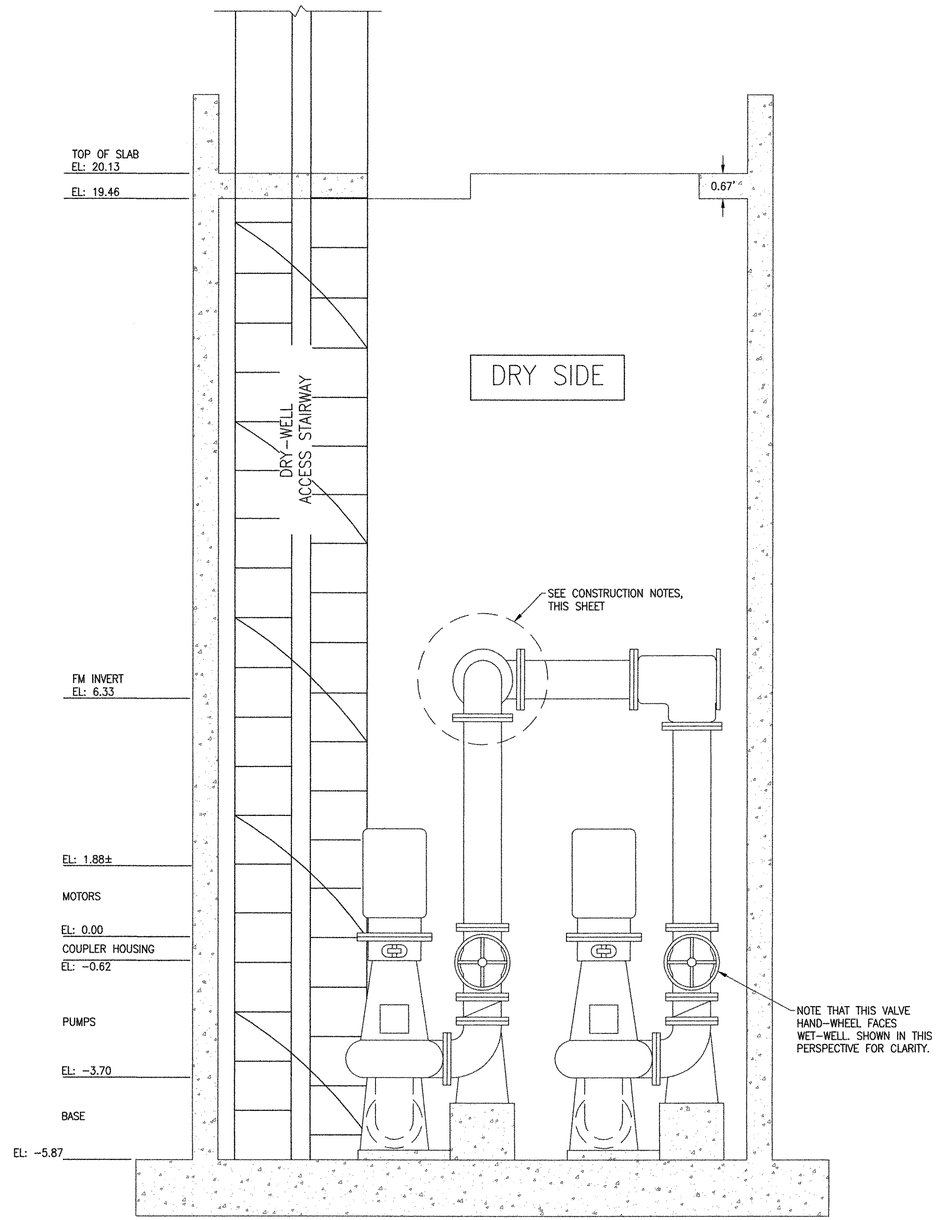

EXISTING DRY SIDE PROFILE VIEW - WEST ELEVATION

SCALE 1" = 2'

CONSTRUCTION NOTES:

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2. THE 12"ø DI FORCE MAIN AS SHOWN IS FROM OBSERVATION. OUTSIDE OF THE WET-WELL, IT APPEARS TO TRANSITION FROM DI TO AC TRANSITE PIPE. CONTRACTOR IS ADVISED NOT TO TORQUE OR PLACE LATERAL PRESSURE ON DRY SIDE TO AVOID DAMAGE TO DI-TRANSITE COUPLING.
3. IT IS CRITICAL THAT LOCK-OUT-TAG OUT PROCEDURES BE ESTABLISHED AND FOLLOWED DURING EQUIPMENT UPGRADE.
4. INVERTS "IN" TO WET WELL TO BE MEASURED AND RECORDED DURING MAINTENANCE OR CLEANING.

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REGISTERED PROFESSIONAL ENGINEER 70947PE OREGON MAR. 12, 2013 TIM B. KRAFT

EXPIRES: 06/30/2017

CITY OF TILLAMOOK
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PS08

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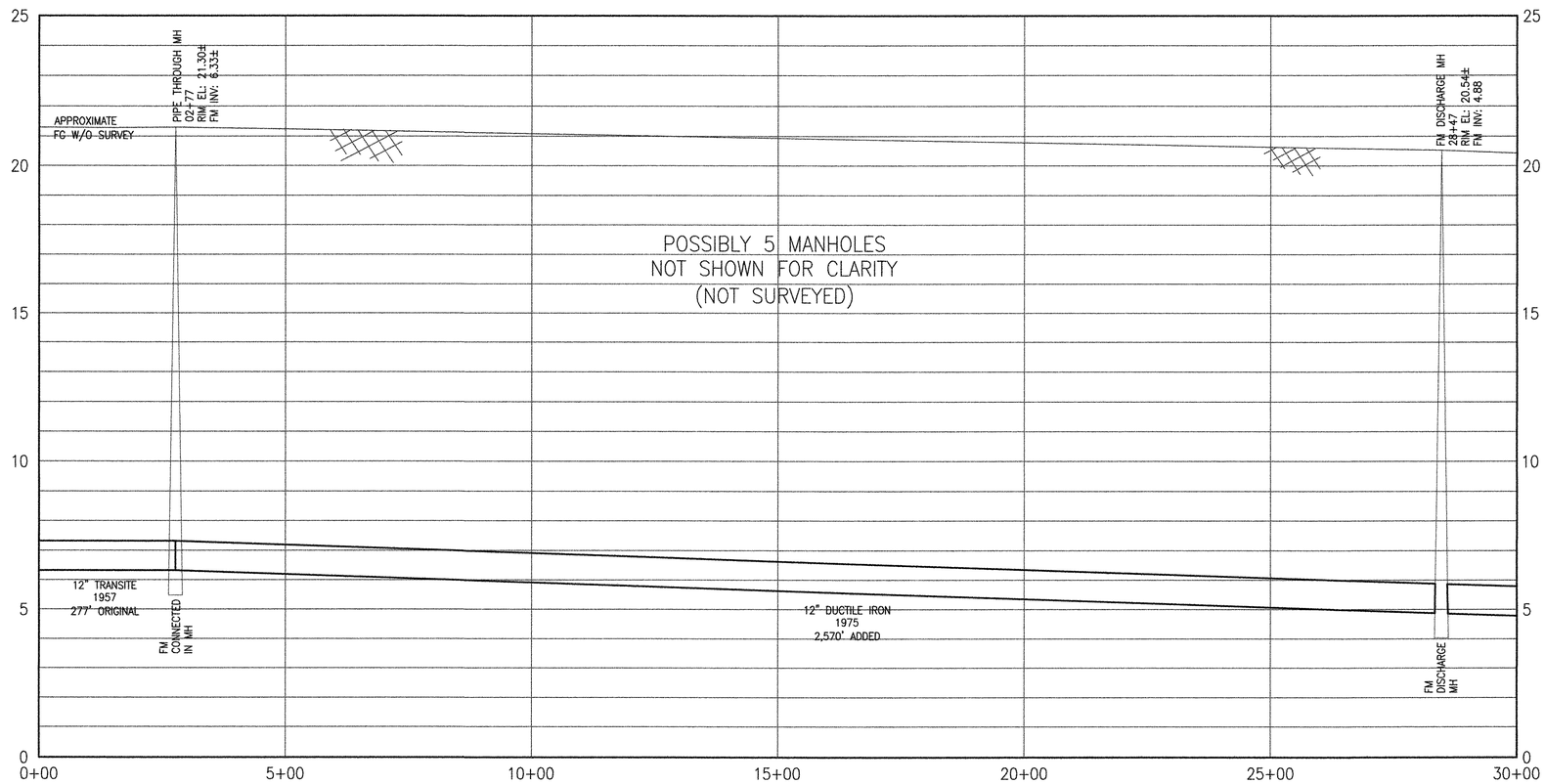
THIS FORCE MAIN PROFILE SHEET IS SHOWN FOR INFORMATIONAL PURPOSES ONLY



APPROXIMATE FORCE MAIN PROFILE ±2,847 L.F. (NO CHANGES)

SCALE (H) 1" = 150'
SCALE (V) 1" = 2.5'

NO.	DATE	BY	Checked & Approved	REVISIONS

CITY OF TILLAMOOK
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12TH STREET PUMP STATION
FORCE MAIN ELEVATION SOUTH EXISTING FM
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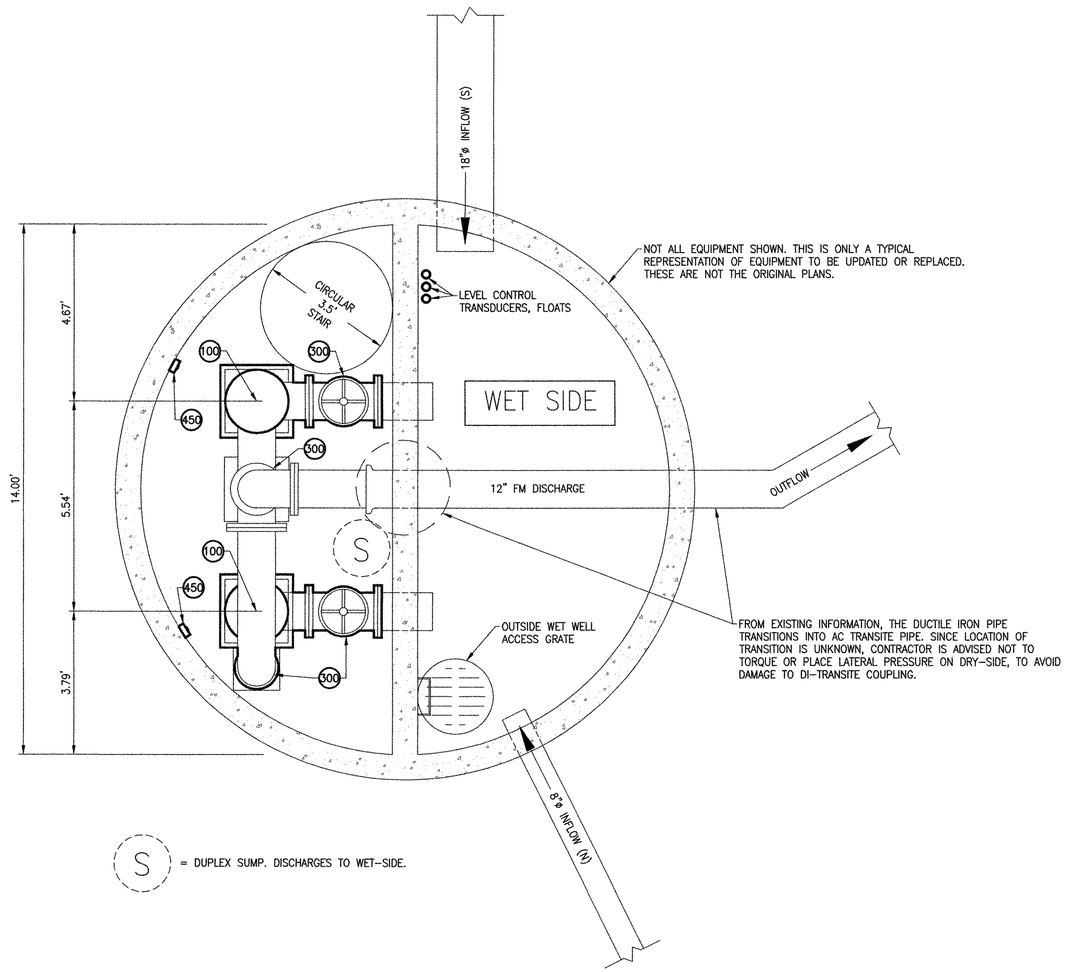

WET-DRY PLAN VIEW - UPGRADE

SCALE 1" = 2'

CONSTRUCTION NOTES:

100 REPLACE EXISTING MOTORS/PUMPS WITH XYLEM MODEL #NT 3153 LT 3~413 OR EQUAL

150 INSTALL ELECTRICAL PUMP DISCONNECTS NEAR PUMPS, ONE FOR EACH PUMP

200 REPLACE ELECTRICAL CONTROLS – VFDS WITH XYLEM MODEL #SR311, SMART RUN OR EQUAL

250 REPLACE LEVEL CONTROLS – WITH TRANSDUCERS, XYLEM OR EQUAL

300 REPLACE GATE/CHECK VALVES

350 REMOVE AND REPLACE CONCRETE HOUSEKEEPING PADS PER PLANS, CLEAN DRY, EPOXY MATING SURFACES, TYP. 4 PLACES, RE-INFORCING #4 EPOXY ANCHORED INTO CONCRETE FLOOR.

400 IF SO EQUIPPED, INSTALL BEARING LUBE KIT TO PUMPS. DO NOT MOUNT ON WALL SURFACE

450 ELECTRICAL PUMP DISCONNECTS ACCESSIBLE AT PUMPS SEE ELECTRICAL PLANS ON SHEETS PS16–PS19

NO.	DATE	BY	Checked & Approval	REVISIONS

REGISTERED PROFESSIONAL ENGINEER 70947PE OREGON MAR 12, 2008 TIM B. KRAFT

EXPIRES: 06/30/2017

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FAX: (360) 737-9651
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Project No. 67522

PS10

Sheet No. 65 of 74

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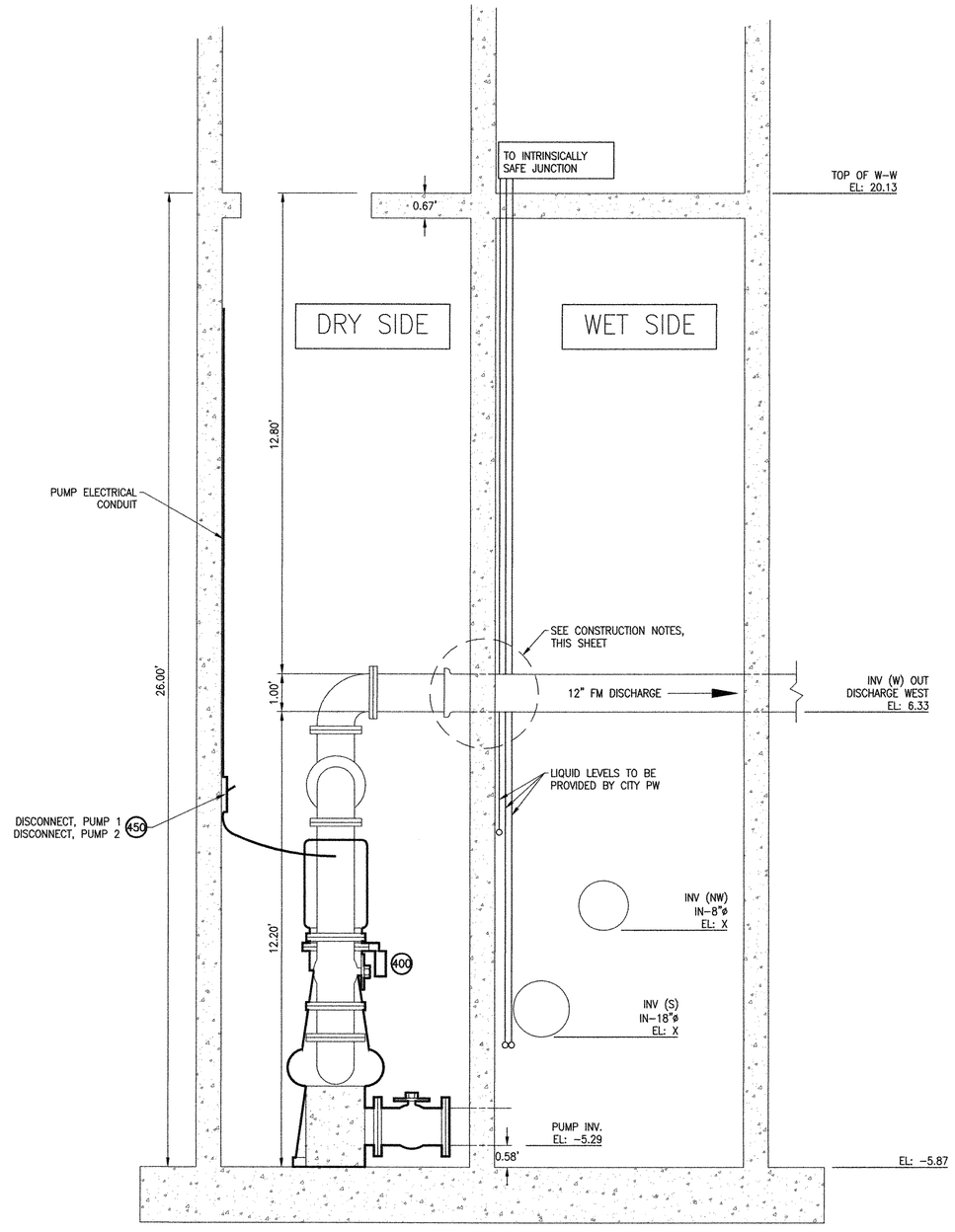

WET-DRY SIDE PROFILE VIEW - SOUTH ELEVATION - UPGRADE

SCALE 1" = 2'

CONSTRUCTION NOTES:

1. NOT ALL EQUIPMENT SHOWN. THIS IS ONLY A TYPICAL REPRESENTATION OF EQUIPMENT TO BE UPDATED OR REPLACED. THESE ARE NOT THE ORIGINAL PLANS.
2. THE 12"ø DI FORCE MAIN AS SHOWN IS FROM OBSERVATION. OUTSIDE OF THE WET-WELL, IT APPEARS TO TRANSITION FROM DI TO AC TRANSITE PIPE. CONTRACTOR IS ADVISED NOT TO TORQUE OR PLACE LATERAL PRESSURE ON DRY SIDE TO AVOID DAMAGE TO DI-TRANSITE COUPLING.
3. IT IS CRITICAL THAT LOCK-OUT-TAG OUT PROCEDURES BE ESTABLISHED AND FOLLOWED DURING EQUIPMENT UPGRADE.
4. INVERTS "IN" TO WET WELL TO BE MEASURED AND RECORDED DURING MAINTENANCE OR CLEANING.

400 IF SO EQUIPPED, INSTALL BEARING LUBE KIT TO PUMPS. DO NOT MOUNT ON WALL SURFACE

450 ELECTRICAL PUMP DISCONNECTS ACCESSIBLE AT PUMPS SEE ELECTRICAL PLANS

NO.	DATE	BY	Checked & Approval	REVISIONS

REGISTERED PROFESSIONAL ENGINEER 70947PE OREGON MAR 12, 2013 TIM B. KRAFT

EXPIRES: 06/30/2017

CITY OF TILLAMOOK
TILLAMOOK SEWER REHABILITATION PROJECT
12TH STREET PUMP STATION
WET-DRY PROFILE VIEW
TILLAMOOK, TILLAMOOK COUNTY, OR

otak
HanmiGlobal Partner
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Project No. 67522

PS11

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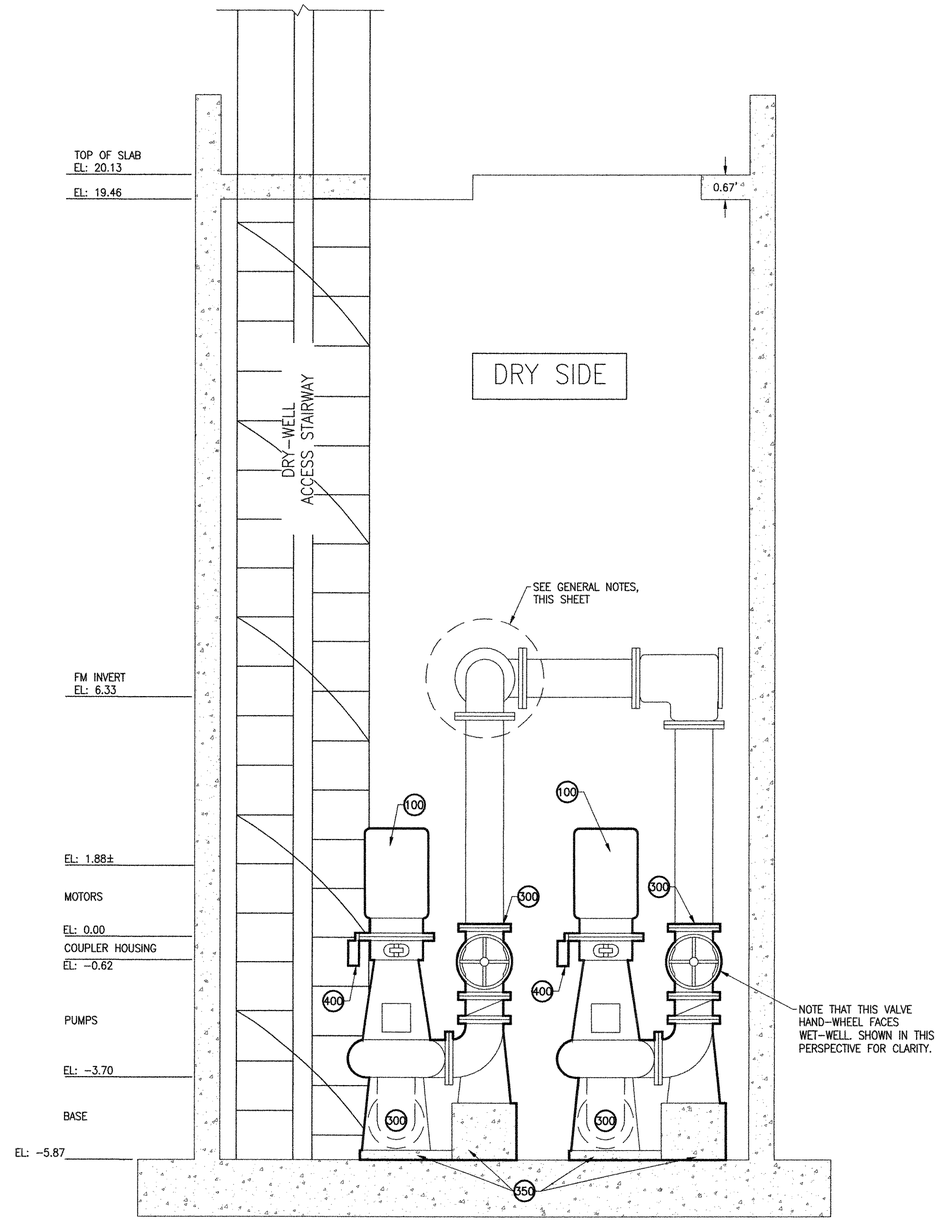

DRY SIDE PROFILE VIEW - WEST ELEVATION - UPGRADE

SCALE 1" = 2'

GENERAL NOTES:

1. NOT ALL EQUIPMENT SHOWN. THIS IS ONLY A TYPICAL REPRESENTATION OF EQUIPMENT TO BE UPDATED OR REPLACED. THESE ARE NOT THE ORIGINAL PLANS.
2. THE 12"ø DI FORCE MAIN AS SHOWN IS FROM OBSERVATION. OUTSIDE OF THE WET-WELL, IT APPEARS TO TRANSITION FROM DI TO AC TRANSITE PIPE. CONTRACTOR IS ADVISED NOT TO TORQUE OR PLACE LATERAL PRESSURE ON DRY SIDE TO AVOID DAMAGE TO DI-TRANSITE COUPLING.
3. IT IS CRITICAL THAT LOCK-OUT-TAG OUT PROCEDURES BE ESTABLISHED AND FOLLOWED DURING EQUIPMENT UPGRADE.
4. INVERTS "IN" TO WET WELL TO BE MEASURED AND RECORDED DURING MAINTENANCE OR CLEANING.

CONSTRUCTION NOTES:

100 REPLACE EXISTING MOTORS/PUMPS WITH XYLEM MODEL #NT 3153 LT OR EQUAL

150 INSTALL ELECTRICAL PUMP DISCONNECTS NEAR PUMPS, ONE FOR EACH PUMP

200 REPLACE ELECTRICAL CONTROLS - VFDS WITH XYLEM MODEL #SR311, SMART RUN OR EQUAL

250 REPLACE LEVEL CONTROLS - WITH TRANSDUCERS, XYLEM MODEL OR EQUAL

300 REPLACE OR REPAIR GATE/CHECK VALVES AS DIRECTED BY CITY

350 REMOVE AND REPLACE CONCRETE HOUSEKEEPING PADS PER PLANS, CLEAN DRY, EPOXY MATING SURFACES, TYP. 4 PLACES, RE-INFORCING #4 EPOXY ANCHORED INTO CONCRETE FLOOR.

400 IF SO EQUIPPED, INSTALL BEARING LUBE KIT TO PUMPS. DO NOT MOUNT ON WALL SURFACE

NO.	DATE	BY	Checked & Approval	REVISIONS

REGISTERED PROFESSIONAL ENGINEER 70947PE OREGON MAR 12, 2002 TIM B. KRAFT

EXPIRES: 06/30/2017

CITY OF TILLAMOOK
TILLAMOOK SEWER REHABILITATION PROJECT
12TH STREET PUMP STATION
DRY SIDE PROFILE VIEW
TILLAMOOK, TILLAMOOK COUNTY, OR

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Project No. 67522

PS12

Sheet No. 67 of 74

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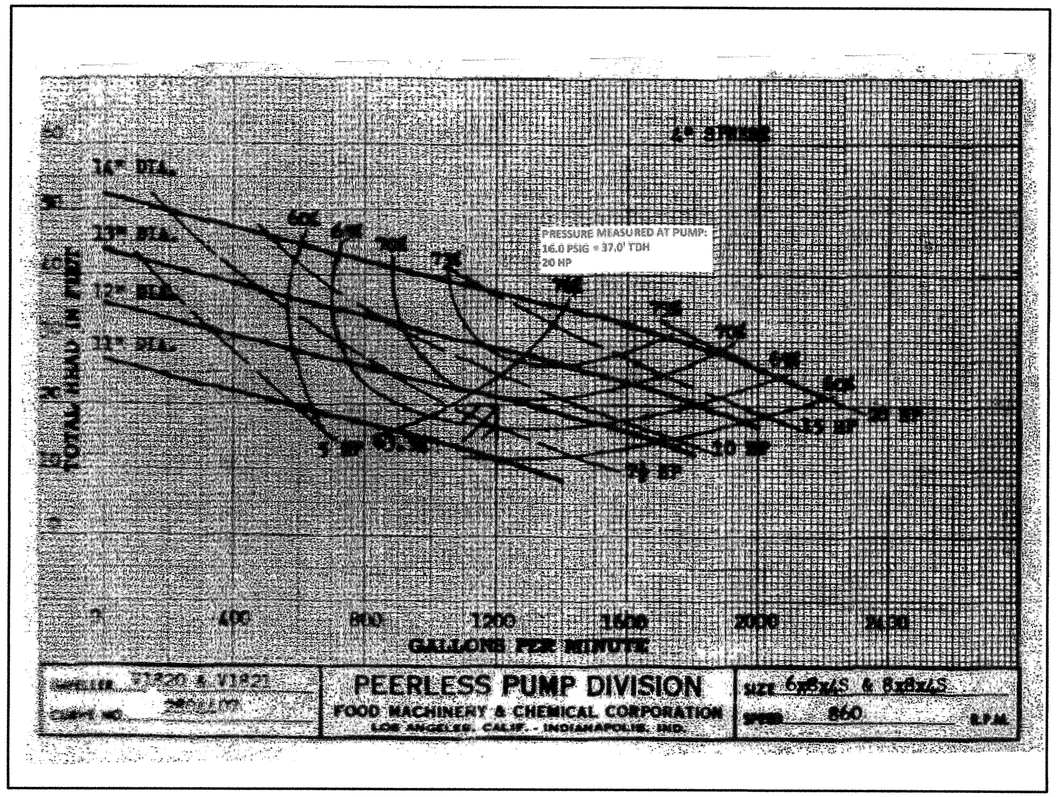
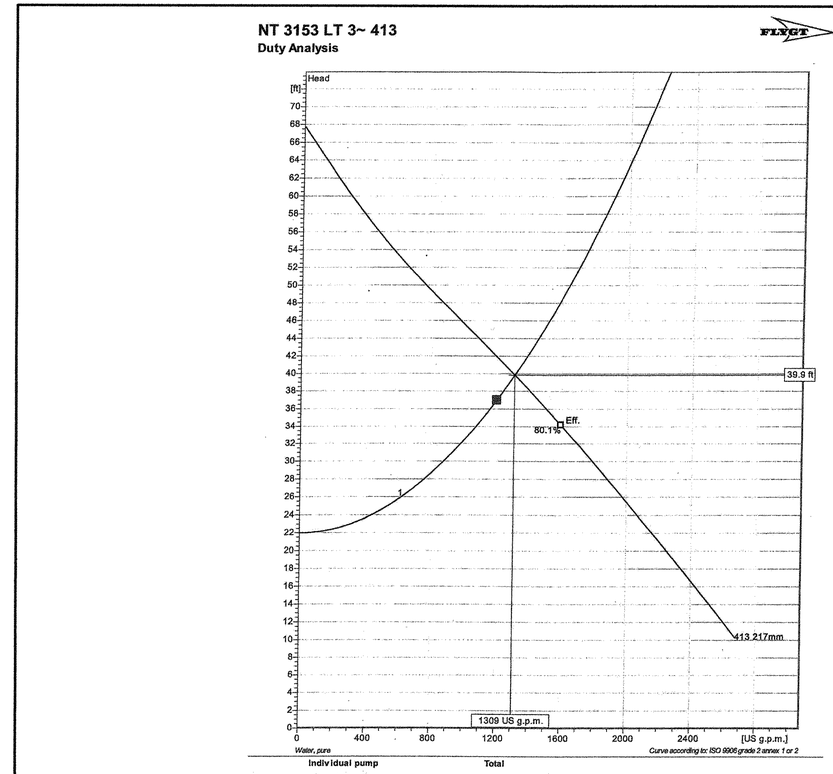


EXISTING PEERLESS



NEW XYLEM

NO.	DATE	BY	Checked / Approval	REVISIONS

CITY OF TILLAMOOK
TILLAMOOK SEWER REHABILITATION PROJECT
12TH STREET PUMP STATION
PUMP CURVES
TILLAMOOK, TILLAMOOK COUNTY, OR

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Project No. 67522

PS13

Sep 02, 2015 - 2:22pm
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NOTE:

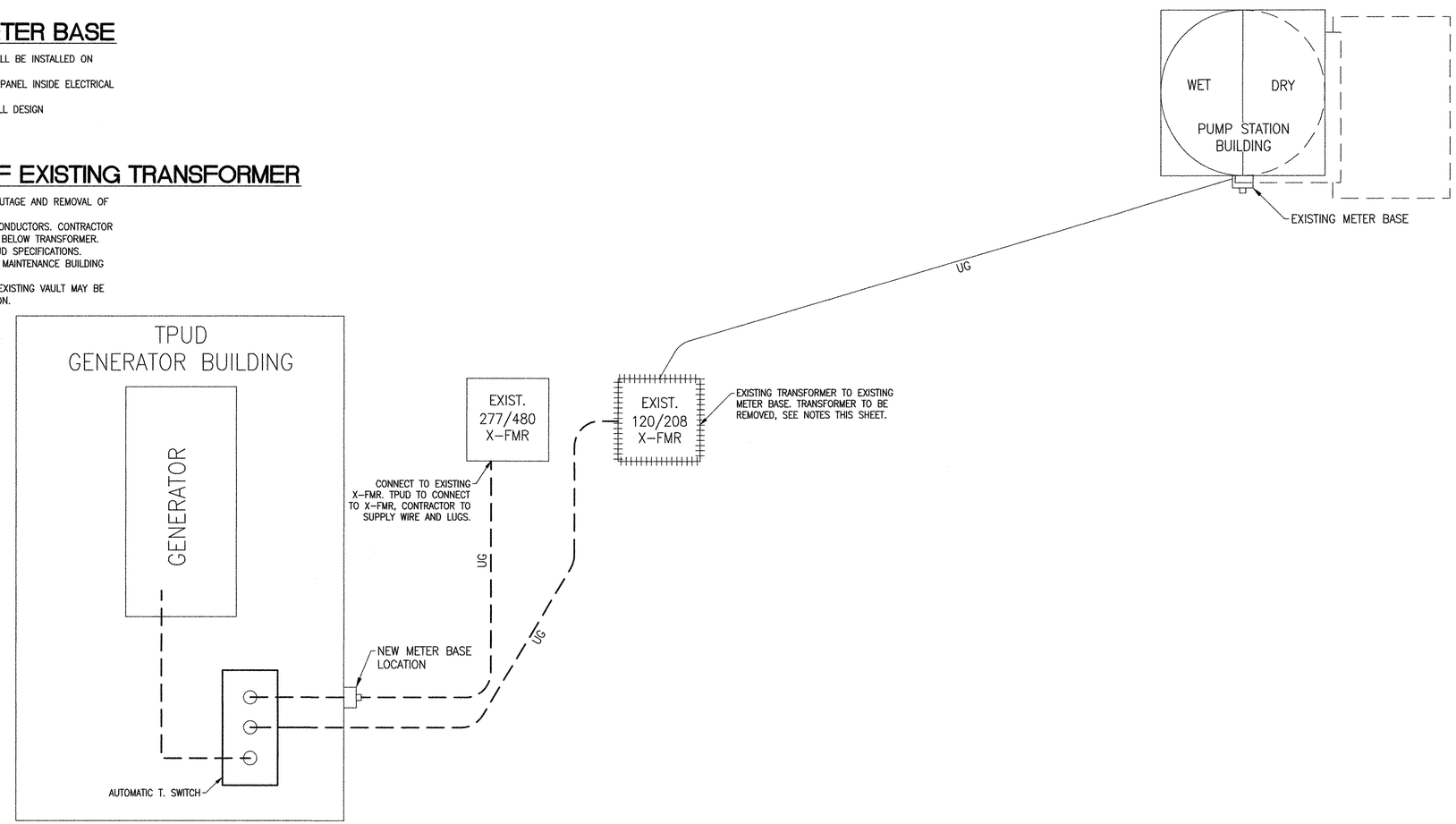
AT A FUTURE DATE – CITY MAY WISH TO FLAT–TOP WET–WELL AND REMOVE BUILDING COMPLETELY. THIS WILL REQUIRE MOVING CONTROLS, VFDs, ACCESSORIES TO TPUD GENERATOR BUILDING, ALONG WITH THE ADDITION OF MORE CONDUITS AND CONDUCTORS BETWEEN PS AND TPUD GENERATOR BUILDING.

NOTES FOR EXISTING METER BASE

1. DURING UP–GRADE, NEW STAINLESS STEEL METER BASE SHALL BE INSTALLED ON SOUTH–EAST SIDE OF GENERATOR BUILDING.
2. UG POWER TO BE RE–CONNECTED TO POWER DISTRIBUTION PANEL INSIDE ELECTRICAL BUILDING.
3. ELECTRICAL ENGINEER, LICENSED BY STATE OF OREGON SHALL DESIGN RE–CONNECTION AND SCHEDULE.

NOTES FOR REMOVAL OF EXISTING TRANSFORMER

1. CONTRACTOR SHALL COORDINATE WITH TPUD FOR SERVICE OUTAGE AND REMOVAL OF EXISTING GENERATOR.
2. TPUD WILL SALVAGE EXISTING TRANSFORMER AND REMOVE CONDUCTORS. CONTRACTOR SHALL PROVIDE AND INSTALL NEW CONCRETE LID ON VAULT BELOW TRANSFORMER. LID SHALL HAVE GALVANIZED STEEL HATCH AND BE PER TPUD SPECIFICATIONS.
3. EXISTING WIRE AND CONDUIT FROM TRANSFORMER VAULT TO MAINTENANCE BUILDING SHALL BE REMOVED/ABANDONED.
4. ONCE TRANSFORMER IS REMOVED AND NEW LID INSTALLED, EXISTING VAULT MAY BE USED AS PULL BOX FOR EXISTING CONDUIT TO PUMP STATION.



THIS SKETCH AND RELATED NOTES ARE FUNCTIONAL IN NATURE TO SHOW DESIGN INTENT. THE ACTUAL CONFIGURATION SHALL BE DESIGNED BY A STATE OF OREGON LICENSED ELECTRICAL ENGINEER AND APPROVED BY CITY OF TILLAMOOK AND THE TILLAMOOK PEOPLE'S UTILITY DISTRICT (TPUD).

UG = EXISTING UNDERGROUND

UG = PROPOSED UNDERGROUND

= DEMO

PROPOSED POWER SCHEMATIC BEFORE EXISTING GENERATOR REMOVAL

NTS

NO.	DATE	BY	Checked & Approval	REVISIONS

CITY OF TILLAMOOK
TILLAMOOK SEWER REHABILITATION PROJECT
12TH STREET PUMP STATION
WET–DRY PROFILE VIEW
TILLAMOOK, TILLAMOOK COUNTY, OR

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PS14

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Sep 03, 2015 – 10:21am
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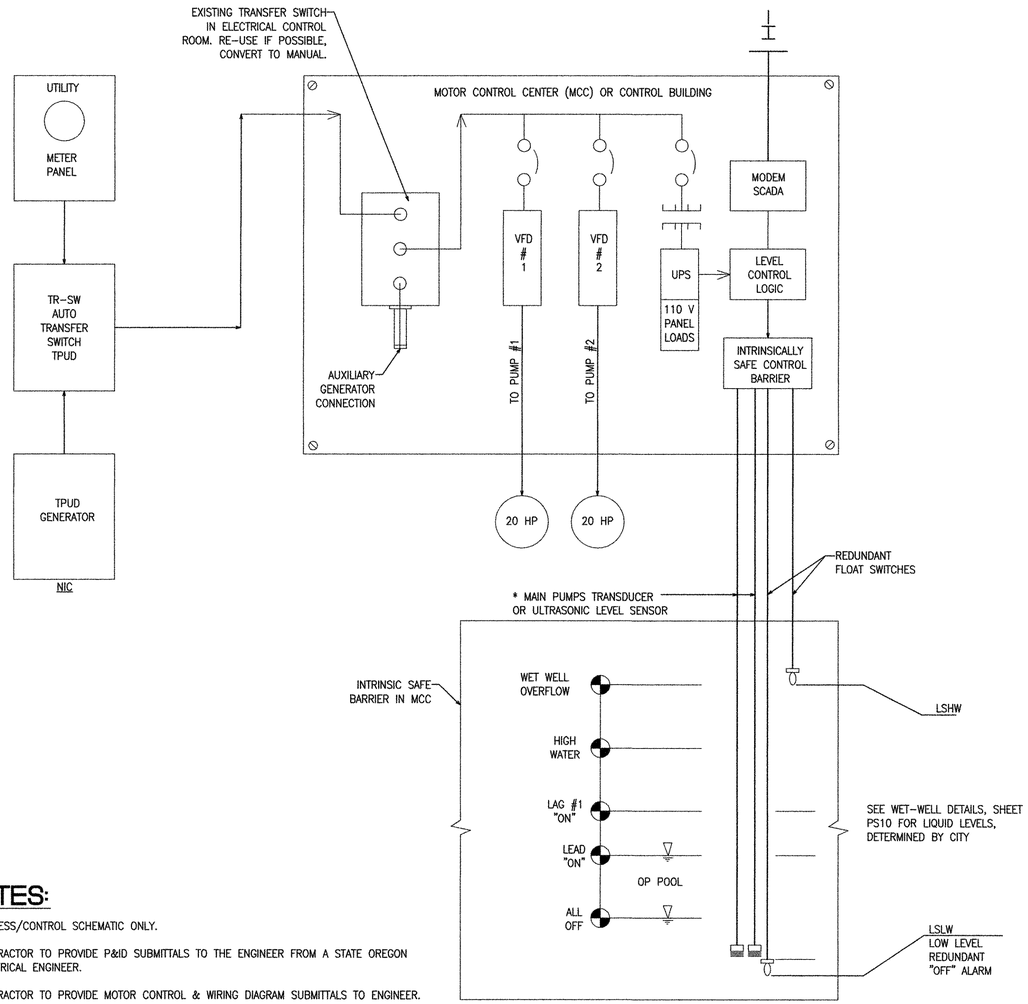
THIS DRAWING AND RELATED NOTES ARE FUNCTIONAL IN NATURE TO SHOW DESIGN INTENT. THE ACTUAL CONFIGURATION, ENCLOSURES, EQUIPMENT MAY VARY DEPENDING ON VENDOR AND EQUIPMENT SUPPLIED THROUGHOUT THE SUBMITTAL PROCESS.



* ALTERNATE LEVEL CONTROL MAY BE PRESSURE TRANSDUCER PRODUCING 4-20 M.A. SIGNAL L.I.T.

NOTES:

1. PROCESS/CONTROL SCHEMATIC ONLY.
2. CONTRACTOR TO PROVIDE P&ID SUBMITTALS TO THE ENGINEER FROM A STATE OREGON ELECTRICAL ENGINEER.
3. CONTRACTOR TO PROVIDE MOTOR CONTROL & WIRING DIAGRAM SUBMITTALS TO ENGINEER.
4. CONTRACTOR TO PROVIDE RECORD DRAWINGS OF COMPLETE INSTALLATION FROM A STATE OF OREGON ELECTRICAL ENGINEER.
5. CONTROL PANEL TO CONTAIN FULLY FUNCTIONAL COOLING FANS(S), HEATER, THERMOSTATICALLY CONTROLLED, ETM METERS, ALARM LIGHTS, HOA W/ VFD BY-PASS, FULL PUMP LOCKOUTS, DEAD FRONT.
6. NOT ALL ELECTRICAL CONTROLS, CONDUITS SHOWN ON THIS PLAN.
7. PUMP AROUND DESIGNED BY OTHERS (IF NECESSARY)
8. BUBBLER LEVEL CONTROL REMOVED
9. CONTRACTOR MAY ELECT SINGULAR PUMP REPLACEMENT RATHER THAN A PUMP-AROUND ARRANGEMENT.

LEGEND

1. MCC/PLC – DENOTES PUMP STATION MOTOR CONTROL CENTER AND PROGRAMMABLE LOGIC CONTROLLER, (A DISCREET NEMA PANEL). ADDITION OF PLC DEPENDS ON CITY REQUIREMENTS.
2. TR-SW – DENOTES AUTO ELECTRICAL TRANSFER SWITCH, TO OPERATE PUMP STATION AND CONTROLLERS FROM MAIN ELECTRICAL POWER GRID OR THROUGH ON-SITE AUXILARY POWER GENERATOR. AUTO TRANSFER SWITCH SHALL BE RE-USED BY CONTRACTOR, IF POSSIBLE. IN COORDINATION WITH EXISTING LOCAL JURISDICTION REQUIREMENTS, TILLAMOOK PUBIC UTILITIES AND LOCAL CODES.
3. VFD – DENOTES VARIABLE FREQUENCY DRIVE FOR INDIVIDUAL PUMP CONTROL.
4. LIT – DENOTES LEVEL INDICATOR TRANSMITTER. PUMP VFDS ARE LEVEL CONTROLLED, BASED ON OPERATING LEVELS WITHIN THE PUMP STATION WET WELL TO BE INPUT INTO PLC. A 4-20 mA SIGNAL SHALL BE PROVIDED TO MCC/PLC, OR DRIVES & PUMP CONTROL PANEL.
5. LSHW – DENOTES REDUNDANT OVERRIDE LEVEL SWITCH FOR HIGH WATER. THIS LEVEL SWITCH (FLOAT) SHALL ONLY BE USED FOR A BACK-UP OR ALARM SYSTEM.
6. LSLW – DENOTES REDUNDANT OVERRIDE LEVEL SWITCH FOR LOW WATER. THIS LEVEL SWITCH (FLOAT) SHALL ONLY BE USED FOR A BACK-UP OR ALARM SYSTEM

AC. POWER	SIGNAL OR
480 OR 110 V	4-20 MA
3Ø 1Ø	

GENERAL SYSTEM OPERATIONAL NOTES

1. THIS SCHEMATIC DIAGRAM IS PROVIDED TO SHOW GENERAL LAYOUT FOR PROCESS AND CONTROL ONLY. CONTRACTOR SHALL SUBMIT ACTUAL PIPING AND INSTRUMENTATION DIAGRAM (P&ID) TO THE PROJECT ENGINEER AND ELECTRICAL ENGINEER FOR APPROVAL.
2. CONTRACTOR SHALL SUBMIT A LOAD SCHEDULE, SINGLE LINE DIAGRAM, MOTOR CONTROL AND WIRING DIAGRAMS, P&ID SCHEMATIC LAYOUT SHOWING INTERFACE LOGIC BETWEEN PUMP STATION AND CONTROL UNIT, AND SHALL RECEIVE PROJECT ENGINEERS APPROVAL OF SAME BEFORE ANY PROJECT WORK IS STARTED.
3. CONTROLS SHALL BE DESIGNED BY THE CONTRACTOR. A SEPARATE VFD SHALL BE INSTALLED ON EACH PUMP. CONTROLS SHALL BE NEMA DESIGN AND MOUNTED INSIDE THE NEMA 4X CONTROL PANEL OR CONTROL BUILDING, WITH CIRCUIT BREAKERS, MAGNETIC MOTOR STARTERS, OVERLOAD PROTECTION IN ALL THREE LEGS, INDICATION LIGHTS, RUN TIME METERS AND TIMED START COUNTERS FOR ALL PUMPS, AND H.O.A. SELECTOR SWITCHES. ALL PUMPING OPERATIONS, LEVEL CONTROLS, AND POWER SUPPLIES SHALL BE AUTOMATIC OPERATION, WITH MANUAL STOP SWITCHES AND MANUAL OVERRIDES, INCLUDING VFD BY-PASS OPERATION.
4. ALL CRITICAL CONTROLS, SUCH AS PUMP ON, PUMP SPEED, PUMP FAILURE, WATER LEVELS IN PUMP STATION, POWER SUPPLY, EMERGENCY STOP, SHALL BE HARDWIRED.
5. COMMUNICATION BETWEEN WASTEWATER PUMPS AND PLC UNIT SHALL BE DUAL REDUNDANT USING ETHERNET TCP/IP FOR SCADA SYSTEM. LANGUAGE SHALL BE MODBUS. CONTRACTOR SHALL SUBMIT A COMMUNICATION/CONTROL NETWORK DIAGRAM FOR APPROVAL BY THE PROJECT ENGINEER AND CITY BEFORE PURCHASING OR INSTALLING SAME. PROTOCOLS THAT ARE PROPRIETARY WILL NOT BE ALLOWED. THE TELEMTRY SYSTEM MUST BE ABLE TO SIMULTANEOUSLY SUPPORT MULTIPLE COMMUNICATION PROTOCOLS.
6. BOTH MAIN PUMPS IN PUMPING STATION SHALL BE SEQUENCED AND ALTERNATING OPERATION, THE FIRST "ON" BEING THE LEAD PUMP, SECOND "ON" BEING LAG #1. ALTERNATE PUMP SEQUENCING ON SUBSEQUENT STARTS.
7. PUMP STATION WETWELL SHALL BE LEVEL-CONTROLLED VIA LEVEL TRANSMITTER MOUNTED WITHIN THE WETWELL. PUMP STATION WETWELL LEVEL SHALL DICTATE HOW MANY PUMPS OPERATE DURING ANY ONE PUMPING PERIOD.
8. NUMBER OF PUMP STARTS PER HOUR AND FREQUENCIES AT WHICH PUMPS ARE ALLOWED TO RUN SHALL BE DETERMINED BY PUMP VENDOR AND APPROVED BY PROJECT ENGINEER.
9. CONTROL PANEL SHALL CONTAIN FULLY FUNCTIONAL COOLING FANS, THERMOSTATICALLY CONTROLLED HEATER, ELAPSED TIME METER FOR EACH INDIVIDUAL PUMP, ELAPSED TIME METER FOR ALL PUMPS ON, TIMED NUMBER OF STARTS, ALARM LIGHTS, H-O-A SWITCHES WITH VFD BY-PASS, FULL PUMP LOCKOUTS, DEAD FRONT.
10. ALL ALARMS SHALL BE INDICATED ON BOTH THE TELEMETRY SYSTEM AND MCC/PLC PANEL. BOTH POWER SOURCES (GRID AND AUXILARY), SHALL BE CAPABLE OF OPERATING BOTH THE PUMPING EQUIPMENT AND THE CONTROLS. CLEARING OF THE ALARMS SHALL ONLY BE ACCOMPLISHED MANUALLY (NOT REMOTELY) AND SHALL TAKE PLACE AT THE PUMP STATION CONTROL PANEL.
11. ALARMS ON PUMP VFD SYSTEM SHALL INCLUDE AS A MINIMUM, PUMPING FAILURE DURING A PUMP CALL, PHASE LOSS MONITORING, LOSS OF PHASE, HARMONICS ABOVE VENDOR PRE-SET LIMITS, SURGE ALARM, CONTINUANCE OF PUMP OPERATION AFTER STOP SIGNAL, HIGH TEMPERATURE ALARM (SET BY MANUFACTURER).
12. ALARMS ON PLC SHALL INCLUDE AS A MINIMUM, GRID POWER FAILURE, OPERATIONS SYSTEM MONITORING, PUMP/VALVE/CONTROL SEQUENCING, LOSS OF CONNECTION WITH PUMP SYSTEM MOTOR CONTROL CENTER.
13. CONTRACTOR SHALL PROVIDE:
    a. FULL START UP AND OPERATIONAL TESTING OF PUMPING AND CONTROL SYSTEM, COORDINATED WITH VENDOR
    b. RECORD DRAWINGS OF COMPLETE INSTALLATION,
    c. OPERATING AND MAINTENANCE MANUALS FOR PUMPING EQUIPMENT AND CONTROLS.
14. ADDITIONAL SPECIFICATIONS FOUND IN SPECIAL PROVISIONS.

NO.	DATE	BY	Checked & Approval	REVISIONS

CITY OF TILLAMOOK
TILLAMOOK SEWER REHABILITATION PROJECT
12TH STREET PUMP STATION
TILLAMOOK, TILLAMOOK COUNTY, OR

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Project No. 67522

PS15

Sheet No. 70 of 74

TILLAMOOK PEOPLE'S UTILITY DISTRICT

TILLAMOOK, OREGON

PLANS

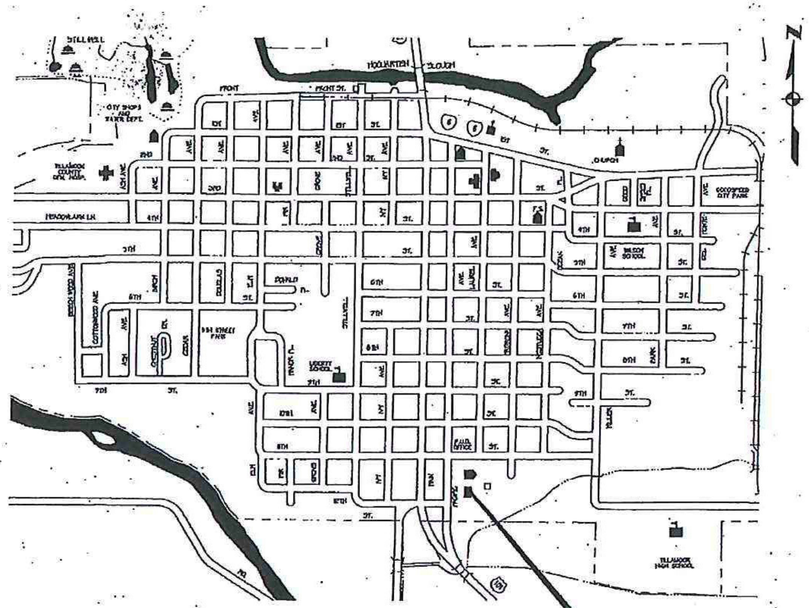
FOR THE CONSTRUCTION OF

FACILITY GENERATOR UPGRADE

KENNEDY/JENKS CONSULTANTS

PORTLAND, OREGON

JUNE 2010



PROJECT LOCATION MAP
NOT TO SCALE

PROJECT LOCATION
1115 PACIFIC AVE.
TILLAMOOK, OREGON 97141

DESIGN CRITERIA

EXISTING TRANSFORMER	-160KVA / 277/480V / 3 PHASE
(N) GENERATOR	-350 KW 277/480V
FUEL TYPE	-DIESEL
EXTERIOR FUEL TANK CAPACITY	-500 GAL
FUEL DURATION @ 75% LOAD	-21.8 HRS
FUEL DURATION @ 100% LOAD	-17.5 HRS
LARGEST MOTOR (TPUD)	-20 HP

INDEX TO PLANS

SHEET NUMBER AND TITLE

1 G1 - TITLE SHEET, TABLE OF CONTENTS AND DESIGN CRITERIA
2 G2 - ABBREVIATIONS AND PIPE SCHEDULE
3 C1 - DEMOLITION PLAN
4 C2 - SITE PLAN
5 C3 - CIVIL DETAILS
6 S1 - STRUCTURAL GENERAL NOTES, CRITERIA AND STANDARD DETAILS
7 S2 - TYPICAL MASONRY DETAILS AND NOTES
8 S3 - STRUCTURAL PLANS AND DETAILS
9 S4 - STRUCTURAL SECTIONS AND DETAILS I
10 S5 - STRUCTURAL SECTIONS AND DETAILS II
11 A1 - ARCHITECTURAL FLOOR PLAN, DOOR SCHEDULE AND FINISH SCHEDULE
12 A2 - ARCHITECTURAL ELEVATIONS AND DETAILS
13 A3 - ARCHITECTURAL SECTIONS AND DETAILS
14 M1 - MECHANICAL PLAN, SECTIONS AND DETAIL
15 E1 - ELECTRICAL LEGEND AND GENERAL NOTES
16 E2 - SINGLE-LINE DIAGRAM
17 E3 - ELECTRICAL SITE PLAN AND DETAILS
18 E4 - ELECTRICAL POWER AND LIGHTING PLAN

Addendum 1 drawings
C1 Demolition Plan
C2 Site plan follow E2

E3 and E4 addendum 1 drawings

19 Field Memo 4 revised
20 Pin Pile Drawing RFI 15

USE OF DOCUMENTS
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NO.	REVISION	DATE	BY
0	ISSUED FOR BIDDING	JUNE 2010	RSP

SCALES
0 — 1"
0 — 25mm
IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.

DESIGNED RSP
DRAWN LLK
CHECKED JMF

TILLAMOOK PEOPLE'S UTILITY DISTRICT
TILLAMOOK, OREGON
FACILITY GENERATOR UPGRADE

Kennedy/Jenks Consultants
PORTLAND, OREGON

TITLE SHEET, TABLE OF CONTENTS, AND DESIGN CRITERIA

FILE NAME 0691015-G1.dwg
JOB NO. 0691015.00
DATE JUNE 2010
SHEET G1 OF 18

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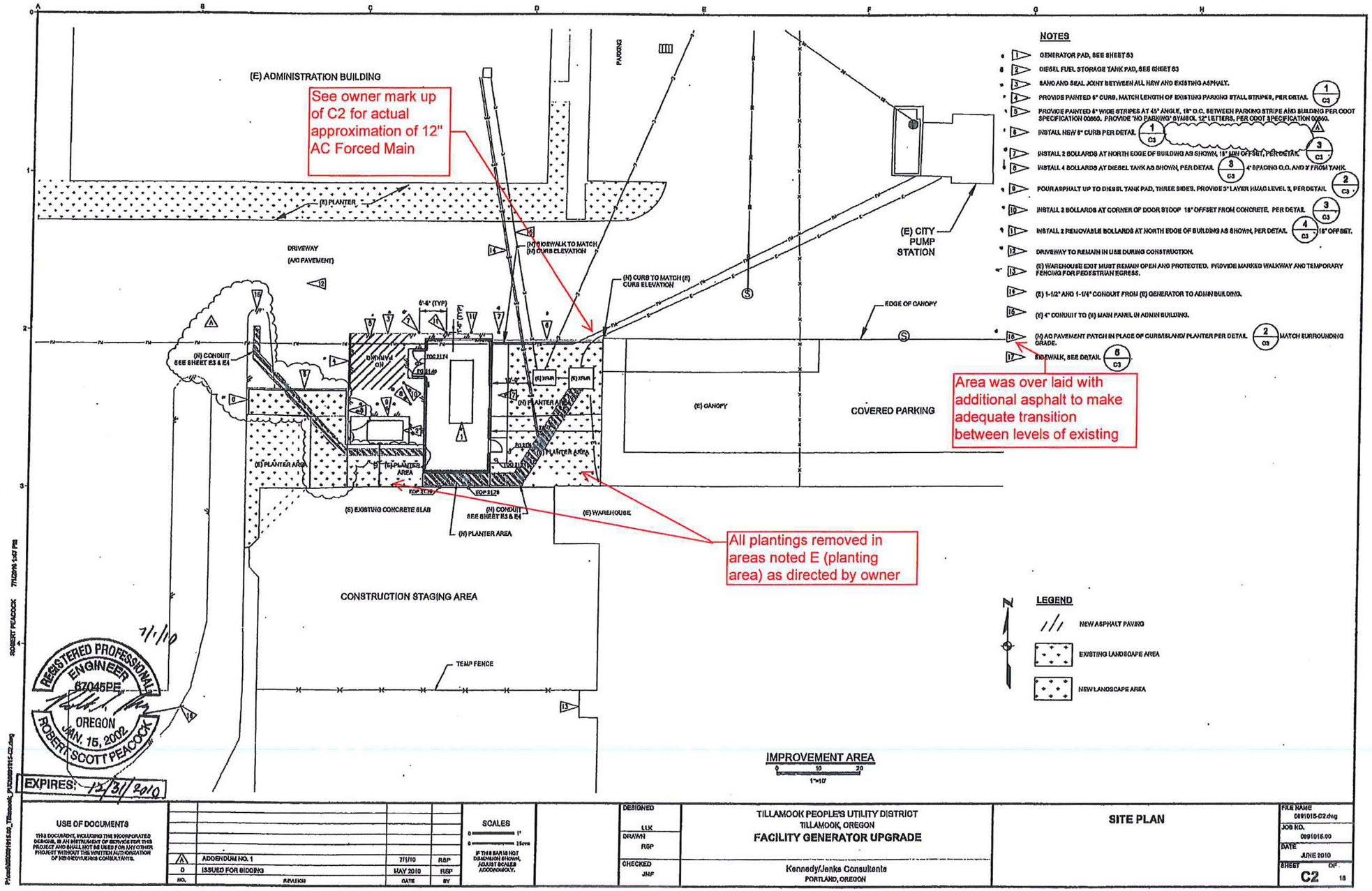
AS-BUILTS – INFORMATION ONLY FOR ELECTRICAL PLANNING

PS16



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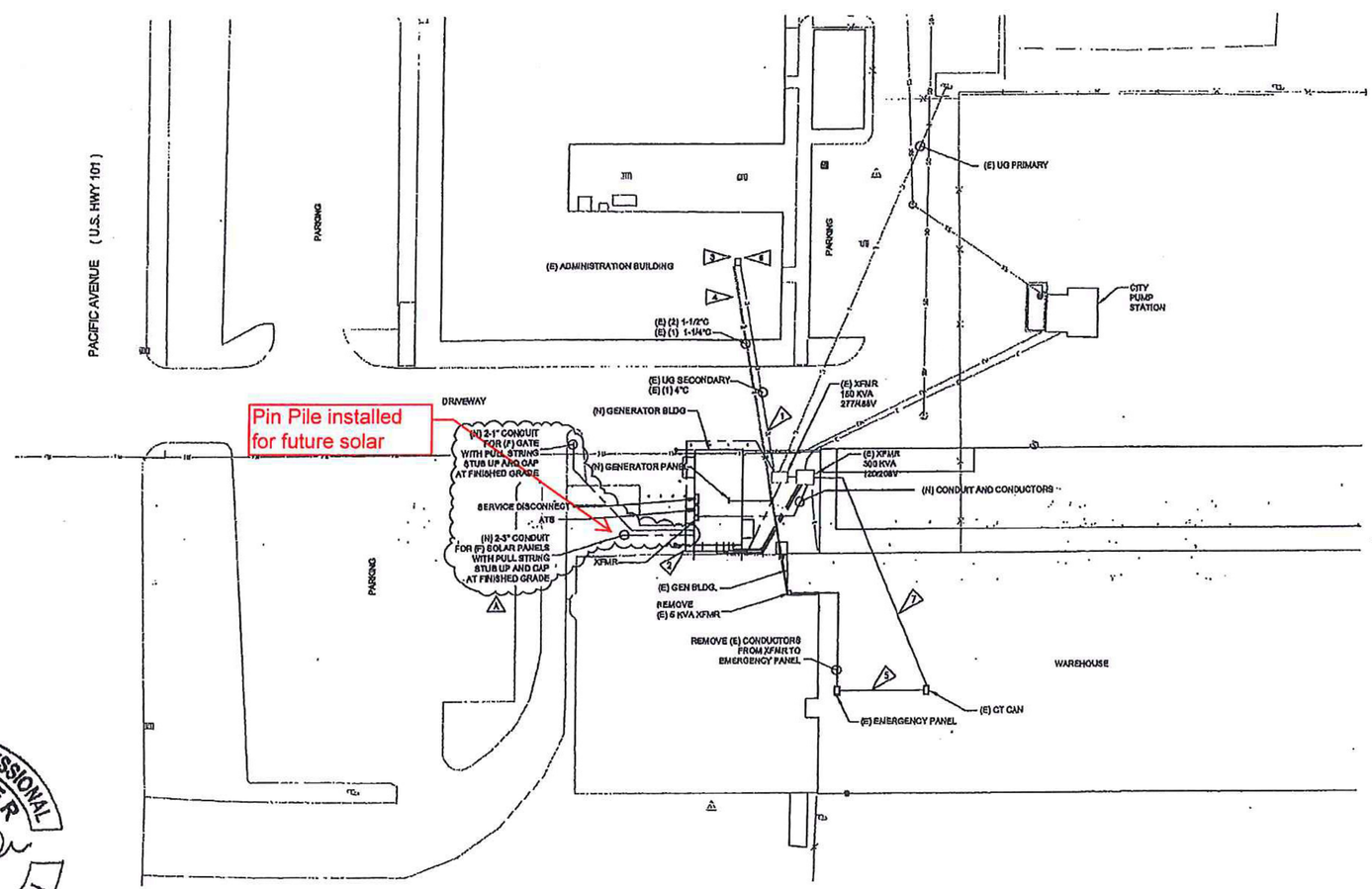

SITE PLAN

0 10 20 30

1"=20'

NOTES:

1. REMOVE (E) BUILDING FEED CONDUCTORS. INSTALL (N) WIRES FROM ATS TO ADMIN BUILDING MDP. REUSE EXISTING 4" CONDUIT.
2. INSTALL (N) WIRES FROM TRANSFORMER TO SERVICE DISCONNECT IN GENERATOR BUILDING.
3. INSTALL (N) OWNER-SUPPLIED REMOTE ANNUNCIATOR IN PLACE OF (E) ANNUNCIATOR.
4. REUSE (E) CONDUITS FOR ANNUNCIATOR CABLE.
5. REFEED (N) EMERGENCY PANEL FROM CT CAN WITH (N) CONDUCTORS.
6. REMOVE (E) ATS AND ALL ASSOCIATED CONDUCTORS.
7. REMOVE (E) (1) 4" C, 4W250 KCMIL, INSTALL (N) 4W, 1/0G

7/1/10

REGISTERED PROFESSIONAL ENGINEER 78375PE OREGON SEPT. 19, 2006 PAUL A. REARDON

EXPIRATION DATE: 12/31/10

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NO.	REVISION	DATE	BY
1	ADDENDUM NO. 1	7/1/10	RSP

SCALES: 1" / 25mm — IF THIS BAR IS NOT ONE INCH ONE INCH, ADJUST SCALES ACCORDINGLY.

DESIGNED: PAR
DRAWN: GWM
CHECKED: JMF

TILLAMOOK PEOPLE'S UTILITY DISTRICT
TILLAMOOK, OREGON
FACILITY GENERATOR UPGRADE

Kennedy/Jenks Consultants
PORTLAND, OREGON

ELECTRICAL SITE PLAN AND DETAILS

FILE NAME: 0891015-E3
JOB NO.: 0891015.00
DATE: JUNE 2010
SHEET E3 OF 18

PAUL REARDON 7/1/2010 12:25 PM

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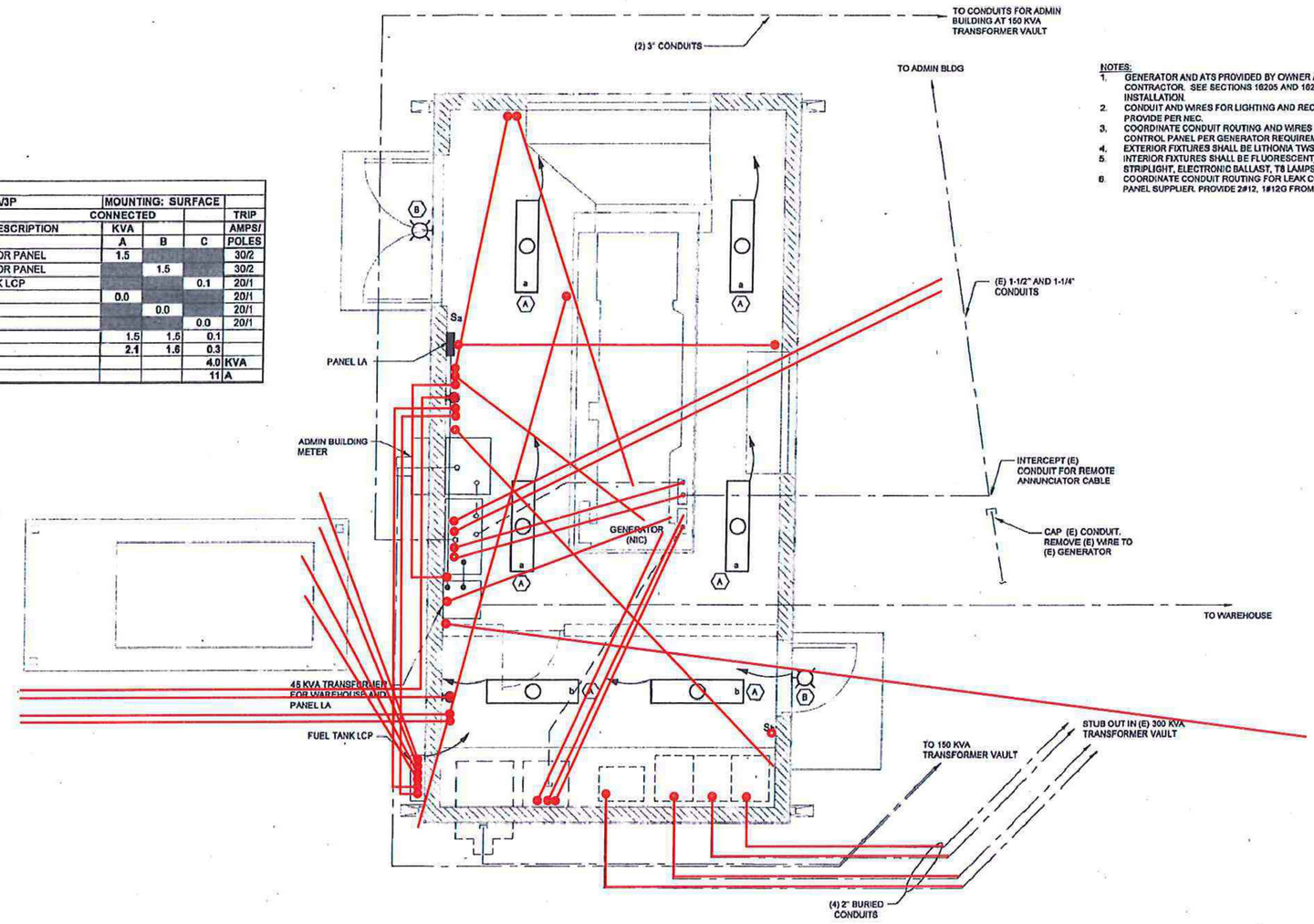
AS-BUILTS – INFORMATION ONLY FOR ELECTRICAL PLANNING

PS18

PANEL-LA											
208/120 VOLTS, THREE PHASE, 4 WIRE			BUS: 100A		AIC: 10KA		MAIN: 30A/3P		MOUNTING: SURFACE		
		CONNECTED			TRIP			CONNECTED			TRIP
CKT.	DESCRIPTION	KVA			AMPS/	CKT.	DESCRIPTION	KVA			AMPS/
NO.		A	B	C	POLES	NO.		A	B	C	POLES
1	INTERIOR LIGHTING	0.6			20/1	2	GENERATOR PANEL	1.5			30/2
3	RECEPTACLES		0.1		20/1	4	GENERATOR PANEL		1.5		30/2
5	EXTERIOR LIGHTING			0.2	20/1	6	FUEL TANK LCP			0.1	20/1
7	SPARE	0.0			20/1	8	SPARE	0.0			20/1
9	SPARE		0.0		20/1	10	SPARE		0.0		20/1
11	SPARE			0.0	20/1	12	SPARE			0.0	20/1
PHASE SUBTOTALS (KVA):		0.6	0.1	0.2				1.5	1.5	0.1	
PHASE TOTALS (KVA):								2.1	1.6	0.3	
TOTAL KVA:										4.0	KVA
TOTAL AMPERES:										11	A



NOTES:
1. GENERATOR AND ATS PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR. SEE SECTIONS 16205 AND 16250 FOR SCOPE OF INSTALLATION.
2. CONDUIT AND WIRES FOR LIGHTING AND RECEPTACLES NOT SHOWN. PROVIDE PER NEC.
3. COORDINATE CONDUIT ROUTING AND WIRES SIZE FOR GENERATOR CONTROL PANEL PER GENERATOR REQUIREMENTS.
4. EXTERIOR FIXTURES SHALL BE LITHONIA TWS-35S-120-LPI-PE, OR EQUAL.
5. INTERIOR FIXTURES SHALL BE FLUORESCENT PRUDENTIAL 1X4 STRIPLIGHT, ELECTRONIC BALLAST, T8 LAMPS.
6. COORDINATE CONDUIT ROUTING FOR LEAK CONTROL PANEL (LCP) WITH PANEL SUPPLIER. PROVIDE 2#12, 1#12G FROM PANEL LA.

ELECTRICAL PLAN

0 2 4
3/8"=1'-0"

USE OF DOCUMENTS

THIS DOCUMENT, INCLUDING THE INCORPORATED DESIGNS, IS AN INSTRUMENT OF SERVICE FOR THIS PROJECT AND SHALL NOT BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF KENNEDY/JENKS CONSULTANTS.

NO.	REVISION	DATE	BY

SCALES
0 — 1"
0 — 25mm
IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.

DESIGNED PAR
DRAWN GWM
CHECKED JMF

TILLAMOOK PEOPLE'S UTILITY DISTRICT
TILLAMOOK, OREGON
FACILITY GENERATOR UPGRADE

Kennedy/Jenks Consultants
PORTLAND, OREGON

ELECTRICAL POWER AND LIGHTING PLAN

FILE NAME 0691015.00-E4
JOB NO. 0691015.00
DATE MAY 2010
SHEET E4 OF 18

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MIKE MARX 5/14/2010 1:35 PM

AS-BUILTS – INFORMATION ONLY FOR ELECTRICAL PLANNING

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