THE CITY OF OREGON
SANITARY SEWER GENERAL NOTES & SPECIFICATIONS

SPECIFICATIONS
EXCEPT AS MODIFIED BY THESE PLANS AND THE DETAIL SPECIFICATIONS PERTAINING THERETO, ALL WORK ON THIS PROJECT SHALL BE GOVERNED BY THE OHIO DEPARTMENT OF TRANSPORTATION, CONSTRUCTION AND MATERIAL SPECIFICATIONS, DATED JANUARY 1, 2016 AND BY SUCH SUPPLEMENTAL SPECIFICATIONS AS MAY BE IN EFFECT FOURTEEN (14) CALENDAR DAYS PRIOR TO AWARD OF THIS CONTRACT. IN THE AFORESAID STATE SPECIFICATIONS, THE WORDS "STATE", "DIRECTOR" AND "ENGINEER" SHALL BE HELD TO MEAN THE SERVICE DIRECTOR, CITY OF OREGON, OR HIS DULY APPOINTED REPRESENTATIVE.

ROOF DRAINS, FOUNDATION DRAINS AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED.

SANITARY SEWER PIPE
4"–15" SANITARY SEWER SHALL BE PVC CONFORMING TO ASTM D–3034 WITH JOINTS CONFORMING TO ASTM D–3212, SDR–35 MINIMUM.

18" AND LARGER SANITARY SEWER SHALL BE PVC CONFORMING TO ASTM F–679 WITH JOINTS CONFORMING TO ASTM D–3212, SDR–35 MINIMUM.

QUANTITIES FOR BENDS, TEES, WYES, PLUGS AND OTHER FITTINGS ARE SHOWN ON THE PLANS FOR THE CONVENIENCE OF THE CONTRACTOR. THE COST OF ALL FITTINGS SHALL BE INCLUDED IN THE UNIT PRICE FOR THE PERTINENT CONDUIT ITEM. THE COST OF ALL BEDDING, SPECIAL BACKFILL, CDF BACKFILL AND PAVEMENT REPLACEMENT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR SANITARY SEWER PIPE.

SEWER–WATER LINE SEPARATION
SANITARY SEWER AND MANHOLE INSTALLATIONS SHALL BE LAID AT LEAST 10 FEET APART HORIZONTALLY AND HAVE 18" OF SEPARATION VERTICALLY.

SANITARY MANHOLES
FOR SEWERS WITH DIAMETER OF 36" OR LESS, TYPE 2 STANDARD, TYPE 3 DROP AND TYPE 4 MANHOLES SHALL BE CONSTRUCTED WITH APPROVED PRECAST CONCRETE MANHOLE SECTIONS CONFORMING TO ASTM C–478.

PRECAST REINFORCED CONCRETE RISERS AND DOMES SHALL COMPLY WITH THE REQUIREMENTS OF ITEM 706.02 EXCEPT THAT THE MINIMUM WALL THICKNESS SHALL BE 5" AND THE MINIMUM REINFORCEMENT SHALL BE 0.18 SQ. IN. PER FOOT. CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 400 PSI.

1¼" HOLES MAY BE CAST INTO DOMES AND RINGS FOR HANDLING. THE HOLES SHALL BE SEALED WITH NON–SHRINK MORTAR AFTER INSTALLATION.

THE FOLLOWING SHALL BE CLEARING STENCILED OR IMPRESSED ON EACH SECTION:
A: MH #
B: DATE OF MANUFACTURE
C: THE NAME OR TRADEMARK OF THE MANUFACTURER AND LOCATION OF PLANT

CONNECTIONS FOR LATERAL SEWERS INCLUDING DROPS AND LEADS, EXCEPT PIPE INCLUDED IN ITEM 603, SHALL BE CONSIDERED A PART OF ALL MANHOLES. MINIMUM DROP PIPE DIAMETER FOR ALL SANITARY SEWER MANHOLES SHALL BE 6". A DROP PIPE SHALL BE PROVIDED FOR A SEWER ENTERING A MANHOLE 24" ABOVE THE MANHOLE INVERT.

OPENINGS FOR CONNECTING SEWERS SHALL BE CORED OR CAST–IN–PLACE. CONNECTIONS SHALL BE MADE WITH A KOR–N–SEAL BOOT, OR APPROVED EQUAL, CONFORMING TO ASTM –C923.

SANITARY MANHOLES SHALL HAVE FLEXIBLE WATERTIGHT JOINTS CONFORMING TO ASTM C–443. THE JOINTS SHALL BE OF SUCH A DESIGN AS WILL PERMIT PLACEMENT WITHOUT APPRECIABLE IRREGULARITIES IN THE INTERIOR WALL SURFACE OF THE MANHOLE. ACCEPTABLE 48" DIAMETER JOINTS SHALL BE OF THE 'O' RING TYPE OR APPROVED EQUAL.

CHIMNEY SEALS SHALL BE EXTERIOR TYPE, "WRAPID SEAL" MANHOLE ENCAPSULATION SYSTEM, AS MANUFACTURED BY CANUSA, OR EQUAL. THE SEAL SHALL BE INSTALLED FROM THE FRAME AND INCLUDE THE ADJUSTING RINGS AND DOME SECTION. THE WRAPIDSEAL SHALL BE INSTALLED AS DIRECTED BY THE MANUFACTURER. THE FURNISHING AND INSTALLATION OF WRAPIDSEAL SHALL BE PAID FOR AT THE UNIT PRICE BID FOR EACH COMPLETE.

ACCESS THROUGH MANHOLES SHALL BE BY MEANS OF STEPS MEETING THE REQUIREMENTS OF ODOT ITEM 604.

MANHOLE SECTIONS MAY BE REPAIRED, IF NECESSARY, BECAUSE OF OCCASIONAL IMPERFECTIONS IN MANUFACTURE OR ACCIDENTAL DAMAGE DURING HANDLING AND MAY BE ACCEPTABLE IF, IN THE OPINION OF THE CITY OF OREGON, THE REPAIRS ARE SOUND AND PROPERLY FINISHED AND CURED AND THE REPAIRED MANHOLE CONFORMS TO ASTM C–478.

ADJUSTING RINGS SHALL BE PRECAST, REINFORCED WITH ONE NO. 3 GAGE WIRE OR EQUIVALENT. EACH MANHOLE SHALL HAVE MINIMUM OF 4" AND A MAXIMUM OF 16" OF ADJUSTING RINGS. THE INSIDE AND OUTSIDE OF THE ADJUSTING RINGS SHALL BE PLASTERED WITH A MINIMUM OF ½" OF PORTLAND CEMENT MORTAR UNLESS OTHERWISE DETAILED ON THE DRAWING OR AS DIRECTED BY THE CITY OF OREGON.

WHEN THE EXCAVATION FOR A MANHOLE IS LOCATED WITHIN 5 (FIVE) FEET OF PAVEMENT, THE BACKFILL MATERIAL SHALL BE ODOT 304. THE MATERIAL SHALL BE COMPACTED IN 6" LAYERS.

INSTALLATION
THE PIPE SHALL BE LAID ON A PROPERLY SHAPED AND FIRM BEDDING OF THE TYPE SPECIFIED AND MEETING THE REQUIREMENTS OF ITEM 603.04. WHERE CONDITIONS WARRANT, UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH EITHER NO. 57 OR NO. 67 STONE.

ALL PIPE AND APPURTENANCES SHALL BE INSTALLED TRUE TO LINE, GRADE AND LOCATION; WITH JOINTS CENTERED, SPIGOTS HOME AND PROPER SUPPORT AND BLOCKING PROVIDED. CARE SHALL BE TAKEN TO LAY THE PIPE SO THAT IT IS SUPPORTED AND BEDDED THE FULL LENGTH OF THE BARREL.

WHEN NO BEDDING IS SPECIFIED, THE REQUIREMENTS FOR CLASS 'B' BEDDING SHALL APPLY.

CLASS 'A' BEDDING SHALL CONSIST OF A CONTINUOUS CONCRETE CRADLE CONFORMING TO PLAN DETAILS.

CLASS 'B' BEDDING SHALL CONSIST OF A BED OF GRANULAR MATERIAL MEETING GRADATIONS OF NO. 57 OR NO. 67 AND HAVING A THICKNESS OF AT LEAST 6" BELOW THE BOTTOM OF THE PIPE AND EXTEND UP TO THE SPRINGLINE OF THE PIPE AS A MINIMUM. THE LAYER OF BEDDING MATERIAL SHALL BE SHAPED TO FIT THE CONDUIT FOR AT LEAST 10% OF THE VERTICAL DIAMETER OF THE CONDUIT AND SHALL HAVE A RECESSED SHAPE TO RECEIVE THE BELL. FOR PVC PIPE, THE BEDDING SHALL EXTEND 12" ABOVE THE TOP OF THE PIPE. INSTALLATION FOR CONCRETE AND CLAY PIPE SHALL, AS A MINIMUM, CONFORM TO ASTM C–12. INSTALLATION FOR PVC PIPE SHALL, AS A MINIMUM, CONFORM TO ASTM D–2321.

CONNECTIONS TO EXISTING SEWERS
WHERE THE PLANS PROVIDE FOR THE PROPOSED CONDUIT TO BE CONNECTED TO OR TO CROSS EITHER OVER OR UNDER AND EXISTING SEWER, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE THE EXISTING PIPE AS TO BOTH LINE AND GRADE BEFORE THEY START CONSTRUCTION OF THE PROPOSED SEWER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ANY EXISTING SEWERS RESULTING FROM HIS OPERATION OR NEGLIGENCE.

MANHOLE CASTINGS
ALL SANITARY MANHOLE LIDS AND CASTINGS SHALL BE NEENAH R–1771(SOLID LID) OR APPROVED EQUAL UNLESS OTHERWISE SHOWN ON THE PLANS. THE COMBINED WEIGHT SHALL NOT BE LESS THAN 485LBS WITH SOLID LID.

IN PAVEMENT AREAS: AFTER THE CASTING IS SET TO GRADE, A CIRCULAR AREA APPROXIMATELY 12" WIDE SHALL BE NEATLY CUT AWAY DOWN TO THE BEARING FLANGE OF THE CASTING. THE EXCAVATION AREA AROUND THE CASTING SHALL THEN BE FILLED WITH CLASS 'C' CONCRETE TO ¼" BELOW FINISH GRADE AND BROOM FINISHED.

ALL CASTINGS MUST:
– BE POURED IN A CLOSED MOLD AND SHALL BE TRUE TO FORM;
– BE FREE OF BLOWS, POROSITY, BURRS AND OTHER DEFECTS;
– NOT BE PLUGGED;
– BE OF A GOOD GRADE MACHINEABLE GRAY IRON USED IN COMMERCIAL CASTINGS;
– HAVE MACHINED BEARING BASES WHEN USED IN TRAFFIC.

IF CASTINGS ARE DELIVERED TO THE SITE UNPAINTED, THEY SHALL BE GIVEN ONE COAT OF ASPHALT VARNISH OR COAL–TAR PITCH PAINT BY THE CONTRACTOR.

LIDS AND CASTINGS IN THE ONE HUNDRED YEAR FLOOD PLAIN SHALL BE EJIW 1040 WT OR APPROVED EQUAL.

SANITARY SERVICE CONNECTIONS
ALL SANITARY SERVICE CONNECTIONS SHALL BE PROPERLY PLUGGED AND SUITABLE STAKED AT THE END OF THE SERVICE CONNECTION. THE STAKE SHALL BE A MINIMUM OF 4 FEET ABOVE THE PLUG TO AID IN FUTURE LOCATION OF THE SERVICE CONNECTION. THE END OF EACH SERVICE CONNECTION SHALL BE PAINTED GREEN IN CONFORMANCE WITH OSHA SPECIFICATIONS 1910.144, APPROVED SAFETY COLOR. THE COST FOR LABOR AND MATERIALS FOR INSTALLATION SHALL BE INCLUDED IN THE UNIT PRICE FOR THE CONDUIT.

EXCEPT AS OTHERWISE PROVIDED IN THESE PLANS, ALL SANITARY SEWER CONNECTIONS CONSTRUCTED FOR EXISTING BUILDINGS WITH A BASEMENT SHALL BE A MINIMUM OF 3 FEET BELOW THE BASEMENT FLOOR ELEVATION AT THE PROPERTY LINE. IF THE PROPERTY IS A VACANT LOT, THE CONNECTIONS SHALL BE A MINIMUM OF 8 FEET BELOW THE PAVEMENT ELEVATION AT THE PROPERTY LINE. ANY DEVIATION FROM THE ABOVE MINIMUM STANDARDS SHALL BE SHOWN ON THE PLANS AND APPROVED BY THE CITY OF OREGON.

EXCEPT AS OTHERWISE NOTED, ALL CROSS–OVER TAPS SHALL HAVE A MINIMUM GRADE OF 1%. WHERE THE DEPTH OF THE MAIN SEWER AT THE SERVICE CONNECTION IS OVER 12 FEET, A RISER SHALL BE INSTALLED AS SHOWN ON THE PLANS. THE RISER SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE SANITARY RISER DETAIL AS SHOWN ON THE PLANS.

RISER SHALL BE THE SAME SIZE AS THE INFLUENT PIPE, OR AS SHOWN ON THE PLANS.

BACKFILLING
ALL TRENCH AND EXCAVATIONS SHALL BE BACKFILLED IMMEDIATELY AFTER PIPE IS LAID THEREIN. NO MATERIAL SHALL BE USED FOR BACKFILLING THAT CONTAINS LARGE STONES, ROCKS OR PIECES OF MASONRY, FROZEN EARTH, DEBRIS, OR EARTH WITH A HIGH VOID CONTENT.

TRENCHES OUTSIDE THE LIMITS OF 5' FROM THE BACK OF CURB OR EDGE OF PAVEMENT (TYPE C CONDUIT) SHALL BE BACKFILLED WITH THOROUGHLY TAMPED GRANULAR MATERIAL A MINIMUM OF 12" ABOVE THE TOP OF THE PIPE. THE REMAINDER OF THE TRENCH MAY BE FILLED WITH EXCAVATED MATERIAL, AS IT IS OF SUITABLE CHARACTER.

TRENCHES UNDER PAVEMENT OR WITHIN 5' FROM THE BACK OF CURB OR EDGE OF PAVEMENT (TYPE B CONDUIT) SHALL BE BACKFILLED WITH THOROUGHLY TAMPED GRANULAR MATERIAL TO THE PAVEMENT SUBGRADE. GRANULAR BACKFILL MATERIAL SHALL CONFORM TO ODOT 304, OR AS MODIFIED BY THE CITY OF OREGON. COMPACTION OF GRANULAR SHALL BE 98% OF STANDARD PROCTOR.

SANITARY MANHOLE TESTING
EACH SANITARY MANHOLE SHALL BE TESTED AFTER ASSEMBLY AND AFTER ALL LIFT HOLES HAVE BEEN PLUGGED WITH NON–SHRINK GROUT AND BEFORE OR AFTER COMPLETING BACKFILL. TEST BY DRAWING A VACUUM ON THE MANHOLE USING EQUIPMENT SPECIFICALLY DESIGNED FOR SUCH TESTING. PLUG AND BRACE PIPES ENTERING THE MANHOLE TO PREVENT THEM FROM BEING DRAWN INTO THE MANHOLE. PLACE A TEST HEAD WITH THE NECESSARY GAUGES AND CONNECTIONS AT THE INSIDE OF THE TOP OF THE CONE SECTION AND SEAL IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. DRAW A VACUUM OF 10 INCHES OF MERCURY IN THE MANHOLE THEN SHUT THE PUMP OFF. WITH VALVES CLOSED, MEASURE THE TIME FOR THE VACUUM TO DROP TO 9 INCHES OF MERCURY. THE TEST SHALL BE SUCCESSFUL IF THE TIME MEASURED MEETS OR EXCEEDS THE VALUES INDICATED IN THE FOLLOWING TABLE. TESTING SHALL CONFORM TO ASTM C–1244.

MINIMUM TEST TIMES IN SECONDS

MANHOLE DEPTH	MANHOLE DIAMETER					
	48"	60"	72"	84"	96"	108"
8' or less	20	26	33	40	48	56
10'	25	33	41	50	58	67
12'	30	39	49	59	69	79
14'	35	46	57	68	80	92
16'	40	52	65	77	91	104
18'	45	59	73	87	102	116
20'	50	65	81	97	113	129
22'	55	72	89	106	123	140
24'	59	78	97	116	135	152
26'	64	85	105	125	148	168
28'	69	91	113	135	157	179
30'	74	98	121	144	168	198
32'	79	104	128	154	179	204
34'	83	110	136	162	190	217
36'	88	116	144	172	201	229
38'	93	122	152	182	213	242
40'	97	128	159	191	223	254

SANITARY SEWER INSPECTIONS
ALL WORK PERFORMED WITHIN THE SCOPE OF THIS PROJECT IS SUBJECT TO THE INSPECTION AND APPROVAL OF THE CITY OF OREGON.

THE SANITARY SEWER SHALL BE VISUALLY INSPECTED FROM MANHOLE TO MANHOLE TO INSURE CORRECT ALIGNMENT AND ABSENCE OF LEAKS. SEWER PIPE INVERT ELEVATIONS SHALL BE CHECKED FROM MANHOLE TO MANHOLE. SEWERS WITH SLOPES LESS THAN DESIGN GRADES ARE SUBJECT TO REJECTION. THE FOLLOWING TABLE IS THE MAXIMUM ALLOWABLE DEVIATION OF THE CONSTRUCTED CENTER OF THE SANITARY SEWER FROM THE STRAIGHT DESIGN BETWEEN THE TWO MANHOLES.

CONDUIT INSIDE DIAMETER	MAXIMUM ALLOWABLE DEVIATION FROM DESIGN CENTER OF CONDUIT
8"	2"
10" – 12"	3"
15"	4"
18" – 24"	5"

THE MAXIMUM SPACING BETWEEN MANHOLES SHALL BE 400 FEET, UNLESS OTHERWISE SHOWN ON THE PLANS.

SANITARY SEWER INSPECTIONS
ALL RUNS OF THE SANITARY SEWER SHALL BE TESTED FOR EXFILTRATION OR INFILTRATION BY AN INDEPENDENT TESTING LABORATORY AND UNDER THE SUPERVISION OF THE DEPARTMENT OF PUBLIC SERVICE OF THE CITY OF OREGON. IF ANY PART OF THE SYSTEM SHOWS EXCESSIBE INFILTRATION, IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PROVIDE TELEVISION INSPECTION AND TO MAKE ALL NECESSARY CONNECTIONS. THE COST OF ALL MATERIAL, EQUIPMENT, LABOR AND INCIDENTALS NECESSARY FOR PERFORMING THE TESTS AND MAKING THE NECESSARY CORRECTIONS AND REPLACEMENTS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. THE AIR TEST FOR THE TEST SECTION SHALLL BE CONSIDERED ACCEPTABLE IF THE TIME ELAPSED FOR THE 1.0 PSI PRESSURE DROP IS EQUAL TO OR GREATER THAN THE TIME IN MINUTES INDICATED IN THE FOLLOWING TABLE:

MINIMUM HOLDING TIME IN MINUTES: SECONDS REQUIRED FOR 1.0 PSI PRESSURE DROP

PIPE DIAMETER	LENGTH OF MAIN LINE TESTED								
	100'	150'	200'	250'	300'	350'	400'	450'	500'
6"	5:40	5:40	5:40	5:40	5:40	5:40	5:42	6:24	7:07
8"	7:34	7:34	7:34	7:34	7:36	8:52	10:08	11:24	12:40
10"	9:26	9:26	9:26	9:53	11:52	13:51	15:49	17:48	19:47
12"	11:20	11:20	11:24	14:15	17:05	19:56	22:27	25:38	28:29
15"	14:10	14:10	17:48	22:15	26:42	31:09	35:36	40:04	44:31
18"	17:00	19:13	25:38	32:03	38:27	44:52	51:16	57:41	64:06
21"	19:50	26:10	34:54	43:37	52:21	61:00	69:48	78:31	87:15
24"	22:47	34:11	45:34	56:58	68:22	79:46	91:10	102:33	113:57
27"	28:51	43:16	57:41	72:07	86:32	100:57	115:22	129:48	144:13

THE AIR TEST SHALL BE UNACCEPTABLE IF THE ELAPSED TIME IS LESS THAN THE STATED PERIOD.

FOR FLEXIBLE SANITARY SEWER PIPE, FIVE PERCENT (5%) IS THE MAXIMUM ALLOWABEL DEFLECTION. THE DEFLECTION TEST CAN BE RUN BY USE OF A RIGID BALL OR MANDREL, WHOSE DIAMETER IS EQUAL TO 95% OF THE INSIDE DIAMETER OF THE PIPE, PULLED THROUGH THE PIPE. DEFLECTIONS TESTING SHALL BE PERFORMED 30 DAYS AFTER BACKFILLING OR PRIOR TO THE COMPLETION OF THE PROJECT. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, ALL PVC PIPE SHALL BE TESTED FOR DEFLECTION.

SHOULD ANY SECTION OF CONDUIT FAIL TO MEET THE ABOVE TEST REQUIREMENTS, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE TELEVISION INSPECTION AND TO PROVIDE NECESSARY CORRECTIONS. THE COST OF ALL MATERIALS, LABOR AND INCIDENTALS NECESSARY TO PERFORM THE TESTS AND MAKE ANY NECESSARY REPAIRS SHALL BE INCLUDED IN THE PERTINENT CONDUIT ITEM.

REMOVAL OF TREES AND STUMPS
ALL TREES AND STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE CONSTRUCTION LIMITS OF THIS PROJECT SHALL BE COVERED UNDER THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING. TREE REMOVALS SHALL BE COORDINATED WITH THE CITY OF OREGON TREE COMMISSION.

SAFETY REQUIREMENTS
THE CONTRACTOR SHALL AT ALL TIMES FOLLOW STATE AND LOCAL SAFETY REQUIREMENTS DURING CONSTRUCTION OF THIS PROJECT. SPECIAL CARE SHALL BE TAKEN DURING ALL TRENCHING OPERATIONS. SHEETING, BRACING, CRIBBING ETC. SHALL BE INSTALLED AS REQUIRED TO PROVIDE MAXIMUM SAFETY TO THE WORKERS IN FULL COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REQUIREMENTS.

INSURANCE
NO CONTRACTOR OR SUBCONTRACTOR SHALL START ANY WORK UNTIL THE APPROVED CERTIFICATE OF LIABILITY IS FILED WITH THE CITY OF OREGON NAMING THE CITY OF OREGON AS INSURED.

EXISTING SURVEY POINTS
SURVEY MONUMENTS, PROPERTY PINS, BENCHMARKS AND EXISTING CONTROL POINTS DAMAGED OR DISTURBED BY CONSTRUCTION ACTIVITY SHALL BE REPLACED BY AN OHIO REGISTERED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE. SHOULD THE CONTRACTOR FAIL TO REPLACE THESE POINTS THE OWNER SHALL REPLACE THEM AT THE CONTRACTOR'S EXPENSE AFTER THREE WEEKS NOTICE.

EXISTING SEWERS, PRIVATE SEWERS, AND UNDERDRAINS
EXCEPT AS OTHERWISE PROVIDED IN THESE PLANS, FLOW FROM AN EXISTING STORM, SANITARY AND PRIVATE SEWERS, INCLUDING FIELD TILES SHALL BE MAINTAINED AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

EXISTING SEWERS AND CATCH BASINS ARE TO BE REPLACED IMMEDIATELY IF DAMAGED DURING CONSTRUCTION BY CONDUIT OF EQUAL STRENGTH AND BY CATCH BASINS OF EQUAL CONSTRUCTION. THESE REPLACEMENTS, IF NECESSARY, ARE TO BE CONSIDERED PAID FOR IN THE UNIT PRICE FOR THE INSTALLATION OF THE PROPOSED SANITARY SEWER.

REVIEW OF DRAINAGE FACILITIES
BEFORE ANY WORK IS STARTED ON THIS PROJECT, AND AGAIN BEFORE FINAL ACCEPTANCE BY THE CITY OF OREGON, REPRESENTATIVES OF THE CITY AND THE CONTRACTOR SHALL MAKE AN INSPECTION OF THE EXISTING SEWERS WITHIN THE CONTRACT LIMITS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTIONS SHALL BE KEPT IN WRITING BY THE CITY.
ALL NEW CONDUITS, INLETS, CATCH BASINS AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE CITY.

ALL EXISTING CONDUITS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER. PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICE FOR THE PERTINENT CONDUIT ITEMS.

ITEM 623, CONSTRUCTION LAYOUT STAKES, AS PER PLAN
THIS WORK SHALL BE EXECUTED IN ACCORDANCE WITH ITEM 623 OF THE OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS EXCEPT AS MODIFIED BY THE FOLLOWING:

LAND SURVEY MONUMENTS, SECTION CORNERS, BENCH MARKS, PROPERTY CORNERS, ENGINEERING SURVEY MARKERS AND ANY OTHER CONTROL POINTS SHALL BE PROTECTED AND PRESERVED IN ACCORDANCE WITH SECTION 107.12 AND THE FOLLOWING:

1) BEFORE ANY CONTROL POINTS ARE DISTURBED OR REMOVED DUE TO CONSTRUCTION OF THIS PROJECT, SUFFICIENT REFERENCE MEASUREMENTS SHALL BE MADE TO INSURE PROPER LOCATION OF THE POINT WHEN IT IS RE–ESTABLISHED.

2) PLAN ELEVATIONS OF SITE BENCH MARKS AND REFERENCES FOR THE CENTERLINE OF SURVEY CONTROL POINTS SHALL BE VERIFIED PRIOR TO CONSTRUCTION OF THIS PROJECT. CENTERLINE SURVEY CONTROL POINTS SHALL BE RE–ESTABLISHED IF REQUIRED AND CENTERLINE OF CONSTRUCTION ESTABLISHED. ADDITIONAL SITE BENCH MARKS SHALL BE ESTABLISHED IF REQUIRED.

3) THE CONTRACTOR SHALL PROVIDE A REGISTERED LAND SURVEYOR TO PERFORM THE ABOVE DESCRIBED WORK. THE SURVEYOR SHALL MAKE A WRITTEN RECORD CLEARLY IDENTIFYING CONTROL, REFERENCE OR BENCH MARK POINTS AND MEASUREMENTS TO THESE POINTS AND SHALL PROVIDE A COPY OF THIS RECORD TO THE CITY OF OREGON ENGINEER.

4) IF VERIFICATION OF CONTROL POINTS OR REFERENCE MEASUREMENTS ARE NOT ACCOMPLISHED TO THE SATISFACTION OF THE ENGINEER, THE ENGINEER WILL PROMPTLY NOTIFY THE CONTRACTOR OF THE NATURE OF THE PROBLEM. IF THE PROBLEM IS NOT ATTENDED TO PROMPTLY, THE COUNTY WILL TAKE THE NECESSARY ACTION TO CORRECT THE PROBLEM WITH THE COST OF SUCH SERVICE DEDUCTED FROM ANY MONIES DUE TO THE CONTRACTOR.

PAYMENT FOR PRESERVING CONTROL POINTS IN ACCORDANCE WITH THE ABOVE STATED STIPULATIONS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 623 CONSTRUCTION LAYOUT STAKES, AS PER PLAN.

DRAWN A.L.L.
CHECKED R.M.S.
DATE JULY 2016

SANITARY SEWER GENERAL NOTES

CITY OF OREGON

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