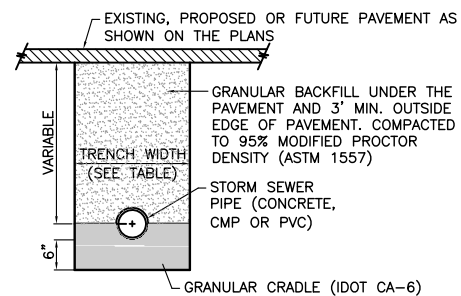
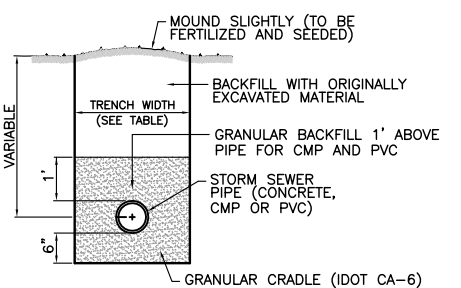


INSIDE DIAMETER OF STORM SEWER (INCHES)	MAXIMUM TRENCH WIDTH	MAXIMUM PAVEMENT REMOVAL WIDTH
6	3'-7"	5'-7"
8	3'-9"	5'-9"
12	4'-2"	6'-2"
15	4'-6"	6'-6"
18	4'-9"	6'-9"
21	5'-0"	7'-0"
24	5'-4"	7'-4"
27	5'-7"	7'-7"
30	5'-11"	7'-11"
36	6'-6"	8'-6"
42	7'-1"	9'-1"
48	7'-8"	9'-8"
54	8'-3"	10'-3"
60	8'-10"	10'-10"
66	9'-5"	11'-5"
72	10'-0"	12'-0"
78	10'-7"	12'-7"
84	11'-2"	13'-2"
90	11'-9"	13'-9"
96	12'-4"	14'-4"
102	12'-11"	14'-11"
108	13'-6"	15'-6"



ALL PAVED AREAS



NON-PAVED AREAS

TRENCH DETAILS

NOT TO SCALE

PROPOSED TRENCH DRAIN SCHEDULE

STRUCTURE NUMBER	LOCATION	ELEVATION A	ELEVATION B	ELEVATION C	ELEVATION D	ELEVATION E	ELEVATION F	ELEVATION G	ELEVATION H
TC1 TO TC2	506+53.61, 46.5'RT	639.90	639.90	639.90	639.90	637.12	636.82	636.52	636.22
TC3 TO TC4	507+43.61, 46.5'RT	639.90	639.90	639.90	639.90	636.94	636.64	636.34	636.04
TC6 TO TC5	510+03.61, 46.5'RT	639.90	639.90	639.90	639.90	636.63	636.33	636.03	635.73
TC8 TO TC7	510+93.61, 46.5'RT	639.90	639.90	639.90	639.90	636.84	636.54	636.24	635.94
TD1 TO TD2	511+83.61, 46.5'RT	639.90	639.90	639.90	639.90	635.93	635.63	635.33	635.03

NOTE: STATION AND OFFSET IS MEASURED TO THE NORTH EDGE OF THE TRENCH DRAIN ON THE TRENCH DRAIN CENTERLINE

STORM SEWER/UNDERDRAIN NOTES

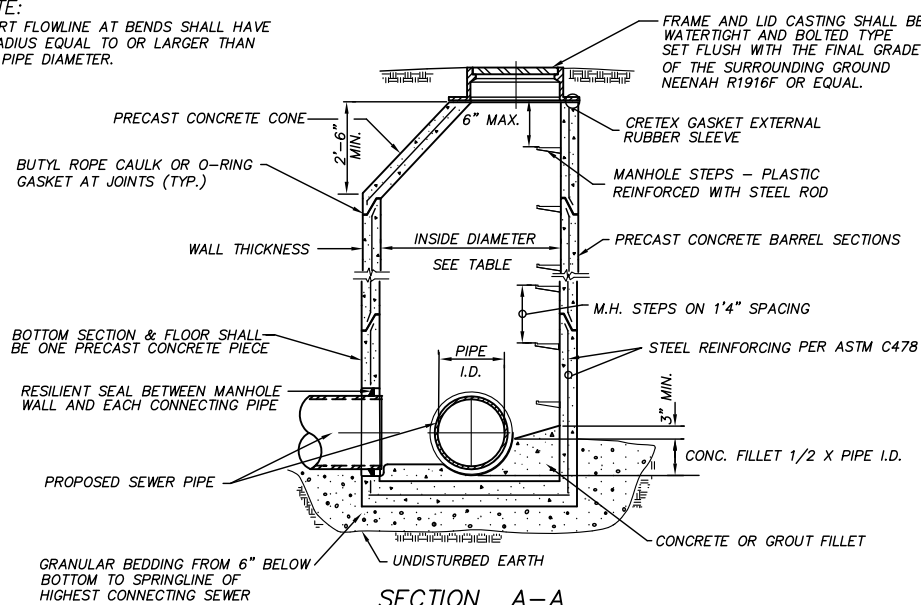
- CONTRACTOR SHALL FIELD VERIFY EXISTING STORM SEWER/UNDERDRAIN INVERTS BEFORE INSTALLING PROPOSED PIPE, CONNECTIONS AND ORDERING MATERIALS.
- ALL UNDERDRAIN CONNECTIONS, CORING INTO STRUCTURES, TEES, BENDS, STORM SEWER ETC. SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE UNDERDRAIN.
- UNDERDRAIN SLOPES FOLLOW EDGE OF PAVEMENT SLOPE UNLESS OTHERWISE NOTED.
- INSTALL PROPOSED ELECTRICAL DUCTS/CONDUITS TO BE CLEAR OF UNDERDRAIN, COST INCIDENTAL.
- UNDERDRAIN CONFLICTS WITH EXISTING CONDITIONS SHALL BE RESOLVED AND COST SHALL BE INCIDENTAL TO UNDERDRAIN.
- PRIOR TO ORDERING AND INSTALLING ALL FIELD TILE REPLACEMENT PIPE, THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION AND INVERTS OF EXISTING FIELD TILE CONNECTIONS. ADJUSTMENTS SHALL BE MADE AS NECESSARY AT NO ADDITIONAL COST TO THE CONTRACT.
- CORING OF DRAINAGE STRUCTURE AND REMOVAL OF EXISTING STORM SEWER MANHOLE/INLET CONCRETE BENCHES TO FACILITATE CONNECTIONS OF PROPOSED STORM SEWER PIPE SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE PIPE.

PROPOSED DRAINAGE/UTILITY SCHEDULE

STRUCTURE NUMBER	LOCATION FROM & F	DESCRIPTION	RIM ELEVATION	INVERT (NORTH)	INVERT (SOUTH)	INVERT (EAST)	INVERT (WEST)
MA4	502+68.8, 150.0'RT	MANHOLE 4', W/TYPE 1 FRAME AND OPEN LID	637.98	635.71		635.71	635.71
MA5	503+58.0, 19.3'LT	EXISTING MANHOLE	639.21		635.46 (SW) EXISTING	635.42	635.42 EXISTING
MA6	503+54.5, 150.0'RT	MANHOLE 4', W/TYPE 1 FRAME AND OPEN LID	640.35		635.83		635.42
MA7	502+30.93, 181.8' RT.	MANHOLE 4', W/TYPE 1 FRAME AND CLOSED LID	638.46	635.79	635.79		635.79
MA8	501+56.42, 106.8' RT.	EXISTING MANHOLE	638.58	635.88		635.90	
MA9	504+10.31, 290.8' RT.	EXISTING MANHOLE	639.27	636.03	636.03 (SW)		
MB1	507+43.1, 105.0'LT	MANHOLE 4', W/TYPE 8 GRATE	637.50		635.21		
MB2	506+57.3, 144.5'LT	MANHOLE 4', W/TYPE 1 FRAME AND OPEN LID	639.17	635.07	635.07		
MB3	506+09.2, 208.5'LT	EXISTING MANHOLE	639.56	634.96	634.96 EXISTING	634.96 EXISTING	634.93 EXISTING
MC1	506+53.6, 25.0'RT	MANHOLE 4' WITH NEENAH R-3492 FRAME AND CLOSED LID OR APPROVED EQUAL	640.10	636.19		636.19	
MC2	507+43.6, 25.0'RT	MANHOLE 4' WITH NEENAH R-3492 FRAME AND CLOSED LID OR APPROVED EQUAL	640.10	636.01	636.01	636.01	
MC3	509+14.3, 25.0'RT	MANHOLE 4' WITH NEENAH R-3492 FRAME AND CLOSED LID OR APPROVED EQUAL	640.18	635.66 EXISTING	635.66 EXISTING	635.66	635.66
MC4	509+43.6, 25.0'RT	MANHOLE 4' WITH NEENAH R-3492 FRAME AND CLOSED LID OR APPROVED EQUAL	640.10	635.70	635.70	635.70	
MC5	510+33.6, 25.0'RT	MANHOLE 4' WITH NEENAH R-3492 FRAME AND CLOSED LID OR APPROVED EQUAL	640.10		635.88	635.91	
MD1	512+28.5, 210.0'RT	MANHOLE 4' WITH NEENAH R-3492 FRAME AND CLOSED LID OR APPROVED EQUAL	640.40			635.24	635.24
MD2	512+28.4, 85.0'RT	MANHOLE 4' WITH NEENAH R-3492 FRAME AND CLOSED LID OR APPROVED EQUAL	640.44	635.04		635.04	635.04
MD2A	513+11.7, 59.4'RT	MANHOLE 4' WITH TYPE 1 FRAME AND GRATE	639.28		635.17		
MD3	511+83.6, 25.0'RT	MANHOLE 4' WITH NEENAH R-3492 FRAME AND CLOSED LID OR APPROVED EQUAL	640.10	634.88		635.00	
MD4	512+28.4, 25.0'RT	MANHOLE 4' WITH NEENAH R-3492 FRAME AND CLOSED LID OR APPROVED EQUAL	640.15		634.80	634.80	634.80
MD5	512+50.0, 60.0'LT	MANHOLE 4' WITH TYPE 1 FRAME AND GRATE	638.39		634.78	634.43	634.43
MD6	512+69.0, 349.5'LT	EXISTING MANHOLE	639.21 EXISTING	633.13 EXISTING	633.15 EXISTING	633.13	
MD7	511+00.0, 60.0'LT	MANHOLE 4' WITH TYPE 1 FRAME AND GRATE	637.78	635.00			
ME1	508+99.8, 208.0'RT	MANHOLE 4' WITH NEENAH R-3492 FRAME AND CLOSED LID OR APPROVED EQUAL	640.39		636.19	EXISTING	636.19 EXISTING
MS3	510+67.4, 204.0'RT	SANITARY MANHOLE 4' WITH NEENAH R1916F OR APPROVED EQUAL	641.22	634.10 (NW)	634.10 (BY OTHERS)		
MS4	512+64.7, 34.0'RT	SANITARY MANHOLE 4' WITH NEENAH R1916F OR APPROVED EQUAL	640.50		633.32 (SE)		
FH1	513+66.1, 86.5'RT	FIRE HYDRANT					

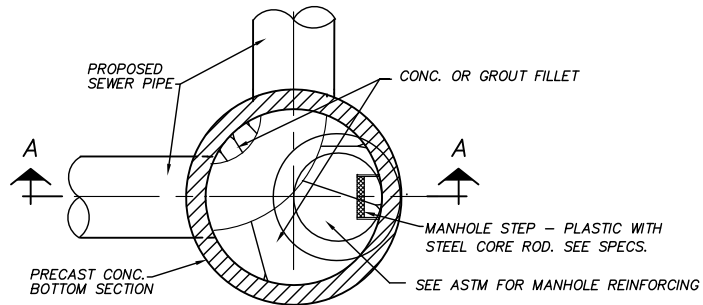
NOTE: THE STATION AND OFFSET IS MEASURED TO THE CENTER OF THE STRUCTURE

NOTE: INVERT FLOWLINE AT BENDS SHALL HAVE A RADIUS EQUAL TO OR LARGER THAN THE PIPE DIAMETER.



SANITARY MANHOLE - TYPE "A"

N.T.S.

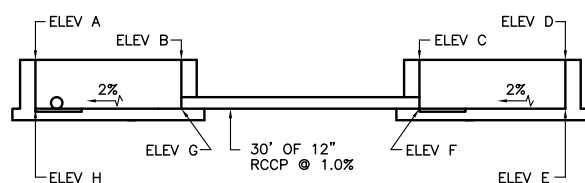


PLAN

N.T.S.

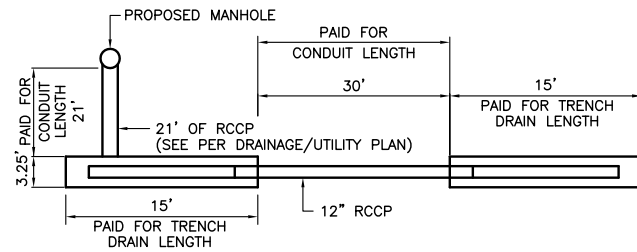
SANITARY MANHOLE

NOT TO SCALE



TYPICAL TRENCH DRAIN PROFILE

NOT TO SCALE

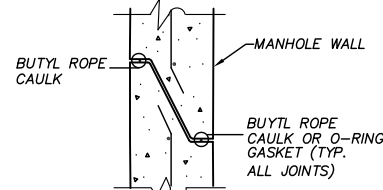


TYPICAL TRENCH DRAIN PLAN VIEW

NOT TO SCALE

NOTE : ADDITIONAL REQUIREMENTS FOR CONCRETE MANHOLE CASTINGS, AND RESILIENT SEAL AROUND PIPE ARE IN THE SPECIFICATIONS. FOR CONNECTING EXISTING SEWERS TO PROPOSED MANHOLES, SEE SPECIFICATIONS.

MANHOLE TYPE	INSIDE DIA.	MIN. WALL THICKNESS
A-4	4'-0"	5"
A-5	5'-0"	6"
A-6	6'-0"	7"

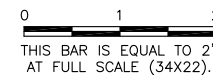


TYP. SANITARY MANHOLE WALL JOINT

N.T.S.

REVISIONS

NUMBER	BY	DATE



CHICAGO EXECUTIVE AIRPORT
WHEELING/PROSPECT HEIGHTS, ILLINOIS
CONSTRUCT SOUTHEAST QUADRANT APRON

DRAINAGE/UTILITY SCHEDULE
AND DETAILS

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APPROVED BY:	
DATE:	07/24/09
JOB No:	09290-04
ILLINOIS PROJECT:	PWK-3581
A.I.P. PROJECT:	3-17-0018-B37
SHEET	17 OF 35 SHEETS