

MWRDGC GENERAL NOTES (APPLIES TO ALL SANITARY SEWER)

- THE MWRDGC SEWER PERMIT SECTION FIELD OFFICE MUST BE NOTIFIED AT LEAST TWO (2) DAYS PRIOR TO THE COMMENCEMENT OF WORK (CALL 708-588-4055).
- ELEVATION DATUM IS USGS.
- ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER SYSTEM.
- ALL DOWNSPOUTS AND FOOTING DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM.
- ALL SANITARY SEWER PIPE MATERIALS AND JOINTS (AND STORM SEWER PIPE MATERIALS AND JOINTS IN A COMBINED SEWER AREA) SHALL CONFORM TO:

DUCTILE IRON PIPE ASTM A-21.5
 PVC ASTM D 3034 SDR26
 RCP ASTM C-26

JOINT SPECIFICATIONS SHALL CONFORM TO THE FOLLOWING.
 DUCTILE IRON PIPE ASTM A-21.11
 PVC ASTM D 3212
 RCP ASTM C-443

6. ALL SANITARY SEWER CONSTRUCTION (AND STORM SEWER CONSTRUCTION IN COMBINED SEWER AREAS) REQUIRES STONE BEDDING WITH STONE 1/4" TO 1" IN SIZE, WITH MINIMUM BEDDING THICKNESS EQUAL TO 1/4 THE OUTSIDE DIAMETER OF THE SEWER PIPE, BUT NOT LESS THAN FOUR (4) INCHES NOR MORE THAN EIGHT (8) INCHES. MATERIAL SHALL BE CA-11 OR CA-13 AND SHALL BE EXTENDED AT LEAST 12" ABOVE THE TOP OF THE PIPE WHEN USING PVC.

7. "BAND SEAL" OF SIMILAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPES OF DISSIMILAR MATERIALS.

8. WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR AN EXISTING MANHOLE, ONE OF THE FOLLOWING METHODS SHALL BE USED.
 1. CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOLS ("SEWER TAP" MACHINE OR SIMILAR) AND PROPER INSTALLATION OF HUB-WYE SADDLE OR HUB-TEE SADDLE.
 2. REMOVE AN ENTIRE SECTION OF PIPE (BREAKING ONLY THE TOP OF ONE BELL AND REPLACE WITH A WYE OR TEE BRANCH SECTION).
 3. WITH PIPE CUTTER, NEATLY AND ACCURATELY CUT OUT DESIRED LENGTH OF PIPE FOR INSERTION OF PROPER FITTING, USING "BAND-SEAL" OR SIMILAR COUPLINGS TO HOLD IT FIRMLY IN PLACE.

9. WHEREVER A SANITARY/COMBINED SEWER CROSSES UNDER A WATER MAIN, THE MINIMUM VERTICAL DISTANCE FROM THE TOP OF THE SEWER TO THE BOTTOM OF THE WATER MAIN SHALL BE 18 INCHES, FURTHERMORE, A MINIMUM HORIZONTAL DISTANCE OF 10 FEET BETWEEN SANITARY/COMBINED SEWERS AND WATER MAINS SHALL BE MAINTAINED UNLESS: THE SEWER IS LAID IN A SEPARATE TRENCH, KEEPING A MINIMUM 18" VERTICAL SEPARATION; OR THE SEWER IS LAID IN THE SAME TRENCH WITH THE WATER MAIN LOCATED AT THE OPPOSITE SIDE ON A BENCH OF UNDISTURBED EARTH, KEEPING A MINIMUM 18" VERTICAL SEPARATION. IF EITHER THE VERTICAL OR HORIZONTAL DISTANCES DESCRIBED ABOVE CANNOT BE MAINTAINED, OR THE SEWER CROSSES ABOVE THE WATER MAIN, THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN STANDARDS.

10. ALL EXISTING SEPTIC SYSTEMS SHALL BE ABANDONED. ABANDONED TANKS SHALL BE FILLED WITH GRANULAR MATERIAL OR REMOVED.

11. ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES, AND SHALL BE CAST IN PLACE OR PRE-CAST REINFORCED CONCRETE.

STORM SEWER SCHEDULE

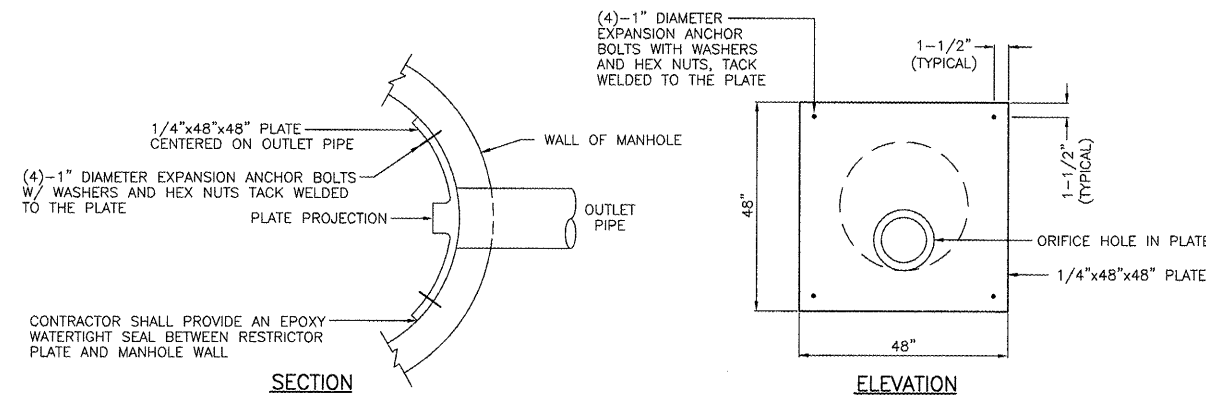
STRUCTURE NO.	STATION / OFFSET	DESCRIPTION	RIM	INVERT
A1	STA. 196+50, 35' RT. CENTERLINE TAXIWAY BRAVO	12" SLOPE BOX INLET W/ GRATE	-	612.85
A2	STA. 199+35, 35' RT. CENTERLINE TAXIWAY BRAVO (SEE NOTES BELOW)	TAXIWAY A-4 MANHOLE W/ TYPE 1 FRAME AND GRATE - CLOSED	616.00	PROPOSED 12" NORTH = 612.25 PROPOSED 12" SOUTH = 612.25 PROPOSED 12" EAST = 612.25 PROPOSED 12" WEST = 612.25
A3	STA. 202+50, 35' RT. CENTERLINE TAXIWAY BRAVO (SEE NOTES BELOW)	EXISTING TYPE A-4 MANHOLE TO BE RECONSTRUCTED	PROPOSED = 616.41 EXISTING = 617.52	EXISTING 18" NORTH = 611.42 EXISTING 12" SOUTH = 611.42 EXISTING 12" EAST = 611.52 PROPOSED 12" WEST = 611.52 PROPOSED 6" UNDERDRAIN = 613.33
A4	STA. 204+50, 35' RT. CENTERLINE TAXIWAY BRAVO (SEE NOTES BELOW)	EXISTING TYPE A-7 MANHOLE TO BE RECONSTRUCTED	PROPOSED = 616.24 EXISTING = 617.49	EXISTING 36" NORTH = 610.95 EXISTING 18" SOUTH = 611.33 EXISTING 30" EAST = 611.33 PROPOSED 6" UNDERDRAIN = 613.65
A5	STA. 207+50, 35' RT. CENTERLINE TAXIWAY BRAVO (SEE NOTES BELOW)	EXISTING TYPE A-6 MANHOLE TO BE RECONSTRUCTED	PROPOSED = 616.44 EXISTING = 617.83	EXISTING 36" NORTH = 610.95 EXISTING 36" SOUTH = 610.99 EXISTING 12" EAST = 612.37 PROPOSED 12" WEST = 611.00 PROPOSED 6" UNDERDRAIN = 613.27
A6	STA. 209+00, 35' RT. CENTERLINE TAXIWAY BRAVO (SEE NOTES BELOW)	CATCH BASIN SPECIAL - 5' DIA. W/ TYPE 1 FRAME AND GRATE - CLOSED W/ 1" RESTRICTOR PLATE	PROPOSED = 617.48	PROPOSED 36" NORTH = 610.80 PROPOSED 36" SOUTH = 610.80 PROPOSED 6" UNDERDRAIN = 613.60
B1	STA. 199+35, 65' RT. CENTERLINE TAXIWAY BRAVO	12" SLOPE BOX INLET W/ GRATE	-	612.40
B2	STA. 199+35, 80' LT. CENTERLINE TAXIWAY BRAVO	12" SLOPE BOX INLET W/ GRATE	-	612.85
B3	STA. 202+50, 80' LT. CENTERLINE TAXIWAY BRAVO	12" SLOPE BOX INLET W/ GRATE	-	612.10
B4	STA. 207+50, 80' LT. CENTERLINE TAXIWAY BRAVO	12" SLOPE BOX INLET W/ GRATE	-	611.67
C1	STA. 191+50, 110' LT. CENTERLINE TAXIWAY BRAVO	18" CONCRETE END SECTION	-	613.40
C2	STA. 191+50, 180' LT. CENTERLINE TAXIWAY BRAVO	18" CONCRETE END SECTION	-	613.00

NOTE: 1. CONTRACTOR SHALL VERIFY ALL EXISTING STRUCTURE RIMS/INVERTS PRIOR TO ORDERING MATERIALS.
 2. EXISTING DRAINAGE STRUCTURES TO BE ADJUSTED/RECONSTRUCTED SHALL HAVE THEIR GRATES REPLACED WITH A CLOSED LID. EACH NEW GRATE SHALL BE CONSIDERED INCIDENTAL TO ITEM AR751983 RECONSTRUCT MANHOLE.

RESTRICTOR PLATE SCHEDULE	
STRUCTURE NO.	RESTRICTOR DIAMETER
A6	6.6"

NOTE

- ALL MANHOLES WITHIN FLOODPLAIN WILL HAVE BOLT DOWN LIDS.
- ALL REINFORCED CONCRETE STORM SEWER SHALL HAVE RUBBER GASKET JOINTS MEETING ASTM C361 OR ASTM C443 WITHIN TEN (10) FEET OF EITHER SIDE OF A WATERMAIN CROSSING.



RESTRICTOR PLATE DETAIL

N.T.S.

NOTES

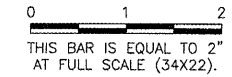
- THE RESTRICTOR PLATE AND FASTENERS SHALL BE FABRICATED IN STAINLESS STEEL OR DUCTILE IRON.
- THE PLATE SHALL BE CURVED TO MATCH THE INSIDE RADIUS OF THE MANHOLE/CATCH BASIN.
- THE DEPTH OF THE ANCHOR BOLTS SHALL BE EMBEDDED AT LEAST 6 INCHES INTO THE STRUCTURE WALL.
- LENGTH OF PROJECTION SHALL BE 1 x DIAMETER OF PIPE. PROJECTION PIPE SHALL BE WELDED OR OTHERWISE PERMANENTLY SECURED TO THE PLATE.

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REVISIONS

NUMBER	BY	DATE



LANSING MUNICIPAL AIRPORT
 LANSING, ILLINOIS
 PARTIAL PARALLEL TAXIWAY TO RUNWAY 18/36
 DRAINAGE DETAILS AND SCHEDULE
 SHEET 2

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DESIGN BY:	ARM
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JOB No:	05297-02

IL. PROJECT: IGO-3681
 A.I.P. PROJECT: 3-17-0121-B26