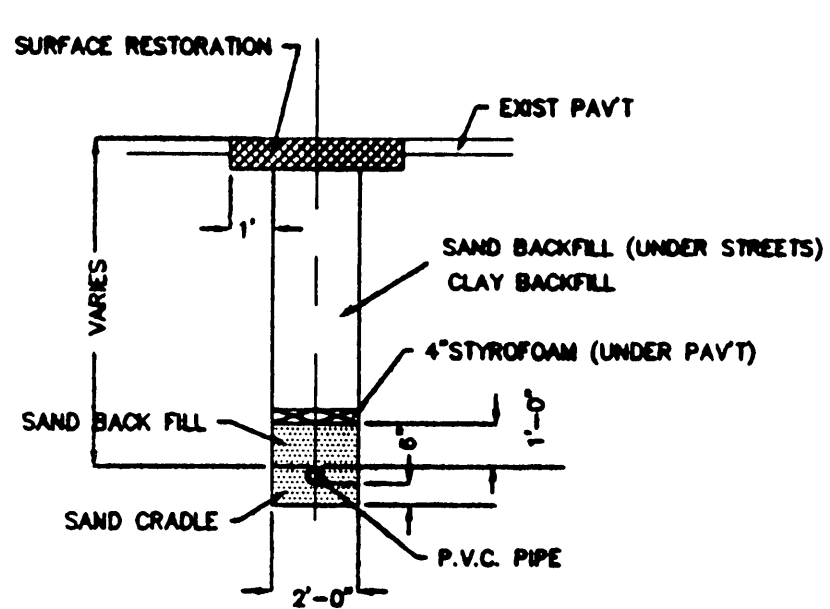
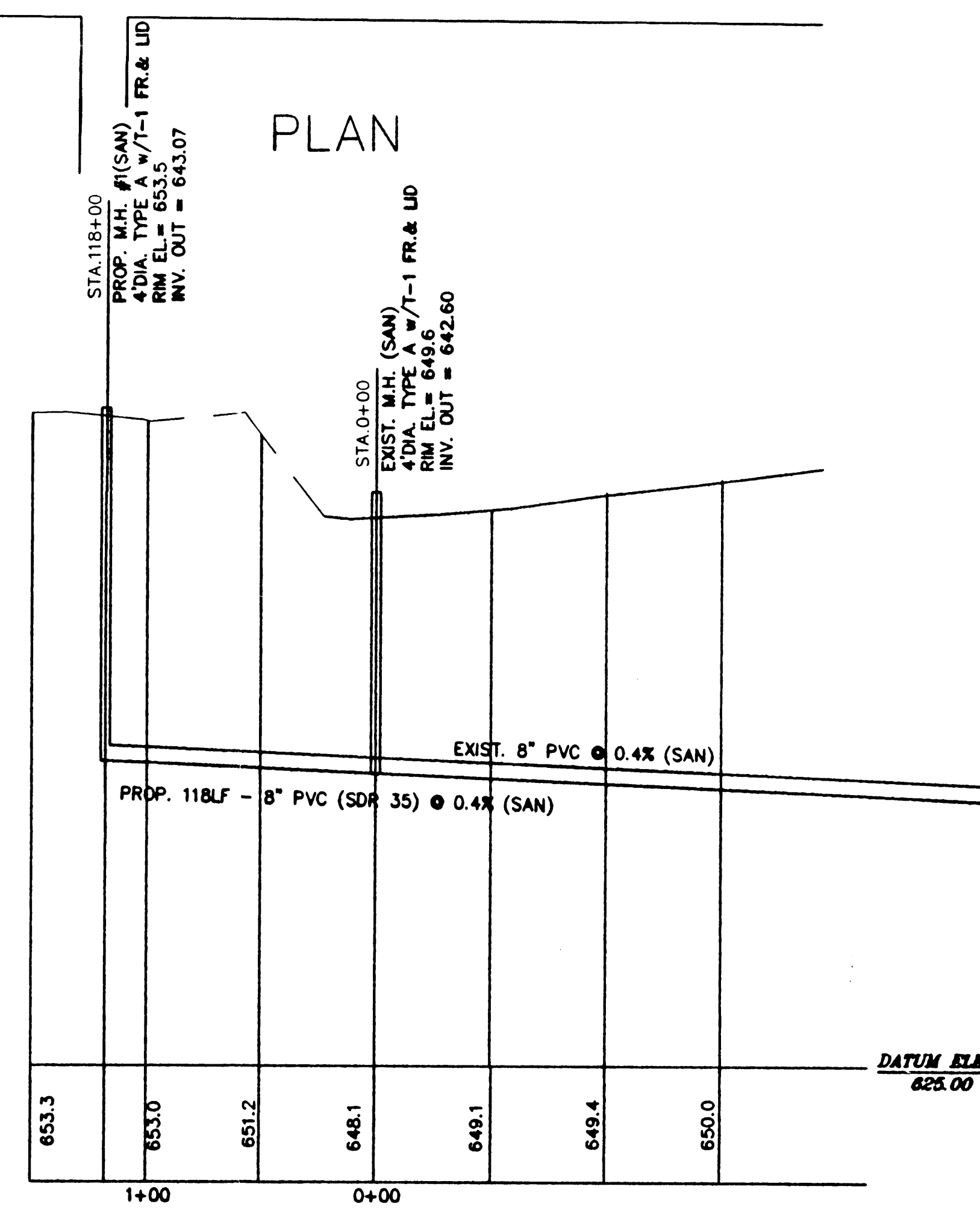


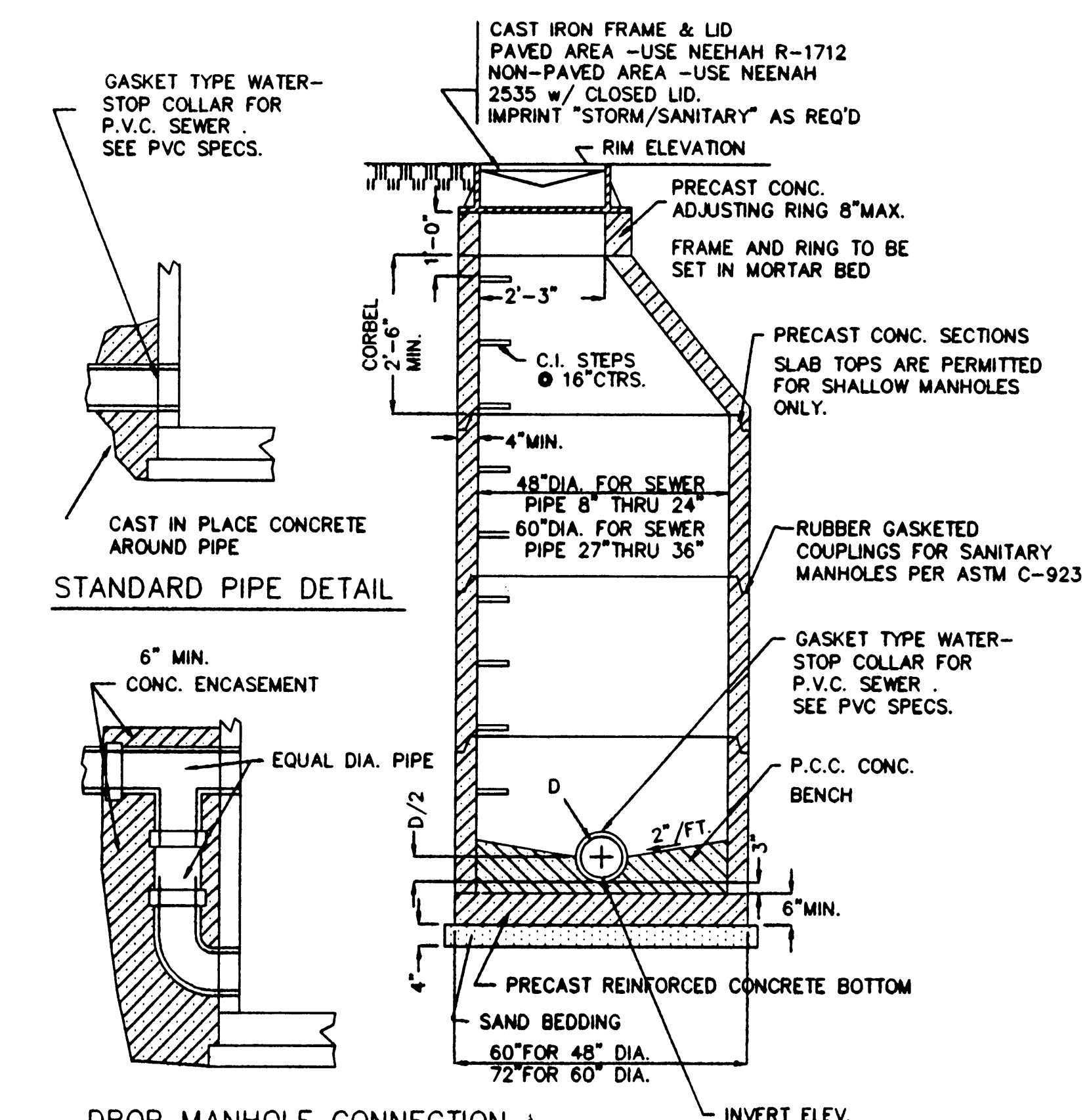
PLAN



DETAIL OF CONDUIT INSTALLATION
N.T.S.



PROFILE



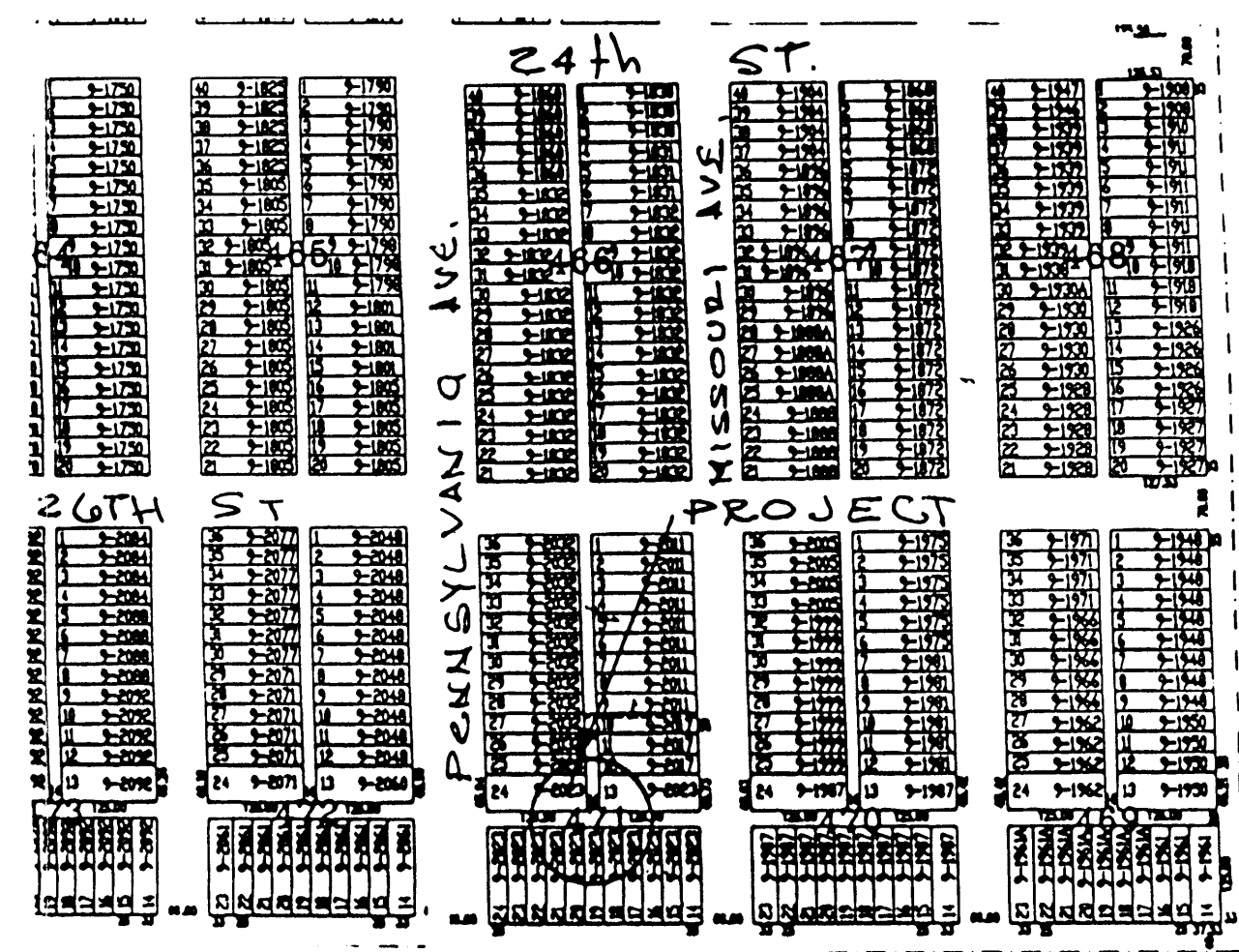
STANDARD PIPE DETAIL

DROP MANHOLE CONNECTION

FOR ANY SANITARY SEWER PIPE ENTERING 2 FEET OR MORE ABOVE THE LOWEST PIPE INVERT.

TYPICAL MANHOLE TYPE "A"

SERVICE CONNECTIONS (WYES) TO BE INSTALLED SHOWN LOCATIONS



LOCATION MAP

LOTS 13 THROUGH 25 INCLUSIVE, BLOCK 471 WEST SUPERIOR 19TH DIVISION, SEC. 21, TOWNSHIP 46, RANGE 14 WEST CITY OF SUPERIOR, DOUGLAS COUNTY, WISCONSIN

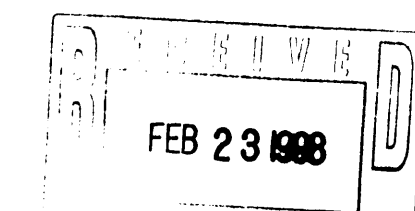
GENERAL NOTES

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, WISDOT, AND STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN IN WISCONSIN, 5th EDITION, WISCONSIN CONSTRUCTION SITE BEST MANAGEMENT PRACTICE HANDBOOK AND APPLICABLE SUPERIOR, W. ORDINANCES.
 - BENCH MARK ELEVATIONS ARE TOP OF MANHOLE FRAMES.
 - 830.0 T.C. INDICATES TOP OF CURB ELEVATION.
830.0 F.F. INDICATES ELEVATION OF FINISHED FRAME.
830.0 G.H. INDICATES ELEVATION OF GROUND @ PROPOSED HYDRANT LOCATION.
 - PAY ITEM - BITUMINOUS CON. SURFACE CL.B - SHALL INCLUDE BITUMINOUS MATERIAL (PRIME) ACCORDING TO THE STANDARD SPECIFICATIONS.
 - PAY ITEM - PARKWAY RESTORATION - SHALL INCLUDE TOPSOIL PLACEMENT AND SEEDING ACCORDING TO THE STANDARD SPECIFICATIONS.
 - THE LOCATION OF EXISTING UTILITIES ARE SHOWN ON THE PLANS FOR INFORMATION ONLY AND REPRESENT THE BEST KNOWLEDGE OF THE ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS OF UTILITY INSTALLATIONS BEFORE STARTING CONSTRUCTION OPERATIONS.
 - THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES IN ORDER TO HAVE EXISTING UNDERGROUND LOCATIONS STAKED PRIOR TO CONSTRUCTION.
- NOTE: ALL CONTRACTORS TO NOTIFY VILLAGE ENGINEERS THREE (3) WORKING DAYS PRIOR TO COMMENCEMENT OF WORK, FAILURE TO DO SO MAY RESULT IN REJECTION OF COMPLETED WORK.
- ELEVATION DATUM IS USGS.
- SANITARY SEWER CONSTRUCTION
- ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER.
 - ALL SANITARY SEWER AND SEWER PIPE JOINTS SHALL CONFORM TO:
-PVC SEWER - GASKET = D-3212
SOLVENT = D2855
PIPE = SDR 35 ASTM D2241
- MINIMUM BEDDING: FOUR INCHES BELOW PIPE TO SPRING LINE, EXCEPT FOR P.V.C. WHICH SHALL BE FOUR INCHES BELOW PIPE TO TWELVE INCHES ABOVE THE TOP OF THE PIPE. BEDDING SHALL BE OF GRADE #2 SAND.
 - MANHOLES SHALL HAVE FOUR INCHES OF STONE BEDDING. THE JOINTS SHALL HAVE "O" RING OR SHALL BE PERFORMED BITUMINOUS PLASTIC GASKET WITH INERT MATERIAL FILLER SIMILAR TO RAM-NEK TO PROVIDE A WATERTIGHT SEAL.
 - WATER-STOP GASKET SHALL BE PROVIDED AT ALL SANITARY SEWER MANHOLE CONNECTIONS. SUCH GASKETS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS FOR THE TYPE OF PIPE USED.
 - WHEREVER UTILITIES CROSS PAVED AREAS, TRENCHES SHALL BE BACKFILLED WITH APPROVED GRANULAR MATERIAL. WHEREVER ONE UTILITY TRENCH CROSSES ANOTHER, THE LOWER TRENCH SHALL IN ALL CASES BE BACKFILLED WITH APPROVED GRANULAR MATERIAL.
 - 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:
 - 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.
 - REMOVE AN ENTIRE SECTION OF PIPE (BREAKING ONLY THE TOP OF ONE BELL) AND REPLACE WITH A WYE OR TEE BRANCH SECTION.
 - 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.
 - WHEREVER A SEWER CROSSES UNDER A WATERMAIN OR STORM SEWER, THE MINIMUM VERTICAL DISTANCE FROM THE TOP OF THE SEWER TO THE BOTTOM OF THE WATERMAIN SHALL BE 18". FURTHERMORE, A MINIMUM HORIZONTAL DISTANCE OF 10' BETWEEN SANITARY SEWERS AND WATERMANS 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 WATERMAIN 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 MAIN, THE SEWER PIPE SHALL BE CAST IRON, DUCTILE IRON OR AN APPROVED EQUIVALENT.
 - ALL EXISTING SEPTIC SYSTEMS TO BE ABANDONED. ABANDONED TANKS TO BE FILLED OR REMOVED.
 - SANITARY SEWER SHALL BE AIR TESTED.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FURNISH ALL LABOR AND MATERIAL FOR THE TESTING, AND SHALL SATISFY HIMSELF THAT THE TESTS CAN BE SUCCESSFULLY COMPLETED PRIOR TO REQUESTING THE ENGINEER'S PRESENCE FOR THE OFFICIAL TESTS.
- FOLLOWING INITIAL SOIL DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN SEVEN CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3:1. IN ADDITION, ALL OTHER DISTURBED OR GRADED AREAS WILL BE STABILIZED WITHIN FOURTEEN CALENDAR DAYS.
- ENGINEER'S SIGNATURE: *R. Stone* E-17541
P.E. NO.

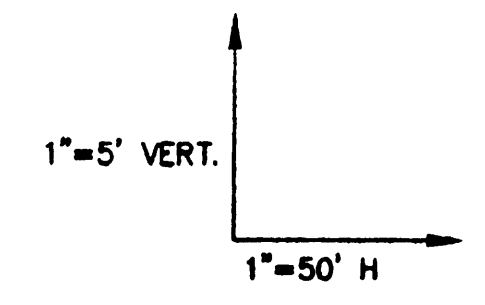


CRI ENGINEERING

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Construction Management
12 BADGER DRIVE SUPERIOR, WI. 54880
(715) 394 7338 FAX (715) 394 7233



JOB NAME:	DRAWN BY: CRI	CHECKED BY:
SAN. SEWER EXTENSION FOR RON STONE	SCALE: 1" = 50'	DATE: 2/16/98
DESCRIPTION:	JOB NUMBER	SHEET



APPROVAL NUMBER: 98-0280
APPROVAL DATE: 3-17-98

DATUM ELEV 625.00