

RAMSEY COUNTY PARKS AND RECREATION DEPARTMENT

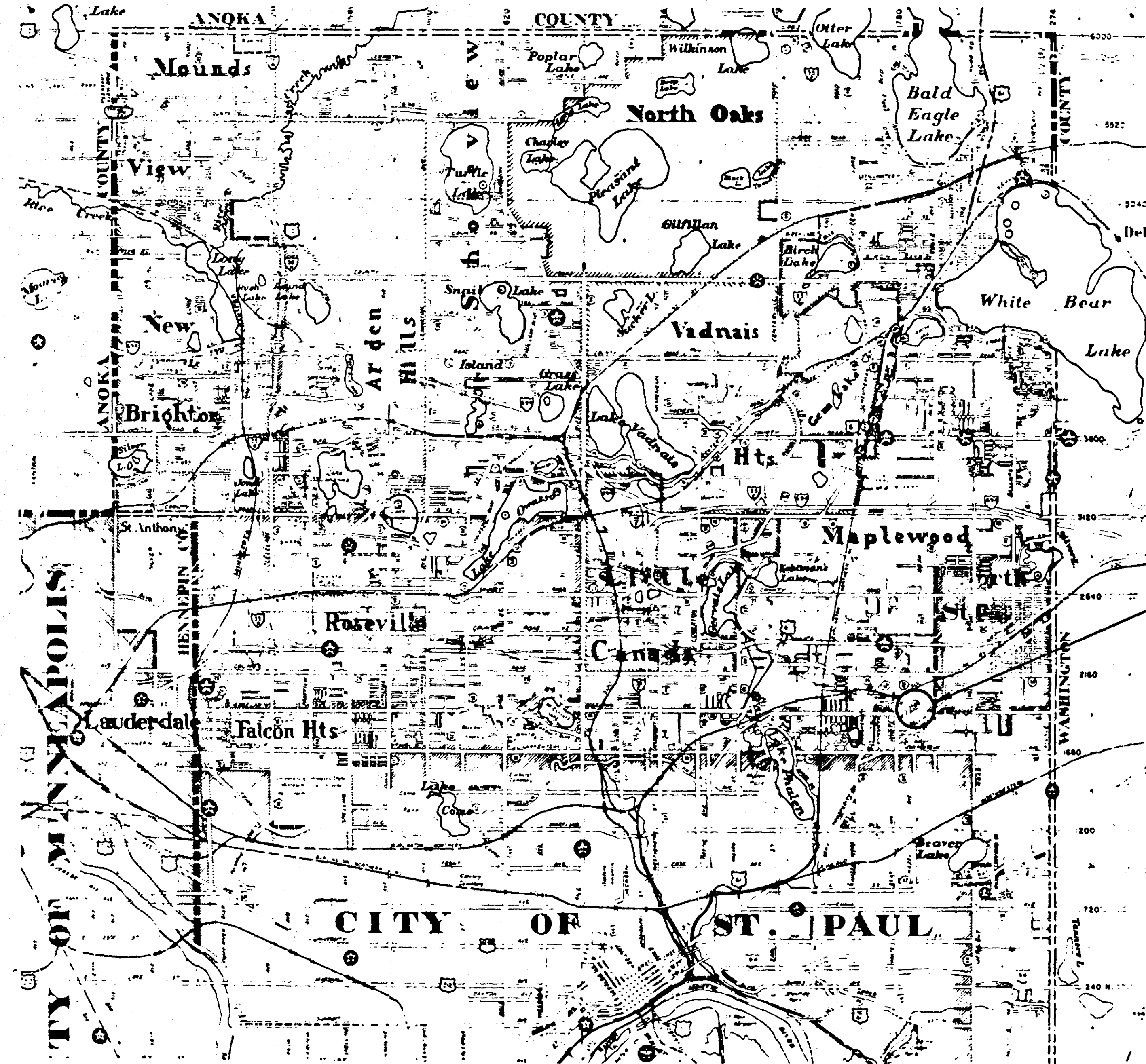
WATERMAIN CONSTRUCTION

RAMSEY COUNTY FAIRGROUNDS WATERMAIN (CON 47323) IN THE CITY OF MAPLEWOOD

ACCOUNT NO. 47323

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	ESTIMATED QUANTITIES, EASEMENT
3	PLAN SHEET



PROJECT LOCATION

PLANS SYMBOLS

STATE LINE	SPRINGS
COUNTY LINE	MARSH
TOWNSHIP OR RANGE LINE	TIMBER
SECTION LINE	ORCHARD
QUARTER LINE	BRUSH
SIXTEENTH LINE	NURSERY
RIGHT OF WAY LINE	CATCH BASIN
PRESENT RIGHT OF WAY LINE	FIRE HYDRANT
CONTROL OF ACCESS LINE	CATTLE GUARD
PROPERTY LINE (Except Land Lines)	OVERPASS (Highway Over)
VACATED PLATTED PROPERTY	UNDERPASS (Highway Under)
CORPORATE OR CITY LIMITS	BRIDGE
TRUNK HIGHWAY CENTER LINE	BUILDING (One Story Frame)
RETAINING WALL	F FRAME C CONCRETE
RAILROAD	S STONE T TILE
RAILROAD RIGHT OF WAY LINE	B BRICK ST STUCCO
RIVER OR CREEK	IRON PIPE OR ROD
DRY RUN	MONUMENT (STONE, CONCRETE, OR METAL)
DRAINAGE DITCH	WOODEN HUB
DRAIN TILE	GRAVEL PIT
CULVERT	SAND PIT
DROP INLET	BOARDW PIT
GUARD RAIL	ROCK QUARRY
BARBED WIRE FENCE	
WOVEN WIRE FENCE	
CHAIN LINK FENCE	
RAILROAD SNOW FENCE	
STONE WALL OR FENCE	
HEDGE	
RAILROAD CROSSING SIGN	
RAILROAD CROSSING BELL	
ELECTRIC WARNING SIGN	
CROSSING GATE	
MEANDER CORNER	
SLOPE EASEMENT (CONST. LIMITS)	

UTILITIES SYMBOLS

POWER POLE LINE	CONDUIT
TELEPHONE OR TELEGRAPH POLE LINE	TELEPHONE CABLE IN CONDUIT
JOINT TELEPHONE AND POWER ON POWER POLES	ELECTRIC CABLE IN CONDUIT
ON TELEPHONE POLES	TELEPHONE MANHOLE
ANCHOR	ELECTRIC MANHOLE
STEEL TOWER	BURIED TELEPHONE CABLE
STREET LIGHT	BURIED ELECTRIC CABLE
PERISTAL (TELEPHONE CABLE TERMINAL)	AERIAL TELEPHONE CABLE
GAS MAIN	SEWER (SANITARY OR STORM)
WATER MAIN	SEWER MANHOLE

PIT DATA

PIT NO. _____	Located in _____
PIT NO. _____	Located in _____

GOVERNING SPECIFICATIONS

THE 1983 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

ASBUILT PLAN
DRB 12/18/86

APPROVED *[Signature]* DATE 6-11-85
DIRECTOR, RAMSEY COUNTY PARKS & REC. DEPT.

APPROVED *[Signature]* DATE 6-11-85
COORDINATING ENGINEER

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.
DATE 6-11-85 REG. NO. 12533 ENGR. *[Signature]*

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
DATE 6/10/85 REG. NO. 16159 ENGR. *[Signature]*

PLAN REVISIONS		
DATE	SHEET NO.	BY
6/14/85	2,3	<i>[Signature]</i>

STATEMENT OF ESTIMATED QUANTITIES

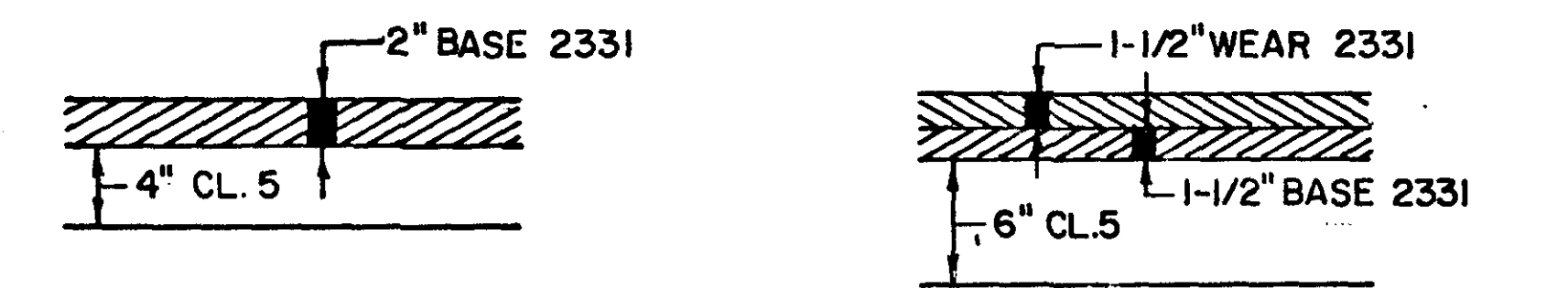
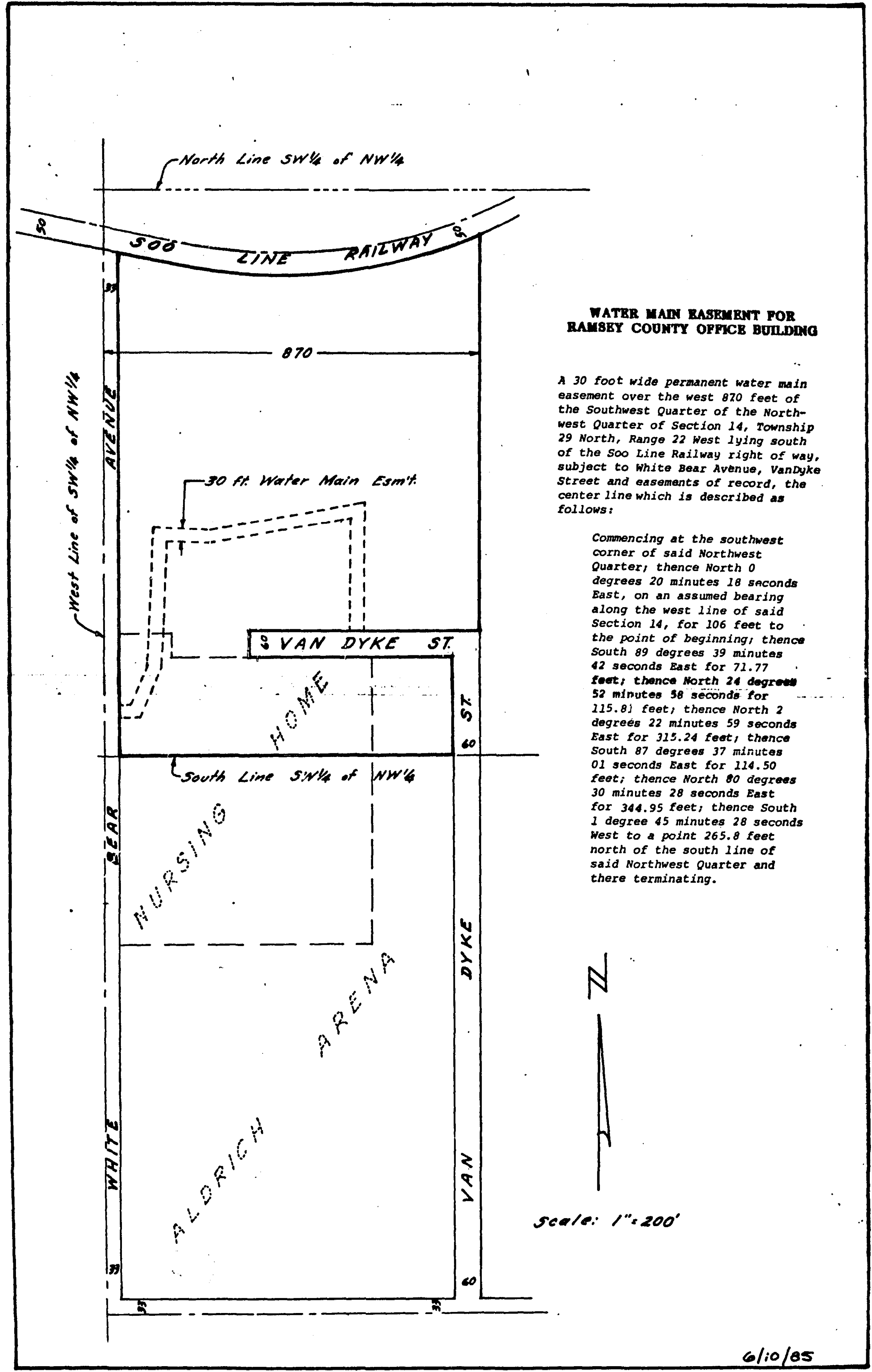
ITEM NO.	ITEM	UNIT	ESTIMATED QUANTITIES	FINAL QUANTITIES
2C21.501	MOBILIZATION	L.S.	1	1
2105.505	TOPSOIL BORROW (LV)	C.Y.	346	0
2211.501	AGGREGATE BASE CL.5	TON	364	82.45
2331.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	9.8	4.1
2331.508	WEARING COURSE MIXTURE	TON	41	73.28
2331.514	BASE COURSE MIXTURE	TON	151	0
2575.501	ROADSIDE SEEDING	ACRE	0.95	0
2575.502	SEED MIXTURE 5	LB.	48	0
2575.531	COMMERCIAL FERTILIZER-ANAL. 12-12-12	TON	0.10	0
2575.511	MULCH MATERIAL, TYPE 1	TON	0.95	0
0503.620	CAST IRON FITTINGS	LB.	1640	1640
0504.602	FURNISH & INSTALL 1" AIR VENT	EA.	1	1
0504.602	HYDRANT	EA.	2	2
0504.602	6" GATE VALVE & BOX	EA.	2	2
0504.602	8" GATE VALVE & BOX	EA.	1	1
0504.602	CONNECT TO EXISTING 6" WATERMAIN	EA.	1	1
0504.602	CONNECT TO EXISTING 8" WATERMAIN	EA.	1	1
0504.603	6" WATERMAIN DUCT IRON CL. 53	L.F.	16	18.5
0504.603	8" WATERMAIN DUCT IRON CL. 52	L.F.	1428	1425.5
0511.602	GRANULAR BEDDING	TON	30	13

STANDARD DETAILS FROM "STANDARDS FOR THE INSTALLATION OF WATER MAINS"

D-3, A1-5794	GATE VALVE & BOX INSTALLATION
D-4, A1-5795	FIRE HYDRANT INSTALLATION
D-6, A1-1087	STANDARD DRIP BOX FOR HYDRANT INSTALLATION
D-8, A1-6636	TIED PIPE REQUIRED FOR BENDS, ALL TYPES OF PIPE
D-14, A1-6636	TYPICAL THRUST BLOCK DESIGN
D-16, A1-6380-A	TYPICAL OFFSET DETAIL
D-12, A1-6636	TYPICAL AIR VENT INSTALLATION

NOTES:

- CONTRACTOR SHALL PROVIDE 48 HOUR NOTICE TO THE ST. PAUL WATER UTILITY BEFORE CONSTRUCTION BEGINS. SUBSEQUENT COORDINATION WITH THE UTILITY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND MEET THE REQUIREMENTS SET FORTH IN THE SPECIFICATIONS.
- CONTRACTOR SHALL SAFEGUARD ALL ADJACENT STRUCTURES AND PROPERTY DURING THE COURSE OF WORK. IT SHALL BE ASSUMED THE CONTRACTOR HAS REVIEWED ALL PROJECT SIGHT CONDITIONS AND HAS CONSIDERED ALL COSTS AND PROCEDURES NECESSARY TO COMPLETE THE PROPOSED WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. NO ADDITIONAL COMPENSATION WILL BE PROVIDED FOR SPECIAL MEASURES OR CONSTRUCTION TECHNIQUES NECESSARY TO SAFEGUARD ADJACENT PROPERTY OR UTILITIES EXCEPT AS SPECIFICALLY IDENTIFIED IN THE PAY ITEMS OR UNDER MDOT SPECIFICATION 1507. SIGNS AND MISCELLANEOUS MINOR STRUCTURES MAY BE REMOVED AND RESET SUBJECT TO APPROVAL OF THE ENGINEER. SUCH WORK SHALL BE CONSIDERED INCIDENTAL TO WATERMAIN INSTALLATION.
- COMPENSATION FOR RESTORATION WITHIN CONSTRUCTION LIMITS SHALL BE IN ACCORDANCE WITH APPLICABLE PAY ITEMS. RESTORATION REQUIRED OUTSIDE INDICATED CONSTRUCTION LIMITS SHALL BE AT CONTRACTOR EXPENSE AND INCLUDE ALL LABOR AND MATERIALS NECESSARY TO RESTORE AFFECTED AREAS TO CONDITIONS NOTED PRIOR TO THE ONSET OF WORK.
- CONTRACTOR SHALL WALK PROJECT ALINEMENT WITH THE ENGINEER PRIOR TO START OF WORK. A PHOTO LOG OF EXISTING CONDITIONS SHALL BE TAKEN CONCURRENTLY WITH THAT INSPECTION.
- PAYMENT FOR HYDRANT UNDER ITEM 0504.602 SHALL BE COMPENSATION IN FULL FOR CEMENT BLOCK, RETAINER BLANDS, DRIP BOX AND GRAVEL, AND ALL HYDRANT COMPONENTS IDENTIFIED ON DRAWING D-4 "FIRE HYDRANT INSTALLATION" IN THE ST. PAUL WATER UTILITY STANDARDS. PAYMENT FOR GATE VALVE & BOX, AND 6" FEEDER LINES SHALL BE MADE UNDER THE APPLICABLE PAY ITEMS.
- INSTALLATION OF RETAINER BLANDS, THRUST BLOCKS, PIPE JOINTING MATERIALS, ETC. SHALL BE INCIDENTAL TO THE MAJOR PIPE ITEM AFFECTED. NO ADDITIONAL COMPENSATION WILL BE PROVIDED.
- TURF RESTORATION SHALL INCLUDE 3" TOPSOIL, SEEDING AND MULCHING. MULCH MATERIAL SHALL BE APPLIED AT A RATE OF ONE TON PER ACRE AND CRIMPED TO A DEPTH OF TWO INCHES.
- ITEM 0504.602 "CONNECT TO EXISTING 6" WATERMAIN" AND ITEM 0504.602 "CONNECT TO EXISTING 8" WATERMAIN" SHALL INCLUDE ALL LABOR AND MATERIALS FOR INSTALLATION OF A WET TAP WITH VALVE AND VALVE BOX. WET TAP INSTALLATION MUST BE DONE BY THE ST. PAUL WATER UTILITY. THE CONTRACTOR SHALL PROVIDE TRENCHING, BACKFILLING, AND COMPACTION.
- ITEM 0504.602 "FURNISH AND INSTALL 1" AIR VENT SHALL INCLUDE ALL LABOR AND MATERIALS FOR THE COMPLETE VENT AS PER STANDARD DETAIL D-12, A1-6636. INSTALLATION OF THE 1" TAP SHALL BE DONE BY THE ST. PAUL WATER UTILITY. TRENCHING, BACKFILLING, AND COMPACTION SHALL BE PROVIDED BY THE CONTRACTOR. CONTRACTOR AND/OR ST. PAUL CAN INSTALL RELATED COMPONENTS.
- COORDINATION AND PAYMENT FOR ST. PAUL UTILITY SERVICES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.



BITUMINOUS RESTORATION
PARKING & DRIVE AREAS
STA. 9+00 TO STA. 13+20
(VARIABLE WIDTH)

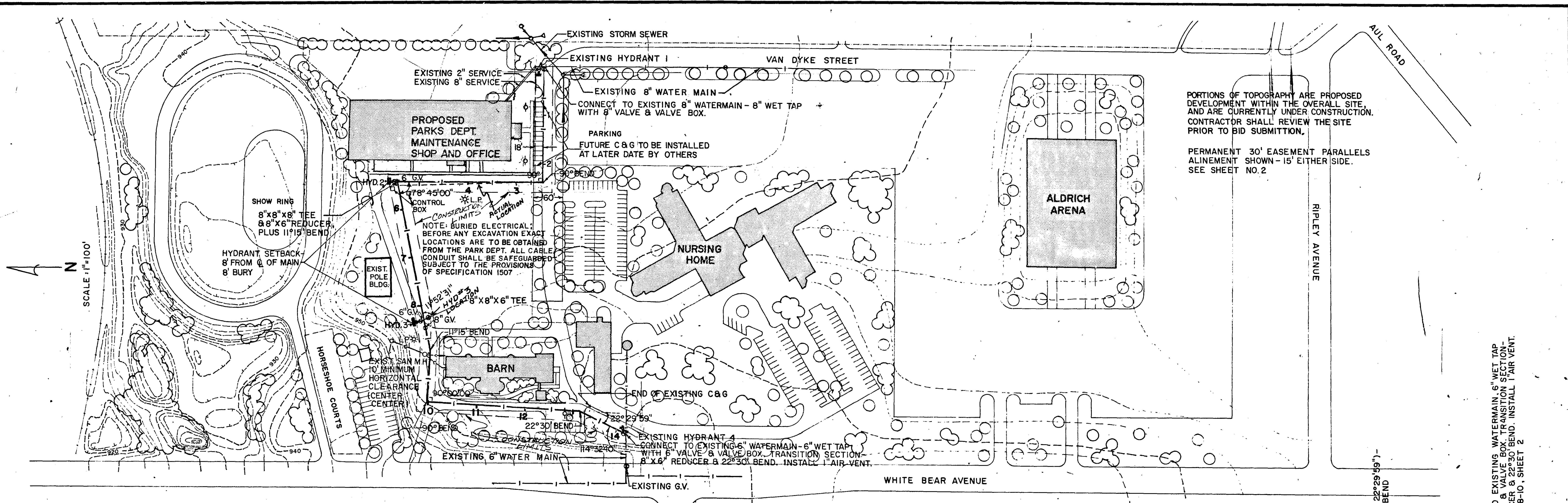
BITUMINOUS RESTORATION
VAN DYKE STA. 0+00 TO 2+50
(15' WIDTH)

ASBUILT PLAN
DRB 12/18/86

REVISIONS	DATE	BY
WET TAP, AIR VENT, NOTES 0, 2, 10	2/1/87	DRB

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

James E. Johnson
Date 2/10/85 Reg. No. 16159



PORTIONS OF TOPOGRAPHY ARE PROPOSED DEVELOPMENT WITHIN THE OVERALL SITE, AND ARE CURRENTLY UNDER CONSTRUCTION. CONTRACTOR SHALL REVIEW THE SITE PRIOR TO BID SUBMITTION.

PERMANENT 30' EASEMENT PARALLELS ALINEMENT SHOWN - 15' EITHER SIDE. SEE SHEET NO. 2

SCALE 1"=100'

