

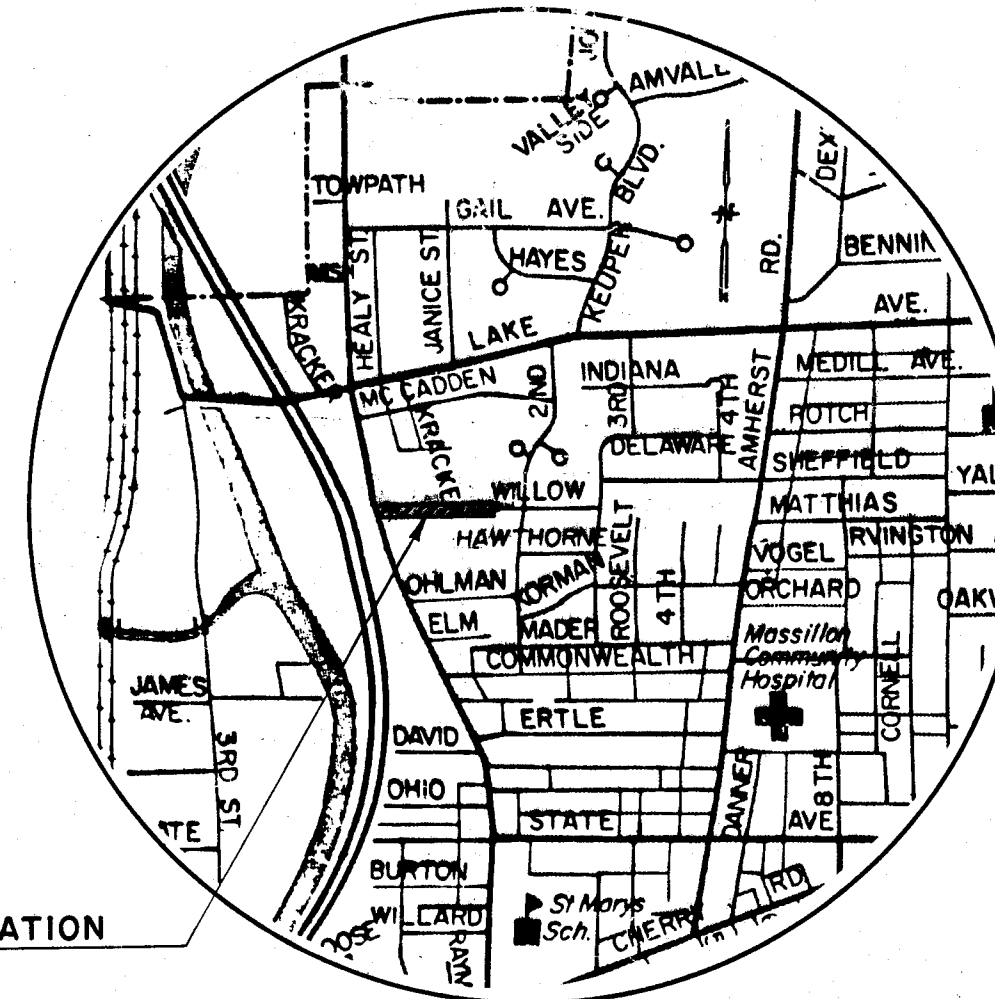
ACKNOWLEDGMENTS

A DEDICATION PLAT OF WILLOW AVENUE N.E.

LOCATED IN
PART OF OUT LOT 72 IN THE
CITY OF MASSILLON
STARK COUNTY, OHIO

SCALE: 1" = 50' APRIL, 1990

FOR: STARK METROPOLITAN HOUSING AUTHORITY
1800 TUSCARAWAS ST. WEST
CANTON, OHIO 44702
PHONE: 454-8051

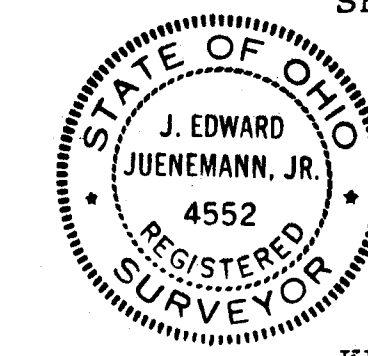


PROJECT LOCATION

LOCATION MAP

SCALE IN MILES

I HEREBY CERTIFY THAT THIS IS A CORRECT PLAT OF SURVEY OF PART OF OUT LOT 72 IN THE CITY OF MASSILLON, STARK COUNTY, OHIO; MADE BY ME THIS 3rd DAY OF APRIL 1990 AND THAT THE SURVEY BALANCES AND CLOSES, AND THAT THE MONUMENTS SHOWN HEREON ARE SET OR TO BE SET AS SHOWN, AND THAT ALL DIMENSIONAL AND GEODETIC DETAILS ARE CORRECT.



J. Edward Juennemann, Jr.
REGISTERED SURVEYOR NO. 4552

KNOW ALL MEN BY THESE PRESENT, THAT THE UNDERSIGNED, THE AGENTS FOR STARK METROPOLITAN HOUSING AUTHORITY DO HEREBY ACKNOWLEDGE THE MAKING OF THE SAME TO BE THEIR FREE ACT AND DEED AND DO HEREBY DEDICATE THE STREET, ROADWAY EASEMENT AND PERMANENT TURN-AROUND EASEMENT TO PUBLIC USE FOREVER

Cherrie Turner
CHERRIE TURNER, EXECUTIVE DIRECTOR

WITNESS: David J. Sprague

Frank L. Beane
FRANK L. BEANE, BOARD CHAIRMAN
STARK METROPOLITAN HOUSING AUTHORITY

WITNESS: David J. Sprague

STATE OF OHIO
COUNTY OF STARK s.s.
BEFORE ME, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, PERSONALLY APPEARED THE ABOVE NAMED PERSONS, WHO ACKNOWLEDGED THE SIGNING OF THE FOREGOING INSTRUMENT AND THAT THE SAME IS THEIR FREE ACT AND DEED.

IN TESTIMONY WHEREOF, I HAVE SET MY HAND AND SEAL THIS 11th DAY OF July 1991.

MY COMMISSION EXPIRES:

3-25-94

Robert J. Hawk
NOTARY PUBLIC

APPROVED BY THE MASSILLON CITY PLANNING COMMISSION AT A MEETING HELD THIS 11th DAY OF APRIL 1990.

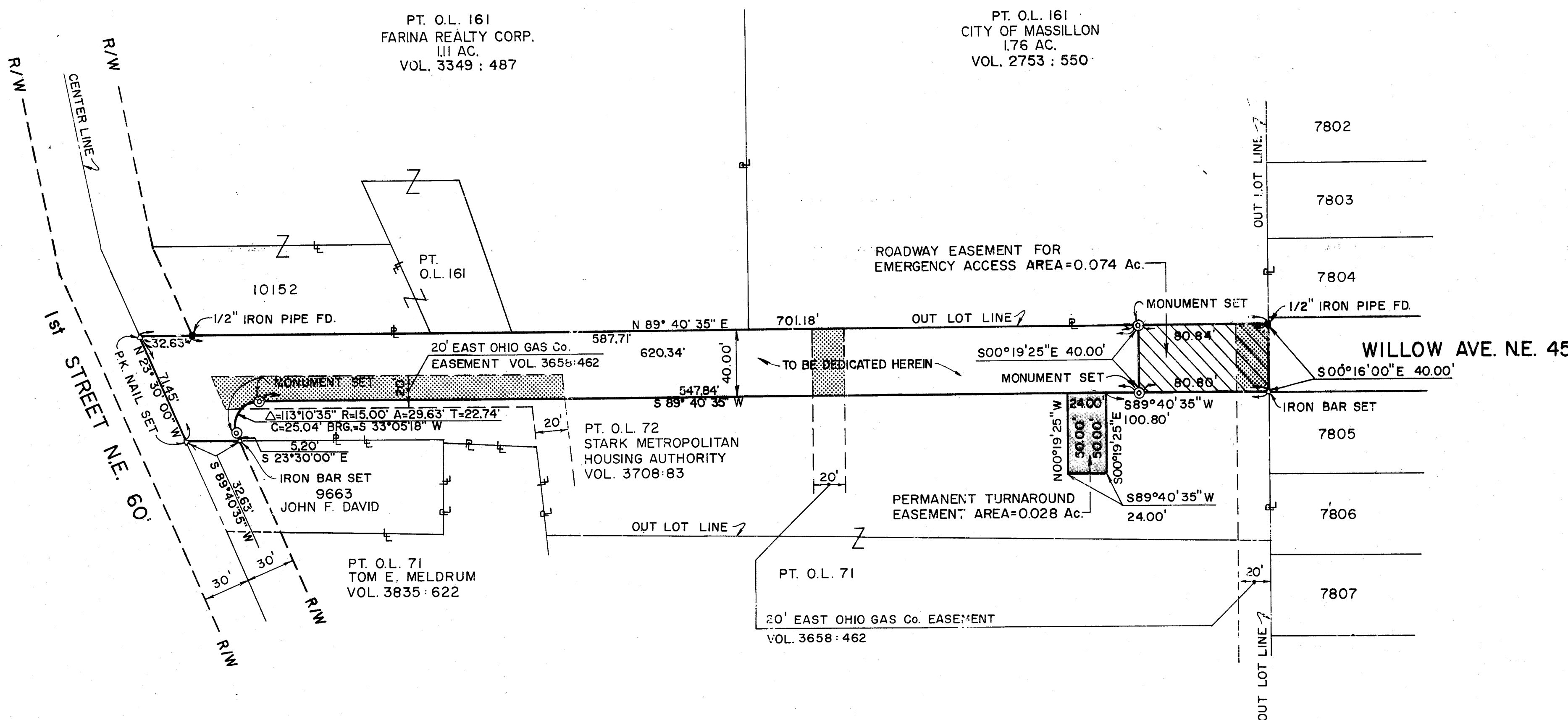
APPROVED BY THE MASSILLON CITY ENGINEER THIS 22nd DAY OF JULY 1991.

I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE, NO ENCUMBRANCES EXIST ON THE LANDS HEREIN OFFERED FOR PUBLIC USE THIS 22nd DAY OF JULY 1991.

ACCEPTED BY THE COUNCIL OF THE CITY OF MASSILLON BY ORDINANCE NO. 86-1990
PASSED THIS 7th DAY OF MAY 1990.

ENTERED FOR TRANSFER BY THE STARK COUNTY AUDITOR THIS DAY OF 1991.

RECEIVED FOR RECORD BY THE STARK COUNTY RECORDER THIS 2nd DAY OF OCTOBER 1991, PLAT BOOK 58 PAGE 50.



PERTINENT DOCUMENTS

PLAT BOOK 16, PAGE 82
DEED VOLUME 2753, PAGE 550
DEED VOLUME 3349, PAGE 487
DEED VOLUME 3658, PAGE 462
DEED VOLUME 3708, PAGE 83
DEED VOLUME 3835, PAGE 622

NOTE:
RIGHT OF ACCESS TO ANY DEAD END STREET SHOWN HERE ON IS PROHIBITED, EXCEPT FROM LOTS PLATTED IN CONFORMITY WITH THE STARK COUNTY SUBDIVISION REGULATIONS.

SUMMARY OF DEDICATED AREA

AREA DEDICATED IN WILLOW AVE. N.E. 0.535 AC.
AREA DEDICATED IN 1st STREET N.E. 0.049 AC.
AREA DEDICATED IN EASEMENT'S 0.102 AC.
TOTAL AREA 0.686 AC.

REFERENCE DIRECTION
BEARING SYSTEM ESTABLISHED FROM DEED BOOK VOLUME 3708, PAGE 83 USING N 23°30'00" W FOR THE CENTER LINE OF 1st STREET N.E.

SCALE: 1" = 50' VERT.	DATE: APRIL, 1990	FIELD BOOK NO. 588	SHEET 1 OF 1
JAMES L. COOPER J. EDWARD JUENEMANN JR. ROBERT A. MILLER WILLIAM J. MEDLA			
COOPER AND ASSOCIATES CONSULTING ENGINEERS AND SURVEYORS 1359 MARKET AVENUE, NORTH CANTON, OHIO 44704 PHONE (216) 452-5731			
A DEDICATION PLAT OF WILLOW AVENUE N.E. PART OF OUT LOT 72 IN THE CITY OF MASSILLON, OHIO			
DESCRIPTION	DATE	BY	REVISIONS
DWG. BY: CH'D BY			

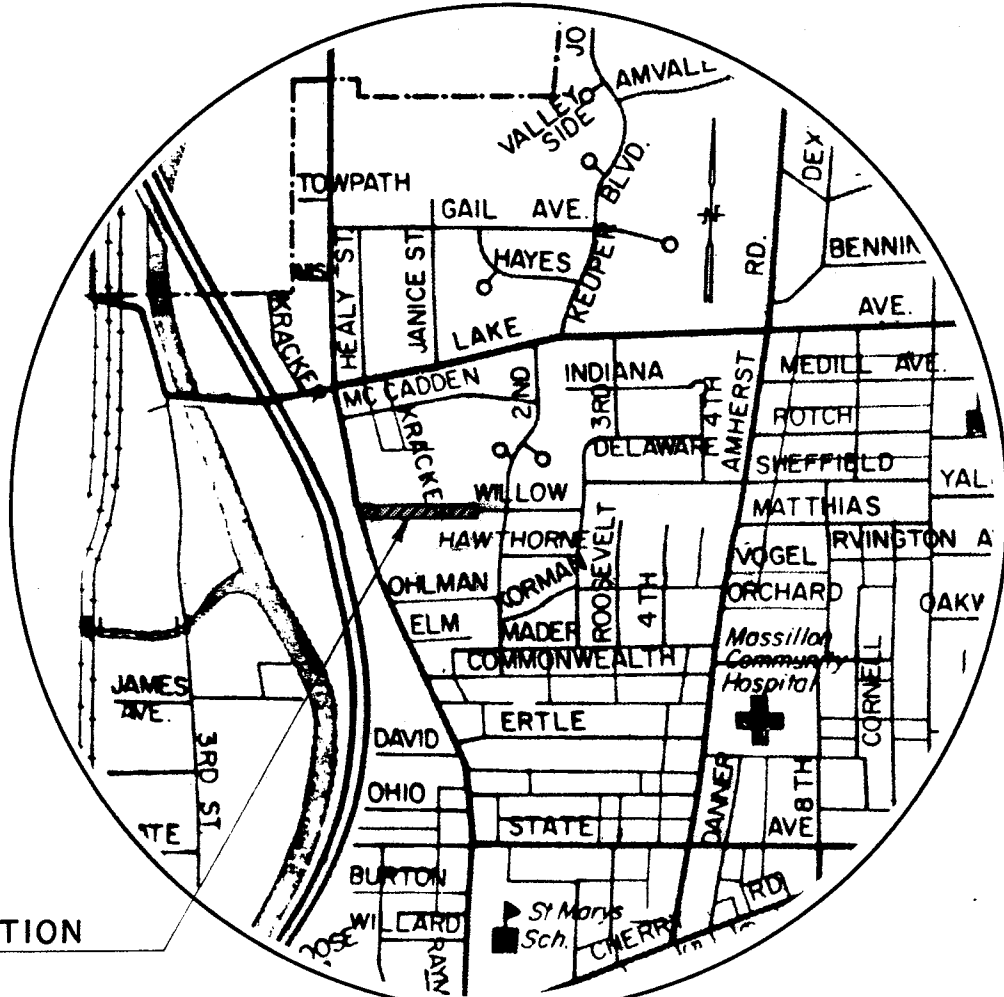
ACKNOWLEDGMENTS

A DEDICATION PLAT OF
WILLOW AVENUE N.E.

LOCATED IN
PART OF OUT LOT 72 IN THE
CITY OF MASSILLON
STARK COUNTY, OHIO

SCALE: 1" = 50' APRIL, 1990

FOR: STARK METROPOLITAN HOUSING AUTHORITY
1800 TUSCARAWAS ST. WEST
CANTON, OHIO 44702
PHONE: 454-8051

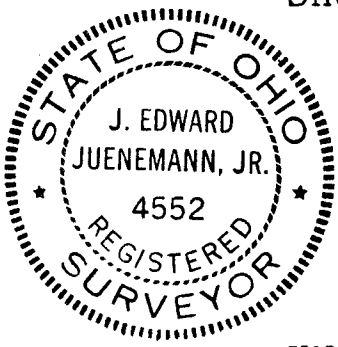


PROJECT LOCATION

LOCATION MAP

SCALE IN MILES

I HEREBY CERTIFY THAT THIS IS A CORRECT PLAT OF SURVEY OF PART OF OUT LOT 72 IN THE CITY OF MASSILLON, STARK COUNTY, OHIO; MADE BY ME THIS 3RD DAY OF APRIL 1990 AND THAT THE SURVEY BALANCES AND CLOSES, AND THAT THE MONUMENTS SHOWN HEREON ARE SET OR TO BE SET AS SHOWN, AND THAT ALL DIMENSIONAL AND GEODETIC DETAILS ARE CORRECT.



J. Edward Juennemann Jr.
REGISTERED SURVEYOR NO. 4552

KNOW ALL MEN BY THESE PRESENT, THAT THE UNDERSIGNED, THE AGENTS FOR STARK METROPOLITAN HOUSING AUTHORITY DO HEREBY ACKNOWLEDGE THE MAKING OF THE SAME TO BE THEIR FREE ACT AND DEED AND DO HEREBY DEICATED THE STREET, ROADWAY EASEMENT AND PERMANENT TURN-AROUND EASEMENT TO PUBLIC USE FOREVER

CHERRIE TURNER, EXECUTIVE DIRECTOR WITNESS:

JOHN ROSS, BOARD CHAIRMAN
STARK METROPOLITAN HOUSING AUTHORITY WITNESS:

STATE OF OHIO
COUNTY OF STARK s.s.
BEFORE ME, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, PERSONALLY APPEARED THE ABOVE NAMED PERSONS, WHO ACKNOWLEDGED THE SIGNING OF THE FOREGOING INSTRUMENT AND THAT THE SAME IS THEIR FREE ACT AND DEED.

IN TESTIMONY WHEREOF, I HAVE SET MY HAND AND SEAL THIS _____ DAY OF _____ 1990.

MY COMMISSION EXPIRES: _____
NOTARY PUBLIC

APPROVED BY THE MASSILLON CITY PLANNING COMMISSION AT A MEETING HELD THIS _____ DAY OF _____ 1990.

APPROVED BY THE MASSILLON CITY ENGINEER THIS _____ DAY OF _____ 1990.

I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE, NO ENCUMBRANCES EXIST ON THE LANDS HEREIN OFFERED FOR PUBLIC USE THIS _____ DAY OF _____ 1990.

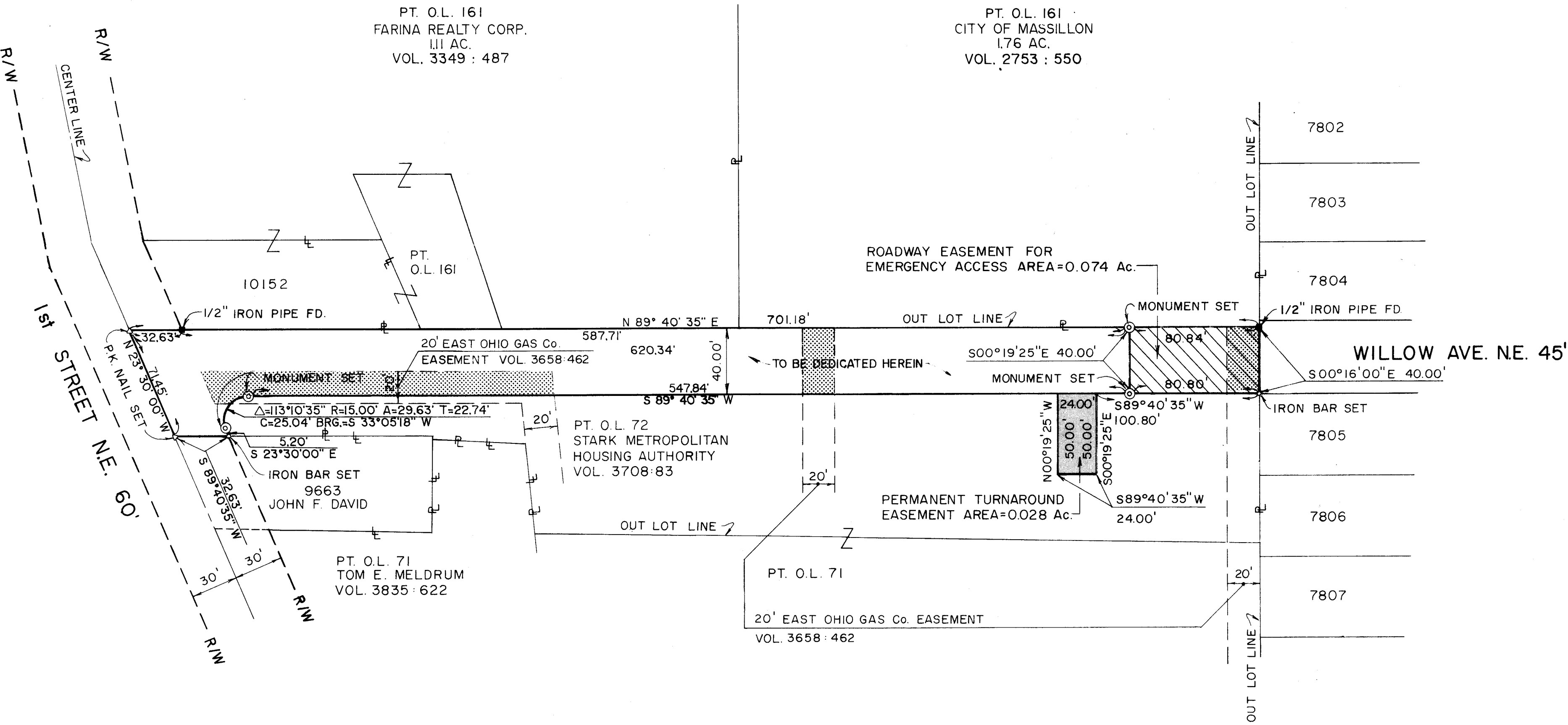
ACCEPTED BY THE COUNCIL OF THE CITY OF MASSILLON BY ORDINANCE NO. _____ PASSED THIS _____ DAY OF _____ 1990.

PRESIDENT CLERK OF COUNCIL

ENTERED FOR TRANSFER BY THE STARK COUNTY AUDITOR THIS _____ DAY OF _____ 1990.

RECEIVED FOR RECORD BY THE STARK COUNTY RECORDER THIS _____ DAY OF _____ 1990, PLAT BOOK _____ PAGE _____.

STARK COUNTY RECORDER



NOTES

ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE CODES, ORDINANCES, AND STANDARD SPECIFICATIONS OF ALL AGENCIES THAT HAVE THE RESPONSIBILITY OF REVIEWING PLANS AND SPECIFICATIONS IN THIS LOCALITY IN LIEU OF ANY LOCAL SPECIFICATIONS. WORK SHALL BE DONE IN CONFORMANCE WITH THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS MOST RECENT EDITION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS FOR CONSTRUCTION.

ALL EXISTING FIELD CONDITIONS SHALL BE ACTUALLY FIELD CHECKED AND VERIFIED BY CONTRACTORS PRIOR TO BIDDING AND CONSTRUCTION. SHOULD THERE BE ANY DISCREPANCY BETWEEN PLANS AND ACTUAL FIELD CONDITIONS, CONTRACTOR HAS TO SEEK WRITTEN CLARIFICATION FROM THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF WORK.

EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, ARE SHOWN ON THE PLANS ACCORDING TO INFORMATION BY SURVEYOR AND/OR IN THE RECORDS, IF AVAILABLE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES AT LEAST TWO DAYS PRIOR TO BEGINNING CONSTRUCTION ABOUT THE EXACT LOCATIONS, THEIR PROTECTION AND OPERATION DURING CONSTRUCTION. IF EXISTING UTILITY LINES ARE ENCOUNTERED THAT ARE IN CONFLICT WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE TO RESOLVE THE CONFLICT.

IT SHALL BE CONTRACTOR'S SOLE RESPONSIBILITY TO CONSTRUCT ALL ITEMS ON THESE PLANS USING CONSTRUCTION MEANS AND METHODS THAT WILL PROTECT PROPERTY AND PREVENT BODILY INJURY AND/OR DEATH. THE CONTRACTOR SHALL TAKE ANY NECESSARY SAFETY PRECAUTIONS TO COMPLY WITH THE SAFETY REQUIREMENTS OF CITY, STATE, AND FEDERAL GOVERNMENTS.

CONSTRUCTION SHALL BE PERFORMED, AND EQUIPMENT STORED, IN A MANNER WHICH PERMITS EXISTING FACILITIES TO PERFORM WITHOUT INTERRUPTION.

THE FOLLOWING MATERIALS ARE APPROVED FOR THE STORM SEWER UNLESS OTHERWISE DESIGNATED ON THE PLAN. INSTALLATION TO BE IN ACCORDANCE WITH O.D.O.T. TYPE "B" UNLESS OTHERWISE NOTED.

- REINFORCED CONCRETE PIPE PER O.D.O.T. ITEM 603
- HIGH DENSITY POLYETHYLENE CORRUGATED PIPE WITH SMOOTH INTERIOR PER O.D.O.T. ITEM 544
- P.V.C. (S.D.R. 35) IN ACCORDANCE WITH A.S.T.M. D-3034

CATCH BASINS (EXCEPT TYPE "S") AND STORM MANHOLES TO BE IN ACCORDANCE WITH MASSILLON CITY STANDARDS (FILE NO. M-581) AVAILABLE FROM THE CITY ENGINEER'S OFFICE. TOP ELEVATIONS TO BE ADJUSTED TO GRADE AS REQUIRED. REMOVAL OF EXISTING CURB FOR INSTALLATION OF PROPOSED CATCH BASINS AND REPLACEMENT OF CURB AND SIDEWALK DISRUPTED DUE TO INSTALLATION OF STORM SEWER SHALL BE INCLUDED IN THE PRICE BID FOR STORM SEWER. ALL REPLACEMENT MATERIALS SHALL BE IN ACCORDANCE WITH CITY REQUIREMENTS.

CONTRACTOR SHALL EXCAVATE AND REMOVE FROM THE SITE THE EXISTING ASPHALT PAVEMENT (APPROX. 2" THICK) WITHIN THE PROPOSED PAVEMENT SECTION.

- C-1 PAVEMENT CORE No. 1, STA. 0+10, ON E 2-1/2" OF ASPHALT, 5" OF AGGREGATE BASE
- C-2 PAVEMENT CORE No. 2, STA. 3+07, ON E 2-1/2" OF ASPHALT, 6" OF AGGREGATE BASE

() DENOTES EXISTING TOP OF CURB SPOT ELEVATION
() DENOTES AS-BUILT DIMENSIONS

APPROVED BY THE MASSILLON CITY ENGINEER
THIS _____ DAY OF _____, 199__

MASSILLON CITY ENGINEER

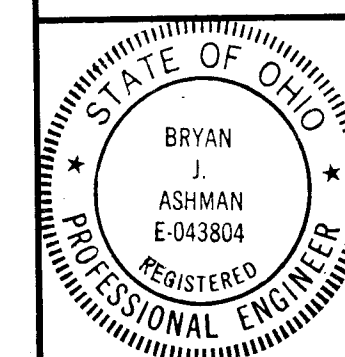
SCALE: 1" = 20' VERT. 1" = 5'
DATE: FEBRUARY, 1990
FIELD BOOK NO. _____
SHEET 2 OF 2

JAMES L. COOPER
J. EDWARD JUENEMANN JR.
ROBERT A. MILLER
WILLIAM J. MEOLA

COOPER AND ASSOCIATES
CONSULTING ENGINEERS AND SURVEYORS
1359 MARKET
AVENUE, NORTH
CANTON, OHIO 44704
PHONE (216) 452-5731

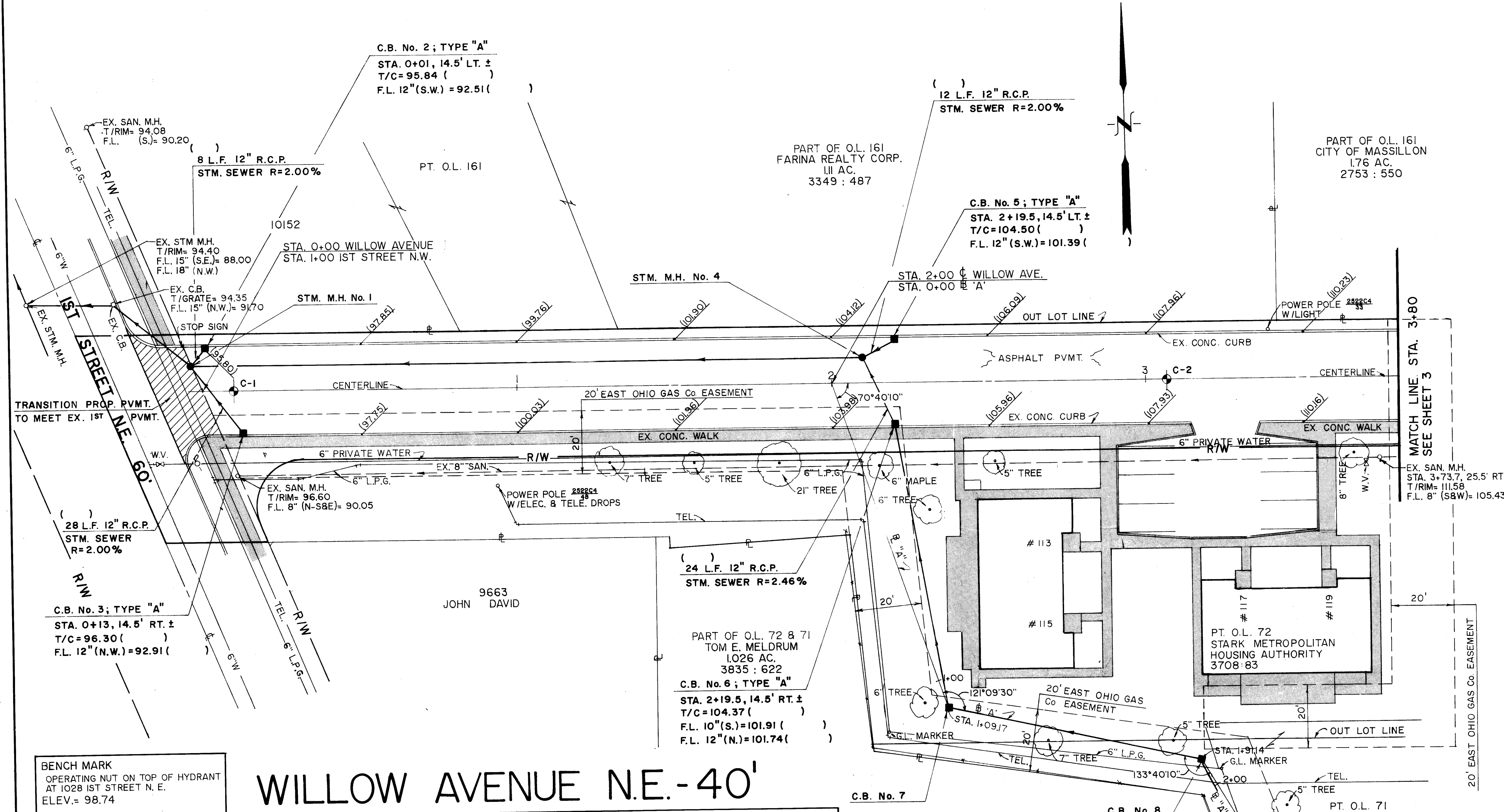
PLAN AND PROFILE
WILLOW AVENUE N.E. IMPROVEMENTS
PART OF OUTLOT 71 AND PART OF OUTLOT 72
CITY OF MASSILLON
STARK COUNTY, OHIO

FOR: STARK METROPOLITAN HOUSING AUTHORITY



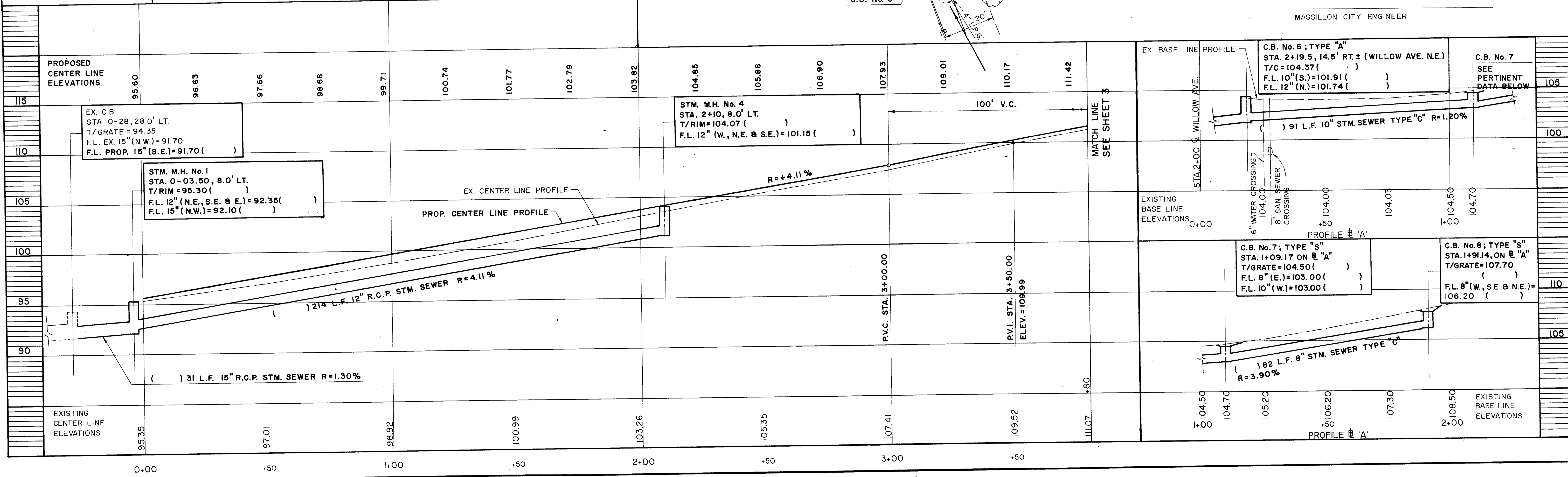
ADD SITE PLAN	DESCRIPTION	DATE	BY	REVISIONS

90126



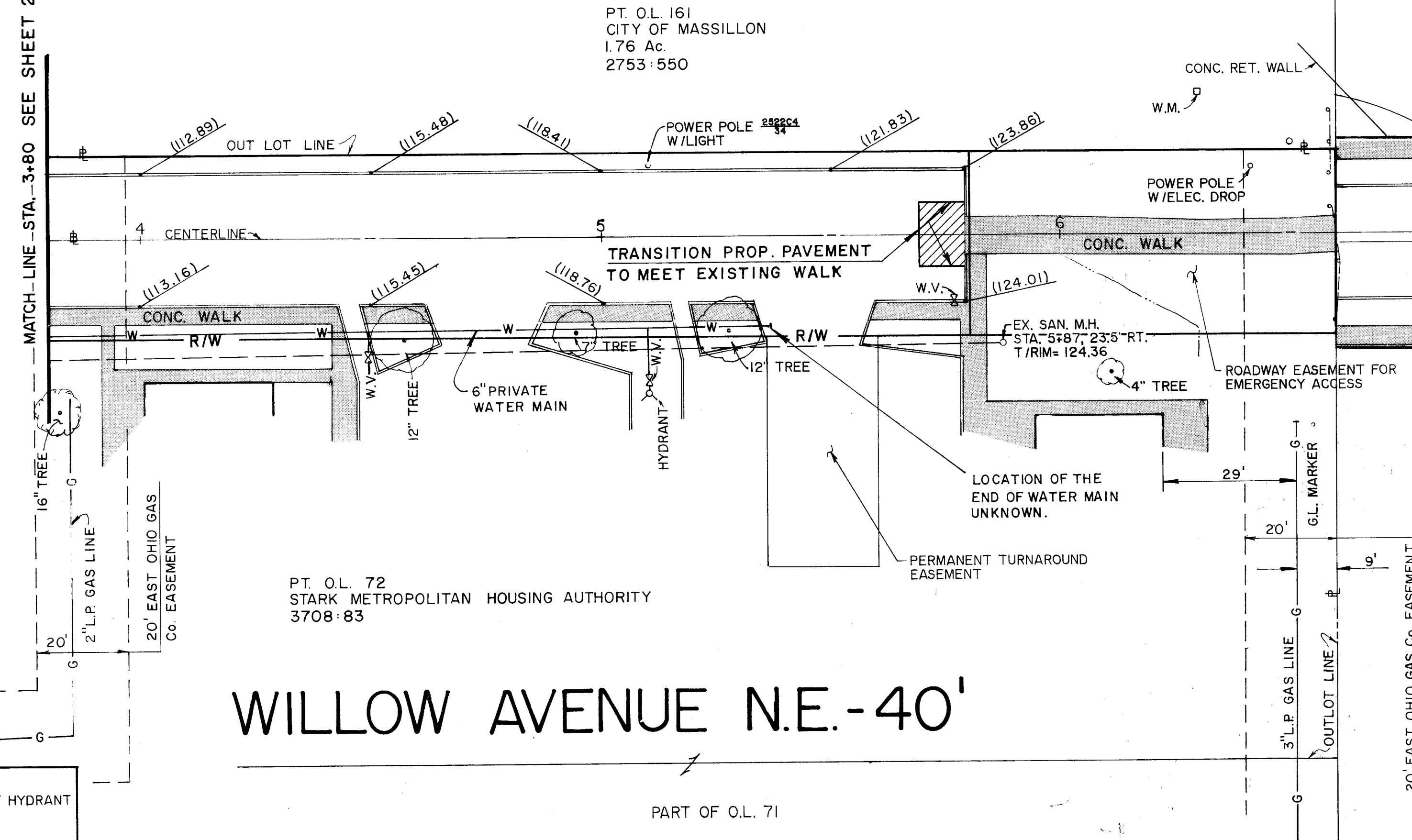
BENCH MARK
OPERATING NUT ON TOP OF HYDRANT
AT 1028 1ST STREET N.E.
ELEV. = 98.74

WILLOW AVENUE N.E. - 40'





MATCH LINE STA. 3+80 SEE SHEET 2

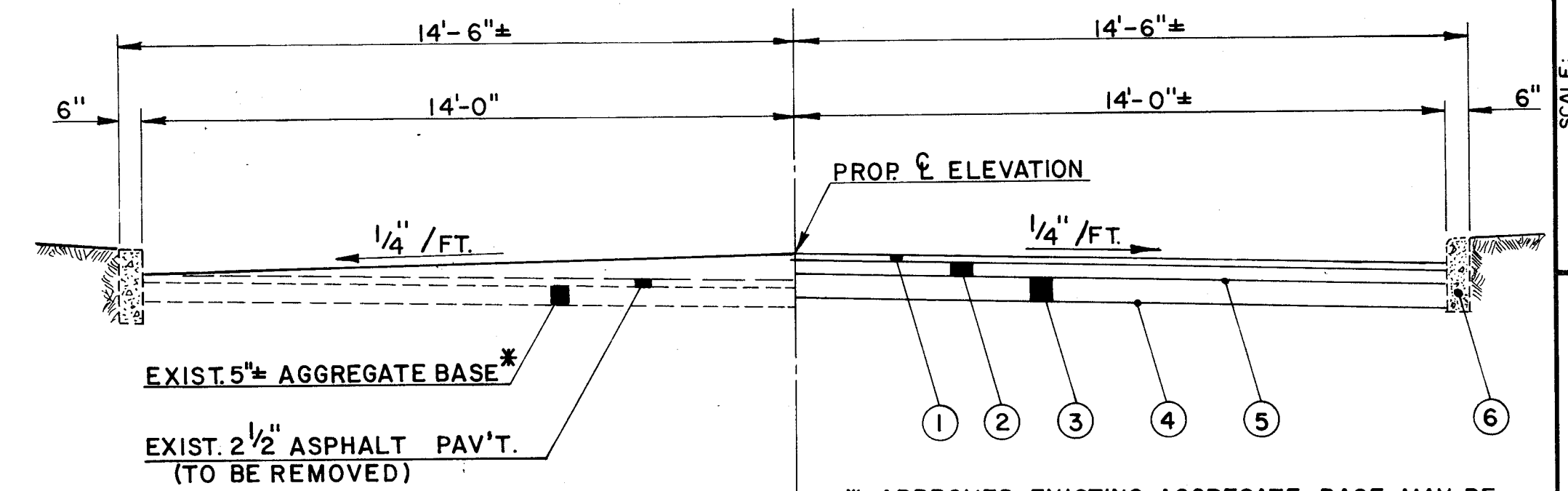


WILLOW AVENUE N.E.-40'

WILLOW AVE. N.E. 45'

7804

7805



* APPROVED EXISTING AGGREGATE BASE MAY BE REGRADED AND COMPACTED TO CONFORM WITH PROPOSED SECTION ITEM 304.

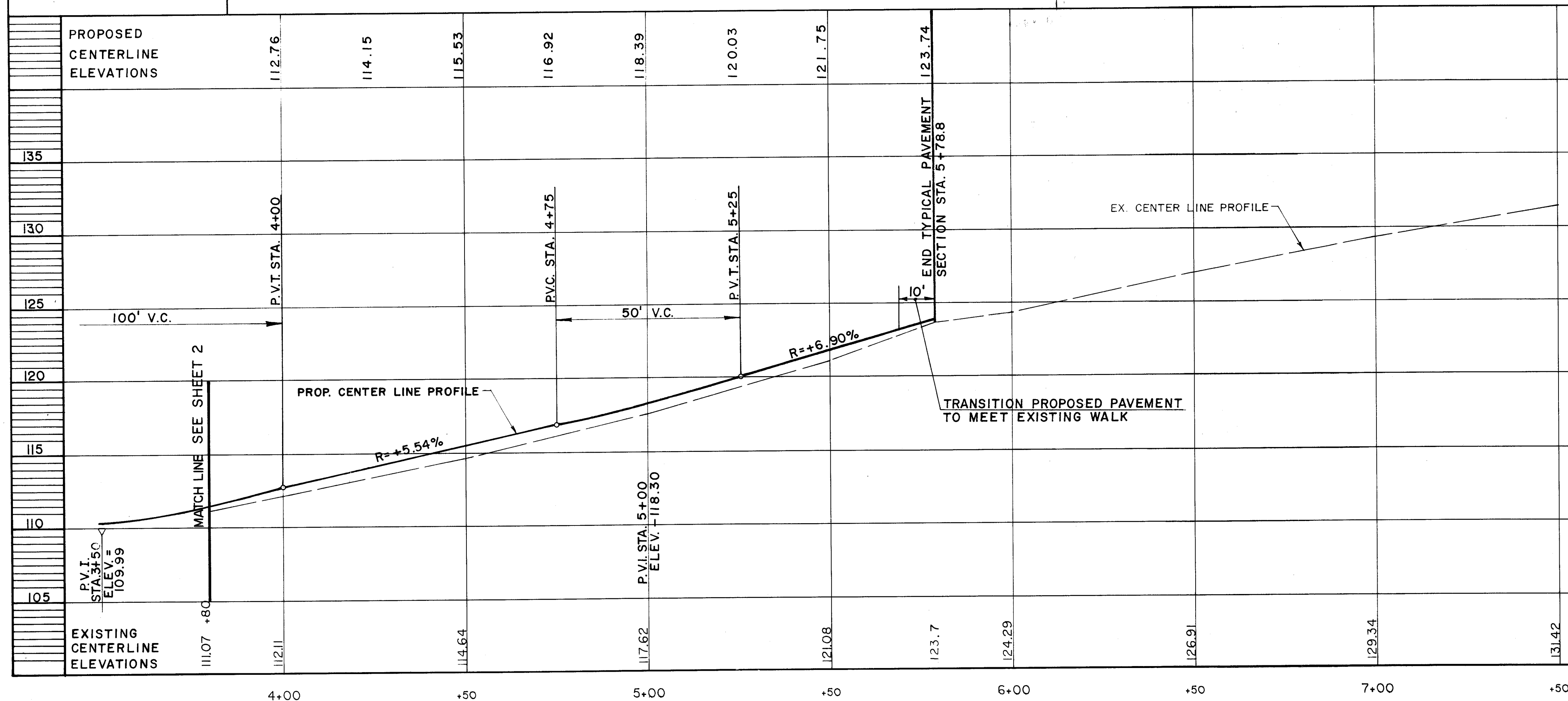
TYPICAL PAVEMENT SECTION
SCALE: NONE

- | | | | |
|---|------|-----|----------------------------------|
| ① | ITEM | 404 | 1" ASPHALT CONCRETE SURFACE |
| ② | ITEM | 301 | 3" BITUMINOUS AGGREGATE BASE |
| ③ | ITEM | 304 | 6" AGGREGATE BASE (2-3" COURSES) |
| ④ | ITEM | 203 | COMPACTED SUBGRADE |
| ⑤ | ITEM | 408 | BITUMINOUS PRIME COAT |
| ⑥ | ITEM | 609 | EXISTING CONCRETE CURB |

APPROVED BY THE MASSILLON CITY ENGINEER
THIS _____ DAY OF _____ 1990.

MASSILLON CITY ENGINEER

BENCH MARK
OPERATING NUT ON TOP OF HYDRANT
AT 1028 1ST STREET N.E.
ELEV. = 98.74

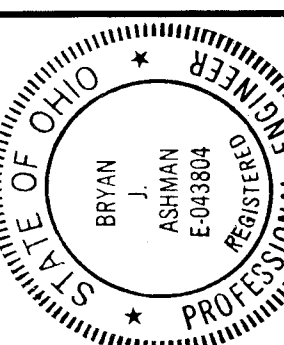


ESTIMATED QUANTITIES			
ITEM	QTY.	UNIT	DESCRIPTION
EARTHWORK AND ROADWAY			
203	130	C.Y.	ROADWAY EXCAVATION INCLUDING EXISTING ASPHALT PAVEMENT
203	—	C.Y.	ROADWAY EMBANKMENT
203	1850	S.Y.	SUBGRADE COMPACTION
301	156	C.Y.	3" BITUMINOUS AGGREGATE BASE
304	312	C.Y.	6" AGGREGATE BASE (2-3" COURSES) (28' WIDTH)
404	52	C.Y.	1" ASPHALT CONCRETE SURFACE COURSE
408	740	GAL.	PRIME COAT (0.4 GALLONS PER SQUARE YARD)
604	4	EACH	STANDARD CITY MONUMENTS
659	LUMP	LUMP	SEEDING AND MULCHING NOT IN ROADWAY (INCLUDING TOPSOIL)
608	1525	SQ. FT.	SIDEWALK REMOVED AND REPLACED
202	2	EACH	STOOP REMOVED AND REPLACED
STORM SEWER			
603	286	L.F.	12" REINFORCED CONCRETE PIPE TYPE "B"
603	708	L.F.	8" STORM SEWER PIPE TYPE "C"
603	91	L.F.	10" STORM SEWER PIPE TYPE "C"
603	31	L.F.	15" REINFORCED CONCRETE PIPE TYPE "B"
604	2	EACH	STORM SEWER MANHOLES
604	10	EACH	CATCH BASINS TYPE "S"
604	4	EACH	CATCH BASINS TYPE "A"
603	163	L.F.	D-6 6" PVC. DOWNSPOUT DRAIN
603	1000	L.F.	D-4 4" PVC. DOWNSPOUT DRAIN
35	L.F.	L.F.	ALUMINUM GUTTER
190	L.F.	L.F.	ALUMINUM DOWNSPOUT
370	L.F.	L.F.	GUTTER SCREEN
517	71	L.F.	HANDRAIL NEW AND COMPLETE
560	1530	L.F.	GROUTING EXISTING STOOPS AND WALKS

JAMES L. COOPER
J. EDWARD JUENEMANN JR.
ROBERT A. MILLER
WILLIAM J. MEOLA

COOPER AND ASSOCIATES
CONSULTING ENGINEERS AND SURVEYORS
1359 MARKET AVENUE, NORTH CANTON, OHIO 44714

PLAN AND PROFILE
WILLOW AVENUE N.E. IMPROVEMENTS
PART OF OUT LOT 71 AND PART OF OUT LOT 72
CITY OF MASSILLON
STARK COUNTY, OHIO
FOR
STARK METROPOLITAN HOUSING AUTHORITY



QUANTITIES	DATE	BY
ADD SITE PLAN	9/13/90	K.M.B.
REVISIONS		
DESCRIPTION	DATE	BY
DWN BY: R.F.D. CHK'D BY: B.A.		

PT. O.L. 161
FARINA REALTY CORP.
3349-487 1.11 ACRES

PT. O.L. 161
CITY OF MASSILLON
2753-550 1.76 ACRES

STA. 2+00.00 PVMT. CENTER LINE WILLOW AVE. N.E.
STA. 0+00.00 BASE LINE "A"

PROPERTY LINE & OUT LOT LINE

POWER POLE 2522C4 WITH LIGHT

POWER POLE 2522C4 WITH LIGHT

CONC. RETAINING WALL

OUT LOT LINE & PROPERTY LINE

7804

WILLOW AVE. N.E.-45'

7805

20' EAST OHIO GAS CO. EASEMENT

SCALE IN FEET
0 20 40
1"=20'

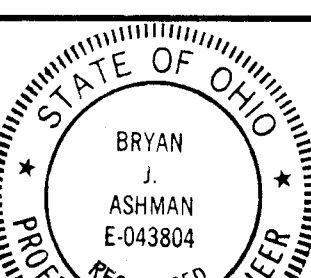
DATE: AUGUST, 1990
FIELD BOOK NO.
SHEET
4 OF 5

JAMES L. COOPER
J. EDWARD JUENEMANN JR.
ROBERT A. MILLER
WILLIAM J. MEOLA
BRYAN J. ASHMAN

COOPER AND ASSOCIATES
CONSULTING ENGINEERS AND SURVEYORS
1359 MARKET
AVENUE, NORTH
STARK COUNTY, OHIO
44714
PHONE (216) 452-8731
FAX (216) 452-9110



SITE PLAN, GENERAL NOTES AND PLAN AND PROFILE
WILLOW AVENUE N.E. IMPROVEMENTS
LOCATED IN PART OF OUT LOT 71 AND PART OF OUTLOT 72
CITY OF MASSILLON
STARK COUNTY, OHIO
FOR: STARK METROPOLITAN HOUSING AUTHORITY



PROJ. # 90126
DWG BY: CHK'D BY:
REVISIONS
DATE BY
DESCRIPTION

WORK ITEM LEGEND

- NEW 6" P.V.C. - SCH. 40 DOWNSPOUT DRAIN. CONNECT INTO PROPOSED CATCH BASIN OR INTO STORM SEWER WITH WYE.
- NEW 4" P.V.C. - SCH. 40 DOWNSPOUT DRAIN. CONNECT INTO PROPOSED CATCH BASIN OR INTO STORM SEWER WITH WYE.
- APPROXIMATE REGRADING AREA TO FORCE DRAINAGE INTO CATCH BASIN OR TO PROMOTE DRAINAGE AWAY FROM BUILDINGS.
- EARTHEN EMBANKMENT TO DIRECT OR CONTAIN DRAINAGE.
- CONCRETE STOOP REMOVED AND REPLACED.
- CONCRETE SIDEWALK REMOVED AND REPLACED.
- REMOVE EXISTING DOWNSPOUT CROSS CONNECTION AND INSTALL INDEPENDENT DOWNSPOUTS TO MATCH EXISTING AND CONNECT INTO PROPOSED DOWNSPOUT HEADER.

C.B. No. 8, TYPE "S"
STA. 1+91.14, ON "A"
T/GRATE=107.70 ()
F.L. 8" (W, S.E. & N.E.)=106.20 ()

C.B. No. 9, TYPE "S"
T/GRATE=111.70 ()
F.L. 8" (N.W. & S.E.)=110.20 ()

C.B. No. 10, TYPE "S"
T/GRATE=113.70 ()
F.L. 8" (N.W. & S.E.)=112.20 ()

C.B. No. 11, TYPE "S"
T/GRATE=120.80 ()
F.L. 8" (W.)=119.30 ()

C.B. No. 12, TYPE "S"
T/GRATE=109.40 ()
F.L. 8" (S.E. & S.W.)=107.90 ()

C.B. No. 13, TYPE "S"
T/GRATE=114.20 ()
F.L. 8" (S.W., N.W. & E.)=111.98 ()

C.B. No. 14, TYPE "S"
T/GRATE=116.50 ()
F.L. 8" (N.W., S.E. & S.)=115.00 ()

C.B. No. 16, TYPE "S"
T/GRATE=113.70 ()
F.L. 8" (N.E.)=112.20 ()

C.B. No. 13
SEE PERTINENT
DATA
THIS SHEET

22 L.F. 8"
STM. SEWER
TYPE "C"
R=1.00%

GENERAL NOTES

REFER ALSO TO NOTES PRESENTED ON SHEET 2 OF THESE CONTRACT DRAWINGS.

LOCATIONS OF EXISTING UTILITIES PRESENTED ON THE PLAN ARE FROM UTILITY COMPANY RECORDS AND BY FIELD SURVEY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY WORK. NO BUILDING SERVICES ARE PRESENTED ON THE PLAN. SHOULD EXISTING UTILITIES CONFLICT WITH THE PROPOSED IMPROVEMENTS THEN THE CONTRACTOR SHALL NOTIFY THE OWNER'S ENGINEER FOR DESIGN MODIFICATIONS.

ALL WORK SHALL BE RESTRICTED TO THE OWNER'S PROPERTY. PROPERTY LINES HAVE NOT BEEN VERIFIED BY FIELD SURVEY.

ALL SPOT ELEVATIONS PRESENTED ON THE PLAN ARE EXISTING ELEVATIONS.

THE CONTRACTOR MUST GUARANTEE ALL WORK TO BE FREE FROM DEFECTS IN WORKMANSHIP AND MATERIALS AND IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL REPLACE OR REPAIR ANY WORK OR MATERIAL FOUND TO BE DEFECTIVE UPON WRITTEN NOTICE FROM THE OWNER'S REPRESENTATIVE IF DEFECTS OCCUR WITHIN A PERIOD OF 12 MONTHS FROM THE DATE PERFORMANCE OF THE WORK.

EXISTING LANDSCAPE FEATURES (BUSHES, SMALL TREES, BOULDERS ETC) SHALL BE REMOVED IF THEY INTERFERE WITH THE PROPOSED IMPROVEMENTS. LANDSCAPE ITEMS SHALL BE RELOCATED ADJACENT TO THE IMPROVEMENTS AS DIRECTED BY THE OWNER'S REPRESENTATIVE. PAYMENT FOR RELOCATING LANDSCAPE FEATURES TO BE INCLUDED IN PAYMENT FOR ITEMS 203 & 659.

CONTRACTOR SHALL PERFORM ANY EXCAVATION, EMBANKMENT, FINISH GRADING AND TOPSOIL OPERATIONS ASSOCIATED WITH THE IMPROVEMENTS TO PROMOTE PROPER DRAINAGE. PAYMENT TO BE INCLUDED AS PART OF ITEMS 203, 608 & 659. ADDITIONAL TOPSOIL AS REQUIRED FOR SEEDING OPERATIONS SHALL BE SUPPLIED BY CONTRACTOR AT THE PRICE OF WHICH SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 659.

STORM SEWER AND DOWNSPOUT HEADER TRENCHES, WITHIN THE LIMITS OF SIDEWALK AND PAVEMENT, SHALL BE BACKFILLED WITH APPROVED GRANULAR MATERIAL THE PRICE OF WHICH SHALL BE INCLUDED IN THE PRICE FOR ITEM 603.

IN ALL AREAS WHERE EARTHWORK OPERATIONS ARE PERFORMED THE TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR REPLACEMENT IN ACCORDANCE WITH ITEMS 651 & 652.

ACCESS TO BUILDING UNITS SHALL BE MAINTAINED AT ALL TIMES.

DOWNSPOUT HEADERS SHALL BE P.V.C. (S.D.R. 35 IN ACCORDANCE WITH A.S.T.M. D-3034 AND INSTALLED AT A MINIMUM SLOPE OF 1.00% WITH 6 INCHES COVER.

ALUMINUM GUTTERS AND DOWNSPOUT SHALL BE INSTALLED ON THOSE BUILDINGS AS CALLED FOR ON THE PLAN. MATERIALS AND INSTALLATION SHALL MATCH THAT OF LIKE BUILDINGS.

GUTTER SCREENS SHALL BE HINGED TYPE AND INSTALLED WHERE CALLED FOR ON THE PLAN IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

SIDEWALKS CALLED FOR REMOVAL AND REPLACEMENT SHALL BE CONSTRUCTED IN A MANNER TO PROMOTE POSITIVE DRAINAGE AWAY FROM BUILDINGS AS APPROVED BY THE OWNER'S REPRESENTATIVE.

CONCRETE STOOPS CALLED FOR REMOVAL AND REPLACEMENT ARE PRECAST. CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE EXISTING STOOP DURING REMOVAL AND REPLACEMENT OPERATIONS. IF DAMAGED, CONTRACTOR SHALL REPLACE IN KIND OR AS APPROVED BY OWNER'S REPRESENTATIVE.

THE PERIMETER OF ALL BUILDINGS WHERE ADJACENT TO CONCRETE WALKS AND/OR STOOPS SHALL BE CALLED IN ACCORDANCE WITH THE DETAIL PRESENTED ON SHEET 5 OF THESE CONTRACT DRAWINGS AND IN ACCORDANCE WITH THE SPECIFICATIONS.

IN AREAS OF PROPOSED HAND-RAILS AND AS DELINEATED ON THE PLAN, THE CONTRACTOR SHALL BACKFILL UNDER AND ADJACENT TO THE WALKS AND STEPS, PLACE 4" TOPSOIL, SEED AND MULCH AS REQUIRED TO STABILIZE ERODED AREAS AS APPROVED BY THE OWNER'S REPRESENTATIVE.

THE EXISTING IRON HAND-RAIL ON THE STEPS IN FRONT OF UNIT 155 SHALL BE REMOVED. USE CONCRETE PATCH TO FILL HAND-RAIL HOLES IN STEPS. REMOVAL OF HAND-RAIL AND PATCHING OF STEPS TO BE INCLUDED IN THE PRICE BID FOR THE NEW HAND-RAIL ITEM 517.

GUTTER SCREEN REQUIRED

UNITS	LOCATION
153 → 159	FRONT
145 → 151	REAR
137 → 143	FRONT
129 → 135	FRONT
121 → 123	REAR
117 → 119	FRONT

GUTTER REQUIRED

UNITS	LOCATION
137 & 139	REAR

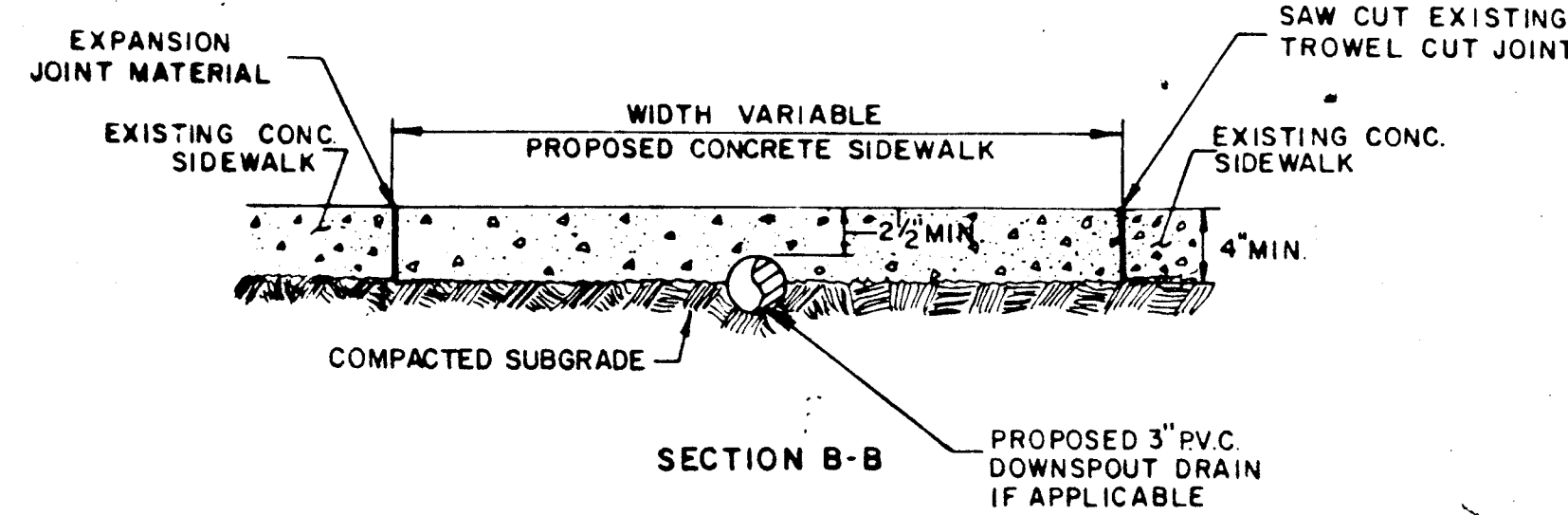
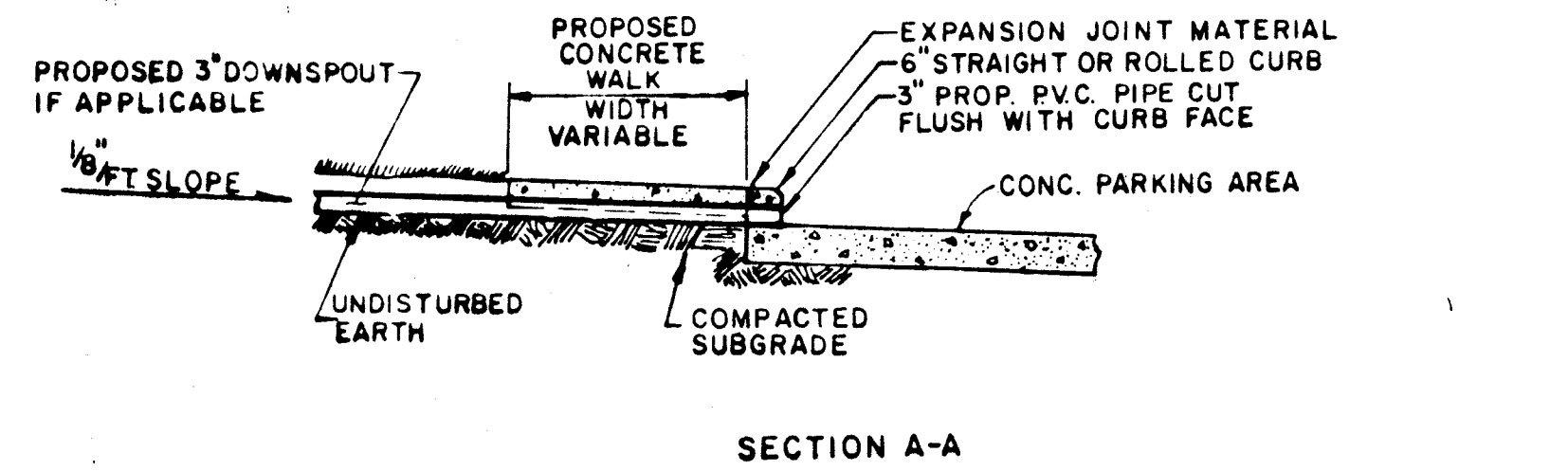
DOWNSPOUT REQUIRED

UNIT	LOCATION
137	N.W. CORNER
159	N.E. CORNER
137	N.E. CORNER OF MAINTENANCE GARAGE
167 *	N.E. CORNER
145 *	N.W. CORNER
143 *	S.E. CORNER
129 *	N.E. CORNER
135 *	S.E. CORNER
121 *	N.E. CORNER
127 *	S.E. CORNER

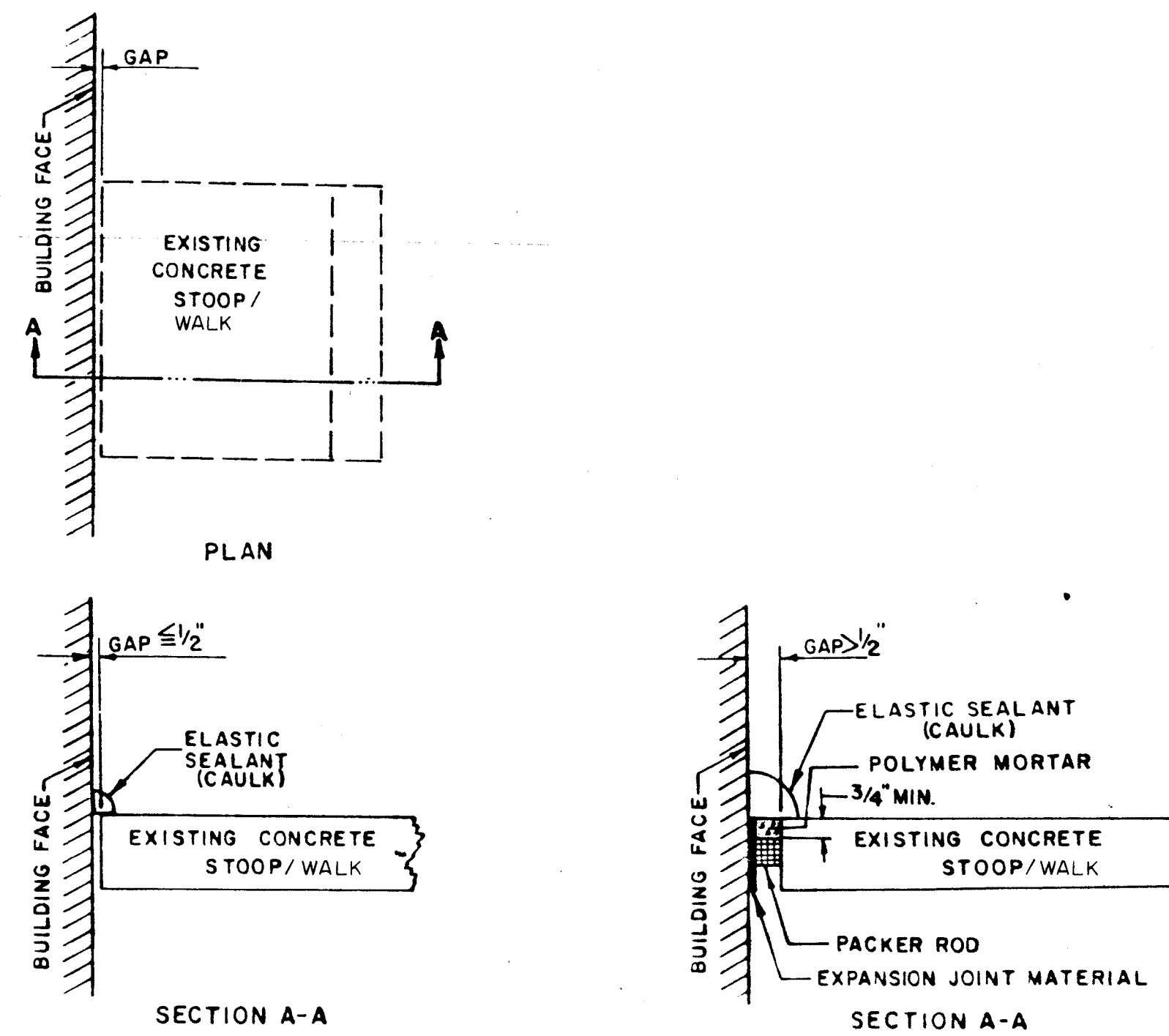
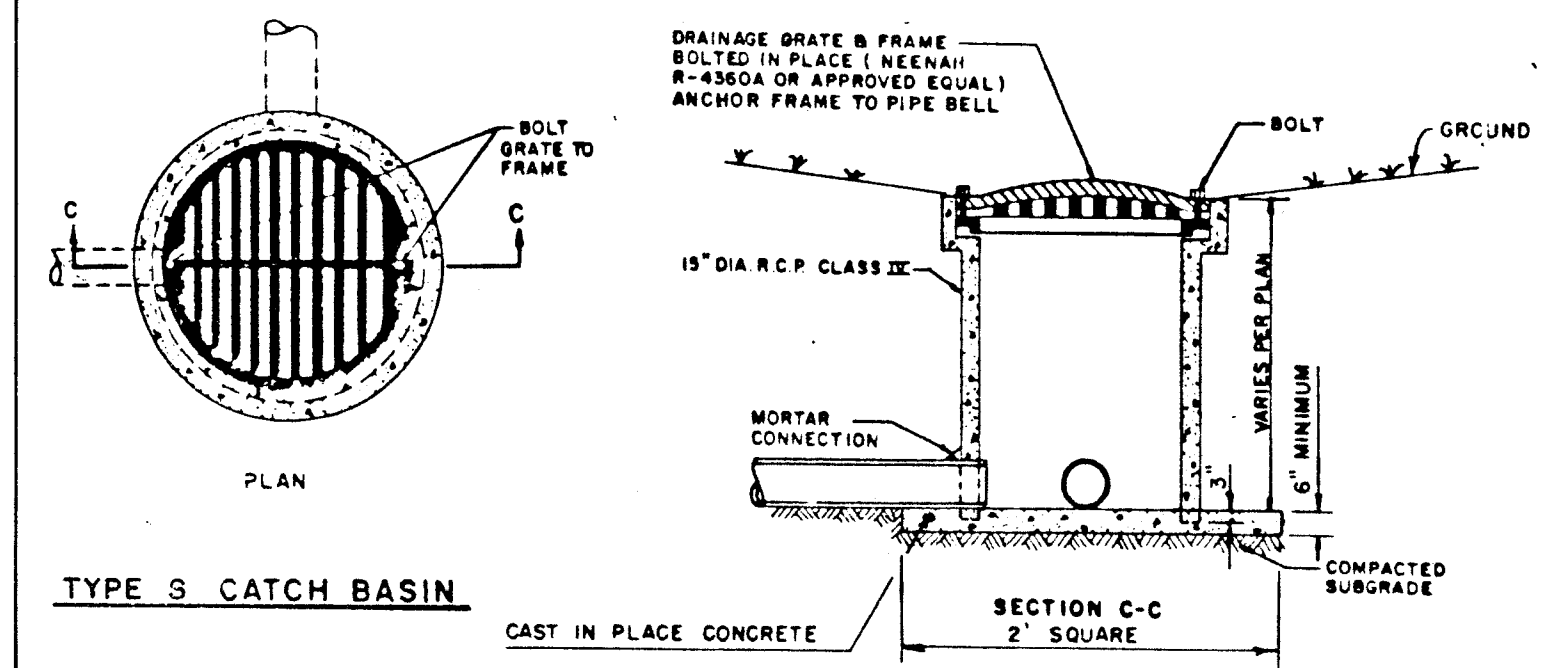
BENCH MARK:
TOP OF HYDRANT, 34' RIGHT OF STA
5+10, WILLOW AVE. N.E.
ELEVATION = 122.88

BENCH MARK:
OPERATING NUT ON TOP OF HYDRANT
AT 1028 1st ST. N.E.
ELEVATION = 98.74

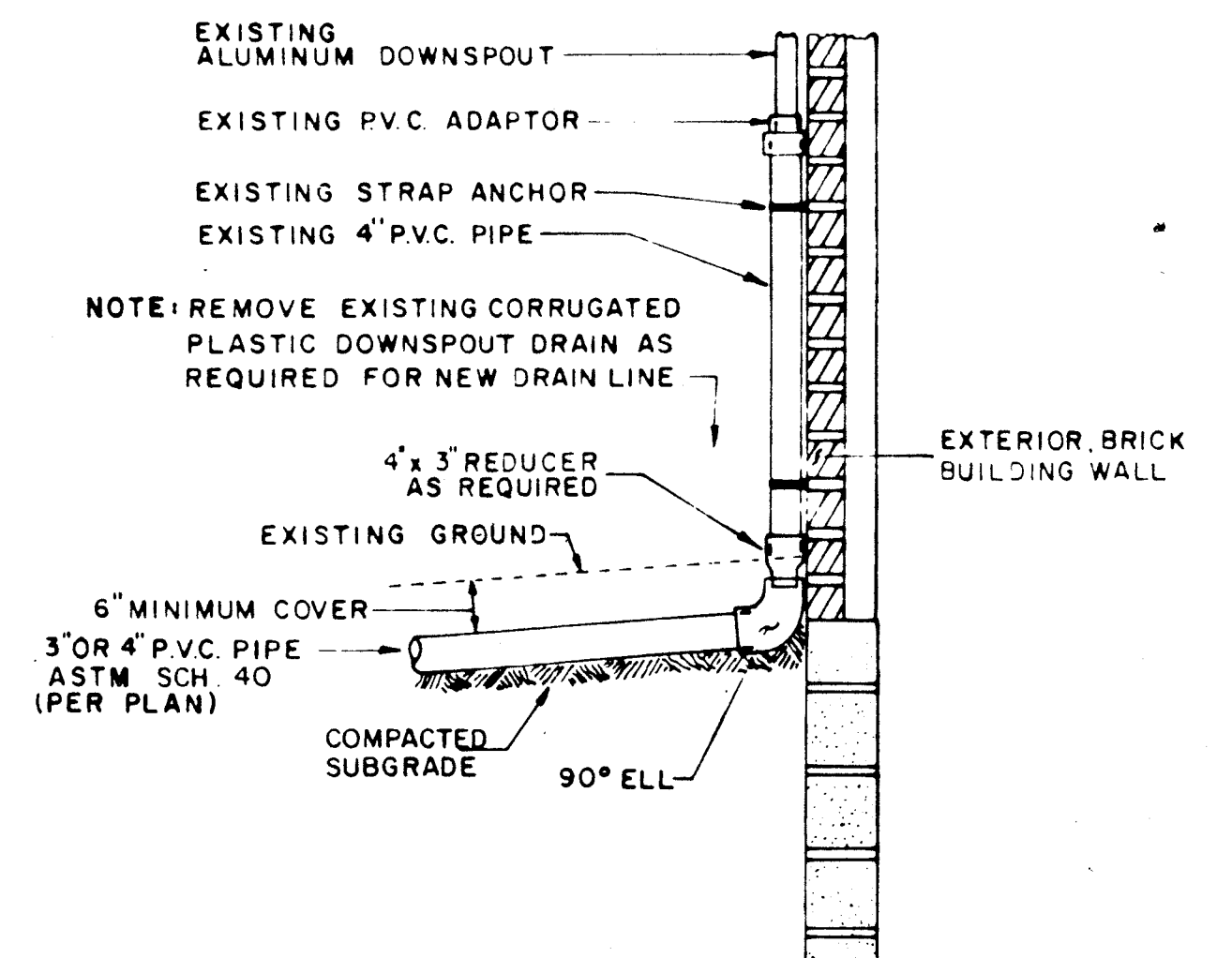
PROPOSED STORM SEWER PROFILES



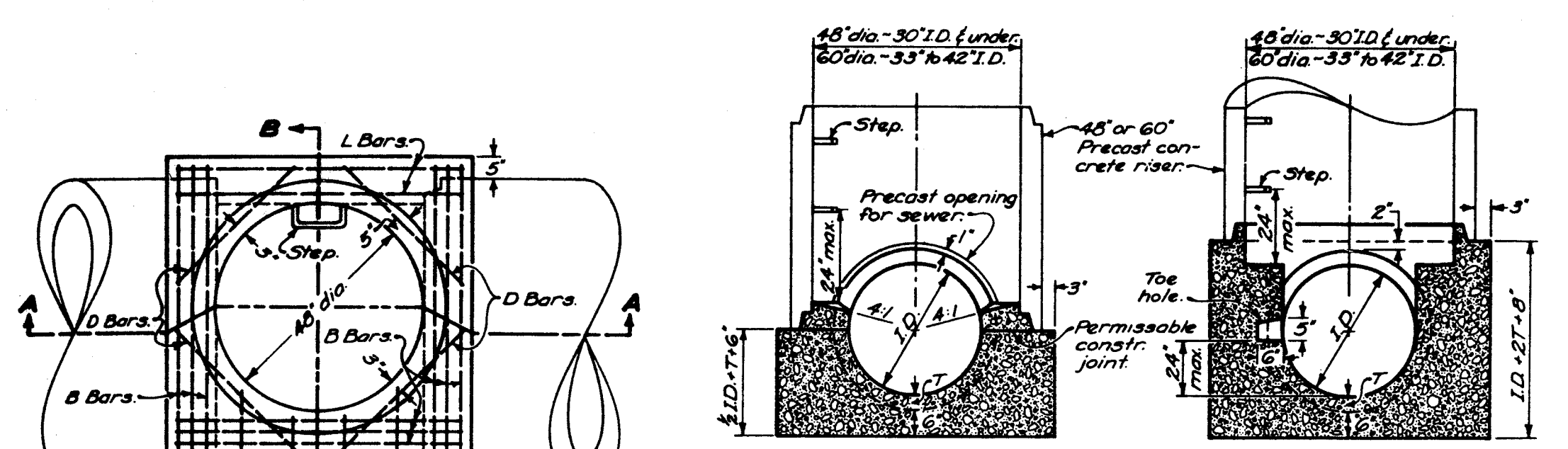
CONCRETE SIDEWALK REPLACEMENT



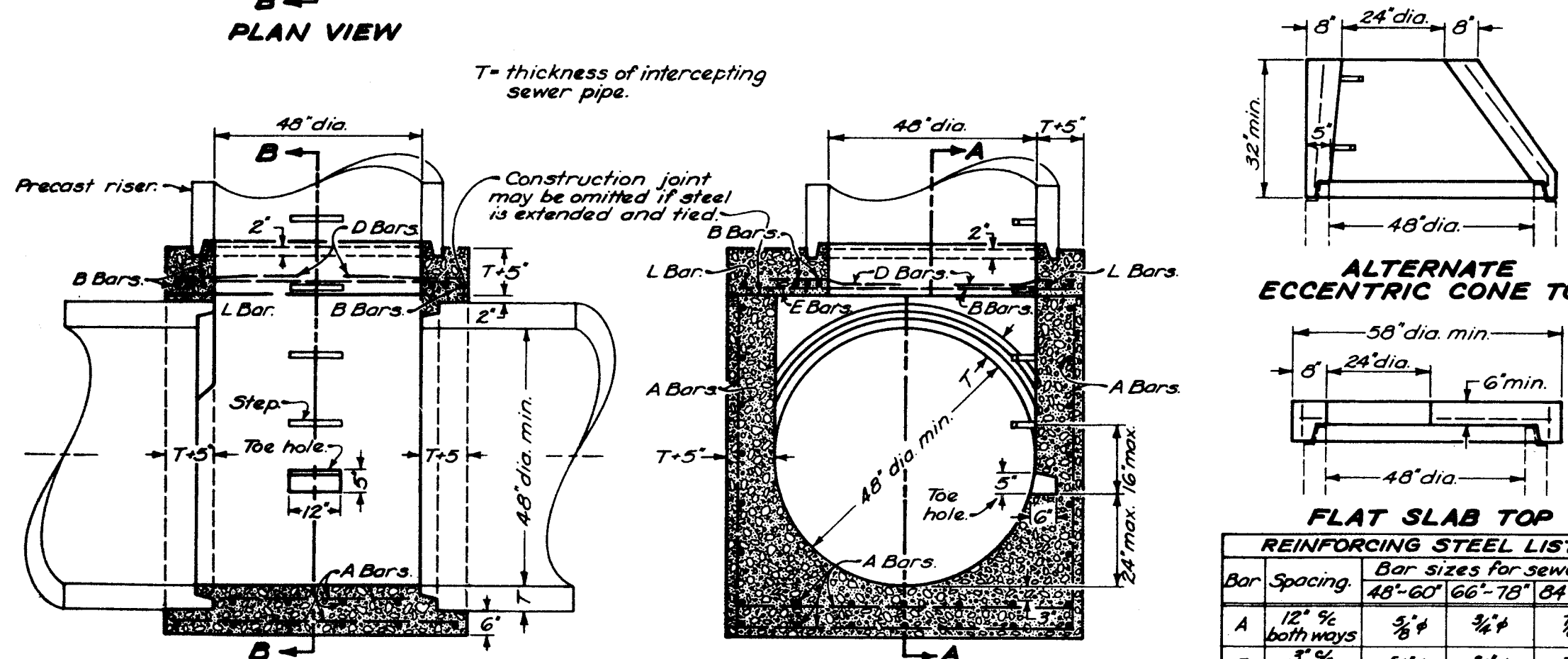
STOOP & CONCRETE WALK CAULKING DETAIL



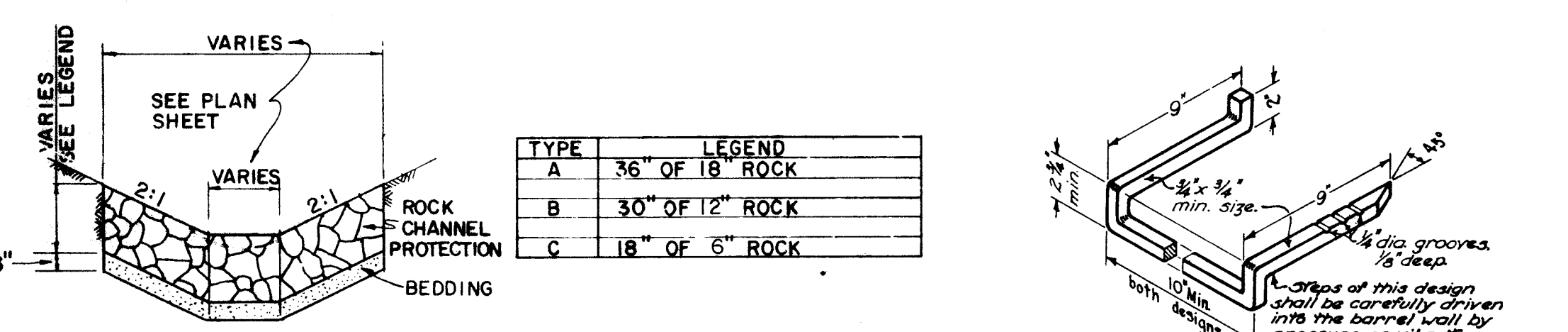
DOWNSPOUT DRAIN CONNECTION DETAIL



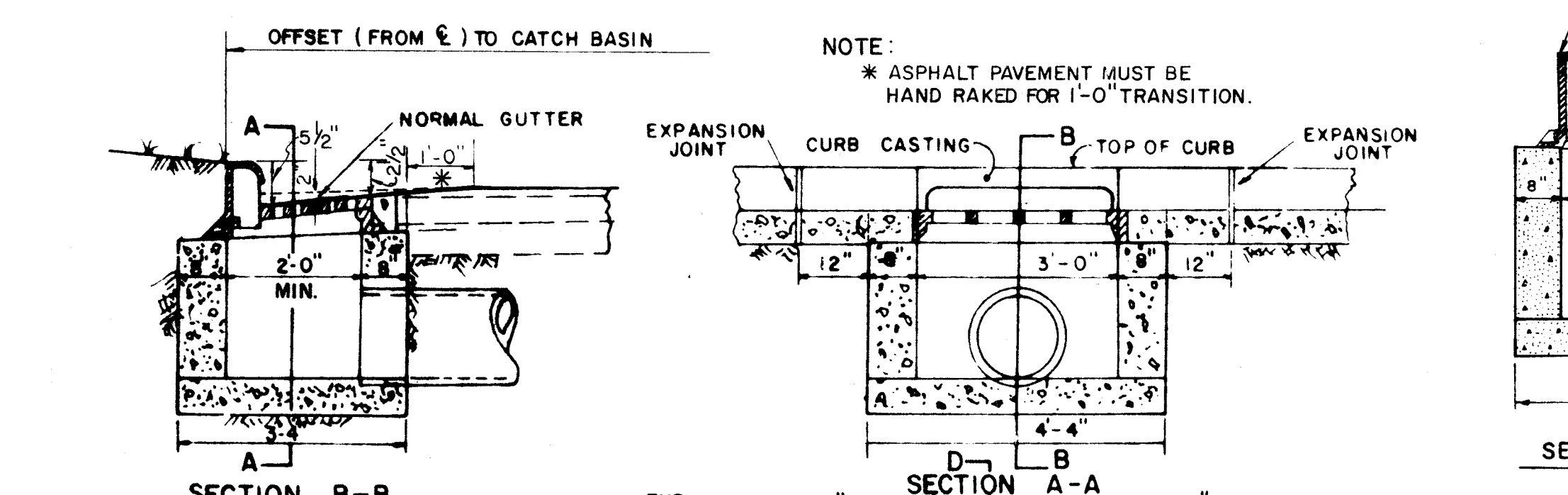
MANHOLE BASES ON SEWERS 42" AND UNDER



MANHOLE BASE ON SEWERS 48" AND OVER



ROCK CHANNEL PROTECTION AND DITCH DETAIL



TYPE "A" CATCH BASIN

CASTING SHALL BE OF CAST IRON IN ACCORDANCE WITH MATERIAL DETAILS. THE DESIGN SHALL BE ESSENTIALLY THE SAME AND EQUALLY AS STRONG AS THOSE SHOWN HEREON AND SHALL BE GIVEN ONE COAT OF ASPHALTUM PAINT AS PER SPECIFICATION WEIGHT TOTAL 400 LBS.

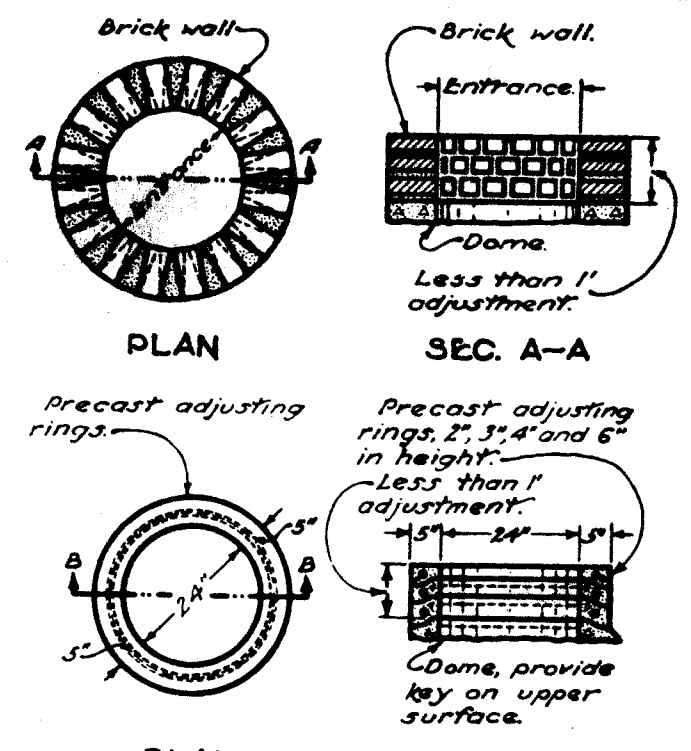
BEARING AREAS OF FRAME AND GRATE SHALL BE SO FITTED AND EVEN SEAT FOR ALL PORTIONS OF THE GRATE IN THE FRAME. NO PROJECTIONS SHALL EXIST ON BEARING AREAS OF EITHER CASTING AND THE GRATE SHALL SEAT IN ITS FRAME WITHOUT ROCKING.

FRAME AND GRATE SHALL BE FITTED, MATCHED AND MARKED BEFORE DELIVERY TO THE PROJECT. CONCRETE IS TO BE CLASS "C".

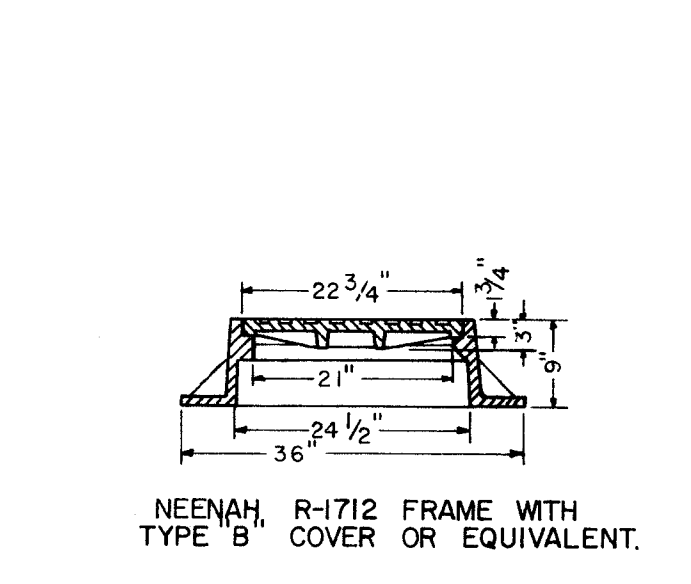
BRICK SIDE WALLS WHEN USED IN PLACE OF CONCRETE SHALL BE 8" IN THICKNESS WITH 1/2 INCH CEMENT MORTAR PLASTERED INSIDE AND OUT.

PAVEMENT - PORTION BLOCKED OUT OF THE PAVEMENT SHALL BE PLACED AFTER THE CASTING HAS BEEN SET BUT SHALL BE PAID FOR AS PART OF THE PAVEMENT.

DROP GUTTER 2" IN 8' INTO CATCH BASIN.



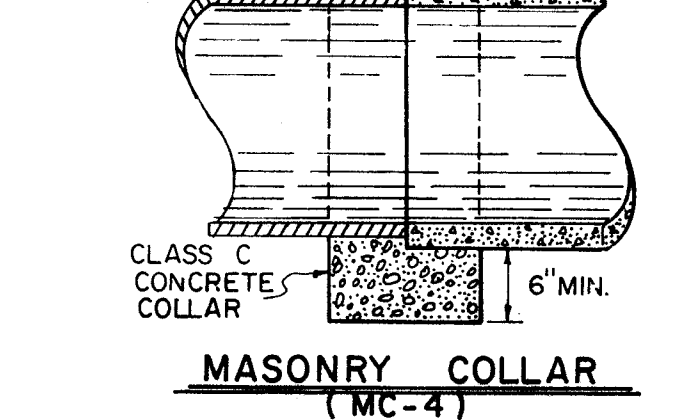
ALTERNATE METHODS OF ADJUSTING TO GRADE



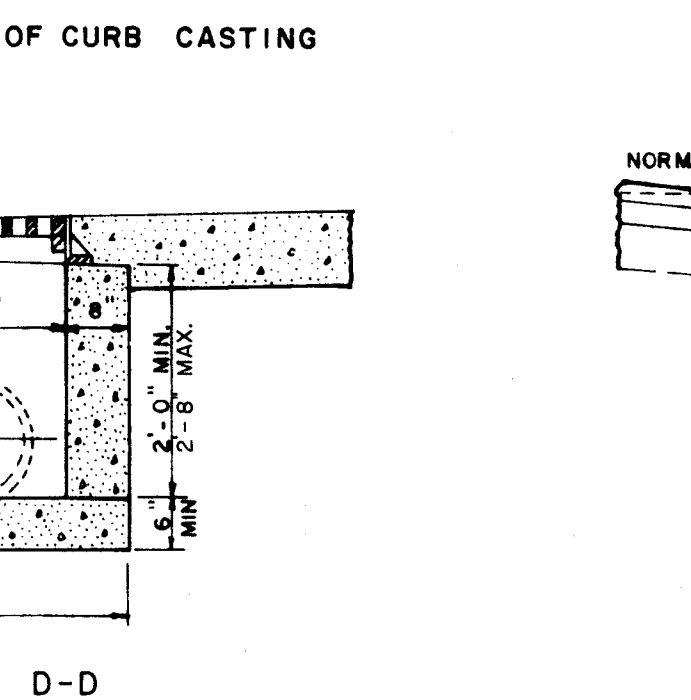
FLAT SLAB TOP

Bar Spacing	Bar Sizes for Sewers
A 12" x 12"	3/8"
B 12" x 12"	3/8"
C 12" x 12"	3/8"
D 12" x 12"	3/8"
E 12" x 12"	3/8"

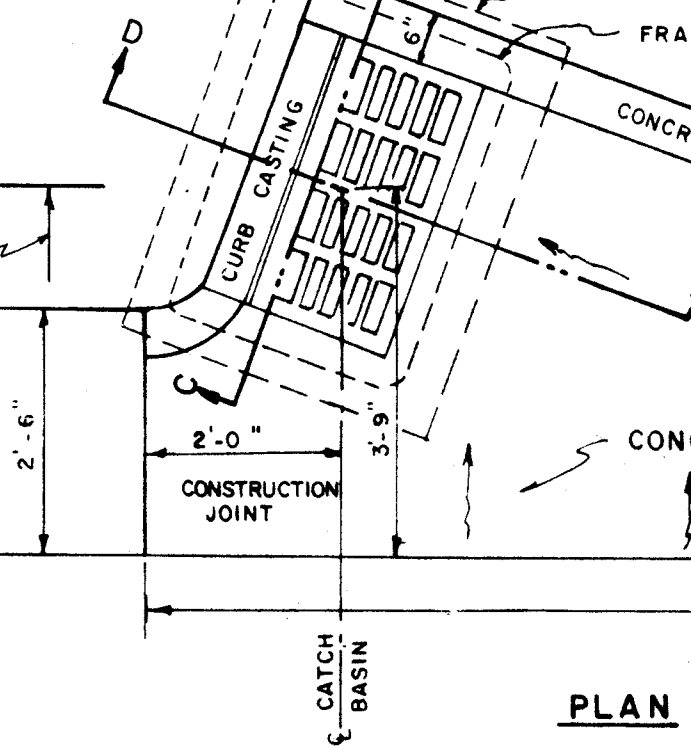
MANHOLE FRAME AND COVER (475 LBS MIN. WEIGHT)



MASONRY COLLAR (MC-4)

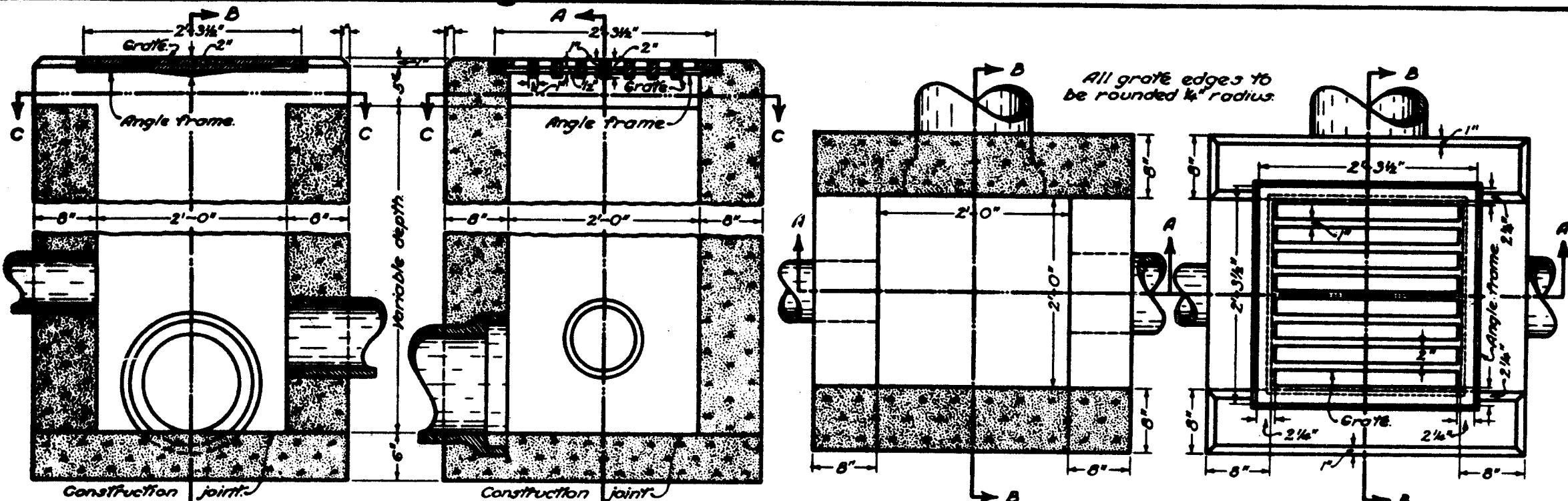


SECTION D-D

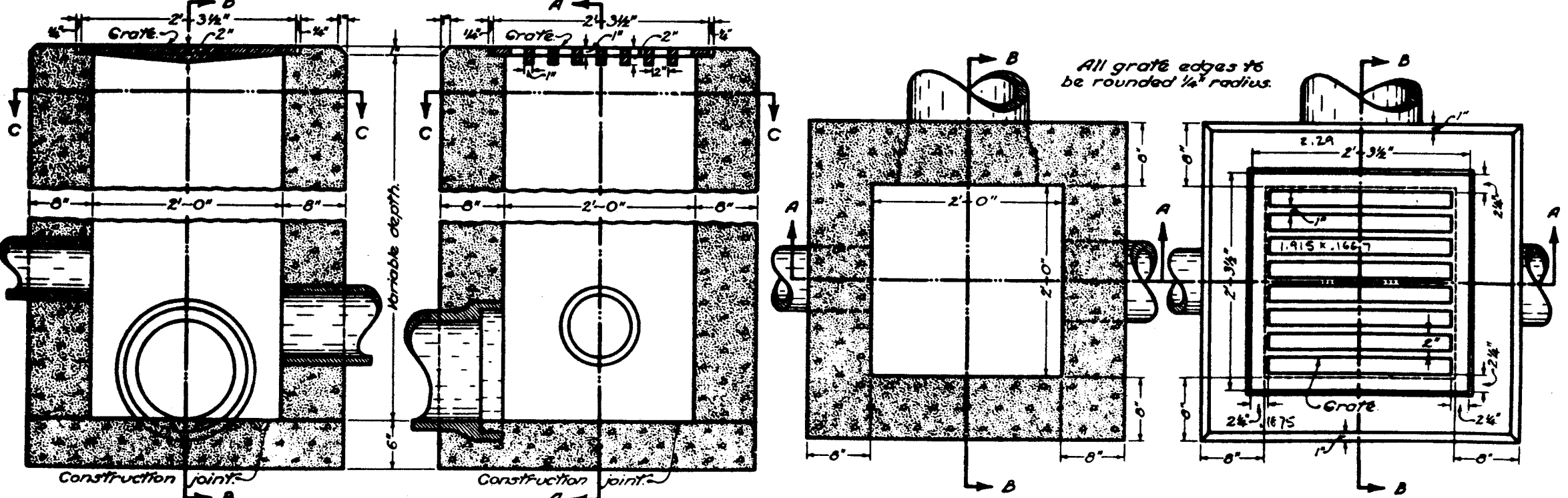


SECTION C-C

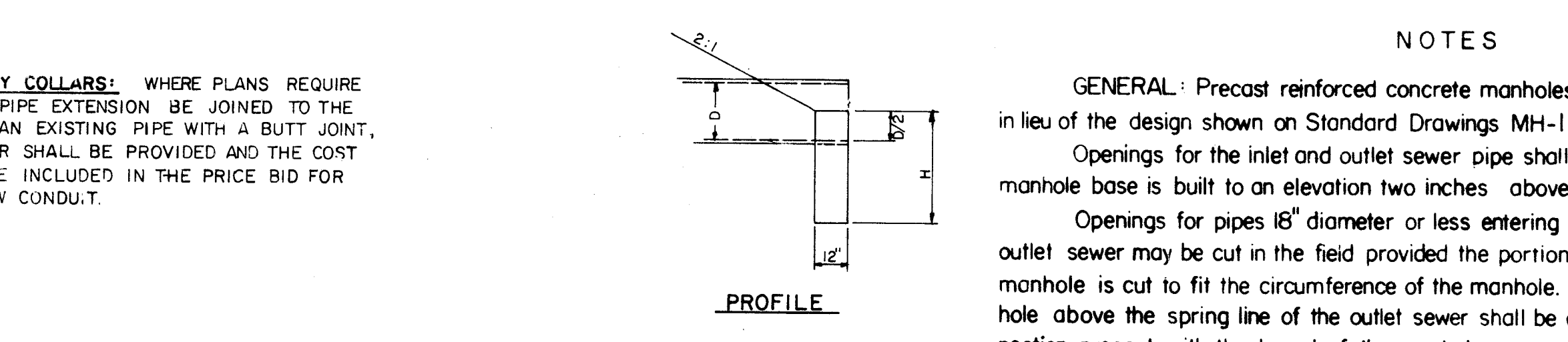
PLAN



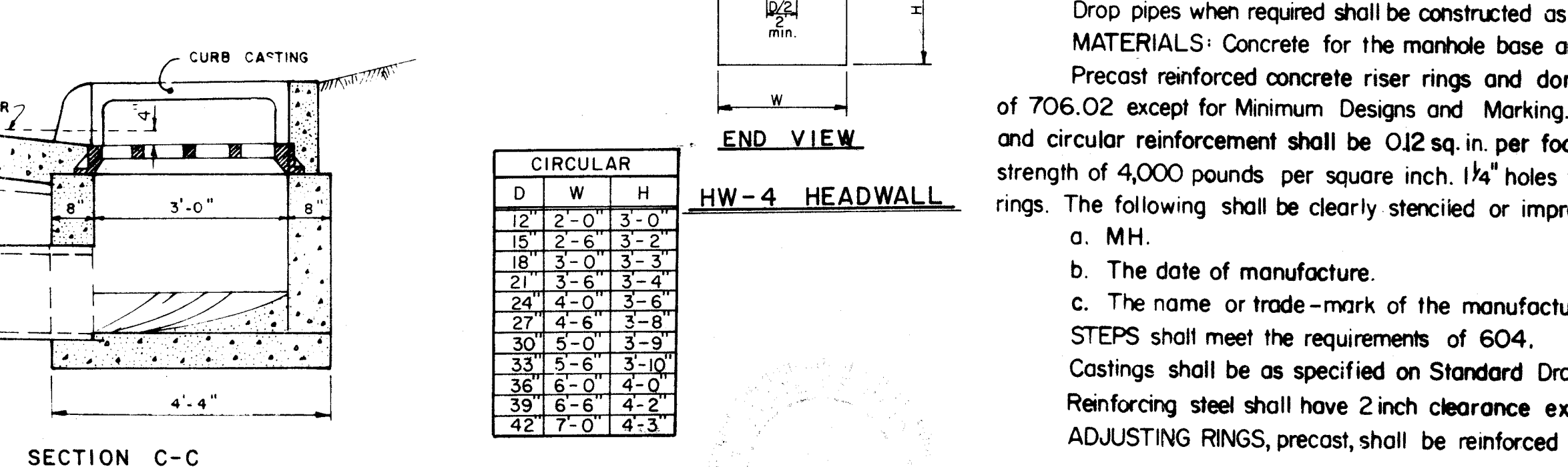
STANDARD NO. 2-2-A CATCH BASIN



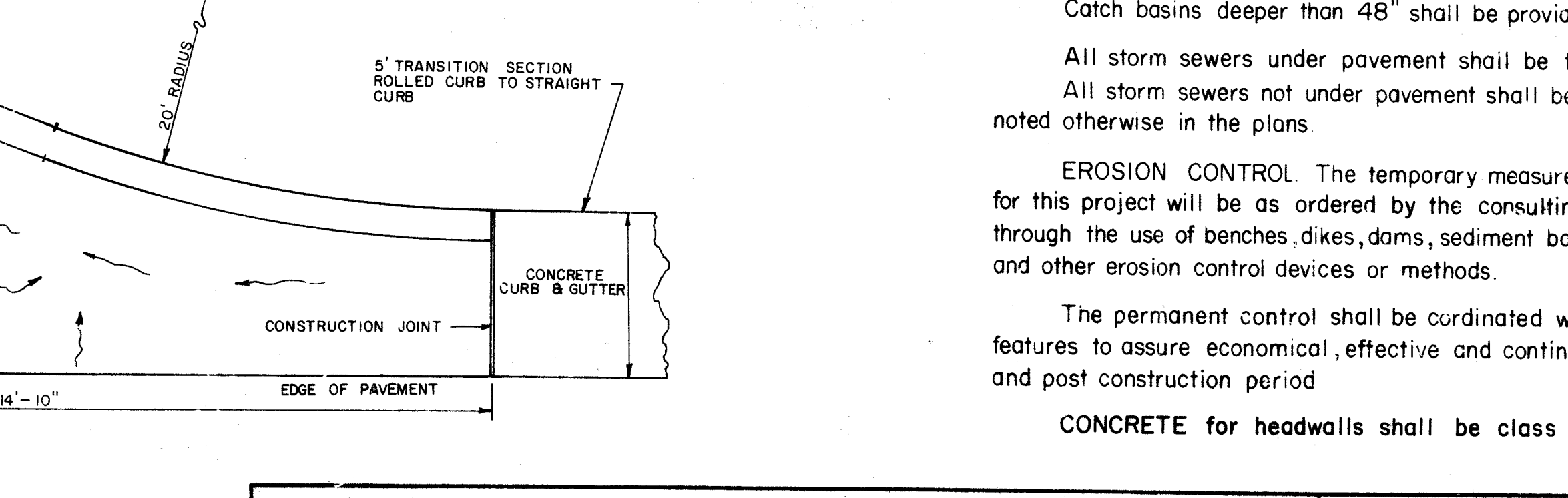
STANDARD NO. 2-2-B CATCH BASIN



MASONRY COLLARS



CIRCULAR



HILLSIDE CATCH BASIN

PLAN

NOTES

GRATING AND FRAMES shall meet the requirements of 604. The design shall be essentially the same and equally as strong as the one shown hereon.

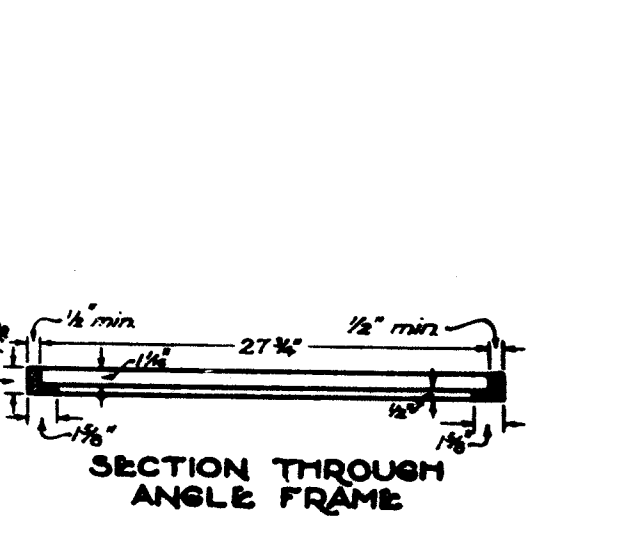
Height of grate minimum 120 lbs. Height of frame minimum 60 lbs. CONCRETE cast in place to be Class "C".

BRICK OR CONCRETE BLOCK side walls when used in place of concrete shall be 8 inches nominal thick. When brick or concrete blocks are used the walls of the catch basin above the flow line of the side opening shall be constructed of Portland Cement concrete.

2-2-A SIDE INLETS shall be placed 4 to 6 inches below normal elevation of median or ditch flow line returning to normal to feet each side of basin.

2-2-B GRADE elevation is to be placed 4 to 6 inches below normal ditch returning to normal to feet each side of basin.

SIDE INLETS shall be provided on both sides of the 18"-2-2 catch basin in sags and on upstream side only where the ditch has a continuous down grade past the catch basin.



SECTION THROUGH ANGLE FRAME

NOTES

GENERAL: Precast reinforced concrete manholes detailed on this drawing may be used in lieu of the design shown on Standard Drawings MH-1 and MH-2.

Openings for the inlet and outlet sewer pipe shall be cast in the precast ring unless the manhole base is built to an elevation two inches above the top of the outlet pipe.

Openings for pipes 18" diameter or less entering the manhole above the spring line of the outlet sewer may be cut in the field provided the portion of the pipe (15" or 18" diam.) inside the manhole is cut to fit the circumference of the manhole. Pipes over 18" diameter entering the manhole above the spring line of the outlet sewer shall be connected to the manhole by a Tee connection precast with the barrel of the manhole.

All joints at pipe openings in the manhole shall be thoroughly caulked with cement mortar or other suitable material to prevent infiltration of earth into the manhole.

Drop pipes when required shall be constructed as shown on Standard Drawing MH-2.

MATERIALS: Concrete for the manhole base and connection box shall be Class "C".

Precast reinforced concrete riser rings and domes shall comply with the requirements of 706.02 except for Minimum Designs and Marking. Minimum wall thickness shall be 5 inches and circular reinforcement shall be 0.12 sq. in. per foot minimum. Concrete shall have a minimum strength of 4,000 pounds per square inch. 1/4" holes for handling may be cast in domes and rings. The following shall be clearly stenciled or impressed on each riser ring:

- MH.
- The date of manufacture.
- The name or trade-mark of the manufacturer and location of the plant.

STEPS shall meet the requirements of 604.

Castings shall be as specified on Standard Drawing MH-1.

Reinforcing steel shall have 2 inch clearance except where otherwise specified.

ADJUSTING RINGS, precast, shall be reinforced with one No. 3 gage wire or equivalent.

On precast catch basins the upper 8" shall be brick or solid block for adjustment purposes.

Catch basins deeper than 48" shall be provided with steps.

All storm sewers under pavement shall be type B with class B bedding.

All storm sewers not under pavement shall be type C with class B bedding unless noted otherwise in the plans.

EROSION CONTROL. The temporary measures for control of soil erosion and siltation for this project will be as ordered by the consulting engineers, and or subdivision engineer, through the use of benches, dikes, dams, sediment basins, coarse aggregate, mulches, grasses and other erosion control devices or methods.

The permanent control shall be coordinated with the temporary erosion control features to assure economical, effective and continuous control throughout the construction and post construction period.

CONCRETE for headwalls shall be class C.

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STORM DRAINAGE DETAILS					
SURVEYED	PLATTED	FIELD BOOK	DATE	FILE	SCALE