# CITY OF MASSILLON
## CITY ENGINEER DEPARTMENT
### STARK COUNTY, OHIO
### LAKE AVENUE WIDENING

### PROJECT DESCRIPTION

WIDENING AND REPLACEMENT OF EXISTING PAVEMENT AND BASE. ALSO THE UPGRADE OF EXISTING TRAFFIC SIGNALS ON LAKE AVENUE FROM SLM 0.86 TO SLM 1.03

### DESIGN DESIGNATION

| | |
|---|---|
| CURRENT ADT (1999) | 4,947 |
| DESIGN YEAR ADT (2019) | 6,541 |
| DESIGN HOURLY VOLUME (2019) | 645 |
| DIRECTIONAL DISTRIBUTION | 70% |
| TRUCKS (24 HOUR B&C) | 10% |
| DESIGN SPEED | 25 MPH |
| LEGAL SPEED | 25 MPH |

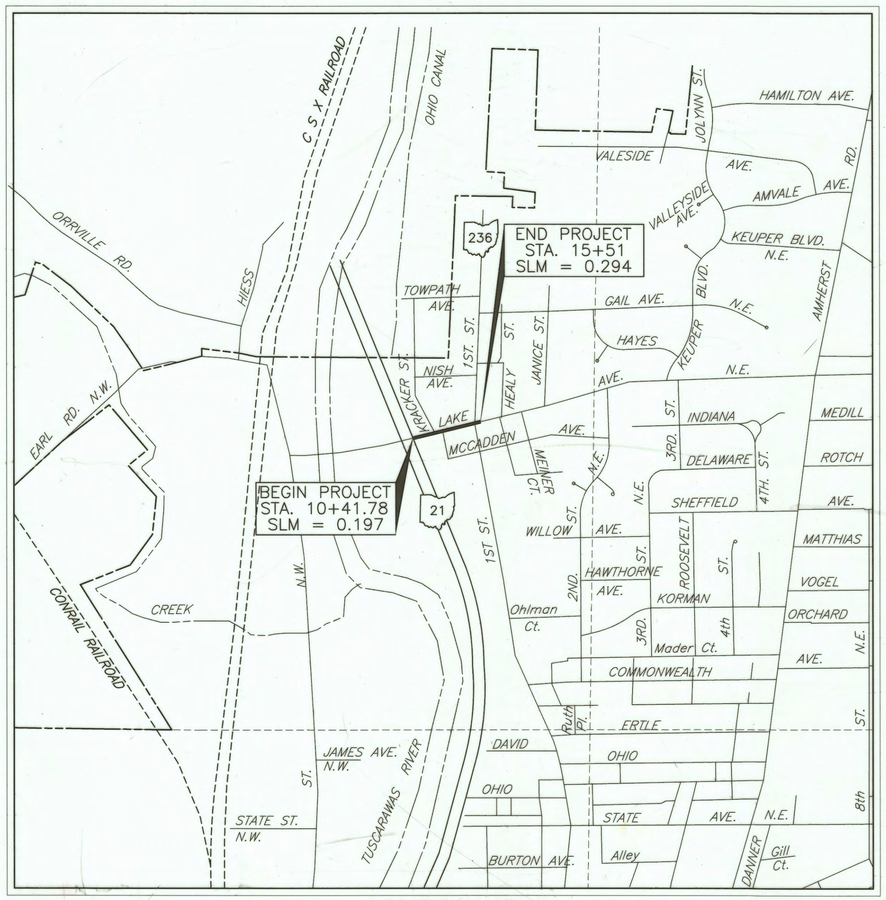
DESIGN FUNCTIONAL CLASSIFICATION – MAJOR COLLECTOR

### DESIGN EXCEPTION

NONE

### CONVENTIONAL SIGNS

RIGHT OF WAY • • • • EXISTING: ——— ———, PROPOSED: ———
COUNTY LINE • • • • • ———————————————
TOWNSHIP LINE • • • • ———————————————
CORPORATION LINE • • ———————————————
FENCE LINE • • • • • EXISTING: —×—×—, PROPOSED: —×—×—
GUARDRAIL • • • • • EXISTING: —o—o—, PROPOSED: —●—●—
MANHOLES • • • • • • EXISTING: ○, PROPOSED: ●, ADJUSTED: ◑
CATCH BASINS • • • • EXISTING: ⬚, PROPOSED: ■, ADJUSTED: ◨
SIGNS • • • • • • • • 1–POST: ⊢, 2–POST: ⊨, 3–POST: ⊫
EXISTING POLES • • • • POWER: Ø, TELEPHONE Ø, LIGHT Ø, SPAN Ø
PROPOSED POLES • • • POWER: Ø, TELEPHONE Ø, LIGHT Ø, SPAN Ø
EXIST. UTILITIES • • • VALVE: ♁, HYDRANT: 🜚, METERS: Ⓜ / ⊠, GUY: ⟋




LOCATION MAP
SCALE IN MILES

PORTION TO BE IMPROVED ——— ——— ———
STATE & FEDERAL ROUTES ——— ——— ———
OTHER ROADS ——— ——— ——— ——— ———

RT. 30 W. — RT. 30 E.
AT THE INDUSTRIAL CROSSROADS OF OHIO
RT. 21

## THE CITY OF MASSILLON, OHIO
MAYOR
FRANCIS H. CICCHINELLI, JR.

### INDEX OF SHEETS:


| | |
|---|---|
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| TYPICAL SECTIONS | 3–4 |
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| CALCULATIONS | 8–9 |
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| PROFILES | 13 |
| CROSS SECTIONS | 14–20 |
| MISCELLANEOUS DETAILS | 21–23 |
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| RETAINING WALL | 26 |
| TRAFFIC CONTROL | 27–29 |
| RIGHT OF WAY | 30 |


### APPROVALS

DIRECTOR OF PUBLIC SERVICE AND SAFETY ALAN W. CLIMER DATE

CITY ENGINEER JAMES J. BENEKOS, P.E., P.S. DATE

### OFFICIALS

| | |
|---|---|
| FRANCIS H. CICCHINELLI, Jr. | MAYOR |
| ALAN W. CLIMER | DIRECTOR OF PUBLIC SERVICE AND SAFETY |
| JAMES J. BENEKOS, P.E., P.S. | CITY ENGINEER |
| JOE ULRICH | WASTE WATER TREATMENT PLANT MANAGER |
| JOHN D. FERRERO JR. | LAW DIRECTOR/PROSECUTOR |
| DOLORES B. LOOMIS | AUDITOR |
| BILL H. HAMIT | TREASURER |
| SHARON K. HOWELL | CLERK OF COUNCIL |

### COUNCIL

| | |
|---|---|
| DENNIS HARWIG | PRESIDENT |
| JAMES H. ROHR | 1st WARD |
| BILL AMAN | 2nd WARD |
| CHARLIE A. TRIBETT | 3rd WARD |
| WILLIAM POOLE | 4th WARD |
| GLENN E. GAMBER | 5th WARD |
| PAUL F. LAMBERT | 6th WARD |

### COUNCIL AT LARGE

MIKE LOUDIANA
TIM BRYAN
NANCY J. HALTER

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
CALL 1–800–362–2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON–MEMBERS
MUST BE CALLED DIRECTLY

PLAN PREPARED BY:

CITY OF MASSILLON
Engineering Department

NW NE SW SE N

VERTICAL SCALE IN MILES: 0, 1/2, 1, 2

0 1/2 1 2
HORIZONTAL SCALE IN MILES

| DRAWN BY: | CHECKED BY: |
|---|---|
| FPW | SDH |
| DATE: Dec. 30, 1998 | DATE: Feb. 26, 1999 |

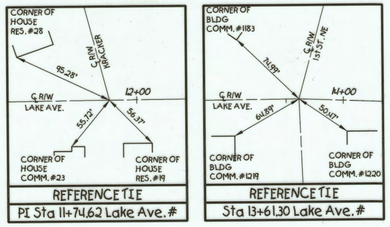
*Lake Avenue N.W. Widening Plans*
Title Sheet
City of Massillon
Stark County, Ohio

RT. 30 W. — RT. 30 E.
AT THE INDUSTRIAL CROSSROADS OF OHIO
RT. 21
THE CITY OF MASSILLON, OHIO
Francis H. Cicchinelli, Jr.
Mayor

REVISIONS:

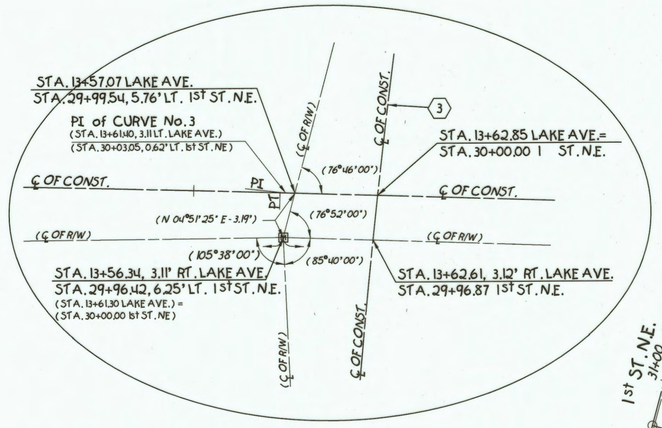
| DATE | DESCRIPTION |
|---|---|
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ELECTROINIC FILE NAME: 98ST0401.DWG
ACCOUNT NUMBER 98ST04










DETAIL A-A

① CURVE DATA (LAKE AVE.)

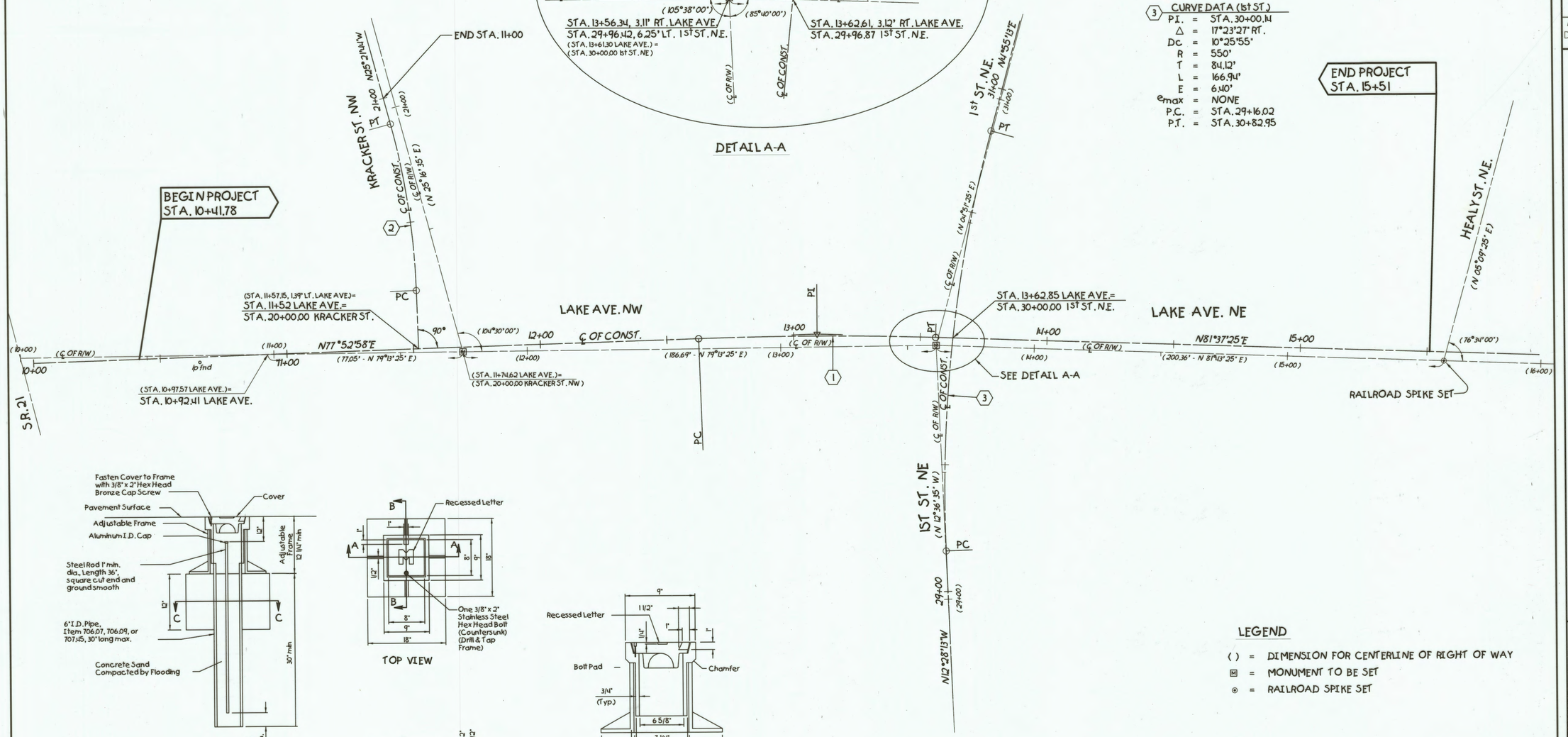
| | | |
|---|---|---|
| P.I. | = | STA. 13+09.31 |
| Δ | = | 3°41'27" RT. |
| Dc | = | 4°00'07" |
| R | = | 1432' |
| T | = | 46.76' |
| L | = | 93.50' |
| E | = | 0.76' |
| emax | = | NONE |
| P.C. | = | STA. 12+62.55 |
| P.T. | = | STA. 13+56.04 |

② CURVE DATA (KRACKER ST.)

| | | |
|---|---|---|
| P.I. | = | STA. 20+56.39 |
| Δ | = | 13°41'43" LT. |
| Dc | = | 20°01'21" |
| R | = | 287.62' |
| T | = | 33.93' |
| L | = | 66.49' |
| E | = | 1.93' |
| emax | = | NONE |
| P.C. | = | STA. 20+23 |
| P.T. | = | STA. 20+89.49 |

③ CURVE DATA (1st ST.)

| | | |
|---|---|---|
| P.I. | = | STA. 30+00.14 |
| Δ | = | 17°23'27" RT. |
| Dc | = | 10°25'55" |
| R | = | 550' |
| T | = | 84.12' |
| L | = | 166.94' |
| E | = | 6.40' |
| emax | = | NONE |
| P.C. | = | STA. 29+16.02 |
| P.T. | = | STA. 30+82.95 |



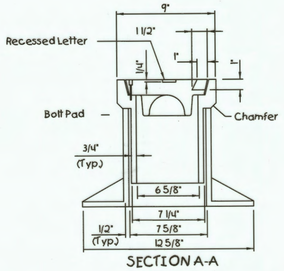

LEGEND

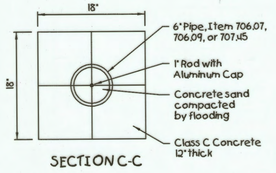
( ) = DIMENSION FOR CENTERLINE OF RIGHT OF WAY
Ⓜ = MONUMENT TO BE SET
⊙ = RAILROAD SPIKE SET

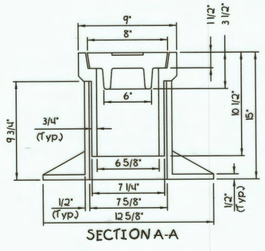








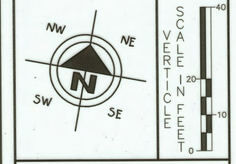




ADJUSTABLE CENTERLINE MONUMENT DETAILS

NOTES

The monuments shall be placed under the direction of a Registered Surveyor and are to be set, as shown on the Plans at the time of construction. All alterations, with Engineers prior approval. All alterations shall be noted and the City of Massillon shall be notified of new locations.

| LOCATION | OFFSET | 604 ADJUSTABLE CENTERLINE MONUMENT | SPECIAL RAILROAD SPIKE |
|---|---|---|---|
| | | EACH | EACH |
| (11+74.62, LAKE AVE. NW) | CENTER | 1 | |
| (13+61.30, LAKE AVE. NW/NE) | CENTER | 1 | |
| (15+61.67, LAKE AVE. NE) | CENTER | | 1 |
| | | | |
| | | | |
| | | | |
| TOTAL | | 2 | 1 |




20 10 0 10
HORIZONTAL SCALE IN FEET

| DRAWN BY: | CHECKED BY: |
|---|---|
| FPW | SDH |
| DATE: Dec. 30, 1998 | DATE: Feb. 26, 1999 |

# Lake Avenue N. W. Widening Plans

Schematic Plan
City of Massillon
Stark County, Ohio

RT. 30 W. AT THE INDUSTRIAL — RT. 30 E. CROSSROADS OF OHIO — RT. 21

THE CITY OF MASSILLON, OHIO

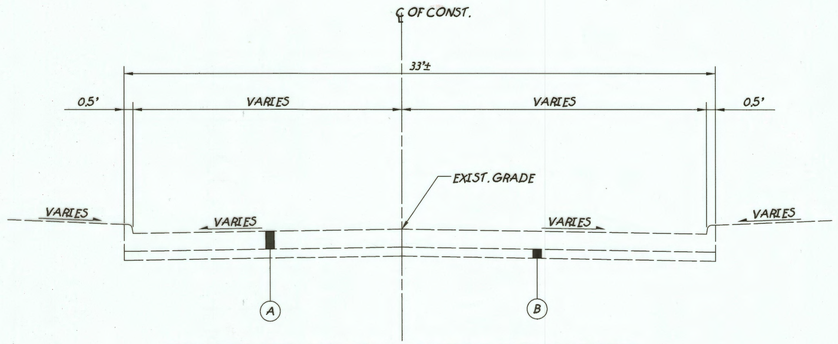
Francis H. Cicchinelli, Jr.
Mayor

REVISIONS:

| DATE | DESCRIPTION |
|---|---|
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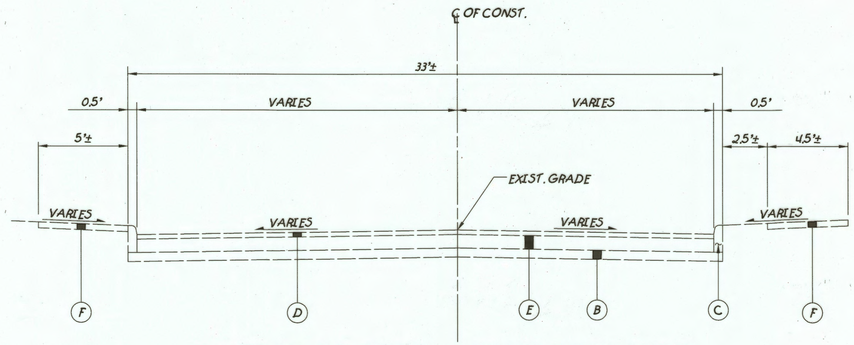
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ACCOUNT NUMBER 98ST04



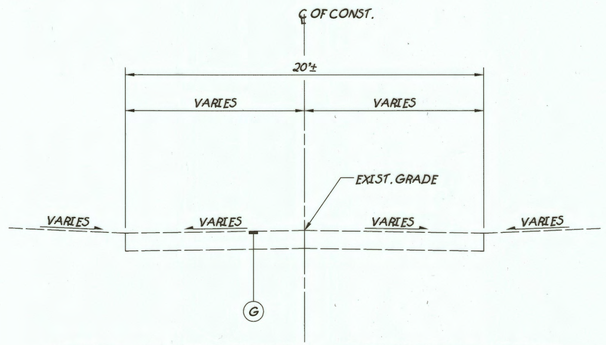

LAKE AVE. N.W. 60' R/W – EXISTING TYPICAL SECTION

STA. 10+41.73 TO STA. 13+33




LAKE AVE. N.E. 60' R/W – EXISTING TYPICAL SECTION

STA. 13+33 TO STA. 15+51

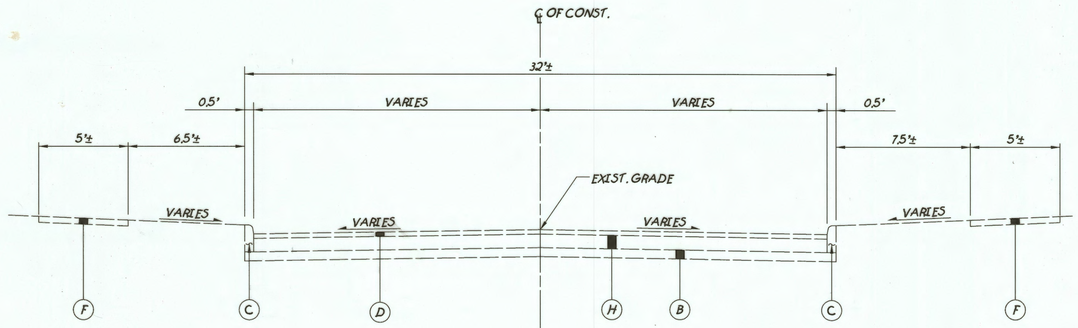



KRACKER AVE. N.W. 40' R/W – EXISTING TYPICAL SECTION

STA. 10+41.73 TO STA. 13+33

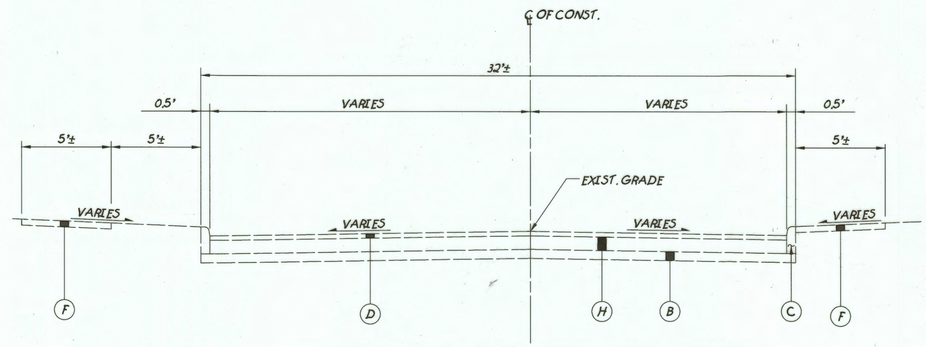
## EXISTING LEGEND

- (A) - 9'± CONCRETE
- (B) - 6'± AGGREGATE BASE
- (C) - CONCRETE CURB
- (D) - 3'± ASPHALT CONCRETE
- (E) - 9'± BITUMINOUS AGGREGATE BASE
- (F) - CONCRETE WALK
- (G) - CHIP AND SEAL
- (H) - BRICK




1st ST. N.E. 60' R/W – EXISTING TYPICAL SECTION

STA. 29+00 TO STA. 30+00




1st ST. N.E. 60' R/W – EXISTING TYPICAL SECTION

STA. 30+00 TO STA. 31+00

VERTICAL SCALE IN FEET: 8, 4, 2, 0

HORIZONTAL SCALE IN FEET: 4, 2, 0, 4

| DRAWN BY: | CHECKED BY: |
|---|---|
| FPW | SDH |
| DATE: Dec. 30, 1998 | DATE: Feb. 26, 1999 |

# Lake Avenue N.W. Widening Plans

Existing Typical Sections
City of Massillon
Stark County, Ohio

RT. 30 W. AT THE INDUSTRIAL — RT. 30 E. CROSSROADS OF OHIO — RT. 21

THE CITY OF MASSILLON, OHIO

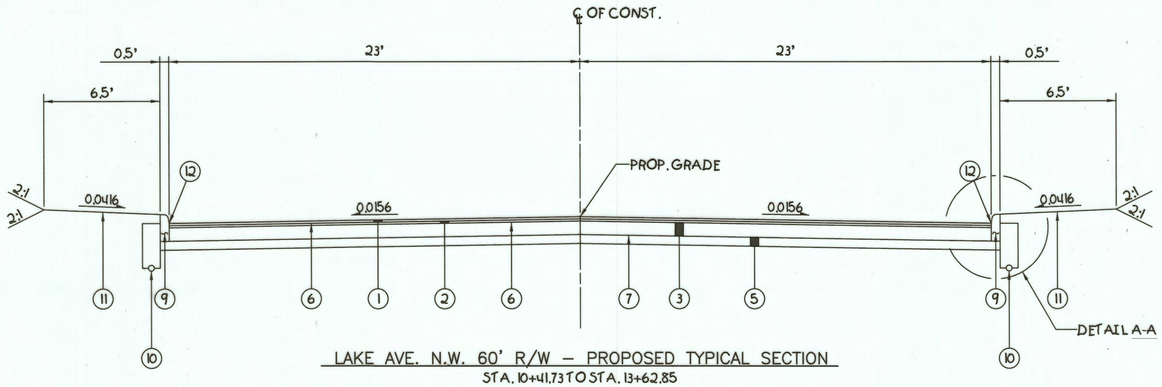
Francis H. Cicchinelli, Jr.
Mayor

REVISIONS:

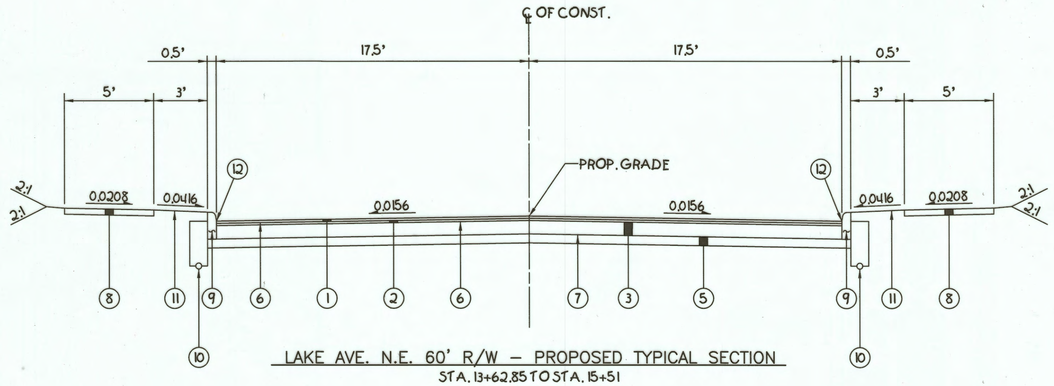
| DATE | DESCRIPTION |
|---|---|
| | |

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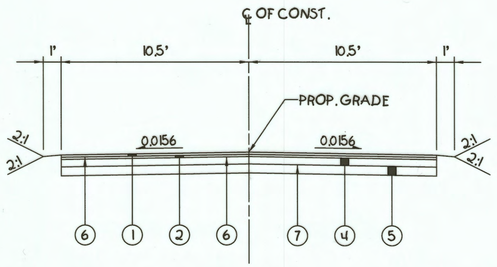
ACCOUNT NUMBER: 98ST04



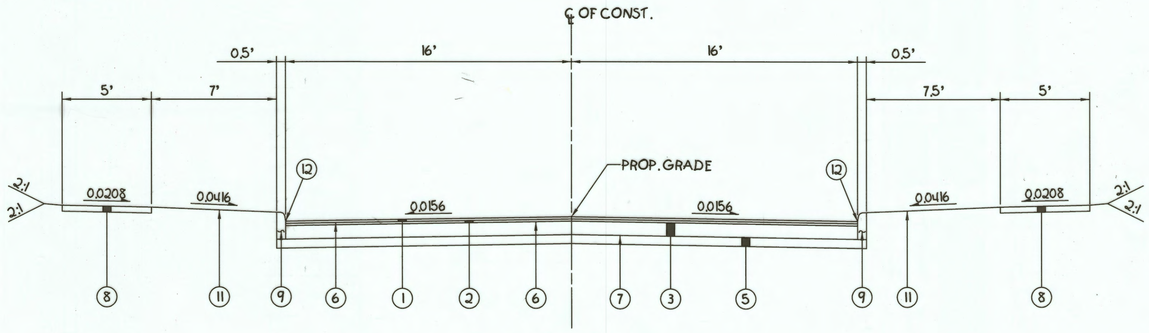

LAKE AVE. N.W. 60' R/W – PROPOSED TYPICAL SECTION
STA. 10+41.73 TO STA. 13+62.85




LAKE AVE. N.E. 60' R/W – PROPOSED TYPICAL SECTION
STA. 13+62.85 TO STA. 15+51



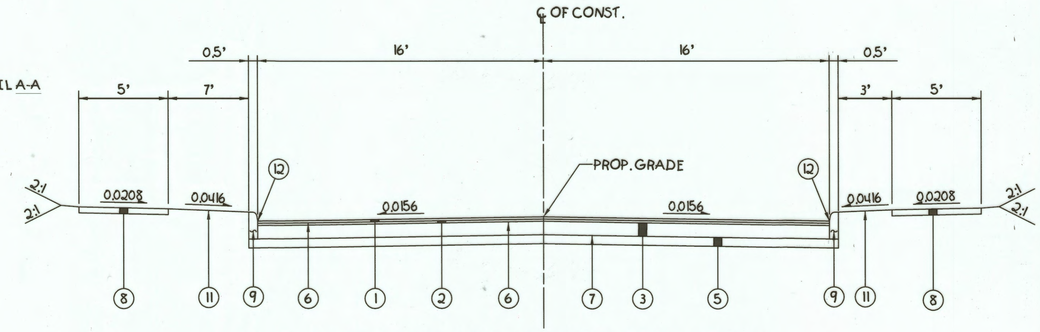

KRACKER AVE. N.W. 40' R/W – PROPOSED TYPICAL SECTION
STA. 30+00 TO STA. 31+00



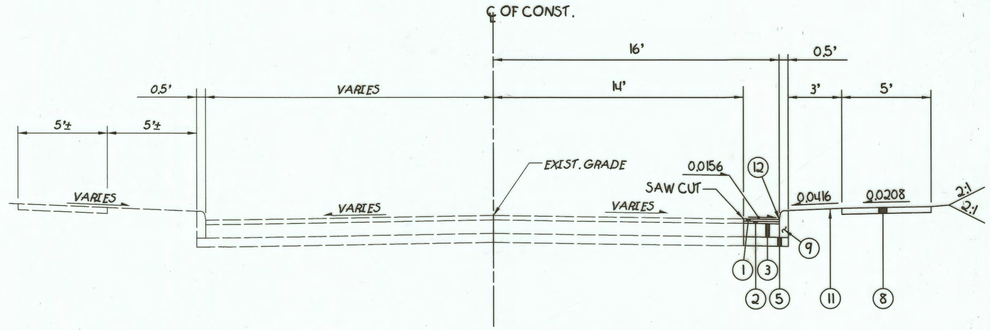

1st ST. NE 60' R/W – PROPOSED TYPICAL SECTION
STA. 29+00 TO STA. 30+00

## PROPOSED LEGEND

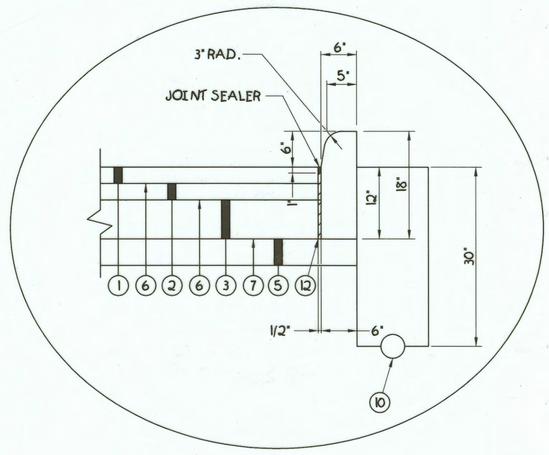
1. ITEM 404-1 1/2" ASPHALT CONCRETE
2. ITEM 402-1 1/2" ASPHALT CONCRETE
3. ITEM 301-9" BITUMINOUS AGGREGATE BASE
4. ITEM 301-5" BITUMINOUS AGGREGATE BASE
5. ITEM 304-6" AGGREGATE BASE
6. ITEM 407-TACK COAT
7. ITEM 408-PRIME COAT
8. ITEM 608-4" CONCRETE WALK
9. ITEM 609-CAST IN PLACE CONCRETE CURB-6"x18"
10. ITEM 605-4" SHALLOW PIPE UNDERDRAINS
11. ITEM 659-SEEDING AND MULCHING
12. ITEM 705-PREFORMER FILLERS




1st ST. NE 60' R/W – PROPOSED TYPICAL SECTION
STA. 30+00 TO STA. 31+00




1st ST. NE 60' R/W – PROPOSED TYPICAL SECTION
STA. 31+00 TO STA. 31+12




DETAIL A–A

# Lake Avenue N.W. Widening Plans

Proposed Typical Sections
City of Massillon
Stark County, Ohio

VERTICAL SCALE IN FEET: 0, 2, 4, 8

HORIZONTAL SCALE IN FEET: 4, 2, 0, 4

| DRAWN BY: | CHECKED BY: |
|---|---|
| FPW | SDH |
| DATE: Dec. 30, 1998 | DATE: Feb. 26, 1999 |

RT. 30 W. AT THE INDUSTRIAL — RT. 21 — RT. 30 E. CROSSROADS OF OHIO

THE CITY OF MASSILLON, OHIO

Francis H. Cicchinelli, Jr.
Mayor

REVISIONS:

| DATE | DESCRIPTION |
|---|---|
| | |

ELECTRONIC FILE NAME: 98ST0404.DWG

ACCOUNT NUMBER: 98ST04

## UTILITIES

LISTED BELOW ARE ALL KNOWN UTILITIES LOCATED WITHIN THE CITY CORPORATION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

AMERITECH
50 W.BOWERY, 6TH FLOOR
AKRON, OH 44308
800-290-2242
RICK MARSILI

CONSUMER OHIO
WATER COMPANY
P.O. BOX 584
MASSILLON, OH 44648
(330) 833-4156

OHIO EDISON
STARK DIVISION
2600 S. ERIE ST.
MASSILLON, OH 44545
(330) 833-3141

MB OPERATING
104 6TH ST. S.W.
CANTON, OH 44702
(330) 456-2454

AT&T COMMUNICATIONS
2535 E. 40TH AVE.
DENVER, CO 80205-3601
(800) 852-3786

MASSILLON CABLE TV
P.O. BOX 814
MASSILLON, OH 44648
(330) 8334134

CITY OF MASSILLON
SANITARY SEWER
ONE JAMES DUNCAN PLAZA
MASSILLON, OH 44646
(330) 830-1722

THE EAST OHIO GAS COMPANY
4725 SOUTHWAY ST. S.W.
CANTON, OH 44706
(330) 478-3142
NANCY KOVACH

NORTHEAST OHIO NATURAL
GAS CORP.
1425 N. WOOSTER AVE.
STRASBURG, OH 44680-9766
(330) 878-5589

THE CONTRACTOR SHALL NOTIFY ALL UTILITIES 48 HOURS PRIOR TO ANY WORK.

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE SHOWN AT APPROXIMATE LOCATIONS AND WHERE OBTAINED AS REQUIRED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

OUPS - 1-800-362-2764

## DATUM ELEVATION

ALL BENCHMARKS ARE BASED ON REFERENCE BENCHMARKS PROVIDED ON THE PLANS BY THE CITY OF MASSILLON.

## STATIONING

ALL STATIONING SHOWN IS REFERENCED TO THE BASELINE AS SHOWN.

## REMOVAL OF TREES OR STUMPS

ALL TREES AND STUMPS REMOVED DURING CONSTRUCTION SHALL BE UNDER THE LUMP SUM BID FOR ITEM 201, CLEARING ANG GRUBBING.

## ITEM 623, CONSTRUCTION STAKING

MONUMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ADJUSTABLE CENTERLINE MONUMENT DETAIL AS SHOWN ON SHEET NO. 2

THE MONUMENTS AND RAILROAD SPIKES SHALL BE PLACED UNDER THE DIRECTION OF A REGISTERED SURVEYOR AND ARE TO BE SET, AS SHOWN ON SHEET NO. 2 AT THE TIME OF CONSTRUCTION ALL ALTERATIONS, WITH ENGINEERS PRIOR APPROVAL. ALL ALTERATIONS SHALL BE NOTED AND THE CITY OF MASSILLON SHALL BE NOTIFIED OF NEW LOCATIONS

CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION LAYOUT AND UPON COMPLETION OF PROJECT AS-BUILT DRAWINGS ARE REQUIRED.

THIS WORK SHALL INCLUDE ALL LABOR AND MATERIALS.

THIS WORK IS TO BE UNDER ITEM 623 CONSTRUCTION STAKING.

## ITEM 609, CAST IN PLACE 6"X18" CONCRETE CURB

GRANULAR BEDDING, BACKFILLING AND CONCRETE CURB PLACEMENT ALONG WITH ALL APPURTENANCES IS TO BE INCLUDED IN ITEM 609.

## ITEM 659, TOPSOIL, SEEDING AND MULCHING

SEEDING AND MULCHING SHALL BE APPLIED TO ALL EXPOSED SOIL BETWEEN THE RIGHT OF WAY LINES, AND WITHIN THE CONSTRUCTIONS LIMITS FOR AREAS OUT-SIDE THE RIGHT OF WAY LINES DISTURB DURING CONSTRUCTION.

THE CITY SHALL APPROVE SEED MIX PRIOR TO CONSTRUCTION TO BE USED THROUGH OUT CONSTRUCTION LIMITS. PROPOSED MIX SHALL BE SUBMITTED IN WRITING PRIOR TO ANY CONSTRUCTION.

ITEM 659, SEEDING AND MULCHING LUMP SUM BID

## ITEM 207 TEMPORARY SOIL EROSION CONTROL

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION CONTROL AND SHALL MEET THE REQUIREMENTS OF 108.04.

## ITEM 604, CATCH BASIN NO. 3, 3A

CATCH BASINS SHALL BE CONSTRUCTED IN CONFORMANCE WITH ITEM 604 EXCEPT THAT THE GRATES SHALL BE NEENAH NO. R-4859-C OR EAST JORDAN NO. 6730-2 OR APPROVED EQUALS.

## ITEM 604, MANHOLE ADJUSTED TO GRADE

ALL MANHOLES WITH IN PROJECT LIMITS SHALL BE ADJUSTED TO GRADE WITH THE USE OF MORTAR AND NEW CASTING WITH LIDS AS PER SPECIFICATIONS.

## CROSSING OR CONNECTING TO EXISTING PIPES AND UTILITIES

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR THE OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 603 CONDUIT ITEM.

## MANHOLES, CATCH BASINS, INLETS AND PIPES REMOVED OR ABANDONED

ALL CASTING AND PIPES SHALL BE CAREFULLY REMOVED AND STORED WITHIN THE RIGHT-OF-WAY FOR SALVAGE BY THE CITY. CONTACT THE CITY OF MASSILLON STREET SUPERINTENDENT - MARK LIGHTFOOT AT 330-833-5746.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 202 ITEM.

## ITEM 407, TACK COAT

THE RATE OF APPLICATION OF THE 407 TACK COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.08 GALLONS PER SQUARE YARD OF TACK COAT FOR ESTIMATING PURPOSES ONLY.

## ITEM 408, BITUMINOUS PRIME COAT

THE RATE OF APPLICATION OF THE 408 PRIME COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.40 GALLONS PER SQUARE YARD OF PRIME COAT FOR ESTIMATING PURPOSES ONLY.

## ITEM SPEC., DECORATIVE LANDSCAPE WALL

DECORATIVE LANDSCAPE WALL TYPE SHALL BE APPROVED BY THE ENGINEER BEFORE CONSTRUCTION.

THE CONTRACTOR SHALL PERFORM WORK AS PER MANUFACTURERS SUGGESTED INSTALLATION.

ALL MATERIALS AND LABOR SHALL BE IN LUMP SUM BID.

THIS WORK SHALL BE PAID UNDER ITEM SPEC. DECORATIVE LANDSCAPE WALL

## REVIEW OF SANITARY AND DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE CITY OF MASSILLON AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE CITY OF MASSILLON.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION TESTED AND VIDEO TAPED INTERNALLY BEFORE THE PROJECT WILL BE ACCEPTED BY THE CITY OF MASSILLON.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 603 CONDUIT ITEMS.

## NOTIFICATION OF SAFETY FORCES

THE CONTRACTOR SHALL NOTIFY THE CITY OF MASSILLON FIRE DEPARTMENT, MASSILLON POLICE DEPARTMENT, CITY ENGINEER AND LOCAL (MASSILLON, JACKSON & PERRY) SCHOOL DISTRICT TRANSPORTATION SUPERVISOR, AND THE SAFETY & SERVICE DIRECTOR AT LEAST 48 HOURS IN ADVANCE OF ANY STREET CLOSING OR TRAFFIC CHANGE.

## EXCAVATED MATERIAL

ALL EXCAVATED MATERIAL AND ALL MATERIAL USED IN CONSTRUCTION OF THE WORK SHALL BE PILED IN A MANNER THAT WILL NOT ENDANGER THE WORK AND THAT WILL LEAVE DRIVEWAYS OR OTHER CONTROLS UNOBSTRUCTED AND ACCESSIBLE WHILE THE WORK IS TO BE COMPLETED. SATISFACTORY PROVISIONS SHALL BE MADE FOR STREET DRAINAGE, AND NATURAL WATERCOURSES SHALL NOT TO BE OBSTRUCTED. DURING THE PROGRESS OF THE WORK, ALL MATERIAL PILES SHALL BE KEPT TRIMMED UP AND MAINTAINED IN A NEAT MANNER. ALL EXCAVATED WASTE MATERIAL SHALL BE REMOVED FROM THE PROJECT SITE, AS DIRECTED BY THE ENGINEER. THE WASTE SITE IS TO BE PROVIDED BY THE CONTRACTOR AT NO COST TO THE CITY. UNLESS OTHERWISE NOTED IN THE SPECIFICATIONS. ALONG WITH A LETTER FROM THE PROPOSED WASTE SITE OWNER PERMITTING SUCH AND HOLDING THE CITY HARMLESS.

## PRESERVATION OF EXISTING UTILITY SERVICES

ANY EXISTING WATER LINE, SANITARY SEWER, STORM SEWER, GAS LINE OR OTHER UTILITY IN OR OUTSIDE OF THE CONSTRUCTION LIMITS, DAMAGED DURING CONSTRUCTION OF THE PROPOSED PROJECT, WILL BE REPLACED AT THAT CONTRACTORS EXPENSE.

## SUBSURFACE CONDITIONS

IT IS THE OBLIGATION AND RESPONSIBILITY OF THE BIDDER TO MAKE HIS OWN INVESTIGATIONS OF SUBSURFACE CONDITIONS PRIOR TO SUBMITTING HIS PROPOSAL. THE BIDDER MAY EXAMINE THE RECORDS OF ALL BORINGS, TEST EXCAVATIONS AND OTHER SUBSURFACE INVESTIGATIONS, IF ANY, MADE SOLELY FOR DESIGN PURPOSES FOR THE OWNER. SAID BORINGS, TEST EXCAVATIONS AND OTHER SUBSURFACE INVESTIGATIONS, ARE NOT A PART OF THE CONTRACT DOCUMENTS, EXCEPT TO THE EXTENT THAT THE RESULTS THEREOF ARE SPECIFICALLY SHOWN ON THE PLANS OR INCLUDED IN THE SPECIFICATIONS AND ARE NOT WARRANTED TO SHOW THE ACTUAL SUBSURFACE CONDITIONS. THE CONTRACTOR AGREES THAT THEY WILL MAKE NO CLAIM AGAINST THE OWNER OR THE ENGINEER IF, IN CARRYING OUT THE WORK, HE FINDS THAT THE ACTUAL SUBSURFACE CONDITIONS ENCOUNTERED DO NOT CONFORM TO THOSE INDICATED BY SAID BORINGS, TEST EXCAVATIONS AND OTHER SUBSURFACE INVESTIGATIONS.

| DRAWN BY: | CHECKED BY: |
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| FPW | SDH |
| DATE: Dec. 30, 1998 | DATE: Feb. 26, 1999 |

*Lake Avenue N.W. Widening Plans*

General Notes
City of Massillon
Stark County, Ohio

RT. 30 W. AT THE INDUSTRIAL — RT. 30 E. CROSSROADS OF OHIO — RT. 21

THE CITY OF MASSILLON, OHIO

Francis H. Cicchinelli, Jr.
Mayor

REVISIONS:

| DATE | DESCRIPTION |
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ELECTRONIC FILE NAME:
98ST0405.DWG

ACCOUNT NUMBER
98ST04

## SANITARY / STORM WORK

THE FOLLOWING CONDUIT TYPES MAY BE USED FOR SANITARY SEWER: 707.44 SDR35, 706.08, 706.03, 706.02 WITH JOINTS AS PER 706.11 OR 706.12.

THE FOLLOWING CONDUIT TYPES MAY BE USED FOR STORM SEWER WITH MORE THAN (1) ONE FOOT OF COVER: 707.42, 706.08, 706.02, WITH JOINTS AS PER 706.10 OR 706.11.

THE FOLLOWING CONDUIT TYPES MAY BE USED FOR STORM SEWER WITH LESS THAN (1) ONE FOOT OF COVER: 706.02 WITH JOINTS AS PER 706.10 OR 706.11

### CONNECTION TO EXISTING SEWERS

CONSTRUCTION OF THE NEW SEWER SHALL BE SCHEDULED AND PERFORMED SUCH THAT ALL NEW SEWER IS IN PLACE TESTED AND FOUND READY FOR ACCEPTANCE BEFORE THE ACTUAL CUTTING AND TYING INTO THE EXISTING SEWER IS PERFORMED.

### INTERNAL TELEVISION INSPECTION

ALL SANITARY SEWERS 8" DIAMETER AND LARGER, MUST PASS INTERNAL TELE-VISION INSPECTION. THE CONTRACTOR SHALL PROVIDE COMPLETE, INTERNAL INSPECTION VIDEOTAPE TO THE CITY OF MASSILLON ENGINEERING DEPARTMENT. THE VIDEOTAPING PROCEDURE MUST BE IN ACCORDANCE WITH SPECIFICATION SECTION 02743.

## EXISTING DATA

EACH CONTRACTOR SHALL VISIT THE SITE PERSONALLY TO ASCERTAIN THE NATURE OF THE WORK AND BECOME THOROUGHLY FAMILIARIZED WITH THE SITE PRIOR TO BID SUBMISSION.

EXISTING STRUCTURES, GRADES, PIPING, ETC. ARE INDICATED IN APPROXIMATE LOCATION ON THE PLAN. INFORMATION SHOWN IS NOT GUARANTEED TO BE CORRECT AND COMPLETE. THE DATA SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR. THE EXISTENCE OF FACILITIES ABOVE OR BELOW GROUND, WHICH MAY NOT BE SHOWN, WILL NOT BE A BASIS FOR A CLAIM FOR EXTRA WORK.

EXISTING UNDERGROUND UTILITIES SHOWN ARE RECORDS PROVIDED BY UTILITY COMPANIES AND ARE APPROXIMATE ONLY. SERVICE LATERALS ARE NOT SHOWN.

IT IS THE RESPONSIBILITY OF CONTRACTOR TO NOTIFY THE CITY, PRIOR TO BID OPENING NON-CONFORMING OR CONFLICTING INFORMATION.

## CONSTRUCTION SPECIFICATIONS & STANDARDS

ALL CONSTRUCTION TO BE CITY OF MASSILLON SPECIFICATIONS AND STANDARDS, THE LATEST EDITION OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, CONSTRUCTION AND MATERIAL SPECIFICATIONS AND FOLLOW ALL OSHA AND ADA REGULATIONS AND REQUIREMENTS.

## CONTRACTOR AVAILABILITY

THE CONTRACTOR SHALL SUPPLY THE ENGINEER WITH A 24 HOUR PHONE NUMBER WHERE THE CONTRACTOR, SHALL BE AVAILABLE FOR EMERGENCIES.

## PRESERVATION OF PRIVATE PROPERTY

THE CONTRACTOR SHALL PERFORM WORK AS TO NOT DISTURB, DAMAGE OR DESTROY ANY TELEPHONE OR POWER POLES, SIGNS, LANDSCAPING ITEMS, ETC. ANY ITEM DAMAGED OR DESTROYED SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. ANY ITEM DISTURBED OR IN CONFLICT WITH THE WORK TO BE PERFORMED SHALL BE REMOVED AND RESET AT THE CONTRACTOR'S EXPENSE. PRIOR ENGINEER APPROVAL IS REQUIRED BEFORE ANY OF THE ABOVE ITEMS ARE PERFORMED.

## PRESERVATION OF PROPERTY CORNERS AND SURVEY MARKERS

THE CONTRACTOR SHALL PRESERVE ALL CORNERSTONES, IRON PINS, CONCRETE MONUMENTS ANY TYPE OF LAND MONUMENT. HE SHALL HAVE ALL LAND MONUMENTS IN THE PROXIMITY OF THE WORK REFERENCED. HE SHALL REPLACE DESTROYED OR DAMAGED MONUMENTS AND SHALL FURNISH A CERTIFICATION BY AN OHIO REGISTERED SURVEYOR THAT THE MONUMENTS HAVE BEEN RESTORED.

## RESTORATION

FOR SANITARY SEWER INSTALLED, TESTED, AND ACCEPTED UP TO MAY 15TH OF ANY CALENDER YEAR, RESTORATION SHALL BE COMPLETE BY JUNE 30TH OF THAT YEAR. FOR INSTALLATION OF SANITARY SEWER TESTED AND ACCEPTED FROM MAY 15TH TO SEPTEMBER 30TH OF ANY CALENDAR YEAR, RESTORATION SHALL BE COMPLETE BY NOVEMBER 15TH OF THAT CALENDAR YEAR. FOR SANITARY SEWER INSTALLED, TESTED, AND ACCEPTED AFTER NOVEMBER 15TH OF ANY CALENDAR YEAR, RESTORATION SHALL BE COMPLETE BY MAY 15TH OF THE NEXT CALENDAR YEAR.

ALL SOIL AREAS DISTURBED BY THE CONTRACTOR SHALL BE TOPSOILED, SEEDED AND MULCHED. COST TO BE INCLUDED IN THE UNIT PRICE BID FOR EACH ITEM OF AFFECTED WORK. TOPSOIL, SEEDING AND MULCHING SHALL NOT BE A SEPERATE PAY ITEM. THIS INCLUDES BACKFILLING, SEEDING AND MULCHING ALONG THE EDGE OF ALL PAVEMENT RESTORATION.

PAVEMENT CROSSINGS WILL RECEIVE TYPE C PAVEMENT REPLACEMENT WITH FULL WIDTH PAVEMENT OVERLAY.

CONTRACTOR TO REPLACE ALL PAVEMENT MARKINGS. COST TO BE INCLUDED IN THE UNIT PRICE BID FOR PAVEMENT.

CONTRACTOR TO USE HOT APPLIED JOINT CRACK SEALER ON ASPHALT PAVEMENT AT ALL ENDS AND INTERSECTIONS.

ALL TRENCHES IN ROAD RIGHT OF WAY WILL RECEIVE FULL DEPTH PREMIUM GRANULAR BACKFILL.

## MAINTENANCE OF TRAFFIC

THE CONTRACTOR SHALL SUPPLY A MAINTENANCE OF TRAFFIC PLAN TO THE CITY ENGINEER.

MAINTENANCE OF TRAFFIC PLAN MUST BE APPROVED BY THE CITY ENGINEER PRIOR TO ANY CONSTRUCTION COMMENCING.

## ACCESSIBILITY TO PRIVATE PROPERTY

ACCESS TO ALL DRIVEWAYS AND PARKING AREAS WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED AT ALL TIMES EXCEPT WHILE LAYING THE SANITARY SEWER ACROSS THE DRIVE. THE TRENCH SHALL BE BACKFILLED AT THE END OF EACH WORK DAY TO PROVIDE ACCESS. THE CONTRACTOR MUST NOTIFY EACH PROPERTY OWNER AT LEAST 24 HOURS IN ADVANCE OF CUTTING THIER DRIVEWAY.

## FINAL APPROVAL

A VIDEO TAPE WILL BE MADE BY THE CONTRACTOR AND SUBMITTED TO THE CITY PRIOR TO THE PROJECT PRE-CONSTRUCTION MEETING. AFTER THE FINAL INVOICE IS RECEIVED THE SITE WILL BE VIDEO TAPED AGAIN BY THE CONTRACTOR. ANY DISCREPANCIES WILL BE RESOLVED PRIOR TO FINAL PAYMENT.

COST OF THIS WORK SHALL BE INCLUDED IN OTHER ITEMS OF WORK.

## DEWATERING

IF THE CONTRACTORS MEANS OF INSTALLATION CAUSES ANY HARDSHIP DUE TO THE REMOVAL OF THE GROUND WATER THE CONTRACTOR MUST SUPPLY WATER TO THESE INDIVIDUALS UNTIL THAT TIME THE WATER TABLES SUBSIDES AND IS DEEMED PALATABLE.

## ITEM SPECIAL - RETAINING WALL

THE RETAINING WALL SHALL BE VERSA-LOK OR EQUIVALENT INSTALLATION OF THE WALL SHALL BE AS PER MANUFACTURES' INSTRUCTIONS, ALL WORK AND MATERIALS FOR THIS ITEM SHALL BE PAID FOR UNDER ITEM SPEC. RETAINING WALL LUMP.

## TRAFFIC CONTROL DEVICES

CONTRACTOR SHALL CONTACT THE CITY GARAGE (JOHN HAUSER) 832-1176 FOR THE FOLLOWING ITEMS.
VEHICULAR SIGNAL HEAD TYPE A W/ 12" LENS
VEHICULAR SIGNAL HEAD TYPE B W/ 12" LENS
PEDESTRIAN SIGNAL TYPE C
TRAFFIC SIGNS AND SUPPORTS
VIDEO DETECTION SYSTEM
THE ITEMS LISTED ABOVE SHALL BE SUPPLIED BY THE CITY AND INSTALLED BY THE CONTRACTOR.

| DRAWN BY: | CHECKED BY: |
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| FPW | SDH |
| DATE: Dec. 30, 1998 | DATE: Feb. 26, 1999 |

*Lake Avenue N.W. Widening Plans*

General Notes
City of Massillon
Stark County, Ohio

RT. 30 W. AT THE INDUSTRIAL — RT. 30 E. CROSSROADS OF OHIO — RT. 21

THE CITY OF MASSILLON, OHIO

Francis H. Cicchinelli, Jr.
Mayor

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ELECTRONIC FILE NAME:
98ST0406.DWG

ACCOUNT NUMBER
98ST04

| SHEET NUMBER | | | | | | | | | | | | | | | | ITEM | GRAND TOTAL | UNIT | DESCRIPTION | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 4 | 8 | 9 | 10 | 11 | 15 | 17 | 18 | 20 | 23 | 26 | 27 | 28 | | | | | | | |
| | | | | | | | | | | | | | | | | | | | ROADWAY | |
| | | | | | | | | | | | | | | | | 201 | LUMP | LUMP | CLEARING AND GRUBBING | |
| | | | | | | 822 | | | | | | | | | | 202 | 822 | S.Y. | CONCRETE BASE REMOVAL | |
| | | | | 251 | | | | | | | | | | | | 202 | 251 | L.F. | PIPE REMOVED 24" AND UNDER | |
| | | | | 8 | | | | | | | | | | | | 202 | 8 | EACH | CATCH BASIN REMOVED | |
| | | | | 121 | | | | | | | | | | | | 202 | 121 | S.Y. | CONCRETE REMOVED | |
| | | | | 1102 | | | | | | | | | | | | 202 | 1102 | L.F. | CONCRETE CURB REMOVED | |
| | | | | 2856 | | | | | | | | | | | | 202 | 2856 | S.F. | SIDEWALK REMOVED | |
| | | | | | | | | | | 184 | | | | | | 202 | 184 | S.Y. | DRIVEWAY REMOVED | |
| | | | | | | | 1077 | 123 | 381 | | | | | | | 203 | 1581 | C.Y. | EXCAVATION NOT INCLUDING EMBANKMENT | |
| | | | | | | | 25 | | 10 | | | | | | | 203 | 35 | C.Y. | EMBANKMENT | |
| 2 | | | | | | | | | | | | | | | | 604 | 2 | EACH | ADJUSTABLE CENTERLINE MONUMENT | |
| 1 | | | | | | | | | | | | | | | | 604SPEC | 1 | EACH | RAILROAD SPIKE | |
| | | | | | 4 | | | | | | | | | | | 608 | 4 | EACH | CURB RAMP TYPE I | |
| | | | 2993 | | | | | | | | | | | | | 608 | 2993 | S.F. | CONCRETE WALK | |
| | | | | | | | | | | | | | | | | 653 | LUMP | LUMP | TOPSOIL FURNISHED & REPLACED | |
| | | | | | | | | | | | | | | | | SPEC | LUMP | LUMP | EXISTING UTILITIES INCIDENTALS | |
| | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | EROSION CONTROL | |
| | | | | | | | | | | | | | | | | 207 | LUMP | LUMP | TEMPORARY SOIL EROSION CONTROL | |
| | | | | | | | | | | | | | | | | 207 | LUMP | LUMP | SEEDING AND MULCHING | |
| | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | DRAINAGE | |
| | | | | | 293 | | | | | | | | | | | 603 | 293 | L.F. | 12 " CONCRETE CONDUIT TYPE B | |
| | | | | | 14 | | | | | | | | | | | 604 | 14 | EACH | MANHOLE RECONSTRUCTION | |
| | | | | | 1 | | | | | | | | | | | 604 | 1 | EACH | SIDE DITCH INLET | |
| | | | | | 9 | | | | | | | | | | | 604 | 9 | EACH | CATCH BASIN TYPE 3A | |
| | | | | | 1 | | | | | | | | | | | 604 | 1 | EACH | MANHOLE TYPE 3 | |
| | 1019 | | | | | | | | | | | | | | | 605 | 1019 | S.F. | SHALLOW PIPE UNDERDRAINS, 4 " | |
| | | | | | | | | | | | | | | | | | | | PAVEMENT | |
| | | 780 | | | | | | | | 5 | | | | | | 301 | 785 | C.Y. | BITUMINOUS AGGREGATE BASE | |
| | | 551 | | | | | | | | | | | | | | 304 | 551 | C.Y. | AGGREGATE BASE | |
| | | 134 | | | | | | | | | | | | | | 402 | 134 | C.Y. | ASPHALT CONCRETE | |
| | | 134 | | | | | | | | 2 | | | | | | 404 | 136 | C.Y. | ASPHALT CONCRETE | |
| | | | 256 | | | | | | | | | | | | | 407 | 256 | GAL | TACK COAT | |
| | | | 1280 | | | | | | | | | | | | | 408 | 1280 | GAL | PRIME COAT | |
| | | | | | 58 | | | | | 184 | | | | | | 452 | 242 | S.Y. | PLAIN PORTLAND CEMENT CONCRETE PAVEMENT | |
| | | | 1373 | | | | | | | | | | | | | 609 | 1373 | L.F. | CAST IN PLACE CONCRETE CURB – 6" x 18" | |
| | | | | | | | | | | | | | | | | | | | TRAFFIC CONTROL | |
| | | | | | | | | | | | | | 525 | | | 625 | 525 | L.F. | 4 " CONDUIT | |
| | | | | | | | | | | | | | 1 | | | 625 | 1 | EACH | PULL BOX | |
| | | | | | | | | | | | | | 2 | | | 632 | 2 | EACH | VEHICULAR SIGNAL HEAD TYPE A W/ 12" LENS * | INSTALL |
| | | | | | | | | | | | | | 6 | | | 632 | 6 | EACH | VEHICULAR SIGNAL HEAD TYPE B W/ 12" LENS * | INSTALL |
| | | | | | | | | | | | | | 8 | | | 632 | 8 | EACH | PEDESTRAIN SIGNAL TYPE C * | INSTALL |
| | | | | | | | | | | | | | 8 | | | 632 | 8 | EACH | MAST ARM SIGNAL HEAD MOUNT * | INSTALL |
| | | | | | | | | | | | | | 2 | | | 632 | 2 | EACH | SIGNAL SUPPORT, TYPE TC-81.20, DESIGN 1 | |
| | | | | | | | | | | | | | 2 | | | 632 | 2 | EACH | SIGNAL SUPPORT, TYPE TC-81.20, DESIGN 2 | |
| | | | | | | | | | | | | | 1 | | | 632 | 1 | EACH | CONTROLLER * | INSTALL |
| | | | | | | | | | | | | | 4 | | | 632 | 4 | EACH | SIGNAL SUPPORT FOUNDATION | |
| | | | | | | | | | | | | | LUMP | | | 632 | LUMP | LUMP | VIDEO DETECTION SYSTEM * | INSTALL |
| | | | | | | | | | | | | | 4 | | | 632 | 4 | EACH | PEDSTRAIN PUSH BUTTON | |
| | | | | | | | | | | | | | 1 | | | 633 | 1 | EACH | CONTROLLER FOUNDATION AND WORK PAD | |
| | | | | | | | | | | | | 0.06 | | | | 644 | 0.06 | MILE | LANE LINES ,4" WHITE DASHED | |
| | | | | | | | | | | | | 0.12 | | | | 644 | 0.12 | MILE | CENTER LINE, 4" DOUBLE YELLOW, NO PASSING | |
| | | | | | | | | | | | | 397 | | | | 644 | 397 | L.F. | CHANNELIZING LINE | |
| | | | | | | | | | | | | 120 | | | | 644 | 120 | L.F. | STOP LINE | |
| | | | | | | | | | | | | 424 | | | | 644 | 424 | L.F. | CROSSWALK LINE | |
| | | | | | | | | | | | | 14 | | | | 644 | 14 | EACH | LANE ARROW | |
| | | | | | | | | | | | | 7 | | | | 644 | 7 | EACH | WORD ON PAVEMENT | |
| | | | | | | | | | | | | 15 | | | | 644 | 15 | EACH | TRAFFIC SIGNS AND BRACKETS * | INSTALL |
| | | | | | | | | | | | | | | | | | | | STRUCTURE | |
| | | | | LUMP | | | | | | | | | | | | 202 | LUMP | LUMP | STRUCTURE REMOVED | |
| | | | | | | | | | | | LUMP | | | | | 610 | LUMP | LUMP | RETAINING WALL | |
| | | | | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | 614 | LUMP | LUMP | MAINTAINING TRAFFIC | |
| | | | | | | | | | | | | | | | | 619 | LUMP | LUMP | FIELD OFFICE | |
| | | | | | | | | | | | | | | | | 623 | LUMP | LUMP | CONSTRUCTION LAYOUT STAKING | |
| | | | | | | | | | | | | | | | | 624 | LUMP | LUMP | MOBILIZATION | |

* – MATERIALS SUPPLIED BY THE CITY OF MASSILLON BUT INSTALLATION TO BE DONE BY THE CONTRACTOR.

DRAWN BY: FPW | CHECKED BY: SDH

DATE: Dec. 30, 1998 | DATE: Feb. 26, 1999

*Lake Avenue N.W. Widening Plans*

Calculations
City of Massillon
Stark County, Ohio

RT. 30 W. AT THE INDUSTRIAL CROSSROADS OF OHIO RT. 21 RT. 30 E.

THE CITY OF MASSILLON, OHIO

Francis H. Cicchinelli, Jr.
Mayor

| REVISIONS: | |
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ELECTROINIC FILE NAME: 98ST0407.DWG

ACCOUNT NUMBER: 98ST04

## ITEM 301 BITUMINOUS AGGREGATE BASE

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| (Lake Ave. N.W. Sta. 10+41.78 to Sta. 13+62.85)<br>(321.07) (46) (9/12) (1/27) | 410.26 CU YD |
| (Lake Ave. N.W. Sta. 13+62.85 to Sta. 15+10)<br>(147.15) (35) (9/12) (1/27) | 143.06 CU YD |
| (Lake Ave. N.E. Sta. 15+10 to Sta. 15+51)<br>(41) [(35+33.5) /2] (9/12) (1/27) | 39.01 CU YD |
| (Kracker St. N.W. Sta. 20+23 to Sta 21+00)<br>(73) (21) (5/12) (1/27) | 23.66 CU YD |
| (1st St. N.E. Sta. 29+00 to Sta 29+79.69)<br>(79.69) (21) (9/12) (1/27) | 46.49 CU YD |
| (1st St. N.E. Sta. 30+20.34 to Sta 31+00)<br>(79.66) (21) (9/12) (1/27) | 46.47 CU YD |
| (1st St. N.E. Sta. 31+00 to Sta 31+12)<br>(12) (2) (9/12) (1/27) | 0.67 CU YD |
| (N.E. corner of Lake Ave. N.W./S.R. 21 Intersection)<br>(457.79) (9/12) (1/27) | 12.72 CU YD |
| (S.E. corner of Lake Ave. N.W./S.R. 21 Intersection)<br>(1151.48) (9/12) (1/27) | 31.99 CU YD |
| (N.W. corner of Lake Ave. N.W./Kracker St. N.E. Intersection)<br>(51.50) (9/12) (1/27) | 0.79 CU YD |
| (N.E. corner of Lake Ave. N.W./Kracker St. N.E. Intersection)<br>(43.41) (5/12) (1/27) | 0.67 CU YD |
| (N.W. corner of Lake Ave. N.W./1st St. N.E. Intersection)<br>(126.20) (9/12) (1/27) | 3.51 CU YD |
| (S.W. corner of Lake Ave. N.W./1st St. N.E. Intersection)<br>(218.33) (9/12) (1/27) | 6.06 CU YD |
| (N.E. corner of Lake Ave. N.E./1st St. N.E. Intersection)<br>(278.64) (9/12) (1/27) | 7.74 CU YD |
| (S.E. corner of Lake Ave. N.E./1st St. N.E. Intersection)<br>(182.85) (9/12) (1/27) | 5.08 CU YD |
| (N.W. corner of Lake Ave. N.E./Healy St. N.E. Intersection)<br>(48.71) (9/12) (1/27) | 1.35 CU YD |
| TOTAL ITEM 301 = | 779.53 Cu. Yd. |
| USED: | 780 Cu. Yd. |

## ITEM 304 AGGREGATE BASE

| | |
|---|---|
| (Lake Ave. N.W. Sta. 10+41.78 to Sta. 13+62.85)<br>(321.07) (47) (6/12) (1/27) | 279.45 CU YD |
| (Lake Ave. N.W. Sta. 13+62.85 to Sta. 15+10)<br>(147.15) (36) (6/12) (1/27) | 98.10 CU YD |
| (Lake Ave. N.E. Sta. 15+10 to Sta. 15+51)<br>(41) [(36+34.5) /2] (6/12) (1/27) | 26.76 CU YD |
| (Kracker St. N.W. Sta. 20+23 to Sta 21+00)<br>(73) (22) (6/12) (1/27) | 29.74 CU YD |
| (1st St. N.E. Sta. 29+00 to Sta 29+79.69)<br>(79.69) (22) (6/12) (1/27) | 32.47 CU YD |
| (1st St. N.E. Sta. 30+20.34 to Sta 31+00)<br>(79.66) (22) (6/12) (1/27) | 32.45 CU YD |
| (1st St. N.E. Sta. 31+00 to Sta 31+12)<br>(12) (2.5) (6/12) (1/27) | 0.56 CU YD |
| (N.E. corner of Lake Ave. N.W./S.R. 21 Intersection)<br>(487.82) (6/12) (1/27) | 9.03 CU YD |
| (S.E. corner of Lake Ave. N.W./S.R. 21 Intersection)<br>(1193.52) (6/12) (1/27) | 22.10 CU YD |
| (N.W. corner of Lake Ave. N.W./Kracker St. N.E. Intersection)<br>(63.71) (6/12) (1/27) | 1.18 CU YD |

CONTINUED: Item 304 Aggregate Base

| | |
|---|---|
| (N.E. corner of Lake Ave. N.W./Kracker St. N.E. Intersection)<br>(54.83) (6/12) (1/27) | 1.02 CU YD |
| (N.W. corner of Lake Ave. N.W./1st St. N.E. Intersection)<br>(146.97) (6/12) (1/27) | 2.72 CU YD |
| (S.W. corner of Lake Ave. N.W./1st St. N.E. Intersection)<br>(242.11) (6/12) (1/27) | 4.48 CU YD |
| (N.E. corner of Lake Ave. N.E./1st St. N.E. Intersection)<br>(304.96) (6/12) (1/27) | 5.65 CU YD |
| (S.E. corner of Lake Ave. N.E./1st St. N.E. Intersection)<br>(206.50) (6/12) (1/27) | 3.82 CU YD |
| (N.W. corner of Lake Ave. N.E./Healy St. N.E. Intersection)<br>(59.02) (6/12) (1/27) | 1.09 CU YD |
| TOTAL ITEM 304 = | 550.62 Cu. Yd. |
| USED: | 551 Cu. Yd. |

## ITEM 402 ASPHALT CONCRETE

| | |
|---|---|
| (Lake Ave. N.W. Sta. 10+41.78 to Sta. 13+62.85)<br>(321.07) (46) (1.5/12) (1/27) | 68.38 CU YD |
| (Lake Ave. N.W. Sta. 13+62.85 to Sta. 15+10)<br>(147.15) (35) (1.5/12) (1/27) | 23.84 CU YD |
| (Lake Ave. N.E. Sta. 15+10 to Sta. 15+51)<br>(41) [(35+33.5) /2] (1.5/12) (1/27) | 6.50 CU YD |
| (Kracker St. N.W. Sta. 20+23 to Sta 21+00)<br>(73) (21) (1.5/12) (1/27) | 7.10 CU YD |
| (1st St. N.E. Sta. 29+00 to Sta 29+79.69)<br>(79.69) (21) (1.5/12) (1/27) | 7.75 CU YD |
| (1st St. N.E. Sta. 30+20.34 to Sta 31+00)<br>(79.66) (21) (1.5/12) (1/27) | 7.74 CU YD |
| (1st St. N.E. Sta. 31+00 to Sta 31+12)<br>(12) (2) (1.5/12) (1/27) | 0.11 CU YD |
| (N.E. corner of Lake Ave. N.W./S.R. 21 Intersection)<br>(457.79) (1.5/12) (1/27) | 2.12 CU YD |
| (S.E. corner of Lake Ave. N.W./S.R. 21 Intersection)<br>(1151.48) (1.5/12) (1/27) | 5.33 CU YD |
| (N.W. corner of Lake Ave. N.W./Kracker St. N.E. Intersection)<br>(51.50) (1.5/12) (1/27) | 0.24 CU YD |
| (N.E. corner of Lake Ave. N.W./Kracker St. N.E. Intersection)<br>(43.41) (1.5/12) (1/27) | 0.20 CU YD |
| (N.W. corner of Lake Ave. N.W./1st St. N.E. Intersection)<br>(126.20) (1.5/12) (1/27) | 0.58 CU YD |
| (S.W. corner of Lake Ave. N.W./1st St. N.E. Intersection)<br>(218.33) (1.5/12) (1/27) | 1.01 CU YD |
| (N.E. corner of Lake Ave. N.E./1st St. N.E. Intersection)<br>(278.64) (1.5/12) (1/27) | 1.29 CU YD |
| (S.E. corner of Lake Ave. N.E./1st St. N.E. Intersection)<br>(182.85) (1.5/12) (1/27) | 0.85 CU YD |
| (N.W. corner of Lake Ave. N.E./Healy St. N.E. Intersection)<br>(48.71) (1.5/12) (1/27) | 0.23 CU YD |
| TOTAL ITEM 402 = | 133.27 Cu. Yd. |
| USED: | 134 Cu. Yd. |

## ITEM 404 ASPHALT CONCRETE

| | |
|---|---|
| (Lake Ave. N.W. Sta. 10+41.78 to Sta. 13+62.85)<br>(321.07) (46) (1.5/12) (1/27) | 68.38 CU YD |
| (Lake Ave. N.W. Sta. 13+62.85 to Sta. 15+10)<br>(147.15) (35) (1.5/12) (1/27) | 23.84 CU YD |

CONTINUED: Item 402 Asphalt Concrete

| | |
|---|---|
| (Lake Ave. N.E. Sta. 15+10 to Sta. 15+51)<br>(41) [(35+33.5) /2] (1.5/12) (1/27) | 6.50 CU YD |
| (Kracker St. N.W. Sta. 20+23 to Sta 21+00)<br>(73) (21) (1.5/12) (1/27) | 7.10 CU YD |
| (1st St. N.E. Sta. 29+00 to Sta 29+79.69)<br>(79.69) (21) (1.5/12) (1/27) | 7.75 CU YD |
| (1st St. N.E. Sta. 30+20.34 to Sta 31+00)<br>(79.66) (21) (1.5/12) (1/27) | 7.74 CU YD |
| (1st St. N.E. Sta. 31+00 to Sta 31+12)<br>(12) (2) (1.5/12) (1/27) | 0.11 CU YD |
| (N.E. corner of Lake Ave. N.W./S.R. 21 Intersection)<br>(457.79) (1.5/12) (1/27) | 2.12 CU YD |
| (S.E. corner of Lake Ave. N.W./S.R. 21 Intersection)<br>(1151.48) (1.5/12) (1/27) | 5.33 CU YD |
| (N.W. corner of Lake Ave. N.W./Kracker St. N.E. Intersection)<br>(51.50) (1.5/12) (1/27) | 0.24 CU YD |
| (N.E. corner of Lake Ave. N.W./Kracker St. N.E. Intersection)<br>(43.41) (1.5/12) (1/27) | 0.20 CU YD |
| (N.W. corner of Lake Ave. N.W./1st St. N.E. Intersection)<br>(126.20) (1.5/12) (1/27) | 0.58 CU YD |
| (S.W. corner of Lake Ave. N.W./1st St. N.E. Intersection)<br>(218.33) (1.5/12) (1/27) | 1.01 CU YD |
| (N.E. corner of Lake Ave. N.E./1st St. N.E. Intersection)<br>(278.64) (1.5/12) (1/27) | 1.29 CU YD |
| (S.E. corner of Lake Ave. N.E./1st St. N.E. Intersection)<br>(182.85) (1.5/12) (1/27) | 0.85 CU YD |
| (N.W. corner of Lake Ave. N.E./Healy St. N.E. Intersection)<br>(48.71) (1.5/12) (1/27) | 0.23 CU YD |
| TOTAL ITEM 404 = | 133.27 Cu. Yd. |
| USED: | 134 Cu. Yd. |

## ITEM 407 TACK COAT

| | |
|---|---|
| (Lake Ave. N.W. Sta. 10+41.78 to Sta. 13+62.85)<br>(321.07) (46) (0.08) (1/9) | 131.28 GAL |
| (Lake Ave. N.W. Sta. 13+62.85 to Sta. 15+10)<br>(147.15) (35) (0.08) (1/9) | 45.78 GAL |
| (Lake Ave. N.E. Sta. 15+10 to Sta. 15+51)<br>(41) [(35+33.5) /2] (0.08) (1/9) | 12.48 GAL |
| (Kracker St. N.W. Sta. 20+23 to Sta 21+00)<br>(73) (21) (0.08) (1/9) | 13.63 GAL |
| (1st St. N.E. Sta. 29+00 to Sta 29+79.69)<br>(79.69) (21) (0.08) (1/9) | 14.88 GAL |
| (1st St. N.E. Sta. 30+20.34 to Sta 31+00)<br>(79.66) (21) (0.08) (1/9) | 14.87 GAL |
| (1st St. N.E. Sta. 31+00 to Sta 31+12)<br>(12) (2) (0.08) (1/9) | 0.21 GAL |
| (N.E. corner of Lake Ave. N.W./S.R. 21 Intersection)<br>(457.79) (0.08) (1/9) | 4.07 GAL |
| (S.E. corner of Lake Ave. N.W./S.R. 21 Intersection)<br>(1151.48) (0.08) (1/9) | 10.24 GAL |
| (N.W. corner of Lake Ave. N.W./Kracker St. N.E. Intersection)<br>(51.50) (0.08) (1/9) | 0.46 GAL |
| (N.E. corner of Lake Ave. N.W./Kracker St. N.E. Intersection)<br>(43.41) (0.08) (1/9) | 0.39 GAL |
| Total This Sheet = | 248.29 GAL |

CONTINUED: Item 407 Tack Coat to Sheet No. 9

*Lake Avenue N. W. Widening Plans*

Calculations
City of Massillon
Stark County, Ohio

| DRAWN BY: | CHECKED BY: |
|---|---|
| FPW | SDH |
| DATE: Dec. 30, 1998 | DATE: Feb. 26, 1999 |

RT. 30 W. — AT THE INDUSTRIAL CROSSROADS OF OHIO — RT. 30 E. / RT. 21

THE CITY OF MASSILLON, OHIO

Francis H. Cicchinelli, Jr.
Mayor

REVISIONS:

| DATE | DESCRIPTION |
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| | |

ELECTROINIC FILE NAME:
98ST0408.DWG

ACCOUNT NUMBER
98ST04

CONTINUED: Item 407 Tack Coat from Sheet No. 8

(N.W. corner of Lake Ave. N.W./1st St. N.E. Intersection)
(126.20) (0.08) (1/9) 1.12 GAL

(S.W. corner of Lake Ave. N.W./1st St. N.E. Intersection)
(218.33) (0.08) (1/9) 1.94 GAL

(N.E. corner of Lake Ave. N.E./1st St. N.E. Intersection)
(278.64) (0.08) (1/9) 2.48 GAL

(S.E. corner of Lake Ave. N.E./1st St. N.E. Intersection)
(182.85) (0.08) (1/9) 1.63 GAL

(N.W. corner of Lake Ave. N.E./Healy St. N.E. Intersection)
(48.71) (0.08) (1/9) 0.43 GAL

Total This Sheet = 7.60 GAL
Total Sheet No. 8 = 248.29 GAL

TOTAL ITEM 407 = 255.89 GAL
USED: 256 GAL

## ITEM 408 PRIME COAT

(Lake Ave. N.W. Sta. 10+41.78 to Sta. 13+62.85)
(321.07) (46) (0.40) (1/9) 656.41 GAL

(Lake Ave. N.W. Sta. 13+62.85 to Sta. 15+10)
(147.15) (35) (0.40) (1/9) 228.90

(Lake Ave. N.E. Sta. 15+10 to Sta. 15+51)
(41) [(35+33.5) /2] (0.40) (1/9) 62.41 GAL

(Kracker St. N.W. Sta. 20+23 to Sta 21+00)
(73) (21) (0.40) (1/9) 68.13 GAL

(1st St. N.E. Sta. 29+00 to Sta 29+79.69)
(79.69) (21) (0.40) (1/9) 74.38

(1st St. N.E. Sta. 30+20.34 to Sta 31+00)
(79.66) (21) (0.40) (1/9) 74.35 GAL

(1st St. N.E. Sta. 31+00 to Sta 31+12)
(12) (2) (0.40) (1/9) 1.07 GAL

(N.E. corner of Lake Ave. N.W./S.R. 21 Intersection)
(457.79) (0.40) (1/9) 20.35 GAL

(S.E. corner of Lake Ave. N.W./S.R. 21 Intersection)
(1151.48) (0.40) (1/9) 51.18 GAL

(N.W. corner of Lake Ave. N.W./Kracker St. N.E. Intersection)
(51.50) (0.40) (1/9) 2.29 GAL

(N.E. corner of Lake Ave. N.W./Kracker St. N.E. Intersection)
(43.41) (0.40) (1/9) 1.93 GAL.

(N.W. corner of Lake Ave. N.W./1st St. N.E. Intersection)
(126.20) (0.40) (1/9) 5.61 GAL.

(S.W. corner of Lake Ave. N.W./1st St. N.E. Intersection)
(218.33) (0.40) (1/9) 9.70 GAL

(N.E. corner of Lake Ave. N.E./1st St. N.E. Intersection)
(278.64) (0.40) (1/9) 12.38 GAL

(S.E. corner of Lake Ave. N.E./1st St. N.E. Intersection)
(182.85) (0.40) (1/9) 8.13 GAL

(N.W. corner of Lake Ave. N.E./Healy St. N.E. Intersection)
(48.71) (0.40) (1/9) 2.16 GAL

TOTAL ITEM 408 = 1,279.38 GAL
USED: 1,280 GAL

## ITEM 608 CONCRETE WALKS

Lake Ave. N.W. Right

SW corner of Lake Ave. NW/1st St. NE
(3.90) (5) 19.50 SQ FT

CONTINUED: Item 608 Concrete Walk

Lake Ave. N.W. Left

NW corner of Lake Ave. NW/S.R. 21
(7.29) (5) 36.45 SQ FT

Lake Ave. N.E. Right

SE corner of Lake Ave. NE/1st St. NE
(12.22) (5) 61.10 SQ FT

Lake Ave. NE Sta. 14+00 to Sta. 15+51
(151) (5) 755.00 SQ FT

Lake Ave. N.E. Left

NE corner of Lake Ave. NE/1st St. NE
(42.11) (5) 210.55 SQ FT

Lake Ave. NE Sta. 14+15.53 to Sta. 15+49.27
(133.74) (5) 668.70 SQ FT

1st St. N.E. Right

1st St. NE Sta. 29+00 to 29+67.39
(67.39) (5) 336.95 SQ FT

1st St. NE Sta. 30+56.43 to Sta. 31+12
(55.57) (5) 277.85 SQ FT

1st St. N.E. Left

1st St. NE Sta. 29+00 to Sta. 29+59.19
(59.19) (5) 295.95 SQ FT

1st St. NE Sta. 30+33.92 to Sta. 31+00
(66.08) (5) 330.40 SQ FT

TOTAL ITEM 608 = 2,992.45 SQ FT
USED: 2,993 SQ FT

## ITEM 609 CAST IN PLACE CONCRETE CURB – 6" X 18"

Lake Ave. N.W. Right

| | |
|---|---|
| SE Intersection return of Lake Ave. NW/S.R. 21 | 84.08 LIN FT |
| Sta. 11+06.12 to Sta. 13+13.31 | 207.19 LIN FT |
| SW Intersection return of Lake Ave. NW/1st St. NE | 47.56 LIN FT |

Lake Ave. N.W. Left

| | |
|---|---|
| NE Intersection return of Lake Ave. NW/S.R. 21 | 60.05 LIN FT |
| Sta. 10+75.87 to Sta. 11+26.07 | 50.20 LIN FT |
| NW Intersection return of Lake Ave. NW/Kracker St. NW | 24.42 LIN FT |
| NE Intersection return of Lake Ave. NW/Kracker St. NW | 22.84 LIN FT |
| Sta. 11+77.14 to Sta. 13+25.01 | 147.87 LIN FT |
| NW Intersection return of Lake Ave. NW/1st St. NE | 41.54 LIN FT |

Lake Ave. N.E. Right

| | |
|---|---|
| SE Intersection return of Lake Ave. NE/1st St. NE | 47.29 LIN FT |
| Sta. 14+07.05 to Sta. 15+51 | 143.95 LIN FT |

Lake Ave. N.E. Left

| | |
|---|---|
| NE Intersection return of Lake Ave. NE/1st St. NE | 52.64 LIN FT |
| Sta. 14+15.53 to Sta. 15+34.80 | 119.27 LIN FT |
| SW Intersection return of Lake Ave. NE/Healy St. NE | 20.62 LIN FT |

Kracker St. N.W. Left

Sta. 20+39.47 to Sta. 20+49.47 10.00 LIN FT

1st St. N.E. Right

| | |
|---|---|
| Sta. 29+00 to Sta. 29+52.19 | 52.19 LIN FT |
| Sta. 30+56.43 to Sta. 31+12 | 55.57 LIN FT |

1st St. N.E. Left

| | |
|---|---|
| Sta. 29+00 to Sta. 29+47.04 | 47.04 LIN FT |
| Sta. 30+45.48 to Sta. 31+00 | 54.52 LIN FT |

TOTAL ITEM 609 = 1,372.92 LIN FT
USED: 1,373 LIN FT

DRAWN BY: FPW | CHECKED BY: SDH
DATE: Dec. 30, 1998 | DATE: Feb. 26, 1999

*Lake Avenue N.W. Widening Plans*

Calculations
City of Massillon
Stark County, Ohio

RT. 30 W. AT THE INDUSTRIAL | RT. 30 E. CROSSROADS OF OHIO | RT. 21
THE CITY OF MASSILLON, OHIO

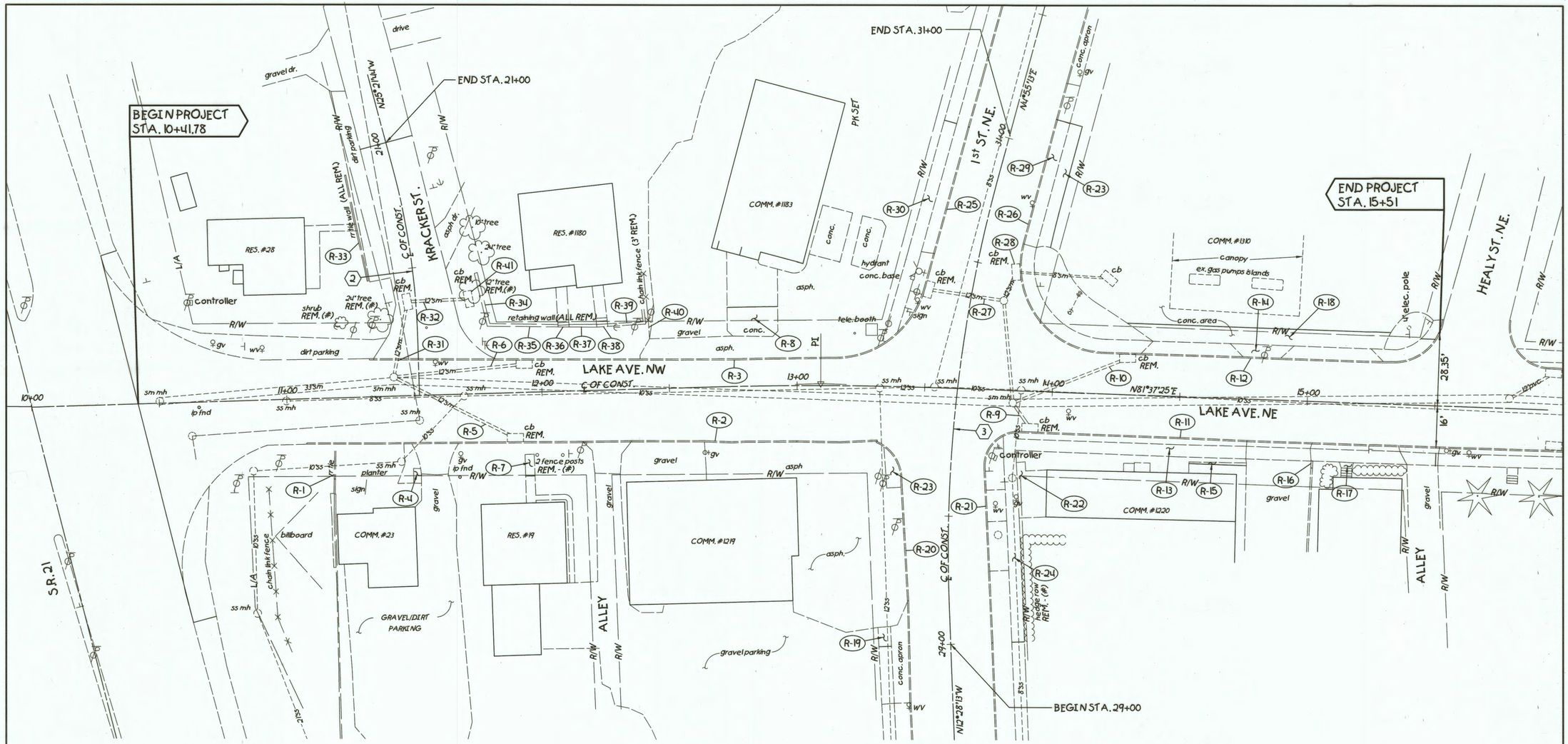
Francis H. Cicchinelli, Jr.
Mayor

REVISIONS:

| DATE | DESCRIPTION |
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ELECTRONIC FILE NAME: 98ST0409.DWG

ACCOUNT NUMBER: 98ST04




| REF. NO. | STATION FROM | STATION TO | SIDE | 202 PIPE REMOVED 24" AND UNDER L.F. | 202 CATCH BASIN REMOVED EACH | 202 CONCRETE REMOVED S.Y. | 202 CONCRETE CURB REMOVED L.F. | 202 SIDEWALK REMOVED S.F. | 202 STRUCTURE REMOVED LUMP |
|---|---|---|---|---|---|---|---|---|---|
| R-1 | 11+18 | | RT. | | | | | | LUMP |
| R-2 | 11+07 | 13+32 | RT. | | | | 225 | | |
| R-3 | 11+33 | 13+35 | LT. | | | | 204 | | |
| R-4 | 11+49 | 11+53 | RT. | | | 1 | | | |
| R-5 | 11+42 | 11+89 | RT./LT. | 54 | 1 | | | | |
| R-6 | 11+42 | 11+94 | LT. | 52 | 1 | | | | |
| R-7 | 11+92 | 11+96 | RT. | | | | | 31 | |
| R-8 | 12+74 | 12+93 | LT. | | | 30 | | | |
| R-9 | 13+85 | 13+91 | RT. | 12 | 1 | | | | |
| R-10 | 13+85 | 14+29 | LT. | 49 | 1 | | | | |
| R-11 | 13+90 | 15+51 | RT. | | | | 161 | | |
| R-12 | 14+20 | 15+51 | LT. | | | | 132 | | |
| R-13 | 13+86 | 15+51 | RT. | | | | | 778 | |
| R-14 | 14+20 | 15+51 | LT. | | | | | 618 | |
| R-15 | 14+54 | 14+77 | 20 | | | | | 20 | |
| R-16 | 14+52 | | RT. | | | | | | LUMP |
| R-17 | 15+16 | | RT. | | | 1 | | | |
| R-18 | 14+29 | 15+32 | LT. | | | 71 | | | |
| R-19 | 29+00 | 29+08 | LT. | | | | | 38 | |
| R-20 | 29+00 | 29+77 | LT. | | | | 84 | | |
| R-21 | 29+00 | 29+86 | RT. | | | | 91 | | |

| REF. NO. | STATION FROM | STATION TO | SIDE | 202 PIPE REMOVED 24" AND UNDER L.F. | 202 CATCH BASIN REMOVED EACH | 202 CONCRETE REMOVED S.Y. | 202 CONCRETE CURB REMOVED L.F. | 202 SIDEWALK REMOVED S.F. | 202 STRUCTURE REMOVED LUMP |
|---|---|---|---|---|---|---|---|---|---|
| R-22 | 29+16 | 29+71 | RT. | | | 10 | | | |
| R-23 | 29+61 | 29+77 | LT. | | | 8 | | | |
| R-24 | 29+00 | 29+81 | RT. | | | | | 395 | |
| R-25 | 30+14 | 31+00 | LT. | | | | 93 | | |
| R-26 | 30+22 | 31+12 | RT. | | | | 112 | | |
| R-27 | 30+37 | | LT./RT. | 30 | 1 | | | | |
| R-28 | 30+48 | | RT. | | 1 | | | | |
| R-29 | 30+22 | 31+12 | RT. | | | | | 552 | |
| R-30 | 30+15 | 31+00 | LT. | | | | | 424 | |
| R-31 | 20+07 | 20+37 | LT. | 30 | 1 | | | | |
| R-32 | 20+37 | | RT./LT. | 24 | 1 | | | | |
| R-33 | 20+47 | 20+92 | RT. | | | | | | LUMP |
| R-34 | 20+26 | 20+45 | RT. | | | | | | LUMP |
| R-35 | 11+79 | 12+07 | LT. | | | | | | LUMP |
| R-36 | 12+09 | | LT. | | | | | | LUMP |
| R-37 | 12+11 | 12+22 | LT. | | | | | | LUMP |
| R-38 | 12+24 | | LT. | | | | | | LUMP |
| R-39 | 12+26 | 12+42 | LT. | | | | | | LUMP |
| R-40 | 12+43 | | LT. | | | | | | LUMP |
| R-41 | 20+38 | | RT. | | | | | | |
| TOTAL | | | | 251 | 8 | 121 | 1102 | 2856 | LUMP |

LEGEND:

# - WORK SHALL BE INCLUDED UNDER ITEM 201 CLEARING AND GRUBBING.

NOTES:

1. FOR DRIVE REMOVAL INFORMATION SEE SHEET No. 23.
2. CONFLICTING UTILITIES NOT PUBLICLY OWNED SHALL BE MOVED AT OWNERS EXPENSE, SO NOT TO DISTURB OR DELAY CONSTRUCTION. CONTRACTOR SHALL BE RESPONIBLE FOR CONTACTING UTILITY OWNERS BEFORE CONTRUCTION STARTS.

NW NE SW SE N

20 10 0 20
HORIZONTAL SCALE IN FEET

| DRAWN BY: | CHECKED BY: |
|---|---|
| FPW | SDH |
| DATE: Dec. 30, 1998 | DATE: Feb. 26, 1999 |

# Lake Avenue N.W. Widening Plans

Removal Plan (Lake Ave. 10+00 to 15+50/Kracker St. 20+00 to 21+50/1st St. 28+50 to 31+50)
City of Massillon
Stark County, Ohio

RT. 30 W. AT THE INDUSTRIAL RT. 21 RT. 30 E. CROSSROADS OF OHIO

THE CITY OF MASSILLON, OHIO

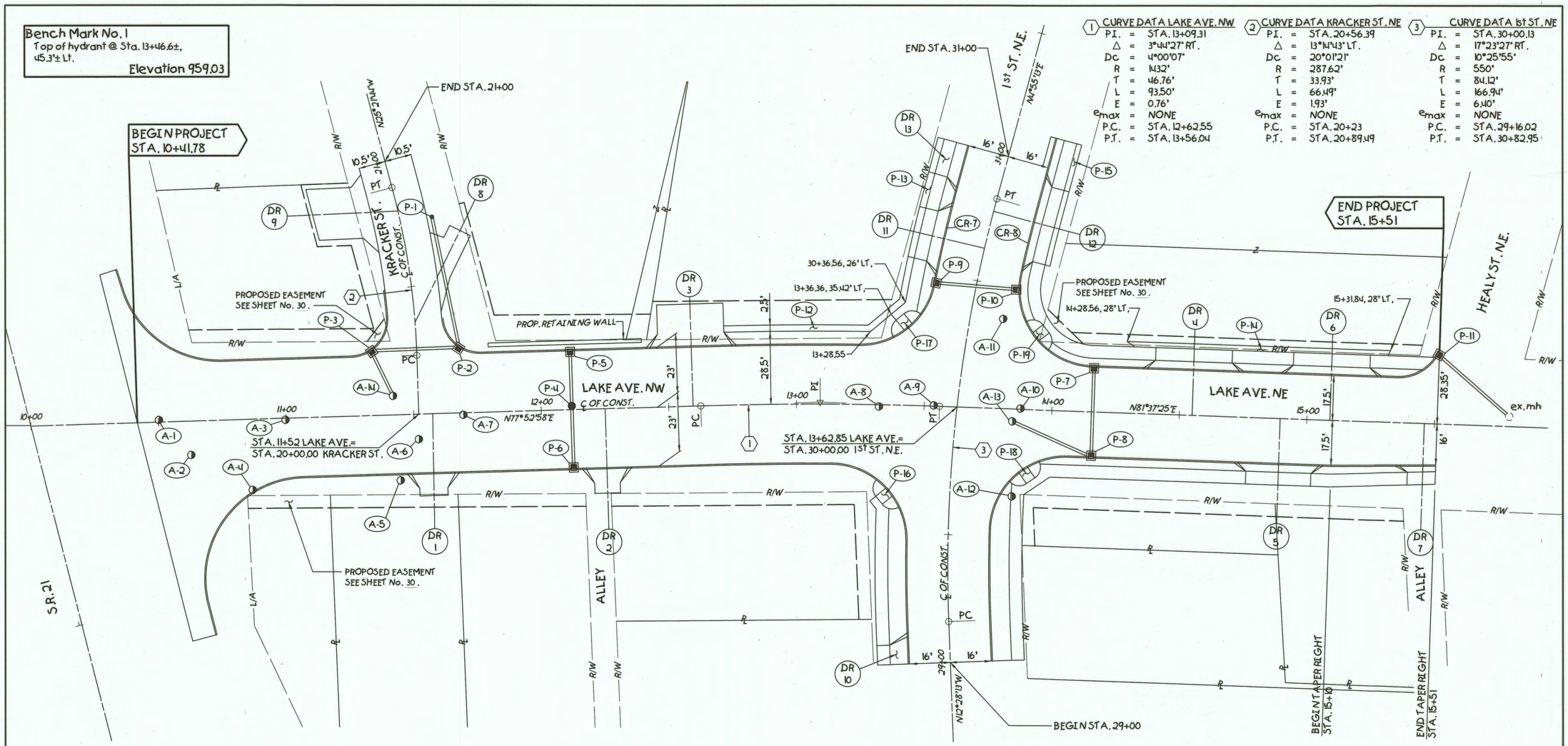
Francis H. Cicchinelli, Jr.
Mayor

REVISIONS:

| DATE | DESCRIPTION |
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ELECTRONIC FILE NAME: 98ST04010.DWG

ACCOUNT NUMBER: 98ST04




| ① CURVE DATA LAKE AVE. NW | | ② CURVE DATA KRACKER ST. NE | | ③ CURVE DATA 1st ST. NE | |
|---|---|---|---|---|---|
| P.I. = | STA. 13+09.31 | P.I. = | STA. 20+56.39 | P.I. = | STA. 30+00.13 |
| Δ = | 3°44'27" RT. | Δ = | 13°44'43" LT. | Δ = | 17°23'27" RT. |
| Dc = | 4°00'07" | Dc = | 20°01'21" | Dc = | 10°25'55" |
| R = | 1432' | R = | 287.62' | R = | 550' |
| T = | 46.76' | T = | 33.93' | T = | 84.12' |
| L = | 93.50' | L = | 66.49' | L = | 166.94' |
| E = | 0.76' | E = | 1.93' | E = | 6.40' |
| emax = | NONE | emax = | NONE | emax = | NONE |
| P.C. = | STA. 12+62.55 | P.C. = | STA. 20+23 | P.C. = | STA. 29+16.02 |
| P.T. = | STA. 13+56.04 | P.T. = | STA. 20+89.49 | P.T. = | STA. 30+82.95 |

| REF. NO. | STATION FROM | STATION TO | SIDE | 452 PLAIN PORTLAND CEMENT CONCRETE PAVEMENT L.F. | 603 12" CONCRETE CONDUIT, TYPE B L.F. | 604 MANHOLE RECONSTRUCT TP GRADE EACH | 604 SIDE DITCH INLET TYPE, I-1 EACH | 604 CATCH BASIN TYPE, 3A EACH | 604 MANHOLE TYPE, 3 EACH | 608 CURB RAMPS TYPE, 1 EACH |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1 | | | | |
| A-1 | 10+50 | | LT. | | | 1 | | | | |
| A-2 | 10+63 | | RT. | | | 1 | | | | |
| A-3 | 11+00 | | RT. | | | 1 | | | | |
| A-4 | 10+86 | | RT. | | | 1 | | | | |
| A-5 | 11+44 | | RT. | | | 1 | | | | |
| A-6 | 11+52 | | RT. | | | 1 | | | | |
| A-7 | 11+70 | | RT. | | | 1 | | | | |
| A-8 | 13+32 | | RT. | | | 1 | | | | |
| A-9 | 13+54 | | LT. | | | 1 | | | | |
| A-10 | 13+88 | | LT. | | | 1 | | | | |
| A-11 | 13+80 | | LT. | | | 1 | | | | |
| A-12 | 13+86 | | RT. | | | 1 | | | | |
| A-13 | 13+85 | | RT. | | | 1 | | | | |
| A-14 | 11+42 | | LT. | | | 1 | | | | |
| P-1 | 20+26 | 20+75 | RT. | | 52 | | 1 | | | |
| P-2 | 20+26 | | RT./LT. | | 35 | | | 1 | | |
| P-3 | 20+08 | 20+26 | LT. | | 20 | | | 1 | | |
| P-4 | 12+12 | | LT. | | | | | | 1 | |
| P-5 | 12+12 | | LT. | | 22 | | | 1 | | |
| P-6 | 12+12 | | RT./LT. | | 25 | | | 1 | | |
| | | | | | | | | | | |

| REF. NO. | STATION FROM | STATION TO | SIDE | 452 PLAIN PORTLAND CEMENT CONCRETE PAVEMENT S.Y. | 603 12" CONCRETE CONDUIT, TYPE B L.F. | 604 MANHOLE RECONSTRUCT TP GRADE EACH | 604 SIDE DITCH INLET TYPE, I-1 EACH | 604 CATCH BASIN TYPE, 3A EACH | 604 MANHOLE TYPE, 3 EACH | 608 CURB RAMPS TYPE, 1 EACH |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | |
| P-7 | 14+16 | | RT./LT. | | 35 | | | 1 | | |
| P-8 | 13+85 | 14+16 | RT. | | 34 | | | 1 | | |
| P-9 | 30+46 | 30+50 | RT./LT. | | 33 | | | 1 | | |
| P-10 | 30+50 | | RT. | | | | | 1 | | |
| P-11 | 15+51 | 15+78 | LT. | | 37 | | | 1 | | |
| P-12 | 12+72 | 30+54 | LT. | 26 | | | | | | |
| P-13 | 30+79 | 30+88 | LT | 4 | | | | | | |
| P-14 | 14+29 | 15+32 | LT. | 23 | | | | | | |
| P-15 | 30+92 | 31+12 | RT. | 5 | | | | | | |
| P-16 | 13+37 | | RT. | | | | | | | 1 |
| P-17 | 13+43 | | LT. | | | | | | | 1 |
| P-18 | 13+89 | | RT. | | | | | | | 1 |
| P-19 | 13+92 | | LT. | | | | | | | 1 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| TOTAL | | | | 58 | 293 | 14 | 1 | 9 | 1 | 4 |

NOTES:

1. FOR DRIVE REPLACEMENT INFORMATION SEE SHEET No. 23
2. CONFLICTING UTILITIES NOT PUBLICLY OWNED SHALL BE MOVED AT OWNERS EXPENSE, SO NOT TO DISTURB OR DELAY CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING UTILITY OWNERS BEFORE CONSTRUCTION STARTS.

NW NE SW SE N

20 10 0 20
HORIZONTAL SCALE IN FEET

| DRAWN BY: | CHECKED BY: |
|---|---|
| FPW | SDH |
| DATE: Dec. 30, 1998 | DATE: Feb. 26, 1999 |

# Lake Avenue N.W. Widening Plans

Proposed Plan(Lake Ave. 10+00 to 15+50/Kracker St. 20+00 to 21+50/1st St. 28+50 to 31+50)
City of Massillon
Stark County, Ohio

RT. 30 W. AT THE INDUSTRIAL RT. 21 — RT. 30 E. CROSSROADS OF OHIO

THE CITY OF MASSILLON, OHIO

Francis H. Cicchinelli, Jr.
Mayor

REVISIONS:

| DATE | DESCRIPTION |
|---|---|
| | |

ELECTRONIC FILE NAME: 98ST0411.DWG

ACCOUNT NUMBER 98ST04

Bench Mark No. 1
Top of hydrant @ Sta. 13+46.6±, 45.3'± Lt.
Elevation 959.03

| ① CURVE DATA | | ② CURVE DATA | | ③ CURVE DATA | |
|---|---|---|---|---|---|
| P.I. | = STA. 13+09.31 | P.I. | = STA. 20+56.39 | P.I. | = STA. 30+00.13 |
| Δ | = 3°44'27" RT. | Δ | = 13°14'43" LT. | Δ | = 17°23'27" RT. |
| Dc | = 4°00'07" | Dc | = 20°01'21" | Dc | = 10°25'55" |
| R | = 1432' | R | = 287.62' | R | = 550' |
| T | = 46.76' | T | = 33.93' | T | = 84.12' |
| L | = 93.50' | L | = 66.49' | L | = 166.94' |
| E | = 0.76' | E | = 1.93' | E | = 6.40' |
| emax | = NONE | emax | = NONE | emax | = NONE |
| P.C. | = STA. 12+62.55 | P.C. | = STA. 20+23 | P.C. | = STA. 29+16.02 |
| P.T. | = STA. 13+56.04 | P.T. | = STA. 20+89.49 | P.T. | = STA. 30+82.95 |

BEGIN PROJECT STA. 10+41.78

END STA. 21+00

END STA. 31+00

END PROJECT STA. 15+51

KRACKER ST.

LAKE AVE. NW

LAKE AVE. NE

1st ST. N.E.

HEALY ST. N.E.

ALLEY

SR. 21

STA. 11+52 LAKE AVE. = STA. 20+00.00 KRACKER ST.

STA. 13+62.85 LAKE AVE. = STA. 30+00.00 1st ST. N.E.

BEGIN STA. 29+00

BEGIN TAPER RIGHT STA. 15+10

END TAPER RIGHT STA. 15+51

NOTES:

1. THIS SHEET SHOWS THE EXISTING TOPO COMPARED TO THE PROPOSED IMPROVEMENT.

NW NE SW SE N

20 10 0 20
HORIZONTAL SCALE IN FEET

| DRAWN BY: | CHECKED BY: |
|---|---|
| FPW | SDH |
| DATE: Dec. 30, 1998 | DATE: Feb. 26, 1999 |

# Lake Avenue N.W. Widening Plans

Plan (Lake Ave. 10+00 to 15+50/Kracker St. 20+00 to 21+50/1st St. 28+50 to 31+50)
City of Massillon
Stark County, Ohio

RT. 30 W. AT THE INDUSTRIAL CROSSROADS OF OHIO — RT. 30 E. RT. 21

THE CITY OF MASSILLON, OHIO

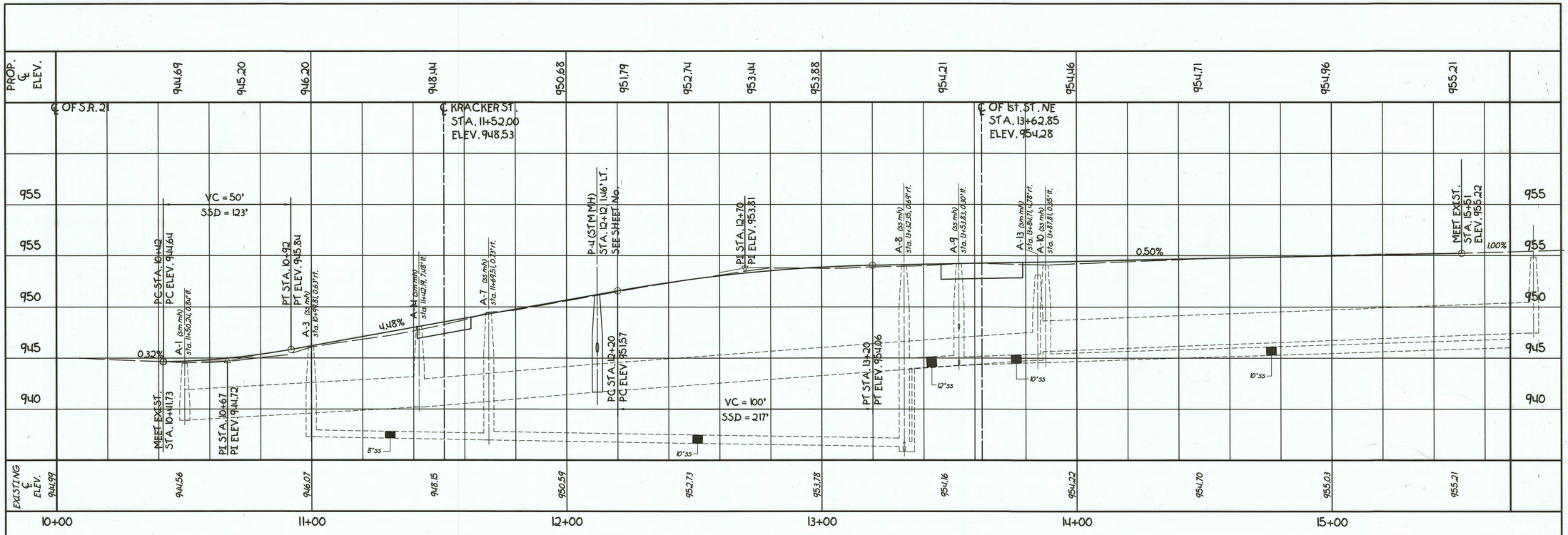
Francis H. Cicchinelli, Jr.
Mayor

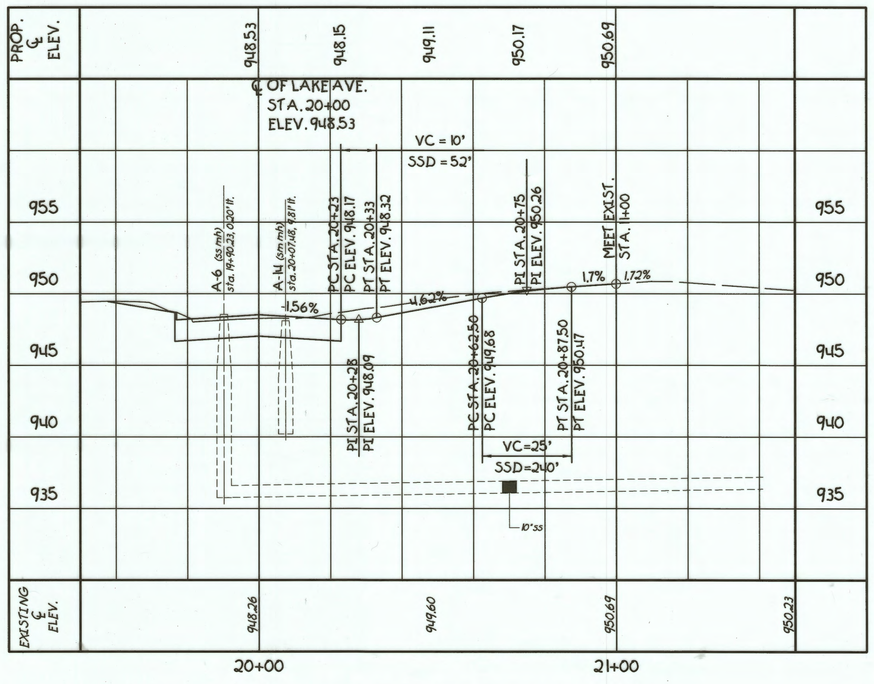
REVISIONS:

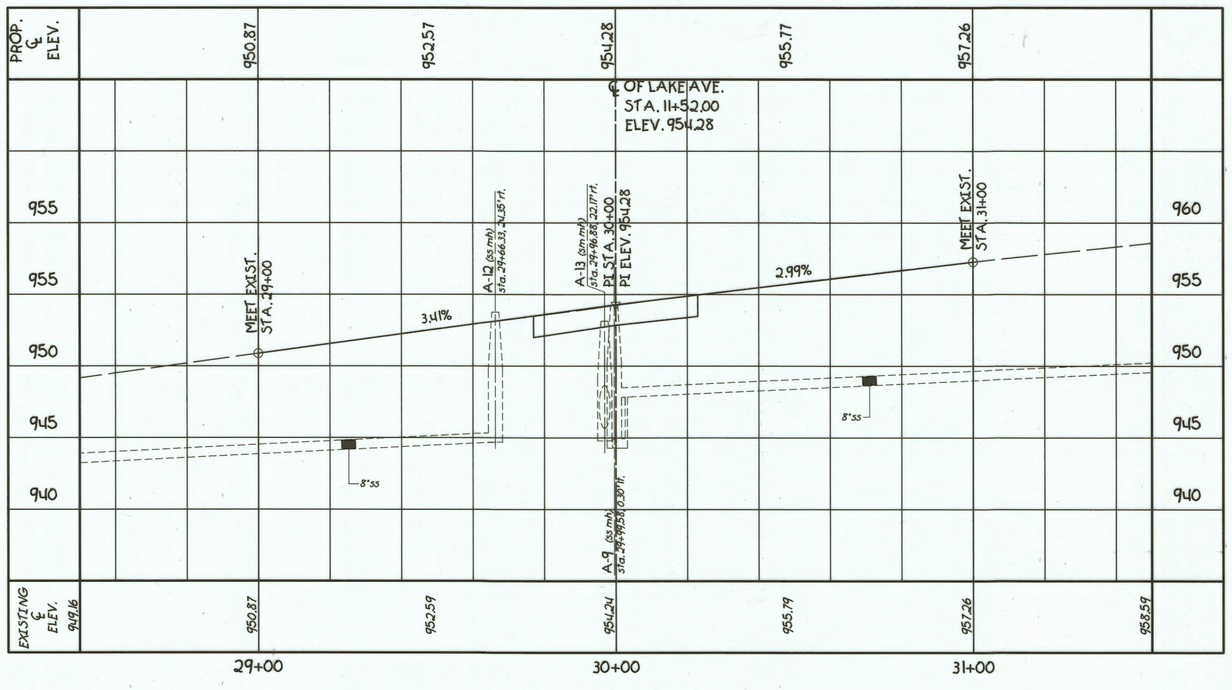
| DATE | DESCRIPTION |
|---|---|
| | |

ELECTROINIC FILE NAME: 98ST0412.DWG

ACCOUNT NUMBER 98ST04




# Lake Avenue N. W. Widening Plans

Profiles(Lake Ave. 10+00 to 15+50/Kracker St. 20+00 to 21+50/1st St. 28+50 to 31+50)
City of Massillon
Stark County, Ohio

HORIZONTAL SCALE IN FEET

| DRAWN BY: | CHECKED BY: |
|---|---|
| FPW | SDH |
| DATE: Dec. 30, 1998 | DATE: Feb. 26, 1999 |

THE CITY OF MASSILLON, OHIO

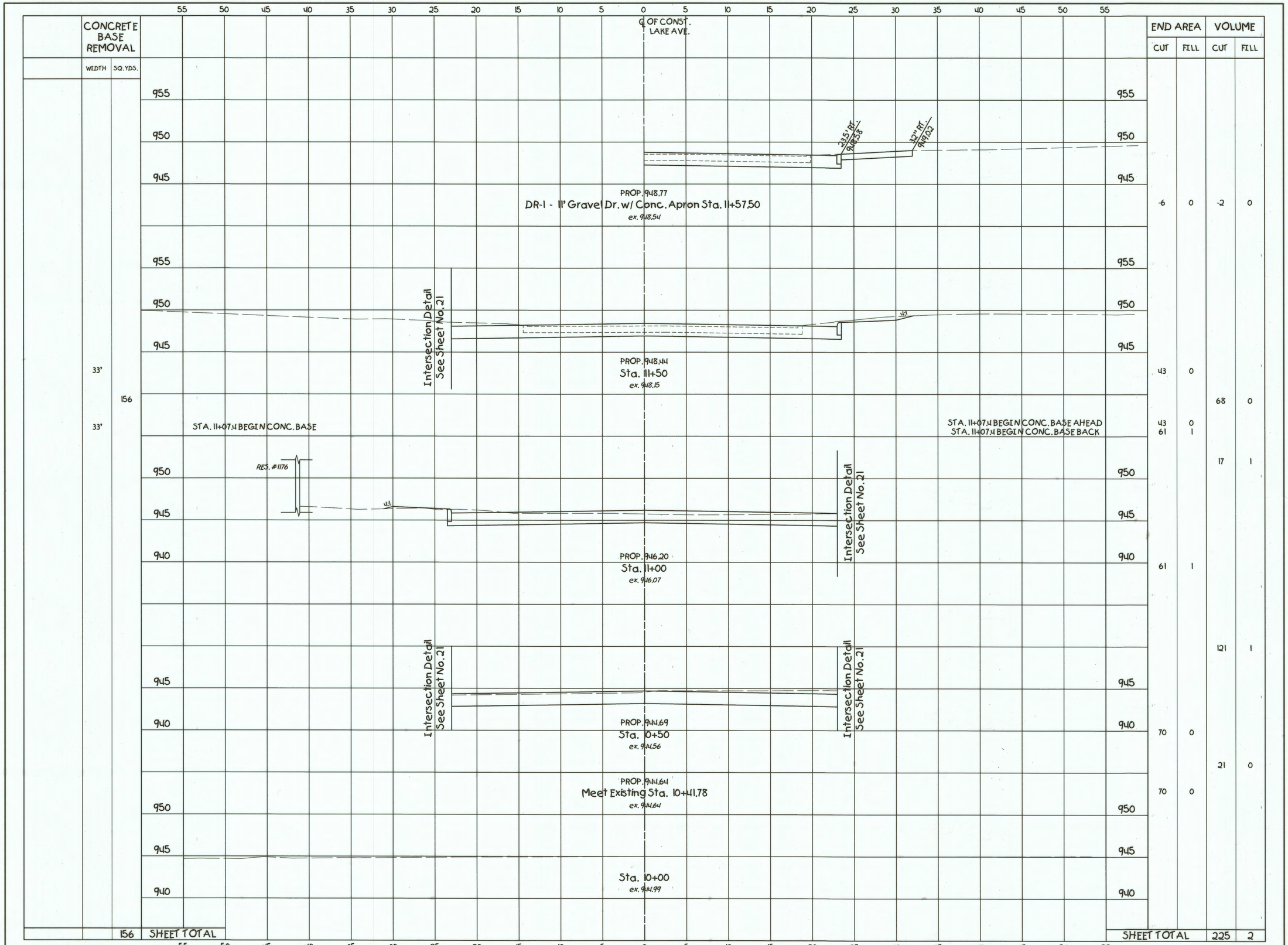
Francis H. Cicchinelli, Jr.
Mayor

REVISIONS:

| DATE | DESCRIPTION |
|---|---|
| | |

ELECTRONIC FILE NAME: 98ST0413.DWG

ACCOUNT NUMBER 98ST04




VERTICAL SCALE IN FEET
0 2.5 5 10

5 2.5 0 5
HORIZONTAL SCALE IN FEET

| DRAWN BY: | CHECKED BY: |
|---|---|
| FPW | SDH |
| DATE: Dec. 30, 1998 | DATE: Feb. 26, 1999 |

# Lake Avenue N. W. Widening Plans

Cross Section (Lake Ave. 10+00 to 11+57.50)
City of Massillon
Stark County, Ohio

RT. 30 W. AT THE INDUSTRIAL — RT. 30 E. CROSSROADS OF OHIO — RT. 21

THE CITY OF MASSILLON, OHIO

Francis H. Cicchinelli, Jr.
Mayor

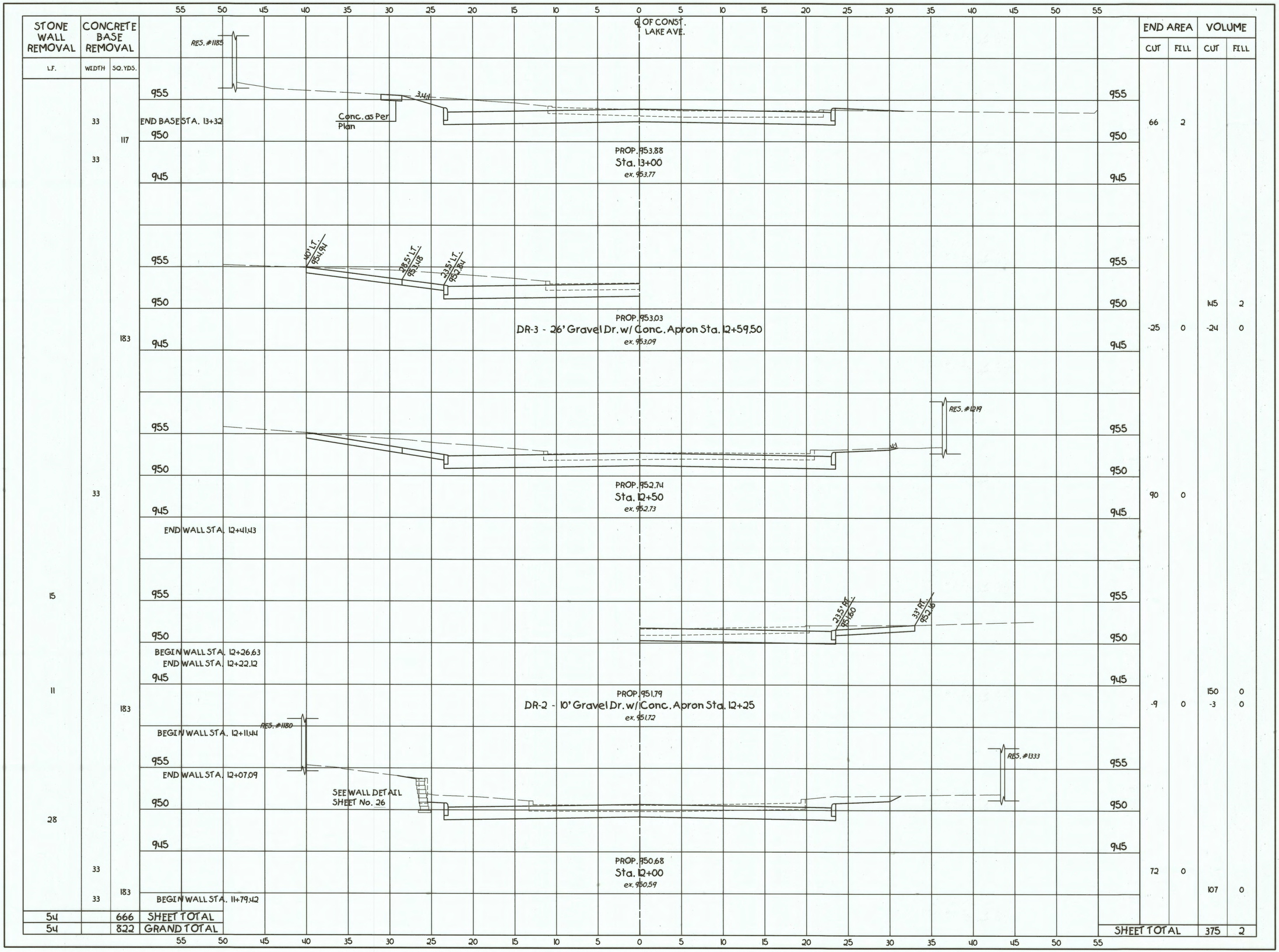
REVISIONS:

| DATE | DESCRIPTION |
|---|---|
| | |

ELECTRONIC FILE NAME:
98ST0414.DWG

ACCOUNT NUMBER
98ST04

| STONE WALL REMOVAL | CONCRETE BASE REMOVAL | | | END AREA | | VOLUME | |
|---|---|---|---|---|---|---|---|
| L.F. | WIDTH | SQ.YDS. | | CUT | FILL | CUT | FILL |
| | | | 955 | | | | |
| | 33 | | END BASE STA. 13+32 950 | 66 | 2 | | |
| | | 117 | | | | | |
| | 33 | | 945 | | | | |
| | | | 955 | | | | |
| | | | 950 | | | 145 | 2 |
| | | 183 | 945 | -25 | 0 | -24 | 0 |
| | | | 955 | | | | |
| | | | 950 | | | | |
| | 33 | | 945 | 90 | 0 | | |
| | | | END WALL STA. 12+41.43 945 | | | | |
| 15 | | | 955 | | | | |
| | | | 950 | | | | |
| | | | BEGIN WALL STA. 12+26.63 END WALL STA. 12+22.12 945 | | | | |
| 11 | | | | | | 150 | 0 |
| | | 183 | | -9 | 0 | -3 | 0 |
| | | | BEGIN WALL STA. 12+11.44 955 | | | | |
| | | | END WALL STA. 12+07.09 950 | | | | |
| 28 | | | | | | | |
| | | | 945 | | | | |
| | 33 | | | 72 | 0 | | |
| | 33 | 183 | BEGIN WALL STA. 11+79.42 | | | 107 | 0 |
| 54 | | 666 | SHEET TOTAL | | | | |
| 54 | | 822 | GRAND TOTAL | | | | |
| | | | | | | SHEET TOTAL | 375 2 |




SCALE IN FEET
VERTICAL 10 5 2.5 0
HORIZONTAL 5 2.5 0 5

HORIZONTAL SCALE IN FEET

| DRAWN BY: | CHECKED BY: |
|---|---|
| FPW | SDH |
| DATE: Dec. 30, 1998 | DATE: Feb. 26, 1999 |

# Lake Avenue N.W. Widening Plans

Cross Section (Lake Ave. 12+00 to 13+00)
City of Massillon
Stark County, Ohio

RT. 30 W. AT THE INDUSTRIAL — RT. 21 — RT. 30 E. CROSSROADS OF OHIO

THE CITY OF MASSILLON, OHIO

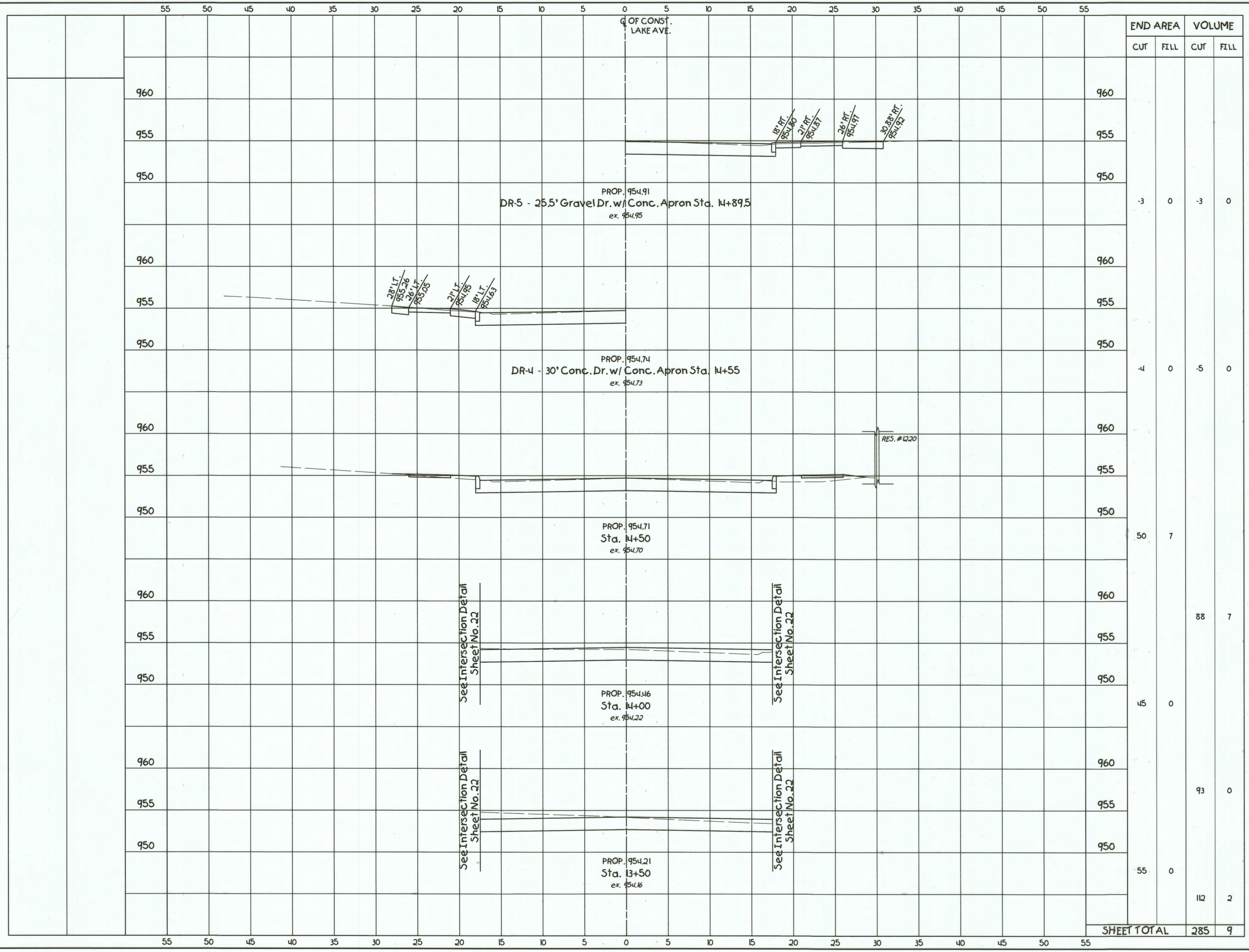
Francis H. Cicchinelli, Jr.
Mayor

REVISIONS:

| DATE | DESCRIPTION |
|---|---|
| | |

ELECTRONIC FILE NAME: 98ST0415.DWG

ACCOUNT NUMBER 98ST04




| | END AREA | | VOLUME | |
|---|---|---|---|---|
| | CUT | FILL | CUT | FILL |
| | | | | |
| | -3 | 0 | -3 | 0 |
| | -4 | 0 | -5 | 0 |
| | 50 | 7 | | |
| | | | 88 | 7 |
| | 45 | 0 | | |
| | | | 93 | 0 |
| | 55 | 0 | | |
| | | | 112 | 2 |
| SHEET TOTAL | | | 285 | 9 |

VERTICAL SCALE IN FEET: 0, 2.5, 5, 10

HORIZONTAL SCALE IN FEET: 5, 2.5, 0, 5

| DRAWN BY: | CHECKED BY: |
|---|---|
| FPW | SDH |
| DATE: Dec. 30, 1998 | DATE: Feb. 26, 1999 |

# Lake Avenue N. W. Widening Plans

Cross Section (Lake Ave. 10+00 to 15+50)
City of Massillon
Stark County, Ohio

RT. 30 W. AT THE INDUSTRIAL — RT. 21 — RT. 30 E. CROSSROADS OF OHIO

THE CITY OF MASSILLON, OHIO

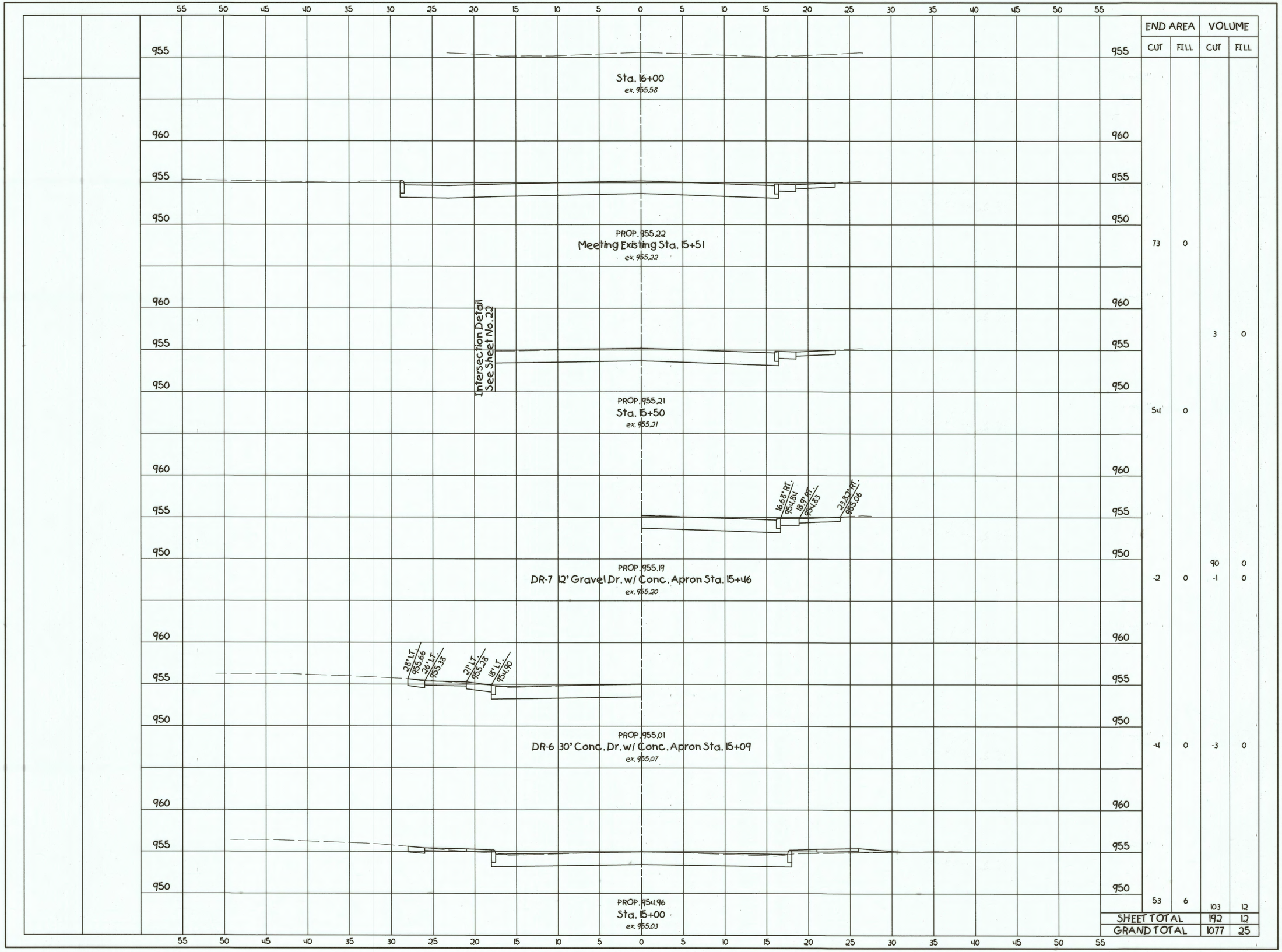
Francis H. Cicchinelli, Jr.
Mayor

REVISIONS:

| DATE | DESCRIPTION |
|---|---|
| | |

ELECTRONIC FILE NAME: 98ST0416.DWG

ACCOUNT NUMBER: 98ST04




| | END AREA | | VOLUME | |
|---|---|---|---|---|
| | CUT | FILL | CUT | FILL |
| | 73 | 0 | | |
| | | | 3 | 0 |
| | 54 | 0 | | |
| | | | 90 | 0 |
| | 2 | 0 | 1 | 0 |
| | 4 | 0 | 3 | 0 |
| | 53 | 6 | 103 | 12 |
| SHEET TOTAL | | | 192 | 12 |
| GRAND TOTAL | | | 1077 | 25 |

VERTICAL SCALE IN FEET: 10, 5, 2.5, 0

HORIZONTAL SCALE IN FEET: 5, 2.5, 0, 5

| DRAWN BY: | CHECKED BY: |
|---|---|
| FPW | SDH |
| DATE: Dec. 30, 1998 | DATE: Feb. 26, 1999 |

# Lake Avenue N. W. Widening Plans

Cross Section (Lake Ave. 15+00 to 16+00)
City of Massillon
Stark County, Ohio

RT. 30 W. AT THE INDUSTRIAL — RT. 30 E. CROSSROADS OF OHIO — RT. 21

THE CITY OF MASSILLON, OHIO

Francis H. Cicchinelli, Jr.
Mayor

REVISIONS:

| DATE | DESCRIPTION |
|---|---|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

ELECTRONIC FILE NAME: 98ST0417.DWG

ACCOUNT NUMBER: 98ST04

| STONE WALL REMOVAL | |
|---|---|
| L.F. | |
| 20 | |
| 20 | SHEET TOTAL |
| 20 | GRAND TOTAL |

55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55

950 955 950 945 955 950 945 955 950 945 955 950 945 940

℄ OF CONST. KRACKER ST. NW

Sta. 21+25
ex. 950.68

PROP. 950.69
Meet Existing Sta. 21+00
ex. 950.69

RES. #1176

33.13' LT. 949.73
15.78' LT. 949.87
10.69' LT. 950.20

PROP. 950.31
DR-9 20' Conc. Dr. @ 79°30' Skew Sta. 20+80
ex. 950.34

RES. #1180

RES. #1176

railroad ties to be removed

PROP. 949.11
Sta. 20+50
ex. 949.60

END WALL STA. 20+45.24

19.13' RT. 949.05
29.13' RT. 950.35
40' RT. 951.39

PROP. 948.46
DR-8 9' Asph. Dr. @ 30°30' Skew Sta. 20+36
ex. 949.06

BEGIN WALL STA. 20+26

SEE INTERSECTION DETAIL SHEET No. 21

PROP. 948.53
Sta. 20+00
ex. 948.26

SEE INTERSECTION DETAIL SHEET No. 21

| END AREA | | VOLUME | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | | |
| 25 | 0 | | |
| | | 72 | 0 |
| -11 | 0 | -8 | 0 |
| 52 | 0 | | |
| | | 68 | 0 |
| -28 | 0 | -9 | 0 |
| 21 | 0 | | |
| SHEET TOTAL | | 123 | 0 |

VERTICAL SCALE IN FEET: 0, 2.5, 5, 10

HORIZONTAL SCALE IN FEET: 5 2.5 0 5

| DRAWN BY: | CHECKED BY: |
|---|---|
| FPW | SDH |
| DATE: Dec. 30, 1998 | DATE: Feb. 26, 1999 |

# Lake Avenue N.W. Widening Plans

Cross Section (Kracker St. 20+00 to 21+25)
City of Massillon
Stark County, Ohio

RT. 30 W. AT THE INDUSTRIAL — RT. 21 — RT. 30 E. CROSSROADS OF OHIO

THE CITY OF MASSILLON, OHIO

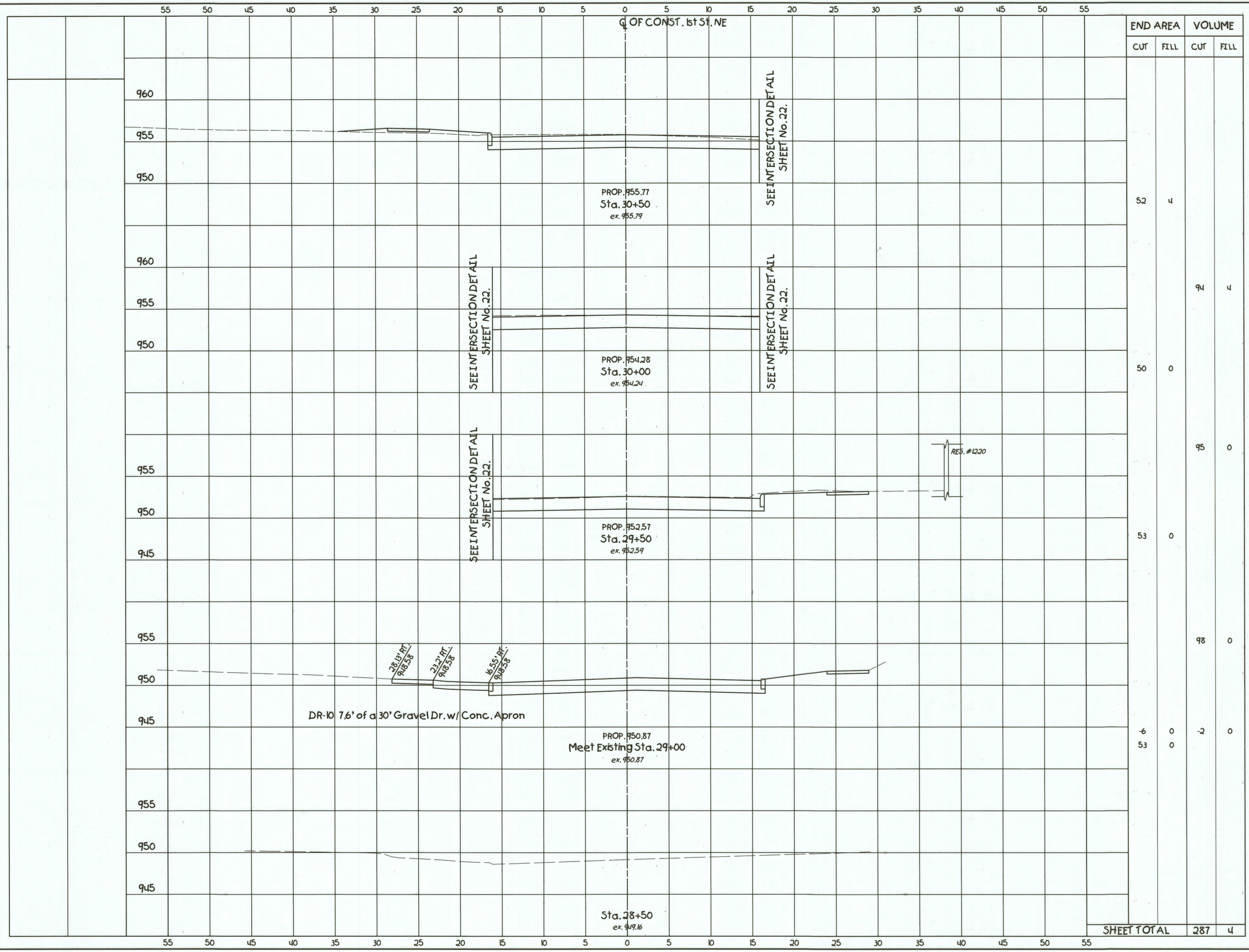
Francis H. Cicchinelli, Jr.
Mayor

REVISIONS:

| DATE | DESCRIPTION |
|---|---|
| | |

ELECTRONIC FILE NAME: 98ST0418.DWG

ACCOUNT NUMBER: 98ST04




| END AREA | | VOLUME | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| 52 | 4 | | |
| | | 94 | 4 |
| 50 | 0 | | |
| | | 95 | 0 |
| 53 | 0 | | |
| | | 98 | 0 |
| -6 | 0 | -2 | 0 |
| 53 | 0 | | |
| SHEET TOTAL | | 287 | 4 |

VERTICAL SCALE IN FEET: 0, 2.5, 5, 10

HORIZONTAL SCALE IN FEET: 5, 2.5, 0, 5

| DRAWN BY: | CHECKED BY: |
|---|---|
| FPW | SDH |
| DATE: Dec. 30, 1998 | DATE: Feb. 26, 1999 |

# *Lake Avenue N. W. Widening Plans*

Cross Section (1st St. NE 28+50 to 30+50)
City of Massillon
Stark County, Ohio

RT. 30 W. AT THE INDUSTRIAL — RT. 30 E. CROSSROADS OF OHIO — RT. 21

THE CITY OF MASSILLON, OHIO

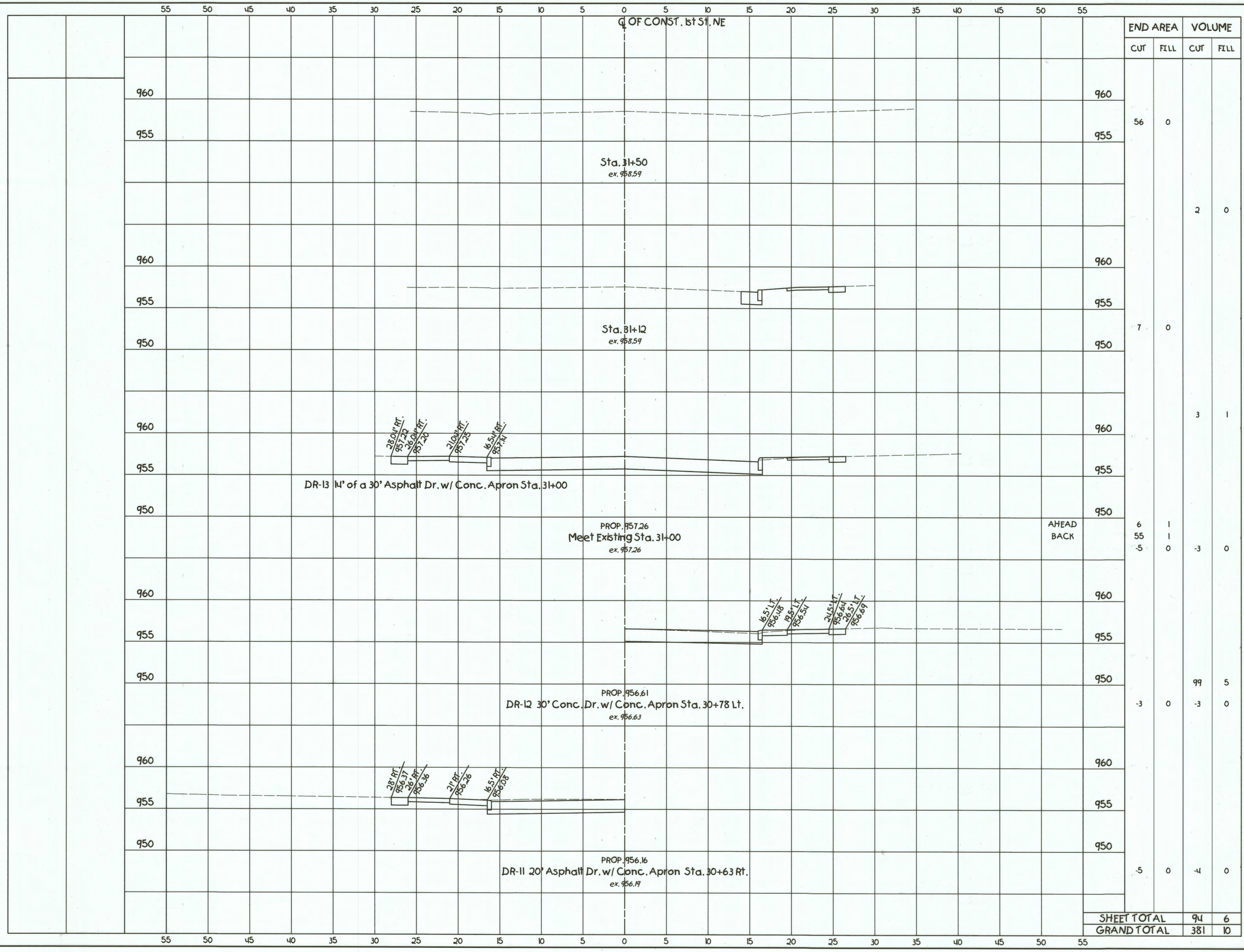
Francis H. Cicchinelli, Jr.
Mayor

REVISIONS:

| DATE | DESCRIPTION |
|---|---|
| | |

ELECTRONIC FILE NAME: 98ST0419.DWG

ACCOUNT NUMBER: 98ST04




| | END AREA | | VOLUME | |
|---|---|---|---|---|
| | CUT | FILL | CUT | FILL |
| | 56 | 0 | | |
| | | | 2 | 0 |
| | 7 | 0 | | |
| | | | 3 | 1 |
| AHEAD | 6 | 1 | | |
| BACK | 55 | 1 | | |
| | -5 | 0 | -3 | 0 |
| | | | | |
| | | | 99 | 5 |
| | -3 | 0 | -3 | 0 |
| | -5 | 0 | -4 | 0 |
| SHEET TOTAL | | | 94 | 6 |
| GRAND TOTAL | | | 381 | 10 |

VERTICAL SCALE IN FEET: 0, 2.5, 5, 10

HORIZONTAL SCALE IN FEET: 5, 2.5, 0, 5

| DRAWN BY: | CHECKED BY: |
|---|---|
| FPW | SDH |
| DATE: Dec. 30, 1998 | DATE: Feb. 26, 1999 |

# Lake Avenue N.W. Widening Plans

Cross Sections (1st St. NE 30+63 to 31+50)
City of Massillon
Stark County, Ohio

RT. 30 W. AT THE INDUSTRIAL — RT. 21 — RT. 30 E. CROSSROADS OF OHIO

THE CITY OF MASSILLON, OHIO

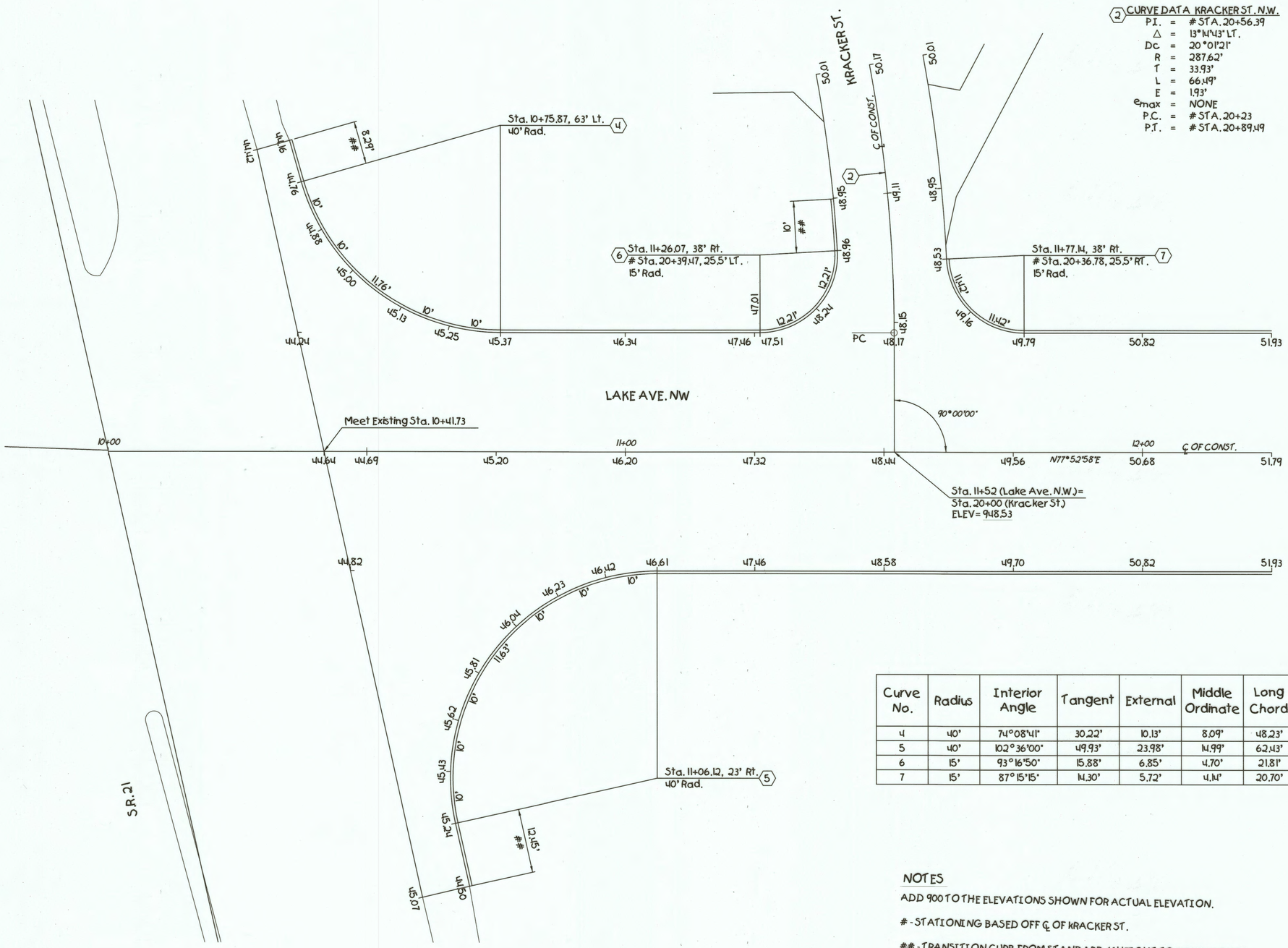
Francis H. Cicchinelli, Jr.
Mayor

REVISIONS:

| DATE | DESCRIPTION |
|---|---|
| | |

ELECTRONIC FILE NAME: 98ST0420.DWG

ACCOUNT NUMBER: 98ST04




| Curve No. | Radius | Interior Angle | Tangent | External | Middle Ordinate | Long Chord | Length of Curve | Degree of Curve |
|---|---|---|---|---|---|---|---|---|
| 4 | 40' | 74°08'41" | 30.22' | 10.13' | 8.09' | 48.23' | 51.76' | 143°14'22" |
| 5 | 40' | 102°36'00" | 49.93' | 23.98' | 14.99' | 62.43' | 71.63' | 143°14'22" |
| 6 | 15' | 93°16'50" | 15.88' | 6.85' | 4.70' | 21.81' | 24.42 | 381°58'19" |
| 7 | 15' | 87°15'15" | 14.30' | 5.72' | 4.14' | 20.70' | 22.84' | 381°58'19" |

NOTES

ADD 900 TO THE ELEVATIONS SHOWN FOR ACTUAL ELEVATION.

# - STATIONING BASED OFF ℄ OF KRACKER ST.

## - TRANSITION CURB FROM STANDARD 6" HEIGHT TO 0" IN HEIGHT.

ALL ELEVATIONS ALONG THE CURB ARE TOP OF CURB ELEVATIONS. DEDUCT 6" IN AREAS OF FULL HEIGHT CURB AND 2" IN AREAS OF DROP CURB TO OBTAIN EDGE OF PAVEMENT ELEVATIONS AT FACE OF CURB.

IN AREAS WITHOUT CURB USE THE ELEVATION SHOWN FOR EDGE OF PAVEMENT.

NW NE SW SE N

VERTICAL SCALE IN FEET 10 5 2.5 0

10 5 0 10
HORIZONTAL SCALE IN FEET

| DRAWN BY: | CHECKED BY: |
|---|---|
| FPW | SDH |
| DATE: Dec. 30, 1998 | DATE: Feb. 26, 1999 |

# Lake Avenue N. W. Widening Plans

Intersection Details(Lake Ave. and S.R. 21 / Lake Ave. and Kracker St.)
City of Massillon
Stark County, Ohio

RT. 30 W. AT THE INDUSTRIAL — RT. 21 — RT. 30 E. CROSSROADS OF OHIO

THE CITY OF MASSILLON, OHIO

Francis H. Cicchinelli, Jr.
Mayor

REVISIONS:

| DATE | DESCRIPTION |
|---|---|
| | |

ELECTRONIC FILE NAME: 98ST0421.DWG

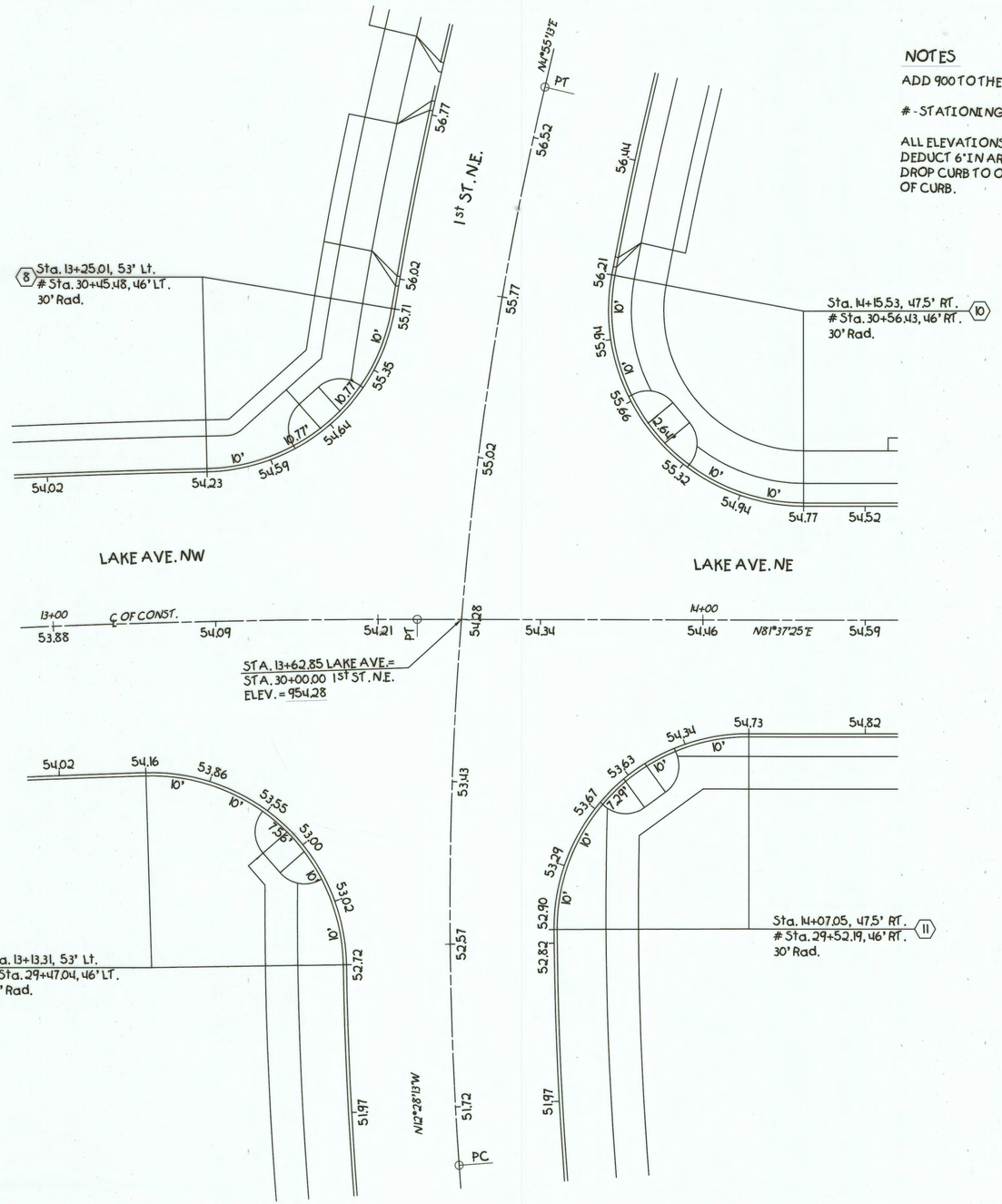
ACCOUNT NUMBER 98ST04

## NOTES

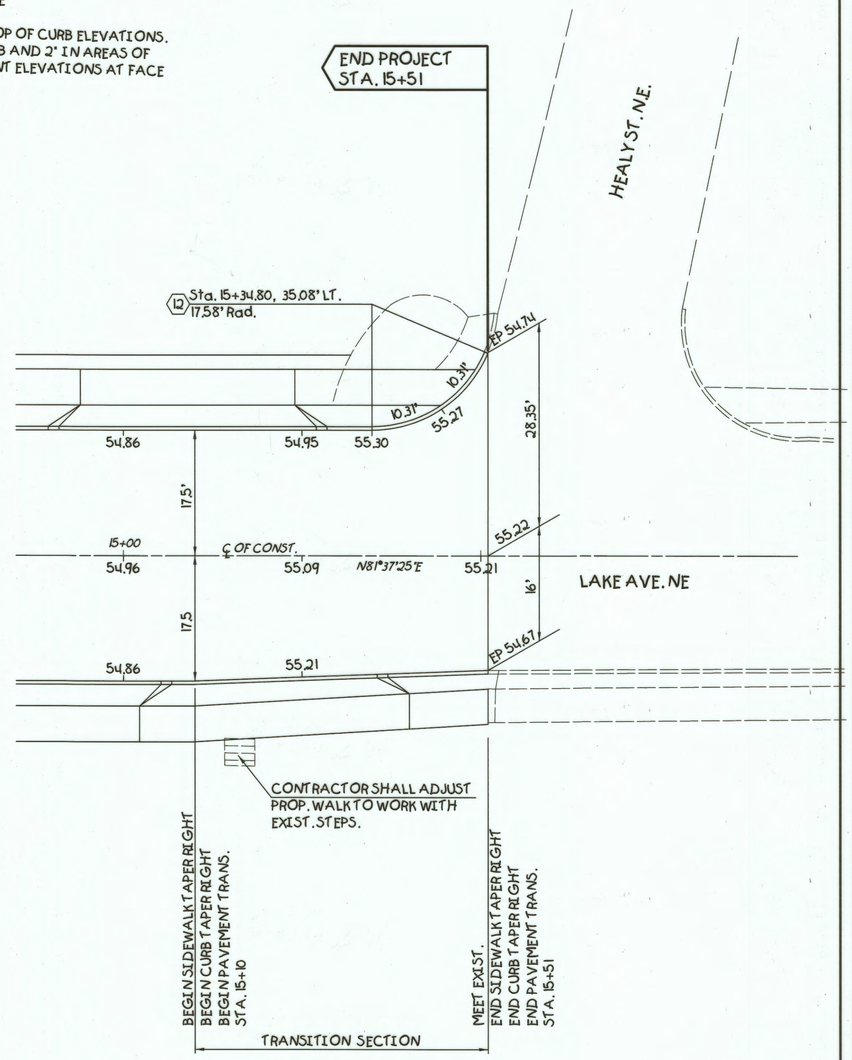
ADD 900 TO THE ELEVATIONS SHOWN FOR ACTUAL ELEVATION.

# - STATIONING BASED OFF ℄ OF 1st ST. NE

ALL ELEVATIONS ALONG THE CURB ARE TOP OF CURB ELEVATIONS. DEDUCT 6" IN AREAS OF FULL HEIGHT CURB AND 2" IN AREAS OF DROP CURB TO OBTAIN EDGE OF PAVEMENT ELEVATIONS AT FACE OF CURB.




| Curve No. | Radius | Interior Angle | Tangent | External | Middle Ordinate | Long Chord | Length of Curve | Degree of Curve |
|---|---|---|---|---|---|---|---|---|
| 8 | 30' | 79°20'00" | 24.88' | 8.97' | 6.91' | 38.30' | 41.54' | 190°59'09" |
| 9 | 30' | 90°50'19" | 30.44' | 12.74' | 8.94' | 42.74' | 47.56' | 190°59'09" |
| 10 | 30' | 100°32'00" | 36.09' | 16.93' | 10.82' | 46.14' | 52.64' | 190°59'09" |
| 11 | 30' | 90°19'33" | 30.17' | 12.55' | 8.85' | 42.55' | 47.29' | 190°59'09" |




| Curve No. | Radius | Interior Angle | Tangent | External | Middle Ordinate | Long Chord | Length of Curve | Degree of Curve |
|---|---|---|---|---|---|---|---|---|
| 12 | 17.58' | 67°12'25" | 11.68' | 3.53' | 2.94' | 19.46' | 20.62' | 325°54'52" |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NW NE SW SE N

SCALE IN FEET
20 10 5 0

10 5 0 10
HORIZONTAL SCALE IN FEET

| DRAWN BY: | CHECKED BY: |
|---|---|
| FPW | SDH |
| DATE: Dec. 30, 1998 | DATE: Feb. 26, 1999 |

# Lake Avenue N. W. Widening Plans

Intersection Details (Lake Ave. and 1st St. NE / Lake Ave. and Healy St. NE)
City of Massillon
Stark County, Ohio

RT. 30 W. AT THE INDUSTRIAL — RT. 30 E. CROSSROADS OF OHIO — RT. 21

THE CITY OF MASSILLON, OHIO

Francis H. Cicchinelli, Jr.
Mayor

REVISIONS:

| DATE | DESCRIPTION |
|---|---|
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ELECTRONIC FILE NAME: 98ST0422.DWG

ACCOUNT NUMBER 98ST04

| SHEET No. | REFERENCE No. | STATION | SIDE | DRIVE TYPE | SKEW | DETAIL | L1 | L2 | W1 | F1 | F2 | F3 | DRIVES PAVEMENT BUILD-UP | 202 DRIVEWAY REMOVAL | 301 BITUMINOUS AGGREGATE | 304 AGGREGATE BASE | 402 ASPHALT CONCRETE | 404 ASPHALT CONCRETE | 408 PRIME COAT USING 0.4 GAL. RT-2 OR RT-3 PER SQ. YDS. | 452 PLAIN PORTLAND CEMENT CONCRETE | 452 PLAIN PORTLAND CEMENT CONCRETE (APRON) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | FT. | FT. | FT. | FT. | FT. | FT. | | S.Y | CU. YDS. | CU. YDS. | CU. YDS. | CU. YDS. | CU. YDS. | S. Y. | S.Y. |
| | | LAKE AVE. | | | | | | | | | | | | | | | | | | | |
| 3 | DR1 | 11+57.5 | RT. | COMM. | 90° | A-A | 6 | 3 | 11 | | | | A | 13.2 | | | | | | 3.7 | 9.5 |
| 3 | DR2 | 12+25 | RT. | COMM. | 90° | A-A | 6 | 4 | 10 | | | | A | 13.3 | | | | | | 4.4 | 8.9 |
| 3 | DR3 | 12+59.5 | LT. | COMM. | 90° | A-A | 5.5 | 11.5 | 26 | | | | A | 41.6 | | | | | | 33.3 | 8.3 |
| 3 | DR4 | 14+55 | LT. | COMM. | 90° | B-B | 3.5 | 0 | 30 | | | | A | 11.5 | | | | | | 0 | 11.5 |
| 3 | DR5 | 14+89.5 | RT. | COMM. | 90° | B-B | 3.5 | 0 | 25.5 | | | | A | 10 | | | | | | 0 | 10 |
| 3 | DR6 | 15+09 | LT. | COMM. | 90° | B-B | 3.5 | 0 | 30 | | | | A | 11.5 | | | | | | 0 | 11.5 |
| 3 | DR7 | 15+46 | RT. | RES. | 90° | B-B | 2.72 | 0 | 11 | | | | A | 4.7 | | | | | | 0 | 4.7 |
| | | | | | | | | | | | | | | | | | | | | | |
| | | KRACKER ST. | | | | | | | | | | | | | | | | | | | |
| 3 | DR8 | 20+36 | RT. | RES. | 30°30' | C-C | 15 | 5.27 | 9 | 5 | 9 | 4.97 | C | 8.1 | 0.6 | | | 0.2 | | | 8.1 |
| 3 | DR9 | 20+80 | LT. | RES. | 79°30' | C-C | 5.09 | 17.65 | 20 | 5 | 5 | 5 | C | 14.2 | 4.3 | | | 1.1 | | | 14.2 |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | LAKE AVE. | | | | | | | | | | | | | | | | | | | |
| 3 | DR10 | 29+00 | RT. | COMM. | 90° | A-A | 7.5 | 0 | 7.6 | | | | A | 7.7 | | | | | | 0 | 7.7 |
| 3 | DR11 | 30+63 | LT. | COMM. | 90° | A-A | 5 | 2.5 | 20 | | | | A | 18.1 | | | | | | 5.6 | 12.5 |
| 3 | DR12 | 30+78 | RT. | COMM. | 90° | A-A | 3.5 | 2 | 30 | | | | A | 17.8 | | | | | | 6.7 | 11.1 |
| 3 | DR13 | 31+00 | LT. | COMM. | 90° | A-A | 5' | 2.5 | 14 | | | | A | 12 | | | | | | 3.9 | 8.1 |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | 183.7 | 4.9 | | | 1.3 | | 183.7 | |
| TOTAL (USED) | | | | | | | | | | | | | | 184 | 5 | | | 2 | | 184 | |

NOTE:

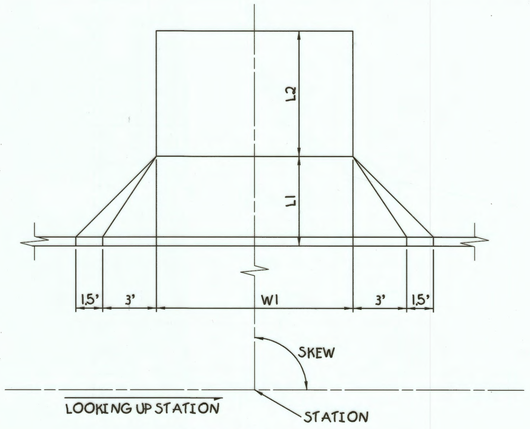
## DRIVES PAVEMENT BUILD-UP

RESIDENTAL DRIVES:

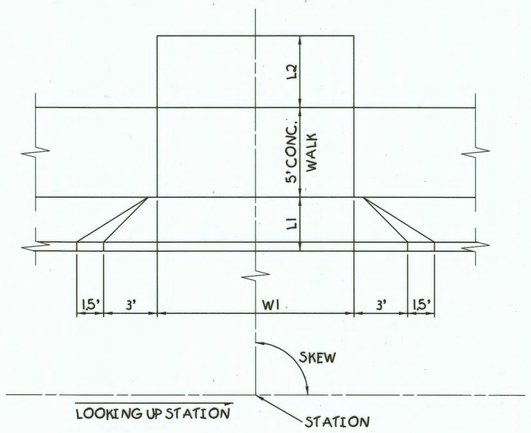
A. 6" 452 PLAIN PORTLAND CEMENT CONCRETE
B. 2" 404 ASPHALT CONCRETE
6" 304 AGGREGATE BASE or 7" 411 STABILIZED CRUSHED AGGREGATE
C. 1 1/2" 404 ASPHALT CONCRETE
4" 301 BITUMINOUS AGGREGATE BASE
D. 8" 301 BITUMINOUS AGGREGATE BASE

COMMERCIAL DRIVES:

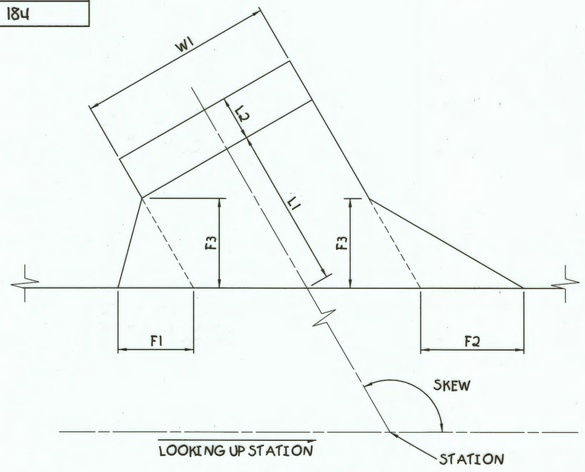
A. 8" 452 PLAIN PORTLAND CEMENT CONCRETE
B. 1 1/2" 404 ASPHALT CONCRETE
1 1/2" 402 ASPHALT CONCRETE
408 PRIME COAT USING 0.4 GALLON RT-2 or RT-3 PER SQUARE YARD
8" 304 AGGREGATE BASE
C. 1 1/2" 404 ASPHALT CONCRETE
5" 301 BITUMINOUS AGGREGATE BASE
D. 10" 411 or 304 AGGREGATE BASE



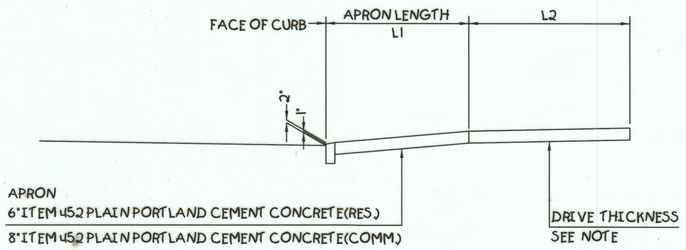

DETAIL A–A

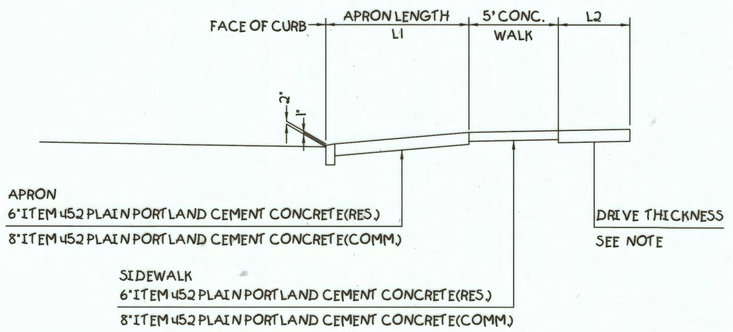


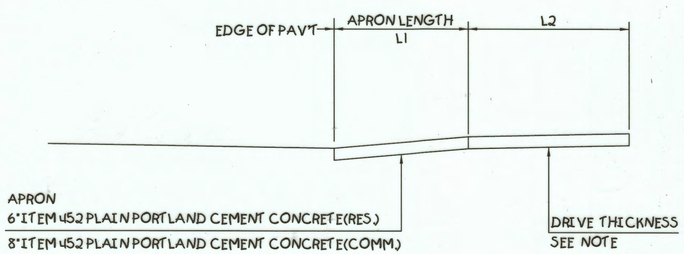

DETAIL B–B




DETAIL C–C




VERTICAL SCALE IN FEET 0 2 4 8

HORIZONTAL SCALE IN FEET 4 2 0 4

DRAWN BY: FPW
CHECKED BY: SDH
DATE: Dec. 30, 1998
DATE: Feb. 26, 1999

# Lake Avenue N. W. Widening Plans

Driveway and Apron Details
City of Massillon
Stark County, Ohio

RT. 30 W. AT THE INDUSTRIAL — RT. 30 E. CROSSROADS OF OHIO — RT. 21

THE CITY OF MASSILLON, OHIO

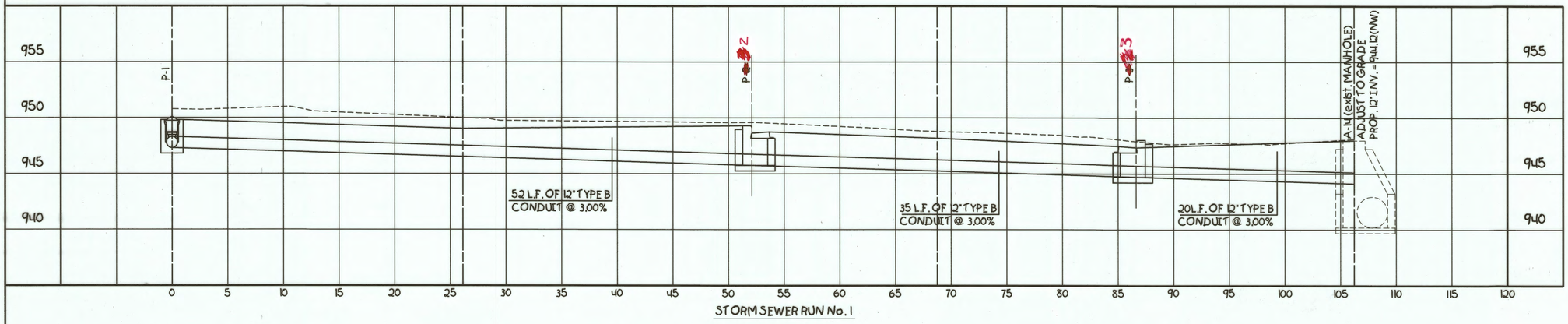
Francis H. Cicchinelli, Jr.
Mayor

REVISIONS:

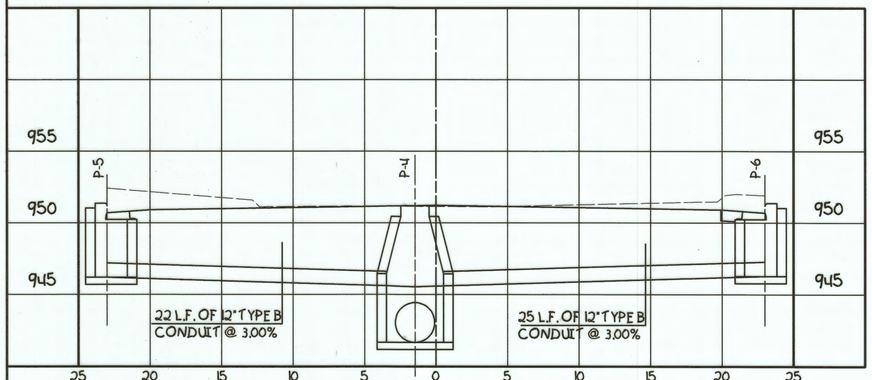
| DATE | DESCRIPTION |
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ELECTRONIC FILE NAME: 98ST0423.DWG

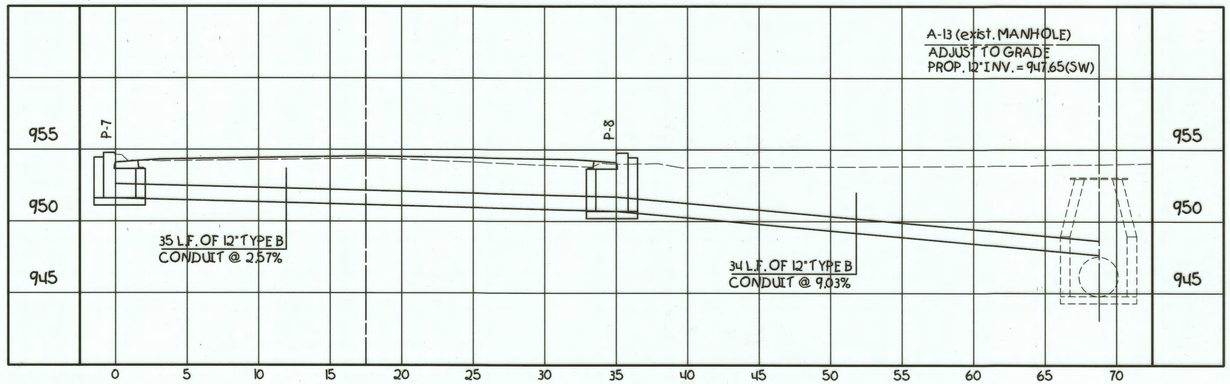
ACCOUNT NUMBER: 98ST04



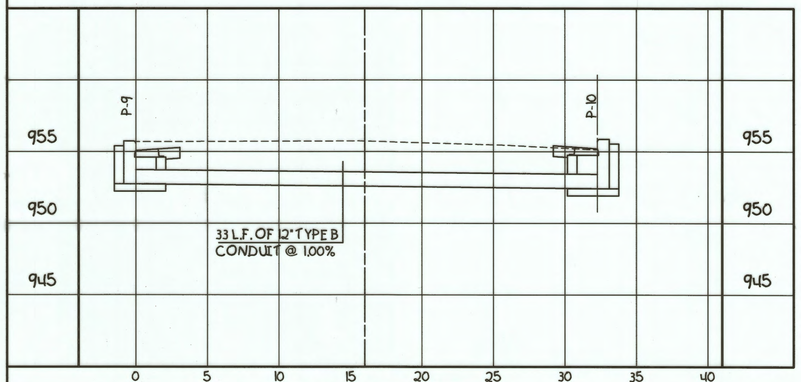

STORM SEWER RUN No. 1



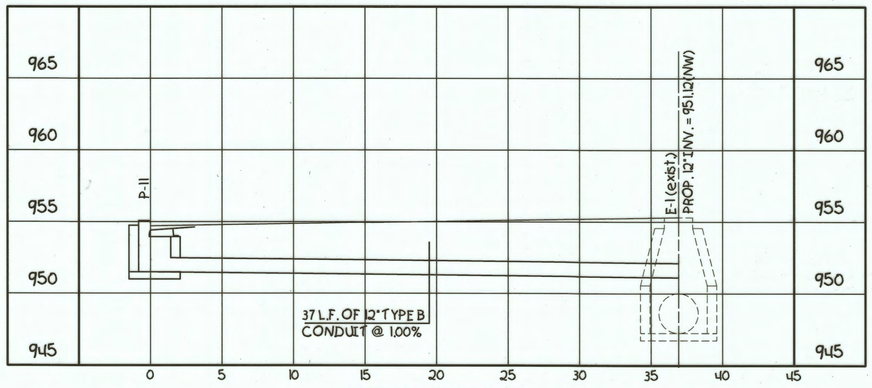

STORM SEWER RUN No. 2




STORM SEWER RUN No. 3

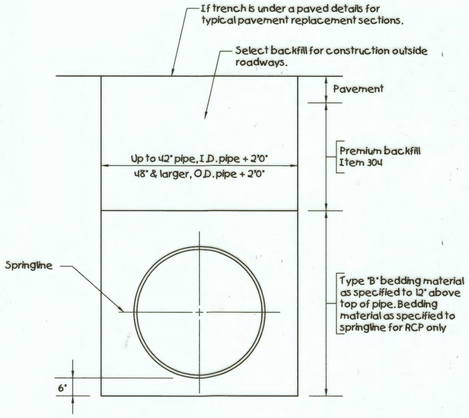



STORM SEWER RUN No. 4




STORM SEWER RUN No. 5

| | STATION, OFFSET BASED ON LAKE AVE. | STATION, OFFSET BASED ON KRACKER ST. | STATION, OFFSET BASED ON 1st ST. | RIM OR T/C | INLET | INLET | INLET | OUTLET | TYPE |
|---|---|---|---|---|---|---|---|---|---|
| P-1 | N/A | 20+75, 12.5' Rt. | N/A | 949.81 | N/A | N/A | N/A | 12" INV. = 947.31(S) | INLET I-1 |
| P-2 | 11+68.63, 25.64' Lt. | 20+25.5, 16.65' Rt. | N/A | 947.35 | 12" INV. = 944.71(E) | N/A | N/A | 12" INV. = 944.71(SE) | CATCH BASE TYPE 3A |
| P-3 | 11+34.12, 25.34' Lt. | 20+25.5, 17.87' Lt. | N/A | 948.62 | 12" INV. = 944.74(N) | N/A | N/A | 12" INV. = 945.74(W) | CATCH BASIN TYPE 3A |
| P-4 | 12+12, 1.46' Lt. | N/A | N/A | 951.19 | 12" INV. = 945.54(N) | 12" INV. = 945.54(S) | 33" INV. = 941.68(E) | 33" INV. = 941.68(W) | MANHOLE TYPE 3 |
| P-5 | 12+12, 23' Lt. | N/A | N/A | 950.69 | N/A | N/A | N/A | 12" INV. = 946.19(S) | CATCH BASIN TYPE 3A |
| P-6 | 12+12, 23' Rt. | N/A | N/A | 950.69 | N/A | N/A | N/A | 12" INV. = 946.28(N) | CATCH BASIN TYPE 3A |
| P-7 | 14+16, 17.5' Lt. | N/A | N/A | 954.10 | N/A | N/A | N/A | 12" INV. = 951.60(S) | CATCH BASIN TYPE 3A |
| P-8 | 14+16, 17.5' Rt. | N/A | N/A | 954.10 | 12" INV. = 950.90(N) | N/A | N/A | 12" INV. = 950.70(NW) | CATCH BASIN TYPE 3A |
| P-9 | N/A | N/A | 30+46, 16' Lt. | 955.24 | N/A | N/A | N/A | 12" INV. = 952.74(E) | CATCH BASIN TYPE 3A |
| P-10 | N/A | N/A | 30+50, 16.01' Rt. | 955.37 | N/A | N/A | N/A | 12" INV. = 952.46(W) | CATCH BASIN TYPE 3A |
| P-11 | 15+50.54, 27.26' Lt. | N/A | N/A | 954.58 | N/A | N/A | N/A | 12" INV. = 951.49(SE) | CATCH BASIN TYPE 3A |




BEDDING AND TRENCH DETAIL
TYPE 'B' BEDDING

VERTICAL SCALE IN FEET
10 5 2.5 0

HORIZONTAL SCALE IN FEET
5 2.5 0 5

| DRAWN BY: | CHECKED BY: |
|---|---|
| FPW | SDH |
| DATE: Dec. 30, 1998 | DATE: Feb. 26, 1999 |

# Lake Avenue N. W. Widening Plans

Proposed Storm Sewer Profiles
City of Massillon
Stark County, Ohio

RT. 30 W. AT THE INDUSTRIAL — RT. 21 — RT. 30 E. CROSSROADS OF OHIO

THE CITY OF MASSILLON, OHIO

Francis H. Cicchinelli, Jr.
Mayor

REVISIONS:

| DATE | DESCRIPTION |
|---|---|
| | |

ELECTRONIC FILE NAME: 98ST0424.DWG

ACCOUNT NUMBER: 98ST04

## NOTES

**GRATE:** The Grate "V" shall be provided unless the plans specifically require the diagonal grate. If the diagonal grate is specified, it shall be placed so that the diagonal bars direct drainage flow toward the curb.

**CASTINGS:** The design shall be essentially the same and equally as strong as those shown. Minimum mass: Curb Casting 170 lbs., Standard Grate 127 lbs., Frame 320 lbs., and Grate "V" 105 lbs.

**BEARING AREAS:** The frame and grate shall be so fitted and finished as to provide a firm and even seat. No projections shall exist on bearing areas of either casting and the grate shall seat in its frame without rocking.

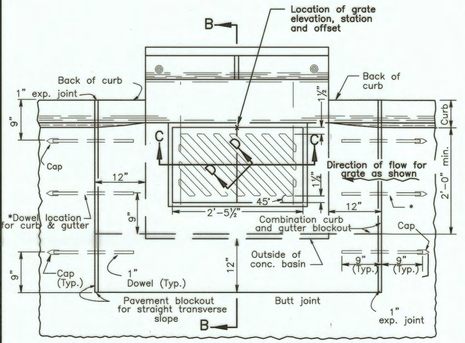
**PRECAST CONSTRUCTION:** Permitted, except for the apron. Concrete shall meet the requirements of CMS 706.13 with a minimum of 4% entrained air in the hardened concrete. Precast walls shall have a minimum thickness of 6" and reinforcing shall be sufficient to permit shipping and placement without damage.

**MINIMUM DEPTH:** The minimum depth shall be the outside diameter (O.D.) of the outlet pipe plus 360 mm.

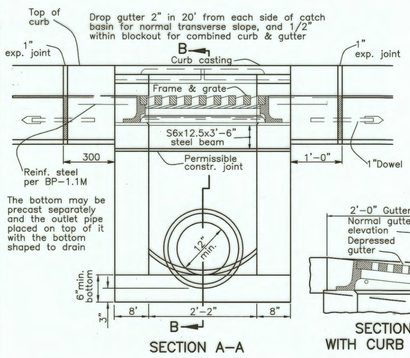
**OPENINGS:** Pipe openings shall be the O.D. of the pipe being supplied plus 50 mm when fabricated or field cut. The interstitial space shall be filled with grout per CMS 601.

**DOWELS:** Four 1"x18" dowels are required for concrete pavement or gutter blockout. See Std. Constr. Dwg. BP-4 for dowel details.

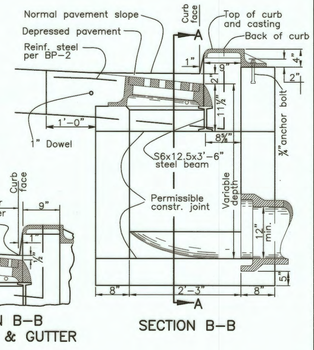
**BLOCKOUT:** Blockouts shall be paved with Class C concrete in PCC pavement or gutter and paid for as a part of the pavement or gutter with no deduction in pavement, curb or gutter quantities because of the castings. A Class C concrete apron the size of the 2' gutter shall be cast-in-place in asphalt pavement (no dowels required) with the cost included in the catch basin bid price. No deduction to be made in curb quantities.



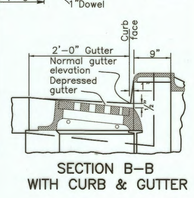

PLAN OF CATCH BASIN AND PAVEMENT JOINTS



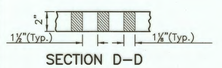

SECTION A–A



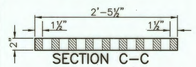

SECTION B–B
WITH CURB & GUTTER



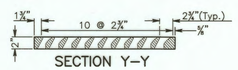

SECTION B–B




SECTION D–D

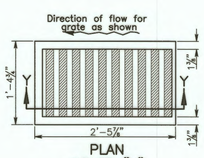



SECTION C–C

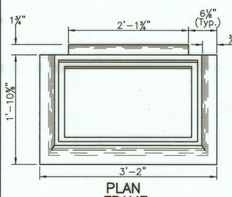



SECTION Y–Y

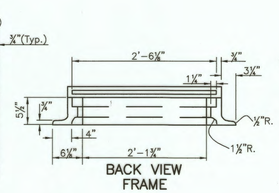
STANDARD GRATE
Grate size 2'-5⅛"x1'-4⅜"x2"



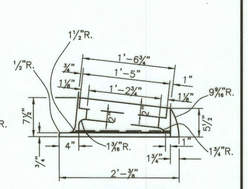

PLAN
GRATE "V"




PLAN
FRAME

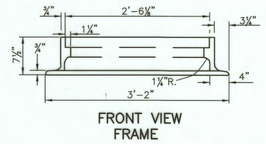



BACK VIEW
FRAME

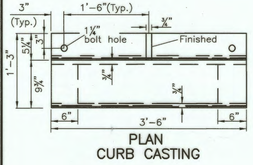



END VIEW FRAME

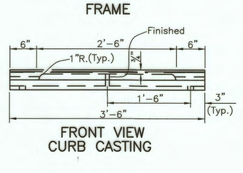
* Dowel location for curb and gutter



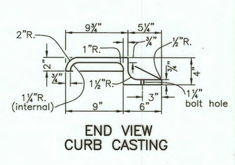

FRONT VIEW
FRAME




PLAN
CURB CASTING



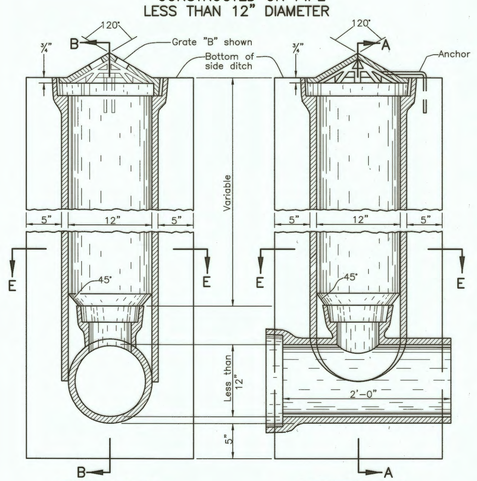

FRONT VIEW
CURB CASTING




END VIEW
CURB CASTING

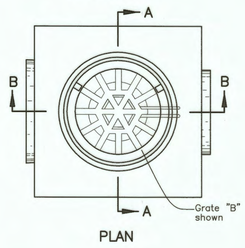
No. 3A CATCH BASIN (CB–3A)

## CONSTRUCTED ON PIPE LESS THAN 12" DIAMETER

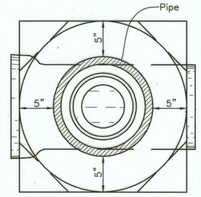



SECTION A–A

SECTION B–B




PLAN




SECTION E–E

## NOTES

**GRATES:** Grate "A" shall be provided unless the plans specify Grate "B".

**CASTINGS:** Castings shall meet the requirements of CMS 604. The design shall be essentially the same and equally as strong as the one shown hereon. Minimum mass shall be 20 lbs. for Grate "B" and 30 lbs. for Grate "A".

**CASTING ANCHOR:** Anchor is to be a 3/8 in. rod, 2 ft. long, bent around grate as shown and anchored into concrete casing.

**CONCRETE CASING:** Casing for riser may be square, round or hexagonal in shape. Concrete shall be Class C.

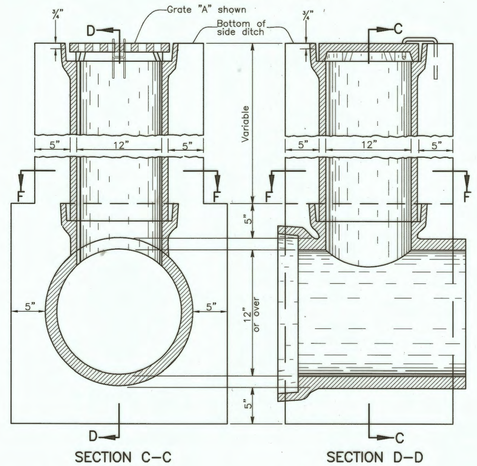
**RISER PIPE:** Riser shall be 12 in. in diameter regardless of size of sewer line.

**TEE:** Where sewer line is not continuous through inlet, the upstream opening of the tee shall be properly plugged using a performed stopper and sealed joint.

**RISER AND TEE:** Shall be constructed of standard strength vitrified clay pipe or non-reinforced concrete pipe having bell and spigot ends.

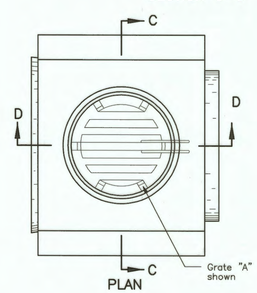
**PAYMENT:** Payment for these inlets shall be Item 604, Each, Inlet, Side Ditch.

## CONSTRUCTED ON PIPE 12" DIAMETER OR OVER

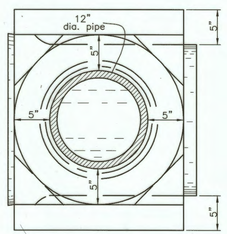



SECTION C–C

SECTION D–D

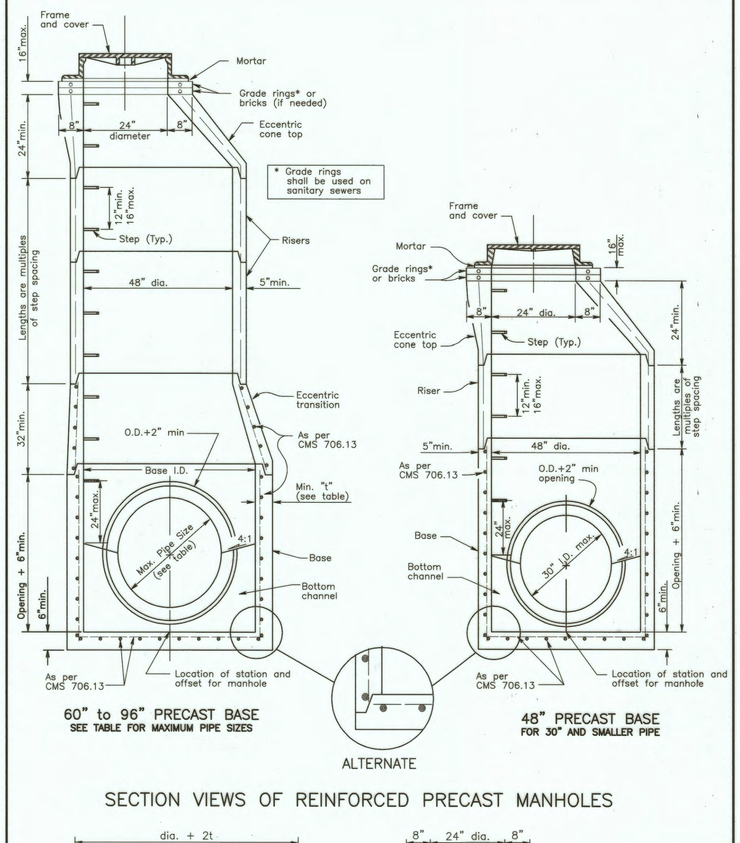



PLAN

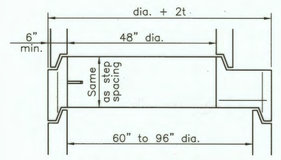



SECTION F–F

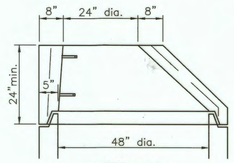
SIDE DITCH INLET (I–1)



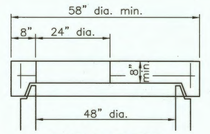

## SECTION VIEWS OF REINFORCED PRECAST MANHOLES



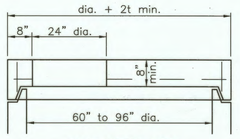

FLAT SLAB TRANSITION




ALTERNATE
ECCENTRIC CONE TOP




FLAT SLAB TOP




FLAT SLAB TOP

| Base I.D. | Min. "t" | Max. Pipe Size |
|---|---|---|
| 60" | 5" | 36" |
| 72" | 6" | 48" |
| 84" | 7" | 54" |
| 90" | 7 1/2" | 60" |
| 96" | 8" | 60" |

## NOTES

**GENERAL:** With normal soil and site conditions this standard precast manhole may be used for any required manhole depth.
Sections of the precast manhole shall be cast and assembled with either all tongue or all groove ends up. Lift holes may be provided in each section for handling.

**TOP AND TRANSITION (OR REDUCER):** This section shall be a flat slab unless an eccentric cone is specified.

**BASE:** Manhole No. 3 is shown with a monolithic floor and riser which may be cast in one or two operations. A permissible alternate is to cast and ship the floor and barrel separately. Openings for inlet and outlet pipes shall be provided, either when

Bottom channels may be formed of concrete, precast in the base or field constructed as shown

**RISER SECTIONS:** Openings for 18" and smaller inlet pipes may be either prefabricated, or cut in the field provided the sides of the pipe at the springline do not project into the manhole.

**CONNECTIONS:** Connections between precast manhole sections and pipes on sanitary sewers may be sealed with resilient connectors conforming to ASTM C 923.

**JOINT SEAL:** Seal between precast manhole sections on sanitary sewers shall be resilient and flexible gasket joints per CMS 706.11.

**MATERIALS:** Materials for bases and other precast sections, including reinforcement not specified hereon, shall comply with the requirements of CMS 706.13.

**DROP PIPE:** When specified on the plans, drop pipe shall be constructed as shown on MH–2.

**STEPS, FRAMES AND COVERS:** Shall comply with the requirements set forth on MH–1.

No. 3 MANHOLE (MH–3)

# Lake Avenue N.W. Widening Plans

Standard Drainage Details
City of Massillon
Stark County, Ohio

| DRAWN BY: | CHECKED BY: |
|---|---|
| FPW | SDH |
| DATE: Dec. 30, 1998 | DATE: Feb. 26, 1999 |

RT. 30 W. AT THE INDUSTRIAL CROSSROADS OF OHIO RT. 21 RT. 30 E.

THE CITY OF MASSILLON, OHIO

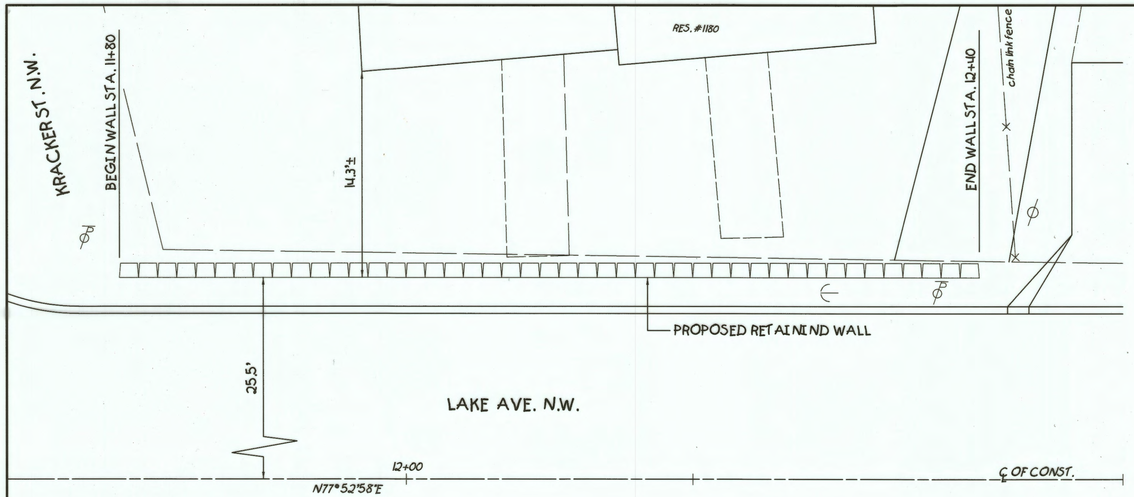
Francis H. Cicchinelli, Jr.
Mayor

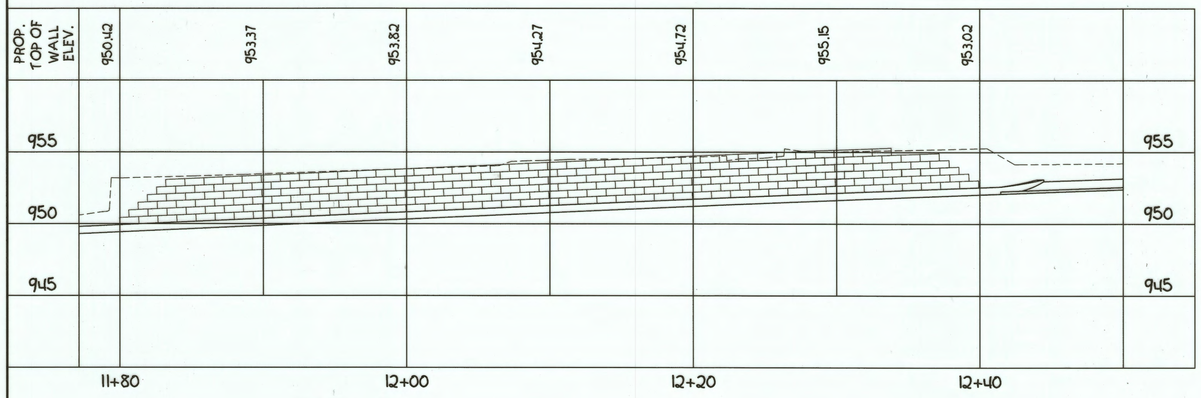
REVISIONS:

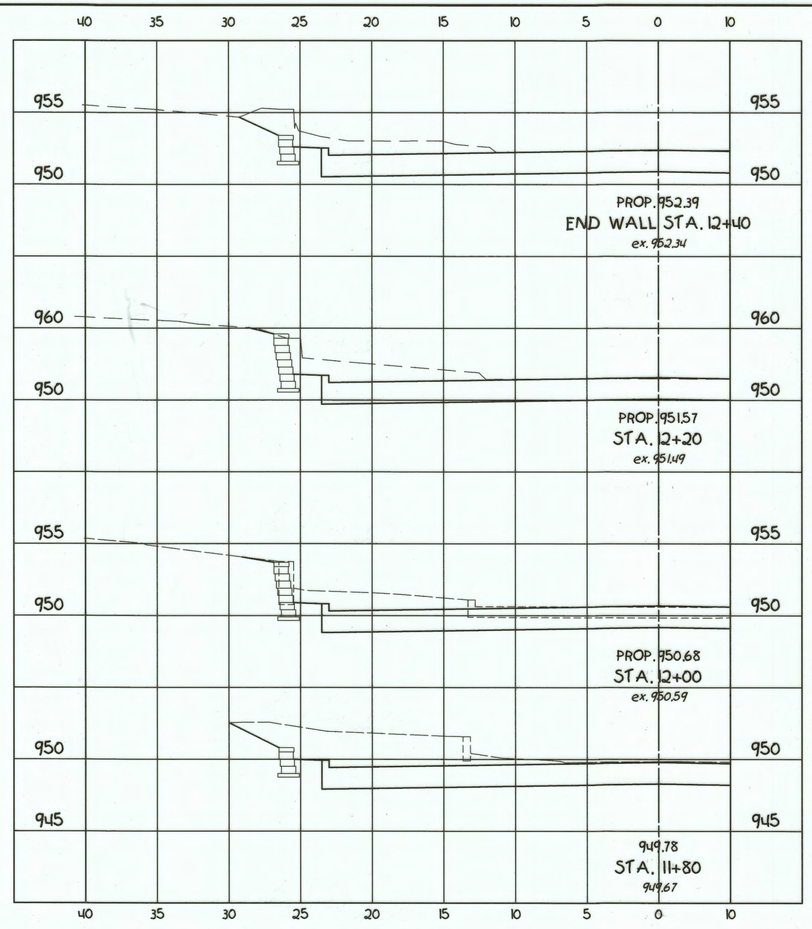
| DATE | DESCRIPTION |
|---|---|
| | |

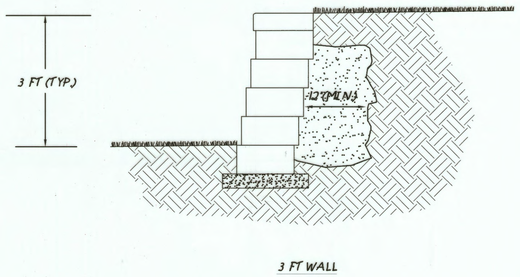
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ACCOUNT NUMBER: 98ST04

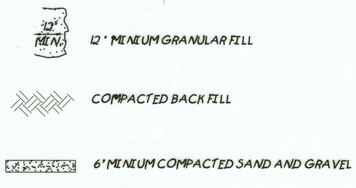


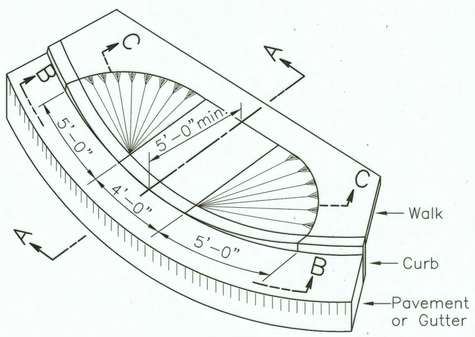



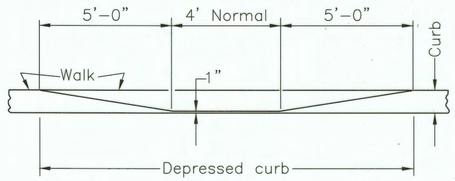




3 FT WALL

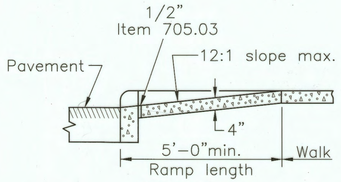



RETAINING WALL DETAIL

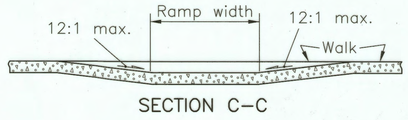



VIEW B-B




SECTION A-A

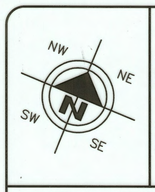



SECTION C-C

CURB RAMPS TYPE 1

NOTES :

1. PROPOSED RETAINING WALL SHALL BE PAID FOR UNDER ITEM 435 RETAINING WALL LUMP SUM.
2. ITEM 435 RETAINING WALL SHALL INCLUDE ALL LATERIALS AND LABOR TO CONSTRUCT AND RESTORE AREAS DISTURB DO TO CONSTRUCTION OF RETAINING WALL.
3. PROPOSED RETAINING WALL IS 60' IN LENGHT x 3' IN HIEGHT.




5 2.5 0 5
HORIZONTAL SCALE IN FEET

| DRAWN BY: | CHECKED BY: |
|---|---|
| FPW | SDH |
| DATE: Dec. 30, 1998 | DATE: Feb. 26, 1999 |

# Lake Avenue N.W. Widening Plans

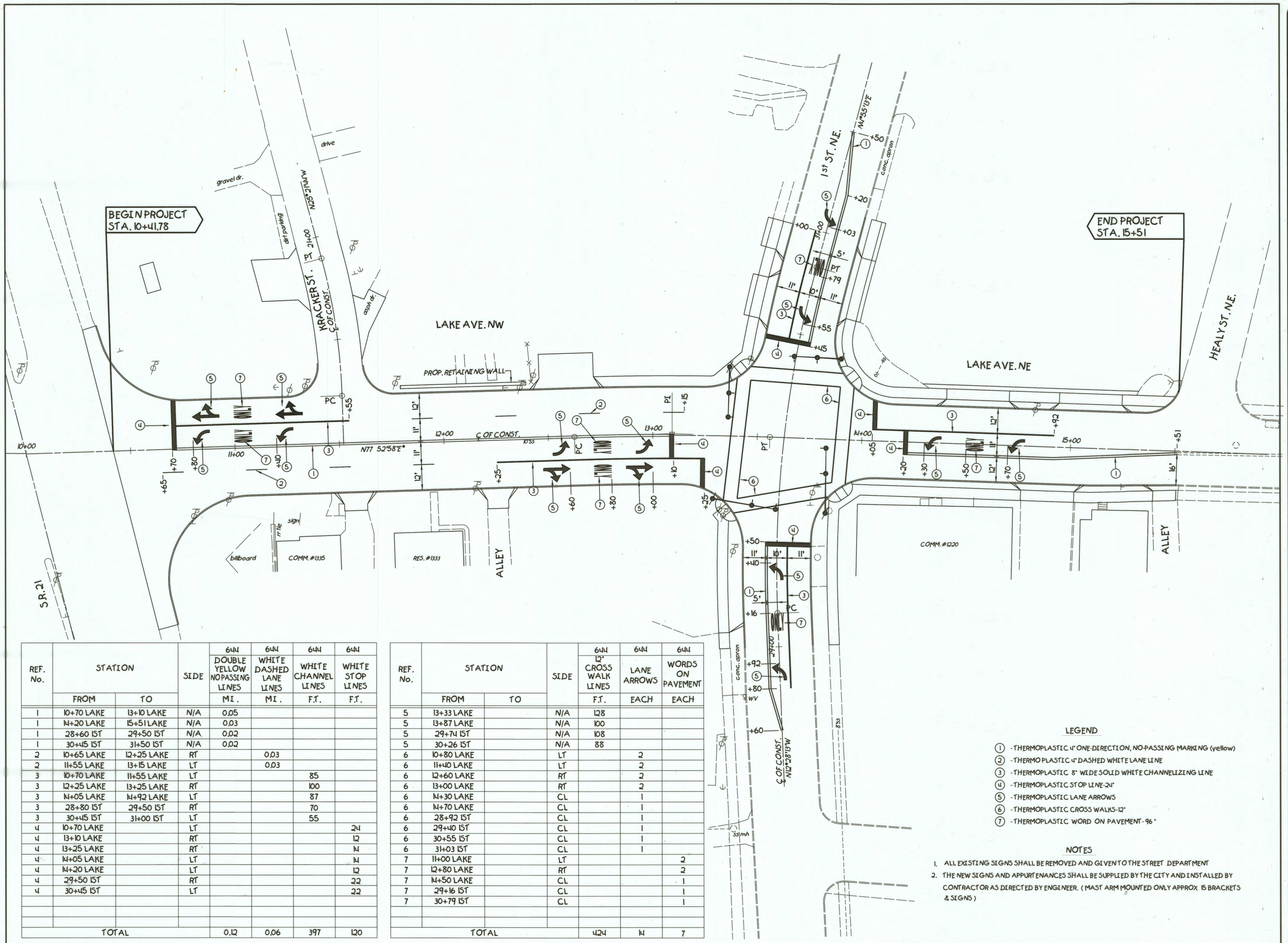
Proposed Retaining Wall Plan / Profile / Cross Section / Curb Ramp Detail
City of Massillon
Stark County, Ohio

REVISIONS:

| DATE | DESCRIPTION |
|---|---|
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| | |
| | |
| | |
| | |

ELECTROINIC FILE NAME: 98ST0426.DWG

ACCOUNT NUMBER 98ST04




| REF. No. | STATION FROM | STATION TO | SIDE | 6(4) DOUBLE YELLOW NO PASSING LINES MI. | 6(4) WHITE DASHED LANE LINES MI. | 6(4) WHITE CHANNEL LINES F.T. | 6(4) WHITE STOP LINES F.T. |
|---|---|---|---|---|---|---|---|
| 1 | 10+70 LAKE | 13+10 LAKE | N/A | 0.05 | | | |
| 1 | 14+20 LAKE | 15+51 LAKE | N/A | 0.03 | | | |
| 1 | 28+60 1ST | 29+50 1ST | N/A | 0.02 | | | |
| 1 | 30+45 1ST | 31+50 1ST | N/A | 0.02 | | | |
| 2 | 10+65 LAKE | 12+25 LAKE | RT | | 0.03 | | |
| 2 | 11+55 LAKE | 13+15 LAKE | LT | | 0.03 | | |
| 3 | 10+70 LAKE | 11+55 LAKE | LT | | | 85 | |
| 3 | 12+25 LAKE | 13+25 LAKE | RT | | | 100 | |
| 3 | 14+05 LAKE | 14+92 LAKE | LT | | | 87 | |
| 3 | 28+80 1ST | 29+50 1ST | RT | | | 70 | |
| 3 | 30+45 1ST | 31+00 1ST | LT | | | 55 | |
| 4 | 10+70 LAKE | | LT | | | | 24 |
| 4 | 13+10 LAKE | | RT | | | | 12 |
| 4 | 13+25 LAKE | | RT | | | | 14 |
| 4 | 14+05 LAKE | | LT | | | | 14 |
| 4 | 14+20 LAKE | | LT | | | | 12 |
| 4 | 29+50 1ST | | RT | | | | 22 |
| 4 | 30+45 1ST | | LT | | | | 22 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| TOTAL | | | | 0.12 | 0.06 | 397 | 120 |

| REF. No. | STATION FROM | STATION TO | SIDE | 6(4) 12" CROSS WALK LINES F.T. | 6(4) LANE ARROWS EACH | 6(4) WORDS ON PAVEMENT EACH |
|---|---|---|---|---|---|---|
| 5 | 13+33 LAKE | | N/A | 128 | | |
| 5 | 13+87 LAKE | | N/A | 100 | | |
| 5 | 29+74 1ST | | N/A | 108 | | |
| 5 | 30+26 1ST | | N/A | 88 | | |
| 6 | 10+80 LAKE | | LT | | 2 | |
| 6 | 11+40 LAKE | | LT | | 2 | |
| 6 | 12+60 LAKE | | RT | | 2 | |
| 6 | 13+00 LAKE | | RT | | 2 | |
| 6 | 14+30 LAKE | | CL | | 1 | |
| 6 | 14+70 LAKE | | CL | | 1 | |
| 6 | 28+92 1ST | | CL | | 1 | |
| 6 | 29+40 1ST | | CL | | 1 | |
| 6 | 30+55 1ST | | CL | | 1 | |
| 6 | 31+03 1ST | | CL | | 1 | |
| 7 | 11+00 LAKE | | LT | | | 2 |
| 7 | 12+80 LAKE | | RT | | | 2 |
| 7 | 14+50 LAKE | | CL | | | 1 |
| 7 | 29+16 1ST | | CL | | | 1 |
| 7 | 30+79 1ST | | CL | | | 1 |
| | | | | | | |
| | | | | | | |
| TOTAL | | | | 424 | 14 | 7 |

## LEGEND

1. -THERMOPLASTIC 4" ONE-DIRECTION, NO-PASSING MARKING (yellow)
2. -THERMOPLASTIC 4" DASHED WHITE LANE LINE
3. -THERMOPLASTIC 8" WIDE SOLID WHITE CHANNELIZING LINE
4. -THERMOPLASTIC STOP LINE-24"
5. -THERMOPLASTIC LANE ARROWS
6. -THERMOPLASTIC CROSS WALKS-12"
7. -THERMOPLASTIC WORD ON PAVEMENT-96"

## NOTES

1. ALL EXISTING SIGNS SHALL BE REMOVED AND GIVEN TO THE STREET DEPARTMENT
2. THE NEW SIGNS AND APPURTENANCES SHALL BE SUPPLIED BY THE CITY AND INSTALLED BY CONTRACTOR AS DIRECTED BY ENGINEER. (MAST ARM MOUNTED ONLY APPROX 15 BRACKETS & SIGNS)

NW NE SW SE N

20 10 0 20
HORIZONTAL SCALE IN FEET

| DRAWN BY: | CHECKED BY: |
|---|---|
| FPW | SDH |
| DATE: Dec. 30, 1998 | DATE: Feb. 26, 1999 |

# Lake Avenue N.W. Widening Plans

Signing and Striping Plans (Lake Ave. 10+00 to 15+50/Kracker St. 20+00 to 21+50/1st St. 28+50 to 31+50)
City of Massillon
Stark County, Ohio

RT. 30 W. AT THE INDUSTRIAL — RT. 30 E. CROSSROADS OF OHIO — RT. 21

THE CITY OF MASSILLON, OHIO

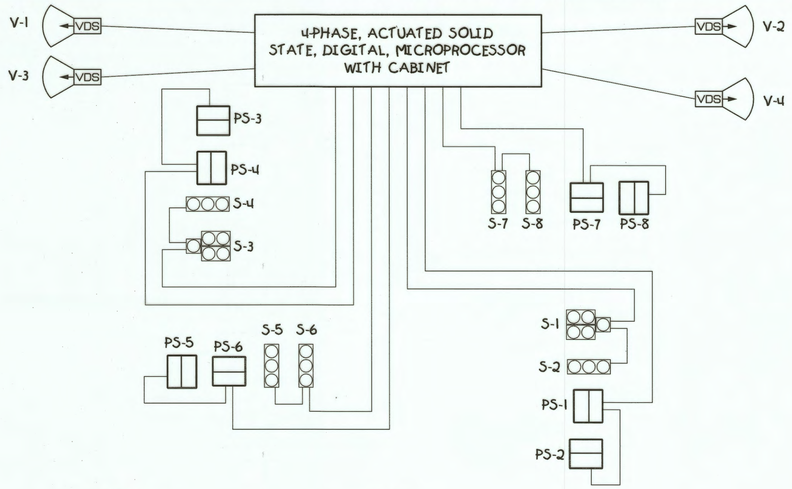
Francis H. Cicchinelli, Jr.
Mayor

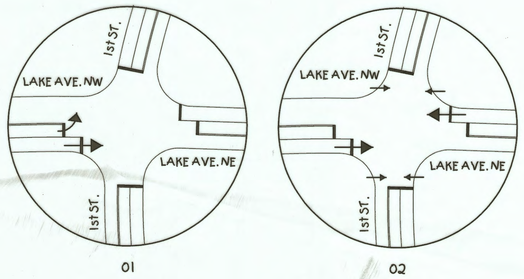
REVISIONS:

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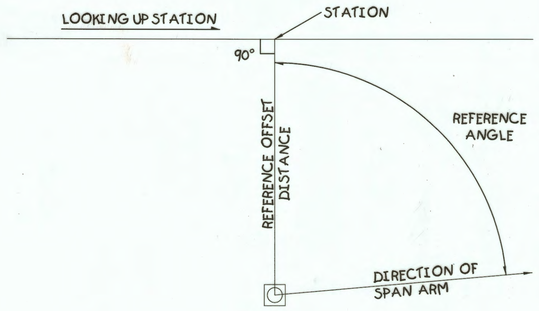
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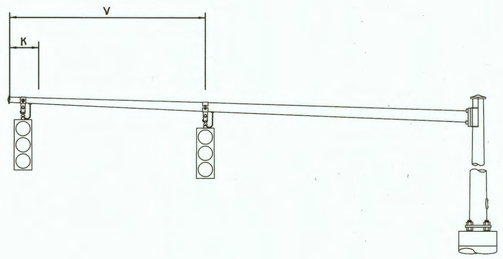
ACCOUNT NUMBER 98ST04

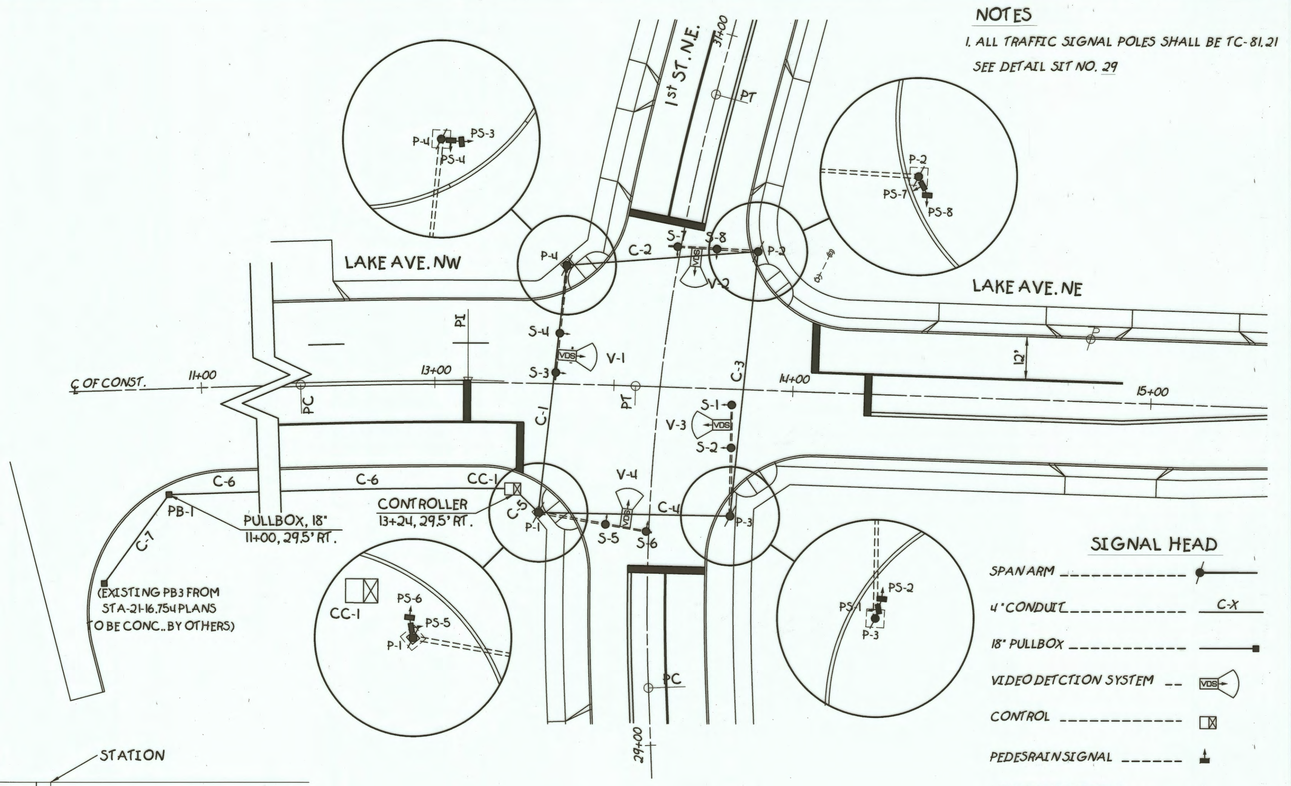



PHASE DIAGRAM



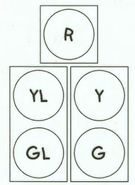

NOTES

1. ALL TRAFFIC SIGNAL POLES SHALL BE TC-81.21 SEE DETAIL SIT NO. 29

SIGNAL HEAD

SPAN ARM
4" CONDUIT — C-X
18" PULLBOX
VIDEO DETCTION SYSTEM — VDS
CONTROL
PEDESRAIN SIGNAL
VEHICULAR SIGNALS

VEHICULAR SIGNAL HEAD




ALL 12" LENS

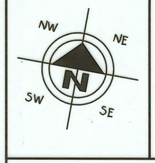
PEDESTRIAN SIGNAL




| SIGNAL REF. No. | LOCATION | SIGNAL TYPE | PHASE 1 INTERVAL | | | PHASE 2 INTERVAL | | | PHASE 3 INTERVAL | | | PHASE 4 INTERVAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| S-1 | P-3 | TYPE "A" | GL/G | YL/G | G | G | Y | R | R | R | R | R | R | R |
| S-2 | P-3 | TYPE "B" | G | G | G | G | Y | R | R | R | R | R | R | R |
| S-3 | P-4 | TYPE "A" | R | R | R | G | G | G | GL/G | YL/Y | R | R | R | R |
| S-4 | P-4 | TYPE "B" | R | R | R | G | G | G | G | Y | R | R | R | R |
| S-5 | P-1 | TYPE "B" | R | R | R | R | R | R | R | R | R | G | Y | R |
| S-6 | P-1 | TYPE "B" | R | R | R | R | R | R | R | R | R | G | Y | R |
| S-7 | P-2 | TYPE "B" | R | R | R | R | R | R | R | R | R | G | Y | R |
| S-8 | P-2 | TYPE "B" | R | R | R | R | R | R | R | R | R | G | Y | R |
| PS-1 | P-3 | TYPE "C" | DW | DW | DW | W | F/DW | DW | DW | DW | DW | DW | DW | DW |
| PS-2 | P-3 | TYPE "C" | DW | DW | DW | DW | DW | DW | DW | DW | DW | W | F/DW | DW |
| PS-3 | P-4 | TYPE "C" | DW | DW | DW | W | F/DW | DW | DW | DW | DW | DW | DW | DW |
| PS-4 | P-4 | TYPE "C" | DW | DW | DW | DW | DWG | DW | DW | DW | DW | W | F/DW | DW |
| PS-5 | P-1 | TYPE "C" | DW | DW | DW | W | F/DW | DW | DW | DW | DW | DW | DW | DW |
| PS-6 | P-1 | TYPE "C" | DW | DW | DW | DW | DW | DW | DW | DW | DW | W | F/DW | DW |
| PS-7 | P-2 | TYPE "C" | DW | DW | DW | W | F/DW | DW | DW | DW | DW | DW | DW | DW |
| PS-8 | P-2 | TYPE "C" | DW | DW | DW | DW | DW | DW | DW | DW | DW | W | F/DW | DW |

| POLE REF. No. | ℄ OF CONST. | STATION | OFFSET | POLE DESIGN No. | REFERENCE ANGLE | SIGNAL SPACING K | SIGNAL SPACING V |
|---|---|---|---|---|---|---|---|
| P-1 | LAKE AVE. N.W. | 13+29 | 30' RT. | 1 | 99° | 1.5' | 13' |
| P-2 | LAKE AVE. N.E. | 13+89 | 38.55' LT. | 1 | 91°30' | 2.5' | 13.5' |
| P-3 | 1st ST. N.E. | 29+65 | 22.5' RT. | 2. | 88° | 1' | 13' |
| P-4 | 1st ST. N.E. | 30+29 | 30.5' LT. | 2 | 86° | 2' | 13' |

| SIGNAL REF. No. | STATION FROM | STATION TO | SIDE | 625 4" CONDUIT Spec. 713.07 L.F. | 625 PULL BOX, 18" SPEC 713.09 EACH | 644 CONT-TROLL CABINET EACH | 644 PEDSTRAIN PUSHBUTTON EACH |
|---|---|---|---|---|---|---|---|
| C-1 | 13+29 LAKE(P-1) | 30+29 1st(P-4) | N/A | 70' | | | |
| C-2 | 30+29 1st(P-4) | 13+89 LAKE(P-2) | N/A | 54' | | | |
| C-3 | 13+89 LAKE(P-2) | 29+65 1st(P-3) | N/A | 74' | | | |
| C-4 | 29+65 1st(P-3) | 13+29 LAKE(P-1) | N/A | 54' | | | |
| C-5 | 13+29 LAKE(P-1) | 13+24 LAKE | RT. | 9' | | | |
| C-6 | 13+24 LAKE | 11+00 LAKE | RT. | 234' | | | |
| C-7 | 11+00 LAKE | 10+71 LAKE | RT. | 30' | | | |
| CC-1 | 13+24 LAKE | | RT. | | | 1 | |
| PB-1 | 11+00 LAKE | | RT. | | 1 | | |
| PW-1 | 13+29 LAKE(P-1) | | RT. | | | | 1 |
| PW-2 | 13+89 LAKE(P-2) | | LT. | | | | 1 |
| PW-3 | 29+65 1st(P-3) | | RT. | | | | 1 |
| PW-4 | 30+29 1st(P-4) | | LT. | | | | 1 |
| | | | | | | | |
| TOTAL | | | | 525' | 1 | 1 | 4 |




| DRAWN BY: | CHECKED BY: |
|---|---|
| FPW | SDH |
| DATE: Dec. 30, 1998 | DATE: Feb. 26, 1999 |

# Lake Avenue N. W. Widening Plans

Signing and Striping Plans (Lake Ave. 10+00 to 15+50/Kracker St. 20+00 to 21+50/1st St. 28+50 to 31+50)
City of Massillon
Stark County, Ohio

RT. 30 W. AT THE INDUSTRIAL — RT. 30 E. CROSSROADS OF OHIO — RT. 21

THE CITY OF MASSILLON, OHIO

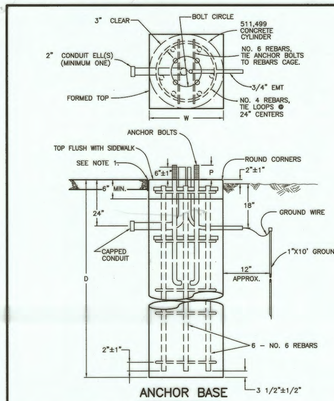
Francis H. Cicchinelli, Jr.
Mayor

REVISIONS:

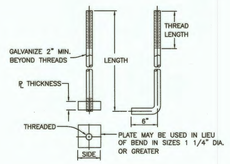
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ELECTROINIC FILE NAME: 98ST0428.DWG

ACCOUNT NUMBER 98ST04




## ANCHOR BASE




| DIA. | LENGTH | THREAD LENGTH | ℄ THICK | ℄ SIDE | THREAD |
|---|---|---|---|---|---|
| 1 1/4 | 42 | 8 | 1 1/2 | 4 | 1 1/4-7 |
| 1 1/2 | 54 | 9 | 1 1/2 | 4 | 1 1/2-6 |
| 1 3/4 | 84 | 9 | 2 | 5 | 1 3/4-5 |
| 2 | 90 | 9 | 2 | 5 | 2-4 1/2 |
| 2 1/4 | 90 | 10 | 2 1/2 | 6 | 2 1/4-4 1/2 |
| 2 1/2 | 114 | 10 | 2 1/2 | 6 | 2 1/2-4 |
| 3 | 138 | 12 | 3 | 7 | 3-4 |

## ANCHOR BOLTS

TC-9.10 TYPE SUPPORTS

| DESIGN NO. | D (feet) | W | ANCHOR BOLTS SIZE | CIRCLE | P |
|---|---|---|---|---|---|
| 1 | 8 | 30 | 1 1/2x54 | 13 1/2 | 6 3/4 |
| 2 | 8 | 30 | 1 1/2x54 | 13 1/2 | 6 3/4 |
| 3 | 9 | 36 | 1 3/4x84 | 16 | 7 3/4 |

TC-16.20 & TC-81.20 TYPE SUPPORTS

| DESIGN NO. | D (feet) | W | ANCHOR BOLTS SIZE | CIRCLE | P |
|---|---|---|---|---|---|
| 1 | 8 | 30 | 1 1/2x54 | 13 1/2 | 6 3/4 |
| 2 | 8 | 30 | 1 1/2x54 | 15 | 6 3/4 |
| 3 | 9 | 30 | 1 1/2x54 | 16 | 6 3/4 |
| 4 | 10 | 36 | 1 1/4x84 | 18 | 7 3/4 |
| 5 | 9 | 36 | 1 1/4x84 | 15 | 7 3/4 |
| 6 | 9 | 36 | 1 1/4x84 | 15 | 7 3/4 |
| 7 | 9 | 36 | 1 1/4x84 | 15 | 7 3/4 |
| 8 | 9 | 36 | 1 1/4x84 | 16 | 7 3/4 |
| 9 | 10 | 36 | 1 1/4x84 | 18 | 7 3/4 |
| 10 | 10 | 36 | 1 1/4x84 | 20 | 7 3/4 |
| 11 | 10 | 36 | 1 1/4x84 | 20 | 7 3/4 |
| 12 | 11 | 36 | 2x90 | 20 | 8 1/2 |

TC-16.20 & TC-81.20 TYPE SUPPORTS

| DESIGN NO. | D (feet) | W | ANCHOR BOLTS SIZE | CIRCLE | P |
|---|---|---|---|---|---|
| 1 | 7 | 30 | 1 1/4x42 | 10 | 5 3/4 |
| 2 | 7 | 30 | 1 1/2x54 | 12 1/2 | 6 3/4 |
| 3 | 8 | 30 | 1 1/2x54 | 16 | 6 3/4 |
| 4 | 8 | 36 | 1 3/4x84 | 18 | 7 3/4 |
| 5 | 9 | 36 | 1 3/4x84 | 15 | 7 3/4 |
| 6 | 9 | 36 | 1 3/4x84 | 15 | 7 3/4 |
| 7 | 10 | 36 | 2x90 | 15 | 8 1/2 |
| 8 | 10 | 36 | 2x90 | 16 | 8 1/2 |
| 9 | 10 | 36 | 2x90 | 18 | 8 1/2 |
| 10 | 11 | 36 | 2 1/4x90 | 20 | 9 |
| 11 | 11 | 36 | 2 1/4x90 | 20 | 9 |
| 12 | 12 | 36 | 2 1/2x114 | 20 | 9 3/4 |

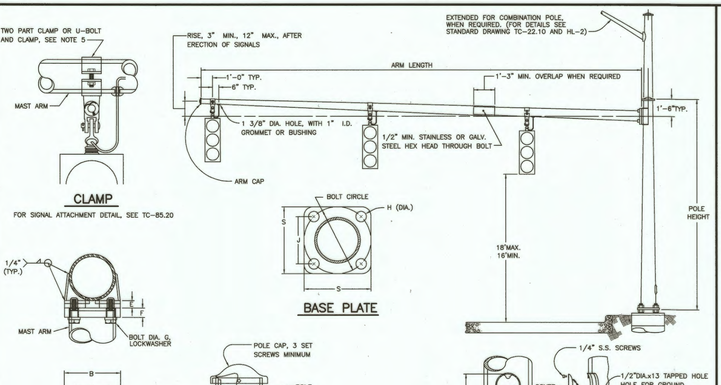
TC-16.20 & TC-81.20 TYPE SUPPORTS

| DESIGN NO. | D (feet) | W | ANCHOR BOLTS SIZE | CIRCLE | P |
|---|---|---|---|---|---|
| 1 | 7 | 30 | 1 1/4x42 | 10 | 5 3/4 |
| 2 | 7 | 30 | 1 1/2x54 | 12 1/2 | 6 3/4 |
| 3 | 8 | 30 | 1 1/2x54 | 16 | 6 3/4 |
| 4 | 10 | 36 | 1 1/4x84 | 18 | 7 3/4 |
| 5 | 9 | 36 | 1 1/4x84 | 15 | 7 3/4 |
| 6 | 9 | 36 | 1 1/4x84 | 15 | 7 3/4 |
| 7 | 10 | 36 | 2x90 | 15 | 8 1/2 |
| 8 | 10 | 36 | 2x90 | 16 | 8 1/2 |
| 9 | 10 | 36 | 2x90 | 18 | 8 1/2 |
| 10 | 11 | 36 | 2 1/4x90 | 20 | 9 |
| 11 | 11 | 36 | 2 1/4x90 | 20 | 9 |
| 12 | 12 | 36 | 2 1/2x114 | 20 | 9 3/4 |

## NOTES

1. 1/2" INCH PERFORMED JOINT FILLER AS PER 705.03 SHALL BE USED BETWEEN FOUNDATIONS AND ADJACENT PAVED AREAS.
2. A SPECIAL FOUNDATION DESIGN WILL BE REQUIRED WHEN SOIL WITH LOAD BEARING CAPACITY OF LESS THAN 200 POUNDS PER SQUARE FOOT IS ENCOUNTERED.
3. ALL ANCHOR BOLTS SHALL BE PROVIDED WITH STANDARD STEEL HEX NUTS, LEVELING NUTS, PLAIN AND LOCKWASHERS. STRENGTH OF THE ANCHOR BOLTS.
4. ALL DIMENSIONS ARE IN INCHES.
5. ALL ITEMS SHALL CONFORM TO C & M SPECIFICATION 630, 730, 632 AND 732, UNLESS OTHERWISE SPECIFIED.

## FOUNDATIONS (TC-21.20)

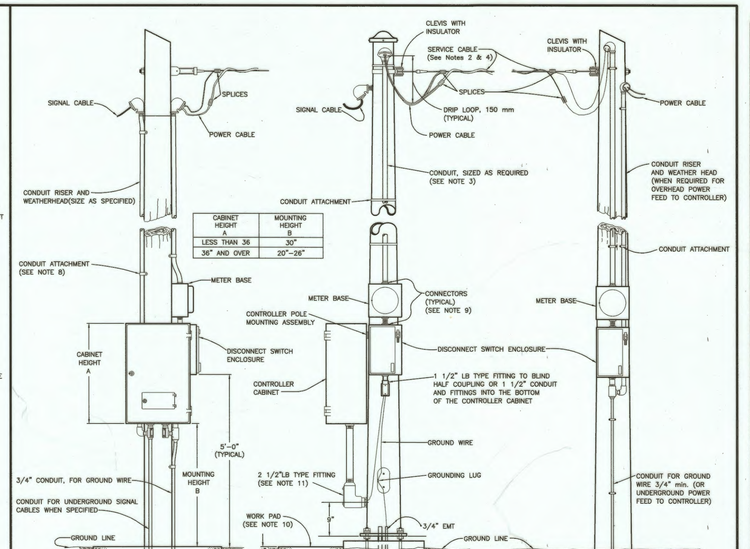



| DESIGN NO. | POLE WALL THICK | POLE SIZE | ARM WALL THICK | ARM SIZE | TWO PIECE ARM WALL THICK | TWO PIECE ARM SIZE | ARM ATTACHMENT A | B | C | D | E | F | G | ANCHOR BASE BOLT CIRCLE | S | J | T | H | ANCHOR BOLT DIA | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .179 | 10x6.78x23' | .179 | 7x3.50x25' | | | 14 1/2 | 12 | 10 1/2 | 8 | 1 1/4 | 1 1/4 | 1 1/4 | 13 1/2 | 14 1/8 | 9 9/16 | 1 1/2 | 1 3/4 | 1 1/2 | 54 |
| 2 | .179 | 11x7.78x23' | .179 | 8x3.52x32' | | | 14 1/2 | 12 | 10 1/2 | 8 | 1 1/4 | 1 1/2 | 1 1/4 | 15 | 15 5/8 | 10 5/8 | 1 1/2 | 1 3/4 | 1 1/2 | 54 |
| 3 | .179 | 12x8.78x23' | .179 | 9x3.68x32' | | | 14 1/2 | 12 | 10 1/2 | 8 | 1 1/4 | 1 1/2 | 1 1/4 | 16 | 17 | 11 5/8 | 1 1/2 | 1 3/4 | 1 1/2 | 54 |
| 4 | .239 | 13x9.78x23' | .239 | 10.32x5.00x38' | | | 16 1/2 | 14 1/2 | 12 1/2 | 9 1/2 | 1 1/4 | 2 | 1 1/4 | 18 | 18 1/2 | 12 3/4 | 2 | 2 1/8 | 1 3/4 | 84 |
| 11 | .239 | 14x10.78x23' | TOT. LENGTH=45' | | .239 | 11x8.62x17'± | 16 1/2 | 14 1/2 | 12 1/2 | 9 1/2 | 1 1/4 | 2 | 1 1/4 | 20 | 20 1/2 | 14 1/8 | 2 | 2 1/8 | 1 3/4 | 84 |
| | | | | | .179 | 9.19x5.10x29'-3" | | | | | | | | | | | | | | |
| 12 | .299 | 14x10.78x23' | TOTAL LENGTH=48' | | .299 | 11x8.62x17'± | 16 1/2 | 14 1/2 | 12 1/2 | 9 1/2 | 1 1/4 | 2 | 1 3/8 | 20 | 20 1/2 | 14 1/8 | 2 | 2 3/8 | 2 | 90 |
| | | | | | .179 | 9.19x4.68x32'-3" | | | | | | | | | | | | | | |

## NOTES

1. ARM PLATE HOLE DIAMETER SHALL BE BOLT DIAMETER PLUS 1/8 INCH. POLE PLATE TAPPED HOLE SHALL HAVE THREADS WITH 7SR (MIN.) FULL PROFILE HEIGHT. THREADS MAY BE RETAPPED AFTER GALVANIZING.
2. FOR SIGN MOUNTING DETAILS SEE STANDARD DRAWINGS TC-16.20 AND TC-41.41 IN O.D.O.T. STANDARD CONSTRUCTION DRAWINGS.
3. FOR FOUNDATIONS DETAILS, SEE TC-21.20.
4. THE ARM ATTACHMENT PLATE SHALL BE WELDED INSIDE AND OUTSIDE WITH FILLET WELDS. EACH FILLET WELD SHALL BE EQUAL TO THE WALL THICKNESS OF THE RESPECTIVE TUBING.
5. THE MAST ARM CLAMP SHALL HAVE A MINIMUM STRENGTH AT YIELD TO SUPPORT A 2000 POUND LOAD.
6. ALL DIMENSIONS ARE IN INCHES.
7. ALL ITEMS SHALL CONFORM TO C & M SPECIFICATION 632 AND 732, UNLESS OTHERWISE SPECIFIED.

## SINGLE ARM OVERHEAD SIGNAL SUPPORT (TC-81.20)

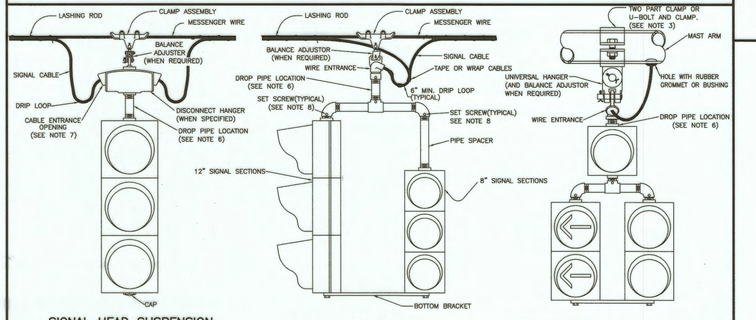


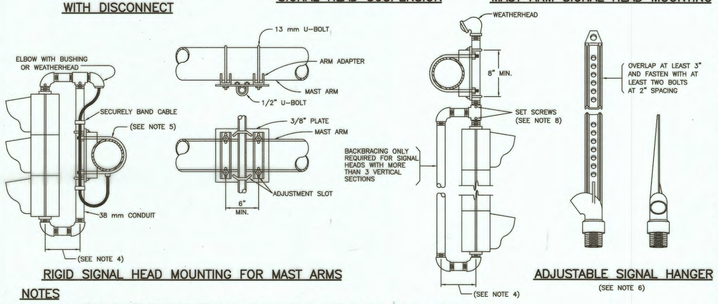

| CABINET HEIGHT A | MOUNTING HEIGHT B |
|---|---|
| LESS THAN 36" | 30" |
| 36" AND OVER | 20"-26" |

## NOTES

1. ALL CONDUIT FITTING ENTRIES FOR CONTROLLERS AND POWER SERVICE EQUIPMENT IN PROPOSED STEEL POLES SHALL BE ATTACHED BY A BLIND HALF COUPLING WELDED INTO THE POLE PRIOR TO GALVANIZING.
2. SERVICE CABLE ATTACHMENT ON WOOD POLES SHALL BE BY A 5/8" THRU-BOLT AND CLEVIS ON STEEL POLES BY A BANDED CLEVIS.
3. IF BOTH THE METER AND DISCONNECT SWITCH ARE NOT REQUIRED ON A STEEL POLE, THE POWER CABLE SHALL ENTER THE THE CONTROLLER THROUGH A CONDUIT RISER, EXTERNAL TO THE POLE.
4. THE SERVICE CABLE AND CABLE SPLICES TO THE POWER CABLE FOR THE INCOMING POWER SUPPLY WILL BE INSTALLED BY THE POWER SUPPLYING AGENCY UNLESS OTHERWISE SPECIFIED. THE POLE ATTACHMENT HARDWARE SHALL BE FURNISHED AND INSTALLED BY CONTRACTOR.
5. ORIENTATION OF THE CABINET, METER AND DISCONNECT ENCLOSURE SHALL BE ARRANGED TO MINIMIZE EXPOSURE TO THE STREET SIDE AND ALSO MINIMIZE ENCROACHMENT ON THE SIDEWALKS, UNLESS OTHERWISE SHOWN ON THE PLANS. THE ELECTRIC METER MOUNTING HEIGHT SHALL BE AS RECOMMENDED BY THE POWER SUPPLYING AGENCY.
6. POWER AND CONTROLLER SERVICE FOR EXISTING STEEL POLES SHALL BE SIMILAR TO THAT SHOWN FOR THE WOOD POLE WITH THE EXCEPTION OF THE ATTACHMENT HARDWARE.
7. METER BASE WILL BE FURNISHED BY THE POWER SUPPLYING AGENCY AND INSTALLED BY THE CONTRACTOR WHEN METERING IS REQUIRED.
8. CONDUIT ATTACHMENT SHALL BE BY MEANS OF TWO HOLE CONDUIT STRAPS WITH A MAXIMUM SPACING OF FIVE(5) FEET. MINIMUM FASTENER REQUIREMENTS ARE AS FOLLOWS: WOOD POLES--1/4"x3" LONG LAG SCREWS, #14X3" LONG ROUND HEAD SCREWS, OR 20d SPIKES. STEEL POLES--1/4" SCREWS, SELF TAPPING OR WITH DRILLED AND TAPPED HOLE. IN LIEU OF CONDUIT CLAMPS, 3/4" WIDE PASSIVATED STAINLESS STEEL BANDING MAY BE USED ON STEEL POLES.
9. CONDUIT CONNECTIONS TO THE TOP OR SIDES OF EQUIPMENT SHALL BE WATER TIGHT.
10. A 48"x36"x4" WORK PAD SHALL BE LOCATED BELOW EACH POLE MOUNTED CONTROLLER CABINET UNLESS LOCATED IN AN OTHERWISE PAVED AREA WHEN REQUIRED THIS ITEM SHALL BE PAID FOR UNDER ITEM 608, 4" CONCRETE WALK. IN LEVEL AREAS THE TOP OF THE PAD SHALL BE 1" ABOVE THE GROUND LINE. IN STEEPLY SLOPED AREAS THE PAD'S LOCATION SHALL BE ADJUSTED TO PROVIDE ACCESS AND DRAINAGE WHILE COMPLYING WITH THE REQUIRED CONTROLLER CABINET MOUNTING HEIGHT.
11. THE HORIZONTAL ORIENTATION OF THE HANDHOLE RELATIVE TO THE 2 1/2" BLIND HALF COUPLING FOR THE CONTROLLER SHALL BE AS REQUIRED BY THE PLANS, EXCEPT THEY SHALL NOT BE LOCATED FACING TRAFFIC. DO NOT INSTALL LB FITTING BEFORE ERECTING POLE.
12. WHEN CONDUIT RISERS ARE REQUIRED TO BE ATTACHED TO UTILITY COMPANY WOOD POLES, AND THEIR POLICY REQUIRES NONMETALLIC CONDUIT, THE CONDUIT RISERS SHALL CONFORM WITH NEMA STANDARD PUBLICATION NO. TC-2 FOR PVC CONDUIT TYPE EPC-40.

## POLE MOUNTING FOR CONTROLLERS AND POWER SERVICE (TC-83.10)

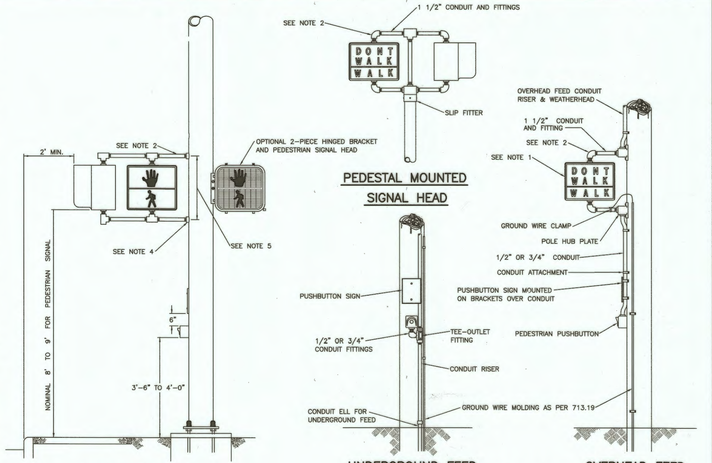


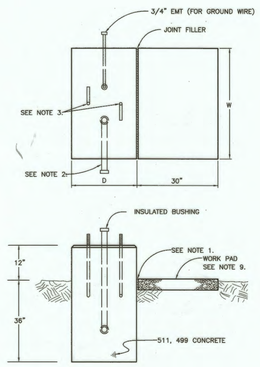




## NOTES

1. VEHICULAR SIGNAL HEADS SHALL UTILIZE MOUNTING BRACKETS SIMILAR TO THOSE SHOWN FOR PEDESTRIAN SIGNAL HEADS.
2. SIGNAL HEAD CONDUIT BRACKETS AND CONDUIT FITTING SHALL BE GALVANIZED AND PAINTED (EXCEPT POLE CLAMPS OR BANDS) TO MATCH THE BODY OF THE SIGNAL HEAD.
3. FOR EMBEDDED STEEL POLES, EXTERNAL CONDUIT SHALL BE SIMILAR TO THAT SHOWN IN ##UWOOD POLE DETAIL. EXTERNAL GROUNDING WILL NOT BE REQUIRED UNLESS SPECIFICALLY NOTED ON THE PLANS.
4. THE SIGNAL HEAD BRACKET ARMS SHALL BE ATTACHED TO THE STEEL POLES BY ONE OF THE FOLLOWING METHODS:
   a. 1 1/2" BLIND HALF COUPLING WELDED INTO THE POLE PRIOR TO GALVANIZING
   b. BRACKET ARM HUB PLATES ATTACHED TO THE POLE AS PER NOTE #7.
   c. POLE CLAMP WITH THREADED HUB.
   FIELD INSTALLATION OF THE WIRING HOLES FOR SIGNAL HEADS AND PUSHBUTTONS WILL BE PERMITTED PROVIDED THAT THE HOLES ARE DRILLED OR HOLE SAWN. NO TORCH CUTTING OR WELD WELDING WILL BE PERMITTED. CUT SURFACES SHALL BE FILED SMOOTH AND COVERED WITH TWO COATS OF ZINC RICH PAINT. GROMMETS OR WIRING GUIDES SHALL BE INSTALLED IN THE HOLES.
5. VERTICAL SPACING BETWEEN BRACKET FITTINGS SHALL BE DETERMINED BY THE CONTRACTOR, AND SHALL BE THE DIMENSION FROM CENTERLINE TO CENTERLINE OF THE BRACKET ARMS NECESSARY TO TO ACCOMMODATE THE VERTICAL HEIGHT OF THE SIGNAL HEAD PLUS NOT MORE THAN 10".
6. THE FOLLOWING MINIMUM SIZE FASTENERS SHALL BE USED FOR THE ATTACHMENT OF THE INDICATED HARDWARE TO WOOD POLES:
   a. CONDUIT BRACKET ARM HUB PLATES: 1/2" DIAM. x 5" LONG LAG SCREWS (TWO SCREWS PER HUB PLATE).
   b. CONDUIT STRAPS (TWO HOLE): 1/4" x 3" LONG LAG SCREWS, #14 x 3" LONG ROUND HEAD WOOD SCREWS, OR 20d SPIKES.
   c. PUSHBUTTON SIGN: WITH BRACKETS- 3/8" x 3" LONG LAG SCREWS (TWO PER BRACKET); WITHOUT BRACKETS - 3/8" x 3" LONG LAG SCREWS WITH 7/16" I.D. x 1" O.D. FLAT WASHER BETWEEN THE SIGN POLE (TWO PER SIGN).
   d. PUSHBUTTON- #14 x 3" LONG ROUND HEAD WOOD SCREWS OR 1/4" x 3" LONG LAG SCREWS (TWOPER PUSHBUTTON).
7. THE FOLLOWING MINIMUM SIZE FASTENERS SHALL BE USED FOR THE ATTACHMENT OF THE INDICATED HARDWARE TO STEEL POLES:
   a. CONDUIT BRACKET ARM HUB PLATES: 1/2" DIAM. SCREW OR 3/4" WIDE PASSIVATED STAINLESS STEEL BAND (TWO FASTENERS OR BANDS PER HUB PLATE).
   b. CONDUIT: TWO HOLE CONDUIT STRAPS WITH 1/4" DIAM. SCREWS OR 3/4" WIDE PASSIVATED STAINLESS STEEL BANDS.
   c. PUSHBUTTON SIGN: 3/8" DIAM. SCREWS (TWO PER SIGN).
   d. PUSHBUTTON: 1/4" DIAM SCREWS (TWO PER PUSHBUTTON).
   THE SCREWS SHALL UTILIZE A DRILLED AND TAPED HOLE OR BE THE SELF-TAPPING TYPE.
8. ALL ITEMS SHALL CONFORM TO C &M SPECIFICATIONS 632 AND 732 UNLESS OTHERWISE SPECIFIED.

## POLE MOUNTINGS FOR SIGNAL HEADS (TC-85.10)




| TYPE | W | D | FOUNDATION CONCRETE |
|---|---|---|---|
| 1 | 40" | 24" | .99 C.Y. |
| 2 | 50" | 36" | 1.85 C.Y. |

GROUND MOUNTED CONTROLLER FOUNDATION

## NOTES

1. 1/2" PERFORMED JOINT FILLER AS PER 705.03 SHALL BE USED BETWEEN FOUNDATIONS AND ADJACENT PAVED AREAS.
2. THE SIZE, NUMBER AND ORIENTATION OF CONDUIT ELLS SHALL BE AS SHOWN IN THE PLANS, EXCEPT THAT ONE 3/4" EMT SHALL BE INSTALLED IN EACH FOUNDATION.
3. THE SIZE, NUMBER AND LOCATION OF ANCHOR BOLTS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
4. ALL PEDESTALS SHALL BE PROVIDED WITH A METHOD OF SECURELY ATTACHING A NO. 4 AWG INSULATED COPPER GROUNDING CABLE TO THE PEDESTAL OR ANCHOR BOLT. NO CABLES OR CONNECTIONS SHALL BE EXTERNAL TO THE PEDESTAL.
5. THE PEDESTAL SHAFT LENGTH AS SHOWN IN THE PLANS INCLUDES THE PEDESTAL BASE HEIGHT FOR EITHER BASE DESIGN.
6. THE PEDESTAL BASE SHALL SET ON THE FOUNDATION TOP WITHOUT GROUTING, PERFORMED FILLERS OR LEVELING NUTS UNDER THE BASE. STEEL SHIMS MY BE USED UNDER THE BASE FOR LEVELING THE INSTALLATION.
7. THE FOUNDATION AREA OF CONTACT WITH THE PEDESTAL BASE SHALL BE LEVEL. IF ADJACENT PAVED AREAS SLOPE, THE REMAINDER OF THE FOUNDATION TOP SHALL BE BEVELED TO MEET THE ADJACENT ELEVATIONS.
8. A CAST STEEL ANCHOR BASE OF EQUIVALENT STRENGTH MAY BE USED IN LIEU OF THE PLATE BASE.
9. A 40"x30"x4" WORK PAD SHALL BE LOCATED IN FRONT OF EACH PEDESTAL MOUNTED CONTROLLER CABINET UNLESS IN AN OTHERWISE PAVED AREA. THE WORK PAD FOR THE GROUND MOUNTED CONTROLLER SHALL BE SIZED AS SHOWN IN THE TABLE. WHEN REQUIRED THIS ITEM SHALL BE PAID FOR UNDER ITEM 608, 4" CONCRETE WALK. IN LEVEL AREAS THE TOP OF THE PAD SHALL BE 1" ABOVE THE GROUND LINE. IN STEEPLY SLOPED AREAS THE PAD'S LOCATION SHALL BE ADJUSTED TO PROVIDE ACCESS AND DRAINAGE.
10. GROUND MOUNTED CONTROLLER CABINETS SHALL BE SEALED TO THE FOUNDATION WITH A FLEXIBLE WEATHERPROOF CAULKING COMPOUND.
11. ALL DIMENSIONS ARE IN INCHES.
12. ALL ITEMS SHALL CONFORM TO SUPPLEMENTAL SPECIFICATIONS 861 AND 961 AND C & M SPECIFICATIONS 608, 632 AND 732 UNLESS OTHERWISE SPECIFIED.

## CONTROLLER FOUNDATION AND PEDESTALS (TC-83.20)

# Lake Avenue N.W. Widening Plans

TRAFFIC CONTROL DETAILS
City of Massillon
Stark County, Ohio

| DRAWN BY: | CHECKED BY: |
|---|---|
| FPW | SDH |
| DATE: Dec. 30, 1998 | DATE: Feb. 26, 1999 |

RT. 30 W. — RT. 30 E. AT THE INDUSTRIAL CROSSROADS OF OHIO — RT. 21

THE CITY OF MASSILLON, OHIO

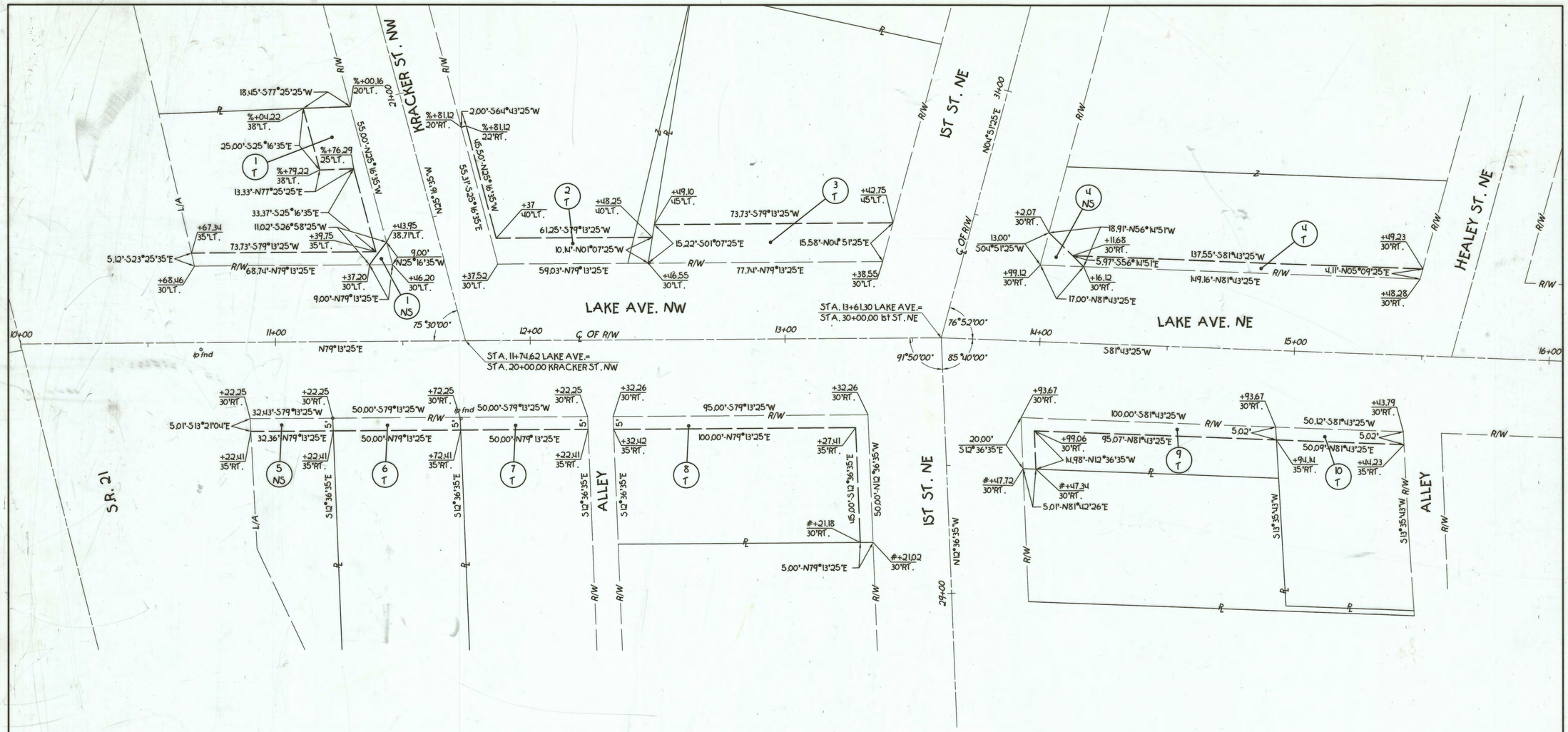
Francis H. Cicchinelli, Jr.
Mayor

REVISIONS:

| DATE | DESCRIPTION |
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ELECTROINIC FILE NAME: 98ST0429.DWG

ACCOUNT NUMBER 98ST04




| PARCEL No. | OWNER | OWNER RECORD BOOK | OWNER RECORD PAGE | AUDITOR'S PARCEL | (T) EASEMENT AREA(Ac.) | (NS) EASEMENT AREA(Ac.) | COMMENTS | AS ACQUIRED BOOK | AS ACQUIRED PAGE |
|---|---|---|---|---|---|---|---|---|---|
| 1T | THOMAS D. & DEBORAH J. HAMMER | 2534 | 370 | 06 00466 | 0.022 | | TO CONSTRUCT DRIVE / RESTORE LAWN | | |
| 1NS | | | | | | 0.001 | TO CONSTRUCT RETURN | | |
| 2T | JOSEPH W. ACCETTA, JR. | 1013 | 424 | 06 16722 | 0.016 | | RESTORE LAWN / DRIVE | | |
| 3T | BONNIE R. AMAN | 834 | 80 | 06 00178 | 1.032 | | RESTORE PARKING / DRIVE | | |
| 4T | CAMBELL OIL COMPANY | 1765 | 129 | 06 16676 | 0.012 | | RESTORE PARKING / DRIVE | | |
| 4NS | | | | | | 0.003 | TO CONSTRUCT RETURN / WALK | | |
| 5NS | MARY P. SIMON | 658 | 633 | 06 10734 | 0.004 | | RESTORE LAWN | | |
| 6T | TIMOTHY J. & CATHERINE STURM | | | 06 07794 | 0.006 | | RESTORE LAWN / DRIVE | | |
| 7T | WILLIAM L. & LINDA BORDER | 179 | 251 | 06 01115 | 0.006 | | RESTORE LAWN / DRIVE | | |
| 8T | MARY P. SIMON | | | 06 10737 | 0.017 | | RESTORE PARKING / DRIVE | | |
| 9T | TOMMY E. & CAROL J. MELDRUM | 1688 | 247 | 06 02225 | 0.013 | | RESTORE LAWN / DRIVE | | |
| 10T | TOMMY E. MELDRUM / CAROL JO MELDRUM | 99012619 | | 06 04759 | 0.006 | | RESTORE LAWN | | |

## LEGEND

(T) TEMPORARY RIGHT OF WAY EASEMENT AGREEMENT. (TO RESTORE AREAS THAT WHERE DISTURBED DURING CONSTRUCTION.)

(NS) STANDARD HIGHWAY EASEMENT. (A PERMANENT FORTHE USE OF ROADWAY AND ITS APPURTENANCES.)

(#) STATIONED FROM 1ST ST. NE

(%) STATIONED FROM KRACKER ST. NW

NW NE SW SE N

20 10 0 20
HORIZONTAL SCALE IN FEET

| DRAWN BY: | CHECKED BY: |
|---|---|
| FPW | SDH |
| DATE: Dec. 30, 1998 | DATE: Feb. 26, 1999 |

# Lake Avenue N.W. Widening Plans

Right of Way Plan( Lake Ave. / Kracker St. / 1st St. )
City of Massillon
Stark County, Ohio

RT. 30 W. AT THE INDUSTRIAL CROSSROADS OF OHIO RT. 30 E. RT. 21

THE CITY OF MASSILLON, OHIO

Francis H. Cicchinelli, Jr.
Mayor

REVISIONS:

| DATE | DESCRIPTION |
|---|---|
| | |

ELECTRONIC FILE NAME: 98ST0430.DWG

ACCOUNT NUMBER: 98ST04