CITY OF NORTHVILLE WAYNE COUNTY, MICHIGAN

DOWNTOWN ROAD CLOSURE BOLLARD INSTALLATION

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LOCATION MAP

GENERAL PROVISIONS

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE DONE IN ACCORDANCE WITH THE PROPOSAL AND ACCOMPANYING SPECIFICATIONS FOR THIS PROJECT INCLUDING THE 2020 MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2011 MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND THE MICHIGAN DEPARTMENT OF TRANSPORTATION LOCAL AGENCY PROGRAMS GUIDELINES FOR GEOMETRICS DATED 7-24-2017.

THE LOCATION OF ALL PUBLIC UTILITIES SHOWN ON THESE PLANS IS TAKEN FROM THE BEST AVAILABLE DATA. THE CITY OF NORTHVILLE WILL NOT BE RESPONSIBLE FOR ANY OMISSION OR VARIATION FROM THE LOCATIONS SHOWN. PURSUANT TO ACTS 173 & 174 OF THE P.A. OF 2013, AS A CONDITION OF THIS CONTRACT, NOTICE SHALL BE GIVEN TO MISS DIG PRIOR TO UNDERGROUND WORK TO BE PERFORMED IN ACCORDANCE WITH THIS CONTRACT, PHONE (800) 482–7171 (OR 811). UTILITY SERVICE CONNECTIONS ARE NOT SHOWN ON THE PLANS AND ARE NOT THE RESPONSIBILITY OF THE CITY OF NORTHVILLE.

THE ELEVATIONS SHOWN ON THESE PLANS ARE BASED ON NAVD 1988 VERTICAL DATUM.

CITY OF NORTHVILLE CITY COUNCIL

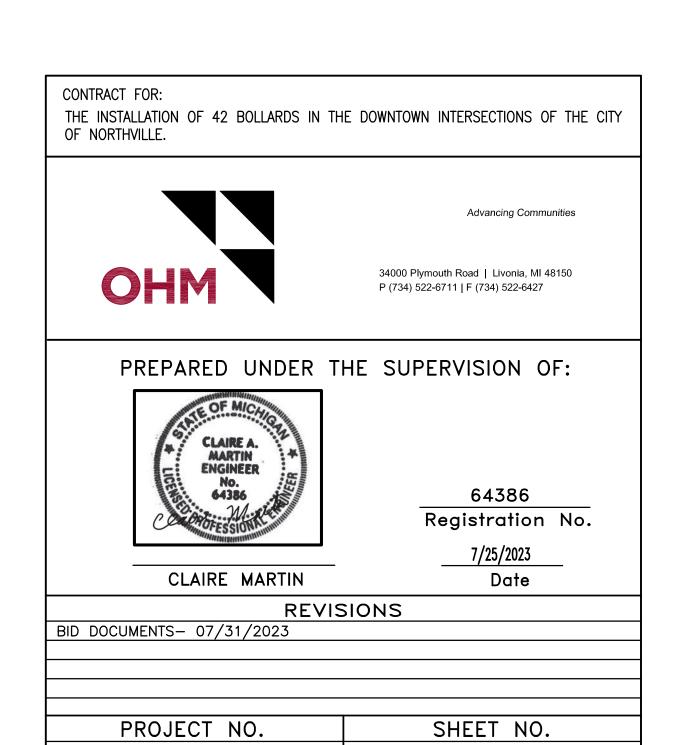
BRIAN TURNBULL

• MAYOR •

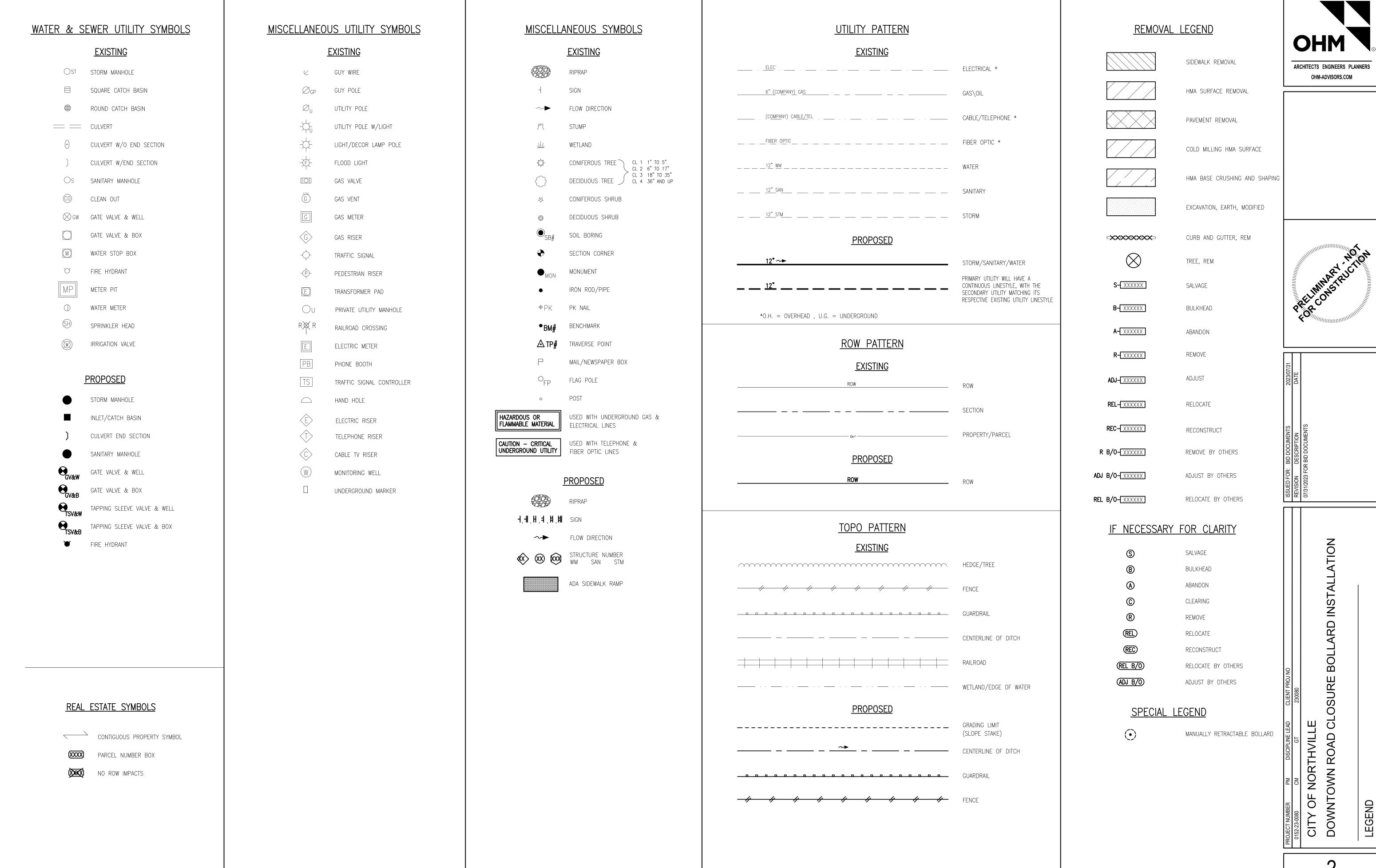
BARBARA MOROSKI-BROWNE

• MAYOR PRO-TEM •

JOHN CARTER
ANDREW KRENZ
MARILYN PRICE
COUNCIL MEMBERS



0152-23-0080



GENERAL

- THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE 2020 MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION EXCEPT AS NOTED HEREIN AND IN THE CONTRACT DOCUMENTS.
- LIMITATIONS ON PRIVATE WORK: DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL NOT PERFORM WORK BY PRIVATE AGREEMENT WITH PROPERTY OWNERS ADJACENT TO THE PROJECT, UNLESS GIVEN WRITTEN CONSENT OF THE OWNER.
- 3. THE CONTRACTOR SHALL CONDUCT OPERATIONS IN SUCH A MANNER TO COMPLY WITH ALL FEDERAL, STATE, AND CITY CODES FOR NOISE LEVELS, VIBRATIONS, OR ANY OTHER RESTRICTIONS WHILE REMOVING PAVEMENT OR FOR ANY OTHER CONSTRUCTION OPERATIONS WITHIN THIS CONTRACT TO BE INCLUDED IN THE RESPECTIVE ITEM OF WORK.
- 4. WHEN THE CONTRACTOR FAILS TO PERFORM THE DUTIES AS CALLED FOR ON THESE PLANS AND IN THE CONTRACT, THE ENGINEER MAY REQUIRE CITY FORCES TO PERFORM WORK, WITH OR WITHOUT NOTIFICATION TO THE CONTRACTOR OR THE SURETY. THE CONTRACTOR WILL BE CHARGED EQUIPMENT RENTAL RATES AS ESTABLISHED BY THE CITY. TIME CHARGED TO THE CONTRACTOR SHALL BE FROM THE TIME THAT THE WORKFORCE AND EQUIPMENT LEAVE THE CITY YARD TO THE TIME THAT THEY RETURN TO THE CITY YARD.
- 5. ALL AREAS DISTURBED OUTSIDE THE PROJECT LIMITS BY THE CONTRACTOR AND/OR HIS SUBCONTRACTOR SHALL BE RESTORED AS SPECIFIED OR DIRECTED BY THE ENGINEER. NO ADDITIONAL PAYMENT OR COMPENSATION WILL BE ALLOWED FOR THIS ACTIVITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE PROPERTY BEYOND THE AREAS OF WORK, INCLUDING BUT NOT LIMITED TO EXISTING PAVEMENT, UTILITIES, SITE FURNISHINGS, FENCING, LAWN, TREES, SPRINKLER SYSTEMS, AND SHRUBBERY.
- THE CONTRACTOR SHALL RELOCATE DISTURBED ORNAMENTAL OBJECTS AS DIRECTED BY THE ENGINEER. NO ADDITIONAL PAYMENT OR COMPENSATION WILL BE ALLOWED FOR THIS ACTIVITY.
- DISTURBED AREAS SHALL BE RESTORED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER.
- 8. UNTIL THE FINAL ACCEPTANCE OF THE PROJECT, ANY RANDOM, IRREGULARLY CRACKED NEW CONCRETE THAT OCCURS SHALL BE REMOVED AND REPLACED AT THE EXPENSE OF THE CONTRACTOR.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING PUBLIC OR PRIVATE UTILITIES DURING THE CONSTRUCTION OF THIS PROJECT. ADEQUATE CARE SHALL BE TAKEN AT ALL TIMES.
- 10. CROSSWALKS, SIDEWALKS, AND CURBS MUST BE PROTECTED DURING CONSTRUCTION. DAMAGE TO EXISTING CROSSWALKS, SIDEWALKS, AND CURBS DUE TO CONSTRUCTION TRAFFIC MUST BE REPAIRED AT CONTRACTOR'S EXPENSE.
- 11. ANY PERMANENT SIGNS REQUIRING RELOCATION DUE TO THE CONTRACTOR'S OPERATIONS SHALL BE SALVAGED AND RESET BY THE CONTRACTOR AT LOCATIONS DESIGNATED BY THE ENGINEER. SIGNS AND POST DAMAGED DURING THE REMOVAL AND STORAGE OPERATION SHALL BE REPLACED WITH NEW SIGNS AND POST BY THE CONTRACTOR AT THEIR SOLE EXPENSE. ALL SIGN SALVAGES SHALL BE RESET IMMEDIATELY.
- 12. THE CONTRACTOR SHALL NOT PARK ANY VEHICLES OR STORE ANY EQUIPMENT AND MATERIALS ON PRIVATE PROPERTY. ALL WORK SHALL BE CONFINED TO THE CONSTRUCTION LIMITS SHOWN ON THE PLANS UNLESS AUTHORIZED IN ADVANCE BY THE ENGINEER.
- 13. EARTH DISTURBANCE LIMITS FOR THIS PROJECT ARE SHOWN ON THE PLANS, RESTORATION MEASURES HAVE BEEN INCLUDED IN THE PLANS FOR THE APPROVED AREAS OF DISTURBANCE. THE CONTRACTOR SHALL SUBMIT AN EARTH CHANGE PLAN FOR ANY WORK BEYOND THE APPROVED LIMITS TO THE ENGINEER TO REVIEW FOR APPROVAL PRIOR TO THE DISTURBANCE. ALL COSTS FOR OBTAINING AND EXECUTING AN APPROVED EARTH CHANGE PLAN, INCLUDING RESTORATION, SHALL BE AT THE CONTRACTOR'S SOLE EXPENSE.
- 14. THE CONTRACTOR SHALL MAINTAIN ACCESS FOR POSTAL SERVICE AND REFUSE COLLECTION TO ALL PROPERTIES AT ALL TIMES. ACCESS SHALL ALSO BE MAINTAINED FOR EMERGENCY SERVICES, INCLUDING POLICE, FIRE AND EMERGENCY RESPONSE PERSONNEL AND EQUIPMENT, AT ALL TIMES.

REMOVALS

- 1. SAW CUTTING AND/OR CORING FOR PAVEMENT REMOVAL AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER SHALL BE TO THE DEPTH REQUIRED FOR PROPER REMOVAL OF PAVEMENTS, WHILE PREVENTING SPALLING, CHIPPING, OR DAMAGE TO EXISTING PAVEMENT, EDGES LEFT IN PLACE.
- 2. THE CONTRACTOR SHALL REMOVE THE EXISTING PAVEMENT SURFACE AND SUBGRADE, AS DIRECTED BY THE ENGINEER, TO A SUFFICIENT DEPTH IN ORDER TO CONSTRUCT THE BOLLARD FOUNDATIONS.
- 3. PAVEMENT REMOVAL AS SHOWN ON THE PLANS SHALL BE AT THE DISCRETION OF THE ENGINEER. IF IN HIS/HER JUDGEMENT, AREAS OF PAVEMENT MAY BE LEFT IN PLACE, OR ADDITIONAL AREAS ADDED, TO PROVIDE THE PROPER BOLLARD FOUNDATION, ADJUSTMENTS CAN BE MADE IN THE QUANTITIES.
- 4. SAW CUTS ARE NOT PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE REMOVAL ITEMS.
- MISS DIG RULES APPLY PRIOR TO SAW CUTTING AND REMOVAL IF UTILITIES ARE EXPECTED OR ENCOUNTERED, HAND DIGGING OR POT HOLING AT THE BOLLARD FOUNDATION LOCATIONS SHALL BE CONDUCTED AT NO ADDITIONAL EXPENSE TO THE OWNER.

UTILITY NOTES

- FOR PROTECTION OF UNDERGROUND UTILITIES AND CONFORMANCE WITH PUBLIC ACT 53, 1974, THE CONTRACTOR SHALL DIAL 1-800-482-7171 OR 811 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS AND HOLIDAYS, PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS OF THE "MISS DIG" ALERT SYSTEM WILL BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE PART OF THE "MISS DIG" ALERT SYSTEM.
- 2. THE LOCATIONS SHOWN FOR ALL PUBLIC UTILITIES, INCLUDING WATER SERVICE AND SANITARY SEWER LEADS ARE BASED ON BEST AVAILABLE INFORMATION. NO GUARANTEE IS MADE REGARDING THE ACCURACY OF THIS INFORMATION. THE CONTRACTOR SHALL PERFORM HIS OWN INVESTIGATION(S) IF HE DESIRES TO IN PERFORMING THE WORK OF THIS PROJECT.
- THE CONTRACTOR SHALL MAINTAIN ALL UTILITIES ENCOUNTERED DURING CONSTRUCTION.

INSTALL BOLLARD AND SLEEVE FURNISHED BY OTHERS GRADE ASPHALT 5,000 PSI CONCRETE GRAVEL **→** 235/8" → 235%"

GRAVEL AT BASE OF BOLLARD SLEEVE TO BE PEA GRAVEL, SEE SPECIFICATIONS

FOR ADDITIONAL DETAIL. 2. INSTALL PER MANUFACTURER'S

BOLLARDS AND SLEEVES TO BE FURNISHED BY THE CITY OF

INSTRUCTIONS.

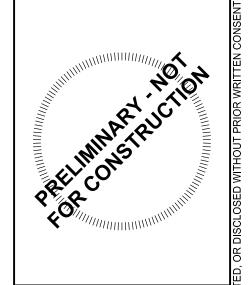
NORTHVILLE.

BOLLARD INSTALLATION DETAIL

AMERISTAR®

DATE: 07/21/23 SHEET: 1 of DRN BY: DM REV: A





OSURE

NORTHVILL OF

DETAILS

AND

NOTES

GENERAL

CITY

UTILITIES

THE FOLLOWING UTILITY COMPANIES HAVE FACILITIES WITHIN THE PROJECT LIMITS:

1. CITY OF NORTHVILLE PUBLIC WORKS 215 W MAIN STREET NORTHVILLE, MI 48167 ATT: MIKE DOMINE PH: 248-305-2708

5. FOR TELEPHONE: 550 S. MAPLE ROAD ANN ARBOR, MI 48103 PH: 248-494-2735

2. FOR ELECTRIC: DTE ELECTRIC 8001 HAGGERTY ROAD BELLEVILLE, MI 48111 ATTN: SARA KIPP PH: 734-397-4321

6. FOR CABLE TELEVISION: COMCAST CABLE 25626 TELEGRAPH ROAD SOUTHFIELD, MI 48034 ATTN: JEFF DOBIES

FOR GAS: CONSUMERS ENERGY 11801 FARMINGTON ROAD LIVONIA, MI 48150 ATTN: CHRIS SCHENIEDER

7. FOR FIBER OPTIC MCI/VERIZON PH: 800-624-9675

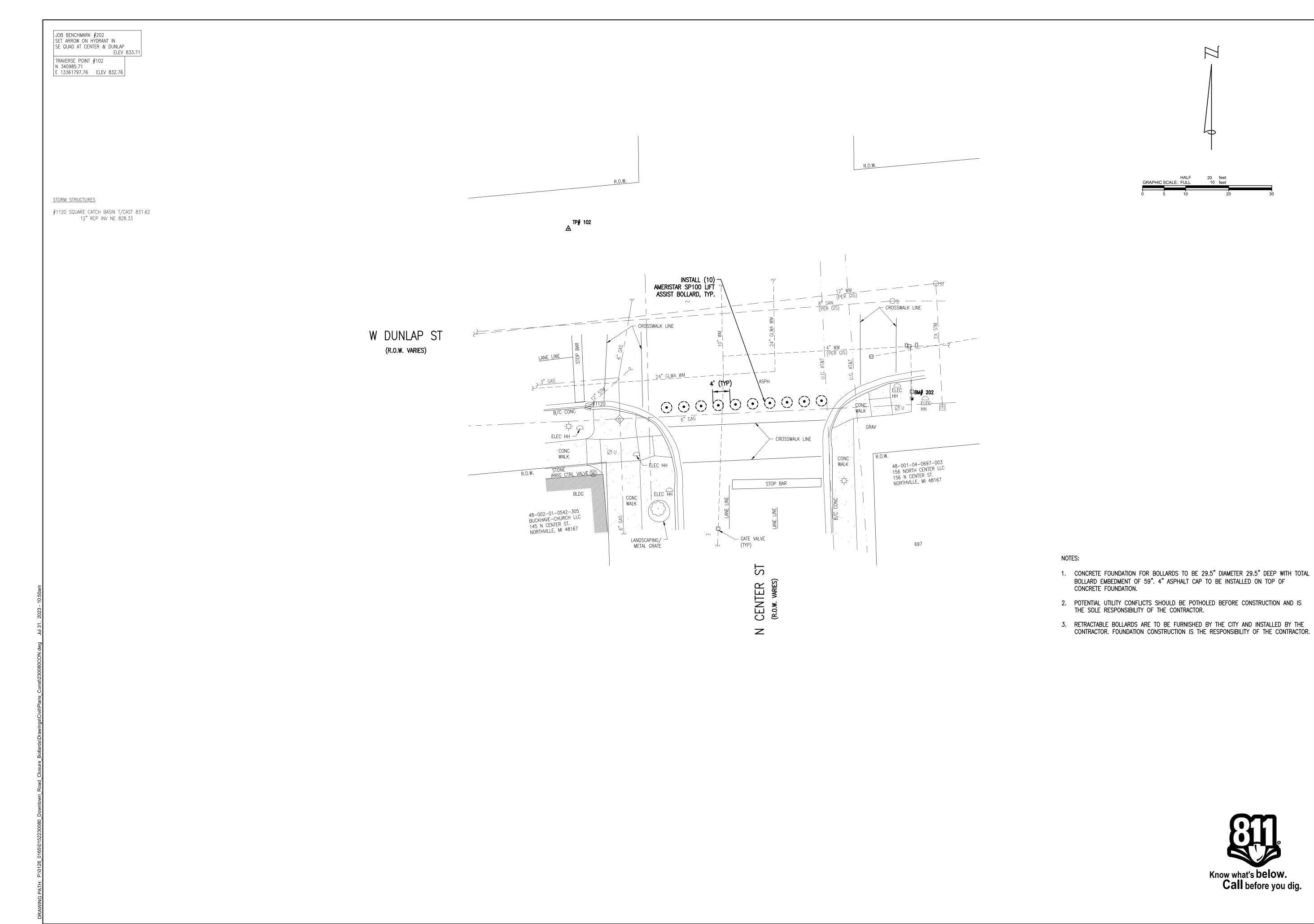
PH: 734-513-6277

COMCAST

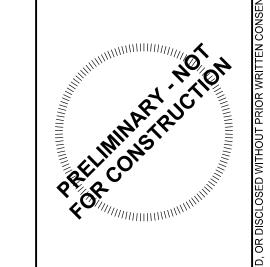
ATTN: CRAIG MCCREIGHT

PH: 734-359-1669

4. FOR FIBER OPTIC ATTN: JEFF DOBIES PH: 734-359-1669







.SN ARD CLOSURE

Know what's below.

Call before you dig.

NORTHVILLE

CITY OF NORTHVILLE DOWNTOWN ROAD (

SITE PLAN - CENTER ST & DUNLAP
PYRIGHT 2023 OHM ADVISORS. ALL DRAWINGS AND WRITTEN MATERIA

JOB BENCHMARK #200
SET ARROW ON HYDRANT IN
NE QUAD AT CENTER & MAIN
ELEV 831.92

TRAVERSE POINT #100
N 340571.67
E 13361866.37 ELEV 829.21

HALF 20 feet

ARCHITECTS ENGINEERS PLANNERS OHM-ADVISORS.COM

STORM STRUCTURES

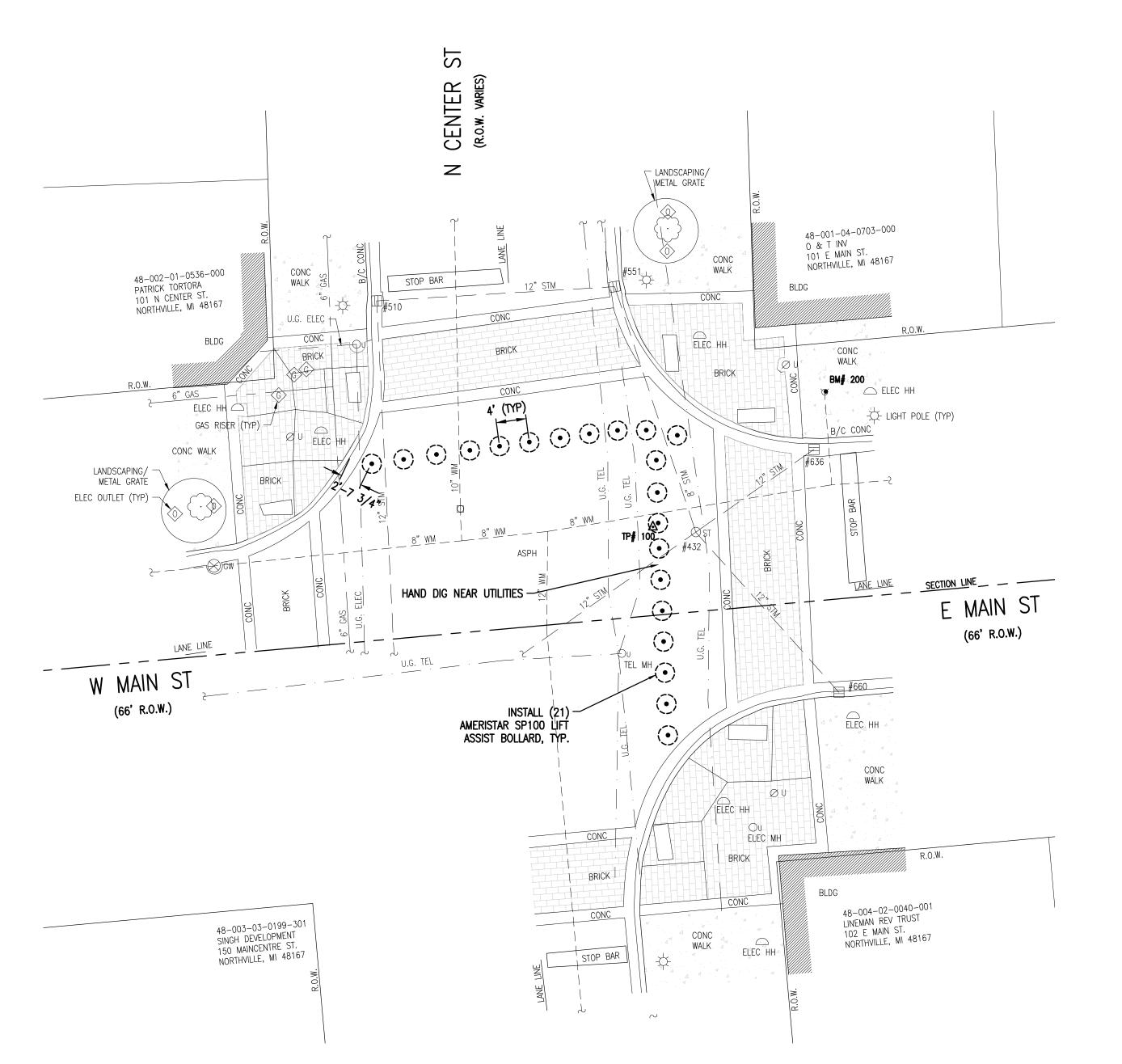
#432 STORM MANHOLE T/CAST 829.17
12" RCP INV NE 824.22
8" PVC INV N 824.47
12" RCP INV SW 824.25
12" RCP INV SE 824.37
(NO FLOW)

#510 SQUARE CATCH BASIN T/CAST 829.33 12" RCP INV SW 824.82 12" RCP INV E 826.03 (NO FLOW)

#551 SQUARE CATCH BASIN T/CAST 829.24 12" RCP INV W 827.08

#636 SQUARE CATCH BASIN T/CAST 828.90 12" RCP INV SW 826.74

#660 SQ CATCH BASIN—IN CURB T/CAST 828.84 12" RCP INV NW 824.57





- 1. CONCRETE FOUNDATION FOR BOLLARDS TO BE 29.5" DIAMETER 29.5" DEEP WITH TOTAL BOLLARD EMBEDMENT OF 59". 4" ASPHALT CAP TO BE INSTALLED ON TOP OF CONCRETE FOUNDATION.
- 2. POTENTIAL UTILITY CONFLICTS SHOULD BE POTHOLED BEFORE CONSTRUCTION AND IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- 3. RETRACTABLE BOLLARDS ARE TO BE FURNISHED BY THE CITY AND INSTALLED BY THE CONTRACTOR. FOUNDATION CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR.

Know what's below.	
Call before you d	İ

SLOSURE BOLLARD INSTALLATION

PROJECT NUMBER PM DISCIPLINE LEAD 0152-23-0080 CM GT CITY OF NORTHVILLE DOWNTOWN ROAD CI

5

PLAN - CENTER ST

SITE

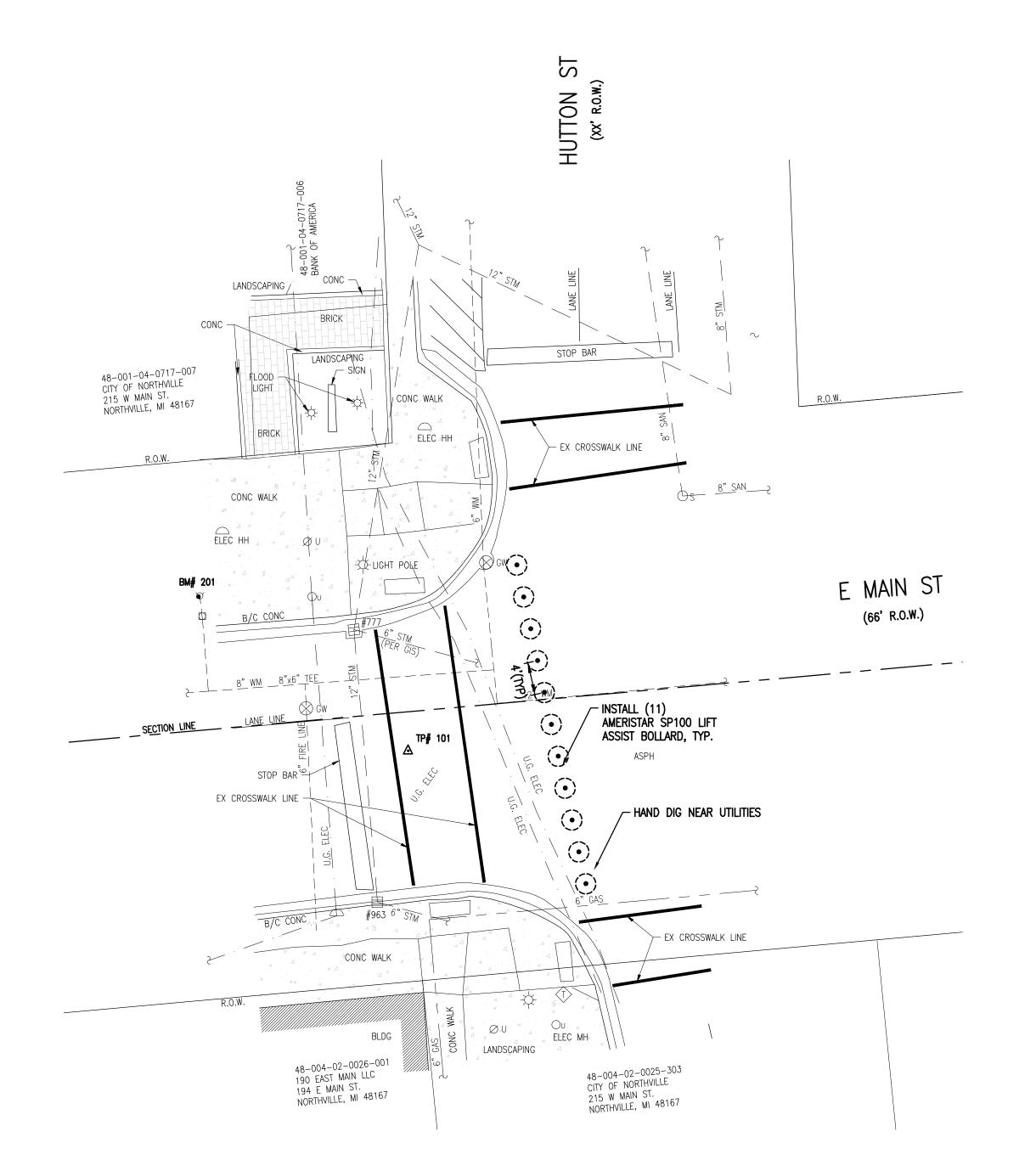
JOB BENCHMARK #201
SET ARROW ON HYDRANT IN
NW QUAD AT MAIN & HUTTON
ELEV 824.46 TRAVERSE POINT #101 N 340604.66 E 13362415.54 ELEV 821.84

ARCHITECTS ENGINEERS PLANNERS OHM-ADVISORS COM

STORM STRUCTURES

#777 SQUARE CATCH BASIN T/CAST 821.52 12" RCP INV NE 817.42 12" RCP INV S 817.62 (NO FLOW)

#963 SQUARE CATCH BASIN-IN CURB T/CAST 821.40 12" RCP INV N 818.07 6" CMP INV SE 819.10 (NO FLOW)





- 1. CONCRETE FOUNDATION FOR BOLLARDS TO BE 29.5" DIAMETER 29.5" DEEP WITH TOTAL BOLLARD EMBEDMENT OF 59".
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CITY OF NORTHVILLE DOWNTOWN ROAD (