CITY OF MUSKEGON
PLAN AND PROFILE OF PROPOSED
KEATING AVE,
INDUSTRIAL BLVD. TO
PORT CITY BLVD. HMA

JOB NUMBER:H 92324

SHEET INDEX

SHEET DESCRIPTION

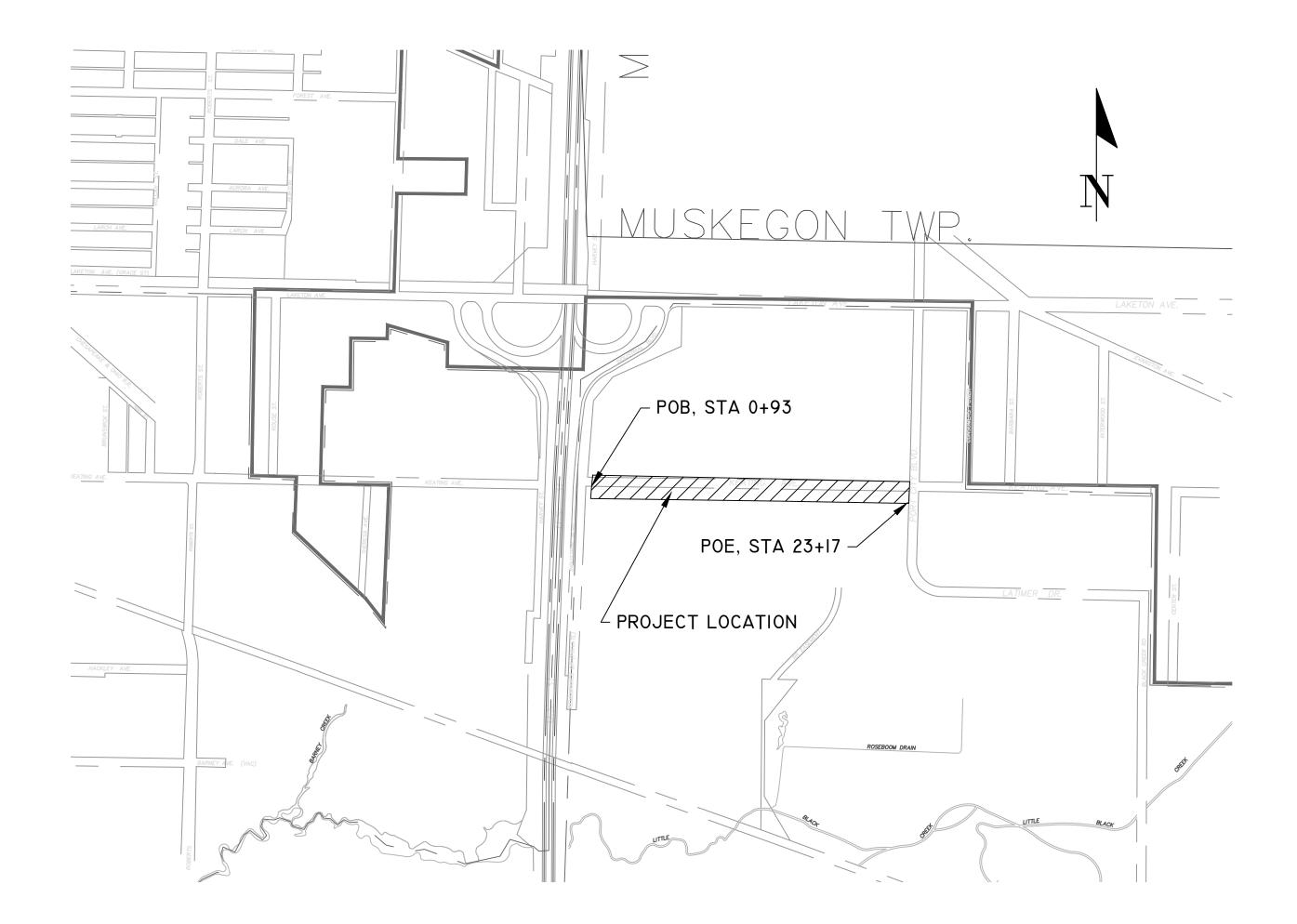
- TITLE SHEET
- PROPOSED PROFILE
- TRAFFIC CONTROL PLAN

NOTE:

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE DONE IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION 2020 STANDARD SPECIFICATIONS FOR CONSTRUCTION AND THE 2011 MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THESE IMPROVEMENTS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE 2011 AASHTO GUIDELINES.

GENERAL NOTES:

- I. EXISTING CONDITIONS INCLUDING ELEVATIONS ARE SUBJECT TO CHANGE DUE TO CONSTRUCTION OUTSIDE THE CONTROL OF THE CITY OF MUSKEGON. CONTRACTOR IS TO VERIFY EXISTING CONDITIONS OF THE SITE, MATCH ALL EXISTING MEETS AND COORDINATE WORK ACTIVES WITH NEIGHBORING CONTRACTORS
- 2. UPON REQUEST AND APPROVAL, THE CONTRACTOR MAY OBTAIN A WATER SUPPLY FROM THE CITY OF MUSKEGON FIRE HYDRANTS AT NO COST, PROVIDED THAT THEY FOLLOW THE CONDITIONS OF THE CITY WATER DEPARTMENT.
- 5. FOR PROTECTION OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL CALL MISS DIG, I-800-482-717I, A MINIMUM OF 3 WORKING DAYS EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO EXCAVATING IN THE VICINITY OF ALL UTILITY LINES. ALL MISS DIG PARTICIPATING MEMBERS WILL THUS BE NOTIFIED, THIS DOES NOT RELIEVE THE CONTRACTOR THE RESPONSIBILITY OF NOTIFYING OWNERS WHO MAY NOT BE PART OF THE MISS DIG ALERT SYSTEM.
- 4. PUBLIC UTILITIES OF ALL TYPES HAVE BEEN SHOWN ON THE PLAN USING AVAILABLE INFORMATION, BUT ARE NOT GUARANTEED AS ACCURATE OR THAT UTILITIES OTHER THAN THOSE SHOWN ARE NOT PRESENT.
- 5. THE CONTRACTOR SHALL SAW CUT ALL MEETS RELATIVE TO SIDEWALK OR PAVEMENT CONSTRUCTION UNLESS WAIVED BY THE ENGINEER. PAYMENT FOR SAW CUTTING SHALL BE INCLUDED IN THE PAYMENT FOR THE PAY ITEMS PAVT, REM, MODIFIED; CURB AND GUTTER, REM; AND/OR SIDEWALK, REM. NO ADDITIONAL PAYMENT WILL ALLOWED FOR SAW CUTTING.
- 6. THE CONTRACTOR SHALL PREVENT EROSION AND CONTROL SEDIMENTATION ASSOCIATED WITH THE PROJECT. KEEP SEDIMENTATION WITHIN THE RIGHT OF WAY (OR CONSTRUCTION LIMITS) AND OUT OF SURFACE WATERS. CONSTRUCT AND MAINTAIN TEMPORARY EROSION AND SEDIMENTATION CONTROLS, TO INCLUDE INLET PROTECTION, FABRIC DROPS ON ALL INLET STRUCTURES NEW AND EXISTING AND INSTALL TEMPORARY EROSION, SEDIMENTATION CONTROLS AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL REMOVE ON A DAILY BASIS SOIL TRACKED ONTO EXISTING PAVED ROADS, (VACUUM METHODS ARE PREFERRED BUT BROOM SWEEPING IS ACCEPTABLE IF THE MATERIAL IS REMOVED) THE CONTRACTOR SHALL INSPECT ALL SOIL EROSION / SEDIMENTATION CONTROL MEASURES ON A WEEKLY BASIS OR AFTER EACH RAIN FALL EVENT, CLEAN REPAIR, OR REPLACE, AS NECESSARY, TO ENSURE PROPER FUNCTION. ALL SOIL EROSION / SEDIMENTATION CONTROLS SHALL REMAIN UNTIL ALL DISTURBED AREAS ARE STABILIZED. ALL SOIL EROSION / SEDIMENTATION CONTROL, EXCEPT FOR THE EROSION CONTROL, INLET PROTECTION, FABRIC DROP AND SILT FENCE SHALL BE INCLUDED WITH THE PAY ITEM PROJECT CLEAN UP. NO OTHER PAYMENT SHALL BE MADE.





West Michigan's Shoreline City www.shorelinecity.com

STANDARD PLANS

R-28-J SIDEWALK RAMP AND DETECTABLE WARNING DETAILS
R-29-I DRIVEWAY OPENINGS & APPROACHES AND CONCRETE SIDEWALKS
R-30-G CONCRETE CURB & GUTTER
R-80-E GRANULAR BLANKET, UNDER DRAINS, OUTLET ENDINGS FOR UNDERDRAINS, AND SEWER BULKHEADS
R-96-E SOIL EROSION & SEDIMENTATION CONTROL MEASURES

TRAFFIC/SAFETY STANDARD PLANS

WZD-100-A GROUND DRIVEN SIGN SUPPORTS FOR TEMPORARY SIGNS
WZD-125-E TEMPORARY TRAFFIC CONTROL DEVICES

UTILITIES

ELECTRIC
JOEL BROWN
CONSUMERS ENERGY
700 E STERNBERG ROAD
NORTON SHORES, MI 49441
(231) 332-2682

TELEPHONE
DAVID B. FLERMOEN
FRONTIER COMMUNICATIONS
860 TERRACE STREET
MUSKEGON MI 49440
(231) 727-1319

NATURAL GAS
VINCENT DUCA
DTE ENERGY
2359 OLTHOFF DRIVE
MUSKEGON MI 49444
(231) 578-0488 (CELL)

CABLE COMCAST

WATER & SEWER
DAVE BAKER
CITY OF MUSKEGON - DPW
1350 E KEATING AVENUE
MUSKEGON MI 49442
(231) 724-4100



CONSTRUCTION INCLUDES .42 MILES OF HMA MILLING AND HMA PAVING IN THE CITY OF MUSKEGON, MUSKEGON COUNTY.

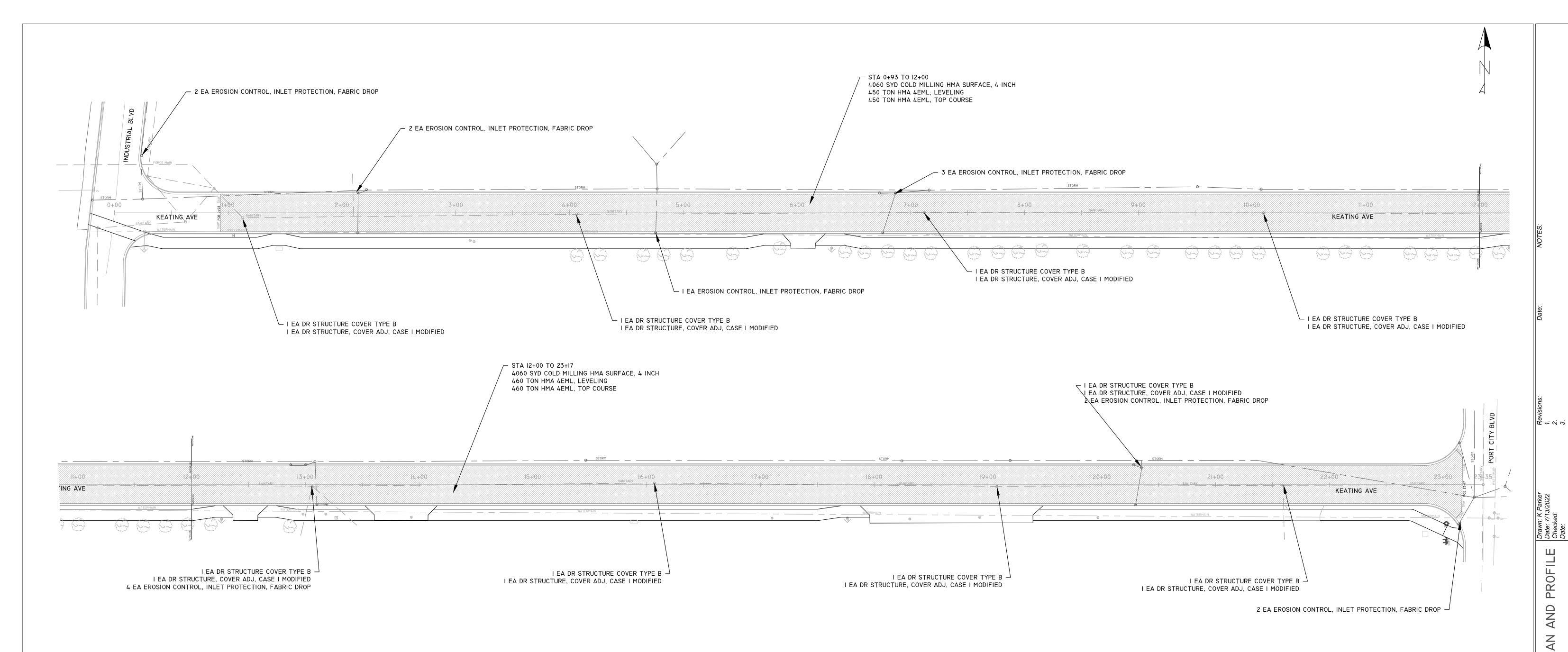
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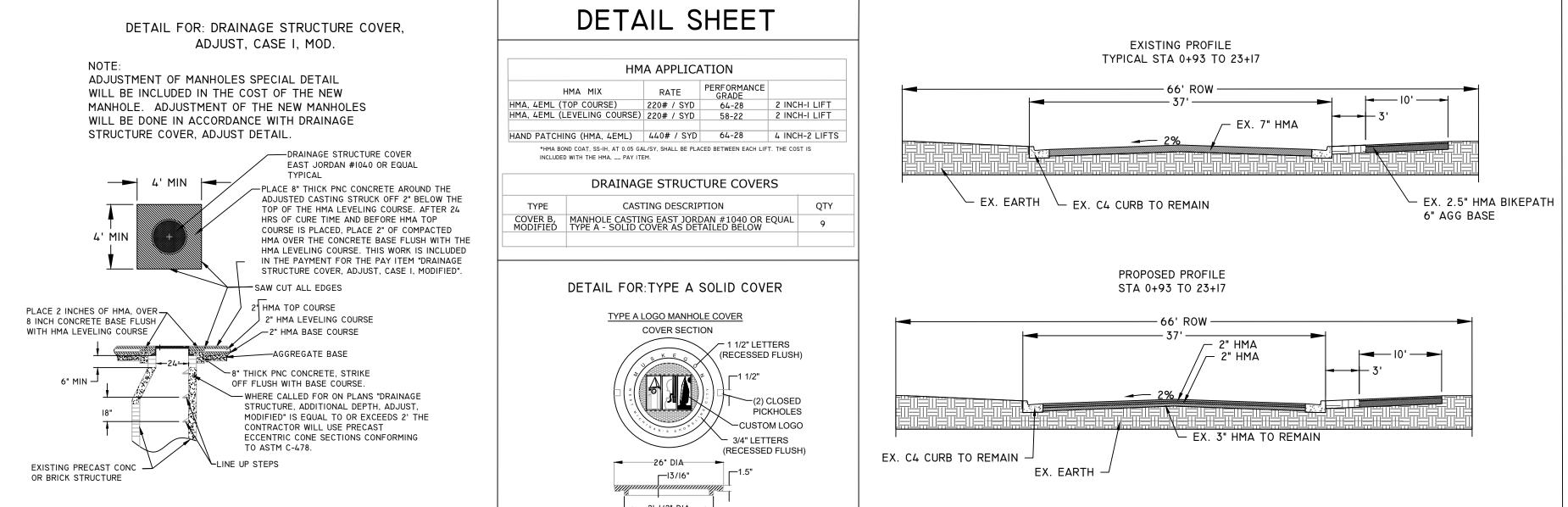
DAN VANDERHEIDE, P.E. CITY ENGINEER

CITY OF MUSKEGON ENGINEERING DEPARTMENT 1350 E KEATING AVE MUSKEGON MI 49442

REGISTRATION NUMBER

CITY OF MUSKEGON OFFICE OF THE CITY ENGINEER				KEATING AVE, INDIUSTRIAL BLVD. TO PORT CITY BLVD. HMA			
DRAWN K PARKER	7/2022	REVISION		SURVEY		PROJECT NO	
CHECKED		REVISION		AS-BUILT			
APPROVED		REVISION				SHEET NO. 01 of 03	





- UPON REQUEST AND APPROVAL, THE CONTRACTOR MAY OBTAIN A WATER SUPPLY FROM THE CITY OF MUSKEGON FIRE HYDRANTS AT NO COST, PROVIDED THAT THEY FOLLOW THE CONDITIONS OF THE CITY WATER DEPARTMENT.
- WHENEVER SMALL CASTINGS (STOP BOXES & METER PITS) THAT ARE ENCOUNTERED WITHIN THE WORK AREA THEY SHALL BE ADJUSTED AT NO COST TO THE CITY. PAYMENT FOR ADJUSTING THESE CASTINGS SHALL BE INCLUDED IN THE PAYMENT FOR NEW WATER SERVICES PAY ITEMS.
- 3. FOR PROTECTION OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL CALL MISS DIG, I-800-482-7171, A MINIMUM OF 3 WORKING DAYS EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO EXCAVATING IN THE VICINITY OF ALL UTILITY LINES. ALL MISS DIG PARTICIPATING MEMBERS WILL THUS BE NOTIFIED, THIS DOES NOT RELIEVE THE CONTRACTOR THE RESPONSIBILITY OF NOTIFYING OWNERS WHO MAY NOT BE PART OF THE MISS DIG ALERT SYSTEM.
- PUBLIC UTILITIES OF ALL TYPES HAVE BEEN SHOWN ON THE PLAN USING AVAILABLE INFORMATION, BUT ARE NOT GUARANTEED AS ACCURATE, OR THAT UTILITIES OTHER THAN THOSE SHOWN ARE NOT PRESENT. THE CONTRACTOR SHALL CALL MISS DIG 3 WORKING DAYS (EXCLUDING SAT., SUN., AND HOLIDAYS) BEFORE DIGGING (I-800-482-7171). EXISTING TRAFFIC CONTROL SIGNS THAT NEED TO BE REMOVED TO ALLOW THE CONTRACTOR TO WORK

CONTRACTOR SHALL THEN REINSTALL THE SIGNS IN THEIR ORIGINAL LOCATION OR AS DIRECTED BY THE

ENGINEER. REMOVAL AND REPLACEMENT OF THE SIGNS WILL BE INCLUDED IN THE ITEM OF MINOR TRAF

DEVICES. SIGNS THAT ARE DAMAGED BY THE CONTRACTOR WILL BE REPLACED BY CITY FORCES, AND THE CONTRACTOR WILL PAY THE CITY FOR THE COST OF REPLACEMENT. THE CONTRACTOR SHALL SAW CUT ALL MEETS RELATIVE TO SIDEWALK OR PAVEMENT CONSTRUCTION UNLESS WAIVED BY THE ENGINEER. PAYMENT FOR SAW CUTTING SHALL BE INCLUDED IN THE PAYMENT

WILL BE REMOVED BY THE CONTRACTOR AND STORED IN A SAFE PLACE TO AVOID DAMAGE. THE

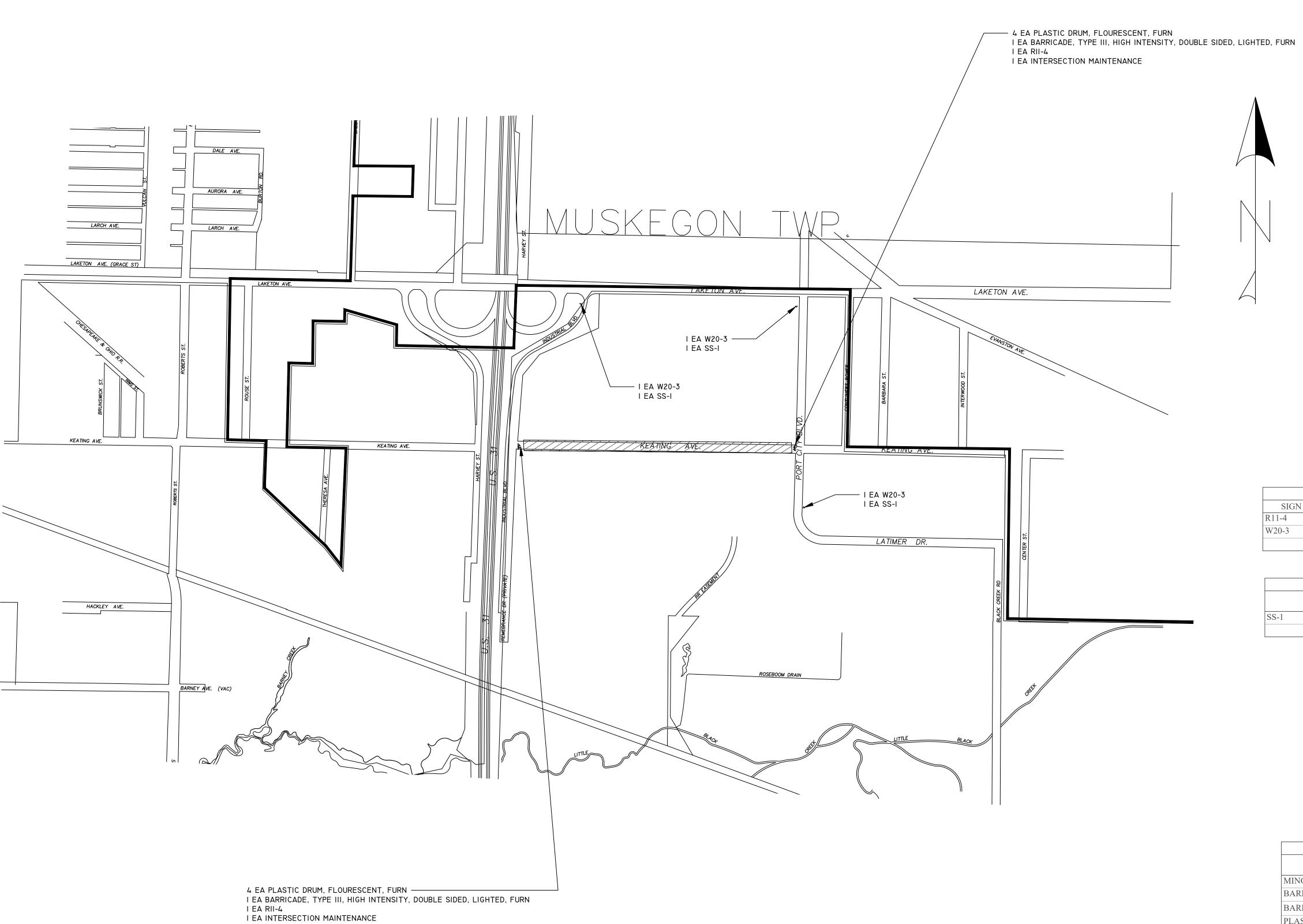
- FOR THE PAY ITEMS PAVT, REM, MODIFIED, CURB AND GUTTER, REM, HMA SURFACE, REM AND SIDEWALK, REM. NO ADDITIONAL PAYMENT WILL ALLOWED FOR SAW CUTTING. IRRIGATION SYSTEMS AS MARKED OR STAKED, AND ARE DAMAGED THROUGH CARELESS WORK BY THE
- CONTRACTOR WILL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE CITY OF MUSKEGON. THE CITY OF MUSKEGON WILL PAY FOR RELOCATION OF IRRIGATION SYSTEMS DUE TO WIDENING OF ROAD OR IN CONFLICT WITH THE CONSTRUCTION OF UNDERGROUND WORK. PAYMENT WILL BE MADE BY A NEGOTIATED UNIT PRICE THROUGH A CONTRACT MODIFICATION. IT SHALL BE AT THE ENGINEER'S DISCRETION AS TO WHAT IRRIGATION REPAIR AND/OR RELOCATION IS THE RESULT OF CARELESS WORK BY THE CONTRACTOR OR THAT WHICH NECESSARY TO THE CONSTRUCTION OF ROAD OR UTILITY WORK. THE CONTRACTOR SHALL PREVENT EROSION AND CONTROL SEDIMENTATION ASSOCIATED WITH THE PROJECT.
- KEEP SEDIMENTATION WITHIN THE RIGHT OF WAY AND OUT OF SURFACE WATERS, CONSTRUCT AND MAINTAIN TEMPORARY EROSION AND SEDIMENTATION CONTROLS, CONTROLS TO INCLUDE EROSION CONTROL, INLET PROTECTION, FABRIC DROPS, ON ALL INLET STRUCTURES, NEW AND EXISTING, AND INSTALL TEMPORARY EROSION, SEDIMENTATION CONTROLS AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL REMOVE ON A DAILY BASIS SOIL TRACKED ONTO EXISTING PAVED ROADS, (VACUUM METHODS ARE PREFERRED BUT BROOM SWEEPING IS ACCEPTABLE IF THE MATERIAL IS REMOVED) THE CONTRACTOR SHALL INSPECT ALL SOIL EROSION / SEDIMENTATION CONTROL MEASURES ON A WEEKLY BASIS OR AFTER EACH RAIN FALL EVENT, CLEAN REPAIR, OR REPLACE, AS NECESSARY, TO ENSURE PROPER FUNCTION. ALL SOIL EROSION / SEDIMENTATION CONTROLS SHALL REMAIN UNTIL ALL DISTURBED AREAS ARE STABILIZED. ALL SOIL EROSION / SEDIMENTATION CONTROL, EXCEPT FOR THE EROSION CONTROL, INLET PROTECTION, FABRIC DROP, SHALL BE INCLUDED WITH THE PAY ITEM PROJECT CLEAN UP NO OTHER PAYMENT SHALL BE MADE.
- CONCRETE SIDEWALK PLACED FOR BUS STOPS MUST BE A MINIMUM 5 FEET WIDE AS MEASURED ALONG BACK OF CURB AND 8 FEET DEEP AS MEASURED FROM BACK OF CURB.



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3 WORKING DAYS Know what's below. CALL MISS DIG Call before you dig.

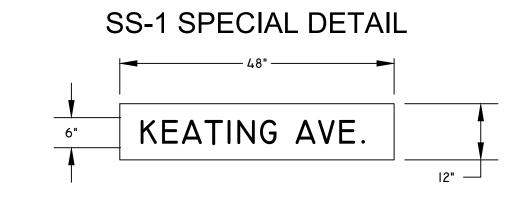
QUANTITIES THIS SHEET DESCRIPTION QUANTITY UNIT COLD MILLING HMA SURFACE, 4 INCH 8193 SYD DR STRUCTURE, COVER ADJ, CASE 1 MODIFIED EA DR STRUCTURE COVER, TYPE B, MODIFIED EA HMA, 4EML, LEVELING 910 TON HMA, 4EML, TOP COURSE 910 TON EROSION CONTROL, INLET PROTECTION, FABRIC DROP EA 16



NOTE: CONTRACTOR SHALL MAINTAIN LOCAL TRAFFIC ON KEATING AVE WITH MILLINGS FROM HMA AS DIRECTED BY ENGINEER AFTER MILLING 4 INCHES. MAINTENANCE NOT NECESSARY AFTER HMA BASE COURSE. HMA TOPCOURSE MUST BE DONE ON A SATURDAY TO AVOID INTERFERENCE FROM INDUSTRIES ON KEATING. IN ADDITION TO THE 8 BARRELS IN THE TRAFFIC CONTROL PLAN, AN ADDITONAL I2 BARRELS SHOULD BE AVAILABLE TO MARK OBJECTS DURING CONSTRUCTION.

	SIGN, TYPE B, TEMI	PORARY			
SIGN	DESCRIPTION	QUANTITY	DIM	AREA	TOTAL
R11-4	ROAD CLOSED TO THRU TRAFFIC	2	30X60	12.5 SFT	37.5
W20-3	ROAD CLOSED AHEAD	3	48X48	16 SFT	48

SIGN, TYPE B, TEM	PORARY, SPE	CIAL		
DESCRIPTION		QUANTITY	AREA	TOTAL
SS-1		3	4 SFT	12 SFT



QUANTITIES THIS SHEET		
DESCRIPTION	QUANTITY	UNIT
MINOR TRAFFIC DEVICES	1	LS
BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED, LIGHTED, FURN	2	EA
BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED, LIGHTED, OPER	2	EA
PLASTIC DRUM, FLUORESCENT, FURN	20	EA
PLASTIC DRUM, FLUORESCENT, OPER	20	EA
SIGN, TYPE B, TEMP, PRISMATIC, FURN	86	SFT
SIGN, TYPE B, TEMP, PRISMATIC, OPER	86	SFT
SIGN, TYPE B, TEMP, PRISMATIC, SPECIAL, FURN	12	SFT
SIGN, TYPE B, TEMP, PRISMATIC, SPECIAL, OPER	12	SFT
INTERSECTION MAINTENANCE	2	EA

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TRAFFIC