



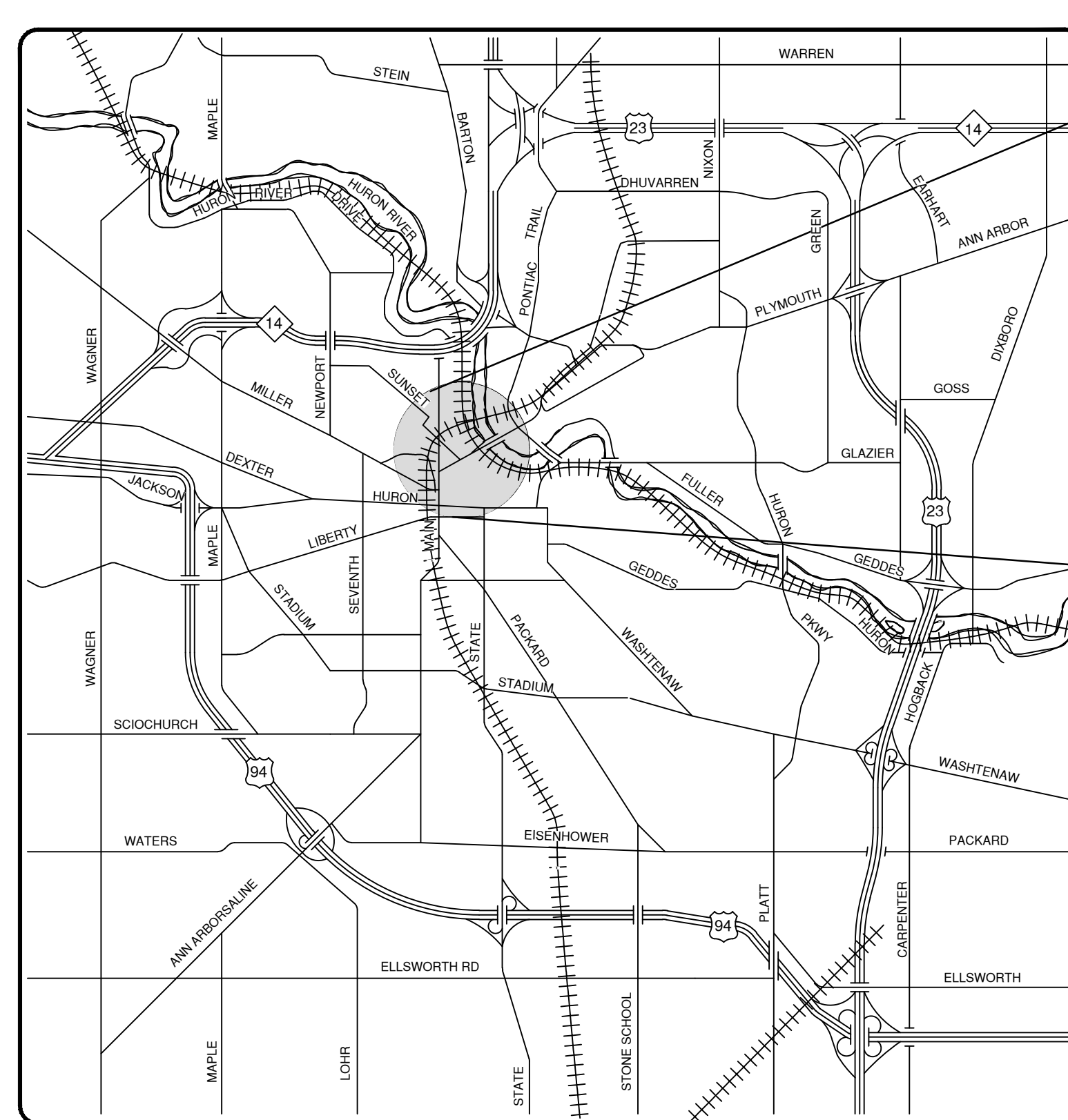
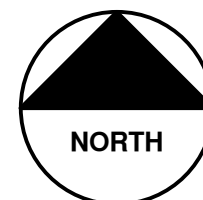
CITY OF ANN ARBOR PROJECT MANAGEMENT SUMMIT STREET

16" WATER MAIN REPLACEMENT THROUGH WHEELER PARK CONSTRUCTION PLANS BID NO. ITB 4367, FILE NO. 2014022

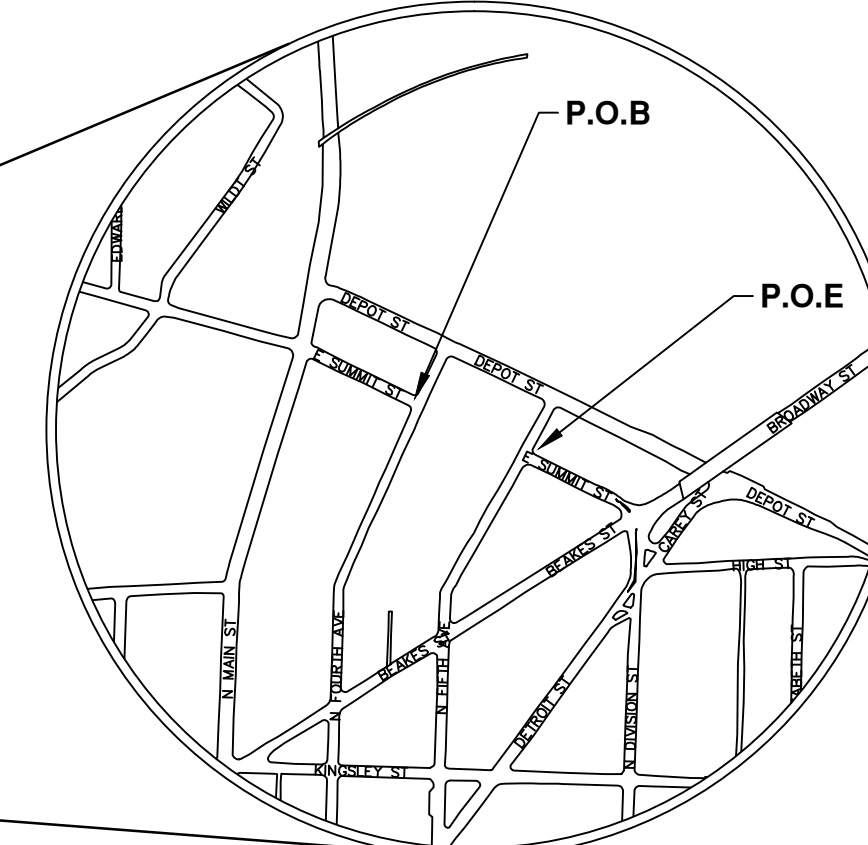
CONSTRUCTION NOTES:

1. Driveways and entrances to buildings, real property, and the like shall not be blocked except for short durations and only when approved by the Engineer. Vehicular and pedestrian access shall be maintained at all times. It shall be the Contractor's responsibility to coordinate all necessary driveway closures with the property owner(s) and resident(s) in the areas of construction.
2. The location and depth of all existing utilities and service leads are to be field verified by the Contractor prior to construction.
3. Location and depth of utilities as depicted on the plans is approximate and shown according to the best information available. It is the Contractor's responsibility to excavate ahead and adjust depth of conflict utilities accordingly. Any damage to utilities is the Contractor's responsibility to avoid and/or repair as necessary.
4. The Contractor is to take special care to protect the existing water main and be responsible for maintaining consistent water service.
5. During non-working hours no trench shall remain open; any open trench shall be properly secured with protective fencing. This work shall be included in the item of work "General Conditions".
6. Trenches for new water services shall be excavated to MIOSHA and City of Ann Arbor Field Services requirements.
7. For the installation of corporations, or any other related activities, the Contractor shall not receive additional compensation for delays due to the scheduling of or coordination with the City of Ann Arbor Field Services.
8. All ductile iron pipe and fittings shall be polyethylene wrapped per ANSI/AWWA C105/A21.5.
9. Cor-blu bolts to be used at all mechanical water main joints at hydrants and Megalug fittings.
10. The Contractor shall construct, flush, and bacteriologically test the water main per Detailed Specification "Water Main Installation and Testing" and as approved by the Engineer. All chlorinated water shall be discharged directly into an approved sanitary sewer. The Contractor shall supply all necessary hoses, fittings and the like to accomplish this work.
11. Water main fittings, other than those specifically listed as separate pay items, which are required to complete the work, such as blow-off assemblies, concrete thrust blocks, solid sleeves and mechanical plugs, shall not be paid for separately, but shall be included in the pipe pay items.
12. "No Parking" signs shall be installed by the Contractor at locations as approved or directed by the Engineer. All signs shall be installed in accordance with the detailed specifications.
13. Postal delivery and refuse pickup service shall be maintained at all times by the Contractor.
14. All fittings, hydrants, valves and castings removed during construction are the property of the City of Ann Arbor. The Contractor within 48 hours shall deliver to City of Ann Arbor Field Operations and Maintenance Facility at the W.R. Wheeler Service Center located at 4251 Stone School Road.
15. Where street curbs are undermined due to construction activities, they shall be removed and replaced as directed by the Engineer.
16. The Contractor shall be responsible for the continuous maintenance of the temporary road surface and soil erosion control measures within the construction area until the full completion of the project. This work shall be included in the item of work "General Conditions".
17. All curb, sidewalk, driveway approach removals shall be approved by Engineer before the work is done.
18. Sewed sewer pipe connections shall be coupled with a Fernco flexible coupling and a stainless steel shear ring.
19. The location of material stock piles and on-site staging areas to be approved by the Engineer.
20. For mainline paving, the width of the mat for each pass of the paver shall be not less than 10.5' or greater than 15', as directed by the Engineer. The Engineer will direct the layout of the longitudinal joints during construction.

21. All structures shall receive new castings as directed by the Engineer, as specified on the standard casting schedule. The existing castings are the property of the City of Ann Arbor. The Contractor shall deliver to City of Ann Arbor Field Operations and Maintenance Facility at the W.R. Wheeler Service Center located at 4251 Stone School Road.
22. Where sewer pipes of different sizes or materials are joined, Fernco flexible couplings with stainless steel shear rings shall be used. The Contractor's purchase price for these devices, including shipping, shall be paid as an extra. Prior to payment for this item, the Contractor shall submit receipts for the Engineer's review and approval. All other costs associated with the installation of these devices shall be included in the payment for the sewer.
23. Where sewer and water main are to be removed & replaced or added, all pipe shall be installed using Trench Detail detailed in the specifications or shown on Plans. Backfill for sewer and water construction shall be MDT Granular Material, Class II, Modified.
24. Existing street name, guide, and regulatory signs, and mailboxes which conflict with the proposed construction shall be removed prior to construction, stored in a manner which will prevent damage, and re-set in locations as directed by the Engineer. This work will not be paid for separately, but shall be included in "Machine Grading, Modified".
25. In areas where edge drain cannot be installed in accordance with City of Ann Arbor Detail SD-TD-11, the edge drain shall be installed at the depth as indicated on the plans, or as directed by Engineer. In no case shall the edge drain be installed at a grade less than 0.50% or at a depth of less than 2' below top of proposed pavement.
26. All excavation required for project grading within the project limits, including proposed pavement, bioswales, sidewalk, and sidewalk ramps shall be included in "Machine Grading, Modified".
27. Where storm sewer and water main are to be removed and replaced or added, all pipe shall be installed using the utility trench details shown elsewhere in the plan sheets and/or detailed in the specifications. Trench Details I and V require the use of MDT Class II Granular Material.
28. Place 4" (minimum) thickness Class II Granular Material compacted to 95% of its max. dry density under concrete sidewalk as shown on the details. This work shall be included in the contract items "Subbase, CIP, Class II, Modified."
29. Place 6" (minimum) Class II Granular Material compacted to 95% of its max. dry density under drive approaches. This work shall be included in the contract item "Subbase, CIP, Class II, Modified."
30. Prior to placing the adjacent paving pass on the leveling and wearing courses of HMA, the Contractor shall cut and remove 6" to 8" of the previously placed pavement by means of a coultter wheel. The Engineer reserves the right to reject any method(s) for cutting the pavement that does not provide a satisfactory edge as determined by the Engineer. Any method(s) employed by the Contractor shall be completely effective. The cut edge shall have a uniform bead of Craftco Joint Adhesive applied. The removal of this HMA material, cleaning the HMA surface and pavement edge, and condition of the resulting edge must be approved by the Engineer prior to proceeding with the placement of the succeeding pass of HMA. The base course of HMA will only have its edges tacked in accordance with standard paving practices. All costs associated with complying with these requirements will not be paid for separately, but shall be considered to be included in the items of work "HMA Pavement 13A."
31. A uniform coat(s) of curing compound shall be applied according to the Standard Specifications and Special Provisions regardless of the difficulty involved. The Contractor shall take care to prevent overspray when applying curing compound. Several different methods may need to be developed to protect various situations, but all methods used to prevent overspray of the curing compound shall be completely effective. Methods used shall be approved by the Engineer prior to use, however approval of a method does not guarantee success or acceptability. No additional compensation shall be made for complying with these requirements.



VICINITY MAP



SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
1	COVER SHEET
2	EXISTING CONDITIONS
3	REMOVAL PLAN
4	SECC AND SITE PLAN
5	WATER MAIN PLAN AND PROFILE
6	DETAILS
7	MAINTENANCE OF TRAFFIC PLAN

NOTES:

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS AND ITS DETAILS WHICH ARE INCLUDED BY REFERENCE. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH THE CURRENT PUBLIC SERVICES STANDARD SPECIFICATIONS AND DETAILS.

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 53, THE CONTRACTOR SHALL CALL 811 OR 1-800-482-7171 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 WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

PERMITS REQUIRED TO BE OBTAINED BY THE CONTRACTOR PRIOR TO THE BEGINNING OF CONSTRUCTION.

PERMIT	ISSUING AUTHORITY
LANE CLOSURE PERMIT *	CITY OF ANN ARBOR PROJECT MANAGEMENT UNIT
"NO PARKING" SIGNS PERMIT *	CITY OF ANN ARBOR PROJECT MANAGEMENT UNIT
GRADING/SOIL EROSION & SEDIMENTATION CONTROL PERMIT *	CITY OF ANN ARBOR CUSTOMER SERVICE
RIGHT-OF-WAY PERMIT *	CITY OF ANN ARBOR CUSTOMER SERVICE
* NO COST TO CONTRACTOR	

PERMITS REQUIRED TO BE OBTAINED BY THE CITY OF ANN ARBOR PRIOR TO THE BEGINNING OF CONSTRUCTION.

PERMIT	ISSUING AUTHORITY
M.D.E.Q. WATER MAIN CONSTRUCTION PERMIT	MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

CONTACT INFORMATION

PUBLIC UTILITIES	OWNER	CONTACT
WATER	CITY OF ANN ARBOR FIELD OPERATIONS SERVICE UNIT W.R. WHEELER SERVICE CENTER 4251 STONE SCHOOL ROAD ANN ARBOR, MI 48108	DAN WOODEN (734) 794-6350
SANITARY		MARK COZART (734) 794-6350
STORM		KEVIN ERNST (734) 794-6350
FORESTRY		STEVEN GOEBEL (734) 794-6350
SIGNS SIGNALS STREET LIGHTS		CHUCK FOJTIK (734) 794-6361
PRIVATE UTILITIES	OWNER	CONTACT
GAS	DTE ENERGY 3150 E. MICHIGAN AVE, YPSILANTI TOWNSHIP, MI 48198	ROBERT CZAPIEWSKI (734) 544-7818
ELECTRIC	DTE ENERGY WESTERN WAYNE SERVICE CENTER 8001 HAGGERTY ROAD BELLEVILLE, MI 48111	CLAY COMBEE (734) 397-4112
CABLE	COMCAST 27800 FRANKLIN ROAD SOUTHFIELD, MI 48034	RON SUTHERLAND (313) 999-8300
PHONE	AT&T 550 S. MAPLE ROAD ANN ARBOR, MI 48103	(734) 996-2135
FIBER OPTIC	MCI 2800 N. GLENFILLE ROAD RICHARDSON, TX 75082	DEAN BOYERS (972) 729-6016

PROJECT MANAGEMENT SERVICE UNIT	
	NICHOLAS HUTCHINSON, P.E. - MI LICENSE No. 46789 CITY ENGINEER
07/22/2014 DATE	07/22/2014 DATE
PREPARED UNDER THE SUPERVISION OF	
SUSAN C. DICKINSON, P.E. - MI LICENSE No. 39622 PROJECT MANAGER	
07/22/2014 DATE	



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NO.	DESCRIPTION	DATE	DRAWN	CHECKED

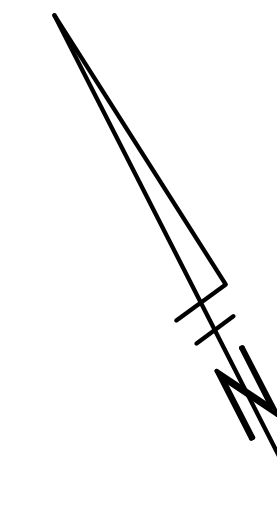
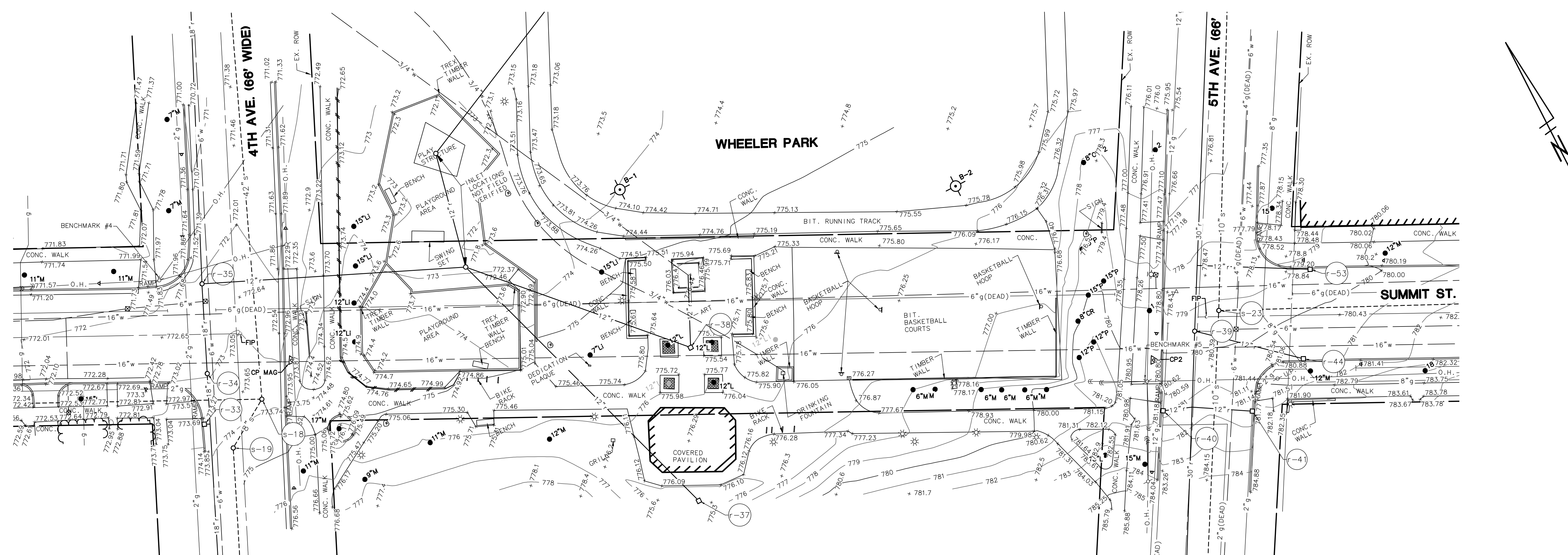
CITY OF ANN ARBOR
PUBLIC SERVICE
301 EAST HURON STREET
P.O. BOX 8847
ANN ARBOR, MI 48108-8847
www.a2gov.org

SUMMIT STREET 16" WATER MAIN
REPLACEMENT THROUGH WHEELER PARK

PROJECT DESCRIPTION
SUMMIT STREET 16" WATER MAIN
REPLACEMENT THROUGH WHEELER PARK

DRAWING No.
2014-022-CV

SHEET No.
1 TO 7



SANITARY STRUCTURE TABLE		
STRUCTURE NO.	RIM ELEV.	INV.
s-18	773.72	42" NW 765.12 8" SW 765.92 42" N 765.12
s-19	774.39	8" SW 768.49 8" NE 768.29
s-20	789.06	8" NE 787.52
s-21	772.14	42" S 764.70
s-23	779.21	10" SW 772.61 10" SE 772.96 10" NE 772.51
s-24	800.53	10" NE 791.83

STORM STRUCTURE TABLE		
STRUCTURE NO.	RIM ELEV.	INV.
r-32	772.59	18" NE 770.05
r-33	773.20	12" SE 770.10
r-34	772.92	18" SW 769.27 18" NE 769.32
r-35	772.15	18" SW 767.95 18" NE 768.25 12" SE 766.98
r-36	770.34	18" SW 767.19
r-37	775.12	12" N 771.67
r-38	775.45	12" NW 770.28 12" NE 770.28
r-39	779.44	30" SW 772.29 12" SE 774.19 30" NE 772.24
r-40	780.71	12" E 775.41
r-41	781.37	12" NW 0.00
r-42	793.78	30" NE 791.78
r-43	769.49	30" SW 767.49
r-44	780.23	12" NW 777.63
r-53	778.94	12" NW 775.14

BENCHMARKS

- B.M. #4 - BENCH-TIE IN NORTH FACE OF UTILITY POLE AT THE NORTHWEST CORNER OF 4TH AVENUE & SUMMIT STREET. ELEVATION = 773.29' (NAVD88)
- B.M. #5 - BENCH-TIE IN NORTHWEST FACE OF UTILITY POLE ON THE WEST SIDE OF 5TH AVENUE AND THE CENTERLINE OF SUMMIT STREET. ELEVATION = 782.15' (NAVD88)

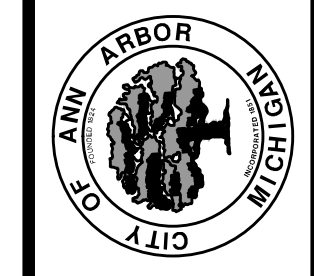
LEGEND

- 8.38 EXIST. CONTOUR
- x836.2 EXIST. SPOT ELEVATION
- o U.P. EXIST. UTILITY POLE
- GUY WIRE
- OH EXIST. OVERHEAD UTILITY LINE
- * EXIST. LIGHT POLE
- t EXIST. TELEPHONE LINE
- e EXIST. ELECTRIC LINE
- g EXIST. GAS LINE
- g EXIST. GAS VALVE
- f.o. EXIST. FIBER OPTIC LINE
- w EXIST. WATER MAIN
- EXIST. HYDRANT
- EXIST. GATE VALVE IN BOX
- EXIST. GATE VALVE IN WELL
- EXIST. CURB STOP & BOX
- r EXIST. STORM SEWER
- EXIST. CATCH BASIN OR INLET
- EXIST. SANITARY SEWER
- EXIST. CLEANOUT
- PEDESTRIAN X-ING SIGNAL
- T.S.C.B. TRAFFIC SIGNAL CONTROL BOX
- POST
- SINGLE TREE
- FENCE
- EXIST. BOULDER
- CONTROL PT.
- EXIST. SOIL BORING LOCATION



REV.	DESCRIPTION	DATE	DRAWN	CHECKED

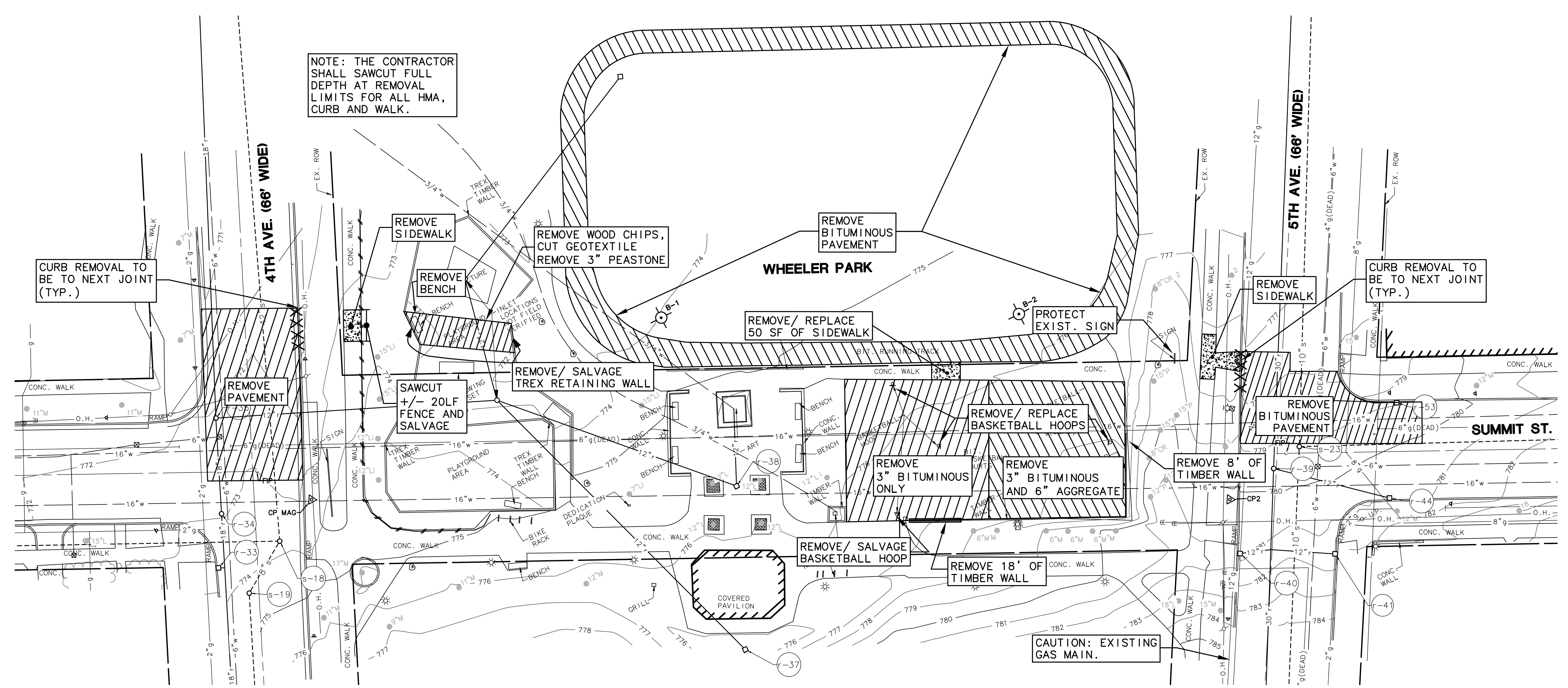
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PUBLIC SERVICE
301 STATE STREET
ANN ARBOR, MI 48107-8847
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
SUMMIT STREET
16" WATER MAIN
REPLACEMENT THROUGH WHEELER PARK
EXISTING CONDITIONS

SCALE PLAN: 1" = 20'
PROFILE: N/A
DRAWING No. 2014-022-EX

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BENCHMARKS

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- REMOVAL NOTES:**
- 1.) TREE PROTECTION IS SHOWN ON SHEET 4.
 - 2.) SALVAGE MEANS TO REMOVE CAREFULLY, STORE, AND USE SAME MATERIAL FOR THE RESTORATION.
 - 3.) BOULDERS NEEDING TO BE RELOCATED FOR CONSTRUCTION ARE TO BE MOVED THE MINIMAL DISTANCE POSSIBLE AND NOT REMOVED FROM THE SITE. COST TO BE INCLUDED IN THE WATER MAIN INSTALLATION AND NOT PAID FOR SEPARATELY.

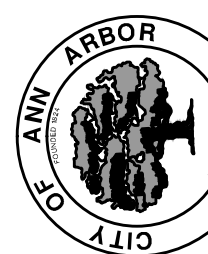
LEGEND

	EXIST. CONTOUR
	EXIST. SPOT ELEVATION
	EXIST. UTILITY POLE
	GUY WIRE
	EXIST. OVERHEAD UTILITY LINE
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	EXIST. CATCH BASIN OR INLET
	EXIST. SANITARY SEWER
	EXIST. CLEANOUT
	PEDESTRIAN X-ING SIGNAL
	TRAFFIC SIGNAL CONTROL BOX
	SIGN
	POST
	SINGLE TREE
	FENCE
	EXIST. BOULDER
	CONTROL PT.
	EXIST. SOIL BORING LOCATION



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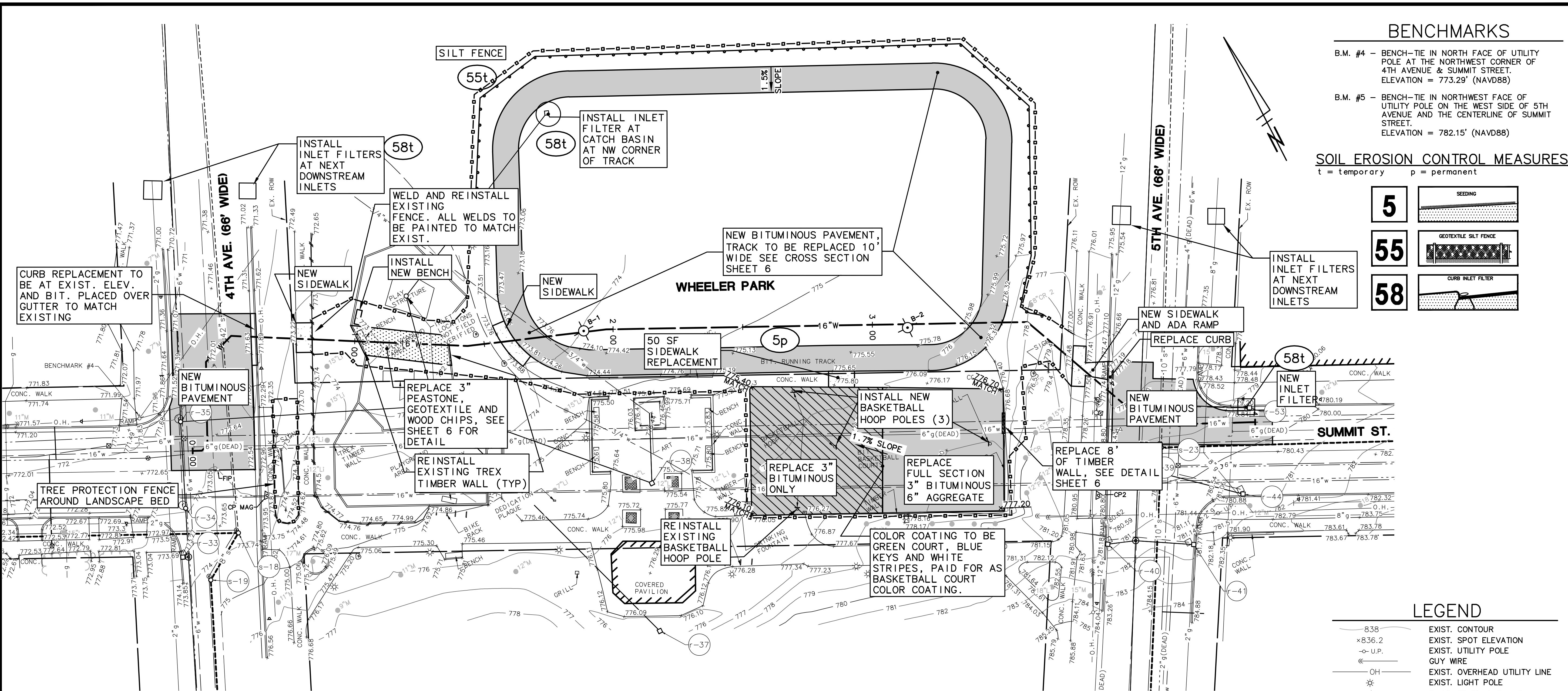
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

**18" WATER MAIN
REPLACEMENT THROUGH WHEELER PARK
REMOVAL PLAN**

PROFILE: N/A
SCALE PLAN: 1" = 20'
DRAWING No. 2014-022-REM

3 OF 7

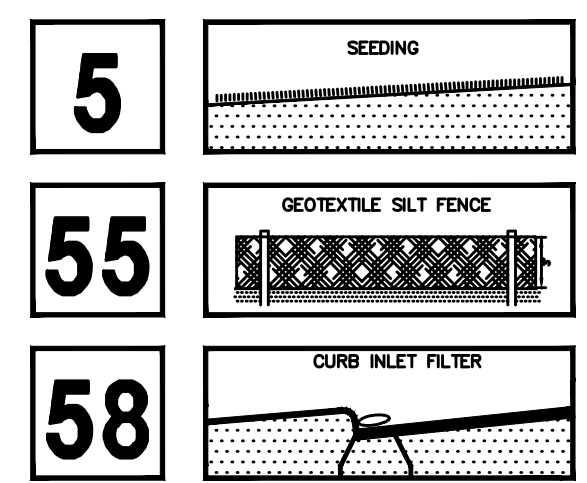
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BENCHMARKS

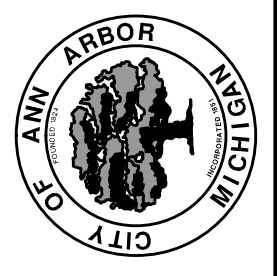
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SOIL EROSION CONTROL MEASURES
t = temporary p = permanent



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CITY OF ANN ARBOR
PUBLIC SERVICE
301 EAST WASHINGTON STREET
ANN ARBOR, MI 48107-6847
www.a3gov.org



GENERAL
NOTIFY THE CITY OF ANN ARBOR SOIL EROSION CONTROL OFFICE 48 HOURS PRIOR TO BEGINNING WORK ON THE PROJECT.
PHONE: 734-794-6265.

- THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN THE SOIL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER AT ALL TIMES DURING CONSTRUCTION. ANY MODIFICATIONS OR ADDITIONS TO THE SOIL EROSION CONTROL MEASURES DUE TO CONSTRUCTION OR CHANGED CONDITIONS SHALL BE AS DIRECTED AND APPROVED BY THE ENGINEER.
- ALL SOIL EROSION AND SEDIMENTATION CONTROL WORK SHALL CONFORM TO THE PERMIT REQUIREMENTS OF THE CITY OF ANN ARBOR, CITY ORDINANCE CHAPTER 63, CITY OF ANN ARBOR STANDARDS DIVISION VII, THE LAWS OF THE STATE OF MICHIGAN, AND THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
- DAILY, OR AFTER ANY STORM EVENT, INSPECTIONS OF EROSION CONTROL MEASURES SHALL BE MADE BY THE CONTRACTOR. PERIODIC INSPECTIONS MAY BE MADE BY THE ENGINEER TO DETERMINE THE EFFECTIVENESS OF EROSION AND SEDIMENTATION CONTROL MEASURES. ANY NECESSARY CORRECTIONS SHALL BE MADE WITHOUT DELAY, AND WITHOUT ADDITIONAL COST TO THE CITY OF ANN ARBOR.
- EROSION AND SEDIMENTATION FROM WORK ON THE SITE SHALL BE CONTAINED ON THE SITE AND NOT BE ALLOWED TO COLLECT ON ANY OFF-SITE AREAS, ROADWAYS OR WATERWAYS.
- ALL MUD/DIRT TRACKED ONTO ROADWAYS FROM THE SITE DUE TO CONSTRUCTION, SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR. IF SO ORDERED, THE CONTRACTOR SHALL PROVIDE AND OPERATE A VACUUM-TYPE STREET SWEEPER, AT NO ADDITIONAL COST TO THE CITY OF ANN ARBOR, WITHIN FOUR (4) HOURS OF BEING SO ORDERED.
- RESTORATION OF ALL DISTURBED AREAS, INCLUDING PLACEMENT OF TOPSOIL, SEED, FERTILIZER AND MULCH AND/OR SOD SHALL BE PERFORMED WITHIN FIVE (5) DAYS OF THE COMPLETION OF FINAL GRADE.
- CONSTRUCTION OPERATIONS SHALL BE SCHEDULED AND PERFORMED SO THAT PREVENTATIVE SOIL EROSION CONTROL MEASURES ARE IN PLACE PRIOR TO EXCAVATION IN CRITICAL AREAS AND TEMPORARY STABILIZATION MEASURES ARE IN PLACE IMMEDIATELY FOLLOWING BACKFILLING OPERATIONS.
- SPECIAL PRECAUTIONS WILL BE TAKEN IN THE USE OF CONSTRUCTION EQUIPMENT TO PREVENT SITUATIONS THAT PROMOTE EROSION.
- PROPER DUST CONTROL SHALL BE MAINTAINED DURING CONSTRUCTION BY USE OF WATER TRUCKS AND/OR DUST PALLIATIVE AS REQUIRED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND REMOVAL OF SOME MEASURES UPON AUTHORIZED COMPLETION OF THE PROJECT. FINAL COMPLETION OF PROJECT WILL NOT BE AUTHORIZED UNTIL ALL SITE WORK AND UTILITY CONSTRUCTION IS COMPLETE AND ALL SOILS ARE STABILIZED.
- THE CONTRACTOR SHALL NOT GRADE INTO ADJACENT PROPERTIES. SILT AND PROTECTIVE FENCE SHALL BE INSTALLED AND MAINTAINED TO PREVENT GRADING, EROSION AND SEDIMENTATION INTO THE ADJACENT PROPERTIES.
- TREE PROTECTION FENCING MUST REMAIN INTACT UNTIL RESTORATION OF THE SITE IS COMPLETE.

SEQUENCE OF EROSION CONTROL MEASURES:

- THE CONTRACTOR IS TO SUBMIT TO THE ENGINEER, A SEQUENCE OF CONSTRUCTION WITH RESPECT TO THE SOIL EROSION CONTROL MEASURES FOR REVIEW, COMMENT AND APPROVAL. THIS SCHEDULE IS TO INCLUDE INSPECTION AND REPAIR OF ALL TEMPORARY EROSION CONTROL MEASURES DAILY AND WITHIN 24 HOURS OF A STORM EVENT.
- SAMPLE SOIL EROSION AND SEDIMENTATION CONTROL INSTALLATION MINIMUM REQUIREMENTS:**
- INSTALL SILT FENCE, TREE PROTECTION FENCING, AND INLET FILTERS ON EXISTING DRAINAGE FEATURES PRIOR TO ANY CLEARING OR EARTH MOVING OPERATION.
 - STRIP AND STOCKPILE TOPSOIL. STABILIZE STOCKPILE AS REQUIRED.
 - PERFORM MACHINE GRADING OPERATIONS AND CONSTRUCT PAVEMENTS (MAINLINE, SIDEWALKS, DRIVES, ETC.).
 - INSTALL WATER MAIN IN ACCORDANCE WITH CONSTRUCTION SEQUENCE CONTAINED WITHIN THE DETAILED SPECIFICATION ENTITLED "WATERMAIN INSTALLATION AND TESTING" CONTAINED IN THE CONTRACT PROPOSAL.
 - CONTINUALLY MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES, AS REQUIRED TO ALLOW DRAINAGE AND SEDIMENT REMOVAL. REMOVE ANY ACCUMULATED SEDIMENT IMMEDIATELY.
 - COMPLETE ALL FINE GRADING.
 - TEMPORARY SEED AND INSTALL EROSION CONTROL BLANKET IN ALL DISTURBED AREAS.
 - CLEAN OUT STORM SEWER SYSTEMS.
 - REMOVE ALL TEMPORARY SOIL EROSION CONTROL MEASURES UPON FINAL INSPECTION AND APPROVAL BY THE ENGINEER.
 - REMEDY ANY NOTED DEFECTS TO THE SATISFACTION OF THE CITY OF ANN ARBOR'S SOIL EROSION AND SEDIMENTATION CONTROL OFFICIAL.

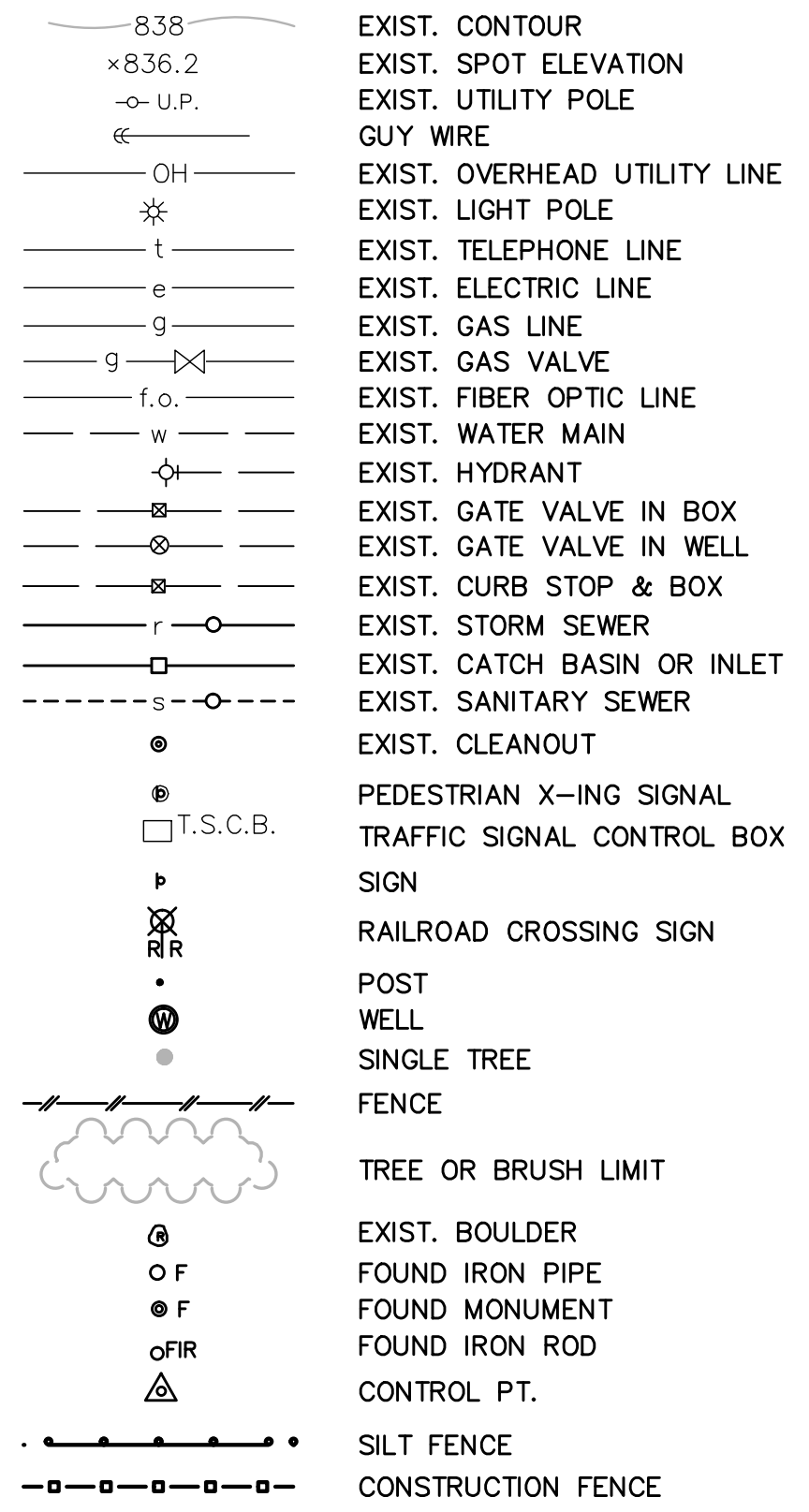
NOTE: THIS SEQUENCE IS FOR INFORMATION ONLY. IT IS INTENDED TO SHOW THE SEQUENCE OF CONSTRUCTION WITH RESPECT TO THE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING THEIR OWN DETAILED CONSTRUCTION SEQUENCE AND SCHEDULE TO THE ENGINEER FOR REVIEW, COMMENT, AND APPROVAL.

TEMPORARY SEEDING:

- SEED IN ACCORDANCE WITH PROJECT DRAWINGS AND SPECIFICATIONS.
- ANY DISTURBED AREA NOT PAVED, SEEDED, MULCHED, SODDED OR BUILT UPON BY NOVEMBER 15TH OR JUNE 30TH IS TO BE TEMPORARILY STABILIZED PER SPECIFICATIONS.

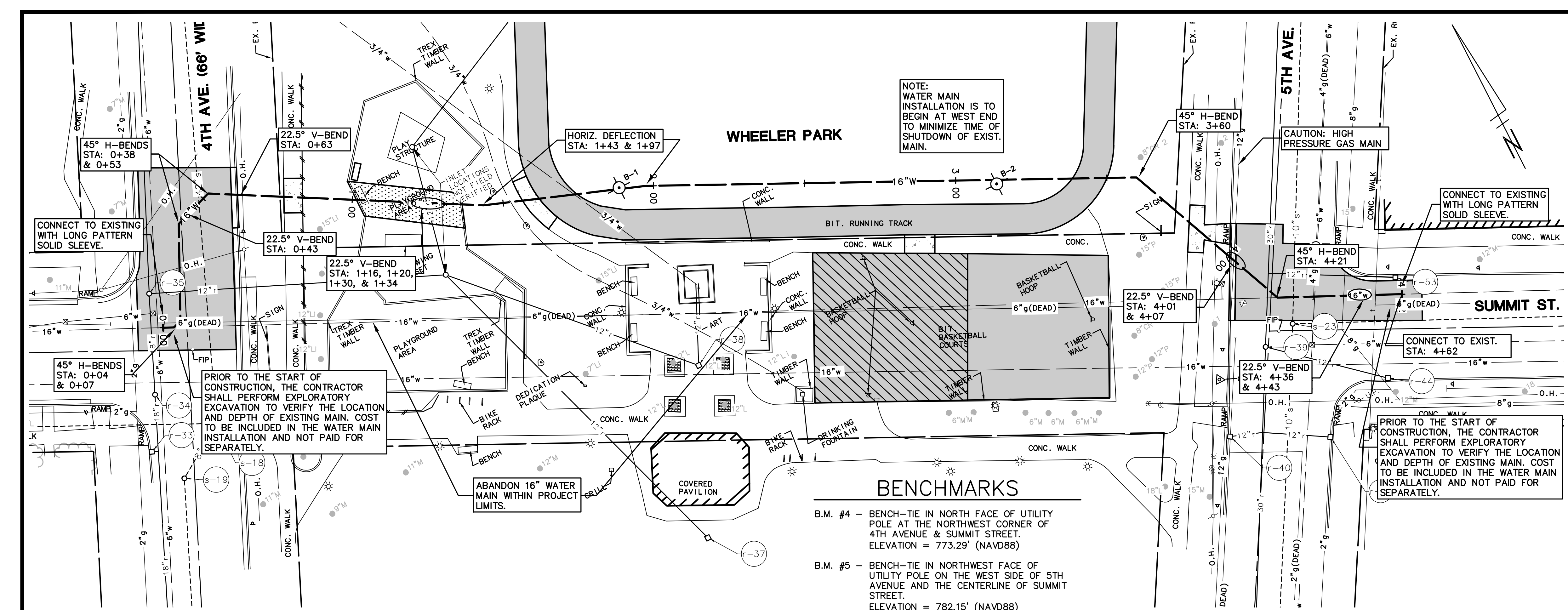
THE ESTIMATED COST OF SOIL EROSION AND SEDIMENTATION CONTROL MEASURES, TOPSOIL, SEEDING, AND MULCH = \$5,000 ON SITE SOILS PER THE USDA SOIL SURVEY OF WASHTENAW COUNTY, MICHIGAN.
• FoB & FoC - FOX SANDY LOAM - IN UPLAND AREAS AND ON OUT WASH PLAINS, KAMES, VALLEY TRAINS, TERRACES, AND MORAINES. SLOPES ARE UNIFORM OR SHORT AND COMPLEX.

LEGEND



PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
SUMMIT STREET
16" WATER MAIN
REPLACEMENT THROUGH WHEELER PARK
SESS AND SITE PLAN

SCALE PLAN: 1" = 20'
PROFILE: N/A
DRAWING No. 2014-022-PRI
SHEET No. 4 OF 7



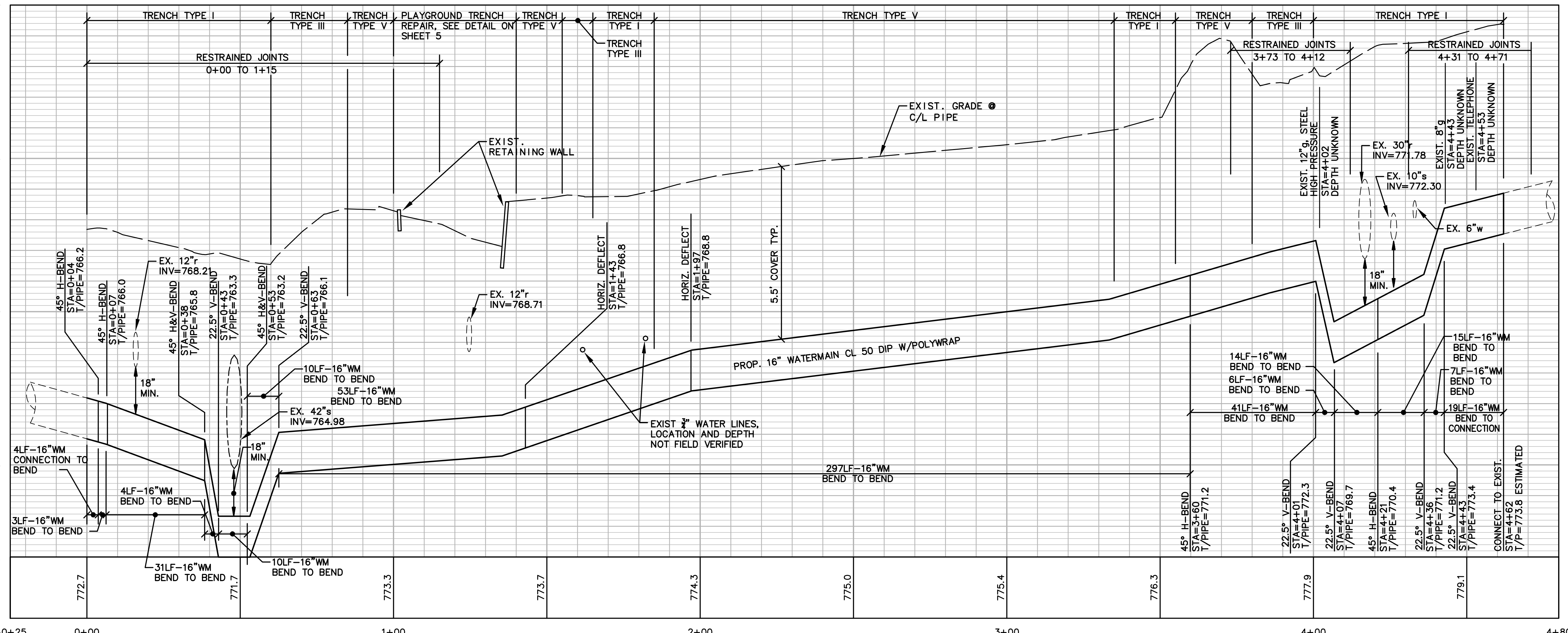
LEGEND

838	EXIST. CONTOUR
×836.2	EXIST. SPOT ELEVATION
U.P.	EXIST. UTILITY POLE
OH	EXIST. OVERHEAD UTILITY LINE
*	EXIST. LIGHT POLE
t	EXIST. TELEPHONE LINE
e	EXIST. ELECTRIC LINE
g	EXIST. GAS LINE
g	EXIST. GAS VALVE
f.o.	EXIST. FIBER OPTIC LINE
w	EXIST. WATER MAIN
h	EXIST. HYDRANT
g	EXIST. GATE VALVE IN BOX
g	EXIST. GATE VALVE IN WELL
r	EXIST. STORM SEWER
o	EXIST. CATCH BASIN OR INLET
s	EXIST. SANITARY SEWER
o	EXIST. CLEANOUT
o	PEDESTRIAN X-ING SIGNAL
o	TRAFFIC SIGNAL CONTROL BOX
o	SIGN
o	RAILROAD CROSSING SIGN
o	POST
o	WELL
o	SINGLE TREE
o	FENCE
o	TREE OR BRUSH LIMIT
o	EXIST. BOULDER
o	FOUND IRON PIPE
o	FOUND MONUMENT
o	FOUND IRON ROD
o	CONTROL PT.

BENCHMARKS


B.M. #4 - BENCH-TIE IN NORTH FACE OF UTILITY POLE AT THE NORTHWEST CORNER OF 4TH AVENUE & SUMMIT STREET. ELEVATION = 773.29' (NAVD88)

B.M. #5 - BENCH-TIE IN NORTHWEST FACE OF UTILITY POLE ON THE WEST SIDE OF 5TH AVENUE AND THE CENTERLINE OF SUMMIT STREET. ELEVATION = 782.15' (NAVD88)



- ### WATER MAIN CONSTRUCTION NOTES:
- FOR EROSION CONTROL ITEMS SEE SHEET 4.
 - ALL WATER MAIN WORK SHALL BE STAGED IN ACCORDANCE WITH THE DETAILED SPECIFICATION AND AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK, CONSTRUCTION METHODS, AND EQUIPMENT TO COMPLY WITH THE CONTRACT REQUIREMENTS.
 - THE CONTRACTOR SHALL CAREFULLY PROTECT FROM DAMAGE OR INJURY DURING CONSTRUCTION OPERATIONS ALL UTILITIES NOT DESIGNATED FOR REMOVAL OR ABANDONMENT. EXISTING FACILITIES NOT DESIGNATED FOR REMOVAL OR ABANDONMENT BUT WHICH ARE DAMAGED BY THE CONTRACTOR'S OPERATION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS SOLE EXPENSE, IN A MANNER THAT IS APPROVED BY THE ENGINEER.
 - THE EXISTING UTILITIES SHOWN ON THESE PLANS REPRESENT THE BEST INFORMATION AVAILABLE AS OBTAINED THROUGH SURVEYS AND/OR EXISTING PLANS. THIS INFORMATION DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO BE SATISFIED AS TO ITS ACCURACY AND/OR THE LOCATION OF EXISTING UTILITIES. IF STORM, SANITARY, OR WATER MAINS CROSS WITH LESS THAN 18" CLEARANCE, THEY SHALL BE SADDLED (SEE UTD DETAIL #3). IF STORM, SANITARY, OR WATER MAINS CROSS OTHER UTILITIES, CONTACT THEIR RESPECTIVE OWNERS FOR INFORMATION ON HOW TO PROCEED. PAYMENT FOR THE COORDINATION EFFORTS, CONCRETE SADDLES, AND ANY OTHER ASSOCIATED ITEMS SHALL BE INCLUDED IN THE RELATED STORM, SANITARY, OR WATER MAIN ITEMS AND SHALL NOT BE PAID FOR SEPARATELY.
 - THE CONTRACTOR WILL ONLY BE ALLOWED TO SHUT DOWN THE EXISTING 16" WATER MAIN FOR A MAXIMUM DURATION OF 8 HOURS IN ANY ONE SHUTDOWN, IN ANY GIVEN 24 HOUR PERIOD, EXCEPT WHEN DOING FINAL TESTING, WHEN IT CAN BE SHUT DOWN FOR TWO WEEKS MAXIMUM. SHUTDOWN OF THE EXISTING WATER MAIN MUST BE SCHEDULED WITH THE ENGINEER A MINIMUM OF 3 WORKING DAYS IN ADVANCE OF THE INTENDED SHUTDOWN AND CONSTRUCTION OF THE WATER MAIN WILL NOT BE ALLOWED TO TAKE PLACE ON A SATURDAY OR A SUNDAY.
 - THE CONTRACTOR SHALL PROPOSE A METHOD(S) AND EQUIPMENT FOR THE REVIEW AND APPROVAL OF THE ENGINEER TO BE USED FOR THE FLUSHING OF CHLORINATED WATER FROM PROPOSED WATER MAIN INTO EXISTING SANITARY SEWERS. CHLORINATED WATER SHALL NOT BE ALLOWED IN STORM SEWERS OR BIOSWALES, ANY AND ALL MEASURES NECESSARY TO COMPLY WITH THIS REQUIREMENT SHALL BE INCLUDED IN THE COST OF THE WATER MAIN INSTALLATION AND WILL NOT BE PAID FOR SEPARATELY.
 - UPON COMPLETION OF THE 16" WATER MAIN CONSTRUCTION AND HYDROSTATIC AND BACTERIOLOGICAL TESTING, THE CONTRACTOR SHALL REMOVE THE TEMPORARY WATER MAIN TESTING AND CONNECTION ASSEMBLY AND CONSTRUCT THE PERMANENT WATER MAIN AS SHOWN ON THE PLAN SHEET. ALL WORK ASSOCIATED WITH REMOVING THE TEMPORARY TESTING CONNECTION AND CONSTRUCTING THE FINAL PERMANENT CONNECTION WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE RELATED ITEMS OF WORK.


M:\Civi3d_Proj\4041\Construction\PH1\4041WM1.dwg Dwg Created: 22-May-14 Plot Date: 22-Jul-14



Know what's below.
Call before you dig.

REV.	DESCRIPTION	DATE	DRAWN	CHECKED

CITY OF ANN ARBOR
PUBLIC SERVICE
301 STATE STREET
ANN ARBOR, MI 48107-8847
www.a2gov.org



PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

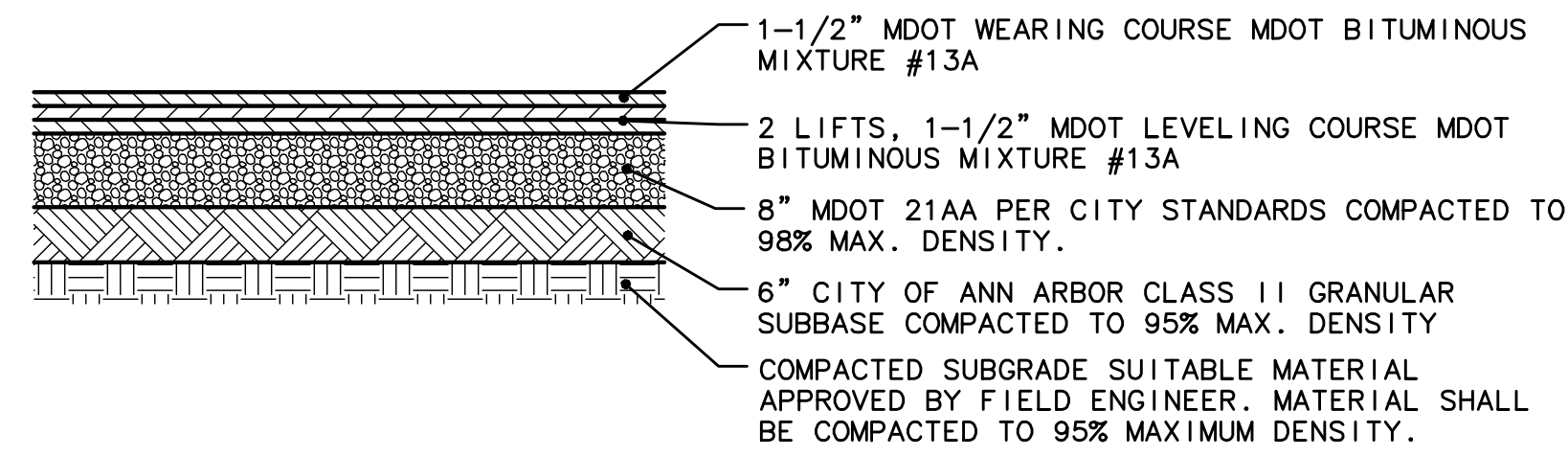
SUMMIT STREET
16" WATER MAIN
REPLACEMENT THROUGH WHEELER PARK
WATER MAIN PLAN AND PROFILE

SCALE PLAN: 1"=20'
PROFILE: 1"=2'

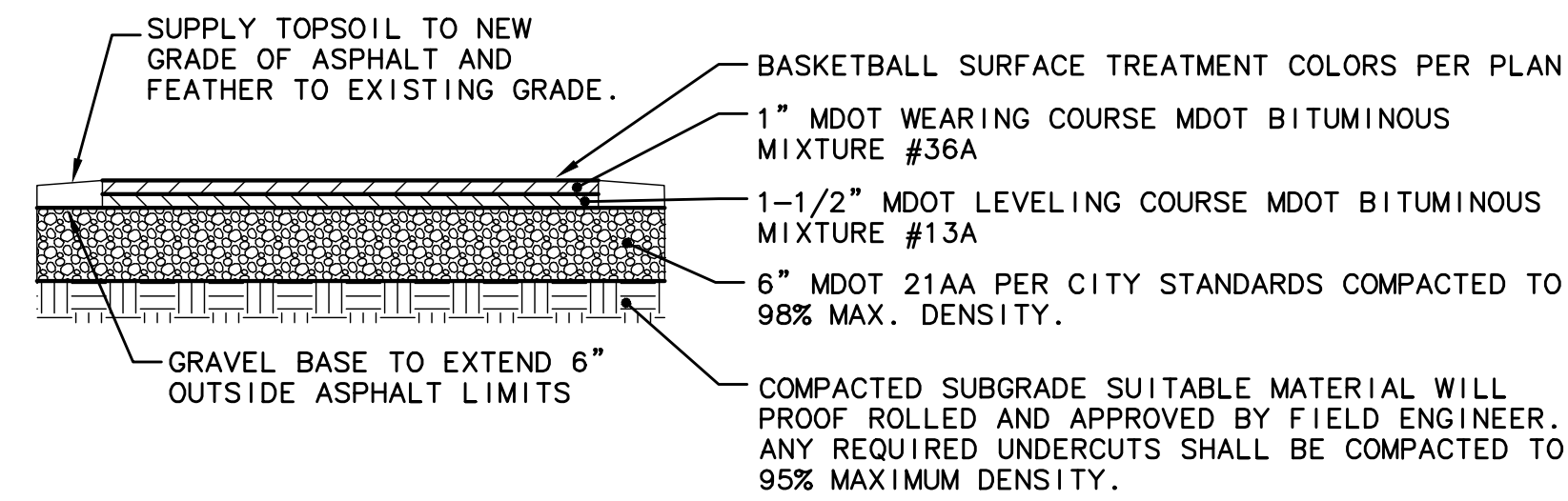
DRAWING No.
2014-022-WM1

SHEET No.
5 OF 7

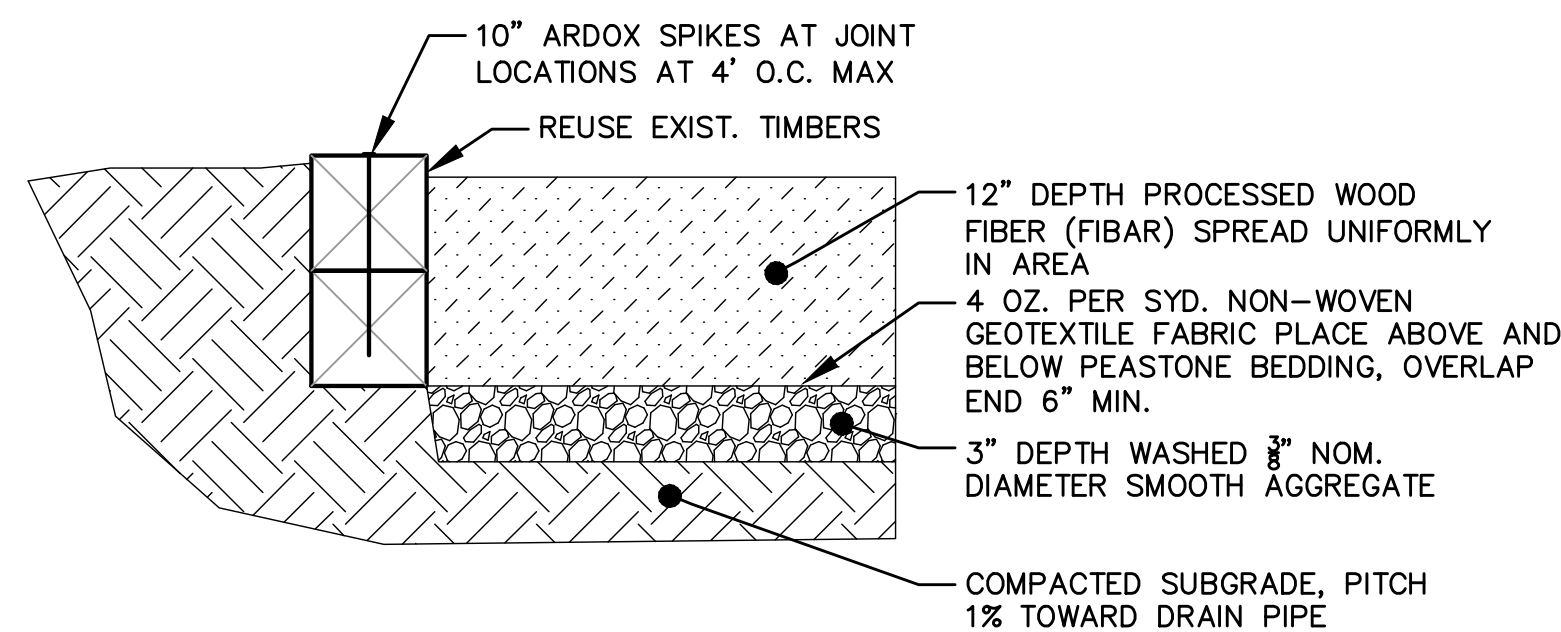
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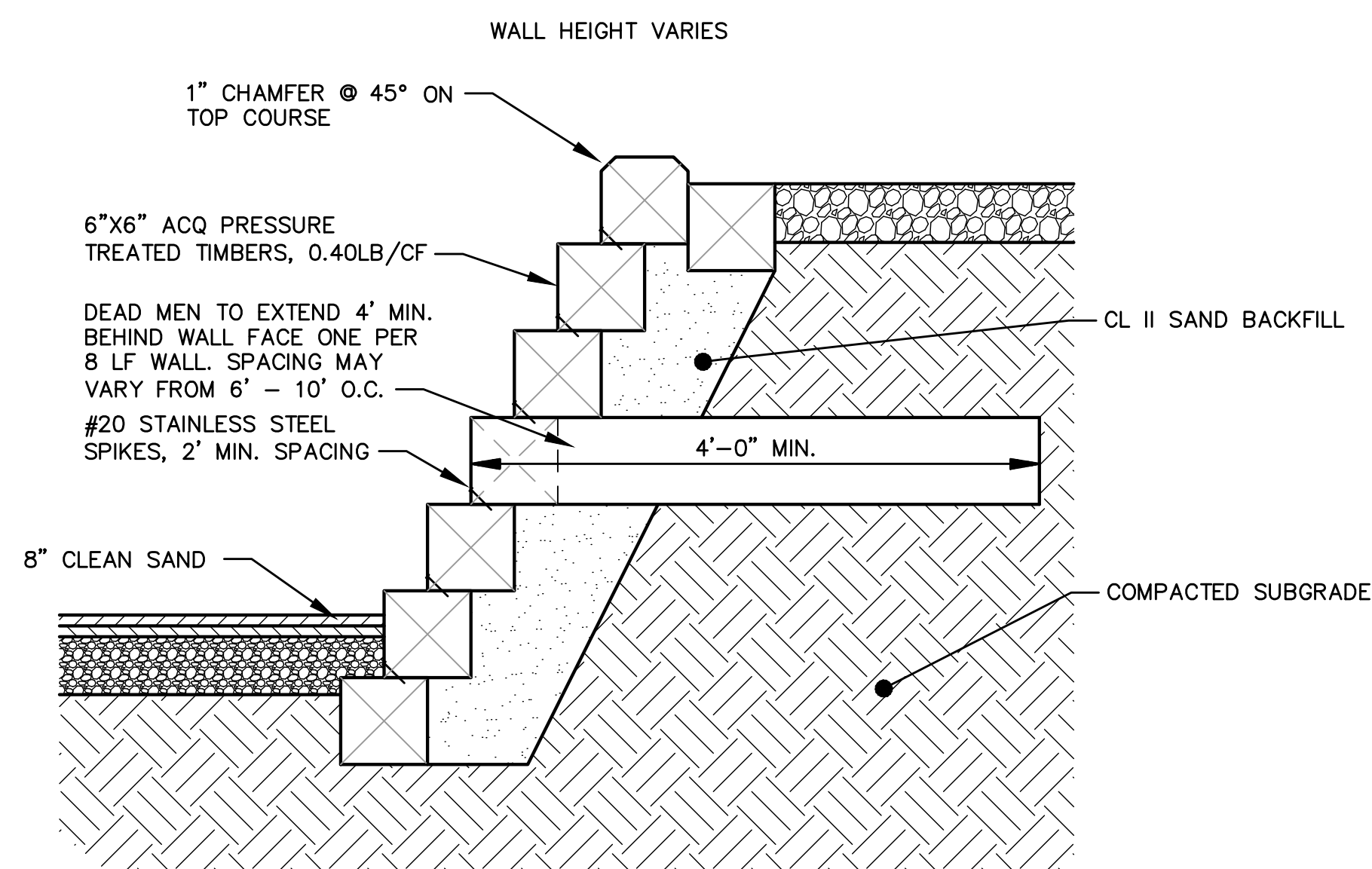
BITUMINOUS ROAD PAVEMENT DETAIL
NOT TO SCALE



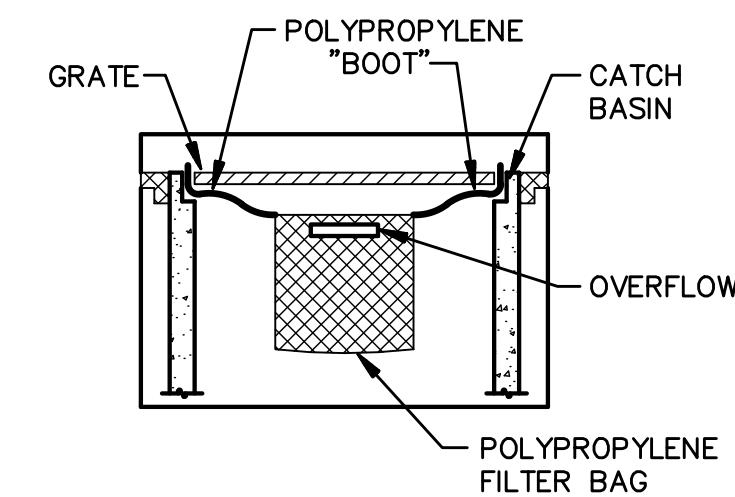
BASKETBALL COURT AND TRACK PAVEMENT DETAIL
NOT TO SCALE



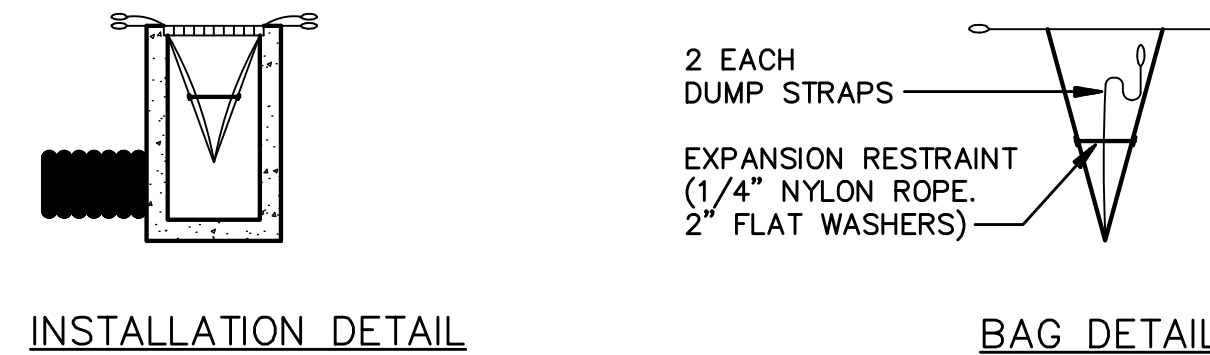
PLAY AREA CROSS SECTION REPAIR
NO SCALE



WOOD RETAINING WALL DETAIL
NO SCALE

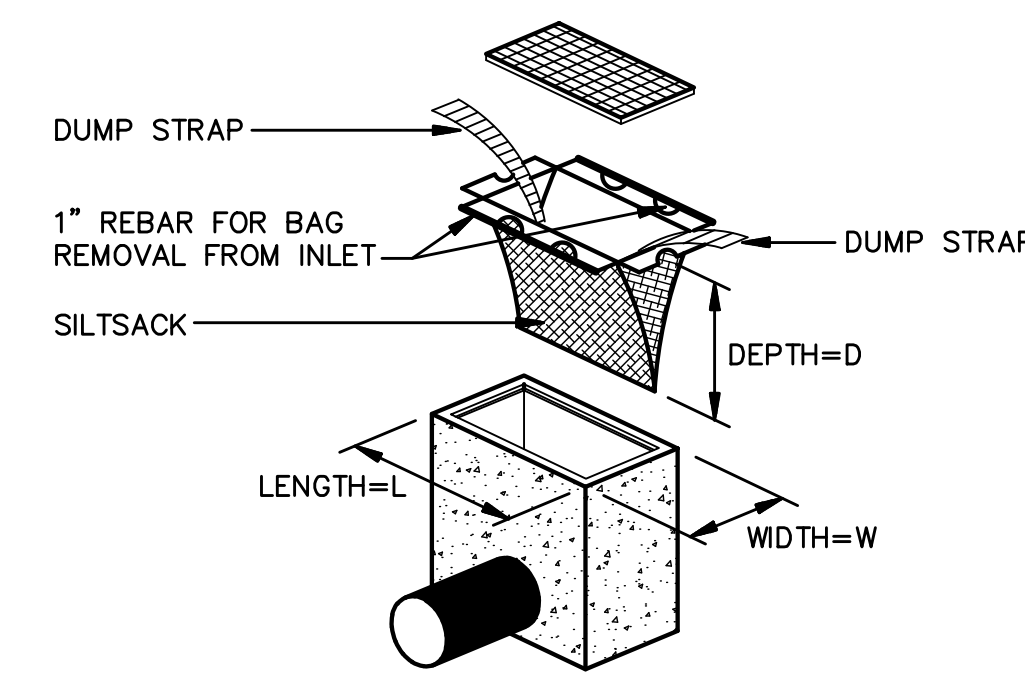


NOTE: TEMPORARY INLET SEDIMENT FILTER TO BE INSTALLED ON ALL PAVED CATCH BASINS OR STORM INLETS. INLET FILTER TO BE SIMILAR TO "STREAMGUARD" AS MANUFACTURED BY STORMWATER SERVICES CORPORATION (206-767-0441) OR "SILTSACK" AS MANUFACTURED BY ATLANTIC CONSTRUCTION FABRICS, INC.; (800-448-3636). CLEAN FILTER AS NEEDED.



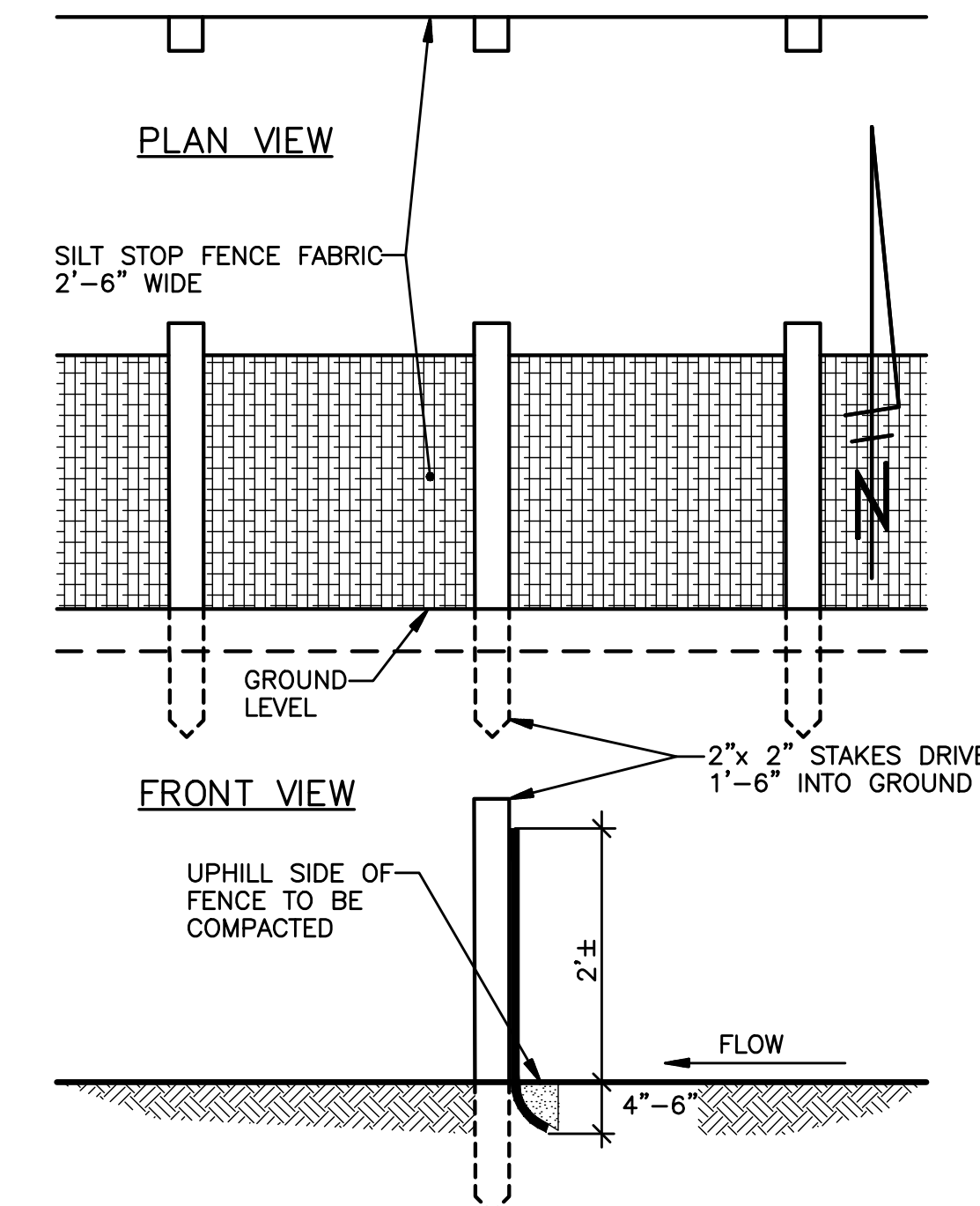
INSTALLATION DETAIL

BAG DETAIL



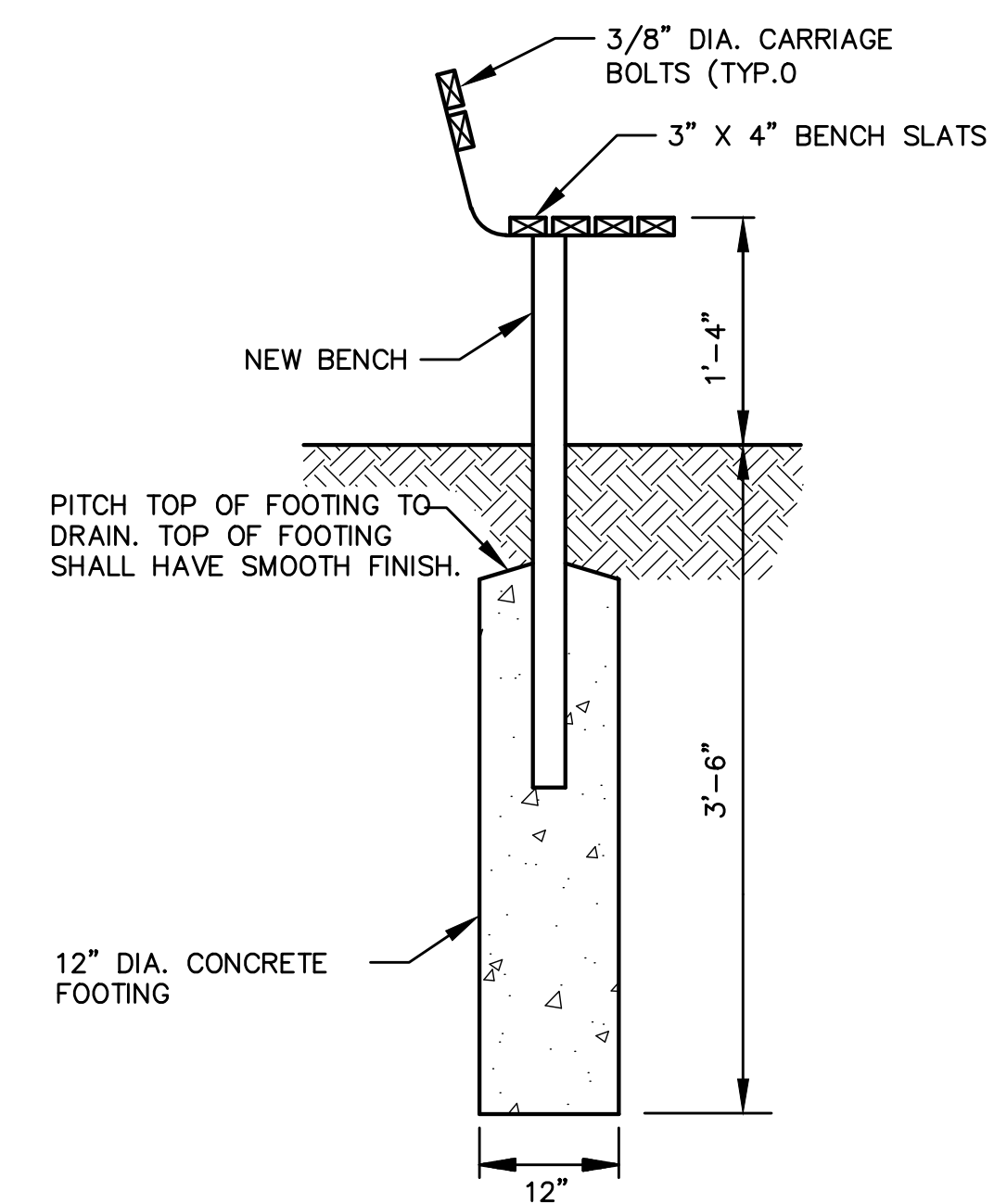
SILT SACK DETAIL
NO SCALE

58t

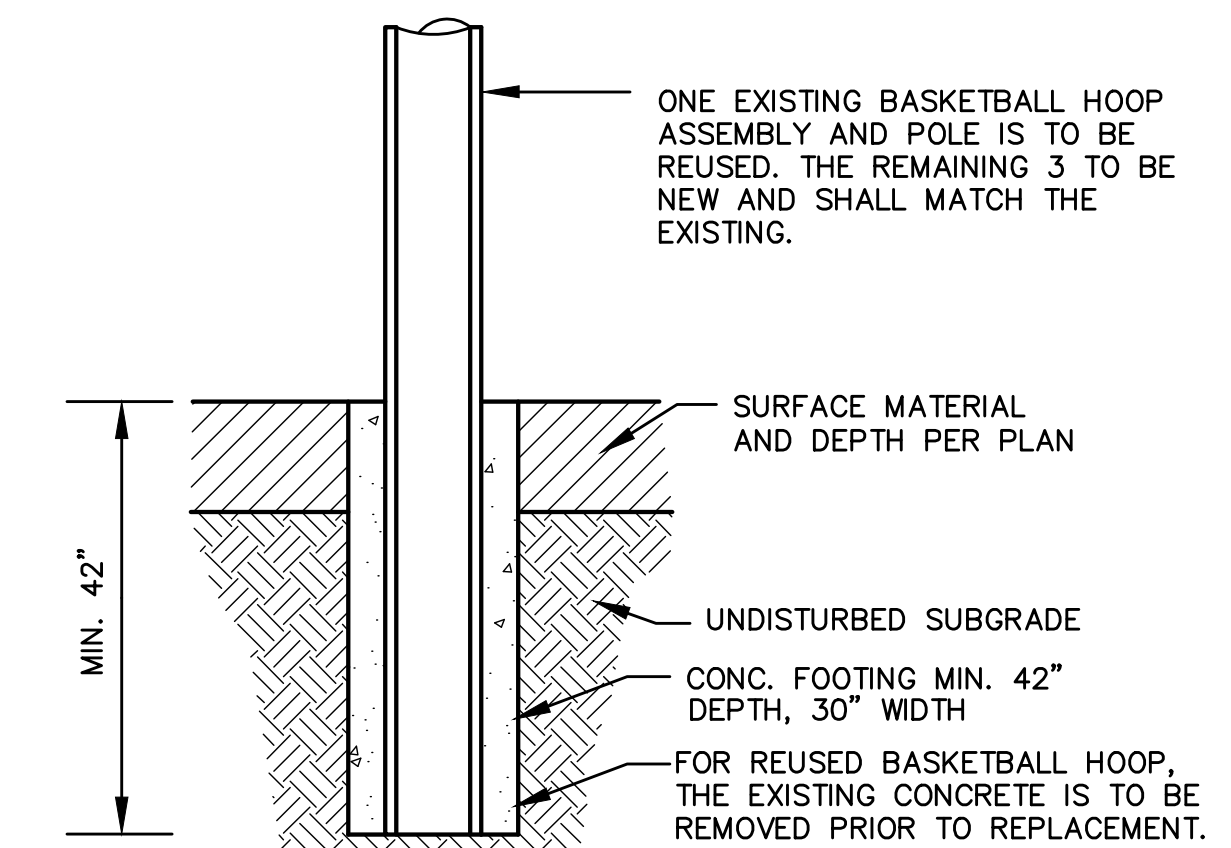


CROSS-SECTION

SILT FENCE DETAIL 55t
NO SCALE



BENCH DETAIL
NO SCALE



BASKETBALL HOOP POLE DETAIL
NO SCALE

REV.	DESCRIPTION	DATE	DRAWN	CHECKED

CITY OF ANN ARBOR PUBLIC SERVICE
301 EAST HURON STREET
ANN ARBOR, MI 48107-8647
734-799-6410
www.a2gov.org

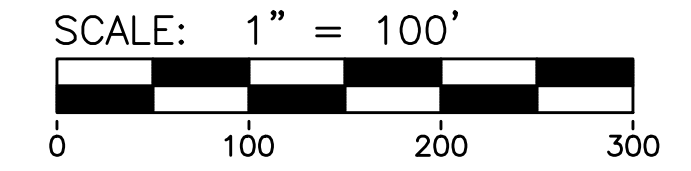
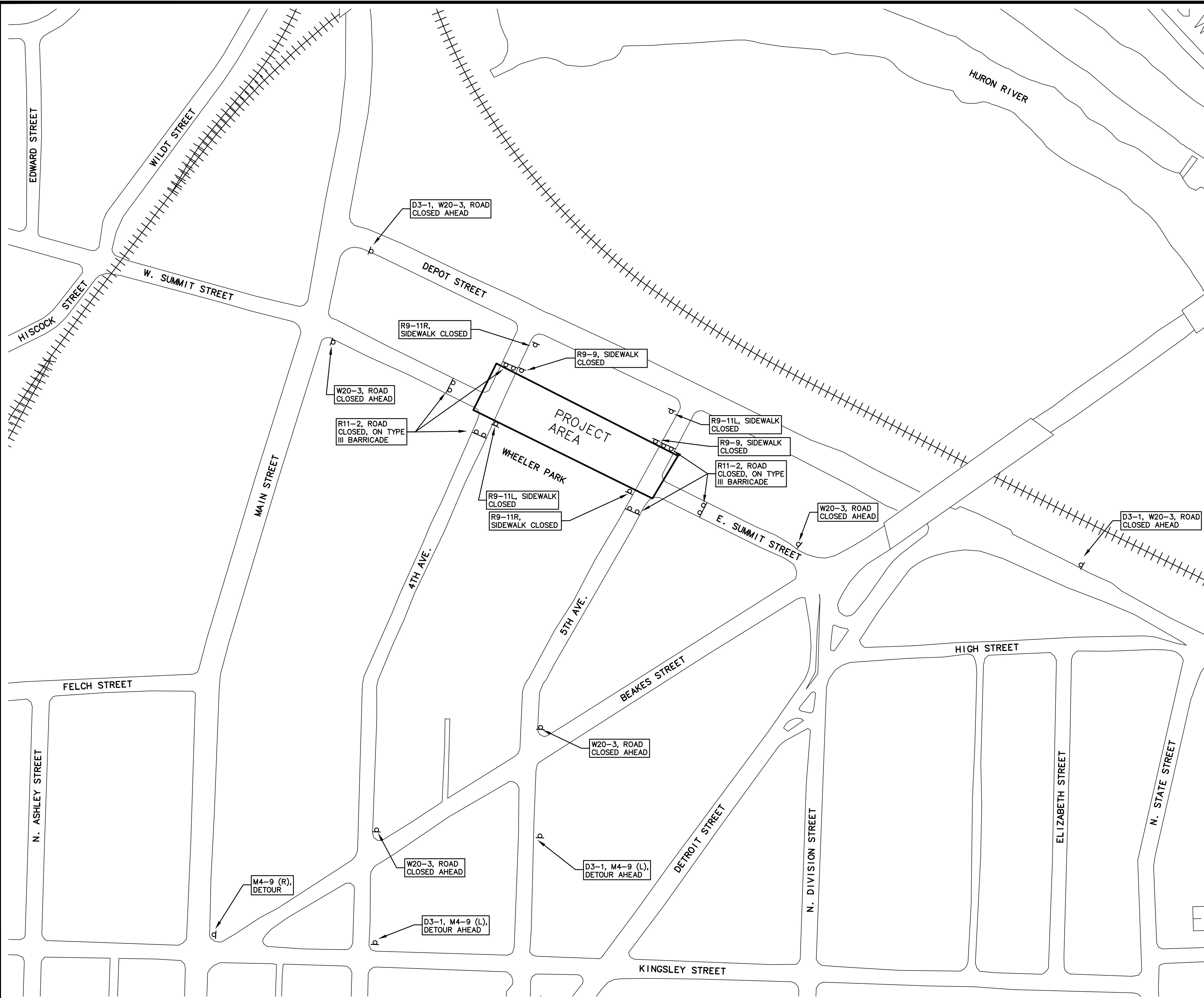
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
SUMMIT STREET
18' WATER MAIN
REPLACEMENT THROUGH WHEELER PARK
DETAILS

SCALE: PLAN: 1" = 20'
PROFILE: N/A

DRAWING No. **2014-022-DT**

SHEET No. **6 OF 7**

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SIGN LEGEND

QUANTITY	DESCRIPTION
3	FOURTH AVE D3-1 (12" x 24")
3	FIFTH AVE D3-1 (12" x 24")
2	DETOUR M4-9 (L) (24" x 30")
1	DETOUR M4-9 (R) (24" x 30")
2	SIDEWALK CLOSED R9-9 (24" x 12")
2	SIDEWALK CLOSED CROSS HERE R9-11R (24" x 12")
2	SIDEWALK CLOSED CROSS HERE R9-11L (24" x 12")
6	ROAD CLOSED R11-2 (48" x 30")
4	ROAD CLOSED AHEAD W20-3 (48")



DATE	DRAWN	CHECKED

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PUBLIC SERVICE
301 EAST HURON STREET
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org



PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
SUUMI STREET 16" WATER MAIN
REPLACEMENT THROUGH WHEELER PARK

SCALE: PLAN: 1" = 20'
PROFILE: N/A
DRAWING No. 2014-022-MT