

CONSTRUCTION PLANS

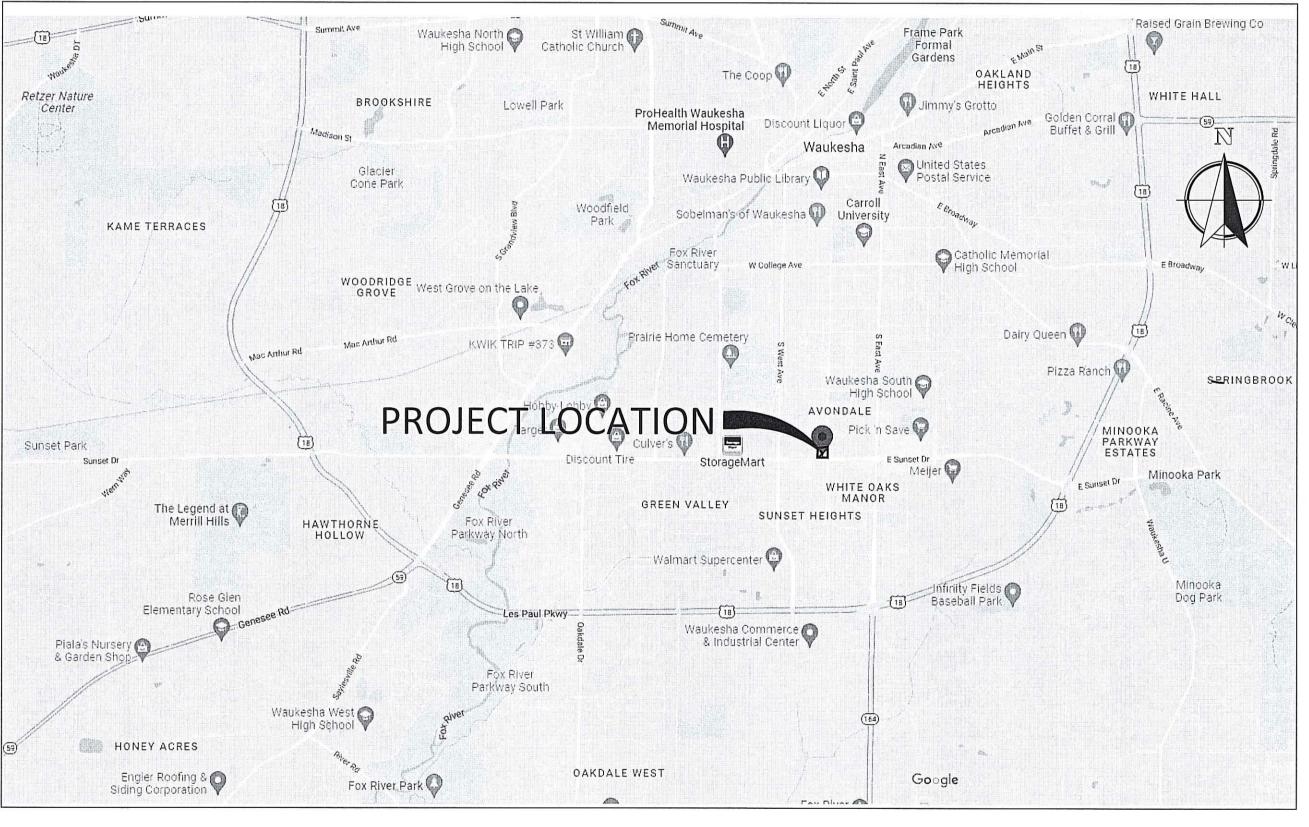
WAUKESHA EXPRESS WASH

ERICKSON ENTERPRISES II, LLC.

300 W. Sunset Drive, Waukesha, Wisconsin

LEGEND

Description	Existing	Description	Existing	Proposed
EDGE OF WOODS	\sim	WATER SHUT OFF	*50	
DECIDUOUS TREE	€3°"	WATER MAIN VALVE	₩V	M
DECIDUOUS TREE REMOVAL	₹	HYDRANT	Q	
CONIFEROUS TREE	. 6"	WATER MAIN REDUCER	\triangleright	
CONIFEROUS TREE REMOVAL	5°	SANITARY MANHOLE	S	
BUSH	₹ Ç3	SANITARY CLEAN OUT	0	•
SOIL BORING	Ø S8 1	STORM MANHOLE		
TELEPHONE BOX	T	CATCH BASIN	$\overline{\cdot}$	$\mathcal{J}_{m_2}^{-1}$
GUY WIRE	\longrightarrow	LIGHT POLE	-×	
UTILITY POLE	$\dot{\Box}$	ENDWALL	\triangleleft	\triangleleft
GAS VALVE	S∨	STORM SEWER	stm	—)—
GAS METER		SANITARY SEWER	SAN	>
SEPTIC VENT	٢	WATERMAIN	w	——W——
ELECTRIC MANHOLE		CONTOURS	650	 650
COMMUNICATION MANHOLE		FIRE PROTECTION		——FP ——
WATER MANHOLE		UTILITY CROSSING		
HVAC UNIT		DITCH OR SWALE		
UNDERGROUND VAULT	Δ	CULVERT	□ = CMP = □	12" CMP
SECTION CORNER	②	RAILROAD TRACKS	+++++	
MAIL BOX		FENCE	—x——x—	
GUARD POST	8	NO VEHICULAR ACCESS	<u> </u>	
STREET SIGN	þ	UNDERGROUND ELECTRIC	——E——	
ELECTRIC PEDESTAL	X	UNDERGROUND GAS MAIN	——-G——	
ELECTRIC METER		UNDERGROUND COMMUNICATIONS	СМ	
PAD MOUNT TRANSFORMER	-00 -001	SILT FENCE	<i>//</i>	
FOUND IRON PIPE	0	OVERHEAD ELECTRIC	OHE	
SET IRON PIPE	• ,	FORCE MAIN	\	



ABBREVIATIONS

BASE LINE	BL	INVERT ELEVATION	IE
LONG CORD OF CURVE	CHD	LENGTH OF CURVE	ARC
CURB AND GUTTER	C&G	MANHOLE	MH
CATCH BASIN	СВ	NORMAL WATER LEVEL	NWL
CENTERLINE	CL	POINT OF CURVATURE	PC
EDGE OF PAVEMENT	EOP	POINT OF TANGENCY	PT
FINISHED FIRST FLOOR	FFF	TANGENCY OF CURVE	TAN
FINISHED GRADE	FG	POINT OF VERTICAL INTERSECTION	PVI
FLOW LINE	FL	RADIUS	R
FLOODPLAIN	FP	RIGHT OF WAY	ROW
ORDINARY HIGH WATER MARK	OHWM	SANITARY SEWER	SAN
TOP OF BANK	TOB	STORM SEWER	STM
TOP OF CURB	TOC	TOP OF FOUNDATION	TOF
TOP OF WALK	TOW	WATER MAIN	WM

WAUKESHA STATEMENT

ALL SITE IMPROVEMENTS AND CONSTRUCTION SHOWN ON THE PLANS SHALL CONFORM TO THE CITY OF WAUKESHA DEVELOPMENT HANDBOOK & INFRASTRUCTURE SPECIFICATIONS. WHERE THE PLANS DO NOT COMPLY, IT SHALL BE THE SOLE RESPONSIBILITY AND EXPENSE OF THE DEVELOPER TO MAKE REVISIONS TO THE PLANS AND/OR CONSTRUCTED INFRASTRUCTURE TO

UTILITY NOTE

Call or (800) 242-851

www.DiggersHotline.com

EXISTING UTILITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE TYPE, LOCATION, SIZE AND ELEVATION OF UNDERGROUND UTILITIES AS THEY DEEM NECESSARY FOR PROPOSED UTILITY CONNECTIONS AND / OR TO AVOID DAMAGE THERETO, CONTRACTOR SHALL CALL "DIGGER'S HOTLINE" PRIOR TO ANY CONSTRUCTION.



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OWNER

ERICKSON ENTERPRISES II, LLC. TRACEY ERICKSON 250 S. DIVERSATECH DRIVE OFFICE: 815-468-1100 EMAIL: terickson@peak-inc.net

GOVERNING AGENCIES CONTACTS

ALEX DAMIEN, INTERIM DIRECTOR EMAIL: adamien@waukesha-wi.gov

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DOUG KOHLER, PLANNER OFFICE: 262-524-3756

EMAIL: jandrews@waukesha-wi.gov

EMAIL: dkohler@waukesha-wi.gov

CHARLIE GRIFFITH, ASSOCIATE PLANNER OFFICE: 262-524-3529 EMAIL: cgriffith@waukesha-wi.gov

CITY OF WAUKESHA - COMMUNITY DEVELOPMENT KRISTIN STONE, BUILDING INSPECTION OFFICE: 262-524-3530 EMAIL: kstone@waukesha-wi.gov

WAUKESHA WATER UTILITY CHRIS WALTERS, TECHNICAL SERVICES MGR. OFFICE: 262-521-5272 EMAIL: cwalters@waukesha-water.com

WAUKESHA WATER UTILITY TOM KRAUSE, PERMITTING OFFICE: 262-521-5272 EMAIL: tkrause@waukesha-water.com

PUBLIC UTILITY CONTACTS

TIME WARNER CABLE STEVE CRAMER UTILITY COORDINATOR OFFICE: 414-277-4045 EMAIL: steve.cramer@twcable.com EMERGENCY NUMBER: (800) 627-2288

MIKE TOYEK OFFICE: 262-636-0549 EMAIL: mt1734@att.com

TDS TELECOM SOUTHEAST WISCONSIN OFFICE: 877-483-7142

WE-ENERGIES TOM SCHULTZ OFFICE: 262-552-3229 EMAIL: tom.schultz@we-energies.com

> NATURAL GAS EMERGENCY: (800) 261-5325 ELECTRICAL EMERGENCY: (800) 662-4797

AMERICAN TRANSMISSION COMPANY **BRIAN MCGEE** OFFICE: 262-506-6895 EMAIL: bmcgee@atcllc.com EMERGENCY NUMBER: (800) 972-5341

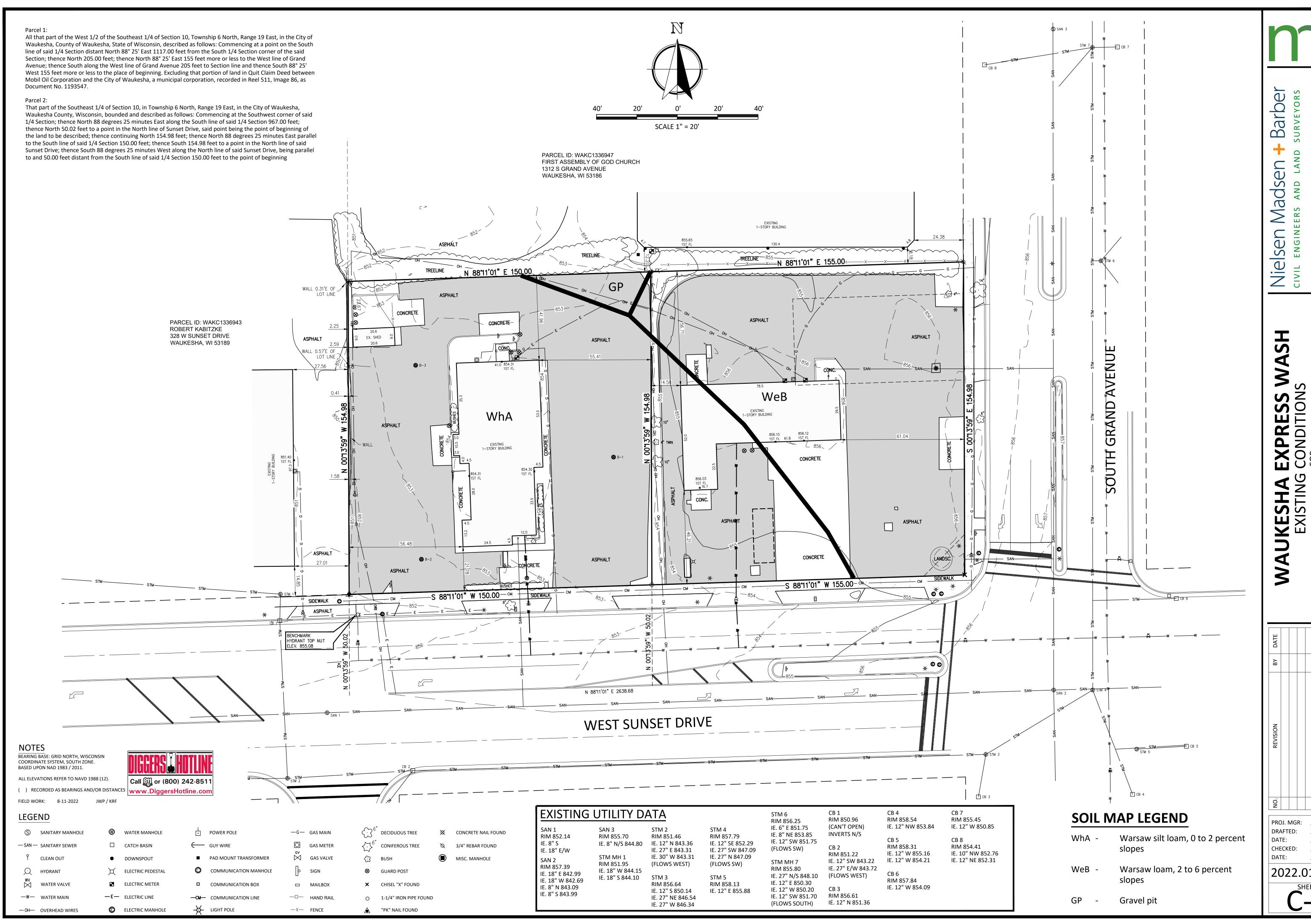
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WAUKESHA GRADING, EROS PAVEN ERICKSOF CITY OF WAUKES

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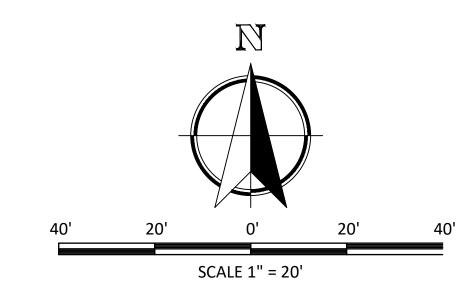


ERPRISES

JKESHA COUNTY, ERICKSON CITY OF WAUKES

<u>12-16-2022</u>

01-03-2023 2022.0186.01



DEMOLITION NOTES

THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSAL AT A LOCATION APPROVED (BY ALL GOVERNING AUTHORITIES) OF ALL STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, PAVEMENTS, DRIVES, DRAINAGE STRUCTURES, UTILITIES, ETC., SUCH THAT THE IMPROVEMENTS SHOWN ON THE REMAINING PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLY COMPACTED FILL MATERIAL PER THE SPECIFICATIONS.

THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE SITE AND DISPOSING THE DEBRIS IN A LAWFUL MANNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION, SITE CLEARING, AND DISPOSAL

THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE LAND SURVEYOR AND ENGINEER OF RECORD ASSUME NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR ON-SITE LOCATIONS OF EXISTING UTILITIES.

ALL EXISTING SEWERS, PIPING, AND UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PROCEEDING WITH THE WORK.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CALL DIGGERS HOTLINE AT 1-800-242-8511 A MINIMUM OF 3 WORKING DAYS PRIOR TO EXCAVATION ACTIVITIES TO LOCATE AND MARK ALL UNDERGROUND UTILITIES.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HIRE A PRIVATE UTILITY LOCATING SERVICE TO LOCATE AND MARK ALL UNDERGROUND PRIVATE UTILITIES.

CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH SIGNS, FENCING, BARRICADES, ENCLOSURES, ETC., (AND OTHER APPROPRIATE BEST MANAGEMENT PRACTICES) AS APPROVED BY THE CONSTRUCTION MANAGER. TEMPORARY CLOSURE OF ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE APPROVED BY THE AUTHORITY HAVING JURISDICTION.

CONTINUOUS ACCESS SHALL BE MAINTAINED FOR THE SURROUNDING PROPERTIES AT ALL TIMES DURING THE COURSE OF WORK.

PRIOR TO DEMOLITION OCCURRING, THE CITY OF APPLETON EROSION CONTROL PERMIT AND WDNR WRAPP PERMIT SHALL BE OBTAINED. ALL EROSION CONTROL DEVICES SHALL BE INSTALLED BEFORE DEMOLITION CAN OCCUR. ORANGE CONSTRUCTION FENCE TO BE INSTALLED ALONG ALL WETLAND AREAS AS SHOWN ON THE SITE GRADING PLAN.

EXISTING ITEMS TO REMAIN INCLUDING, BUT NOT LIMITED TO, FENCES, SIGNS, UTILITIES, BUILDINGS, TREES, PAVEMENTS, AND LIGHT POLES SHALL BE CAREFULLY PROTECTED DURING THE DEMOLITION PROCESS. ANY DAMAGE SUSTAINED TO ITEMS TO REMAIN IN PLACE SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE AT NO ADDITIONAL COST TO THE OWNER.

PROPERTY CORNERS AND BENCHMARKS SHALL BE CAREFULLY PROTECTED UNTIL THEY HAVE BEEN REFERENCED BY A PROFESSIONAL LAND SURVEYOR. PROPERTY MONUMENTS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE AT NO ADDITIONAL COST TO THE OWNER.

CONTRACTOR SHALL LIMIT PAVEMENT REMOVALS TO ONLY THOSE AREAS WHERE IT IS NECESSARY AS SHOWN ON THESE CONSTRUCTION PLANS. CONCRETE SIDEWALK AND CURB & GUTTER IS TO BE REMOVED TO NEAREST JOINT IN ORDER TO ACCOMMODATE PROPOSED IMPROVEMENTS. IF ANY DAMAGE IS INCURRED ON ANY OF THE SURROUNDING PAVEMENTS AND/OR OTHER IMPROVEMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND REPAIR OF DAMAGED PAVEMENT AND OTHER ITEMS AT NO ADDITIONAL COST TO THE OWNER.

CONTRACTOR TO REMOVE ALL EXISTING SIGNS WITHIN PROPERTY LIMITS EXCEPT FOR THOSE CALLED TO BE SALVAGED TO THE OWNER OR SALVAGED AND RELOCATED.

IF PREVIOUSLY UNIDENTIFIED HAZARDOUS, CONTAMINATED MATERIALS, OR OTHER ENVIRONMENTAL RELATED CONDITIONS ARE DISCOVERED, STOP WORK IMMEDIATELY AND NOTIFY THE PROJECT CONSTRUCTION MANAGER FOR ACTION TO BE TAKEN. DO NOT RESUME WORK UNTIL SPECIFICALLY AUTHORIZED BY THE CONSTRUCTION MANAGER.

AT THE COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ABANDONED, EXCESS, WASTE, STOCKPILED AND SPOIL MATERIAL IN ACCORDANCE WITH SECTION 205.3.12 OF THE "STATE SPECIFICATIONS". THIS WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

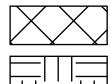
DEMOLITION LEGEND

·****** SAW CUT PAVEMENT (FULL DEPTH)

REMOVE CURB & GUTTER

REMOVE PAVEMENT

REMOVE LANDSCAPING



REMOVE BUILDING/DUMPSTER ENCLOSURE



REMOVE TREES



REMOVE SIGN

2

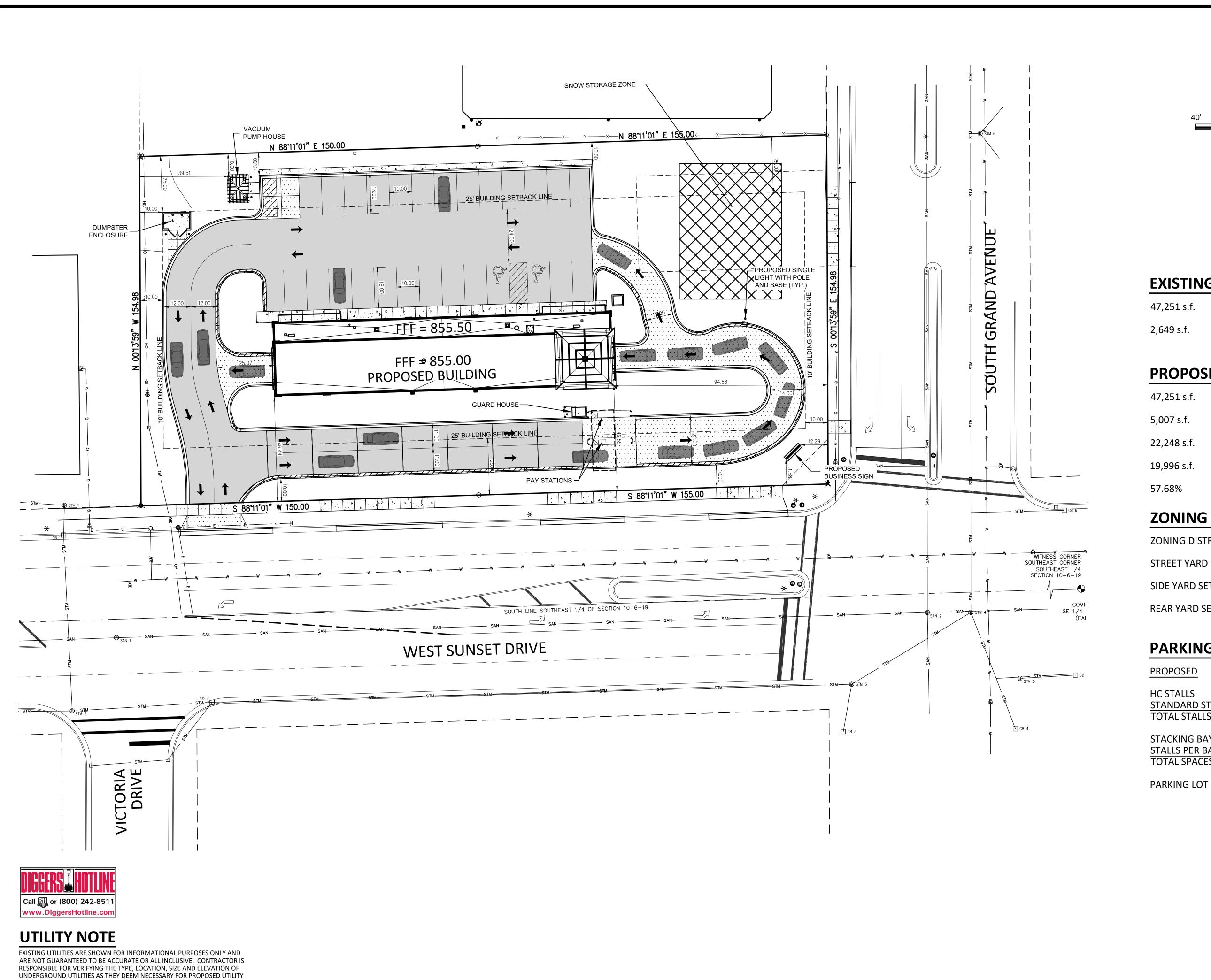
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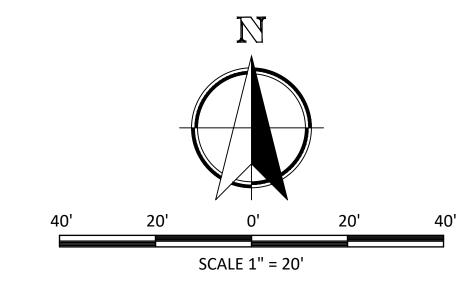
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EXISTING SITE INFORMATION

47,251 s.f. TOTAL LOT AREA 2,649 s.f. GREEN SPACE AREA

PROPOSED SITE INFORMATION

47,251 s.f. TOTAL LOT AREA 5,007 s.f. **BUILDING AREAS** 22,248 s.f. PAVEMENT AREAS 19,996 s.f. **GREEN SPACE AREA IMPERVIOUS SURFACE RATIO**

ZONING INFORMATION

ZONING DISTRICT - B-3

STREET YARD SETBACK 25 FEET SIDE YARD SETBACK 10 FEET

REAR YARD SETBACK 25 FEET

PARKING INFORMATION

PROPOSED

HC STALLS STANDARD STALLS TOTAL STALLS	2 26 28	
STACKING BAYS STALLS PER BAY	2 7	
TOTAL SPACES	14	

8548 s.f.

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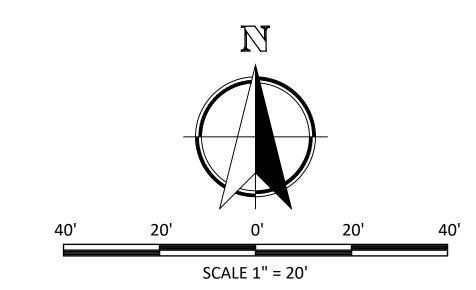
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CONNECTIONS AND / OR TO AVOID DAMAGE THERETO, CONTRACTOR SHALL CALL "DIGGER'S HOTLINE" PRIOR TO ANY CONSTRUCTION.



SITE GRADING & SUB-GRADE PREPARATION

ALL EXISTING TOPSOIL AND OTHER NON-STRUCTURAL MATERIAL WITHIN THE PROPOSED BUILDING PADS, PAVEMENT SECTIONS AND STRUCTURAL FILL AREAS SHALL BE STRIPPED AND STOCKPILED AT THE LOCATION SHOWN OR AS DIRECTED BY THE GENERAL CONTRACTOR.

EXCAVATE, GRADE AND SHAPE SUBGRADE TO THE LINES AND GRADES SHOWN ON THE PLANS. SEE TYPICAL SECTIONS FOR PAVEMENT THICKNESS AND MATERIALS.

FOR STRUCTURAL FILL DEPTHS LESS THAN 20 FEET, THE DENSITY OF THE STRUCTURAL COMPACTED FILL AND SCARIFIED SUBGRADE AND GRADES SHALL NOT BE LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY STANDARD PROCTOR (ASTM D-698) WITH THE EXCEPTION OF THE TOP 12 INCHES OF PAVEMENT SUBGRADE WHICH SHALL HAVE A MINIMUM IN-SITU DENSITY OF 100 PERCENT OF MAXIMUM DRY DENSITY, OR 5 PERCENT HIGHER THAN UNDERLYING FILL MATERIALS.

THE MOISTURE CONTENT OF COHESIVE SOIL SHALL NOT VARY BY MORE THAN -1 TO +3 PERCENT AND GRANULAR SOIL ±3 PERCENT OF THE OPTIMUM WHEN PLACED AND COMPACTED OR RECOMPACTED, UNLESS SPECIFICALLY RECOMMENDED / APPROVED BY THE SOILS ENGINEER MONITORING THE PLACEMENT AND COMPACTION. COHESIVE SOILS WITH MODERATE TO HIGH EXPANSIVE POTENTIALS (PI>15) SHOULD, HOWEVER, BE PLACED, COMPACTED AND MAINTAINED PRIOR TO CONSTRUCTION AT A MOISTURE CONTENT OF 3±1 PERCENT ABOVE OPTIMUM MOISTURE CONTENT TO LIMIT FUTURE HEAVE.

THE FILL SHALL BE PLACED IN LAYERS WITH A MAXIMUM LOOSE THICKNESS OF 9 INCHES. THE COMPACTION EQUIPMENT SHOULD CONSIST OF SUITABLE MECHANICAL EQUIPMENT SPECIFICALLY DESIGNED FOR SOIL COMPACTION. BULLDOZERS OR SIMILAR TRACKED VEHICLES ARE TYPICALLY NOT SUITABLE FOR COMPACTION.

UPON COMPLETION OF THE GRADING AND COMPACTION OF THE SUBGRADE, A PROOF ROLL SHALL BE CONDUCTED BY THE CONTRACTOR ON ALL SUBGRADES THAT RECEIVE DENSE AGGREGATE BASE COURSE THE CONTRACTOR SHALL PROVIDE A FULLY LOADED QUAD-AXLE TRUCK (18 TON MINIMUM LOAD) TO PERFORM THE PROOF ROLL. CONTRACTOR SHALL COORDINATE THE PROOF ROLL WITH THE OWNER AND THE GENERAL CONTRACTOR'S GEOTECHNICAL ENGINEER.

SOIL COMPACTION IN ALL FILL AND EMBANKMENT AREAS SHALL BE APPROVED BY A QUALIFIED GEOTECHNICAL ENGINEER.

TEMPORARY SEEDING IS REQUIRED FOR ALL STOCKPILES AND OTHER EXPOSED LAND AREAS IF NOT ACTIVELY WORKED WITHIN 30 DAYS. AT THE COMPLETION OF THE PAVEMENT WORK, RE-SPREAD ALL LANDSCAPE AND LAWN AREAS.

ALL DISTURBED AREAS SHALL BE RESTORED PER THE LANDSCAPE PLAN.

SEEDING SHALL BE IN ACCORDANCE WITH STATE SPECIFICATION 630, EXCEPT AS MODIFIED HEREIN.

a. AREAS DESIGNATED ON THE PLANS TO BE SEEDED OR AREAS WHERE GRASS IS TO BE REPLACED SHALL BE SEEDED AT A RATE OF FOUR POUNDS PER 1,000 SQUARE FEET WITH GRASS SEED MEETING THE REQUIREMENTS OF SUBSECTION 630.2.1.5.1.1.1 (TABLE OF HIGHWAY SEED MIXTURES - NO. 40) AS FOLLOWS:

35% KENTUCKY BLUEGRASS 20% RED FESCUE 20% HARD FESCUE

25% IMPROVED FINE PERENNIAL RYEGRASS

EXCESS TOPSOIL NOT BEING USED FOR THE PROJECT SHALL BE HAULED OFF-SITE.

CONSTRUCTION SEQUENCING

- OBTAIN PLAN APPROVAL AND ALL APPLICABLE PERMITS.
- 2. HOLD A PRE-CONSTRUCTION CONFERENCE AT LEAST ONE (1) WEEK PRIOR TO STARTING CONSTRUCTION.
- 3. NOTIFY THE CITY OF THE PROJECT START DATE.
- 4. INSTALL CONSTRUCTION ENTRANCE.
- INSTALL SILT FENCE BARRIER. 6. INSTALL INLET PROTECTION.
- 7. BEGIN DEMOLITION WORK.
- 8. BEGIN BUILDING STRUCTURE.
- 9. INSTALL ALL UTILITIES. 10. GRADE PAVEMENT AREAS.
- 13. FINAL GRADE STONE IN PAVEMENT AREAS.
- 14. INSTALL CURB & GUTTER AND SIDEWALKS. 15. RE-GRADE STONE & INSTALL PAVEMENTS.
- 16. RESTORE AND INSTALL EROSION MAT WHERE NOTED ON
- 17. AT CONCLUSION OF GRADING ACTIVITIES ALL NON-EROSION CONTROL MAT AREAS SHALL BE SEEDED AND MULCHED.

GRADING LEGEND

— 692 — EXISTING CONTOURS

—702 — PROPOSED CONTOURS

604.88 EXISTING SPOT GRADES

PROPOSED SPOT GRADES

100 YR FLOOD ROUTE

Call or (800) 242-8511 www.DiggersHotline.com

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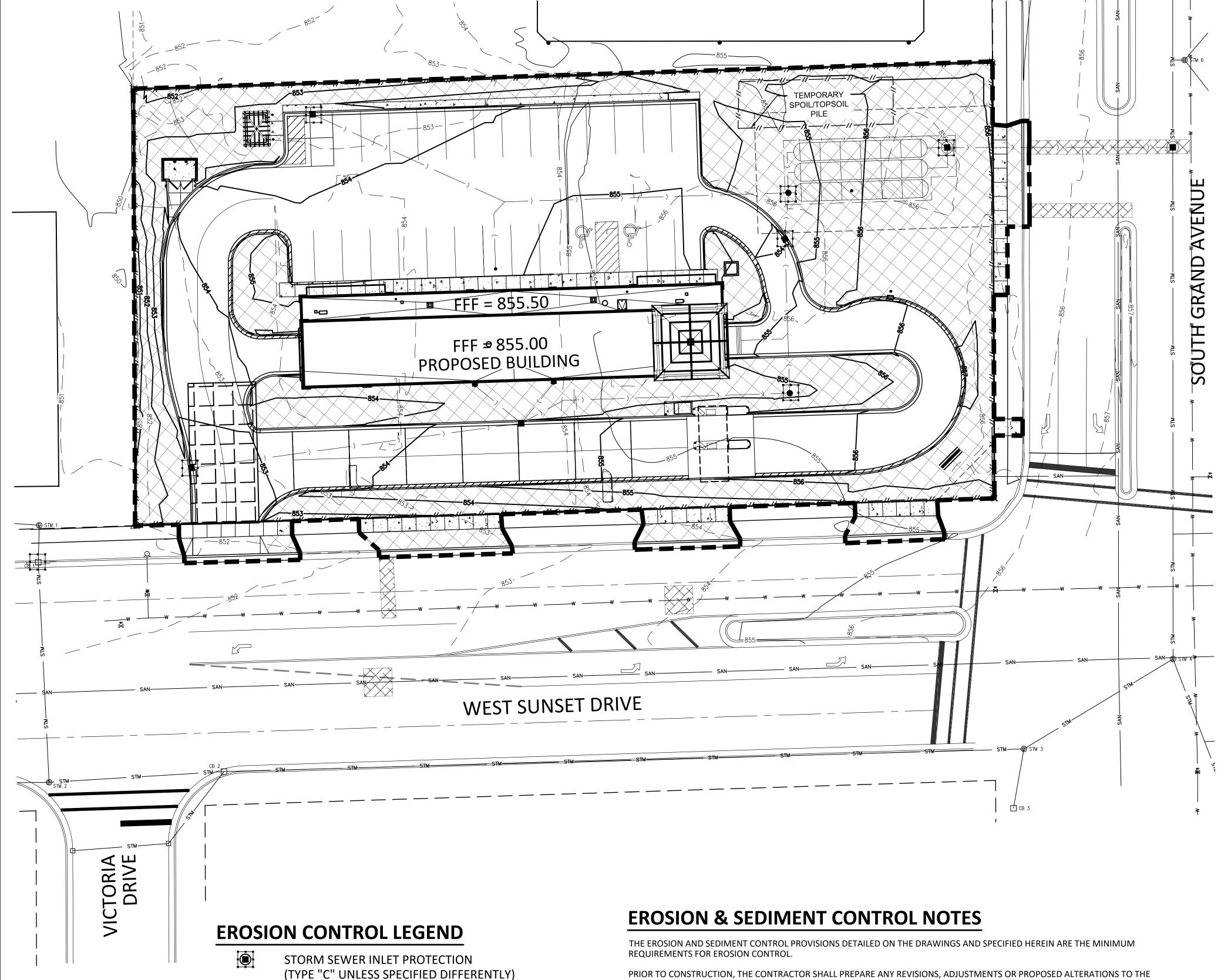
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PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PREPARE ANY REVISIONS, ADJUSTMENTS OR PROPOSED ALTERATIONS TO THE CONSTRUCTION SEQUENCING AND/OR EROSION CONTROL PLANS. THE CONTRACTOR IS RESPONSIBLE TO NOTIFY ENGINEER OF RECORD AND REGULATORY OFFICIALS OF ANY CHANGES TO THE EROSION CONTROL AND STORMWATER MANAGEMENT PLANS. MODIFICATIONS TO THE APPROVED EROSION CONTROL DESIGN IN ORDER TO MEET UNFORESEEN FIELD CONDITIONS IS ALLOWED IF MODIFICATIONS CONFORM TO BEST MANAGEMENT PRACTICES (BMP'S). ALL SIGNIFICANT DEVIATIONS FROM THE PLANS MUST BE SUBMITTED AND APPROVED BY THE CITY

THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION, MAINTENANCE, REPAIR AND REMOVAL OF ALL EROSION CONTROL DEVICES REQUIRED WDNR EROSION CONTROL PERMITS FOR ADDITIONAL DETAILS OR REQUIREMENTS.

ALL EROSION AND SEDIMENT CONTROL MEASURES AND DEVICES SHALL BE INSPECTED BY THE CONTRACTOR AS REQUIRED IN THE

INSPECTIONS AND MAINTENANCE OF ALL EROSION CONTROL MEASURES SHALL BE ROUTINE (ONCE PER WEEK MINIMUM) TO ENSURE PROPER FUNCTION OF EROSION CONTROLS AT ALL TIMES. SEDIMENT AND EROSION CONTROL MEASURES ARE TO BE IN WORKING ORDER AT THE END OF EACH WORK DAY. THE CONTRACTOR SHALL CHECK THE EROSION AND SEDIMENT CONTROL PRACTICES FOR MAINTENANCE NEEDS AT ALL THE FOLLOWING INTERVALS UNTIL THE SITE IS STABILIZED:

- A. AT LEAST WEEKLY.
- TOTAL AMOUNT OF RAINFALL RECORDED IN ANY CONTINUOUS 24-HOUR PERIOD. ALL EROSION AND SEDIMENT CONTROL ITEMS SHALL BE INSPECTED WITHIN 24 HOURS OF ALL RAIN EVENTS EXCEEDING 0.5 INCHES. IMMEDIATELY REPAIR ANY DAMAGE OBSERVED DURING THE INSPECTION.

OF WAUKESHA.

FOR THE PROJECT WHICH SHALL BE DONE IN ACCORDANCE WITH THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES (DNR) TECHNICAL STANDARDS (REFERRED TO AS BMP'S) AND THE CITY OF WAUKESHA ORDINANCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL CONTROL MEASURES WHICH MAY BE NECESSARY TO MEET UNFORESEEN FIELD CONDITIONS. SEE THE CITY OF WAUKESHA AND

WISCONSIN ADMINISTRATIVE CODE (SPS 360.21) AND MAINTAINED PER SPS 360.22.

B. WITHIN 24 HOURS AFTER A RAINFALL EVENT OF 0.5 INCHES OR GREATER. A RAINFALL EVENT SHALL BE CONSIDERED TO BE THE

ALL PROPOSED STORM SEWER STRUCTURES AND ADJACENT EXISTING STORM INLETS SHALL HAVE A LAYER OF GEOTEXTILE FABRIC (TYPE "FF") INSTALLED BETWEEN THE FRAME & GRATE TO PREVENT SEDIMENT OR SILT FROM ENTERING THE SYSTEM. THE INLET PROTECTION SHALL BE INSPECTED BY THE CONTRACTOR AND REPLACED EVERY 14 DAYS AND AFTER EACH RAINFALL EVENT. FABRIC TO BE REPLACED AS NEEDED TO MEET FIELD CONDITIONS.

THE PRODUCT LIFE. FENCING SHALL BE SUPPORTED AT MAXIMUM EIGHT-FOOT (8') INTERVALS BY METAL T-POSTS OR OTHER

OTHERWISE SPECIFIED IN THE CONTRACT. CONSTRUCTION FENCE MATERIAL SHALL BE SECURED TO THE METAL T-POSTS BY PLASTIC ZIP OR WIRE TIES. FENCING AND POSTS SHALL BECOME PROPERTY OF THE CONTRACTOR AT PROJECT COMPLETION

NOT CONSIDERED AN APPROVED METHOD OF SUPPORT. DEFAULT COLOR OF FENCING SHALL BE ORANGE UNLESS

THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING WIND EROSION (DUST) DURING CONSTRUCTION AT HIS/HER EXPENSE (WHEN NECESSARY OR AS REQUIRED BY LOCAL INSPECTORS AND/OR ENGINEER OF RECORD).

EROSION CONTROL FOR UTILITY CONSTRUCTION (STORM SEWER, SANITARY SEWER, WATER MAIN, ETC.):

A. PLACE EXCAVATED TRENCH MATERIAL ON THE HIGH SIDE OF THE TRENCH.

THIS PROJECT.

BE INSTALLED WITHIN 24 HOURS OF REQUEST

AND SHALL BE REMOVED FROM THE SITE.

- B. BACKFILL, COMPACT AND STABILIZE THE TRENCH IMMEDIATELY AFTER PIPE CONSTRUCTION.
- C. ANY WATER PUMPED FROM PITS, TRENCHES, WELLS OR PONDS SHALL BE DISCHARGED INTO A SEDIMENTATION BASIN OR FILTERING TANK IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1061 AND BMP'S PRIOR TO RELEASE INTO THE STORM SEWER, RECEIVING STREAM OR DRAINAGE DITCH. PUMPED WATER CAN BE TREATED IN FILTER BAGS, STONE FILTERS OR SIMILAR DEVICES. QUALITY OF PUMPED WATER SHALL BE CONTINUOUSLY MONITORED DURING PUMPING OPERATIONS.

CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT ALL LOCATIONS OF VEHICLE INGRESS/EGRESS POINTS. CONTRACTOR IS RESPONSIBLE TO COORDINATE LOCATION(S) WITH THE PROPER AUTHORITIES, PROVIDE NECESSARY FEES AND OBTAIN ALL REQUIRED APPROVALS OR PERMITS. ADDITIONAL CONSTRUCTION ENTRANCES, OTHER THAN SHOWN ON THE PLANS, MUST HAVE PRIOR APPROVAL BY THE CITY OF WAUKESHA.

DITCH CHECKS AND APPLICABLE EROSION NETTING/MATTING SHALL BE INSTALLED IMMEDIATELY AFTER COMPLETION OF GRADING EFFORTS WITHIN DITCHES/SWALES TO PREVENT SOIL TRANSPORTATION.

CONCRETE WASHOUT BASIN SHALL BE LOCATED ON SITE IN AN AREA THAT IS STABILIZED AND DRAINS INTO SUITABLE SEDIMENT TRAPPING OR SETTLING DEVICE. MONITOR THE WASHOUT BASIN FOR SEDIMENT ACCUMULATION, CLOGGED HOSES, APPROPRIATE WATER LEVELS, AND EFFECTIVENESS.

ALL EXPOSED SOIL AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE OR ON WHICH LAND DISTURBING ACTIVITIES WILL NOT BE PERFORMED FOR A PERIOD GREATER THAN 14 DAYS AND REQUIRE VEGETATIVE COVER FOR LESS THAN 1 YEAR, REQUIRE TEMPORARY SEEDING FOR EROSION CONTROL. SEEDING FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1059 AND THE CITY OF WAUKESHA ORDINANCE.

ALL DISTURBED SLOPES EXCEEDING 5:1, SHALL BE STABILIZED WITH CLASS I, TYPE A EROSION MATTING OR APPLICATION OF A WISCONSIN DEPARTMENT OF TRANSPORTATION (WisDOT) APPROVED (POLYMER) SOIL STABILIZATION TREATMENT OR A COMBINATION THEREOF, AS REQUIRED. EROSION MATTING AND/OR NETTING USED ONSITE SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES AND WDNR TECHNICAL STANDARDS 1052.

PAVED SURFACES ADJACENT TO CONSTRUCTION SITE VEHICLE ACCESS SHALL BE SWEPT AND/OR SCRAPED TO REMOVE ACCUMULATED SOIL, DIRT AND/OR DUST AT THE END OF EACH WORK DAY AND AS REQUESTED BY THE CITY OF WAUKESHA.

EROSION CONTROL MEASURES SHALL BE REMOVED ONLY AFTER SITE CONSTRUCTION IS COMPLETE WITH ALL SOIL SURFACES HAVING AN ESTABLISHED VEGETATIVE COVER.

AT THE COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ABANDONED, EXCESS, WASTE, STOCKPILED AND SPOIL MATERIAL IN ACCORDANCE WITH SECTION 205.3.12 OF THE "STATE SPECIFICATIONS". THIS WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

Call [44] or (800) 242-8511 www.DiggersHotline.com

UTILITY NOTE

EXISTING UTILITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE TYPE, LOCATION, SIZE AND ELEVATION OF UNDERGROUND UTILITIES AS THEY DEEM NECESSARY FOR PROPOSED UTILITY CONNECTIONS AND / OR TO AVOID DAMAGE THERETO, CONTRACTOR SHALL CALL "DIGGER'S HOTLINE" PRIOR TO ANY CONSTRUCTION.

—\\— SILT FENCE

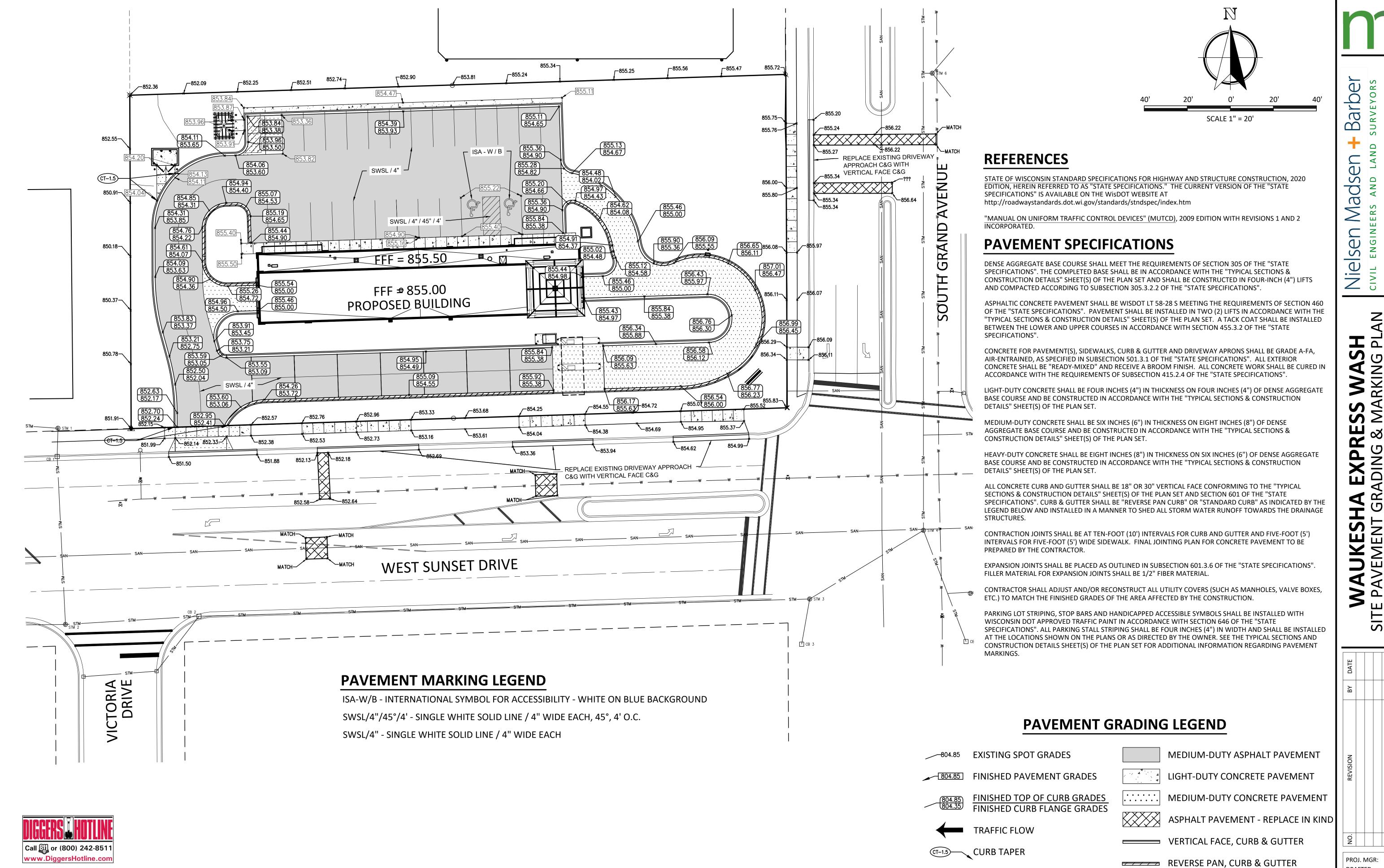
SLOPE EROSION MAT

STONE TRACKING PAD

LIMITS OF DISTURBANCE

(50,083 S.F. = 1.15 AC)

(CLASS 1, TYPE A, URBAN)



UTILITY NOTE EXISTING UTILITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE TYPE, LOCATION, SIZE AND ELEVATION OF UNDERGROUND UTILITIES AS THEY DEEM NECESSARY FOR PROPOSED UTILITY

CALL "DIGGER'S HOTLINE" PRIOR TO ANY CONSTRUCTION.

CONNECTIONS AND / OR TO AVOID DAMAGE THERETO, CONTRACTOR SHALL

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SITE UTILITY LEGEND

— <— PROPOSED 6" SANITARY SEWER

—w— PROPOSED 2" WATER SERVICE

(VARIOUS SIZES)

PROPOSED STORM SEWER

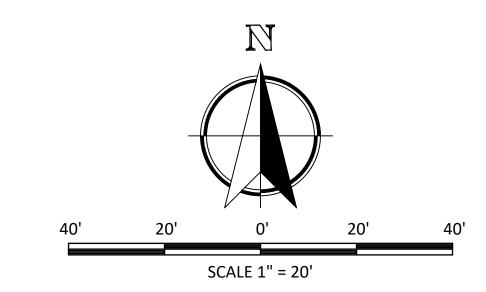
CONTRACTOR SHALL VERIFY ALL ELEVATIONS, LOCATIONS AND SIZES OF EXISTING SANITARY AND STORM SEWERS WATER MAINS, GAS & ELECTRIC LINES AND OTHER ADJACENT UTILITIES PRIOR TO COMMENCING CONSTRUCTION. AS-BUILT (FIELD) DATA SHALL BE USED TO CHECK ALL PROPOSED UTILITY CROSSINGS FOR CONFLICTS.

CONTRACTOR SHALL CONTACT DIGGER'S HOTLINE A MINIMUM OF 72 HOURS BEFORE THE START OF CONSTRUCTION TO HAVE THE ADJACENT UNDERGROUND PUBLIC UTILITIES LOCATED. THE LOCATION OF EXISTING PRIVATE UTILITIES MAY NOT BE SHOWN ON THE PLANS AND SHOULD BE LOCATED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

ANY WATER PUMPED FROM PITS, TRENCHES, WELLS OR PONDS SHALL BE TREATED FOR SEDIMENT REMOVAL PRIOR TO DISCHARGE OFF-SITE. PUMPING OPERATIONS SHALL BE IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1061. PUMPED WATER CAN BE TREATED IN RETENTION BASINS, FILTER BAGS, STONE FILTERS OR BY OTHER WDNR APPROVED METHODS. QUALITY OF PUMPED WATER SHALL BE CONTINUOUSLY MONITORED DURING PUMPING OPERATIONS.

THE EXACT LOCATION OF THE SANITARY SEWER LATERAL, DOMESTIC WATER LINE, FIRE PROTECTION LEAD, NATURAL GAS SERVICE, ELECTRIC, PHONE AND CABLE LINES (AS THEY ENTER THE BUILDING) SHALL BE PER THE ARCHITECTURAL OR MECHANICAL DRAWINGS.

AT THE COMPLETION OF THE PROJECT THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ABANDONED, EXCESS, WASTE, STOCKPILED AND SPOIL MATERIAL IN ACCORDANCE WITH SECTION 205.3.12 OF THE "STATE SPECIFICATIONS". THIS WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.



SANITARY SEWER & WATERMAIN SPECIFICATIONS

MATERIALS FOR WATERMAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STATE OF WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES (SPS) AND WAUKESHA WATER UTILITY SPECIFICATIONS.

SANITARY SEWER AND WATER MAIN CONSTRUCTION SHALL BE CONSTRUCTED PER THE CITY OF WAUKESHA'S DEVELOPMENT HANDBOOK. THE CITY OF WAUKESHA'S STANDARD CONSTRUCTION SPECIFICATIONS AND THE WAUKESHA WATER UTILITY SPECIFICATIONS

A 10-GAUGE TRACER WIRE SHALL BE INSTALLED THE ENTIRE LENGTH OF ALL PRIVATE SANITARY SEWERS AND LATERALS PER SPS 382.30(11)(h). THE TRACER WIRE SHALL BE EXTENDED TO THE SURFACE WITHIN THE PROPOSED STRUCTURES. FOR THE SANITARY SEWER LATERALS, THE TRACER WIRE SHALL BE EXTENDED TO THE SURFACE AT THE BUILDING WALL AND ALL OTHER SYSTEM LIMITS (FOR EACH SYSTEM INSTALLED) AND ENCLOSED IN A RISER BOX WITH "SEWER" ON THE COVER

A 10-GAUGE TRACER WIRE SHALL BE INSTALLED THE ENTIRE LENGTH OF ALL PRIVATE WATER MAINS, TRACER WIRE SHALL BE EXTENDED TO THE SURFACE AT THE BUILDING WALL AND ALL OTHER SYSTEM LIMITS (FOR EACH SYSTEM INSTALLED) AND ENCLOSED IN A RISER BOX WITH "WATER" OR "FDC" ON THE COVER. THE TRACER WIRE SHALL BE CONNECTED TO THE TRACER WIRE ON THE WATER MAIN

- WIRE SPLICES SHALL BE IN ACCORDANCE WITH STANDARD ELECTRICAL PRACTICES. ACCEPTABLE WIRE SPLICES ARE BRASS SPLIT BOLTS, DRYCONN WATERPROOF CONNECTORS, SNAP-LOC MODEL LV 9500, OR APPROVED EQUAL. WIRE NUTS ARE NOT ACCEPTABLE
- 2. BRANCH CONNECTIONS UTILIZING SPLIT BOLTS SPLICE BRANCH TRACER WIRE TO MAIN TRACER WIRE USING THE FOLLOWING PROCEDURE: BARE TRACER WIRE ON MAIN LINE (DO NOT CUT); CONNECT BRANCH WIRE TO MAIN LINE WITH BRASS SPLIT BOLT; AND SEAL CONNECTION WITH RUBBER ELECTRICAL TAPE AND OVER WRAP WITH TWO LAYER OF POLYETHYLENE ADHESIVE TAPE 1-1/2" WIDE AND 8MM THICK.
- BRANCH CONNECTIONS UTILIZING OTHER APPROVED CONNECTORS FOLLOW MANUFACTURER'S

SANITARY SEWER LATERAL PIPE MATERIAL SHALL BE FOUR-INCH (4") PVC CLASS SDR-35 WITH INTEGRAL BELL TYPE ELASTOMERIC JOINTS CONFORMING TO THE REQUIREMENTS OF ASTM D3034, ASTM D3212 AND F-789/P546 WITH RUBBER GASKETS. SANITARY LATERALS SHALL BE PROVIDED WITH A CLEANOUT AT THE BUILDING PER SPS 382.35. LATERAL CLEAN-OUT RISERS SHALL BE SIX-INCH (6") DIAMETER WITH EIGHT-INCH (8") DIAMETER FROST SLEEVE CONSTRUCTED OF THE SAME MATERIAL. THE CLEANOUT RISERS SHALL TERMINATE FOUR INCHES (4") BELOW FINISHED GRADE WITH A SCREW ON CAP. THE FROST SLEEVE SHALL BE BROUGHT UP TO JUST BELOW FINISHED GRADE AND COVERED WITH A NEENAH R-3487 FRAME WITH A SOLID LID.

SANITARY SEWER BACKFLOW PREVENTOR SHALL BE CONSTRUCTED WITH A CLEAN CHECK EXTENDABLE BACKWATER VALVE MODEL MADE BY RECTORSEAL OR AN APPROVED EQUAL

WATER SERVICE SHALL BE TWO INCH (2") MINIMUM COPPER TYPE "K". WATER SERVICE CONNECTION SHALL BE CONSTRUCTED WITH MUELLER MODEL NUMBER H-15000 CORPORATIONS, MUELLER "ORI SEAL" MODEL NUMBER H-15201 CURB VALVES. AND MUELLER 1-1/4" ARCH PATTERN CURB BOX (MODEL NUMBER

SANITARY SEWER LATERAL PIPE MATERIAL SHALL BE 6" PVC CLASS SDR-26, CONFORMING TO THE REQUIREMENTS OF ASTM D3034 AND F-789/P546 WITH RUBBER GASKETS. CLEAN-OUT RISERS SHALL BE 6" DIAMETER WITH 8" DIAMETER FROST SLEEVE CONSTRUCTED OF THE SAME MATERIAL.

ALL SEWER AND WATER LINES INSTALLED IN PROPOSED PRIVATE PAVED AREAS SHALL BE BACKFILLED WITH COMPACTED GRANULAR MATERIAL IN ACCORDANCE WITH TABLE 37, CHAPTER 8.43.4 OF THE "STANDARD SPECIFICATIONS". BACKFILL MATERIAL SHALL EXTEND A MINIMUM OF FIVE FEET (5') OUTSIDE OF THE PAVEMENT LIMITS. TRENCHES RUNNING PARALLEL TO AND LESS THAN FIVE FEET (5') FROM THE EDGE OF PAVEMENT SHALL ALSO REQUIRE COMPACTED GRANULAR BACKFILL.

SLURRY BACKFILL SHALL BE USED WHERE INDICATED ON THE PLANS. MATERIALS SHALL BE PLACED IN A CLEAN CEMENT MIXER TRUCK AND THOROUGHLY MIXED, IN THE FOLLOWING QUANTITIES:

> 1,350 LBS 775 LBS #1 STONE #2 STONE 1,150 LBS

(+0 TO 0.5 GALS) WATER/CU. YD. 25 GAL

THE SLURRY BACKFILL MATERIAL SHALL BE PLACED AND MECHANICALLY COMPACTED IN LAYERS NOT TO EXCEED 8 INCHES IN DEPTH. NO ADDITIONAL WATER SHALL BE ALLOWED. THE ABOVE WEIGHTS ARE DAMP WEIGHTS. JUST PRIOR TO PLACING THE SLURRY, THE MIXER SHALL BE RUN AT MIXING SPEED FOR ONE FULL MINUTE TO ENSURE AN EVEN MIXTURE.

ALL SEWER AND WATER LINES INSTALLED IN THE PUBLIC RIGHT-OF-WAY SHALL BE BACKFILLED WITH SLURRY MATERIAL IN ACCORDANCE WITH CHAPTER 8.43.8 OF THE "STANDARD SPECIFICATIONS". BACKFILL MATERIAL SHALL EXTEND A MINIMUM OF FIVE FEET (5') OUTSIDE OF THE PAVEMENT/SIDEWALK LIMITS.

PROVIDE FIVE FEET (5') OF COVER OVER ALL SANITARY SEWERS AND FIVE AND ONE HALF FEET (5-1/2') OF COVER OVER ALL WATER MAINS. MINIMUM HORIZONTAL SEPARATION OF UTILITY MAINS IS EIGHT FEET (8'). PROVIDE VERTICAL SEPARATION OF UTILITIES PER CODE.

UTILITY CONFLICT RESOLUTION TABLE				
LOCATION	UTILITY	BOTTOM OF PIPE	TOP OF PIPE	CLEARANCE
A	10" STM 2" WTR	850.04 847.00	851.02 847.17	2.87'
B	12" STM 6" SAN	849.56 846.50	850.73 847.05	2.51'



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UTILITY NOTE

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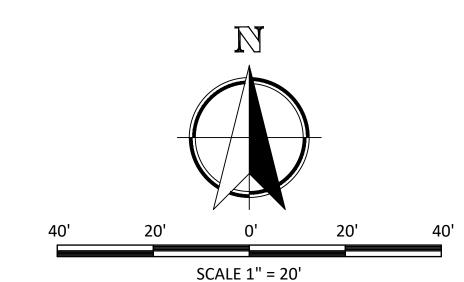
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CONNECTIONS AND / OR TO AVOID DAMAGE THERETO, CONTRACTOR SHALL

CALL "DIGGER'S HOTLINE" PRIOR TO ANY CONSTRUCTION.

ARE NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. CONTRACTOR IS



REFERENCES

EROSION CONTROL, EARTHWORK, SITE GRADING AND PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "STATE OF WISCONSIN, STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION", CURRENT EDITION, HEREIN REFERRED TO AS THE "STATE SPECIFICATIONS"

MATERIALS FOR STORM SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STATE OF WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES (SPS) AND THE CITY OF WAUKESHA'S DEVELOPMENT HANDBOOK AND THE CITY OF WAUKESHA'S STANDARD CONSTRUCTION SPECIFICATIONS.

STORM SEWER CONSTRUCTION SHALL BE CONSTRUCTED PER THE CITY OF WAUKESHA'S DEVELOPMENT HANDBOOK AND THE CITY OF WAUKESHA'S STANDARD CONSTRUCTION SPECIFICATIONS.

PUBLIC UTILITY NOTES

CABLE TV AND TELEPHONE SERVICE INSTALLATION TO BE COORDINATED WITH THE ELECTRICAL

ELECTRICAL SERVICE TO BE COORDINATED WITH WE ENERGIES. EXACT LOCATION OF THE SERVICE ENTRANCE / METER TO BE COORDINATED WITH WE ENERGIES, THE MECHANICAL DESIGNER AND THE ARCHITECT.

THE EXACT LOCATION OF THE SANITARY SEWER LATERAL, DOMESTIC WATER LINE, FIRE PROTECTION LEAD, NATURAL GAS SERVICE, ELECTRIC, AND PHONE LINES (AS THEY ENTER THE BUILDING) SHALL BE PER THE ARCHITECTURAL OR MECHANICAL DRAWINGS.

UTILITY CONSTRUCTION GENERAL NOTES

CONTRACTOR SHALL VERIFY ALL ELEVATIONS, LOCATIONS AND SIZES OF EXISTING SANITARY AND STORM SEWERS, WATER MAINS, GAS & ELECTRIC LINES OR OTHER UTILITIES PRIOR TO STARTING CONSTRUCTION. AS-BUILT (FIELD) DATA SHALL BE USED TO CHECK ALL PROPOSED UTILITY CROSSINGS FOR CONFLICTS.

CONTRACTOR SHALL CONTACT DIGGER'S HOTLINE A MINIMUM OF 72 HOURS BEFORE THE START OF CONSTRUCTION TO IDENTIFY ADJACENT UNDERGROUND UTILITIES. THE LOCATION OF EXISTING PRIVATE UTILITIES MAY NOT BE SHOWN ON THE PLANS AND SHOULD BE LOCATED BY THE OWNER PRIOR TO CONSTRUCTION.

ANY WATER PUMPED FROM PITS, TRENCHES, WELLS OR PONDS SHALL BE TREATED FOR SEDIMENT REMOVAL PRIOR TO DISCHARGE OFF-SITE. PUMPING OPERATIONS SHALL BE IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1061. PUMPED WATER CAN BE TREATED IN RETENTION BASINS, FILTER BAGS, STONE FILTERS OR BY OTHER WDNR APPROVED METHODS. QUALITY OF PUMPED WATER SHALL BE CONTINUOUSLY MONITORED DURING PUMPING OPERATIONS.

THE EXACT LOCATION OF ALL BUILDING LATERALS, ROOF DRAIN RISERS AND DOWNSPOUTS (IF APPLICABLE) SHALL BE PER THE ARCHITECTURAL OR MECHANICAL DRAWINGS.

STORM SEWER SPECIFICATIONS

STORM SEWERS WERE SIZED IN ACCORDANCE WITH SPS TABLE 382.36-4 "MAXIMUM CAPACITY OF STORM WATER HORIZONTAL CONVEYANCE PIPING FOR CONCRETE, ASTM C76 AND ASTM C14". ANY MATERIAL APPROVED BY THE CITY OF WAUKESHA AND THE WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES MAY BE USED AT THE SLOPES AND SIZES DESIGNED.

STORM SEWER, ROOF DRAIN AND STORM BUILDING SEWER PIPE AND TUBING MATERIALS SHALL CONFORM TO SPS 384.30 OF THE WISCONSIN ADMINISTRATIVE CODE. REINFORCED CONCRETE PIPE (RCP) AND POLYVINYL CHLORIDE (PVC) MATERIALS SHALL BE SELECTED FROM TABLE 384.30-6. CORRUGATED HIGH DENSITY POLYETHYLENE (HDPE) PIPE MATERIAL (IF SELECTED) SHALL MEET THE REQUIREMENTS OF AASHTO M-252 FOR 4"-10" DIAMETER SIZES AND AASHTO M294 FOR 12"-48" DIAMETER SIZES.

BEDDING AND COVER MATERIAL SHALL BE SAND, CRUSHED STONE CHIPS OR CRUSHED STONE SCREENINGS CONFORMING TO CHAPTER 8.43.2 OF THE "STANDARD SPECIFICATIONS".

ALL STORM SEWERS INSTALLED IN EXISTING OR PROPOSED PAVED AREAS SHALL BE BACKFILLED WITH COMPACTED GRANULAR MATERIAL IN ACCORDANCE WITH TABLE 37, CHAPTER 8.43.4 OF THE "STANDARD SPECIFICATIONS". BACKFILL MATERIAL SHALL EXTEND A MINIMUM OF FIVE FEET (5') OUTSIDE OF THE PAVEMENT LIMITS. TRENCHES RUNNING PARALLEL TO AND LESS THAN FIVE FEET (5') FROM THE EDGE OF PAVEMENT SHALL ALSO REQUIRE COMPACTED GRANULAR BACKFILL.

A 10-GAUGE TRACER WIRE SHALL BE INSTALLED THE ENTIRE LENGTH OF ALL PRIVATE STORM SEWERS, ROOF DRAINS AND STORM BUILDING SEWER LATERALS PER SPS 382.36(7)(d)10. THE TRACER WIRE SHALL BE EXTENDED TO THE SURFACE AT THE BUILDING WALL AND ALL OTHER SYSTEM LIMITS (FOR EACH SYSTEM INSTALLED) AND ENCLOSED IN A RISER BOX WITH "STORM" ON THE COVER.

SLURRY BACKFILL SHALL BE USED WHERE INDICATED ON THE PLANS. MATERIALS SHALL BE PLACED IN A CLEAN CEMENT MIXER TRUCK AND THOROUGHLY MIXED, IN THE FOLLOWING QUANTITIES:

> 1,350 LBS SAND #1 STONE 775 LBS 1,150 LBS #2 STONE

(+0 TO 0.5 GALS) WATER/CU. YD. 25 GAL

THE SLURRY BACKFILL MATERIAL SHALL BE PLACED AND MECHANICALLY COMPACTED IN LAYERS NOT TO EXCEED 8 INCHES IN DEPTH. NO ADDITIONAL WATER SHALL BE ALLOWED. THE ABOVE WEIGHTS ARE DAMP WEIGHTS. JUST PRIOR TO PLACING THE SLURRY, THE MIXER SHALL BE RUN AT MIXING SPEED FOR ONE FULL MINUTE TO ENSURE AN EVEN MIXTURE.

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— <— PROPOSED 6" SANITARY SEWER

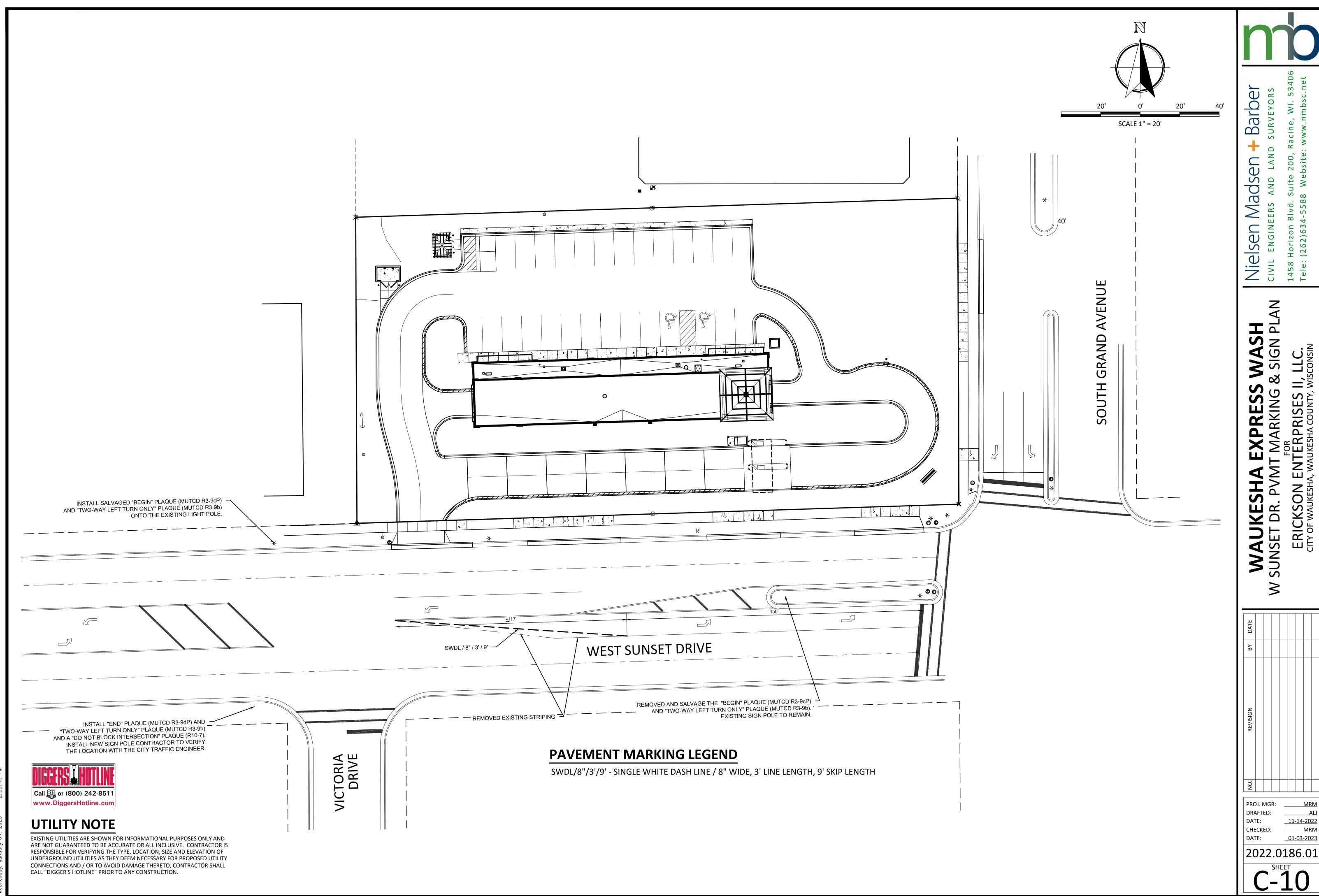
PROPOSED 2" WATER SERVICE

PROPOSED STORM SEWER (VARIOUS SIZES)

UTILITY CONFLICT RESOLUTION TABLE				
LOCATION	UTILITY	BOTTOM OF PIPE	TOP OF PIPE	CLEARANCE
\triangle	10" STM 2" WTR	850.04 847.00	851.02 847.17	2.87
B	12" STM 6" SAN	849.56 846.50	850.73 847.05	2.51

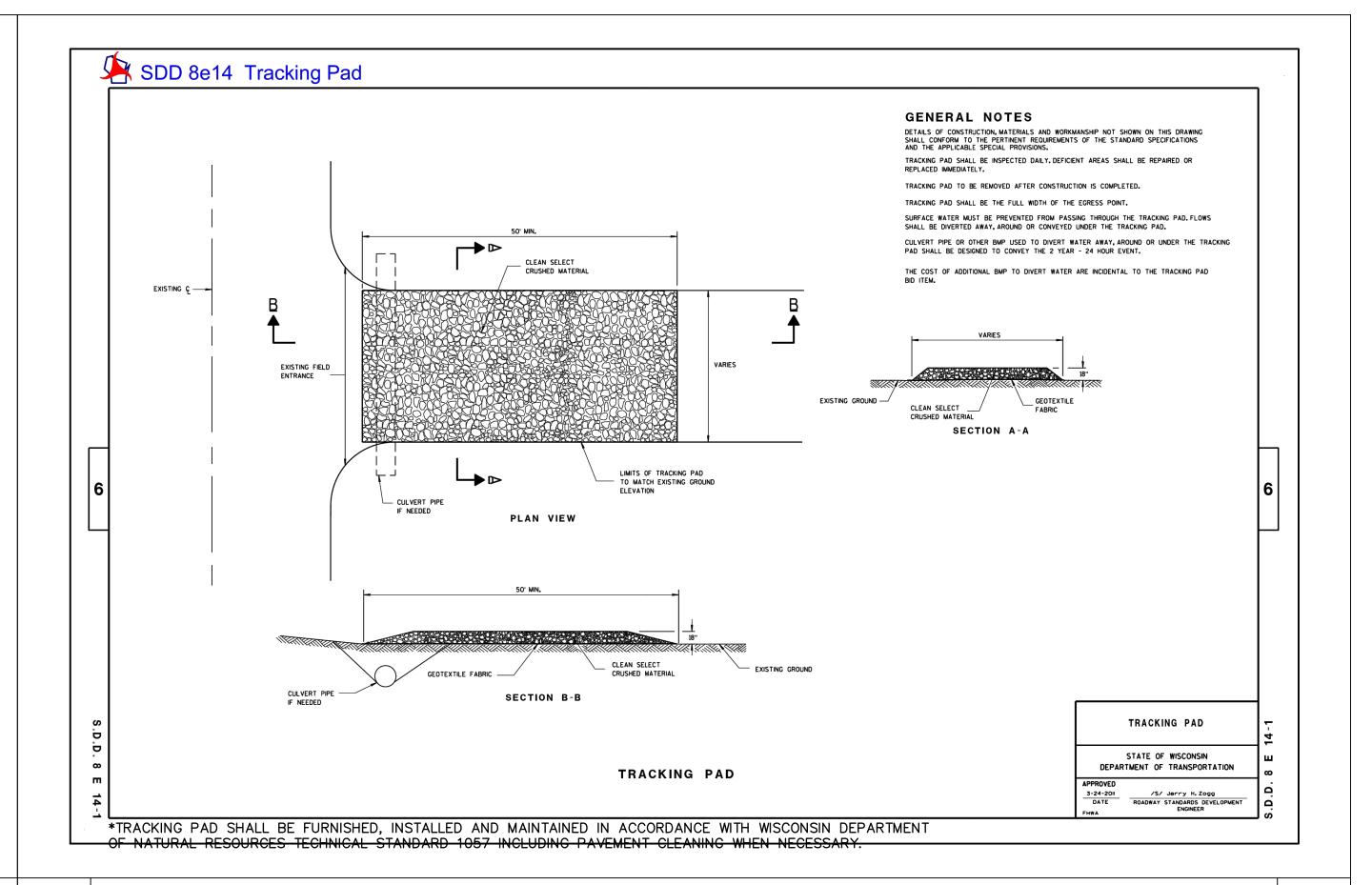
Call 👊 or (800) 242-8511 **UTILITY NOTE**

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<u>11-14-2022</u>

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SILT FENCE DETAIL

SDD 8e10 Inlet Protection Type A, B, C and D 2" × 4" STAKE AND INLET SPECIFICATIONS AS PER THE PLAN DIMENSION LENGTH AND WIDTH TO MATCH GEOTEXTILE FABRIC. 2" × 4" STAKE AND CROSS BRACING FOR INLETS WITH CAST -CURB BOX USE WOOD
2" X 4", EXTEND 10" BEYOND
GRATE WIDTH ON BOTH
SIDES, LENGTH VARIES.
SECURE TO GRATE WITH
WIRE OR PLASTIC TIES INLET PROTECTION, TYPE B FABRIC, TYPE FF-(WITHOUT CURB BOX) FRONT, BACK, AND BOTTOM TO BE — MADE FROM SINGLE (CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX) PIECE OF FABRIC. - 4" X 6" OVAL HOLE SHALL BE HEAT CUT INTO ALL FOUR SIDE PANELS. MINIMUM DOUBLE STITCHED SEAMS ALL AROUND SIDE PIECES — AND ON FLAP POCKETS. ____ FABRIC, TYPE FF TO THE STAKES AND GEOTEXTILE FABRIC. TYPE FF WITHOUT GRATE INLET PROTECTION, TYPE A _ WIDTH ON BOTH SIDES. LENGTH VARIES.
SECURE TO GRATE WITH WIRE OR PLASTIC TIES INLET PROTECTION, TYPE D GENERAL NOTES (CAN BE INSTALLED IN ANY INLET TYPE WITH INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE OR WITHOUT A CURB BOX AS PER NOTE (2) DIRECTION OF THE ENGINEER. INLET PROTECTION, TYPE C (WITH CURB BOX) MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE INSTALLATION NOTES DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE TYPE B & C WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE. THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND REMOVED IMMEDIATELY. HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET. INLET PROTECTION TYPE D TYPE A, B, C, AND D 1 FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL. FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE. ∞ ② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE. DEPARTMENT OF TRANSPORTATION 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES.
THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING. THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT DATE CHIEF ROADWAY DEVELOPMENT ENGINEER 3 FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4. *INLET PROTECTION SHALL BE FURNISHED, INSTALLED AND MAINTAINED IN ACCORDANCE TH WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARD 1060.

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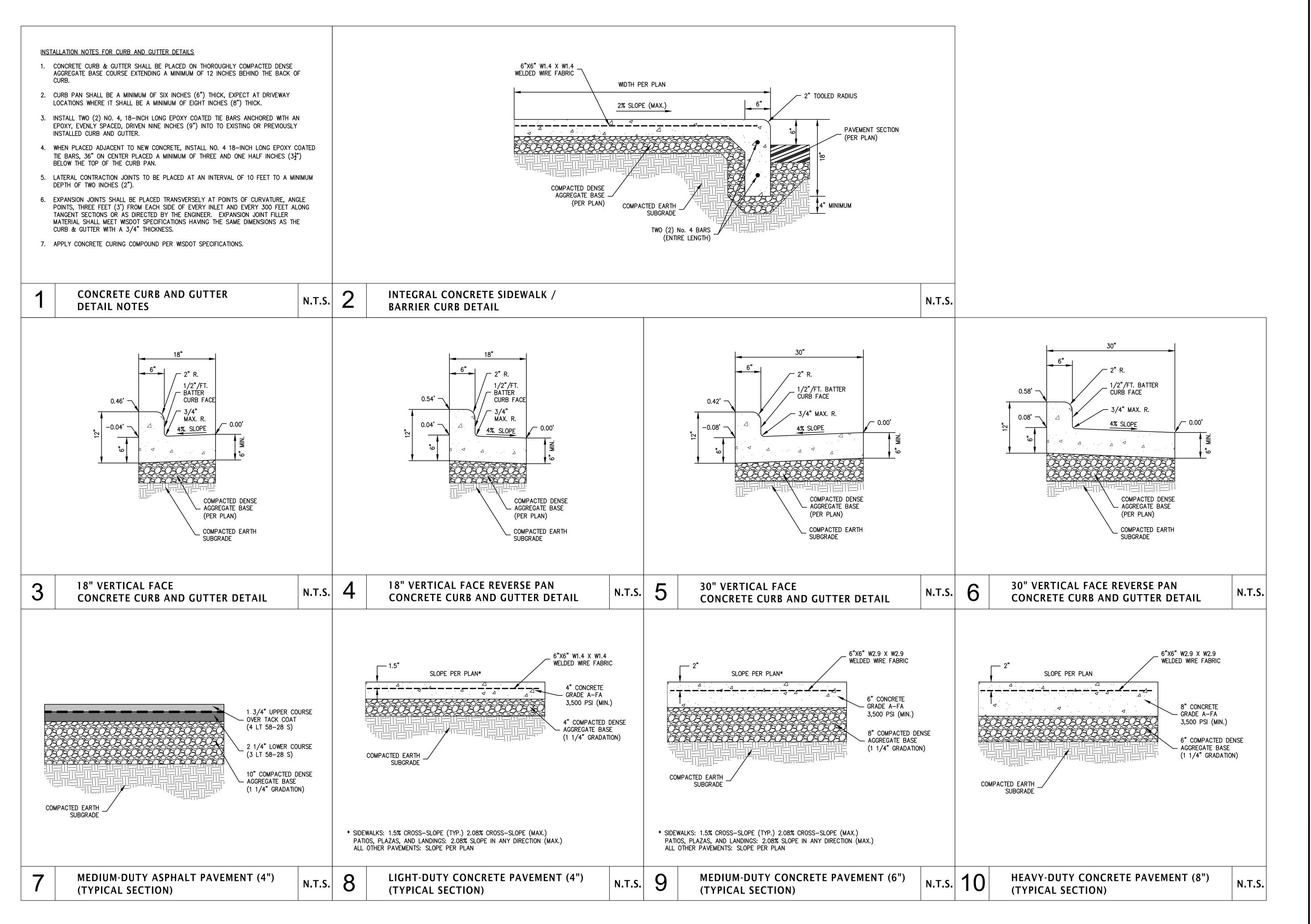
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INLET PROTECTION DETAIL

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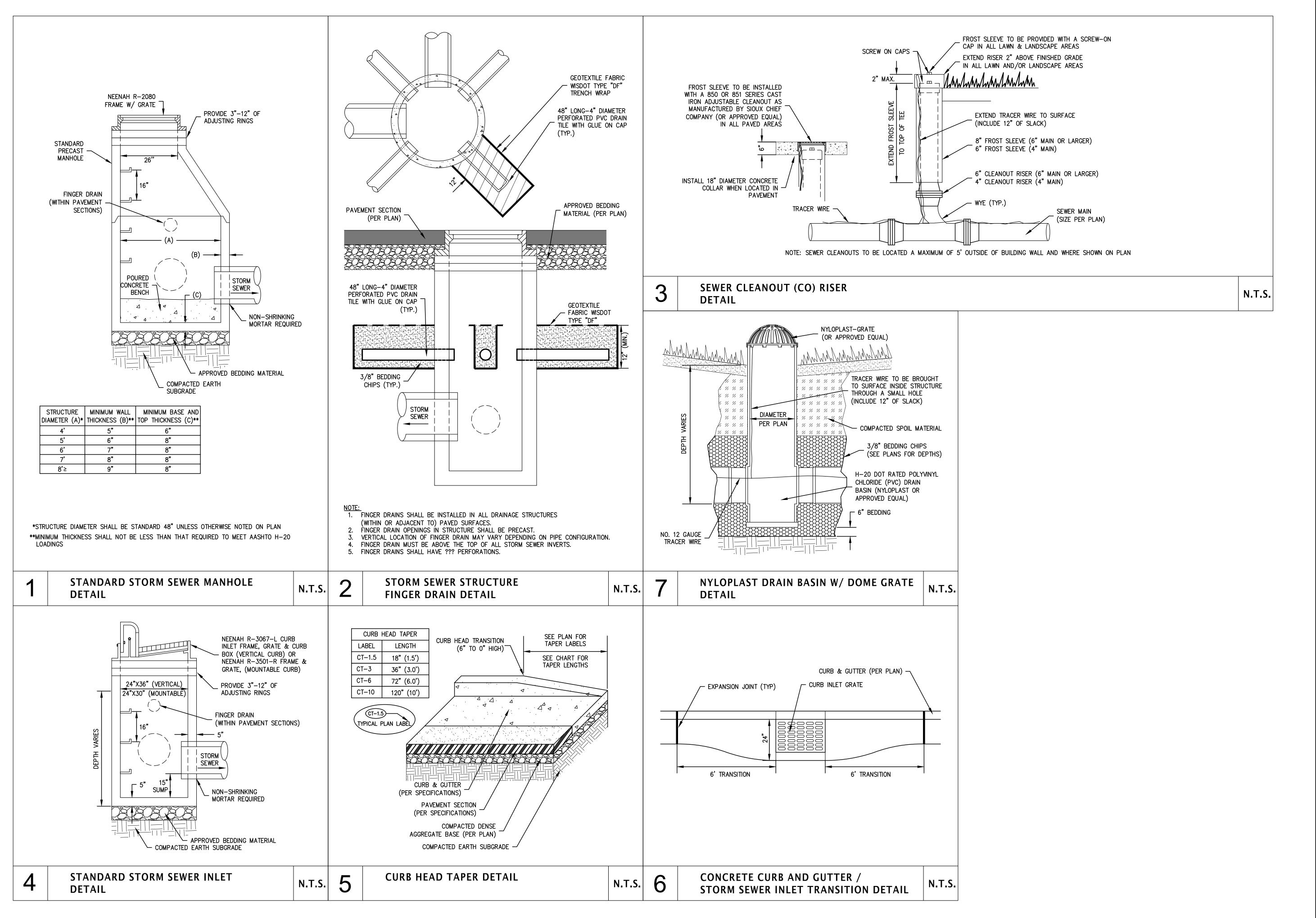
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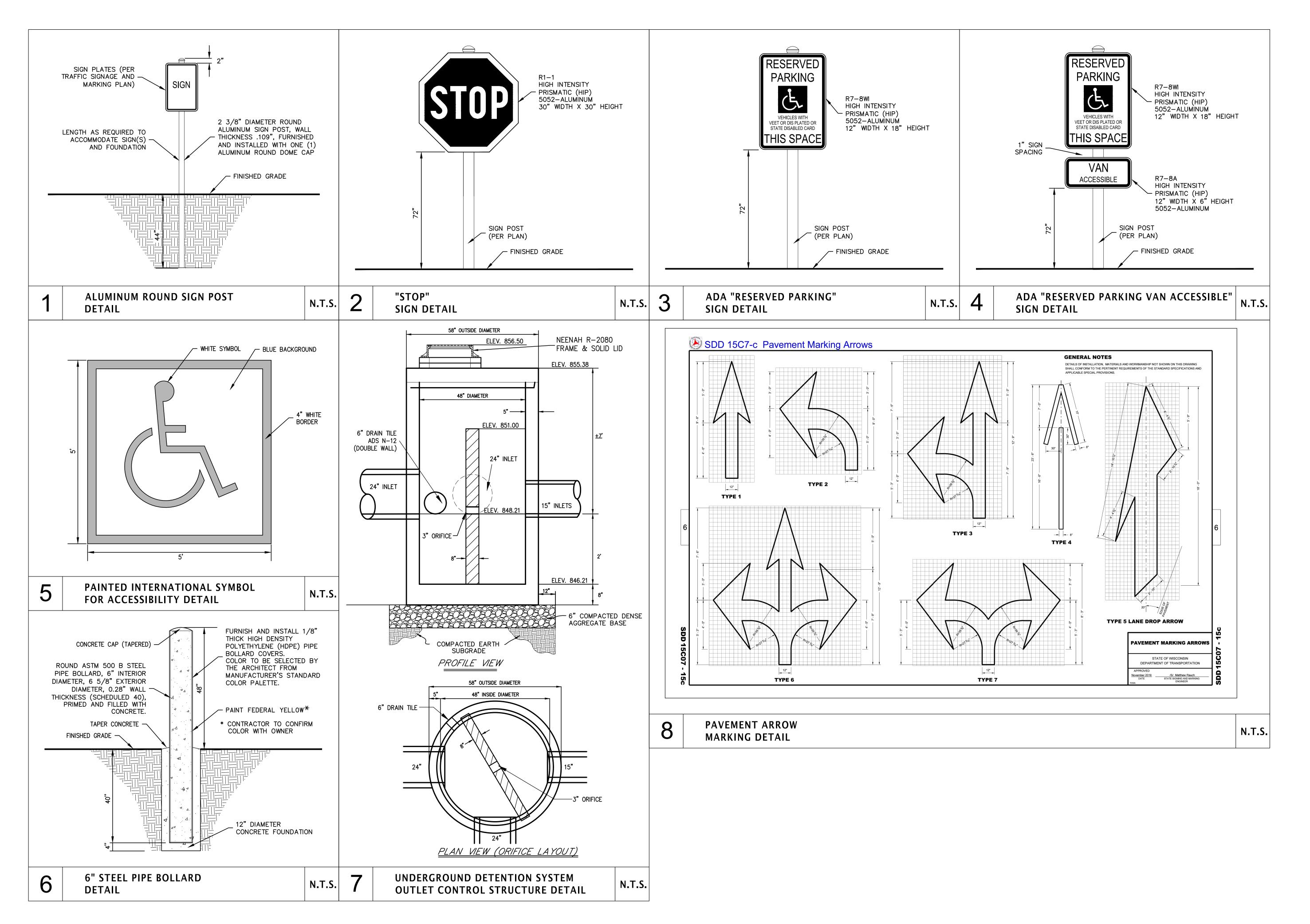
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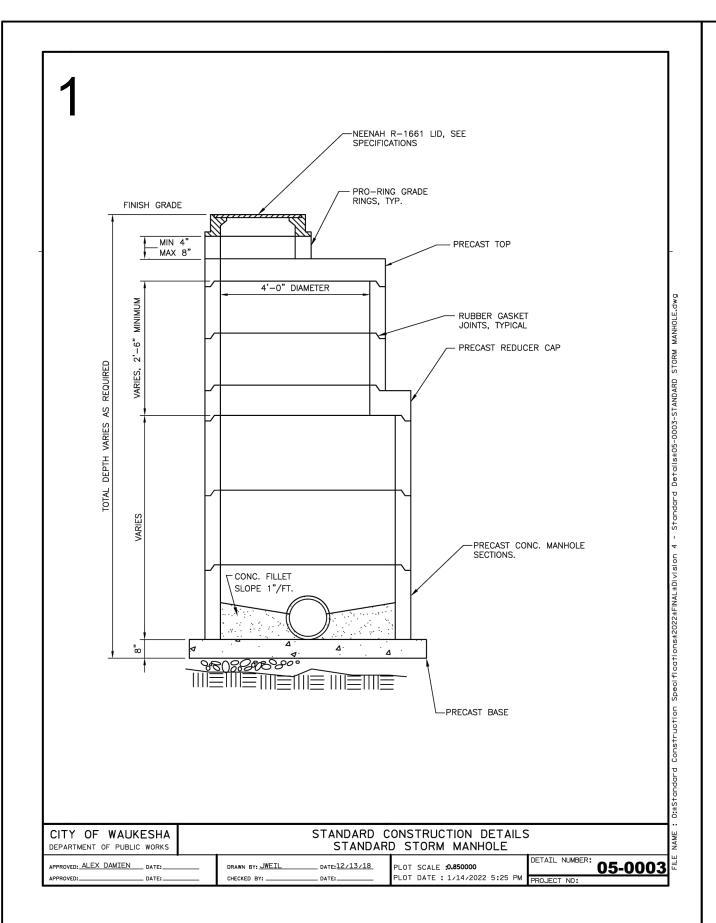
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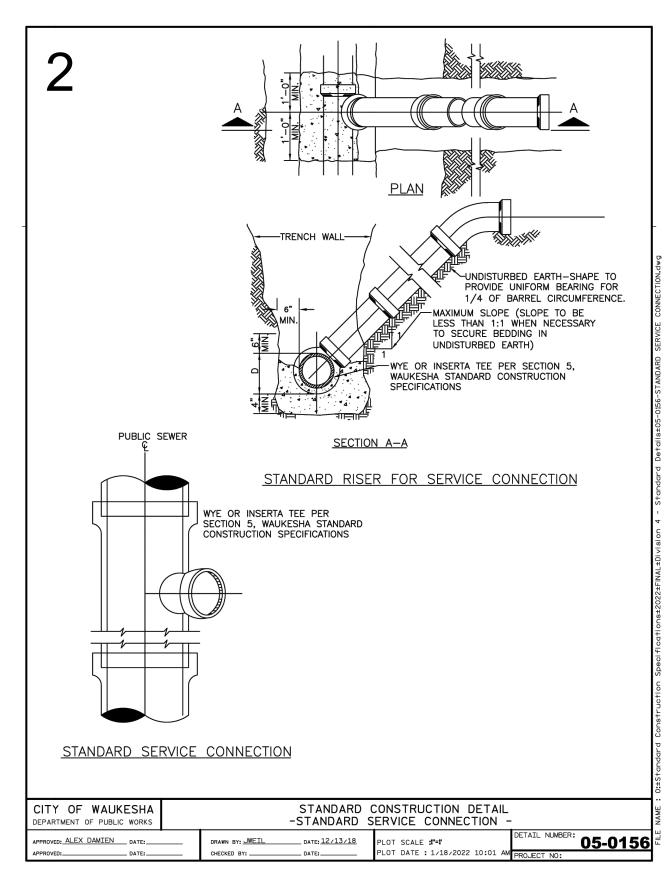
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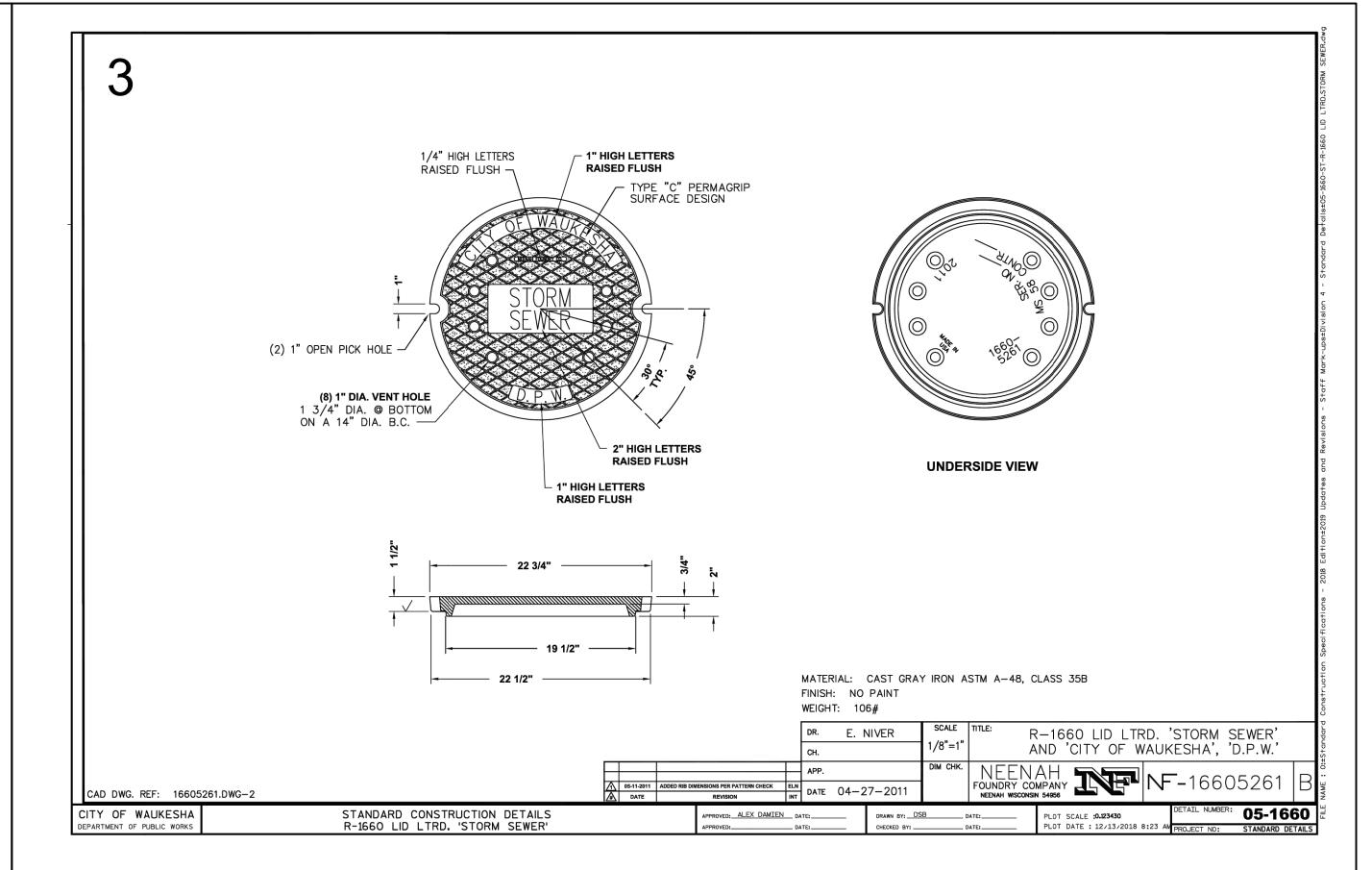
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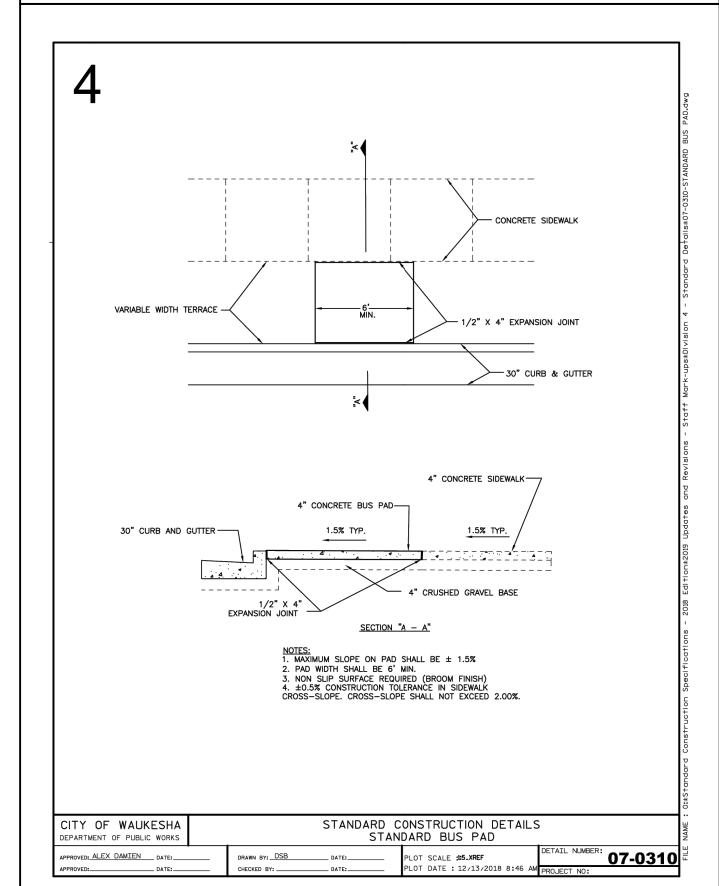
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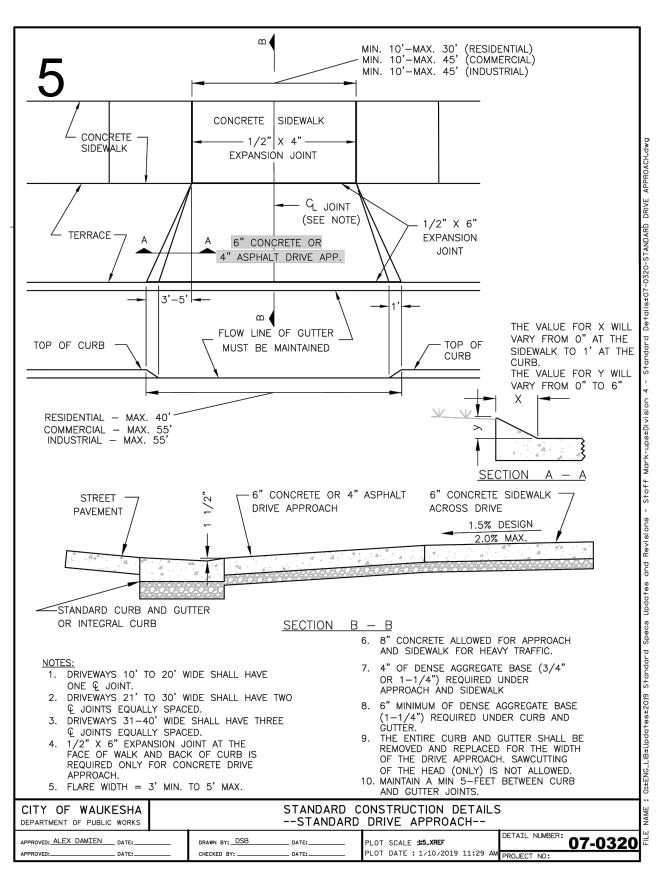
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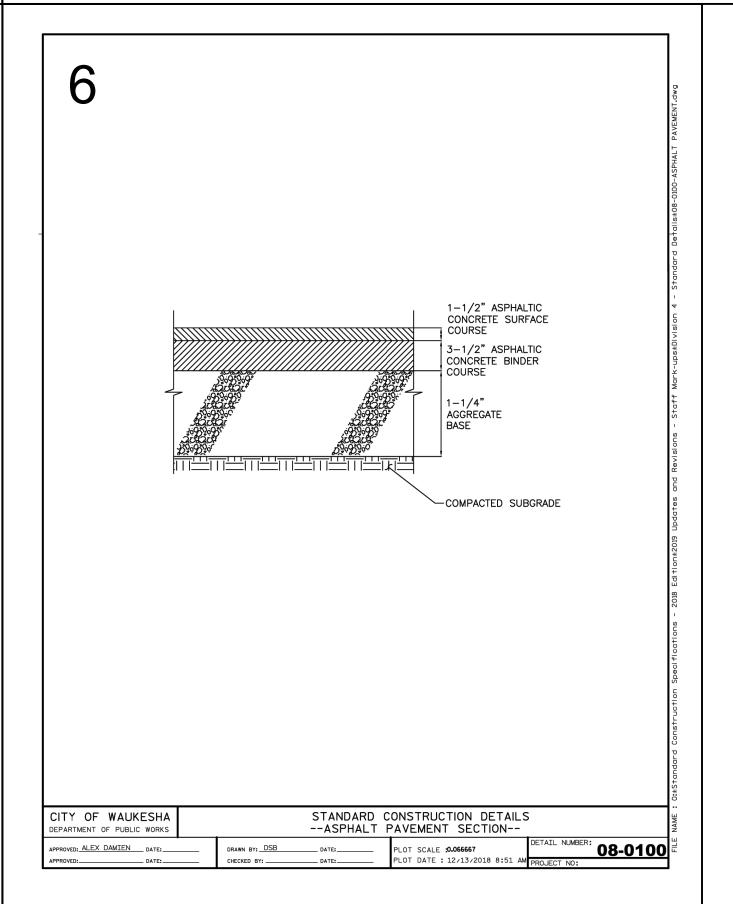














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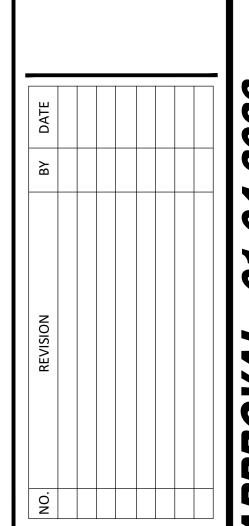
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17.0 CFS IN 14.0 CFS OUT

2 OF 6

3 OF 6

PEAK CAR WASH

PREFABRICATED END CAP

19.92 MANIFOLD 18.88 NYLOPLAST (INLET W/ ISO

PREFABRICATED END CAP

- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1)
- LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION
- CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787. "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2)
- REQUIREMENTS FOR HANDLING AND INSTALLATION:

 TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS 1 HAN 3".

 TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 450 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER. THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

WAUKESHA, WI, USA

- IMPORTANT NOTES FOR THE BIDDING AND INSTALLATION OF MC-3500 CHAMBER SYSTEM 1. STORMTECH MC-3500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A
- 2. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE". CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS.
- STORMTECH RECOMMENDS 3 BACKFILL METHODS:

 STONESHOOTER LOCATED OFF THE CHAMBER BED.

 BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.

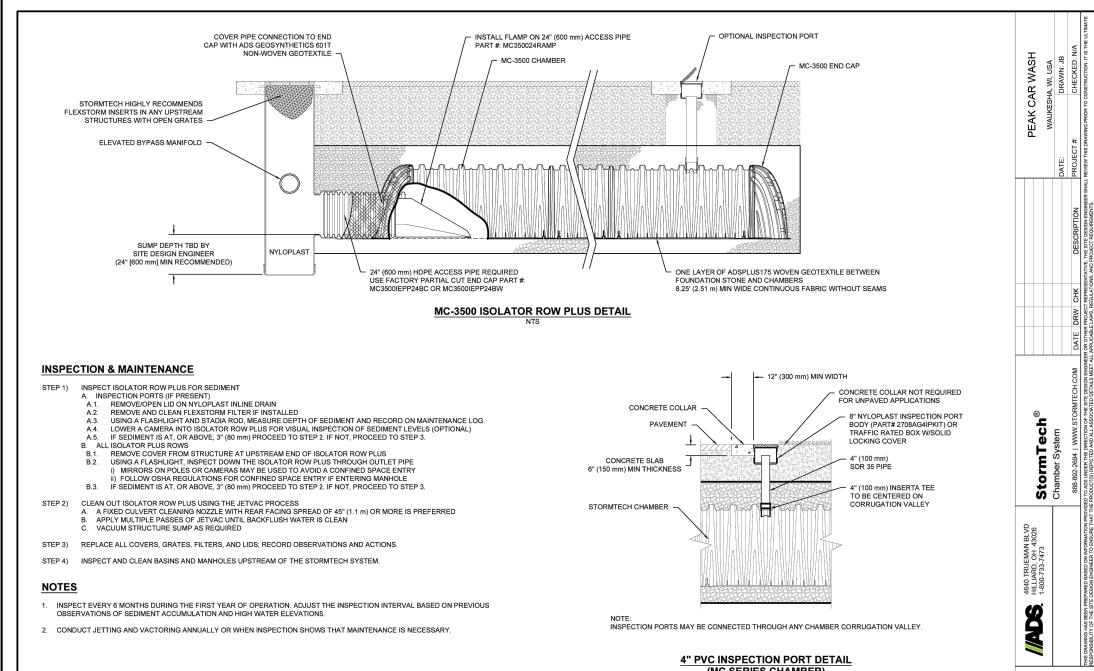
 BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- 5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- MAINTAIN MINIMUM 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
- INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS. 8. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
- 9. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
- 10. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN
- . ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF. NOTES FOR CONSTRUCTION EQUIPMENT

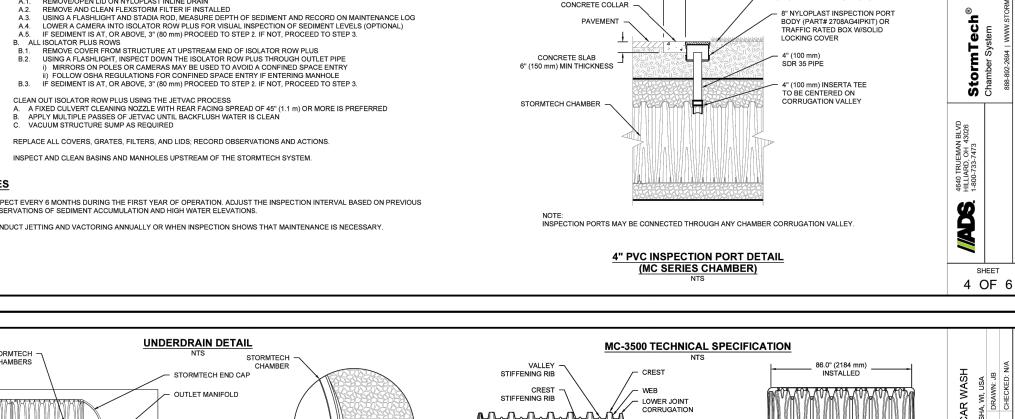
F 30" DIAMETER (24.00" SUMP MIN)

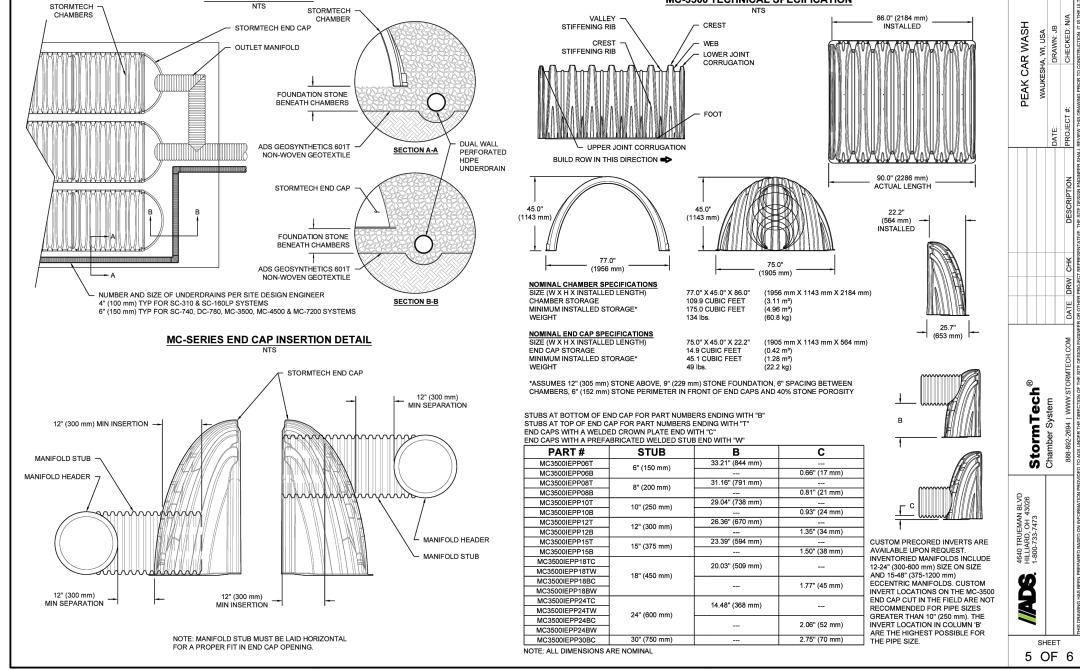
- STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
 WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE". 3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

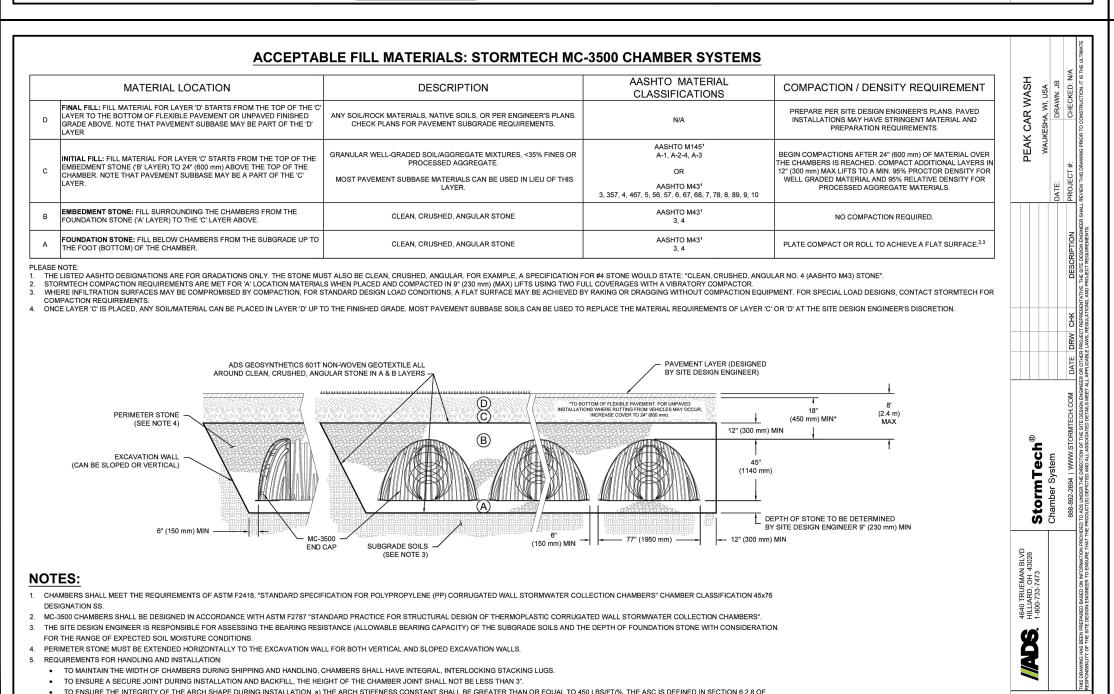
USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

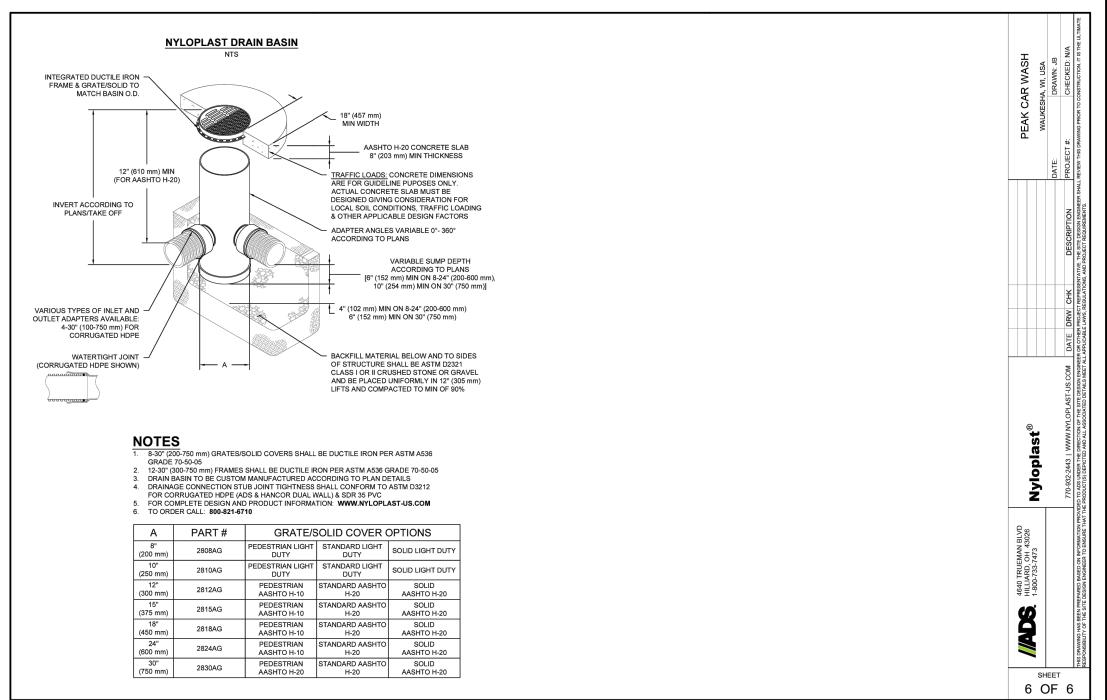








ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW



April 4, 2017

Madison, Wisconsin 53701-26 TTY: Contact Through Rel Governor Scott Walker Laura Gutierrez, Secretary

ADVANCED DRAINAGE SYSTEMS, INC. JAKE BRUNOEHLFR

Re: Description: STORMWATER DETENTION AND/OR INFILTRATION SYSTEM, ALTERNATE PLUMBING SYSTEM

Manufacturer: ADVANCED DRAINAGE SYSTEMS, INC.
Product Name: (trans. dt. TBD) STORMTECH
Model Number(s): SC 156LP, SC 310, SC746, DC 780, MC 3500 AND MC 4500 Manufacturer: ADVANCED I Product Name: (trans. id. TBI Model Number(s): SC 160LP, SC Product File No: 20170109

This approval supersedes the approval issued on various dates under product file numbers 20160315, 20150136, 20140347, 20140348 and 20140118. This alternate approval is contingent upon compliance with the following stipulation(s):

- This product must be installed in accordance with the manufacturer's printed instructions, product approval and the plan approval. If there is a conflict between the manufacturer's instructions and the plan approval, the plan approval will take precedence.
- The installation of waterproof membranes must be either PVC or linear low density polyethylene (LLDPE)
 material having a minimum 30 mil thickness with all seams sealed. PVC membrane seams must be sealed
 using solvent cement. LLDPE membrane seams must be sealed using thermal welding. Inspection and maintenance of this product must be performed at intervals specified by the manufacturer or in accordance plan approval or s. SPS 382.21, whichever is more restrictive.
- When this product is installed an Isolator Row, the installation must be in accordance with the manufactu
 printed Design Manual (S191010), ch. SPS 382, plan approval under s. SPS 382.20 and product approva
 stipulations. When there is a conflict between manufacturer's installation instructions and plan approva
 product approval stipulations, the plan approval or product approval stipulations will take precedence. This product must be permanently labeled identifying the manufacturer and model number (StormTech SC-310).
- The review undertaken by department staff does not include review and/or approval of this submittal as meeting DNR specifications for ch. NR 151.

SBD-10564-E (N.10/97) File Ref: 17010901.DOC

VANCED DRAINAGE SYSTEMS, INC Page 3 of 3 Product File No.: 20170109

When this product is installed as a subsurface detention system, the installation must be in accordance with the manufacturer's printed instructions. When there is a conflict between the manufacturer's installation instructions and plan approval or product approval stipulations, the plan approval or product approval stipulations will take precedence.

This product must be permanently labeled identifying the manufacturer and model number (StormTech DC-780). Any plumbing plans that include this device(s) and submitted to the department (or its agents) shall be
accompanied by an acceptable modeling method, such as outlined in Method for Predicting the Efficiency of
Proprietary Storm Water Sedimentation Devices (1006) for the specific site where the installation of this
device(s) is planned. The submitted calculations, based on site-specific inputs, shall predict the removal
efficiencies by concentration and percentage. Any plumbing plans that include this device(s) and submitted to the department (or its agents) shall be accompanied by an acceptable modeling analysis for the specific site where the installation of this device(s) is planned. The submitted calculations, based on site-specific inputs, shall predict the removal efficiencies by concentration and percentage for both TSS and O&G.

may result from its use.

Page 2 of 3 Product File No.: 20170109 proved for the following uses, as specified in Table SPS 382.70-1 Stormwater and clearwater subsurface detention system,
 Stormwater and clearwater subsurface infiltration system, or
 Stormwater and clearwater subsurface detention/infiltration system.

When this product is installed, the installation must be in accordance with the manufacturer's printed design installation instructions, ch. SPS 382, plan approval under s. SPS 382.20, and any product approval stipula

approval stipulations, the plan approval conditions or product approval stipulations will take precedence. Installation-- Installation of this product must be in accordance with the manufacturer's printed installatio

instructions. A copy of the manufacturer's installation instructions must be given to the property owner, installer and submitted along with other information required by the governing agency for the installation.

The installation is not for a subsurface detention system;

 The soils on which that detention system is placed have a maximum soil application rate of 0.2 gallons/square foot/day based upon morphological soil evaluation as listed in SPS Table 383.44-2 under the column for BOD₆ and TSS > 30mg/L; and A geotextile fabric that meets the chamber manufacturer's specifications is in place on the bottom of the product is required.

When used as a stormwater and clearwater subsurface infiltration system, this product may be installed without a waterproof membrane for use as under the following conditions: 1. The requirements contained in WDNR TECHNICAL STANDARD for Site Evaluation for Stormwater Infilitation

2. The soils on which that detention system is placed have a maximum soil application rate of 0.2 gallons/square foot/day based upon morphological soil evaluation as listed in SPS Table 383.44-2 under the column for BOD5 and TSS > 30mg/L; and 3. A geotextile fabric that meets the chamber manufacturer's specifications is place on the bottom of the product is required.

When used as a stormwater and clearwater subsurface infiltration system, this product may be installed without a waterproof membrane for use as under the following conditions: The requirements contained in WDNR TECHNICAL STANDARD for Site Evaluation for Stormwater Infiltration (SOC 1002 rev. 02/04); see http://dnr.wi.gov/runoff/pdf/stormwater/techstds/post/dnr1002/nfiltration.pdf
2. The soils on which that detention system is placed have a maximum soil application rate of 0.2 gallons/square foot/day based upon morphological soil evaluation as listed in Table SPS 383.44-2 under the column for BODS and TSS > 30 mg/L; and
3. A geotextile fabric that meets the chamber manufacturer's specifications is placed on the bottom of the product above the bedding base is required.

SIZING: For manufacturer's site CALCULATORS, see : http://www.stormtech.com/resources/calculator.html

Sizing of piping for stormwater and clearwater subsurface detention shall be made using hydraulic calculations as specified in manufacturer's instructions.

 Written approval for the plumbing plans shall be obtained from the department or its agent for each installation of
this system. If the project is located within the city of Milwaukee or another agent having plumbing stormwater
review status, plans may be submitted to either the department or to the agent municipality. The department is in no way endorsing this product or any advertising, and is not responsible for any situation which

Governor Tony Evers Dawn Crim, Secretary October 8, 2019

Brent A. Yeager 1814 Pineview Dr. Verona WI 53593

Revised 7/24/2020 Advanced Drainage Systems, Inc.

Re: Description: (Polyvinylchloride) Pipes & Fitting - Drain, Waste & Vent
Manufacturer: Product Name: Product Name: Nyloplast PVC Storm Drainage Structures and Fittings (see attached manual) The specifications and/or plans for this piping system have been reviewed and determined to be in compliance with chapters SPS 382 through 384, Wisconsin Administrative Code, and Chapters 145 and 160, Wisconsin Statutes. The Department hereby issues an alternate approval to s. SPS 382.35 and 384.30 (3) (b) & (c) Wis. Adm. Code based on the Wisconsin Statutes and the Wisconsin Administrative Code. This approval is valid until the end of October 2024. This approval supersedes the approval issued on March 14, 2014 under product file number 2014/0032.

This alternate approval is contingent upon compliance with the following stipulation(s): > This piping system may be installed for the following drain use(s):

Storm Building Sewer - gravity flow
 Underground Drain and Vent – gravity flow

This piping system shall be installed in accordance with ASTM D2321, ADS installation guidelines and s. SPS 382.36 and s. SPS382.35 Wis. Adm. Code.

> If this piping system is installed without clean outs, then the system shall be cleaned using a vacuum or jetting system. > This piping systems shall be installed by properly licensed Wisconsin plumbers.

All connections to storm sewer piping shall be watertight.

All storm sewer materials shall conform to s. SPS 384.30 (3) (b) & (c) Wis. Adm. Code. The department is in no way endorsing this product or any advertising and is not responsible for any situation which may result from its use.

Sincerely, Glen W. Schlüeter
Plumbing Product Reviewer
Department of Safety and Professional Services
Division of Industry Services
Bureau of Technical Services
(608) 267-1401 Phone glen.schlueter@wi.gov E-mail7 :45AM-4:30PM CDT M-F Work Hours

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