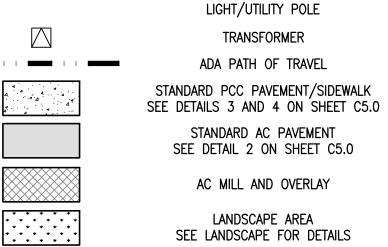


SD STORM DRAIN LINE UE UNDERGROUND ELECTRIC UT UNDERGROUND TELECOM GAS TREE/SHRUB FENCE SIGN BOLLARD/POST FIRE HYDRANT WATER METER/VALVE SEWER MANHOLE/CLEANOUT GAS METER/VALVE GAS METER/VALVE GAS METER/VALVE GAS METER/VALVE GO GAS METER/VALVE GO



LEGAL DESCRIPTION:

A PARCEL OF LAND LOCATED IN AND BEING A PART OF THE WEST HALF OF THE NORTHWEST QUARTER OF SECTION 17, TOWN 3 NORTH, RANGE 11 EAST, CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN, BEING MORE PARTICULARLY DESCRIBED AS: BEGINNING AT A POINT A DISTANCE OF 440.00 FEET SOUTH 00 DEGREES 14 MINUTES 40 SECONDS EAST ALONG THE WEST LINE OF SAID SECTION 17, AND A DISTANCE OF 419.89 FEET DUE EAST OF THE NORTHWEST CORNER OF SAID SECTION 17; THENCE NORTH 00 DEGREES 14 MINUTES 40 SECONDS WEST, 302.14 FEET TO A DEGREES 51 MINUTES 46 SECONDS EAST, 148.79 FEET ALONG SAID SOUTHERLY RIGHT—OF—WAY LINE OF WALTON BOULEVARD; THENCE SOUTH 00 DEGREES 14 MINUTES 40 SECONDS EAST, 318.05 FEET; THENCE DUE WEST, 148.00 FEET TO THE POINT OF BEGINNING, ALONG WITH ITS STORM SEWER PERPETUAL EASEMENT AS RECORDED IN LIBER 6800, PAGES 433, 434, 435, OAKLAND COUNTY RECORDS, TOGETHER WITH THE EASEMENT TO THE FULL USE OF THE WATER RETENTION BASIN, WATER SHED AND EXISTING 42" STORM SEWER WHICH IS INCLUDED AS PART OF THIS CONVEYANCE FOR THE BENEFIT OF THE PURCHASER AND THEIR ASSIGNS FOREVER.

XERISCAPE AREA (BLACK OBSIDIAN STONE)

CODE INFORMATION:

CONSTRUCTION CODE REQUIRMENTS: MEET REQUIRED NATIONAL, STATE, & LOCAL CODES & ORDINANCES ADOPTED:

BUILDING CODE: 2015 MICHIGAN BUILDING CODE (MBC) ADOPTS WITH AMENDMENTS 2015 INTERNATIONAL BUILDING CODE; 2018 PLUMBING (MPC); 2015 FOR ALL: MICHIGAN MECHANICAL (MMC), ENERGY (MEC); NATIONAL ELECTRICAL CODE 2017 OF MICHIGAN ADOPTS WITH AMENDMENTS NFPA 70, 2017 –2015 MBC CHAPTER 9.

ACCESSIBILITY COMPLIANCE:

MICHIGAN BUILDING CODE CHAPTER 11, ICC/ANSI A117.1-2009

<u>USE & OCCUPANCY CLASSIFICATION:</u>
MAIN BUILDING USE: SECTION 304.1 (B)BUSINESS OCCUPANCY GROUP
SECTION 508.2 ACCESSORY USE — ALLOWS AREAS THAT ARE LESS THAN 10% TO BE ACCESSORY TO MAIN USE.

BUILDING HEIGHT, AREA, & OCCUPANCY SEPARATIONS: TABLE 503 ALLOWABLE BUILDING HEIGHT / AREA:

OCCUPANCY GROUP B / CONSTRUCTION TYPE "V-B" HEIGHT & AREA:

TABLE 504.3 ALLOWABLE BUILDING MAX. HEIGHT = 40'-0" > ACTUAL 19'-0" (COMPLIES)

TABLE 504.4 ALLOWABLE # OF STORIES—MAX STORIES = 2 STORY > ACTUAL 1 STORY (COMPLIES)

TABLE 506.2 ALLOWABLE AREA NO SPRINKLER—MAX AREA = 9,000 SF > 2,500 SF (COMPLIES)

TYPES OF CONSTRUCTION — BUILDING CONSTRUCTION CLASSIFICATION:
SECTION 601 CONSTRUCTION CLASSIFICATION FIRE RESISTANCE RATING (TABLE 602)
TYPE — "V—B" (NON—)COMBUSTIBLE / (UN)PROTECTED
NON—SPRINKLERED BUILDING

CONDITIONAL USE PERMIT NOTE:

A CONDITIONAL USE PERMIT IS REQUIRED FOR THE PROPOSED DRIVE—THROUGH. REFER TO SECTION 138—1.203 OF THE ZONING ORDINANCE FOR REQUIRED SIGNAGE THAT MUST BE PLACED ON THE PROPERTY 15 CALENDAR DAYS PRIOR TO THE PUBLIC HEARING.

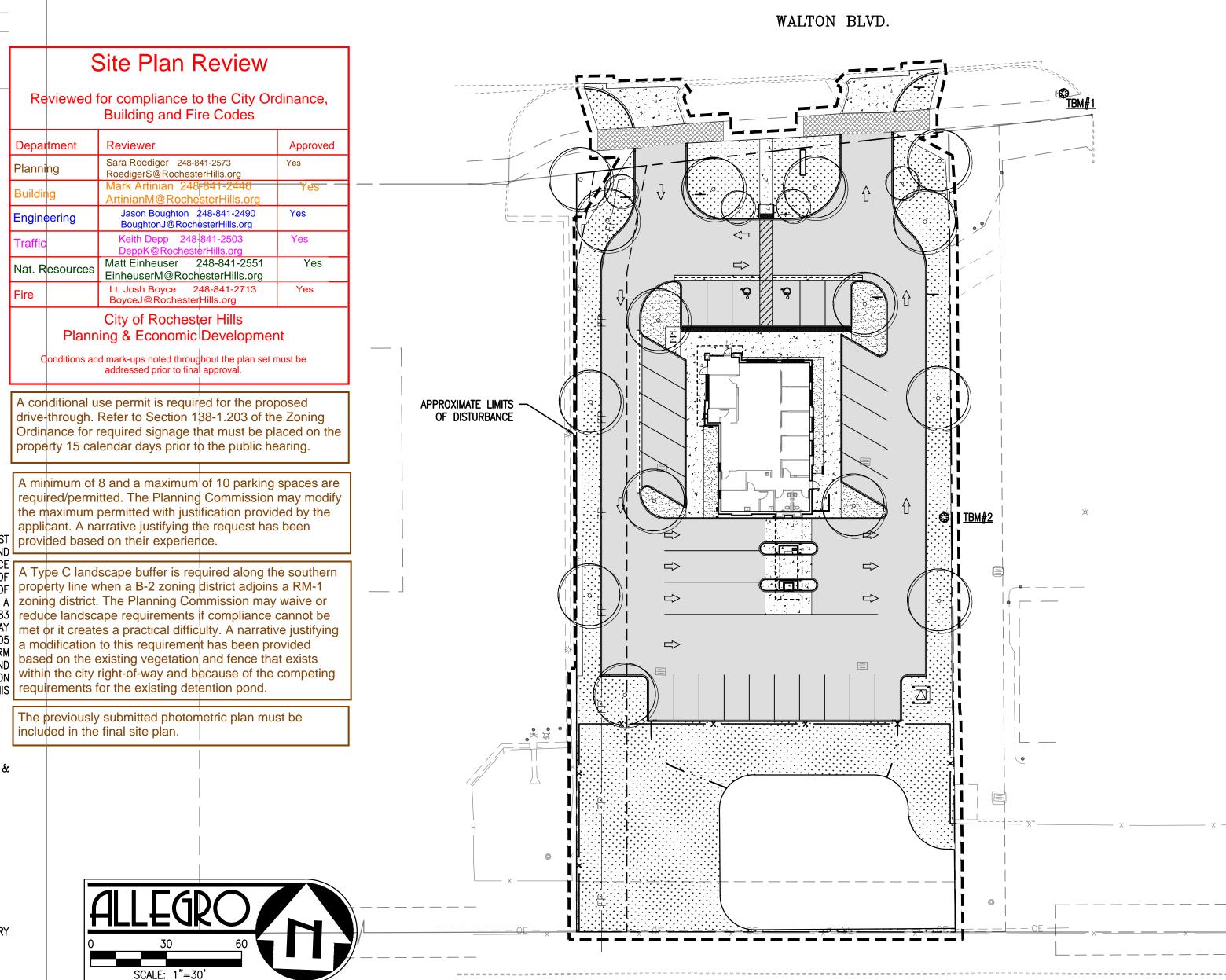


ENGINEER'S NOTE TO CONTRACTOR:

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITIES, PIPES AND/OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL ASCERTAIN THE TRUE VERTICAL AND HORIZONTAL LOCATION AND SIZE OF ANY UNDERGROUND UTILITIES AND SHALL BE RESPONSIBLE FOR DAMAGE TO PUBLIC OR PRIVATE UTILITIES SHOWN OR NOT SHOWN HEREON.

LAND IMPROVEMENT PERMIT (LIP) PLANS HUNTINGTON NATIONAL BANK - ROCHESTER HILLS

2977 WALTON BOULEVARD | ROCHESTER HILLS, MICHIGAN, 48309



Square footage shall include all roof overhangs & canopies.

ABBREVIATIONS:

AC	ASPHALT CONCRETE
ADA	AMERICANS WITH DISABILITIES ACT
APN	ASSESSORS PARCEL NUMBER
APWA	AMERICAN PUBLIC WORKS ASSOCIATION
AVE	AVENUE
BLDG	BUILDING
BLVD	BOULEVARD
BFP	BACKFLOW PREVENTER
BM	BENCHMARK BOTTOM OF BIDE
BOP	BOTTOM OF PIPE
C	CONCRETE
CB	CATCH BASIN
CCTV	CLOSED-CIRCUIT TELEVISION
CL	CENTERLINE
CLR	CLEAR
COMM	COMMUNICATION
CONC	CONCRETE
CVLT	COMMUNICATION VAULT
DCV	DETECTOR CHECK VALVE
DCDA	DOUBLE CHECK DETECTOR ASSEMBLY
DI	DROP_INLET
DIA	DIAMETER
DWG	DRAWING
E	ELECTRIC / EAST
ECAB	ELECTRIC CABINET
EVLT	ELECTRIC VAULT
EX	EXISTING
FDC	FIRE DEPARTMENT CONNECTION
FF	FINISHED FLOOR

FH	FIRE HYDRANT
FL	FLOW LINE
FND	FOUND
FOC	FACE OF CURB
FP	FIRE PROTECTION
FS	FINISHED SURFACE
FT	FEET
FW	FRONT OF WALK
FWC	FACE OF WALL CONCRETE
G	GAS
GB	GRADE BREAK
GV	GAS VALVE
HDPE	HIGH-DENSITY POLYETHYLENE
HWY	HIGHWAY
HYD	HYDRANT
ΙE	INVERT ELEVATION
INV	INVERT
IV	IRRIGATION VALVE
JP	JOINT POLE
L	LENGTH
L/S	LANDSCAPE
ĹF	LINEAL FEET
LT	LIGHT
LUM	LUMINAIRE
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MON	MONUMENT

FINISHED GRADE

MTR	METER
N	NORTH
NG	NATURAL GROUND
N.I.C.	
NO	NUMBER
N.T.S.	NOT TO SCALE
0.C.	ON CENTER
OH	OVERHANG
Р	PAVEMENT
PB	PULL BOX
PCC	
PIV	
POC	POINT OF CONNECTION
PP	POWER POLE
PVC	POLYVINYL CHLORIDE
REU	
RD	ROAD
RPPA	REDUCED PRESSURE PRINCIPLE ASSEMBLY
S	SLOPE / SANITARY / SOUTH
SAN	
	STORM DRAIN MANHOLE
SDR35	
SF	SQUARE FEET
SL	STREET LIGHT
	STREET LIGHT PULL BOX
SP	
SPEC	SPECIFICATION
	SANITARY SEWER CLEAN OUT
	SANITARY SEWER MANHOLE

MEADOWBROOK DR.

CIVIL IMPROVEMENT PLAN / LIMITS OF CONSTRUCTION

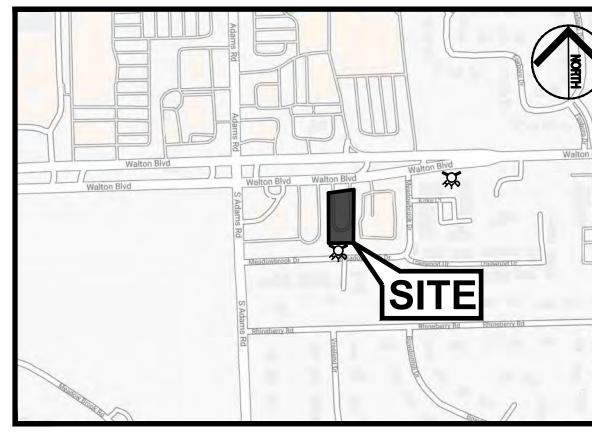
STANDARD
STREET LIGHT
SIDEWALK
TELEPHONE
TEMPORARY BENCHMARK
TOP OF CURB
TRAFFIC CONTROL DEVICE

STD

TELEPHONE VAULT
TRAFFIC LIGHT
TOE OF SLOPE
TOP OF SLOPE / TOP OF PIPE
TRAFFIC SIGNAL
TRAFFIC SIGNAL PULL BOX
TELEPHONE VAULT
TOP OF WALL

TRAFFIC SIGNAL PULL BOX
TELEPHONE VAULT
TOP OF WALL
TYPICAL
UNDERGROUND ELECTRIC
UNDERGROUND TELEPHONE
UTILITY
VARIABLE
VACUUM AIR TUBE

VACUUM AIR TUBE
VAULT
WEST
WITH
WATER METER
WATER LINE
WATER VALVE
WATER VAULT



VICINITY MAP NOT TO SCALE

CIVIL SHEET INDEX

CO.0 COVER SHEET
CO.1 OVERALL PLAN, GENERAL NOTES & LEGAL DESCRIPTION

C1.0 EXISTING CONDITIONS
C1.1 SITE DEMOLITION PLAN

C1.2 CONSTRUCTION STAGING PLAN
C2.0 OVERALL GRADING PLAN

C2.1 DETAILED GRADING, SOIL EROSION CONTROL & TREE PROTECTION FENCING PLAN

C2.2 DRAINAGE AREA MAP
C3.0 SANITARY SEWER & WATER MAIN PLAN & PROFILE

C3.1 STORM SEWER PLAN & PROFILE
C4.0 SIGNING & PAVING PLAN

C5.0 CONSTRUCTION DETAILS
C5.1 CONSTRUCTION DETAILS

C5.1 CONSTRUCTION DETAILS C5.2 CONSTRUCTION DETAILS

C5.3 CONSTRUCTION DETAILS
C5.4 CONSTRUCTION DETAILS

C5.5 CONSTRUCTION DETAILS
C6.0 SOIL BORING DATA SHEET
L1.0 LANDSCAPE PLAN

L1.1 ORNAMENTAL FENCE DETAIL

PIN NUMBER: 1517102033

SITE INFORMATION:

ZONING: B-2: GENERAL BUSINESS
FLOOD ZONE: THE PROPERTY LIES WITHIN FLOOD ZONE 'X' PER FIRM MAP NO: 26125C0387F, EFFECTIVE DATE SEPTEMBER 29, 2006. ZONE X IS DEFINED AS "AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANGE FLOODPLAIN"

±46,290 SF (1.062 AC)	
±36,777 SF (0.844 AC))
±2,500 SF	
EXISTING	PROPOSED
±30,217 SF	±25,027 SF
±16,073 SF	±21,263 SF
	±5,190 SF DECREASE
PROPOSED	REQUIRED
24	10 (125% OF MIN); 8 (1/300 SF)
2	2
26	10 (MAX), 8 (MIN)
	±36,777 SF (0.844 AC) ±2,500 SF EXISTING ±30,217 SF ±16,073 SF PROPOSED 24 2

SURVEY NOTES:

- ALTA TOPOGRAPHIC SURVEY PROVIDED BY BLEW & ASSOCIATES, P.A.; REVISED 06/13/2022.

 BASIS OF BEARING: GRID NORTH PER MICHIGAN STATE PLANE COORDINATE SYSTEM, SOUTHERN ZONE, NAD83-2011, BASED OFF OF THE WEST LINE OF THE SUBJECT PROPERTY BEARING
- SO2'48'46"E PER GPS COORDINATE OBSERVATIONS.
 ELEVATIONS ESTABLISHED USING MDOT MONUMENT 63659
- N: 431540.17, E: 13424713.73, ELEV: 977.39'
 4. TBM#1: SET CHISELED "X" ON RIM OF MANHOLE
- N: 432375.49, E: 13439236.75, ELEV: 933.05'
- TBM#2: SET CHISELED "X" ON CONCRETE BASE OF LIGHT POLE N: 432206.49, E: 13439197.49, ELEV: 934.81'
- N: 432206.49, E: 13439197.49, ELEV: 934.81

 ALL EXISTING INFORMATION PRESENTED IN THESE PLANS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR. ANY DISCREPANCIES IN THE PLANS SHALL BE MADE AWARE TO THE ENGINEER PRIOR TO BEGINNING CONSTRUCTION.

UTILITY LOCATION NOTE:

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITIES, PIPES AND/OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED FROM A SEARCH OF ROCHESTER HILLS RECORDS, AND INFORMATION PROVIDED BY OTHERS. THE CONTRACTOR SHALL INVESTIGATE AND VERIFY THE TRUE VERTICAL AND HORIZONTAL LOCATION AND SIZE OF ANY UNDERGROUND UTILITIES SHOWN OR NOT SHOWN HEREON

GEOTECHNICAL REPORT NOTE:

REFER TO THE GEOTECHNICAL EXPLORATION AND ENGINEERING REPORT BY INTERTEK PSI; PROJECT NO. 03811256X; TITLED, "HUNTINGTON NATIONAL BANK, 2975 WALTON BOULEVARD, ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN"; DATED 10/26/2021; FOR ALL PROJECT SPECIFICATIONS, REQUIREMENTS, RECOMMENDATIONS AND PROCEDURES IN REGARDS TO PAVEMENT SECTIONS, PAD PREPARATION, SITE CLEARING REQUIREMENTS, OVER-EXCAVATION, COMPACTION, SOIL REMEDIATION,

ENVIRONMENTAL NOTE:

THIS PROJECT WAS EXECUTED WITHOUT THE BENEFIT OF AN ENVIRONMENTAL REPORT OR INVESTIGATION.

TITLE REPORT NOTE:

A TITLE REPORT WAS NOT PROVIDED TO THE ENGINEER. ENCUMBRANCES MAY EXIST THAT ARE NOT PLOTTED HEREON.

WORK IN THE RIGHT OF WAY NOTES:

- 1. ANY CONSTRUCTION WITHIN THE CITY RIGHT-OF-WAY MUST HAVE AN APPROVED ENCROACHMENT PERMIT FOR CONSTRUCTION IN THE PUBLIC STREET PRIOR TO COMMENCEMENT OF THIS WORK. THE PERFORMANCE OF THIS WORK IS NOT AUTHORIZED BY THE BUILDING
- PERMIT ISSUANCE BUT SHOWN ON THE BUILDING PERMIT FOR INFORMATION ONLY.

 2. CONTRACTOR SHALL NOT STAGE, STORE, OR STOCKPILE ANY MATERIAL OR EQUIPMENT WITHIN THE PUBLIC ROAD RIGHT—OF—WAY. CONSTRUCTION PHASING SHALL BE COORDINATED TO KEEP MATERIALS AND EQUIPMENT ONSITE OR WITHIN PRIVATE PROPERTY.



new york. 530 5th Avenue, 16th Floor New York City, NY 10036

555 West 5th Street, 35th Floor Los Angeles, CA 90013

vocon.partners ⊔

ALLEGRO
CIVIL ENGINEERS

ALLEGRO CIVIL ENGINEERS 4322 N. LINCOLN AVE. SUITE A CHICAGO, IL 60625 (872) 270-3682

PROFESSIONAL SEAL:



PROPOSED TENANT IMPROVEMENTS FOR:

HUNTINGTON NATIONAL BANK ROCHESTER HILLS

2977 WALTON BLVD ROCHESTER HILLS, MI 48309

JOB NUMBER:	2021-177-002

DRAWING RELEASE:

No. Date Description

		07.19.2021	SITE PLAN REVIEW
	2	05.04.2022	RESPONSE TO CITY COMMENT
	3	06.06.2022	RESPONSE TO CITY COMMENT
Γ	4	08.22.2022	RESPONSE TO CITY COMMENT
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SHEET TITLE:

CIVIL COVER SHEET

SHEET NUMBER:

C0.0

ENGINEER'S CONSTRUCTION NOTES:

- THE CONTRACTOR SHALL LEAVE AN EMERGENCY PHONE NUMBER WITH THE POLICE AND FIRE DEPARTMENTS AND KEEP THEM INFORMED OF DETOURS.
- CONTRACTOR SHALL POST EMERGENCY TELEPHONE NUMBERS ON THE SITE FOR PUBLIC WORKS. AMBULANCE. POLICE. UTILITY LOCATE COMPANIES AND FIRE DEPARTMENT AT ALL TIMES.
- CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR OR REPLACE ANY EXISTING IMPROVEMENTS OR UNDERGROUND FACILITIES THAT ARE DAMAGED
- ALL DIMENSIONS SHOWN ARE TO THE FACE OF CURB, EDGE OF PAVEMENT, FACE OF WALL, ALL RADII SHOWN ARE TO THE FACE OF CURB, UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL CONDUCT HIS/HER WORK SO AS NOT TO INTERFERE WITH OR HINDER IHE PROGRESS OF COMPLETION OF WORK BEING PERFORMED BY OTHER CONTRACTORS.
- THE CONTRACTOR AND ALL SUBCONTRACTORS INVOLVED SHALL ASSUME ALL LIABILITY, FINANCIAL OR OTHERWISE, IN CONNECTION WITH HIS/HER CONTRACT AND SHALL PROTECT AND SAVE HARMLESS THE OWNER AND THE OWNER'S REPRESENTATIVES FROM ANY AND ALL DAMAGES OR CLAIMS THAT MAY ARISE BECAUSE OF INCONVENIENCE, DELAYS, OR LOSS EXPERIENCED BECAUSE OF THE PRESENCE AND OPERATIONS OF OTHER CONTRACTORS OR CONSULTANTS WORKING
- ADJACENT TO OR WITHIN THE LIMITS OF THE PROJECT. CONTRACTOR MUST REPAIR ANY DAMAGE TO PROPERTY DURING CONSTRUCTION. DAMAGED PROPERTY SHALL BE RETURNED TO EXISTING CONDITIONS AT A MINIMUM.
- PUBLIC SAFETY AND TRAFFIC CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH THE CITY OF ROCHESTER HILLS STANDARDS AND SPECIFICATIONS (AS APPLICABLE) AND AS DIRECTED BY THE CITY OF ROCHESTER HILLS. SAFE VEHICULAR AND PEDESTRIAN ACCESS SHALL BE PROVIDED
- AROUND THE SITE AT ALL TIMES. PRIOR TO BEGINNING CONSTRUCTION, CONTRACTOR TO FIELD VERIFY ALL EXISTING SITE FEATURES AND UTILITIES, AND REPORT ALL DISCREPANCIES TO ENGINEER
- ANY AND ALL FIELD MODIFICATIONS TO THESE PLANS MUST BE APPROVED IN WRITING PRIOR TO ANY CONSTRUCTION OR DEMOLITION RESULTING THEREOF. THE ENGINEER IS UNDER NO OBLIGATION TO PROVIDE ANY LEVEL OF CERTIFICATION FOR WORK THAT WAS NOT COMPLETED I STRICT ACCORDANCE WITH THESE PLANS UNLESS THE ENGINEER DIRECTED THE CONTRACTOR TO MAKE SAID CHANGE BY RESPONDING TO A FORMAL WRITTEN REQUEST FOR INFORMATION (RFI) THAT FOLLOWED THE MUTUALLY AGREED UPON RFI PROCESS.

ENGINEER'S SITE NOTES

- THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES. SEQUENCES OR PROCEDURES FOR SAFETY PRECAUTIONS OR PROGRAMS. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- NOTHING CONTAINED IN THE CONTRACT DOCUMENTS SHALL CREATE, NOR SHALL BE CONSTRUED TO CREATE, ANY CONTRACTUAL RELATIONSHIP BETWEEN THE ENGINEER AND THE CONTRACTOR OR SUBCONTRACTOR.
- THE ENGINEER AND APPLICABLE AGENCY MUST APPROVE, PRIOR TO CONSTRUCTION. ANY ALTERATION OR VARIANCE FROM THESE PLANS, ANY VARIATIONS FROM THESE PLANS SHALL BE
- PROPOSED ON CONSTRUCTION FIELD PRINTS AND TRANSMITTED TO THE ENGINEER. ANY INSPECTION BY THE CITY, COUNTY, OR THE ENGINEER SHALL NOT, IN ANY WAY, RELIEVE THE CONTRACTOR FROM ANY OBLIGATION TO PERFORM THE WORK IN STRICT COMPLIANCE WITH THE
- APPLICABLE CODES AND AGENCY REQUIREMENTS. REMOVAL AND REPLACEMENT QUANTITIES ARE APPROXIMATE. THE EXACT LOCATION OF REMOVAL LIMITS SHALL BE VERIFIED IN THE FIELD AND APPROVED BY THE INSPECTOR PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL REQUIRED CONSTRUCTION PERMITS AND BONDS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF THE CONTRACT DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, AND SPECIAL CONDITIONS, COPIES OF REQUIRED CONSTRUCTION PERMITS, AND EROSION CONTROL PLANS AND INSPECTION REPORTS.
- THE CONTRACTOR SHALL PROVIDE A COPY OF ALL REQUIRED CONSTRUCTION PERMITS TO THE OWNER WITHIN SEVEN (7) DAYS OF ISSUE OF SUBJECT PERMIT.
- ALL COPIES OF COMPACTION, CONCRETE AND OTHER REQUIRED TEST RESULTS ARE TO BE SENT TO THE OWNER AND ENGINEER OF RECORD DIRECTLY FROM THE TESTING AGENCY.
- CONTRACTOR SHALL THOROUGHLY CHECK COORDINATION OF ARCHITECTURAL, CIVIL, LANDSCAPE STRUCTURAL, MEP, AND OTHER PLANS PRIOR TO COMMENCING CONSTRUCTION. OWNER AND ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCY PRIOR TO COMMENCING CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY RELOCATIONS INCLUDING BUT NOT LIMITED TO: UNDERGROUND AND OVERHEAD UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS & POLES. IRRIGATION STRUCTURES AND OTHER EXISTING APPURTENANCES AS REQUIRED TO FACILITATE THE INSTALLATION OF THE PROPOSED IMPROVEMENTS, ALL RELOCATION WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES/OWNERS SPECIFICATIONS AND SHALL BE APPROVED BY THE GOVERNING AUTHORITIES/OWNERS PRIOR TO COMMENCEMENT OF THE WORK. ALL RESULTING COSTS SHALL BE DEEMED TO BE INCLUDED IN THE CONTRACTOR'S BID.
- 12. THE CONTRACTOR SHALL NOT TAKE ADVANTAGE OF ANY APPARENT ERROR OR OMISSION ON THE PLANS OR SPECIFICATIONS. IN THE EVENT THE CONTRACTOR DISCOVERS ANY APPARENT ERROR OR DISCREPANCY, HE SHALL IMMEDIATELY CALL UPON THE ENGINEER FOR HIS/HER INTERPRETATION AND DECISION, AND SUCH DECISION SHALL BE FINAL.
- 13. THE CONTRACTOR SHALL COMPLY WITH ALL LEGAL LOAD RESTRICTIONS IN THE HAULING OF MATERIALS ON PUBLIC ROADS BEYOND THE LIMITS OF THE WORK. A SPECIAL HAUL PERMIT WILL NOT RELIEVE THE CONTRACTOR OF LIABILITY FOR DAMAGE WHICH MAY RESULT FORM THE MOVING OF MATERIAL OR EQUIPMENT.

ENGINEER'S ACCESSIBILITY NOTES:

- ALL SITE WORK SHALL BE IN CONFORMANCE WITH MICHIGAN ACCESSIBILITY STANDARDS AND WITH
- THE AMERICANS WITH DISABILITIES ACT (ADA), LATEST EDITION. RAMPS SHALL NOT EXCEED A RUNNING SLOPE OF 1:12 (8.33%).

OBSTRUCTIONS) FOR ACCESSIBLE CONFORMANCE.

- RAMPS ARE DEFINED AS ANY WALKWAY BETWEEN SLOPES 1:20 (5%) AND 1:12 (8.33%) AND SHALL HAVE A MINIMUM WIDTH OF 4 FEET AND A MAXIMUM CROSS-SLOPE OF 2%. RAMPS EXCEEDING 30 INCHES VERTICAL CHANGE SHALL HAVE INTERMEDIATE (2% MAX SLOPE) LANDINGS HAVING A MINIMUM LENGTH IN THE DIRECTION OF TRAVEL OF 60 INCHES. BOTTOM LANDINGS AT CHANGES IN RAMP DIRECTION SHALL HAVE A MINIMUM LENGTH OF 72 INCHES.
- MAXIMUM CROSS-SLOPE ON ANY WALK OR RAMPS SHALL BE 2%. ALL ACCESSIBLE PARKING SPACES AND LOADING ZONES SHALL HAVE A MAXIMUM SLOPE OF 2% IN ANY DIRECTION.
- ALL WALKS SHALL HAVE A MINIMUM 4 FOOT CLEAR WIDTH (DOWN TO 3.5 FEET FOR

ENGINEER'S SIGNAGE AND STRIPING NOTES:

- 1. ALL SIGNS SHALL BE STANDARD SIZE AND TO MICHIGAN DEPARTMENT OF TRANSPORTATION AND MUTCD STANDARDS UNLESS OTHERWISE NOTED.
- ALL PARKING RESTRICTION SIGNS SHALL HAVE ENGINEERING GRADE REFLECTIVE SHEETING. ALL
- OTHER SIGNS SHALL HAVE DIAMOND GRADE REFLECTIVE SHEETING. ALL SIGNS SHALL BE MOUNTED WITH VANDAL-RESISTANT HARDWARE.
- SIGNS SHALL BE MOUNTED SO THAT THE BOTTOM OF THE SIGN IS AT LEAST 7'-0" FROM THE FINISHED GRADE IN AREAS WHERE PEDESTRIANS MAY BE PRESENT EVEN IF THERE IS NO SIDEWALK, UNLESS OTHERWISE NOTED. TO SATISFY THIS REQUIREMENT, EXISTING POSTS MAY HAVE
- TO BE REPLACED IF ADDITIONAL SIGNS ARE NEEDED. WHERE POSSIBLE, AT LEAST 2 FEET OF CLEARANCE SHALL BE PROVIDED FROM CURB FACE TO EDGE OF SIGN.
- ALL PERMANENT STRIPING AND PAVEMENT MARKINGS SHALL BE THERMOPLASTIC UNLESS OTHERWISE NOTED. YELLOW THERMOPLASTIC SHALL BE LEAD-FREE ORGANIC MATERIAL. CURB MARKINGS
- SHALL BE PAINTED ALL STRIPING AND MARKINGS SHALL BE REFLECTORIZED UNLESS OTHERWISE NOTED.
- ALL EXISTING STRIPING AND MARKINGS THAT CONFLICT WITH PROPOSED STRIPING AND MARKING SHALL BE REMOVED BY WET SANDBLASTING OR GRINDING. PAVEMENT LEGENDS AND ARROWS THAT ARE REMOVED SHALL BE REMOVED IN A BLOCK PATTERN. ALL STRIPING AND MARKING REMOVAL AREAS SHALL BE TREATED WITH AN APPROVED PAVEMENT SEALER.

PROJECT SPECIFICATION NOTE:

UNLESS OTHERWISE NOTED ON THESE PLANS AND THE PROJECT SPECIFICATIONS, ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT CITY OF ROCHESTER HILLS AND OAKLAND COUNTY, AS APPLICABLE, STANDARDS SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION).

ENGINEER'S EROSION & SEDIMENT CONTROL NOTES:

- EROSION CONTROL MEASURES SHOWN ARE THE MINIMUM. CONTRACTOR TO USE ALL MEASURES
- NECESSARY TO PREVENT EROSION AND CONTAIN SEDIMENT ON THE SITE. STOCKPILE SANDBAGS IN PARKWAY AREAS FOR RAPID PLACEMENT IN THE EVENT OF A STORM. EXCEPT AS OTHERWISE DIRECTED BY THE PUBLIC WORKS INSPECTOR, ALL SEDIMENT CONTROLS FOR DRAINAGE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE FORECAST OF RAIN PROBABILITY IS AT LEAST 50% AND MAINTAINED DURING THE RAINY
- APPROVED EROSION CONTROL DEVICES MUST BE IN PLACE DURING THE ABOVE STATED PERIOD. CLEAN OUT MUD AND SILT AFTER EACH RAIN OR AS DIRECTED BY THE SITE AND/PUBLIC WORKS
- INSPECTOR. EROSION CONTROL DEVICES SHOWN ON THE DETAILED GRADING, SOIL EROSION AND TREE PROTECTION FENCING PLAN MAY ONLY BE REMOVED WHEN APPROVED BY THE CITY ENGINEER IF THE GRADING OPERATION HAS PROGRESSED TO THE POINT WHERE THEY ARE NO LONGER REQUIRED.
- GRADED AREAS ADJACENT TO SLOPES MUST DRAIN AWAY FROM THE TOP OF SLOPE AT CONCLUSION OF EACH WORKING DAY WHEN THERE IS A FORECAST OF RAIN
- ALL LOOSE SOIL AND DEBRIS, WHICH MAY CREATE A POTENTIAL HAZARD TO OFFSITE PROPERTY. SHALL BE REMOVED FROM THE SITE.
- DESILTING BASINS SHALL BE DRAINED OR PUMPED DRY WITHIN 24 HOURS AFTER EACH RAINSTORM. SILT AND DEBRIS SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN STORAGE CAPACITY IS
- THE PLACEMENT OF ADDITIONAL DEVICES TO REDUCE EROSION DAMAGE WITHIN THE SITE SHALL BE LEFT TO THE DISCRETION OF THE FIELD ENGINEER AND CONTRACTOR.
- EROSION AND SEDIMENT CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF DEEMED NECESSARY BY SITE INSPECTION, ADDITIONAL MEASURES WILL BE INSTALLED
- SOIL DISTURBING OPERATIONS THAT ARE SUSPENDED FOR MORE THAN SEVEN (7) DAYS SHALL WARRANT TEMPORARY VEGETATION OR OTHER EROSION CONTROL MEASURES AT THE DIRECTION OF THE CITY OF ROCHESTER HILLS. SOIL DISTURBING OPERATIONS THAT ARE SUSPENDED FOR THIRTY (30) DAYS SHALL WARRANT PERMANENT STABILIZATION.
- NOTIFY SITE INSPECTOR BEFORE EACH PHASE OF CONSTRUCTION COMMENCES. ALL EROSION AND SEDIMENTATION CONTROL DEVICES SHALL CONFORM TO THE LATEST REGULATIONS
- FOR THE CITY, COUNTY AND STATE. WHEN ANY CONSTRUCTION BORDERS A DRAINAGE COURSE, THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ANY EXCAVATION-SPOILED DIRT, CONSTRUCTION TRASH OR DEBRIS FROM THE DRAINAGE AREAS SHOWN HEREON IN AN EXPEDITIOUS MANNER.
- MDOT-APPROVED SILT DIKE MUST MEET THE REQUIREMENTS OF THE SPECIFICATIONS CONTAINED IN THE CONSTRUCTION DETAILS OR AN EQUIVALENT PRODUCT APPROVED BY THE OWNER'S REPRESENTATIVE.
- THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOW OF MUD ONTO THE PUBLIC RIGHT-OF-WAY. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO THE PUBLIC ROADWAY OR INTO THE PUBLIC STORM
- DRAIN SHALL BE REMOVED IMMEDIATELY PRIOR TO COMMENCEMENT OF LAND DISTURBING ACTIVITIES, THE LIMITS OF LAND DISTURBANCE SHALL BE DEMARCATED BY APPROPRIATE MEANS. THE LIMITS OF CONSTRUCTION SHALL REMAIN DEMARCATED FOR THE DURATION OF WORK.
- IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCES/EXITS, ALL PERIMETER EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION
- THE CONSTRUCTION OF THE SITE WILL INITIATE WITH THE INSTALLATION OF EROSION CONTROL MEASURES SUFFICIENT TO CONTROL SEDIMENT DEPOSITS AND EROSION. ALL SEDIMENT CONTROLS WILL BE MAINTAINED UNTIL ALL UPSTREAM GROUND WITHIN THE CONSTRUCTION AREA HAS BEEN
- 21. THE CONTRACTOR SHALL REMOVE ACCUMULATED SILT WHEN IT IS WITHIN ½ OF THE TOP OF THE PERIMETER CONTROL DEVICE.

COMPLETELY STABILIZED WITH PERMANENT VEGETATION.

- FAILURE TO INSTALL, OPERATE OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN CONSTRUCTION BEING STOPPED UNTIL SUCH MEASURES ARE CORRECTED.
- A COPY OF ALL APPROVED PERMITS AND PLANS SHALL BE MAINTAINED ON SITE FOR THE DURATION OF CONSTRUCTION.
- THE CONTRACTOR SHALL MAINTAIN AN ON-SITE DAILY LOG OF ALL MAINTENANCE OF EROSION AND
- SEDIMENT CONTROL MEASURES. LOG SHALL BE MADE AVAILABLE FOR INSPECTION AT ALL TIMES. CONTRACTOR SHALL ENSURE ALL VEHICLES/EQUIPMENT EXITING THE SITE ARE FREE OF DIRT AND DEBRIS TO PREVENT SEDIMENT TRACKING ONTO PUBLIC ROADWAYS
- PERIMETER EROSION CONTROL MEASURES TO BE USED AS NECESSARY BY THE CONTRACTOR TO CONTROL SEDIMENT RUNOFF, INCLUDING AROUND UTILITY TRENCHES. BMPS TO CONTROL PERIMETER SHALL BE SILT FENCE, OR APPROVED EQUIVALENT
- CONTRACTOR TO KEEP PAVEMENT AND ADJACENT DRIVE AISLES CLEAN OF DEBRIS AND SEDIMENT AT ALL TIMES. TRUCK WASHOUTS, PAVEMENT SWEEPING, AND ALL OTHER NECESSARY BMPS SHALL BE USED TO PREVENT SEDIMENT FROM LEAVING THE SITE.

CITY OF ROCHESTER HILLS SANITARY SEWER NOTES:

- ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF ROCHESTER HILLS AND THE OAKLAND COUNTY WATER RESOURCES COMMISSIONER (OCWRC). ALL SANITARY SEWER CONSTRUCTION SHALL HAVE FULL-TIME INSPECTION SUPERVISED BY THE CITY OF ROCHESTER HILLS INSPECTION SERVICES.
- NO SEWER INSTALLATION SHALL HAVE AN INFILTRATION EXCEEDING 100 GALLONS PER INCH DIAMETER PER MILE OF PIPE IN A 24 HOUR PERIOD, AND NO SINGLE RUN OF SEWER BETWEEN MANHOLES SHALL EXCEED 100 GALLONS PER INCH DIAMETER PER MILE. AIR TESTS IN LIEU OF INFILTRATION TESTS SHALL BE AS SPECIFIED IN THE OAKLAND COUNTY WATER RESOURCES COMMISSIONER STANDARDS. PRELIMINARY-AIR TESTS ARE WITNESSED BY THE CITY AND FINAL AIR TESTS ARE WITNESSED BY BOTH THE CITY AND THE OCWRC. ONLY PIPE AND PIPE JOINTS APPROVED BY THE CITY MAY BE USED FOR SANITARY SEWER CONSTRUCTION.
- LOCATED IN THE FIRST MANHOLE UPSTREAM FROM THE POINT OF ALL CONNECTIONS TO AN EXISTING SEWER, OR EXTENSION, A TEMPORARY 12-INCH DEEP SUMP SHALL BE PROVIDED IN THE FIRST MANHOLE ABOVE THE CONNECTION WHICH WILL BE FILLED IN AFTER SUCCESSFUL COMPLETION OF ANY ACCEPTANCE TEST UP TO THE STANDARD FILLET PROVIDED FOR THE FLOW CHANNEL. A WATERTIGHT BULKHEAD SHALL BE PROVIDED ON THE DOWNSTREAM SIDE OF THE SUMP MANHOLE
- AT ALL TIMES WHEN LAYING OF NEW PIPE IS NOT ACTUALLY IN PROGRESS, THE UPSTREAM OPEN END OF THE PIPE SHALL BE CLOSED BY TEMPORARY WATERTIGHT PLUGS OR BY OTHER APPROVED MEANS. IF WATER IS IN THE TRENCH WHEN WORK IS RESUMED, THE PLUG SHALL NOT BE REMOVED UNTIL THE DANGER OF WATER ENTERING THE PIPE HAS PASSED. ALL MAIN LINE PIPE SHALL BE LAID WITH A PIPE LASER BEAM FOR LINE AND GRADE. A TARGET MUST BE INSTALLED AT THE END OF THE PIPE BEING LAYED.
- SELF-LEVELING ACCESS ASSEMBLY STRUCTURES SHALL BE USED FOR ADJUSTING STRUCTURES WITHIN ASPHALT AND CONCRETE PAVEMENT.
- ALL SEWER PIPE SHALL BE INSTALLED IN CLASS "B" BEDDING OR BETTER. ALL NEW MANHOLES SHALL HAVE CITY APPROVED FLEXIBLE, WATERTIGHT SEALS WHERE PIPES PASS THROUGH WALLS. MANHOLES SHALL BE OF PRE CAST SECTIONS WITH MODIFIED GROOVE TONGUE AND BUTYL TYPE JOINTS. PRE CAST MANHOLE CONE SECTIONS SHALL BE CITY APPROVED MODIFIED ECCENTRIC CONE TYPE. ALL MANHOLES SHALL BE PROVIDED WITH BOLTED, WATERTIGHT COVERS.
- AT ALL CONNECTIONS TO MANHOLES IN ALL SEWERS, OR EXTENSIONS, DROP CONNECTIONS WILL BE REQUIRED WHEN THE DIFFERENCE IN INVERT ELEVATIONS EXCEEDS 18 INCHES. GROUND WATER, STORM WATER, CONSTRUCTION WATER, DOWN SPOUT DRAINAGE OR WEEP TILE
- DRAINAGE SHALL NOT BE ALLOWED TO ENTER ANY SANITARY SEWER INSTALLATION. 10. PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT MISS DIG THREE (3) DAYS IN ADVANCE (811) FOR THE LOCATION OF UNDERGROUND PIPELINE AND CABLE FACILITIES AND SHALL
- ALSO NOTIFY REPRESENTATIVES OF OTHER UTILITIES LOCATED IN THE VICINITY OF THE WORK. 11. AN 18 INCH MINIMUM VERTICAL SEPARATION AND A 10 FOOT MINIMUM HORIZONTAL SEPARATION MUST BE MAINTAINED BETWEEN SANITARY SEWER AND ALL OTHER UTILITIES.
- 12. AS A MEANS OF INSURING PROPER INSTALLATION OF THE SANITARY SEWER PIPE, THE CONTRACTOR SHALL VIDEO INSPECT, ACCORDING TO THE CITY OF ROCHESTER HILLS VIDEO INSPECTION STANDARDS, 100% OF THE SANITARY SEWER PIPE. THE CONTRACTOR SHALL PROVIDE 24 HOURS NOTICE TO THE CITY OF ROCHESTER HILLS PRIOR TO VIDEO INSPECTION, SO A REPRESENTATIVE MAY BE PRESENT. ROCHESTER HILLS WILL BE PROVIDED WITH A DIGITAL COPY OF THE VIDEO INSPECTION AND LOG IN ACCORDANCE WITH THE CITY OF ROCHESTER HILLS INSPECTION STANDARDS.

SANITARY MATERIALS:

- THE FOLLOWING MATERIALS MAY BE USED FOR PUBLIC SANITARY SEWER CONSTRUCTION, APPROVED PIPE MATERIALS MUST CONFORM TO STANDARDS ADOPTED BY THE OFFICE OF THE OAKLAND COUNTY WATER RESOURCES COMMISSIONER:
- A. FOR SEWERS 8" TO 15" TO BE PVC TRUSS PIPE, ASTM D-2680, WITH GASKET JOINTS, OTHER TYPES OF PIPE AS APPROVED BY CITY ENGINEER.
- B. FOR 6" SEWER LEADS SHALL BE SOLID WALLED PVC, SDR 23.5, ASTM D-3034 OR PVC SCHEDULE 40 SOLID WALLED, ASTM D-2665. PIPE SHALL HAVE A MINIMUM PIPE STIFFNESS OF 150 P.S.I., AND A MINIMUM DEFLECTION OF 15% AT FAILURE. THE SEWER LEAD MATERIAL SHALL BE COMPATIBLE WITH SEWER MAIN MATERIAL.
- C. FOR SEWERS GREATER THAN 15" TO BE REINFORCED CONCRETE PIPE (RCP) SHALL CONFORM TO THE CURRENT ASTM D C76 WALL B. JOINTS SHALL BE SYNTHETIC RUBBER AND MEET OR EXCEED THE REQUIREMENTS ESTABLISHED BY ASTM 361.

CITY OF ROCHESTER HILLS WATER MAIN NOTES:

- ALL CONSTRUCTION PROCEDURES AND MATERIALS SHALL CONFORM TO THE CURRENT STANDARDS
- AND SPECIFICATIONS OF THE CITY OF ROCHESTER HILLS. A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED BY THE CITY OF ROCHESTER HILLS AND
- HELD PRIOR TO THE START OF CONSTRUCTION CONTRACTOR MUST CONTACT MISS DIG (811) AT LEAST THREE WORKING DAYS PRIOR TO THE START OF CONSTRUCTION FOR UNDERGROUND UTILITY LOCATIONS. ALL UTILITIES SHALL BE STAKED
- BEFORE CONSTRUCTION BEGINS. ALL WATER MAIN EASEMENTS SHALL BE PROVIDED PRIOR TO CONSTRUCTION AND ACCEPTANCE OF
- THE WATER DISTRIBUTION SYSTEM. WATER MAINS SHALL BE CONSTRUCTED WITH A MINIMUM COVER OF 6 FEET BELOW FINISHED
- GRADES, INCLUDING OPEN DRAINAGE COURSES. ALL TRENCHES UNDER OR WITHIN A 1:1 RATIO OF EXISTING OR PROPOSED PAVEMENT OR
- DRIVEWAYS, SHALL BE BACKFILLED WITH COMPACTED CLASS II SAND TO GRADE (95% MAXIMUM UNIT DENSITY)
- WHERE TWO UTILITIES CROSS, PROVIDE CLASS II BACKFILL MATERIAL IN SIX (6) INCH COMPACTED LAYERS TO TOP OF HIGHEST UTILITY.
- WHERE WATER MAINS DIP UNDER OTHER UTILITIES, THE SECTIONS WHICH ARE DEEPER THAN NORMAL SHALL BE CONSTRUCTED WITH 11-1/4 VERTICAL BENDS, 22 1/2 OR 45 BENDS MUST BE RODDED AND PROPERLY ANCHORED
- ALL PRECAST CONCRETE GATE WELL SECTIONS SHALL BE IN ACCORDANCE WITH A.S.T.M. C478, STANDARD SPECIFICATIONS FOR PRECAST REINFORCED CONCRETE MANHOLE SECTIONS. WALL THICKNESS SHALL BE AS SHOWN ON THESE DETAILS. ALL JOINTS FOR PRECAST CONCRETE GATE WELL SECTIONS SHALL BE "MODIFIED GROOVE TONGUE" WITH GASKET MANUFACTURED TO CONFORM WITH A.S.T.M. C 443, STANDARD SPECIFICATION FOR JOINTS FOR CIRCULAR CONCRETE SEWER AND CULVERT PIPE USING RUBBER GASKETS.
- CONTRACTOR SHALL INSTALL VALVES, TAPPING SLEEVES AND GATE WELL STRUCTURES IN STRICT COMPLIANCE WITH MEASUREMENTS PROVIDED ON SHEET 1 (2'-0" BETWEEN GATE WELL WALL & CENTERLINE OF OPERATING NUT) TO ALLOW PROPER OPERATION OF VALVE THROUGH GATE WELL OPENING.
- 11. ALL CROSS-CONNECTION CONTROL DEVICES SHALL BE INSTALLED AS REQUIRED BY THE ROCHESTER HILLS PLUMBING INSPECTOR AND IN ACCORDANCE WITH THE STANDARDS OF THE OAKLAND COUNTY WATER RESOURCE COMMISSIONER OPERATION AND MAINTENANCE DIVISION AND THE MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF DRINKING WATER AND
- 12. ALL WATER SERVICE CONNECTIONS TWO (2) INCHES AND SMALLER SHALL BE MADE BY THE CITY OF ROCHESTER HILLS, DEPARTMENT OF PUBLIC SERVICES AFTER WATER MAIN ACCEPTANCE AND APPLICABLE PERMITS ARE OBTAINED.
- 13. ALL FITTINGS AND BENDS SHOULD BE BLOCKED IN ACCORDANCE WITH THRUST BLOCK DETAILS, UNLESS ALTERNATE THRUST RESTRAINT SYSTEM, AS INDICATED PLANS AND SPECIFICATIONS, IS APPROVED BY THE CITY OF ROCHESTER HILLS DEPARTMENT OF PUBLIC SERVICE.

<u>NATER MAIN MATERIAL NOTES</u>

TEMPORARY CONNECTIONS, WHICH MAY BE MADE FOR CHLORINATING AND FLUSHING PURPOSES, SHALL INCLUDE A TESTABLE DOUBLE CHECK VALVE BACKFLOW PREVENTER WITH CURRENT CERTIFICATION.

- CORPORATION STOPS USED FOR INSERTION INTO MAINS SHALL BE FORD TYPE B-44. ALL STOPS SHALL HAVE BRONZE CAST BODIES, KEYS, STEM WASHERS AND NUTS. INLET THREADS SHALL CONFORM TO THE LATEST VERSION OF AWWA C800.
- ALL DUCTILE IRON PIPE (D.I.P.) WATER MAIN SHALL BE DESIGNED FOR 150 PSI MINIMUM WORKING PRESSURE. A ZINC COATING WITH CLASS 52 MAY BE PROPOSED AND IS SUBJECT TO FINAL
- DECISION FOR APPROVAL BY THE CITY ENGINEER THE DUCTILE IRON PIPE TO BE FURNISHED AND DELIVERED UNDER THIS SPECIFICATION SHALL MEET ALL THE REQUIREMENTS OF THE CURRENT AWWA C151 (ANSI A21.5), EXCEPT AS OTHERWISE
- SPECIFIED HEREIN. PIPE SHALL BE DOUBLE CEMENT-LINED AND SEAL COATED WITH AN APPROVED BITUMINOUS SEAL COAT IN ACCORDANCE WITH AWWA C104 (ANSI A21.4). DUCTILE IRON PIPE SHALL BE CLASS 54 FOR SIZES THREE (3) INCH THROUGH TWENTY (20)
- INCHES SIZE. TWENTY-FOUR (24) INCH AND LARGER SHALL BE CLASS 55 DUCTILE IRON PIPE. PIPES TWENTY-FOUR (24) INCHES AND LARGER IN NOMINAL DIAMETER SHALL MEET ALL THE REQUIREMENTS OF THE CURRENT AWWA C100 FOR DUCTILE IRON WATER PIPE.

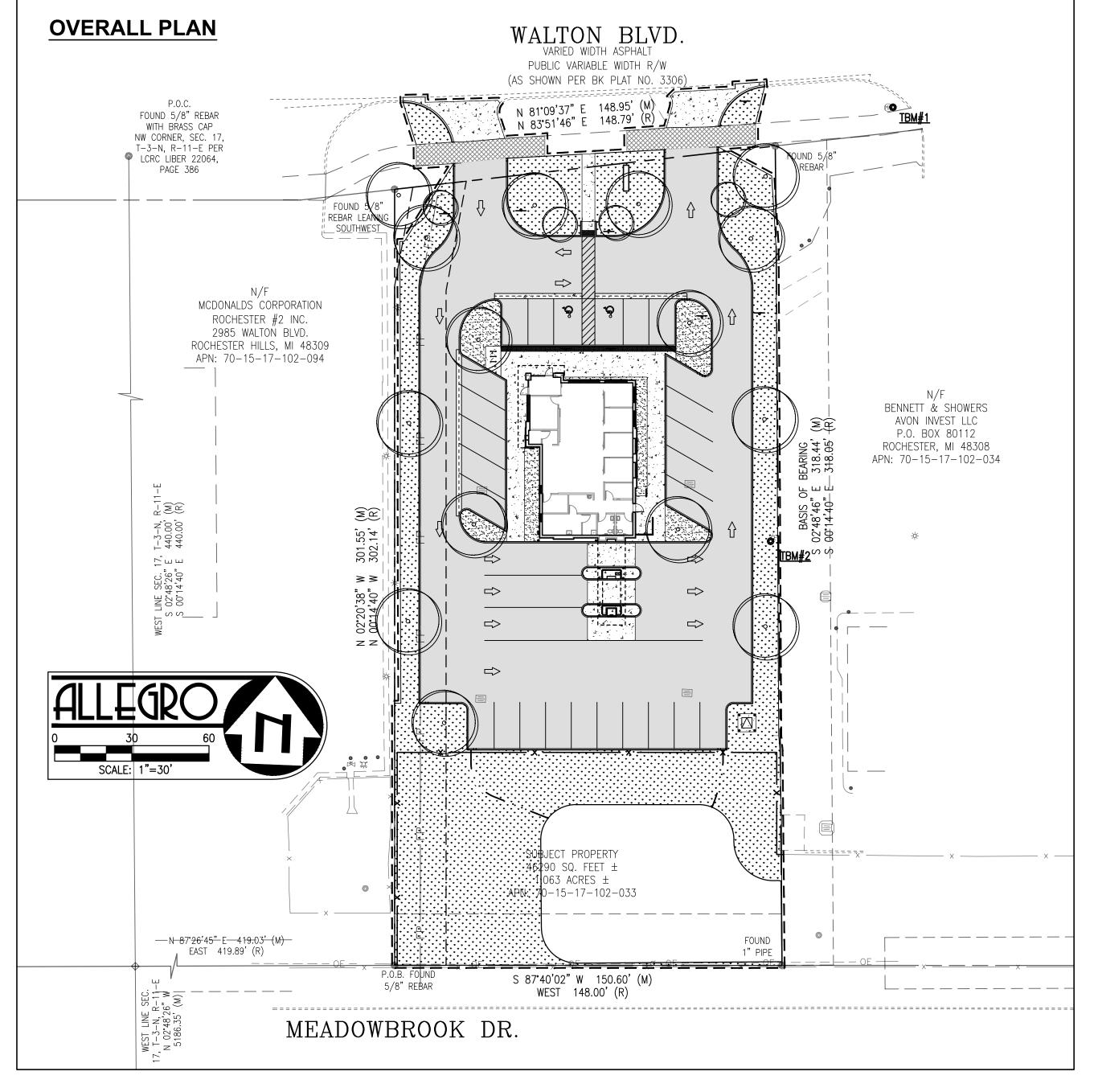
FLANGE JOINTS FOR DUCTILE IRON WATER MAIN SHALL BE IN ACCORDANCE WITH AWWA C110 (ANSI

- MECHANICAL JOINTS FOR DUCTILE IRON WATER MAIN SHALL BE IN ACCORDANCE WITH AWWA C111 (ANSI A21.11)
- A21.10). FITTINGS FOR DUCTILE IRON PIPE SHALL BE DUCTILE IRON AND SHALL MEET REQUIREMENTS OF AWWA C110 (ANSI A21.10) OR AWWA C153 (ANSI A21.53). DUCTILE IRON FITTINGS SHALL BE RATED FOR 350 PSI, PIPE SIZES TWENTY-FOUR (24) INCH DIAMETER AND LESS, AND 250 PSI FOR PIPE SIZES OVER TWENTY-FOUR (24) INCH DIAMETER. DUCTILE IRON FLANGE FITTINGS SHALL
- BE RATED FOR 250 PSI FOR ALL PIPE DIAMETERS. ALL DUCTILE IRON PIPE, FITTINGS AND HYDRANTS SHALL BE ENCASED WITH POLYETHYLENE ENCASEMENT IN ACCORDANCE WITH THE REQUIREMENTS OF A.N.S.I./A.W.W.A. STANDARD SPECIFICATION D1248 AND AWWA C105. POLYETHYLENE TUBE MATERIAL SHALL HAVE A THICKNESS OF .008" (8-MILS). ADHESIVE TAPE SHALL BE A GENERAL PURPOSE ADHESIVE TAPE 2" WIDE AND APPROXIMATELY 10-MILS THICK, SUCH AS SCOTCHRAP. NO.50, POLYKEN NO. 900, OR TAPECOAT

LEGAL DESCRIPTION:

A PARCEL OF LAND LOCATED IN AND BEING A PART OF THE WEST HALF OF THE NORTHWEST QUARTER OF SECTION 17, TOWN 3 NORTH, RANGE 11 EAST, CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN, BEING MORE PARTICULARLY DESCRIBED AS: BEGINNING AT A POINT A DISTANCE OF 440.00 FEET SOUTH OO DEGREES 14 MINUTES 40 SECONDS EAST ALONG THE WEST LINE OF SAID SECTION 17, AND A DISTANCE OF 419.89 FEET DUE EAST OF THE NORTHWEST CORNER OF SAID SECTION 17: THENCE NORTH 00 DEGREES 14 MINUTES 40 SECONDS WEST, 302.14 FEET TO A POINT IN THE SOUTHERLY RIGHT-OF-WAY LINE OF WALTON BOULEVARD: THENCE NORTH 83 DEGREES 51 MINUTES 46 SECONDS EAST, 148.79 FEET ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE OF WALTON BOULEVARD: THENCE SOUTH OO DEGREES 14 MINUTES 40 SECONDS EAST, 318.05 FEET: THENCE DUE WEST. 148.00 FEET TO THE POINT OF BEGINNING. ALONG WITH ITS STORM SEWER PERPETUAL EASEMENT AS RECORDED IN LIBER 6800, PAGES 433, 434, 435, OAKLAND COUNTY RECORDS, TOGETHER WITH THE EASEMENT TO THE FULL USE OF THE WATER RETENTION BASIN. WATER SHED AND EXISTING 42" STORM SEWER WHICH IS INCLUDED AS PART OF THIS

CONVEYANCE FOR THE BENEFIT OF THE PURCHASER AND THEIR ASSIGNS FOREVER.





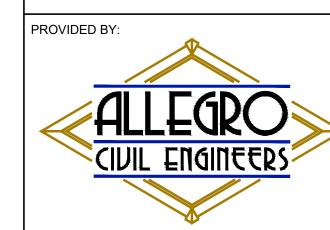
3142 Prospect Avenue Cleveland, OH 44115 new york.

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ALLEGRO CIVIL ENGINEERS 4322 N. LINCOLN AVE. SUITE A CHICAGO, IL 60625 (872) 270-3682

PROFESSIONAL SEAL:



PROPOSED TENANT **IMPROVEMENTS FOR:**

HUNTINGTON NATIONAL BANK **ROCHESTER HILLS**

2977 WALTON BLVD ROCHESTER HILLS, MI 48309

JOB NUMBER: 2021-177-002

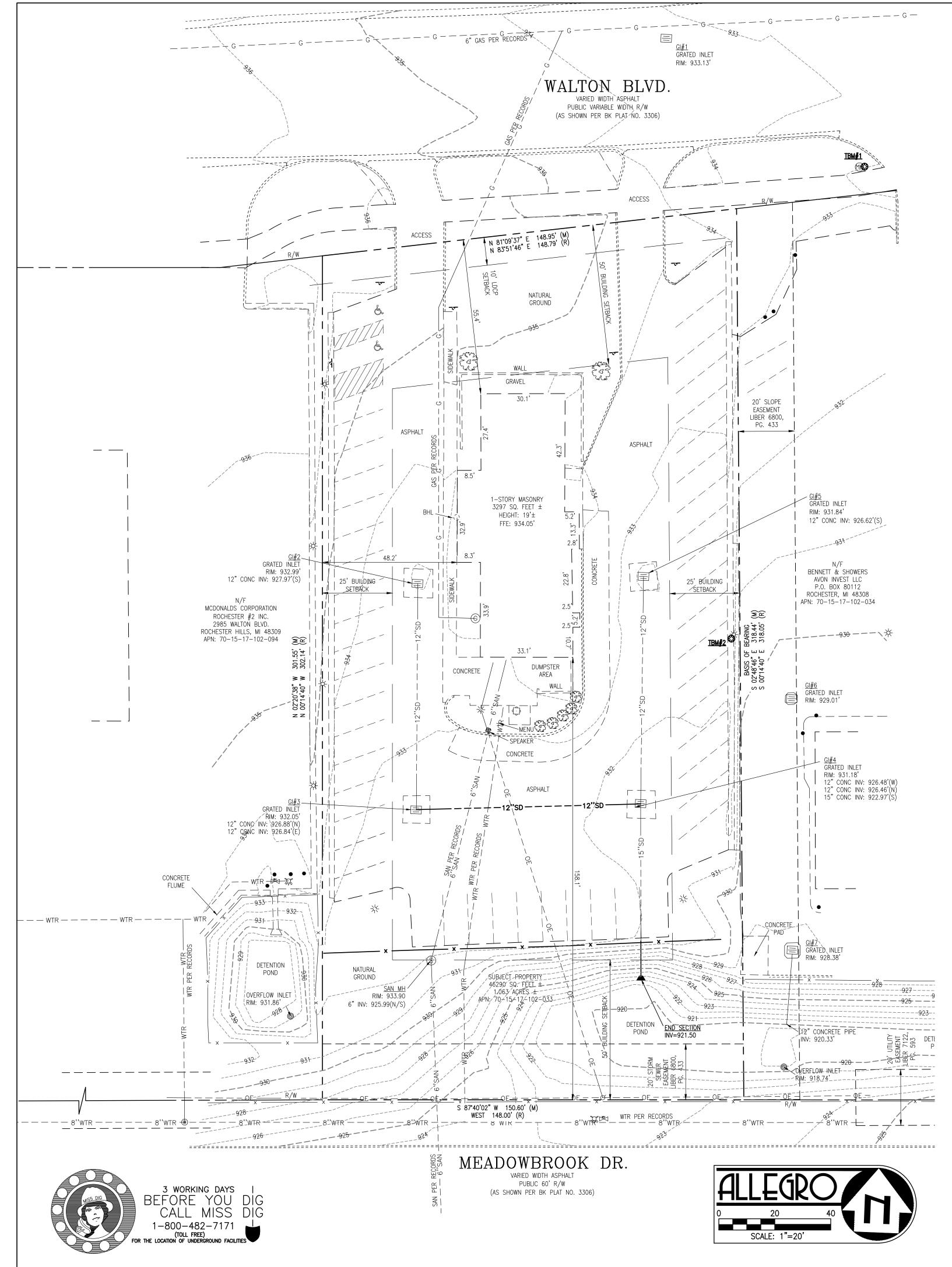
DRAWING RELEASE:

No. Date Description

07.19.2021 | SITE PLAN REVIEW

2	05.04.2022	RESPONSE TO CITY COMMENTS		
3	06.06.2022	RESPONSE TO CITY COMMENTS		
4	08.22.2022	RESPONSE TO CITY COMMENTS		
SHEET	SHEET TITLE:			

OVERALL PLAN, **GENERAL NOTES &** LEGAL DESCRIPTION



- ALTA TOPOGRAPHIC SURVEY PROVIDED BY BLEW & ASSOCIATES, P.A.; REVISED 6/13/2022. BASIS OF BEARING: GRID NORTH PER MICHIGAN STATE PLANE COORDINATE SYSTEM, SOUTHERN ZONE, NAD83-2011, BASED OFF OF THE WEST LINE OF THE SUBJECT PROPERTY BEARING
- SO2'48'46"E PER GPS COORDINATE OBSERVATIONS. ELEVATIONS ESTABLISHED USING MDOT MONUMENT 63659
- N: 431540.17, E: 13424713.73, ELEV: 977.39 TBM#1: SET CHISELED "X" ON RIM OF MANHOLE
 - N: 432375.49, E: 13439236.75, ELEV: 933.05
 - TBM#2: SET CHISELED "X" ON CONCRETE BASE OF LIGHT POLE N: 432206.49, E: 13439197.49, ELEV: 934.81
- ALL EXISTING INFORMATION PRESENTED IN THESE PLANS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR. ANY DISCREPANCIES IN THE PLANS SHALL BE MADE AWARE TO THE ENGINEER PRIOR TO BEGINNING CONSTRUCTION.

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	PROPOSED	LEGEND	EXISTING
J		PROPERTY LINE	
;		EASEMENT LINE	
		APPROXIMATE LIMIT OF DISTURBANCE	
		1-FOOT CONTOUR	9
		5-FOOT CONTOUR	10
		WATER LINE	——————————————————————————————————————
,		SANITARY SEWER LINE	——————————————————————————————————————
<u>.</u>		STORM DRAIN LINE	——————————————————————————————————————
		UNDERGROUND ELECTRIC	——————————————————————————————————————

UNDERGROUND TELECOM	— — — — — UT —
GAS	G
TREE/SHRUB	
· FENCE	x
SIGN	- o-
BOLLARD/POST	•
FIRE HYDRANT	**
WATER METER/VALVE	\SW\
SEWER MANHOLE/CLEANOUT	S
STORM CLEANOUT/CATCH BASIN/END SECTION	
GAS METER/VALVE	G
LIGHT/UTILITY POLE	* a

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PROFESSIONAL SEAL:



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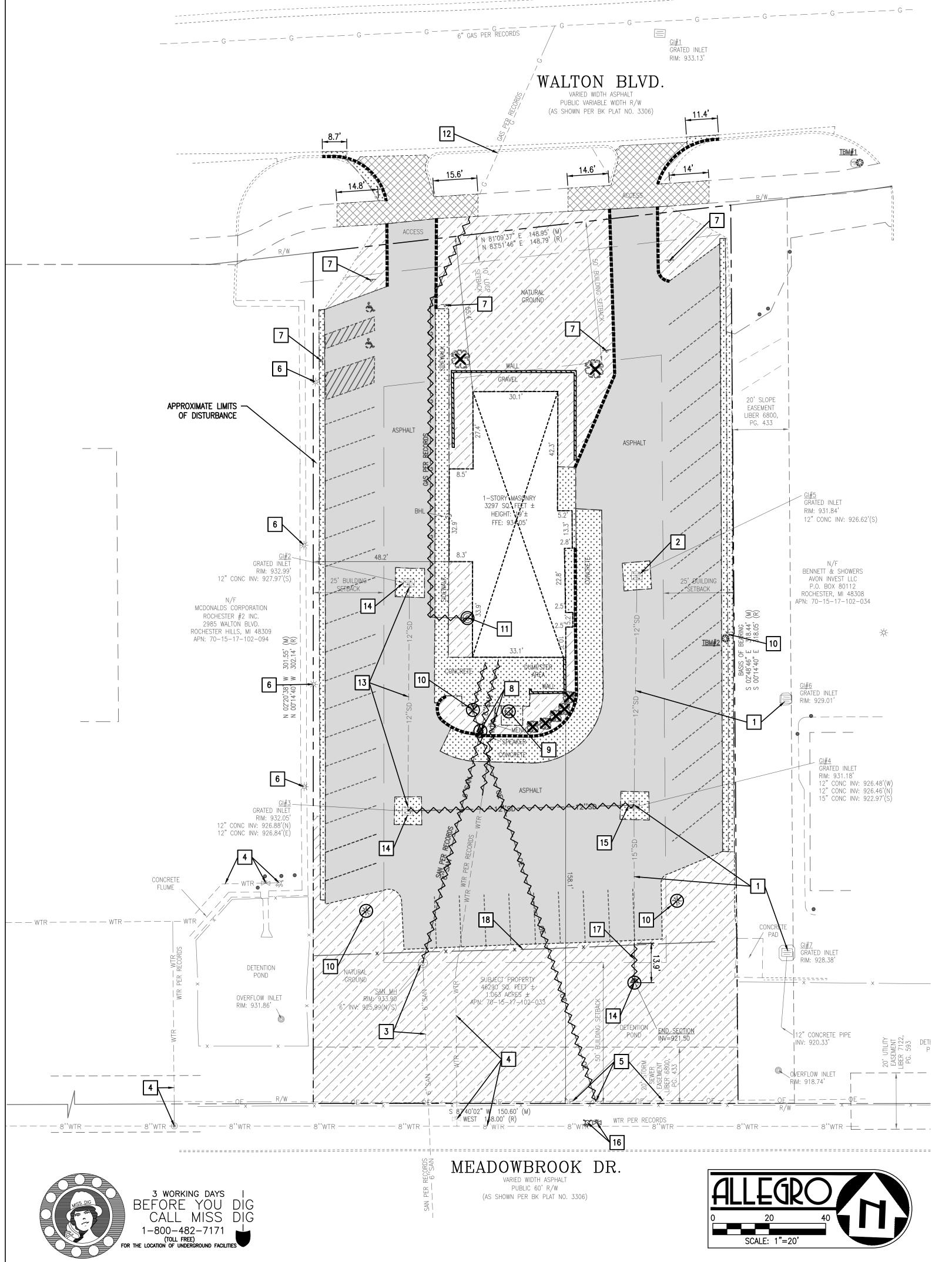
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EXISTING CONDITIONS



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GENERAL NOTES:

- ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST CITY OF ROCHESTER HILLS, MDOT, ROAD COMMISSION OF OAKLAND COUNTY (RCOC), AND STATE OF MICHIGAN STANDARDS AND SPECIFICATIONS.
- ANY EXISTING INFRASTRUCTURE OR SITE ITEMS (ABOVE OR BELOW GRADE, READILY VISIBLE OR NOT) OR PROPERTY DAMAGED AS A RESULT OF CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE APPROPRIATE AGENCY.
- 3. ALL SIGNAGE AND PAINT MARKINGS SHALL COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), RCOC AND MDOT STANDARDS, OR AS OTHERWISE SPECIFIED. INSTALLATION OF SIGNS SHALL BE GOVERNED BY LOCAL CODES.
- THE CONTRACTOR IS RESPONSIBLE TO LOCATE AND PROTECT ALL EXISTING UTILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE UTILITY PROTECTION CENTER AT LEAST THREE DAYS PRIOR TO ANY SITE WORK FOR PROPER IDENTIFICATION OF EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL EXISTING ITEMS AND DIMENSIONS AND REPORT ANY

DEMOLITION NOTES:

CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND/OR PROTECTION OF THE EXISTING ITEMS AS NOTED ON THIS PLAN.

DISCREPANCIES TO THE ENGINEER PRIOR TO BEGINNING CONSTRUCTION.

- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR ANY AND ALL DAMAGES.
- CONTRACTOR IS TO DISPOSE OF ALL MATERIAL RESULTING FROM PREVIOUS AND CURRENT DEMOLITION IN ACCORDANCE WITH ALL LOCAL, STATE, AND/OR FEDERAL LAWS. THE CONTRACTOR IS CAUTIONED TO LOCATE ALL EXISTING UTILITIES AND CONFLICTS. CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS
- BEFORE ANY CONSTRUCTION ACTIVITY IN ORDER TO FIELD VERIFY EXISTING UTILITY INFORMATION. 5. EXISTING OFF-SITE UTILITY LOCATIONS ARE APPROXIMATE AND BASED ON RECORD DRAWINGS
- AS-BUILT INFORMATION. LOCATION OF EXISTING ON-SITE UNDERGROUND UTILITIES HAVE NOT BEEN SURVEYED AND ARE SHOWN BASED ON LOCATIONS OF EXISTING VISIBLE UTILITY STRUCTURES SURVEYED IN THE FIELD. EXACT LOCATIONS OF ALL UTILITIES MUST BE LOCATED IN THE FIELD BY THE CONTRACTOR. PROTECT ALL EXISTING UTILITIES IN PLACE NOT SHOWN TO BE REMOVED. ALL SERVICES TO EXISTING BUILDING TO BE REMOVED AND STUBBED BY CONTRACTOR AT
- CONTRACTOR TO PROTECT EXISTING STREET LIGHTS & POSTS, TRAFFIC SIGNALS & POSTS, TRAFFIC CONTROL DEVICES, SIGNS AND UTILITY BOXES IN THE SIDEWALK; UNLESS OTHERWISE
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING DEMOLITION PERMITS AS REQUIRED FROM THE CITY OF ROCHESTER HILLS, OR ANY OTHER AGENCY HAVING JURISDICTION. CONTRACTOR SHALL FOLLOW ALL JURISDICTIONAL AIR QUALITY AND WASTE/RECYCLING
- REQUIREMENTS. 9. CONTRACTOR TO VERIFY LOCATION, SIZE, AND DEPTH OF ALL EXISTING UTILITIES AND REPORT ANY DISCREPANCIES TO THE OWNER AND ENGINEER PRIOR TO BEGINNING CONSTRUCTION.

PROPOSED	LEGEND	EXISTING
	PROPERTY LINE	
	EASEMENT LINE	
	APPROXIMATE LIMIT OF DISTURBANCE	
	1-FOOT CONTOUR	9
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SEWER MANHOLE/CLEANOUT	S
STORM CLEANOUT/CATCH BASIN/END SECTION	
GAS METER/VALVE	(G)

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DEMOLITION LEGEND

LIGHT/UTILITY POLE

DEMO AND REMOVE BUILDING, INCLUDING FOUNDATIONS.

UNLESS NOTED OTHERWISE.

AC MILL AND OVERLAY

DEMO AND REMOVE CONCRETE PAVEMENT, INCLUDING BASE MATERIAL. PROTECT ALL UNDERGROUND UTILITIES WITHIN THE PAVING LIMITS UNLESS NOTED OTHERWISE. CLEAR AND GRUB EXISTING LANDSCAPE AREA. DO NOT DISTURB TREES, UNLESS OTHERWISE INDICATED. IN ALL EXISTING LANDSCAPED AREAS -

DEMO AND REMOVE ASPHALT PAVEMENT, INCLUDING BASE MATERIAL.

PROTECT ALL UNDERGROUND UTILITIES WITHIN THE PAVING LIMITS

REMOVE WEEDS, ADD SOD AND PLANTINGS AS REQUIRED BY PRE-CONSTRUCTION VISIT AND CONSTRUCTION MANAGER — — — — SAWCUT EXISTING PAVEMENT, PER DETAIL 1 ON SHEET C5.0.

DEMO AND REMOVE EXISTING CURB AND GUTTER, INCLUDING BASE DEMO AND REMOVE EXISTING WALL

DEMO AND REMOVE EXISTING STRUCTURE DEMO AND REMOVE EXISTING UTILITY LINES/PIPES

DEMO AND REMOVE EXISTING TREE OR SHRUB, INCLUDING ROOT BALL

DEMOLTION KEY NOTES

1	EXISTING STORM	DRAIN/STRUCTURE	TO	REMAIN.	PROTECT	IN	PLACE.

- 2 EXISTING STORM CATCH BASIN TO REMAIN. PROTECT IN PLACE. ADJUST TO GRADE PER SHEET C3.1.
- 3 EXISTING SANITARY SEWER PIPE/STRUCTURE TO REMAIN. PROTECT IN PLACE
- 4 EXISTING WATER PIPE/STRUCTURE TO REMAIN. PROTECT IN PLACE
- 5 EXISTING UTILITY POLE/OVERHEAD WIRES TO REMAIN. PROTECT IN PLACE
- 6 EXISTING LIGHT POLE TO REMAIN. PROTECT IN PLACE
- 7 DEMO AND REMOVE EXISTING SIGN
- 8 DEMO AND REMOVE EXISTING SPEAKER BOX AND MENU BOARD
- 9 DEMO AND REMOVE EXISTING TRANSFORMER
- 10 DEMO AND REMOVE EXISTING LIGHT/UTILITY POLE
- 11 DEMO AND REMOVE EXISTING GAS METER
- 12 EXISTING GAS LINE/STRUCTURE TO REMAIN. PROTECT IN PLACE
- 13 EXISTING STORM DRAIN TO BE ABANDONED IN PLACE. SEAL PIPE AT BOTH ENDS
- REMOVE EXISTING FRAME AND GRATE. CAVE—IN STRUCTURE AND FILL WITH AGGREGATE PER GEOTECH REPORT.
- 15 PLUG EXISTING STORM DRAIN PIPE AT WEST PIPE ENTRY
- CUT AND CAP EXISTING FIRE SERVICE CONNECTION TO WATER MAIN. DEMO AND REMOVE EXISTING FIRE HYDRANT ASSEMBLY.
- CUT SPECIFIED LENGTH OF EXISTING 15" SD. SEE STORM PROFILE ON SHEET C3.1 FOR ADDITIONAL DETAILS.
- 18 DEMO AND REMOVE EXISTING FENCE



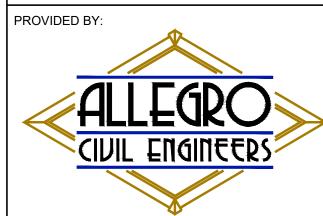
3142 Prospect Avenue Cleveland, OH 44115

530 5th Avenue, 16th Floor New York City, NY 10036

555 West 5th Street, 35th Floor

vocon.partners LLC

Los Angeles, CA 90013



ALLEGRO CIVIL ENGINEERS 4322 N. LINCOLN AVE. SUITE A CHICAGO, IL 60625 (872) 270-3682

PROFESSIONAL SEAL:



PROPOSED TENANT **IMPROVEMENTS FOR:**

HUNTINGTON NATIONAL BANK **ROCHESTER HILLS**

2977 WALTON BLVD ROCHESTER HILLS, MI 48309

JOB NUMBER:	2021-177-002

No. Date

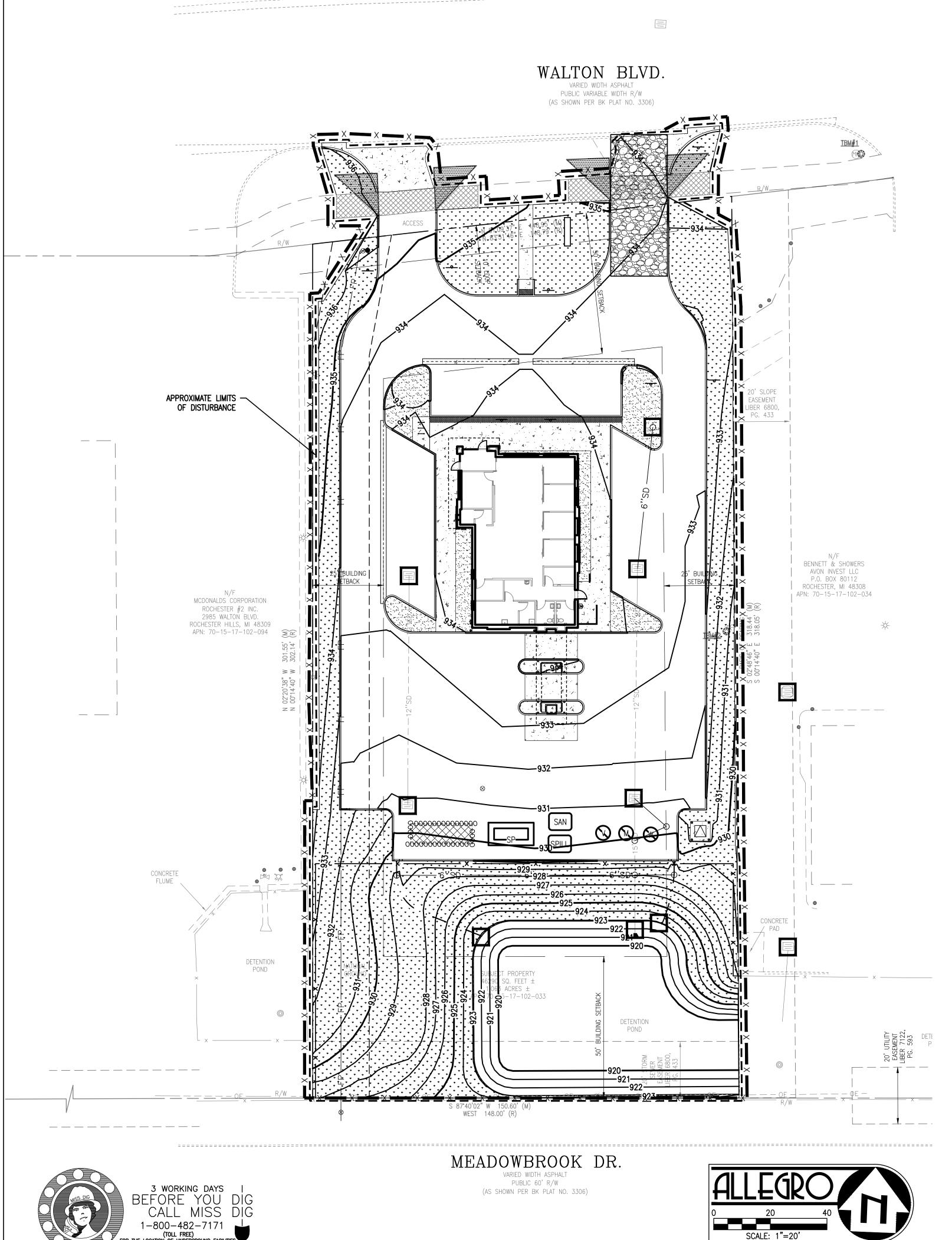
DRAWING RELEASE:

07.19.2021 SITE PLAN REVIEW

	0111012021	
2	05.04.2022	RESPONSE TO CITY COMMENTS
3	06.06.2022	RESPONSE TO CITY COMMENTS
4	08.22.2022	RESPONSE TO CITY COMMENTS

SHEET TITLE:

SITE DEMOLITION **PLAN**



- ALTA TOPOGRAPHIC SURVEY PROVIDED BY BLEW & ASSOCIATES, P.A.; REVISED 06/13/2022. BASIS OF BEARING: GRID NORTH PER MICHIGAN STATE PLANE COORDINATE SYSTEM, SOUTHERN ZONE, NAD83-2011, BASED OFF OF THE WEST LINE OF THE SUBJECT PROPERTY BEARING SO2*48'46"E PER GPS COORDINATE OBSERVATIONS.
- ELEVATIONS ESTABLISHED USING MDOT MONUMENT 63659
- N: 431540.17, E: 13424713.73, ELEV: 977.39 TBM#1: SET CHISELED "X" ON RIM OF MANHOLE
 - N: 432375.49, E: 13439236.75, ELEV: 933.05
 - TBM#2: SET CHISELED "X" ON CONCRETE BASE OF LIGHT POLE N: 432206.49, E: 13439197.49, ELEV: 934.81
- ALL EXISTING INFORMATION PRESENTED IN THESE PLANS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR. ANY DISCREPANCIES IN THE PLANS SHALL BE MADE AWARE TO THE ENGINEER PRIOR TO BEGINNING CONSTRUCTION.

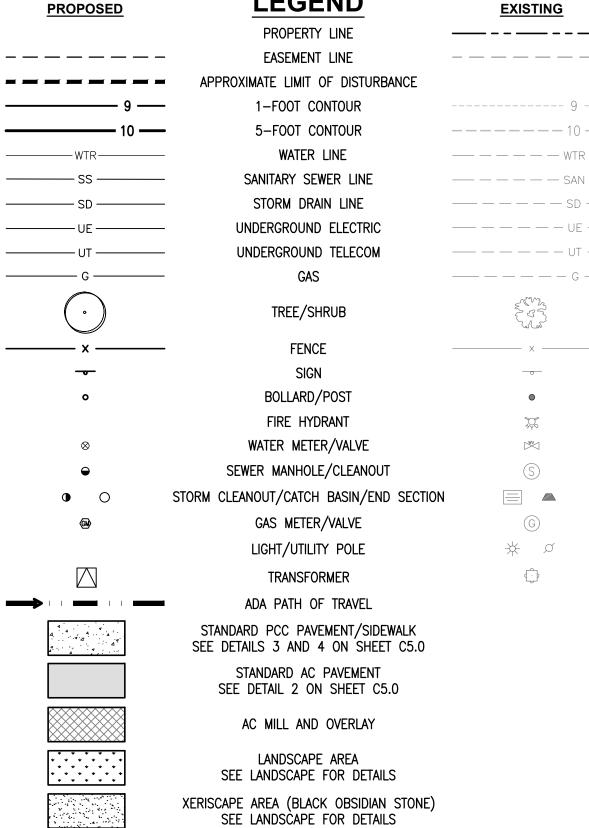
GENERAL NOTES:

- ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST CITY OF ROCHESTER HILLS, MDOT, ROAD COMMISSION OF OAKLAND COUNTY (RCOC), AND STATE OF MICHIGAN STANDARDS AND SPECIFICATIONS.
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- 3. ALL SIGNAGE AND PAINT MARKINGS SHALL COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), RCOC AND MDOT STANDARDS, OR AS OTHERWISE SPECIFIED. INSTALLATION OF SIGNS SHALL BE GOVERNED BY LOCAL CODES. THE CONTRACTOR IS RESPONSIBLE TO LOCATE AND PROTECT ALL EXISTING UTILITIES DURING
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ROCESTER HILLS EROSION CONTROL NOTES:

DISCREPANCIES TO THE ENGINEER PRIOR TO BEGINNING CONSTRUCTION.

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- ALL TEMPORARY AND PERMANENT (POST CONSTRUCTION) SESC MEASURES SHALL CONFORM TO THE CITY OF ROCHESTER HILLS CURRENT MS4 PERMIT. ANY CONFLICT BETWEEN THESE STANDARDS AND THE MS4 PERMIT, THE PERMIT'S CONDITIONS SHALL TAKE PRECEDENCE. DAILY INSPECTIONS SHALL BE MADE BY THE CONTRACTOR FOR EFFECTIVENESS OF EROSION
- AND SEDIMENTATION CONTROL MEASURES, AND ANY NECESSARY REPAIRS SHALL BE PERFORMED WITHOUT DELAY.
- ANY SEDIMENTATION FROM WORK ON THIS SITE SHALL BE CONTAINED ON THE SITE AND NOT ALLOWED TO COLLECT ON ANY OFF-SITE AREAS OR IN WATERWAYS.
- CONTRACTOR SHALL APPLY TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES WHEN REQUIRED AND AS DIRECTED ON THESE PLANS. TEMPORARY MEASURES SHALL BE REMOVED AS SOON AS PERMANENT STABILIZATION OF SLOPES, DITCHES, AND OTHER EARTH CHANGES HAVE BEEN ACCOMPLISHED PER OAKLAND COUNTY WATER RESOURCES COMMISSIONER'S STANDARDS. THIS WOULD INCLUDE TEMPORARY SEDIMENTATION PONDS AND TEMPORARY SO2 FILTERS.
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- FAILURE TO COMPLY WITH APPROVED SOIL EROSION AND SEDIMENTATION MEASURES MAY RESULT IN WORK STOPPAGE BY APPROPRIATE AUTHORITY.
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CONSTRUCTION STAGING LEGEND

PERIMETER BARRIER. SEE DETAIL 1 ON SHEET C5.2.

STOCKPILE MANAGEMENT STAGING AREA. CONTRACTOR TO LOCATE AS PROJECT CONSTRUCTION REQUIRES.

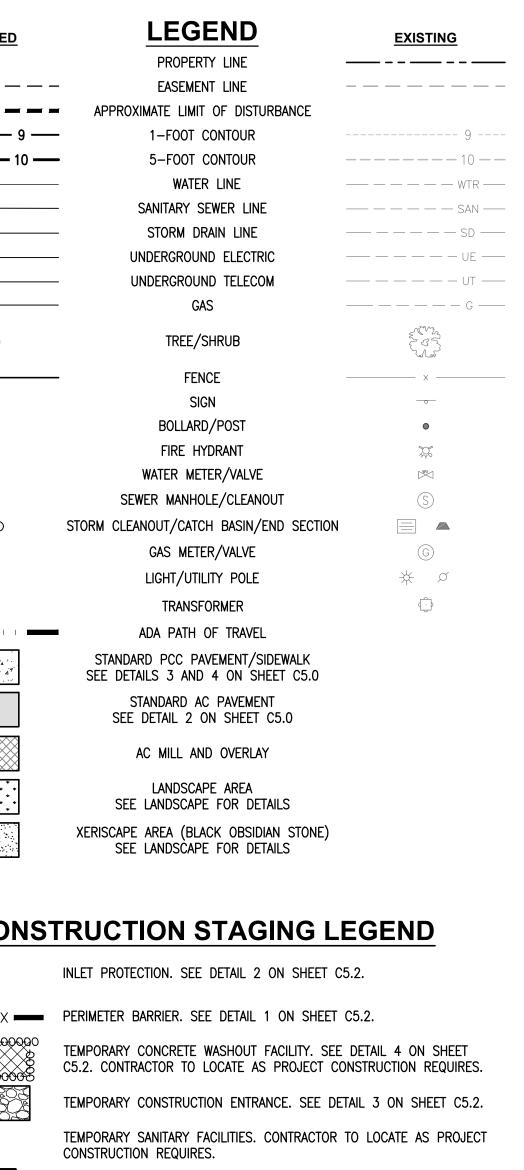
REQUIRES. MATERIAL DELIVERY AND STORAGE STAGING AREA. CONTRACTOR TO

SPILL PREVENTION MATERIALS STAGING AREA. CONTRACTOR TO LOCATE AS PROJECT CONSTRUCTION REQUIRES.

VEHICLE AND EQUIPMENT CLEANING, FUELING, AND MAINTENANCE STAGING AREA. CONTRACTOR TO LOCATE AS PROJECT CONSTRUCTION

LOCATE AS PROJECT CONSTRUCTION REQUIRES.

WASTE STORAGE AREA. CONTRACTOR TO LOCATE AS PROJECT CONSTRUCTION REQUIRES.



IMPROVEMENTS FOR:

PROPOSED TENANT

HAHN

ENGINEER

ALLEGRO CIVIL ENGINEERS 4322 N. LINCOLN AVE. SUITE A

CHICAGO, IL 60625

(872) 270-3682

PROFESSIONAL SEAL:

vocon.

PROVIDED BY:

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Cleveland, OH 44115

530 5th Avenue, 16th Floor

555 West 5th Street, 35th Floor

New York City, NY 10036

Los Angeles, CA 90013

vocon.partners LLC

new york.

HUNTINGTON NATIONAL BANK **ROCHESTER HILLS**

2977 WALTON BLVD ROCHESTER HILLS, MI 48309

Description

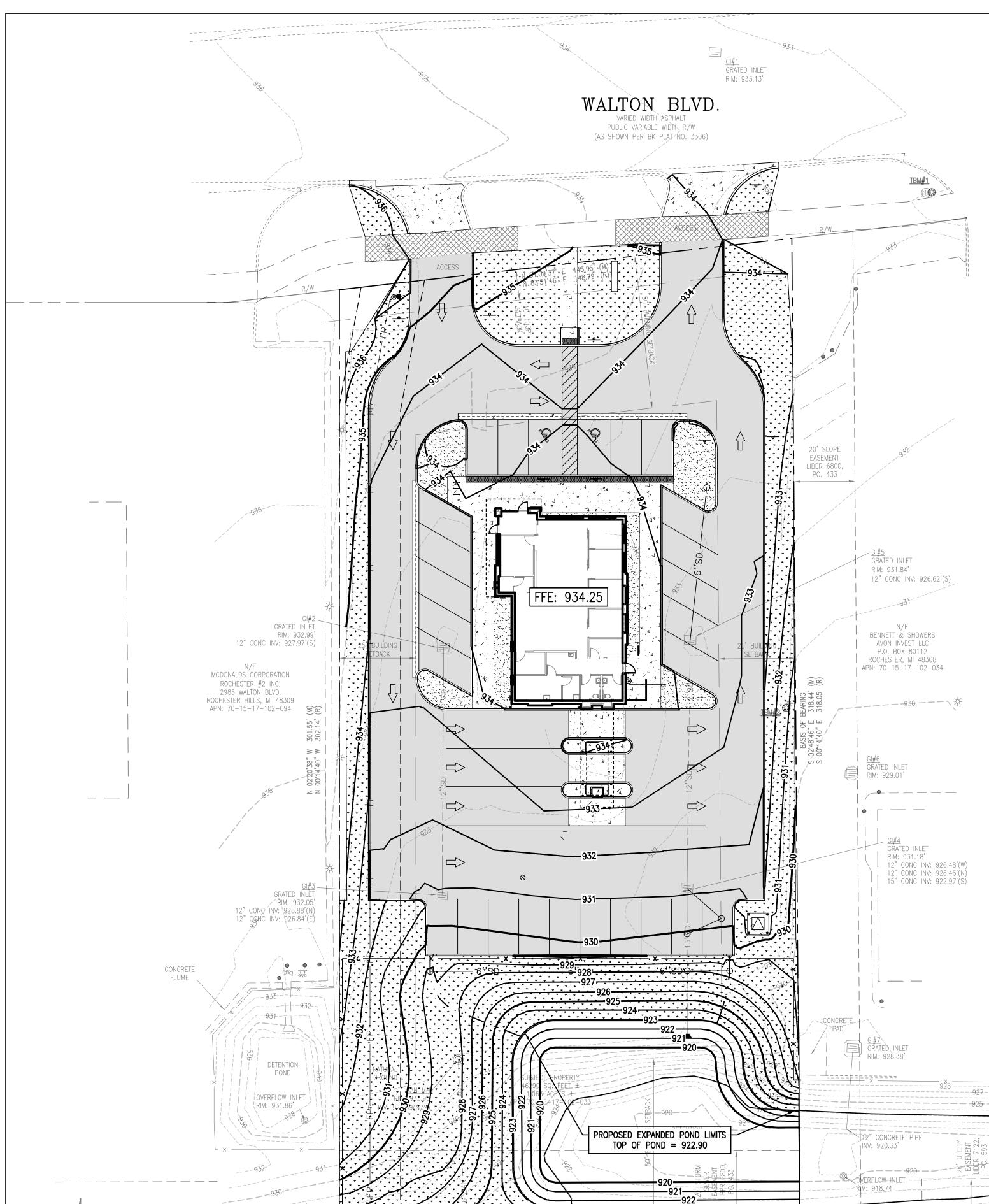
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07.19.2021 SITE PLAN REVIEW 05.04.2022 | RESPONSE TO CITY COMMENTS 06.06.2022 RESPONSE TO CITY COMMENTS 08.22.2022 RESPONSE TO CITY COMMENTS SHEET TITLE: CONSTRUCTION

SHEET NUMBER:

STAGING PLAN



S 87°40'02" W 150.60' WEST 148.00' (R)

3 WORKING DAYS

1-800-482-7171

BEFORE YOU DIG

X

MEADOWBROOK DR.

PUBLIC 60' R/W

(AS SHOWN PER BK PLAT NO. 3306)

SURVEY NOTES:

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ACCESSIBILITY NOTES:

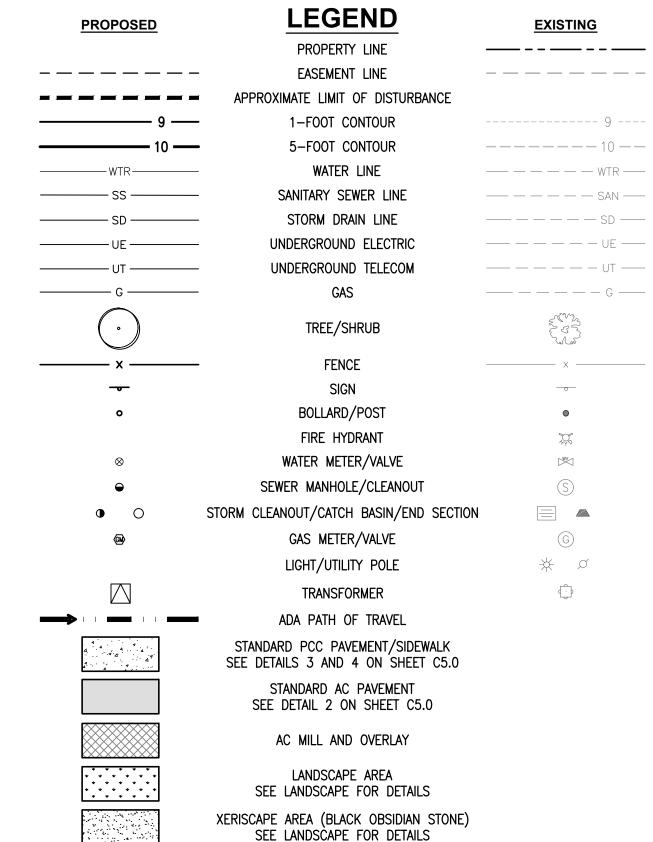
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- RAMPS SHALL NOT EXCEED A RUNNING SLOPE OF 1:12 (8.33%).

DISCREPANCIES TO THE ENGINEER PRIOR TO BEGINNING CONSTRUCTION.

- RAMPS ARE DEFINED AS ANY WALKWAY BETWEEN SLOPES 1:20 (5%) AND 1:12 (8.33%) AND SHALL HAVE A MINIMUM WIDTH OF 4 FEET AND A MAXIMUM CROSS-SLOPE OF 2%. RAMPS EXCEEDING 30 INCHES VERTICAL CHANGE SHALL HAVE INTERMEDIATE (2% MAX SLOPE) LANDINGS HAVING A MINIMUM LENGTH IN THE DIRECTION OF TRAVEL OF 60 INCHES. BOTTOM LANDINGS AT CHANGES IN RAMP DIRECTION SHALL HAVE A MINIMUM LENGTH OF 72 INCHES.
- MAXIMUM CROSS-SLOPE ON ANY WALK OR RAMPS SHALL BE 2%. ALL ACCESSIBLE PARKING SPACES AND LOADING ZONES SHALL HAVE A MAXIMUM SLOPE OF 2% IN ANY DIRECTION.
- 5. ALL WALKS SHALL HAVE A MINIMUM 4 FOOT CLEAR WIDTH FOR ACCESSIBLE CONFORMANCE.

POND VOLUME DATA				
	STORAGE VOLUME PROVIDED (CF)			
EX. POND (TOTAL)	14,537			
EX. POND (OFF-SITE AREAS TO REMAIN)	7,758			
EX. POND (ON-SITE AREA, TO BE REVISED)	6,779			
PROPOSED POND (ON-SITE REVISED AREA)	12,841			
PROPOSED POND (TOTAL)	20,599			
NET CHANGE TO POND	+6,062			

EXISTING POND LIMITS
TOP OF POND = 922.90





3142 Prospect Avenue Cleveland, OH 44115

new york.

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PROVIDED BY:

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PROFESSIONAL SEAL:



PROPOSED TENANT **IMPROVEMENTS FOR:**

HUNTINGTON NATIONAL BANK ROCHESTER HILLS

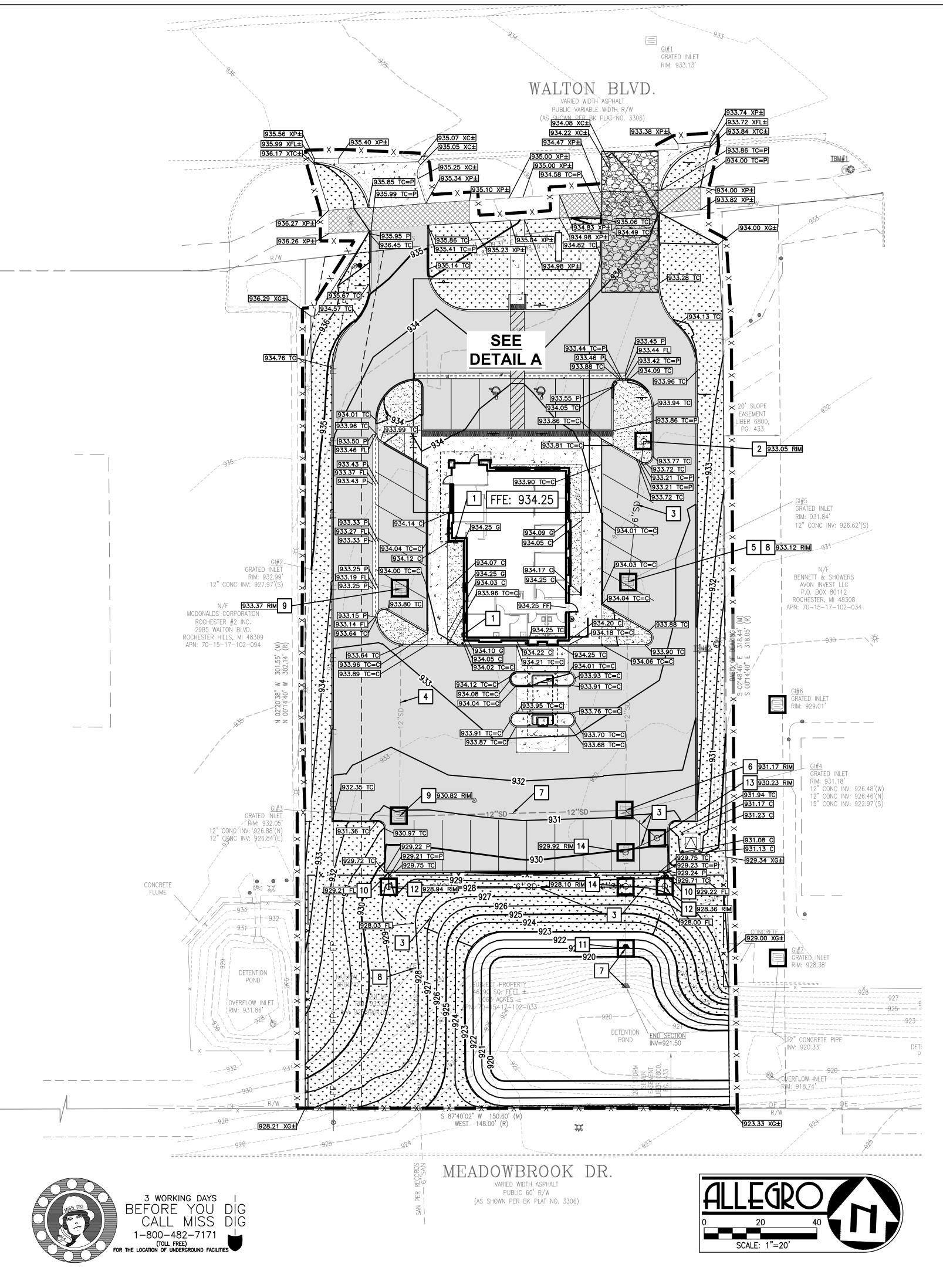
2977 WALTON BLVD ROCHESTER HILLS, MI 48309

JOB NUMBER: 2021-177-002

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SHEET TITLE:					

OVERALL GRADING PLAN



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ACCESSIBILITY NOTES:

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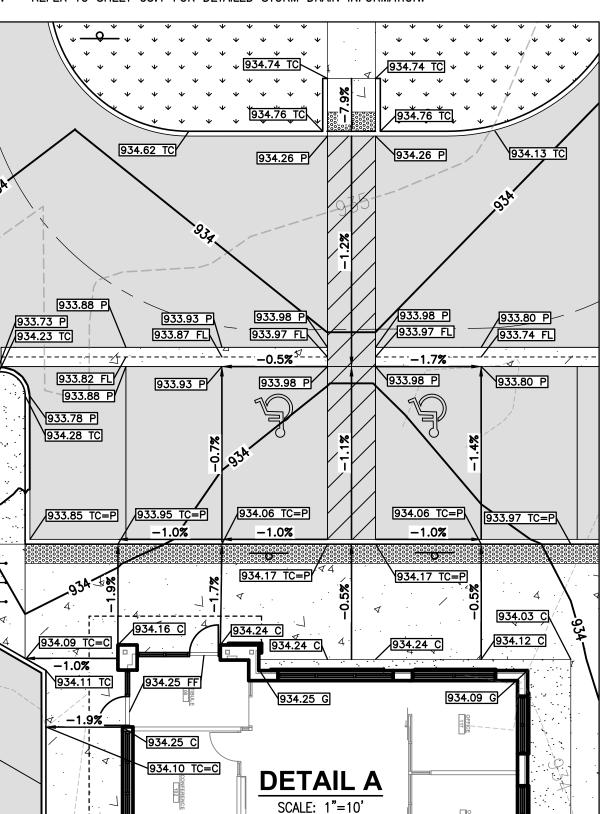
ROCESTER HILLS EROSION CONTROL NOTES:

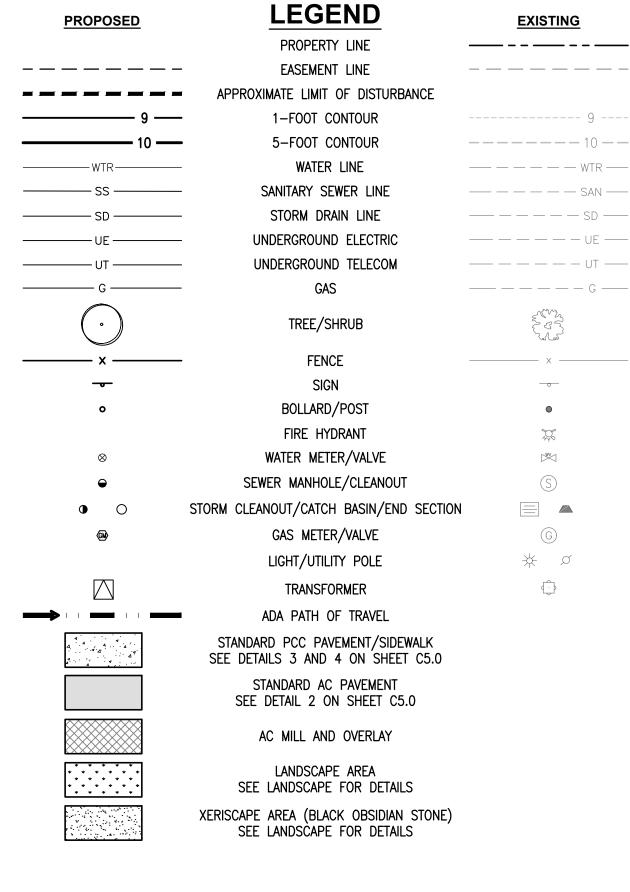
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GRADING NOTES:

- ALL GRADE BREAKS SHALL BE CONSTRUCTED AS A VERTICAL CURVE TO AVOID ANY DEFINED UNLESS OTHERWISE NOTED, PAVEMENT ELEVATION (P) IS 6" BELOW THE TOP OF CURB (TC)
- REFER TO SHEET C3.1 FOR DETAILED STORM DRAIN INFORMATION.





SPOT GRADING LEGEND

90.00 X--INDICATES ELEVATION TO MATCH EXISTING ITEM INDICATES ELEVATION AT TOP OF CURB 90.00 G INDICATES ELEVATION AT FINISHED GROUND 90.00 C INDICATES ELEVATION AT TOP OF CONCRETE INDICATES FLOWLINE ELEVATION OF PIPE, SWALE, OR GUTTER 90.00 FL 90.00 RIM INDICATES RIM ELEVATION OF UTILITY INDICATES ELEVATION AT TOP OF ASPHALT PAVEMENT

INDICATES TOP OF CURB EQUAL TO CONCRETE SIDEWALK ELEVATION

DRAINAGE ARROW AND PROPOSED SLOPE

EROSION CONTROL LEGEND

INLET PROTECTION. SEE DETAIL 2 ON SHEET C5.2.

PERIMETER BARRIER. SEE DETAIL 1 ON SHEET C5.2.

1.5%

TEMPORARY CONCRETE WASHOUT FACILITY. SEE DETAIL 4 ON SHEET C5.2. CONTRACTOR TO LOCATE AS PROJECT CONSTRUCTION REQUIRES.

INDICATES TOP OF CURB EQUAL TO ASPHALT PAVEMENT ELEVATION

TEMPORARY CONSTRUCTION ENTRANCE. SEE DETAIL 3 ON SHEET C5.2.

GRADING PLAN KEY NOTES

PROPOSED BUILDING DOWNSPOUT CONNECTION TO SPLASH AT GRADE. VELOCITY DISSIPATION MULCH BLANKET, PER MDOT STANDARD DWG E&S-33-A

PROPOSED YARD DRAIN WITH BEEHIVE GRATE, PER DETAIL 7 ON SHEET C5.2. SEE SHEET C3.1 FOR RIM AND INVERTS.

3 PROPOSED PVC STORM DRAINPIPE.

4 PLUG AND ABANDON EXISTING STORM DRAIN IN PLACE.

5 CONNECT TO EXISTING STORM STRUCTURE. SEE SHEET C3.1 FOR INVERTS.

ADD WEIR WALL TO EXISTING STORM STRUCTURE. SEE SHEET C3.1 FOR ELEVATIONS.

7 DEMO AND REMOVE EXISTING LENGTH OF STORM DRAIN PIPING.

8 ADJUST EXISTING STRUCTURE TO SEPTEMBER 10 ADJUST EXISTING STRUCTURE TO GRADE, PER DETAIL 5 ON SHEET C5.3. SEE SHEET C3.1

REMOVE EXISTING FRAME AND GRATE. CAVE-IN STRUCTURE AND FILL WITH AGGREGATE PER GEOTECH REPORT.

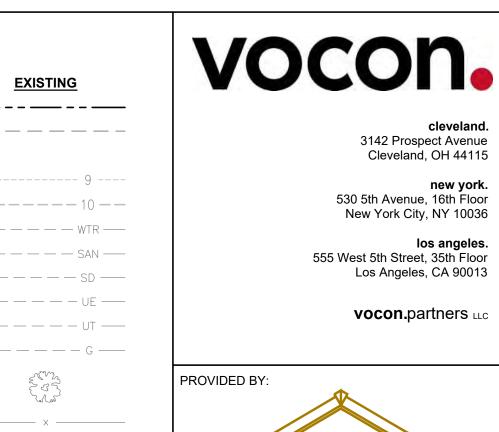
10 PROPOSED CURB CUT FOR STORMWATER CONVEYANCE, PER DETAIL 6 ON SHEET C5.0.

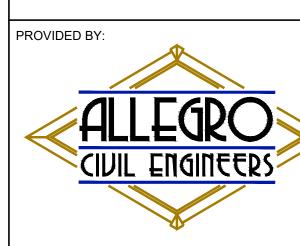
11 PROPOSED STORM END SECTION, PER DETAIL 1 ON SHEET C5.5.

OFF-LINE STORMWATER TREATMENT CONTECH STORMFILTER, PER DETAIL 5 ON SHEET C5.4. REPLACE SOLID LID WITH BEEHIVE GRATE, PER DETAIL 7 ON SHEET C5.2.

OFF-LINE STORMWATER TREATMENT CONTECH STORMFILTER, PER DETAIL 5 ON SHEET

PROPOSED STORM MANHOLE JUNCTION STRUCTURE, PER DETAIL 1 ON SHEET C5.5. SEE SHEET C3.1 FOR INVERT ELEVATIONS.





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PROFESSIONAL SEAL:



PROPOSED TENANT **IMPROVEMENTS FOR:**

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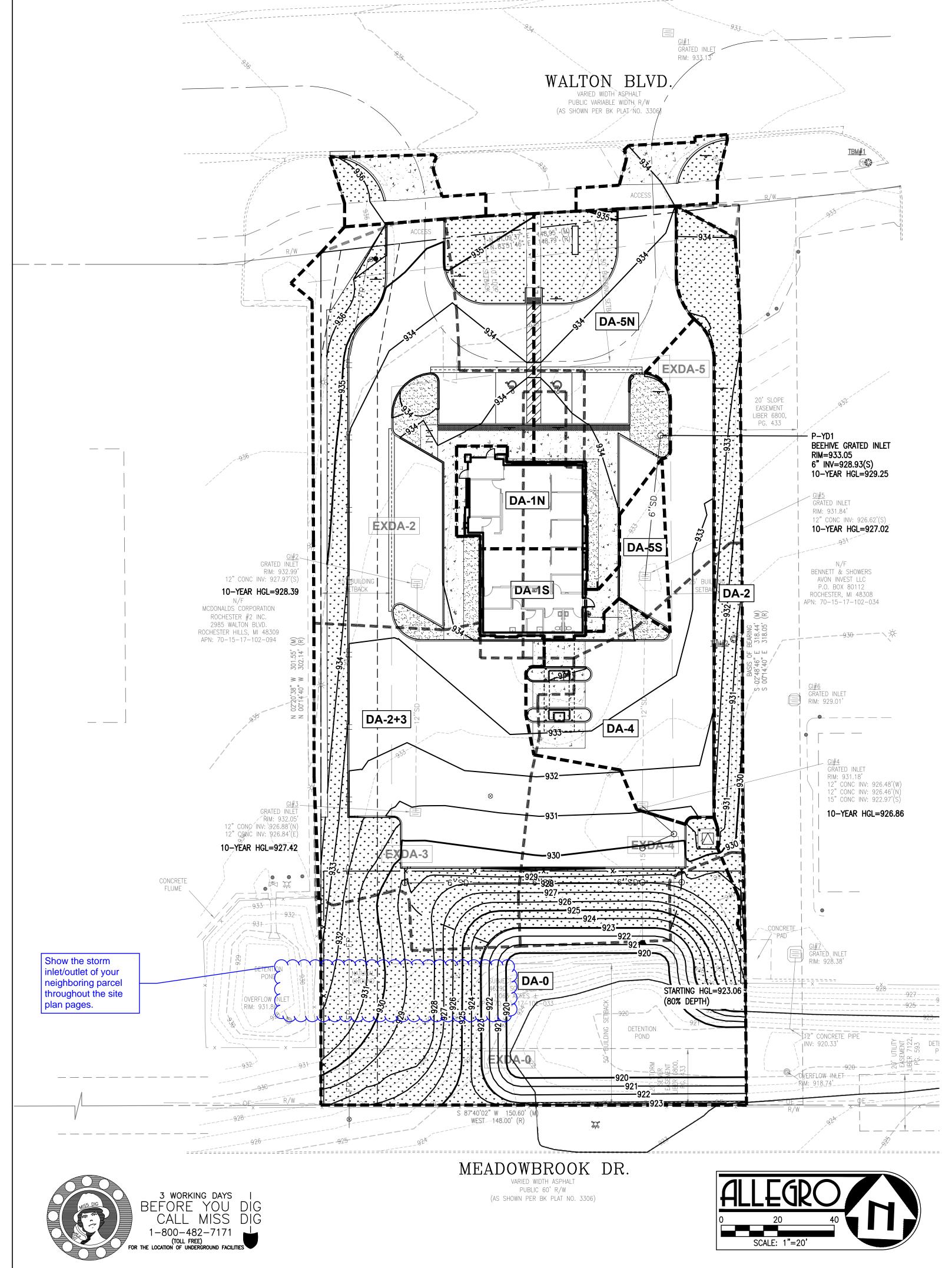
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SHEET TITLE:

DETAILED GRADING, SOIL **EROSION CONTROL &** TREE PROTECTION FENCING PLAN



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- CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE UTILITY PROTECTION CENTER AT LEAST THREE DAYS PRIOR TO ANY SITE WORK FOR PROPER IDENTIFICATION OF EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL EXISTING ITEMS AND DIMENSIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO BEGINNING CONSTRUCTION.

SEE PAGE 4-24 OF ENGINEERING STANDARDS REGARDING MANUFACTURED TREATMENT DEVICES.

STORMWATER DESIGN CRITERIA:

- 10-YEAR HGL 1' BELOW RIM: MET
- HGL START AT HIGHER OF 80% FULL OR POND HWL: APPLIED
- n=0.013 FOR PIPE FLOW: APPLIED
- $WQ_{VOLUME} = 1815 \times A \times C = 1815 \times 1.03 \times 0.65 = 1,215 \text{ CFS}$
- $WQ_{FLOW} = \frac{0.5 \text{ I/N}}{HR} \times \frac{1 \text{ FT}}{12 \text{ I/N}} \times 44,650 \text{ FT}^2 \times \frac{1 \text{ HR}}{3600 \text{ SEC}} = 0.52 \text{ CFS}$

EXISTING SITE WATERSHEDS								
WATERSHED	TOTAL DRAINAGE	IMPERVIOUS	PERCENT	С	Тс	1,0	Q ₁₀ (CFS)	
WATERSHED	AREA	PERVIOUS	PERCENT		(MINUTES)	(IN/HR)	(CFS)	
EXDA-0	9,812 SF	0 SF	0%	0.25	15	4 775	0.25	
EXDA-0	9,012 35	9,812 SF	100%	0.25	15	4.375	0.25	
	9,733 SF	7,770 SF	80%		15	4.375	0.82	
EXDA-2		1,296 SF	13%	0.85				
		667 SF	7% (GRAVEL)					
EXDA-3	8,001 SF	7,277 SF	91%	0.89	15	4.375	0.70	
EXDA-3	0,001 35	724 SF	9%	0.09				
	7,893 SF	7,457 SF	94%	0.91	4.5	4 775	0.72	
EXDA-4		436 SF	6%	0.91	15	4.375	0.72	
	12.064 SE	7,851 SF	65%	0.71	4.5	4 775	0.87	
EXDA-5	12,064 SF	4,213 SF	35%	0.71	15	4.375	0.67	

	PROPOSED SITE WATERSHEDS							
WATERSHED	TOTAL DRAINAGE	IMPERVIOUS	PERCENT	С	Тс	i ₁₀	Q ₁₀	
WAIEKSHED	AREA	PERVIOUS	PERCENT		(MINUTES)	(IN/HR)	(CFS)	
DA-0	8,370 SF	0 SF	0%	0.25	15	4.375	0.21	
DA-0	0,570 31	8,370 SF	100%	0.23	13	4.575	0.21	
DA-1N	1,470 SF	1,470 SF	100%	0.95	15	4.375	0.12	
DA-IN	1,770 31	0 SF	0%	0.93			0.12	
DA-1S	1,171 SF	1,171 SF	100%	0.95	15	4.375	0.12	
DA-13		0 SF	0%	0.93			0.12	
DA-2+3	22,267 SF	12,849 SF	58%	0.66	15	4.375	1.48	
DA-ZT3		9,418 SF	42%	0.00				
DA-4	5,736 SF	5,574 SF	97%	0.93	15	4.375	0.57	
DA-4	3,730 31	162 SF	3%	0.93	13	4.575	0.53	
DA-5N	4, 873 SF	3,472 SF	71%	0.75	15	4.375	0.36	
DA-3N	4,0/3 Sr	1,401 SF	29%	0.73	15	4.575	0.50	
DA-5S	710 SF	710 SF	100%	0.95	15	4.375	0.08	
	/ 10 31	0 SF	0%	0.33	15	4.575	0.00	

C GRASS = 0.25C GRAVEL = 0.85C IMPERVIOUS = 0.95

SOIL TYPE B (CAPAC SANDY LOAM, 0-4% SLOPE)

	IDF DATA:						
0.7	0.75 TO HIGH RANGE FROM LOW RANGE						
	1-YEAR	2-YEAR	5-YEAR	10-YEAR	25-YEAR	50-YEAR	100-YEAR
5 MIN	4.12	4.92	6.24	7.35	9.00	10.30	11.64
15 MIN	2.46	2.93	3.71	4.375	5.38	6.13	6.95
30 MIN	1.69	2.02	2.57	3.04	3.74	4.26	4.83
60 MIN	1.08	1.29	1.66	1.97	2.46	2.84	3.22

* 1.67 gpm/sf [1.08 L/s/m²] SPECIFIC FLOW RATE IS APPROVED WITH PHOSPHOSORB® (PSORB) MEDIA ONLY

PROPOSED	LEGEND	EXISTING
	PROPERTY LINE -	
	EASEMENT LINE -	
	APPROXIMATE LIMIT OF DISTURBANCE	
9	- 1-FOOT CONTOUR	9
10	5 —FOOT CONTOUR —	10
WTR	— WATER LINE —	— — — — WTR —
SS	- SANITARY SEWER LINE -	— — — — SAN —
	- STORM DRAIN LINE -	— — — — SD —
————UE ———	UNDERGROUND ELECTRIC	— — — — UE —
———UT —	UNDERGROUND TELECOM	— — — — — UT —
——— G ———	– GAS –	— — — — G —
\bigcirc	TREE/SHRUB	
x	- FENCE -	×
	SIGN	
•	BOLLARD/POST	•
	FIRE HYDRANT	**
\otimes	WATER METER/VALVE	
•	SEWER MANHOLE/CLEANOUT	S
• 0	STORM CLEANOUT/CATCH BASIN/END SECTION	
(GM)	GAS METER/VALVE	G
	LIGHT/UTILITY POLE	* ¤
	TRANSFORMER	
	ADA PATH OF TRAVEL	
	STANDARD PCC PAVEMENT/SIDEWALK SEE DETAILS 3 AND 4 ON SHEET C5.0	
	STANDARD AC PAVEMENT SEE DETAIL 2 ON SHEET C5.0	
	AC MILL AND OVERLAY	
* * * * * * * * * * * * * * * * * * * *	LANDSCAPE AREA SEE LANDSCAPE FOR DETAILS	
	XERISCAPE AREA (BLACK OBSIDIAN STONE) SEE LANDSCAPE FOR DETAILS	
	■ DRAINAGE MANAGEMENT AREA BOUNDARY ■	
DA-0	DRAINAGE MANAGEMENT AREA DESIGNATION	EXDA-0

POND VOLUME DATA		
	STORAGE VOLUME PROVIDED (CF)	
EX. POND (TOTAL)	14,537	
EX. POND (OFF-SITE AREAS TO REMAIN)	7,758	
EX. POND (ON-SITE AREA, TO BE REVISED)	6,779	
PROPOSED POND (ON-SITE REVISED AREA)	12,841	
PROPOSED POND (TOTAL)	20,599	
NET CHANGE TO POND	+6,062	

 Q_{10} PRE = 3.36 CFS (NO DETENTION/NO WQ); EXDA-0+EXDA-2+EXDA-3+EXDA-4+EX-DA-5 Q_{10} POSTrestricted = 0.04 CFS; DA-1N+DA-1S+DA-2+3+DA-4+DA-5N+DA-5S - DIRECTED TO POND Q_{10} POSTtotal = 0.04 CFS << Q_{10} PRE = 3.36 CFS STORAGE PROVIDED = 3,398 CF; 10-YR STORAGE ATTAINED = 2,609 CF

OVERFLOW WEIR ELEVATION PROVIDED = 930.95; 100-YR ELEVATION ATTAINED = 930.95 (OVERFLOW)

POND PERFORMANCE DATA					
STORM	WATER ELEVATION (FT)	STORAGE REALIZED (CF)	RELEASE RATE (CFS)	PRE-PROJECT RELEASE RATE (CFS)	REDUCTION (%)
1-	930.03	1,436	0.038	1.937	98
2-	930.16	1,728	0.039	2.315	98
5-	930.39	2,201	0.039	2.928	99
10-	930.58	2,609	0.040	3.455	99
25-	930.86	3,198	0.040	4.216	99
50-	OVERTOP	3,397	1.7010	4.773	65
100-	OVERTOP	3,397	1.9240	5.408	65

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— — G ——	
3	PROVIDED BY:
	ΔΙΙΕίΟ
	CIVIL ENGINEERS
Ø	ALLEGRO CIVIL ENGINEERS 4322 N. LINCOLN AVE. SUITE A CHICAGO, IL 60625

PROFESSIONAL SEAL:

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PROPOSED TENANT **IMPROVEMENTS FOR:**

HUNTINGTON NATIONAL BANK **ROCHESTER HILLS**

2977 WALTON BLVD ROCHESTER HILLS, MI 48309

JOB NUMBER: 2021-177-002 DRAWING BELEASE.

DRAWING RELEASE:		
No.	Date	Description
	07.19.2021	SITE PLAN REVIEW
2	05.04.2022	RESPONSE TO CITY COMMENTS
3	06.06.2022	RESPONSE TO CITY COMMENTS
4	08.22.2022	RESPONSE TO CITY COMMENTS

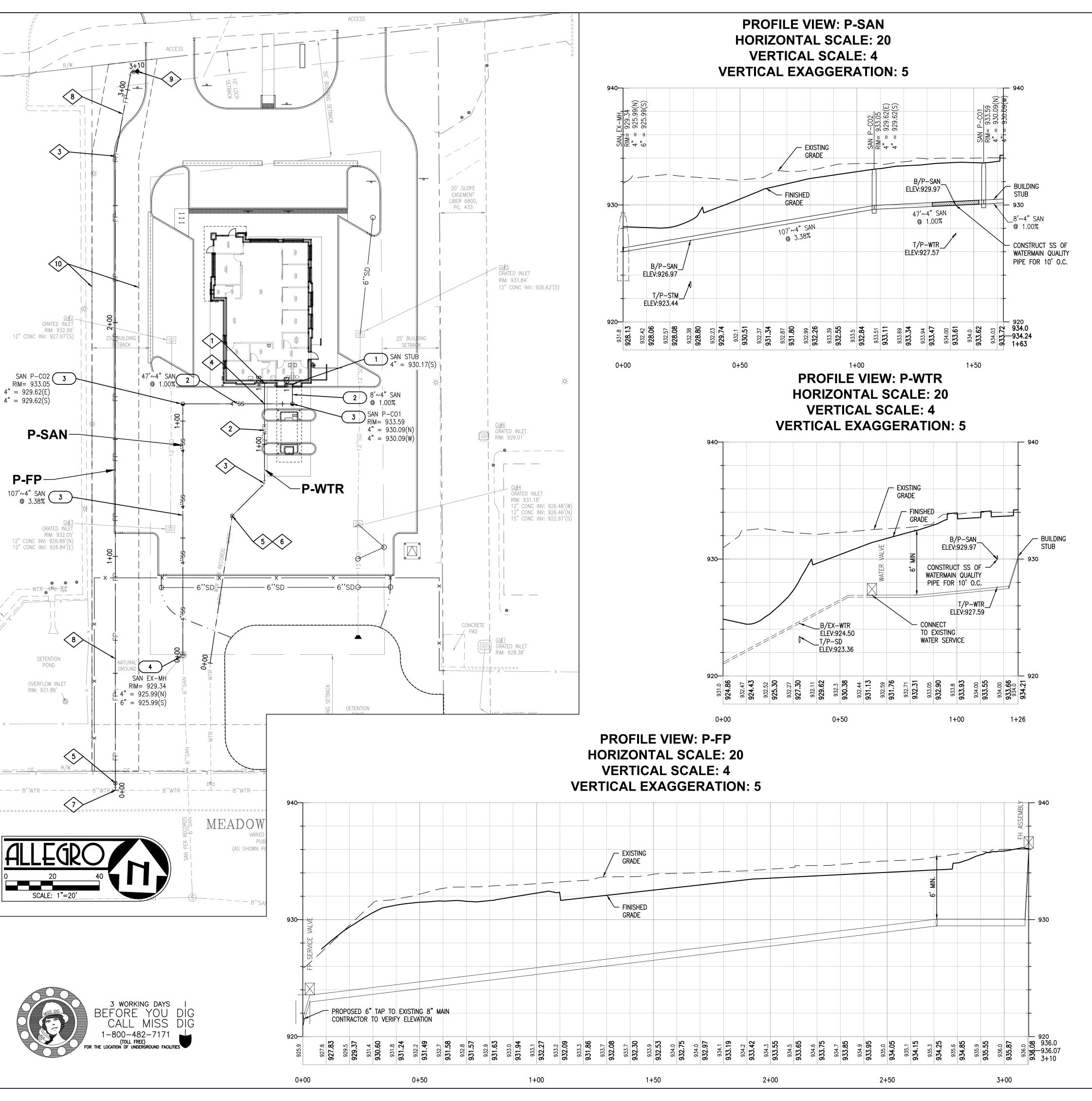
SHEET TITLE:

DRAINAGE AREA MAP

SHEET NUMBER:

STORMFILTER DESIGN NOTES TORMFILTER TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE SELECTION AND THE NUMBER OF CARTRIDGES. THE STANDARD MANHOLE STYLE IS SHOWN WITH THE MAXIMUM NUMBER OF CARTRIDGES (3). VOLUME SYSTEM IS ALSO AVAILABLE WITH MAXIMUM 3 CARTRIDGES. Ø4 [1219 mm] MANHOLE STORMFILTER PEAK HYDRAULIC CAPACITY IS 1.0 CFS [28.3 L/s] . IF THE SITE CONDITIONS EXCEED 1.0 CFS [28.3 L/s] AN UPSTREAM BYPASS STRUCTURE IS REQUIRED. CARTRIDGE SELECTION CARTRIDGE HEIGHT LOW DROP RECOMMENDED HYDRAULIC DROP (H 2.3' [700 mm] 3.05' [930 mm] 1.8' [550 mm] SPECIFIC FLOW RATE (gpm/sf) [L/s/m²]

SEE DETAIL 5 SHEET C5.4



PROPOSED	LEGEND	EXISTING
	PROPERTY LINE	
	EASEMENT LINE	
	APPROXIMATE LIMIT OF DISTURBANCE	
9 —	1-FOOT CONTOUR	9
10 —	5-FOOT CONTOUR	10
WTR	WATER LINE	——————————————————————————————————————
SS	SANITARY SEWER LINE	——————————————————————————————————————
SD	STORM DRAIN LINE	——————————————————————————————————————
——— UE ————	UNDERGROUND ELECTRIC	——————UE —
UT	UNDERGROUND TELECOM	——————————————————————————————————————
G	GAS	——————————————————————————————————————
\bigcirc	TREE/SHRUB	
x	FENCE	x
- o -	SIGN	- 0-

SANITARY SEWER KEY NOTES

BOLLARD/POST

FIRE HYDRANT

WATER METER/VALVE

SEWER MANHOLE/CLEANOUT

STORM CLEANOUT/CATCH BASIN/END SECTION

GAS METER/VALVE

LIGHT/UTILITY POLE

TRANSFORMER

* a

- CONNECT PROPOSED PVC SANITARY SEWER TO SERVICE POC STUB. SIZE AND INVERT PER PLAN. SEE PLUMBING PLANS FOR CONTINUATION.
- PER PLAN. SEE PLUMBING PLANS FOR CONTINUATION.

 PROPOSED SANITARY PVC SEWER SERVICE PIPE. SIZE, LENGTH AND SLOPE PER PLAN.
- BEDDING PER DETAIL 2 ON SHEET C5.3.

 PROPOSED TWO-WAY CLEANOUT, PER DETAIL 6 ON SHEET C5.2. RIM AND INVERT PER
- PROPOSED IWO-WAY CLEANOUI, PER DETAIL 6 ON SHEET C5.2. RIM AND INVERT PER PLAN.
- PROPOSED DROP CONNECTION TO EXISTING SANITARY SEWER MANHOLE, PER DETAIL 1 ON SHEET C5.3. INVERT PER PLAN. LOCATION, SIZE, AND DEPTH OF EXISTING SANITARY SEWER SERVICE TO BE VERIFIED IN THE FIELD.

SANITARY SEWER BASIS OF DESIGN:
PROPOSED OCCUPANCY (USAGE) TYPE = FINANCIAL CENTER
PER PROJECT PLUMBING PLANS:
2,500 SF x 0.4/1,000 SF(UNIT FACTOR) = REU OF 1.0
POPULATION (P) (2.44 PEOPLE/EDU) = 2.44 PEOPLE
AVERAGE FLOW (100 GPCPO) = 2.44 GPD
PEAK FLOW = 976 GPD

WATER KEY NOTES

- CONNECT PROPOSED 2" TYPE K COPPER DOMESTIC WATER SERVICE TO BUILDING SERVICE STUB. SEE PLUMBING PLANS FOR CONTINUATION.
- PROPOSED 2" TYPE K COPPER WATER SERVICE OR APPROVED EQUAL. BEDDING PER
- DETAIL 4 ON SHEET C5.3.
- PROPOSED BEND. THRUST BLOCK PER DETAIL 4 ON SHEET C5.4.
- 4 UTILITY CROSSING, PER DETAIL 3 ON SHEET C5.3.
- 5 PROPOSED GATE VALVE.
- PROPOSED 2" WATER LINE CONNECTION TO EXISTING WATER SERVICE. SLEEVE PER DETAIL 3 ON SHEET C5.3. LOCATION, SIZE, AND DEPTH OF EXISTING WATER SERVICE TO BE VERIFIED IN THE FIELD.
- CONNECT PROPOSED FIRE WATER SERVICE TO EXISTING 8" WATER MAIN
- PROPOSED FIRE PROTECTION WATER SERVICE OR APPROVED EQUAL. BEDDING PER DETAIL 4 ON SHEET C5.3.
- 9 PROPOSED FIRE HYDRANT ASSEMBLY, PER DETAIL 3 ON SHEET C5.4.
- PROPOSED 20' WIDE WATER EASEMENT

SURVEY NOTES:

- 1. ALTA TOPOGRAPHIC SURVEY PROVIDED BY BLEW & ASSOCIATES, P.A.; REVISED 06/13/2022.
- 2. BASIS OF BEARING: GRID NORTH PER MICHIGAN STATE PLANE COORDINATE SYSTEM, SOUTHERN ZONE, NAD83-2011, BASED OFF OF THE WEST LINE OF THE SUBJECT PROPERTY BEARING
- S02°48'46"E PER GPS COORDINATE OBSERVATIONS.

 3. ELEVATIONS ESTABLISHED USING MDOT MONUMENT 63659
- N: 431540.17, E: 13424713.73, ELEV: 977.39 4. TBM#1: SET CHISELED "X" ON RIM OF MANHOLE
- 4. TBM#1: SET CHISELED "X" ON RIM OF MANHOLE N: 432375.49, E: 13439236.75, ELEV: 933.05
- TBM#2: SET CHISELED "X" ON CONCRETE BASE OF LIGHT POLE
- N: 432206.49, E: 13439197.49, ELEV: 934.81'
 ALL EXISTING INFORMATION PRESENTED IN THESE PLANS SHALL BE VERIFIED IN THE FIELD BY
 THE CONTRACTOR. ANY DISCREPANCIES IN THE PLANS SHALL BE MADE AWARE TO THE
 ENGINEER PRIOR TO BEGINNING CONSTRUCTION.

GENERAL NOTES:

- . ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST CITY OF ROCHESTER HILLS, MDOT, ROAD COMMISSION OF OAKLAND COUNTY (RCOC), AND STATE OF MICHIGAN STANDARDS AND SPECIFICATIONS.
- 2. ANY EXISTING INFRASTRUCTURE OR SITE ITEMS (ABOVE OR BELOW GRADE, READILY VISIBLE OR NOT) OR PROPERTY DAMAGED AS A RESULT OF CONSTRUCTION SHALL BE REPAIRED BY THE
- CONTRACTOR TO THE SATISFACTION OF THE APPROPRIATE AGENCY.

 3. ALL SIGNAGE AND PAINT MARKINGS SHALL COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), RCOC AND MDOT STANDARDS, OR AS OTHERWISE SPECIFIED. INSTALLATION OF SIGNS SHALL BE GOVERNED BY LOCAL CODES.
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 4. THE CONTRACTOR IS RESPONSIBLE TO LOCATE AND PROTECT ALL EXISTING UTILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE UTILITY PROTECTION CENTER AT LEAST
- THREE DAYS PRIOR TO ANY SITE WORK FOR PROPER IDENTIFICATION OF EXISTING UTILITIES.

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UTILITY NOTES:

- 1. EXISTING OFF-SITE UTILITY LOCATIONS ARE APPROXIMATE AND BASED ON RECORD DRAWINGS OR AS-BUILT INFORMATION.
- LOCATION OF EXISTING ON—SITE UNDERGROUND UTILITIES HAVE NOT BEEN SURVEYED AND ARE SHOWN BASED ON LOCATIONS OF EXISTING VISIBLE UTILITY STRUCTURES SURVEYED IN THE FIELD. EXACT LOCATIONS OF ALL UTILITIES MUST BE LOCATED IN THE FIELD BY THE CONTRACTOR AND ANY DISCREPANCIES REPORTED TO THE ENGINEER PRIOR TO STARTING CONSTRUCTION.



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Y:



ALLEGRO CIVIL ENGINEERS 4322 N. LINCOLN AVE. SUITE A CHICAGO, IL 60625 (872) 270-3682

PROFESSIONAL SEAL:



PROPOSED TENANT IMPROVEMENTS FOR:

HUNTINGTON NATIONAL BANK ROCHESTER HILLS

2977 WALTON BLVD ROCHESTER HILLS, MI 48309

IOB NI IMBED:	2021 177 002

No. Date

DRAWING RELEASE:

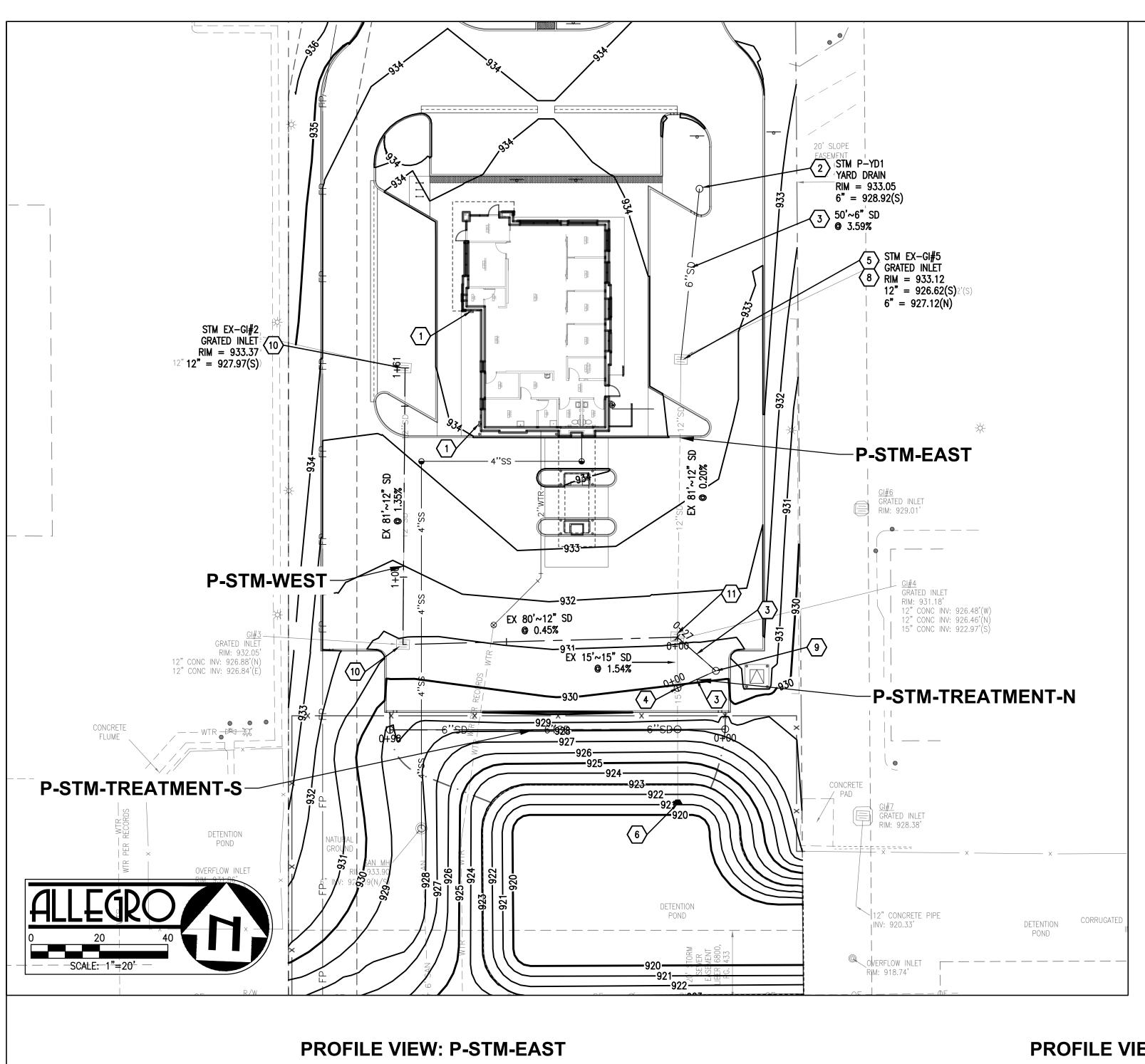
	07.19.2021	SITE PLAN REVIEW
2	05.04.2022	RESPONSE TO CITY COMMENTS
3	06.06.2022	RESPONSE TO CITY COMMENTS
4	08.22.2022	RESPONSE TO CITY COMMENTS

SHEET TITLE:

SANITARY SEWER & WATER MAIN PLAN & PROFILE

SHEET NUMBER:

C3.0



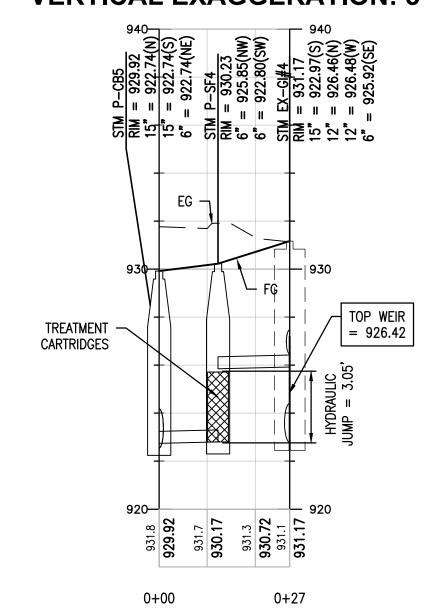
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INSTALLATION OF SIGNS SHALL BE GOVERNED BY LOCAL CODES

ROFILE VIEW: P-STM-TREATMENT-N HORIZONTAL SCALE: 20 VERTICAL SCALE: 4 VERTICAL EXAGGERATION: 5



APPROXIMATE LIMIT OF DISTURBANCE 1-FOOT CONTOUR 5-FOOT CONTOUR WATER LINE ____ _ _ _ _ WTR ___ SANITARY SEWER LINE STORM DRAIN LINE UNDERGROUND ELECTRIC UNDERGROUND TELECOM GAS TREE/SHRUB FENCE BOLLARD/POST FIRE HYDRANT WATER METER/VALVE SEWER MANHOLE/CLEANOUT STORM CLEANOUT/CATCH BASIN/END SECTION GAS METER/VALVE LIGHT/UTILITY POLE * a

LEGEND

PROPERTY LINE

EASEMENT LINE

_ _ _ _ _ _ _ _ _ _

PROPOSED

_ _ _ _ _ _ _ _ _

STORM DRAIN KEY NOTES

TRANSFORMER

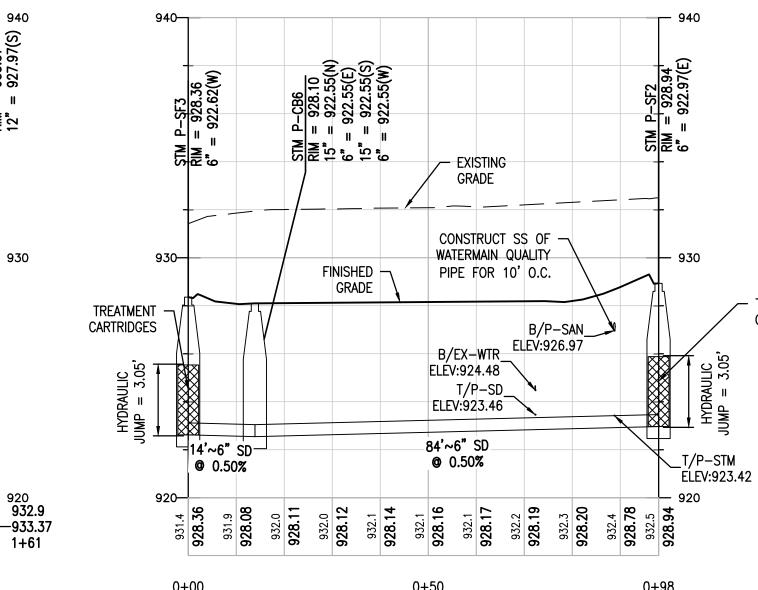
- (1) PROPOSED BUILDING DOWNSPOUT CONNECTION. STPASH AT GRADE.
- PROPOSED YARD DRAIN WITH BEEHIVE GRATE, PER DETAIL 7 ON SHEET C5.2. RIM AND INVERT PER PLAN.
- PROPOSED PVC STORM DRAINPIPE. TRENCH PER DETAIL 5 ON SHEET C5.2. SIZE, LENGTH AND SLOPE PER PLAN
- PROPOSED STORM MANHOLE JUNCTION STRUCTURE PER DETAIL 1 ON SHEET C5.5.
- CONNECT TO EXISTING STORM STRUCTURE. INVERT PER PLAN.
- PROPOSED ENDWALL STRUCTURE. REUSE THE EXISTING, IF POSSIBLE.
- FIT DOWNSTREAM EXISTING STRUCTURE WITH FILTER INSERT (FILTREXX STORMEXX BASIN PROTECTION OR APPROVED EQUIVALENT).
- ADJUST EXISTING STORM STRUCTURE TO GRADE, PER DETAIL 5 ON SHEET C5.3.
- OFF-LINE STORMWATER TREATMENT CONTECH STORMFILTER, PER DETAIL 5 ON SHEET
- REMOVE EXISTING FRAME AND GRATE. CAVE-IN STRUCTURE AND FILL WITH AGGREGATE PER GEOTECH REPORT.
- ADD WEIR WALL TO EXISTING STRUCTURE.

UTILITY NOTES:

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- LOCATION OF EXISTING ON-SITE UNDERGROUND UTILITIES HAVE NOT BEEN SURVEYED AND ARE SHOWN BASED ON LOCATIONS OF EXISTING VISIBLE UTILITY STRUCTURES SURVEYED IN THE FIELD. EXACT LOCATIONS OF ALL UTILITIES MUST BE LOCATED IN THE FIELD BY THE CONTRACTOR AND ANY DISCREPANCIES REPORTED TO THE ENGINEER PRIOR TO STARTING

PROFILE VIEW: P-STM-TREATMENT-S

HORIZONTAL SCALE: 20 VERTICAL SCALE: 4 VERTICAL EXAGGERATION: 5



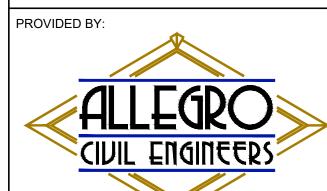


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PROFESSIONAL SEAL:



PROPOSED TENANT **IMPROVEMENTS FOR:**

HUNTINGTON NATIONAL BANK **ROCHESTER HILLS**

2977 WALTON BLVD ROCHESTER HILLS, MI 48309

JOB NUMBER: 2021-177-002

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EET TITLE:			
OTODA OEMED			
	STORM SFWFR		

STURINI SEWER PLAN & PROFILE

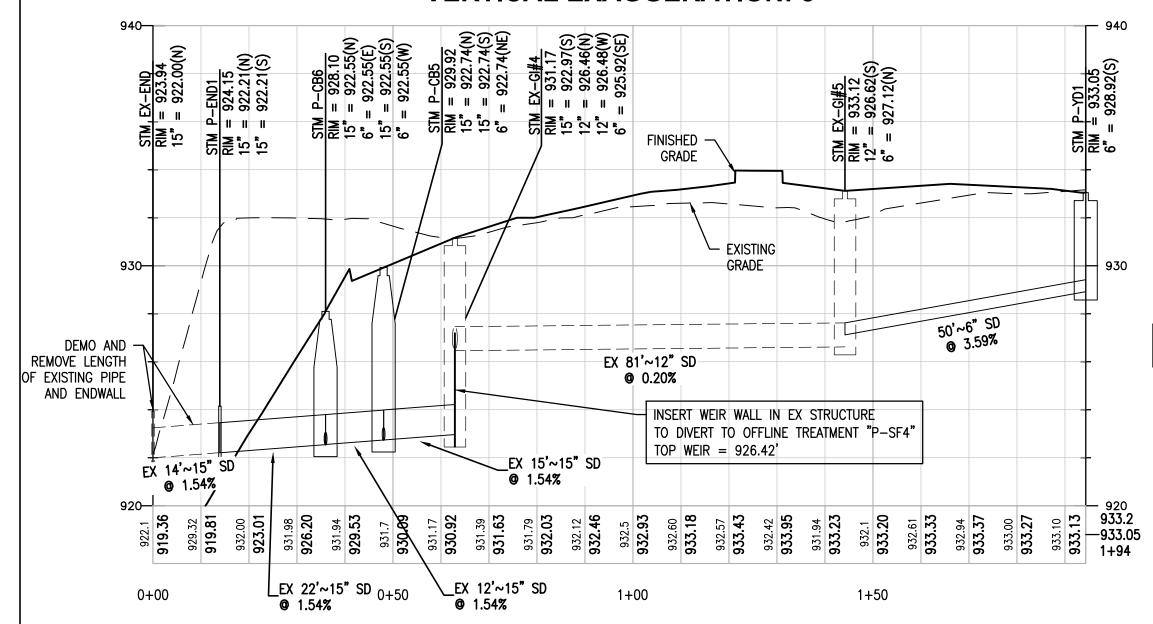
SHEET NUMBER:

TREATMENT

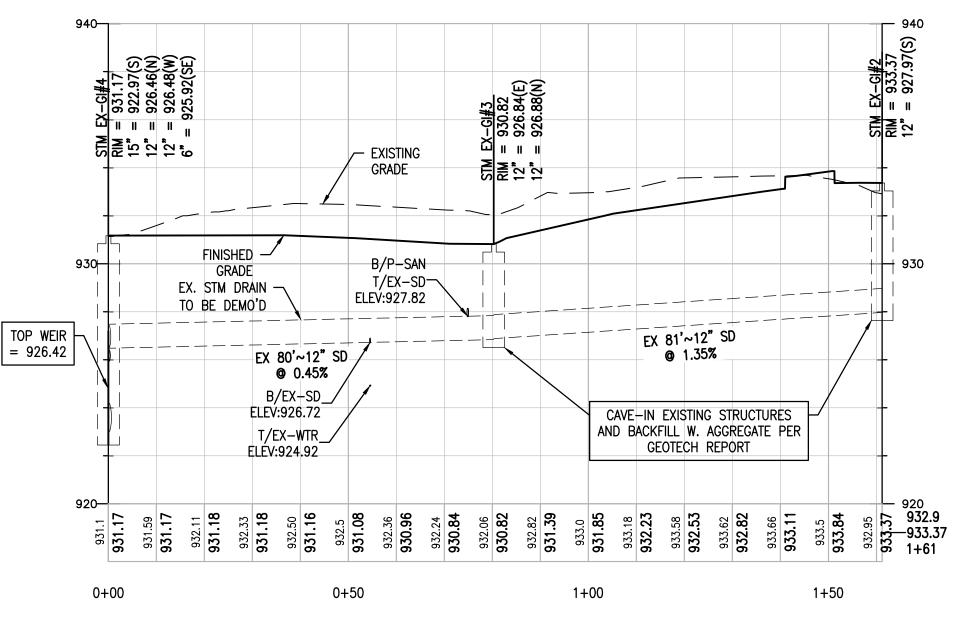
CARTRIDGES

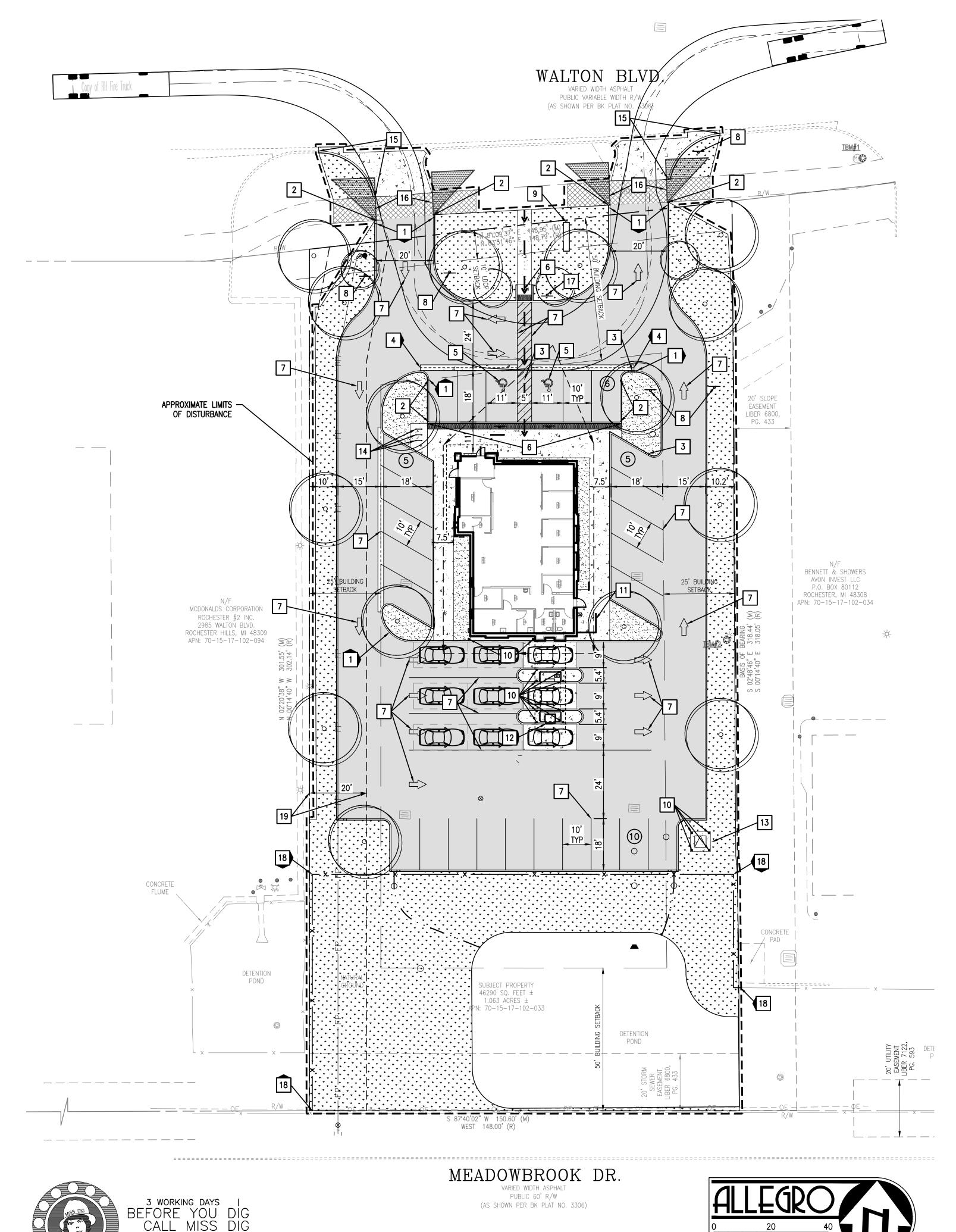
C3.1

HORIZONTAL SCALE: 20 VERTICAL SCALE: 4 VERTICAL EXAGGERATION: 5



PROFILE VIEW: P-STM-WEST HORIZONTAL SCALE: 20 VERTICAL SCALE: 4 VERTICAL EXAGGERATION: 5





1-800-482-7171

SURVEY NOTES:

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- N: 431540.17, E: 13424713.73, ELEV: 977.39 TBM#1: SET CHISELED "X" ON RIM OF MANHOLE
- N: 432375.49, E: 13439236.75, ELEV: 933.05
- TBM#2: SET CHISELED "X" ON CONCRETE BASE OF LIGHT POLE N: 432206.49, E: 13439197.49, ELEV: 934.81
- ALL EXISTING INFORMATION PRESENTED IN THESE PLANS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR. ANY DISCREPANCIES IN THE PLANS SHALL BE MADE AWARE TO THE ENGINEER PRIOR TO BEGINNING CONSTRUCTION.

GENERAL NOTES:

- ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST CITY OF ROCHESTER HILLS, MDOT, ROAD COMMISSION OF OAKLAND COUNTY (RCOC), AND STATE OF MICHIGAN STANDARDS AND SPECIFICATIONS.
- ANY EXISTING INFRASTRUCTURE OR SITE ITEMS (ABOVE OR BELOW GRADE, READILY VISIBLE OR NOT) OR PROPERTY DAMAGED AS A RESULT OF CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE APPROPRIATE AGENCY.
- 3. ALL SIGNAGE AND PAINT MARKINGS SHALL COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), RCOC AND MDOT STANDARDS, OR AS OTHERWISE SPECIFIED. INSTALLATION OF SIGNS SHALL BE GOVERNED BY LOCAL CODES. THE CONTRACTOR IS RESPONSIBLE TO LOCATE AND PROTECT ALL EXISTING UTILITIES DURING
- CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE UTILITY PROTECTION CENTER AT LEAST THREE DAYS PRIOR TO ANY SITE WORK FOR PROPER IDENTIFICATION OF EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL EXISTING ITEMS AND DIMENSIONS AND REPORT ANY

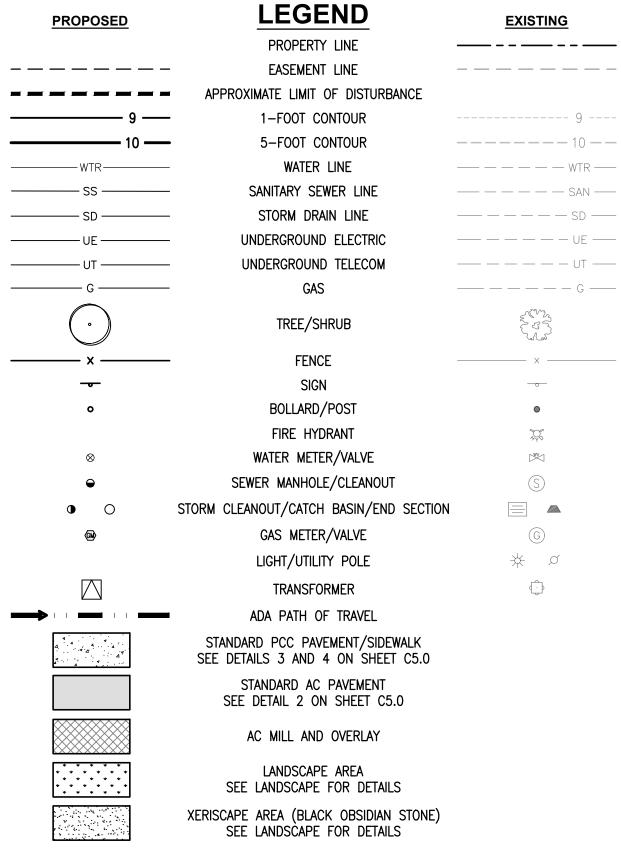
DISCREPANCIES TO THE ENGINEER PRIOR TO BEGINNING CONSTRUCTION.

ACCESSIBILITY NOTES:

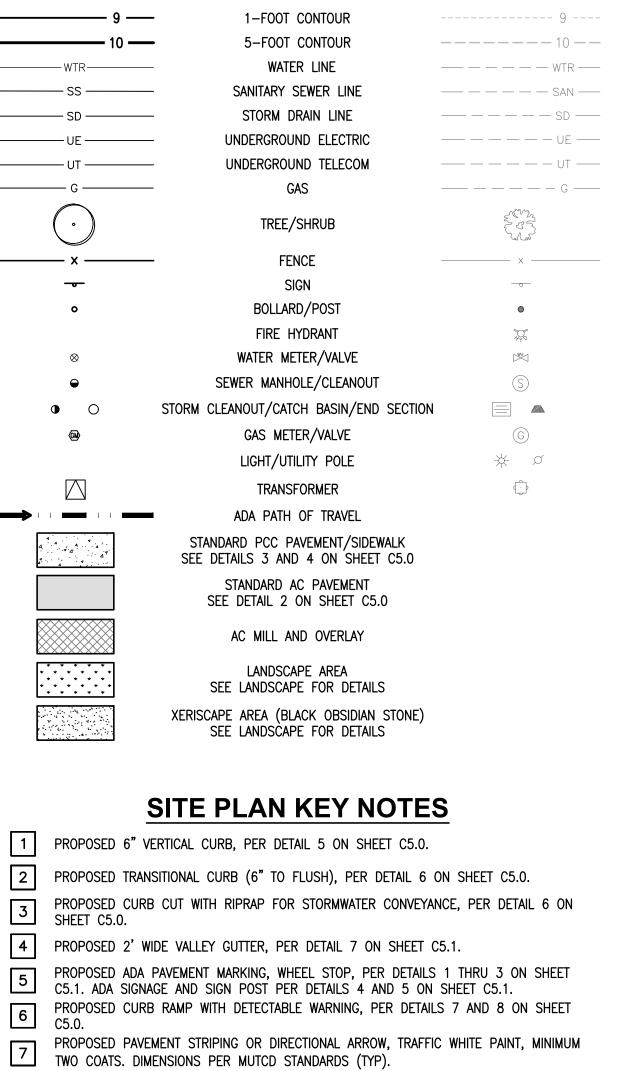
- ALL SITE WORK SHALL BE IN CONFORMANCE WITH THE MOST RECENT MICHIGAN ACCESSIBILITY CODE, MDOT DETAIL R28 SERIES, AND WITH THE AMERICANS WITH DISABILITIES ACT (ADA),
- RAMPS SHALL NOT EXCEED A RUNNING SLOPE OF 1:12 (8.33%).
- RAMPS ARE DEFINED AS ANY WALKWAY BETWEEN SLOPES 1:20 (5%) AND 1:12 (8.33%) AND SHALL HAVE A MINIMUM WIDTH OF 4 FEET AND A MAXIMUM CROSS-SLOPE OF 2%. RAMPS EXCEEDING 30 INCHES VERTICAL CHANGE SHALL HAVE INTERMEDIATE (2% MAX SLOPE) LANDINGS HAVING A MINIMUM LENGTH IN THE DIRECTION OF TRAVEL OF 60 INCHES. BOTTOM LANDINGS AT CHANGES IN RAMP DIRECTION SHALL HAVE A MINIMUM LENGTH OF 72 INCHES.
- MAXIMUM CROSS-SLOPE ON ANY WALK OR RAMPS SHALL BE 2%. ALL ACCESSIBLE PARKING SPACES AND LOADING ZONES SHALL HAVE A MAXIMUM SLOPE OF 2% IN ANY DIRECTION. 5. ALL WALKS SHALL HAVE A MINIMUM 4 FOOT CLEAR WIDTH FOR ACCESSIBLE CONFORMANCE.

FIRE DEPARTMENT NOTES:

- 1. A KNOX KEY SYSTEM SHALL BE INSTALLED IN A LOCATION APPROVED BY THE FIRE CODE OFFICIAL. ORDERING INFORMATION IS AVAILABLE FROM THE KNOX COMPANY AT WWW.KNOXBOX.COM - IFC 2006 SEC. 1028.2.
- FIRE LANES SHALL BE DESIGNATED BY THE FIRE CODE OFFICIAL, AND SHALL BE CONSPICUOUSLY POSTED ON BOTH SIDES OF THE FIRE LANE, WITH FIRE SIGNS, SPACED NOT MORE THAN 100 FEET APART. FIRE LANE SIGNS SHALL READ "NO STOPPING, STANDING, PARKING, FIRE LANE" AND SHALL CONFORM TO THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES - FIRE PROTECTION ORDINANCE CHAPTER 58, SEC. 503.
- CONSTRUCTION SITES SHALL BE SAFEGUARDED IN ACCORDANCE WITH IFC 2006 CHAPTER 14. OPEN BURNING IS NOT PERMITTED, INCLUDING THE BURNING OF TRASH, DEBRIS, OR LAND CLEARING MATERIALS. OPEN BURNING FOR WARMING OF SAND AND OR WATER FOR THE PREPARATION OF MORTAR SHALL BE WITHIN THE CITY OF ROCHESTER HILLS BURN PERMIT GUIDELINES - FIRE PROTECTION ORDINANCE CHAPTER 58, SEC. 307.6.2 & 307.6.2.3.



- 2 PROPOSED TRANSITIONAL CURB (6" TO FLUSH), PER DETAIL 6 ON SHEET C5.0.
- 4 PROPOSED 2' WIDE VALLEY GUTTER, PER DETAIL 7 ON SHEET C5.1.
- C5.1. ADA SIGNAGE AND SIGN POST PER DETAILS 4 AND 5 ON SHEET C5.1.
- PROPOSED CURB RAMP WITH DETECTABLE WARNING, PER DETAILS 7 AND 8 ON SHEET
- PROPOSED PAVEMENT STRIPTING ON DIRECTOR TWO COATS. DIMENSIONS PER MUTCO STANDARDS (TYP). PROPOSED "ONE WAY DO NOT ENTER" SIGN PER MUTCD STANDARDS. SIGN POST PER DETAIL 5 ON SHEET C5.1.
- 9 PROPOSED MONUMENT SIGN. SEE ARCHITECTURAL PLANS FOR DETAILS.
- PROPOSED BOLLARD, PER DETAIL 6 ON SHEET C5.1.
- PROPOSED TRASH/PAPER SHREDDING ENCLOSURE. SEE ARCHITECTURAL PLANS FOR DETAILS.
- PROPOSED DRIVE-UP ATM. SEE ARCHITECTURAL PLANS FOR DETAILS.
- PROPOSED TRANSFORMER ON PCC PAD.
- PROPOSED BIKE RACK, INVERTED "U". THREE RACKS. SEE ARCHITECTURAL PLANS FOR
- RECONSTRUCT DRIVEWAY ENTRANCE, PER DETAIL 1 ON SHEET C5.4.
- EXISTING ASPHALT PATHWAY CONFORMS TO CITY OF ROCHESTER HILLS PATHWAY
- REQUIREMENTS, PER DETAIL 2 ON SHEET C5.4. PROPOSED FIRE LANE SIGN SHALL READ "NO STOPPING, STANDING, PARKING, FIRE LANE" AND SHALL CONFORM TO THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES - FIRE PROTECTION ORDINANCE CHAPTER 58. SEC. 503
- PROPOSED 6' TALL ORNAMENTAL FENCE. SEE SHEET L1.1 FOR DETAIL.
- 19 PROPOSED 20' WIDE WATER EASEMENT



PROPOSED TENANT **IMPROVEMENTS FOR:**

HAHN

ENGINEER

ALLEGRO CIVIL ENGINEERS 4322 N. LINCOLN AVE. SUITE A

CHICAGO. IL 60625

(872) 270-3682

PROFESSIONAL SEAL:

vocon.

PROVIDED BY:

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Cleveland, OH 44115

530 5th Avenue, 16th Floor

555 West 5th Street, 35th Floor

New York City, NY 10036

Los Angeles, CA 90013

vocon.partners LLC

new york.

HUNTINGTON NATIONAL BANK **ROCHESTER HILLS**

2977 WALTON BLVD ROCHESTER HILLS, MI 48309

JOB NUMBER:	2021-177-002

| DRAWING RELEASE: No. Date 07.19.2021 SITE PLAN REVIEW

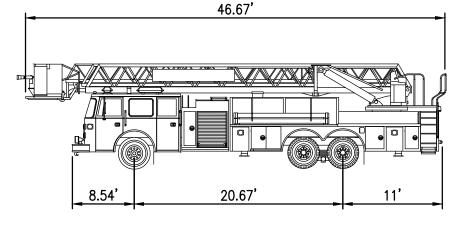
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SHEET TITLE:		

05.04.2022 RESPONSE TO CITY COMMENTS 06.06.2022 RESPONSE TO CITY COMMENTS

> SIGNING & PAVING PLAN

SHEET NUMBER:

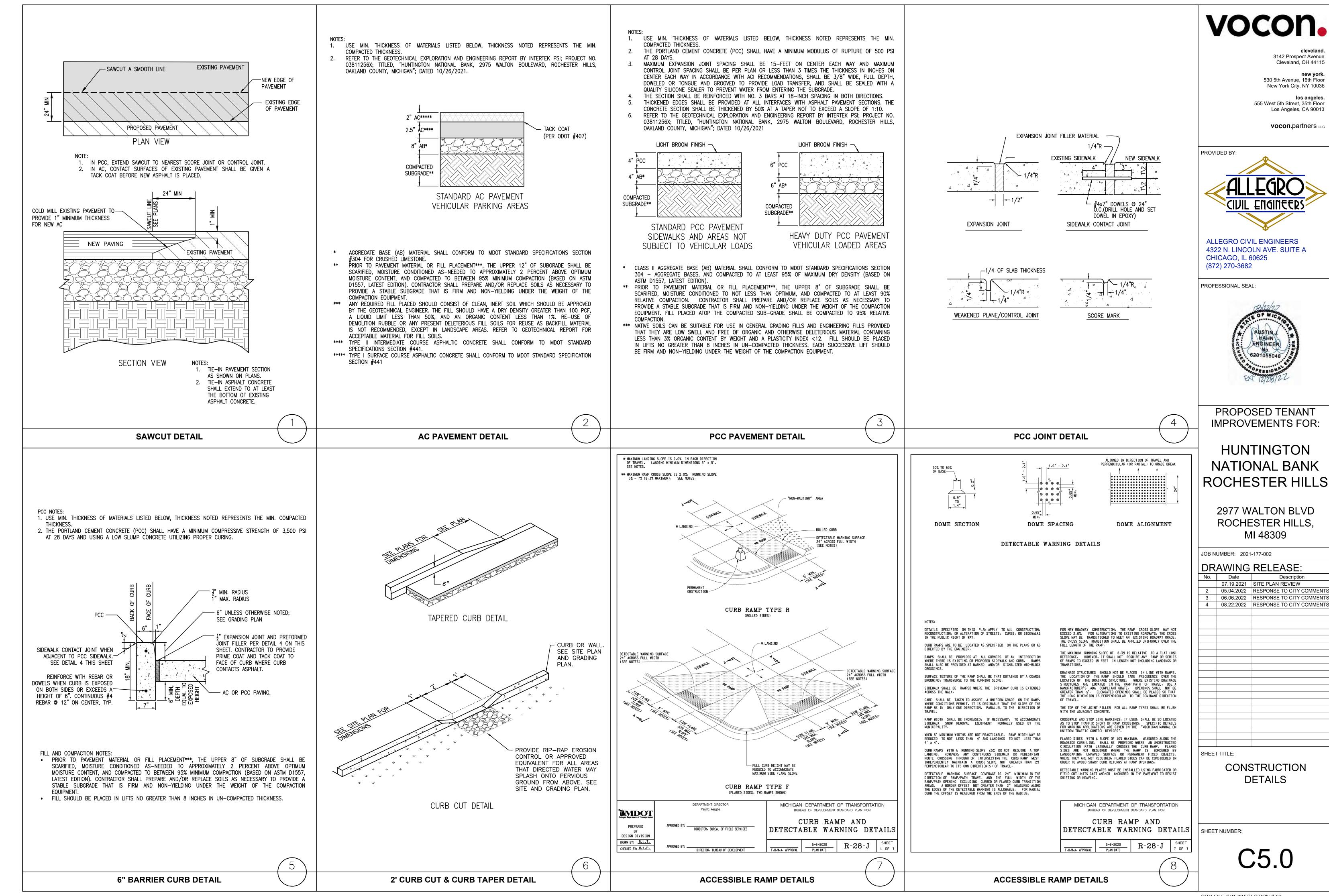
C4.0



Rochester Hills Fire Truck 1 Overall Body Length Overall Width Overall Body Height Min Body Ground Clearance Track Width Lock-to-lock time Turning Radius

8.5' 0.81 8.5' 5.00s 42.5'

Max Wheel Angle



CITY FILE # 21-024 SECTION # 17

