

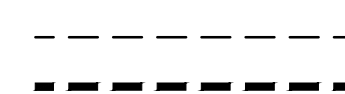
**SURVEY NOTES:**

- 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 502°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'
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**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 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 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.

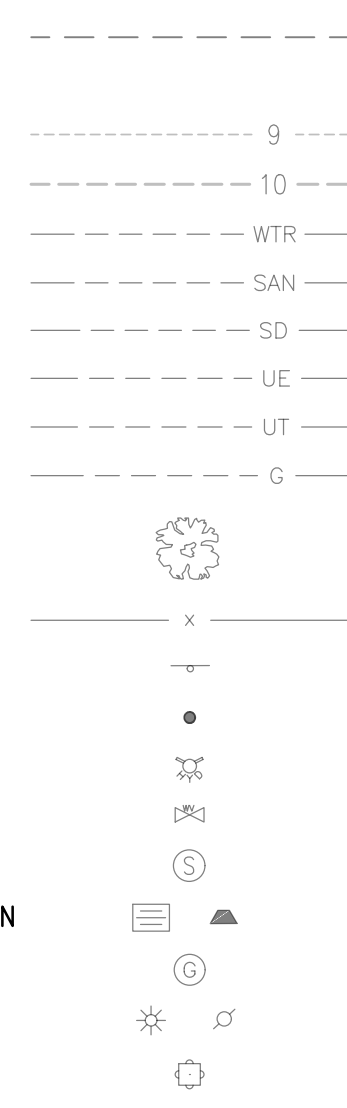
**PROPOSED**



**LEGEND**

- PROPERTY LINE
- EASEMENT LINE
- APPROXIMATE LIMIT OF DISTURBANCE
- 1-FOOT CONTOUR
- 5-FOOT CONTOUR
- WATER LINE
- SANITARY SEWER LINE
- STORM DRAIN LINE
- UNDERGROUND ELECTRIC
- UNDERGROUND TELECOM
- GAS
- TREE/SHRUB
- FENCE
- SIGN
- BOLLARD/POST
- FIRE HYDRANT
- WATER METER/VALVE
- SEWER MANHOLE/CLEANOUT
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- LIGHT/UTILITY POLE
- TRANSFORMER

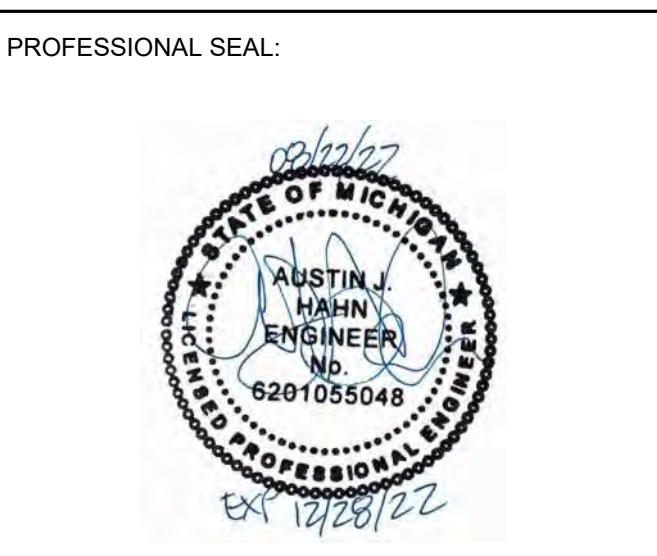
**EXISTING**



cleveland.  
3142 Prospect Avenue  
Cleveland, OH 44115  
new york.  
530 5th Avenue, 16th Floor  
New York City, NY 10036  
los angeles.  
555 West 5th Street, 35th Floor  
Los Angeles, CA 90013  
vocon.partners LLC



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



PROPOSED TENANT IMPROVEMENTS FOR:

HUNTINGTON NATIONAL BANK  
ROCHESTER HILLS

2977 WALTON BLVD  
ROCHESTER HILLS,  
MI 48309

JOB NUMBER: 2021-177-002

**DRAWING RELEASE:**

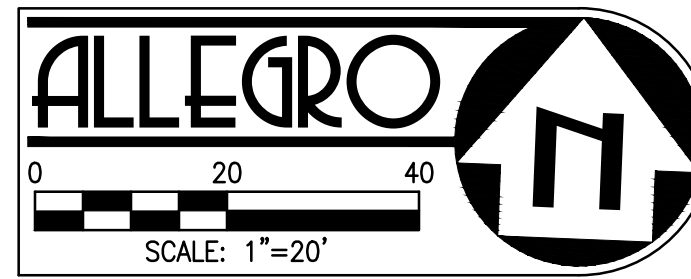
No.	Date	Description
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2	05.04.2022	RESPONSE TO CITY COMMENTS
3	06.06.2022	RESPONSE TO CITY COMMENTS
4	08.22.2022	RESPONSE TO CITY COMMENTS

SHEET TITLE:  
EXISTING CONDITIONS

SHEET NUMBER:  
C1.0



MEADOWBROOK DR.  
VARIED WIDTH ASPHALT  
PUBLIC 60' R/W  
(AS SHOWN PER BK PLAT NO. 3306)



PROVIDED BY:



ALLEGRO CIVIL ENGINEERS  
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PROFESSIONAL SEAL:



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SHEET TITLE:

SITE DEMOLITION PLAN

SHEET NUMBER:

C1.1

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- 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.
- 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.

**DEMOLITION NOTES:**

- CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND/OR PROTECTION OF THE EXISTING ITEMS AS NOTED ON THIS PLAN.
- 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.
- 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 PROPERTY LINE.
- CONTRACTOR TO PROTECT EXISTING STREET LIGHTS & POSTS, TRAFFIC SIGNALS & POSTS, TRAFFIC CONTROL DEVICES, SIGNS AND UTILITY BOXES IN THE SIDEWALK; UNLESS OTHERWISE NOTED.
- 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.
- CONTRACTOR TO VERIFY LOCATION, SIZE, AND DEPTH OF ALL EXISTING UTILITIES AND REPORT ANY DISCREPANCIES TO THE OWNER AND ENGINEER PRIOR TO BEGINNING CONSTRUCTION.

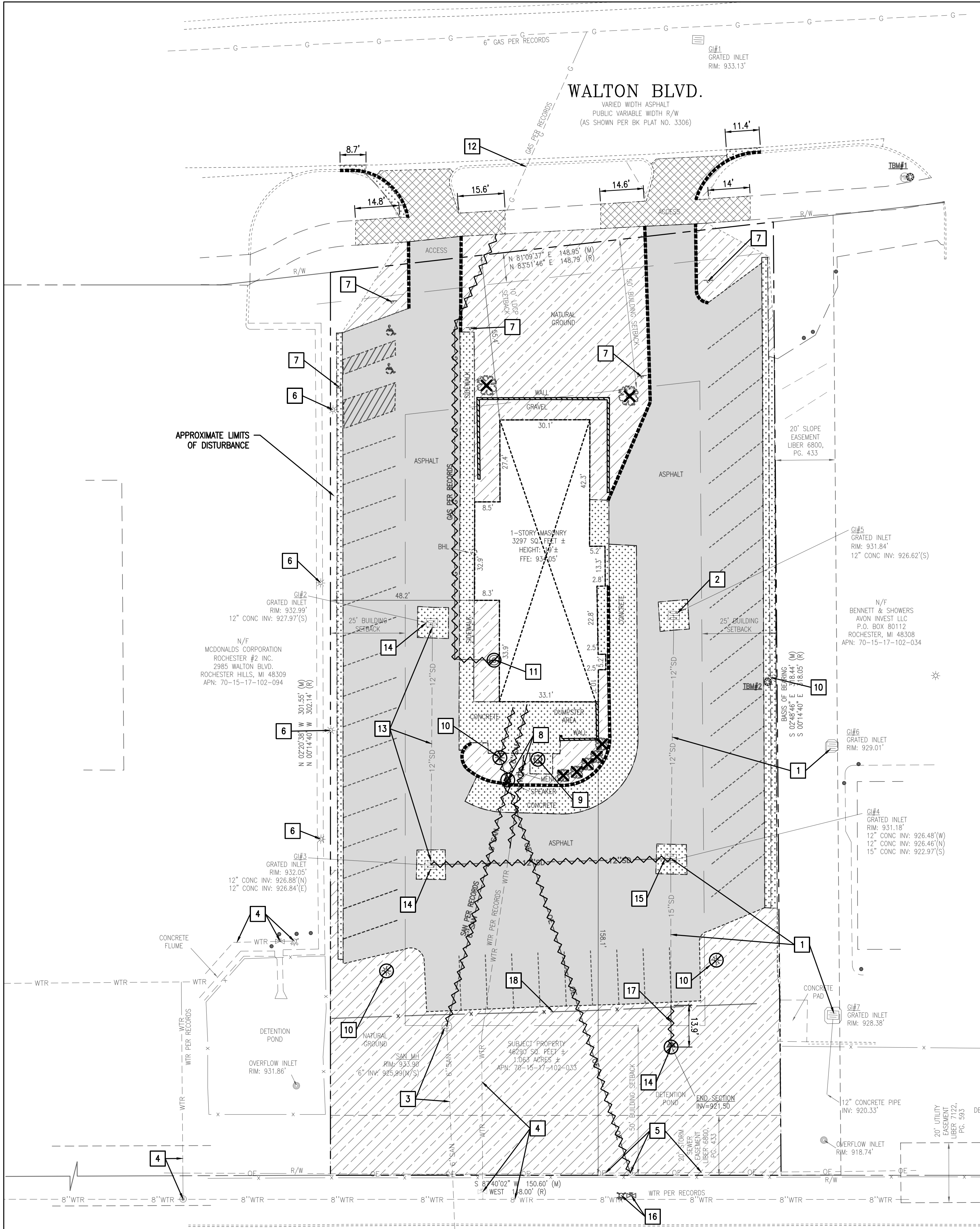
PROPOSED	LEGEND	EXISTING
---	PROPERTY LINE	---
---	EASEMENT LINE	---
---	APPROXIMATE LIMIT OF DISTURBANCE	---
---	1-FOOT CONTOUR	---
---	5-FOOT CONTOUR	---
---	WATER LINE	---
---	SANITARY SEWER LINE	---
---	STORM DRAIN LINE	---
---	UNDERGROUND ELECTRIC	---
---	UNDERGROUND TELECOM	---
---	GAS	---
---	TREE/SHRUB	---
---	FENCE	---
---	SIGN	---
---	BOLLARD/POST	---
---	FIRE HYDRANT	---
---	WATER METER/VALVE	---
---	SEWER MANHOLE/CLEANOUT	---
---	STORM CLEANOUT/CATCH BASIN/END SECTION	---
---	GAS METER/VALVE	---
---	LIGHT/UTILITY POLE	---
---	TRANSFORMER	---

**DEMOLITION LEGEND**

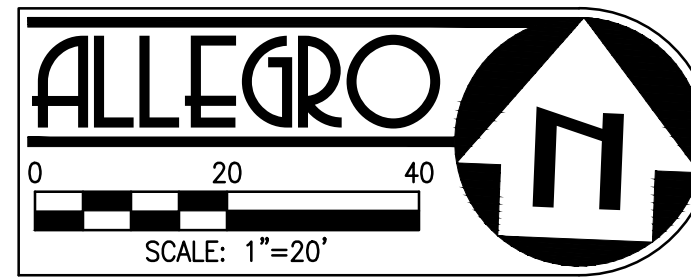
[Symbol]	DEMO AND REMOVE BUILDING, INCLUDING FOUNDATIONS.
[Symbol]	AC MILL AND OVERLAY
[Symbol]	DEMO AND REMOVE ASPHALT PAVEMENT, INCLUDING BASE MATERIAL. PROTECT ALL UNDERGROUND UTILITIES WITHIN THE PAVING LIMITS UNLESS NOTED OTHERWISE.
[Symbol]	DEMO AND REMOVE CONCRETE PAVEMENT, INCLUDING BASE MATERIAL. PROTECT ALL UNDERGROUND UTILITIES WITHIN THE PAVING LIMITS UNLESS NOTED OTHERWISE.
[Symbol]	CLEAR AND GRUB EXISTING LANDSCAPE AREA. DO NOT DISTURB TREES, UNLESS OTHERWISE INDICATED. IN ALL EXISTING LANDSCAPED AREAS - REMOVE WEEDS, ADD SOO AND PLANTINGS AS REQUIRED BY PRE-CONSTRUCTION VISIT AND CONSTRUCTION MANAGER
[Symbol]	SAWCUT EXISTING PAVEMENT, PER DETAIL 1 ON SHEET C5.0.
[Symbol]	DEMO AND REMOVE EXISTING CURB AND GUTTER, INCLUDING BASE MATERIAL.
[Symbol]	DEMO AND REMOVE EXISTING WALL
[Symbol]	DEMO AND REMOVE EXISTING STRUCTURE
[Symbol]	DEMO AND REMOVE EXISTING UTILITY LINES/PIPES
[Symbol]	DEMO AND REMOVE EXISTING TREE OR SHRUB, INCLUDING ROOT BALL

**DEMOLITION KEY NOTES**

- EXISTING STORM DRAIN/STRUCTURE TO REMAIN. PROTECT IN PLACE.
- EXISTING STORM CATCH BASIN TO REMAIN. PROTECT IN PLACE. ADJUST TO GRADE PER SHEET C3.1.
- EXISTING SANITARY SEWER PIPE/STRUCTURE TO REMAIN. PROTECT IN PLACE
- EXISTING WATER PIPE/STRUCTURE TO REMAIN. PROTECT IN PLACE
- EXISTING UTILITY POLE/OVERHEAD WIRES TO REMAIN. PROTECT IN PLACE
- EXISTING LIGHT POLE TO REMAIN. PROTECT IN PLACE
- DEMO AND REMOVE EXISTING SIGN
- DEMO AND REMOVE EXISTING SPEAKER BOX AND MENU BOARD
- DEMO AND REMOVE EXISTING TRANSFORMER
- DEMO AND REMOVE EXISTING LIGHT/UTILITY POLE
- DEMO AND REMOVE EXISTING GAS METER
- EXISTING GAS LINE/STRUCTURE TO REMAIN. PROTECT IN PLACE
- 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.
- 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.
- DEMO AND REMOVE EXISTING FENCE



MEADOWBROOK DR.  
VARIED WIDTH ASPHALT  
PUBLIC 60' R/W  
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PROFESSIONAL SEAL:



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SHEET TITLE:

CONSTRUCTION STAGING PLAN

SHEET NUMBER:

C1.2

**SURVEY NOTES:**

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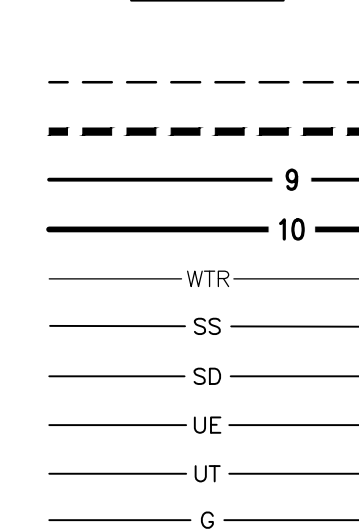
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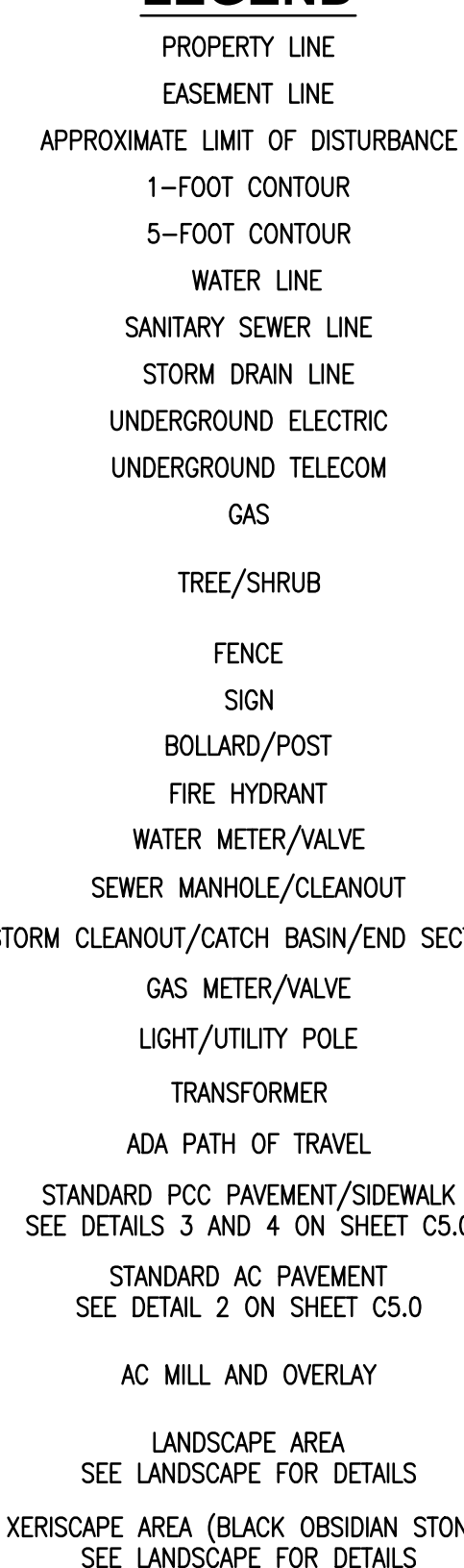
**ROCESTER HILLS EROSION CONTROL NOTES:**

- ALL EROSION AND SEDIMENT CONTROL WORK SHALL CONFORM TO STANDARDS AND SPECIFICATIONS OF THE CITY OF ROCHESTER HILLS AND OAKLAND COUNTY WATER RESOURCES COMMISSIONER.
- 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 S02 FILTERS.
- STAGING THE WORK WILL BE DONE BY THE CONTRACTOR AS DIRECTED IN THESE PLANS AND AS REQUIRED TO ENSURE PROGRESSIVE STABILIZATION OF DISTURBED EARTH.
- SOIL EROSION CONTROL PRACTICES SHALL BE ESTABLISHED IN THE EARLY STAGES OF CONSTRUCTION BY THE CONTRACTOR. SEDIMENT CONTROL PRACTICES WILL BE APPLIED AS A PERIMETER DEFENSE AGAINST ANY TRANSPORTING OF SILT OFF THE SITE.
- FAILURE TO COMPLY WITH APPROVED SOIL EROSION AND SEDIMENTATION MEASURES MAY RESULT IN WORK STOPPAGE BY APPROPRIATE AUTHORITY.
- EXCEPTIONS TO TIMING OF CONTROL MEASURES INSTALLATION WILL ONLY BE PERMITTED WHERE TREES AND STUMPS NEED TO BE REMOVED TO INSTALL SESC MEASURES.
- CONTRACTOR IS TO PROVIDE THE CITY WITH PERMIT RENEWALS, VIOLATION CORRECTIONS, AND/OR RELEASES.

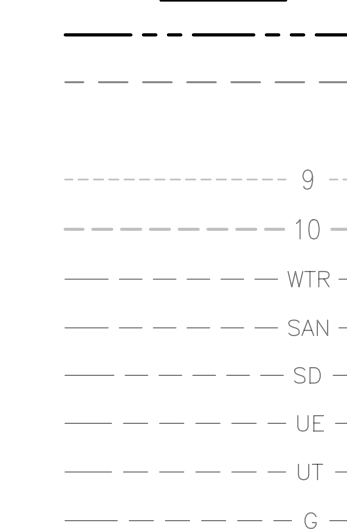
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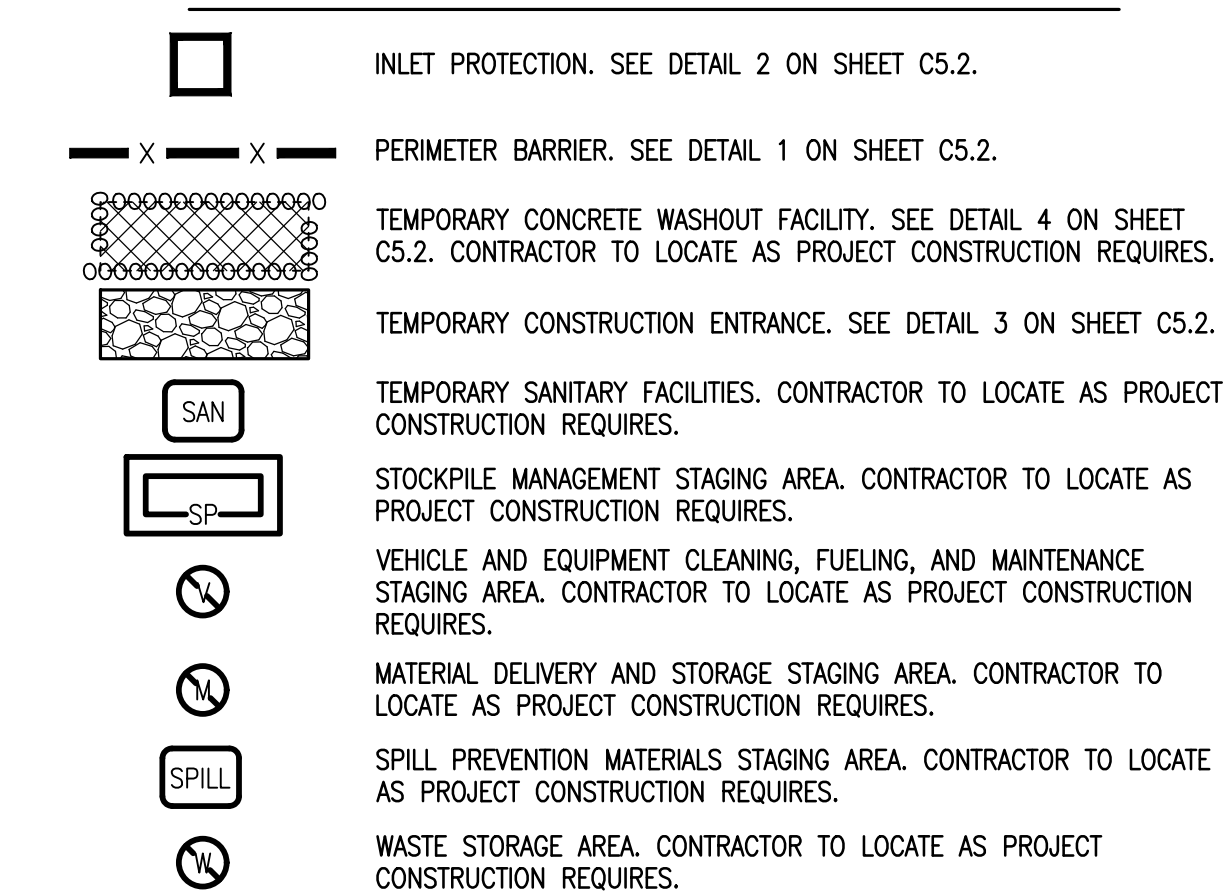
**LEGEND**



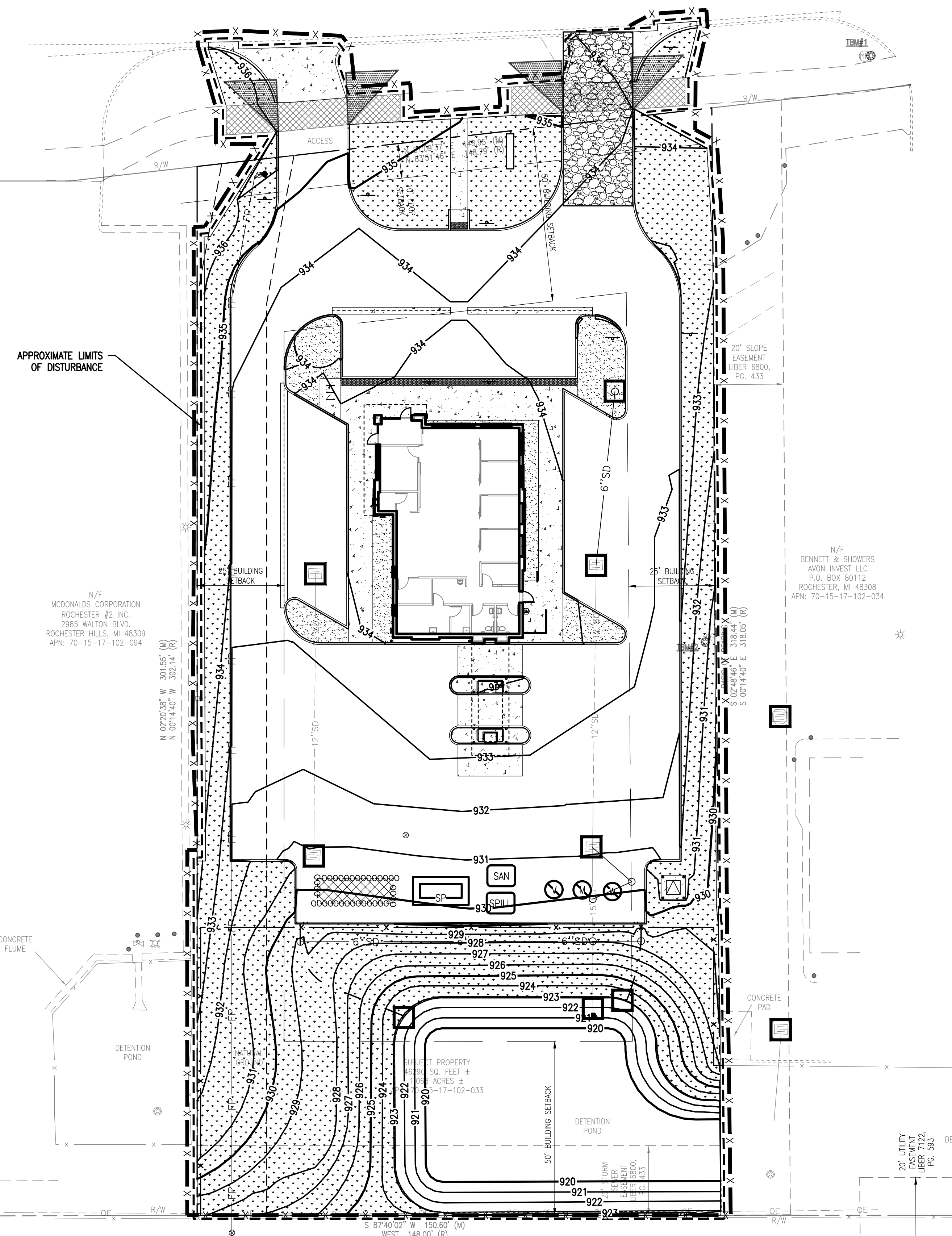
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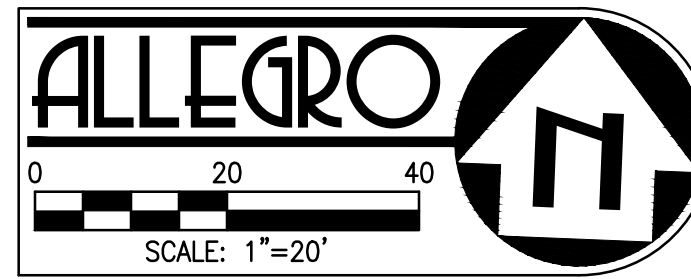
**CONSTRUCTION STAGING LEGEND**



WALTON BLVD.  
VARIED WIDTH ASPHALT  
PUBLIC VARIABLE WIDTH R/W  
(AS SHOWN PER BK PLAT NO. 3306)



MEADOWBROOK DR.  
VARIED WIDTH ASPHALT  
PUBLIC 60' R/W  
(AS SHOWN PER BK PLAT NO. 3306)



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SHEET TITLE:

OVERALL GRADING  
PLAN

SHEET NUMBER:

C2.0

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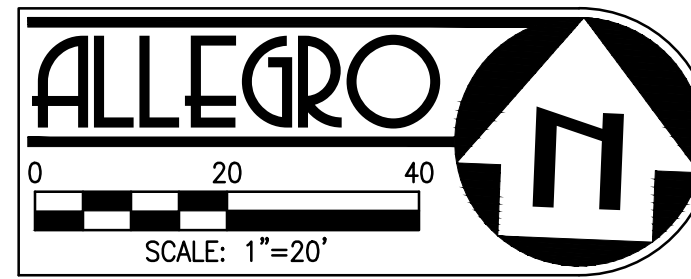
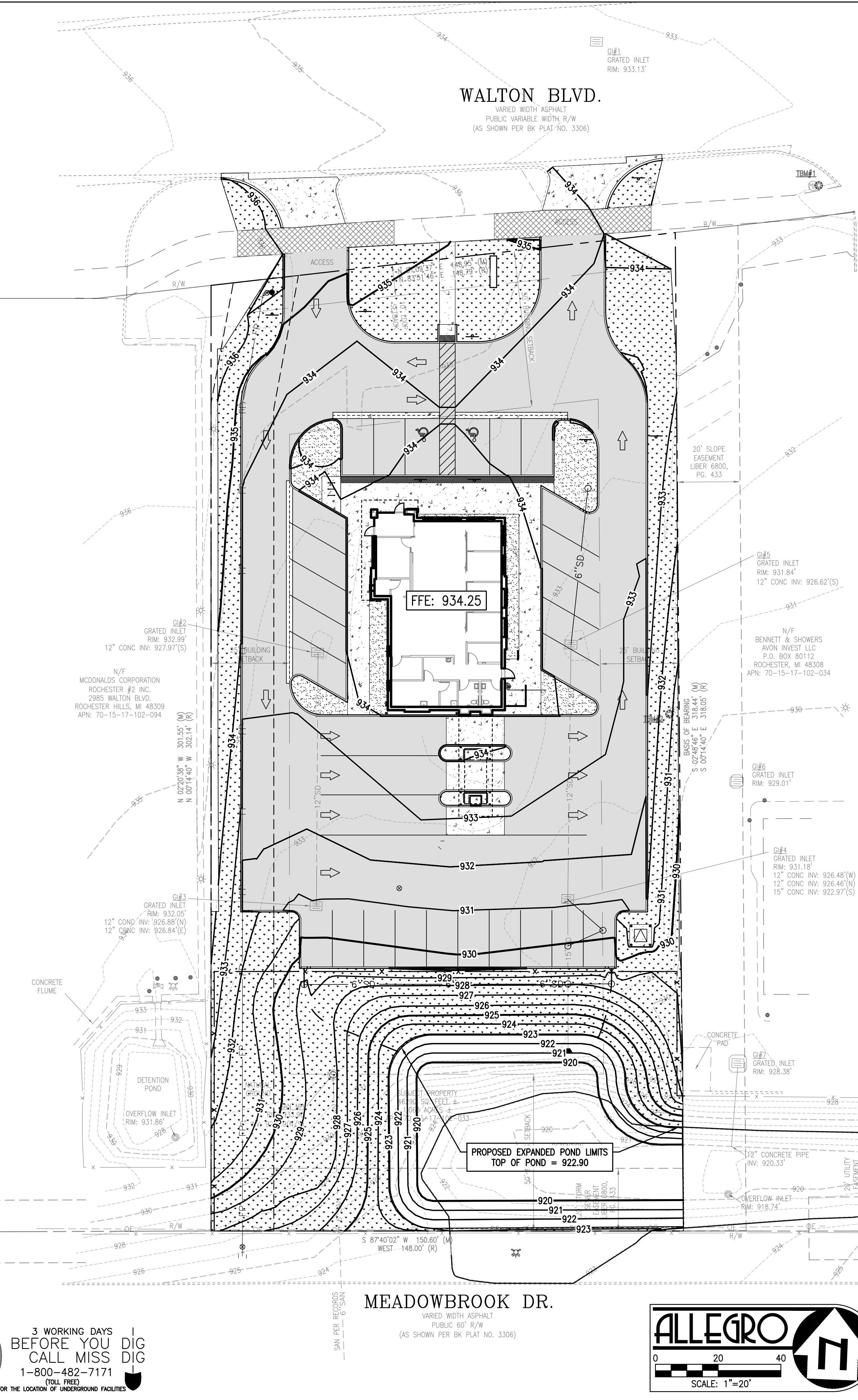
**ACCESSIBILITY NOTES:**

- 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), LATEST EDITION.
- 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.
- 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

PROPOSED	LEGEND	EXISTING
---	PROPERTY LINE	---
---	EASEMENT LINE	---
---	APPROXIMATE LIMIT OF DISTURBANCE	---
---	1-FOOT CONTOUR	---
---	5-FOOT CONTOUR	---
---	WATER LINE	---
---	SANITARY SEWER LINE	---
---	STORM DRAIN LINE	---
---	UNDERGROUND ELECTRIC	---
---	UNDERGROUND TELECOM	---
---	GAS	---
○	TREE/SHRUB	○
x	FENCE	x
○	SIGN	○
○	BOLLARD/POST	○
○	FIRE HYDRANT	○
○	WATER METER/VALVE	○
○	SEWER MANHOLE/CLEANOUT	○
○	STORM CLEANOUT/CATCH BASIN/END SECTION	○
○	GAS METER/VALVE	○
○	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	---



PROVIDED BY:



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
1	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:  
**DETAILED GRADING, SOIL EROSION CONTROL & TREE PROTECTION FENCING PLAN**

SHEET NUMBER:

**C2.1**

**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 S02°48'46" 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.
- 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.
- 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:**

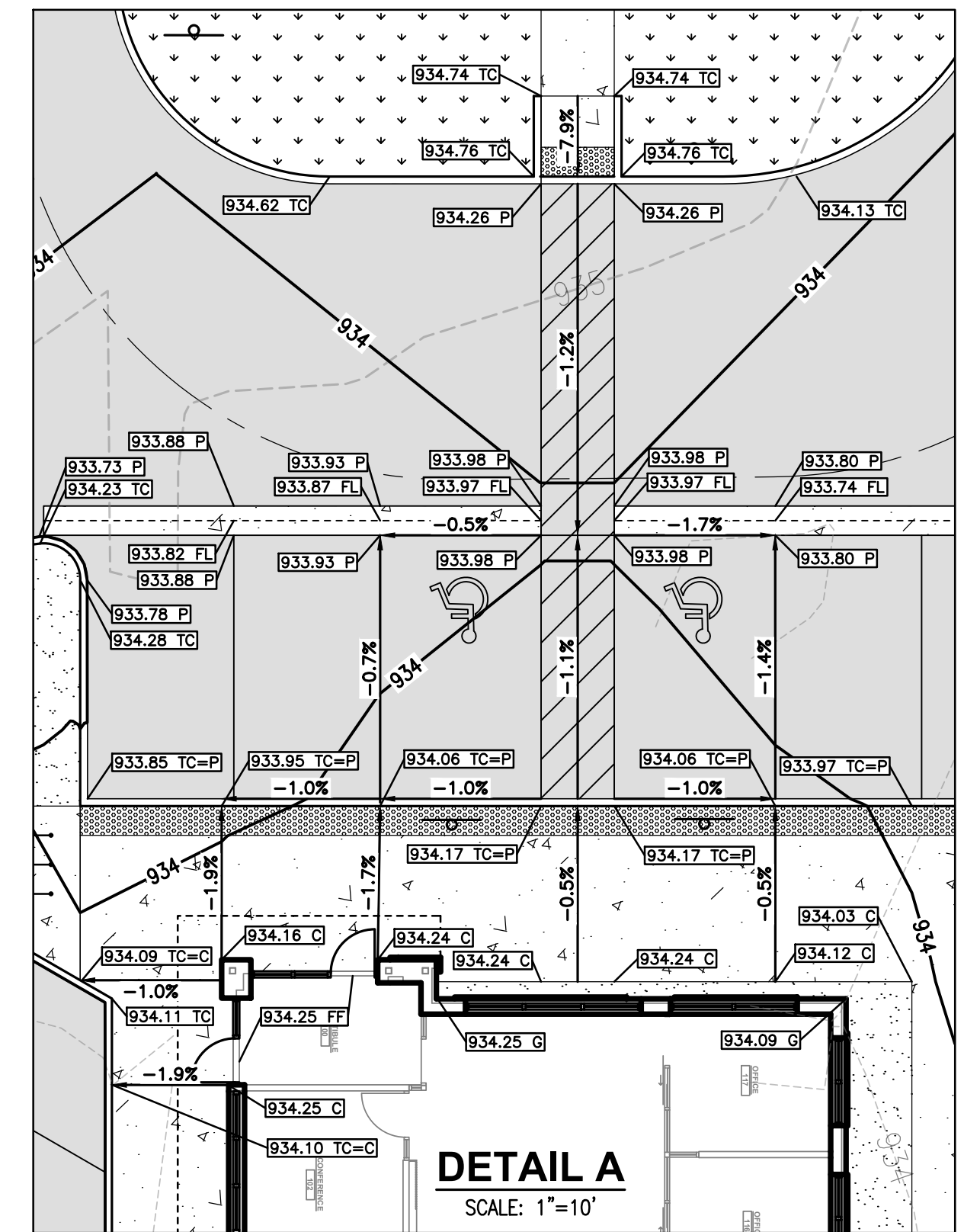
- ALL SITE WORK SHALL BE IN CONFORMANCE WITH THE MOST RECENT MICHIGAN ACCESSIBILITY CODE, MDOT DETAIL R28 SERIES, AND WITH THE AMERICANS WITH DISABILITIES ACT (ADA), LATEST EDITION.
- RAMPS SHALL NOT EXCEED A RUNNING SLOPE OF 1:12 (8.33%).
- RAMPS ARE DEFINED AS ANY WALKWAY BETWEEN SLOPES 1:20 (5%) AND 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. ALL WALKS SHALL HAVE A MINIMUM 4 FOOT CLEAR WIDTH FOR ACCESSIBLE CONFORMANCE.

**ROCESTER HILLS EROSION CONTROL NOTES:**

- ALL EROSION AND SEDIMENT CONTROL WORK SHALL CONFORM TO STANDARDS AND SPECIFICATIONS OF THE CITY OF ROCHESTER HILLS AND OAKLAND COUNTY WATER RESOURCES COMMISSIONER.
- 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.
- STAGING THE WORK WILL BE DONE BY THE CONTRACTOR AS DIRECTED IN THESE PLANS AND AS REQUIRED TO ENSURE PROGRESSIVE STABILIZATION OF DISTURBED EARTH.
- SOIL EROSION CONTROL PRACTICES SHALL BE ESTABLISHED IN THE EARLY STAGES OF CONSTRUCTION BY THE CONTRACTOR. SEDIMENT CONTROL PRACTICES WILL BE APPLIED AS A PERIMETER DEFENSE AGAINST ANY TRANSPORTING OF SILT OFF THE SITE.
- FAILURE TO COMPLY WITH APPROVED SOIL EROSION AND SEDIMENTATION MEASURES MAY RESULT IN WORK STOPPAGE BY APPROPRIATE AUTHORITY.
- EXCEPTIONS TO TIMING OF CONTROL MEASURES INSTALLATION WILL ONLY BE PERMITTED WHERE TREES AND STUMPS NEED TO BE REMOVED TO INSTALL SESC MEASURES.
- CONTRACTOR IS TO PROVIDE THE CITY WITH PERMIT RENEWALS, VIOLATION CORRECTIONS, AND/OR RELEASES.

**GRADING NOTES:**

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



PROPOSED	LEGEND	EXISTING
---	PROPERTY LINE	---
---	EASEMENT LINE	---
---	APPROXIMATE LIMIT OF DISTURBANCE	---
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---	WATER LINE	---
---	SANITARY SEWER LINE	---
---	STORM DRAIN LINE	---
---	UNDERGROUND ELECTRIC	---
---	UNDERGROUND TELECOM	---
---	GAS	---
○	TREE/SHRUB	○
x	FENCE	x
+	SIGN	+
+	BOLLARD/POST	+
+	FIRE HYDRANT	+
+	WATER METER/VALVE	+
+	SEWER MANHOLE/CLEANOUT	+
+	STORM CLEANOUT/CATCH BASIN/END SECTION	+
+	GAS METER/VALVE	+
+	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	+

**SPOT GRADING LEGEND**

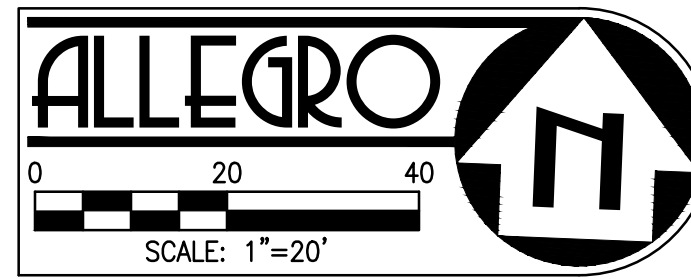
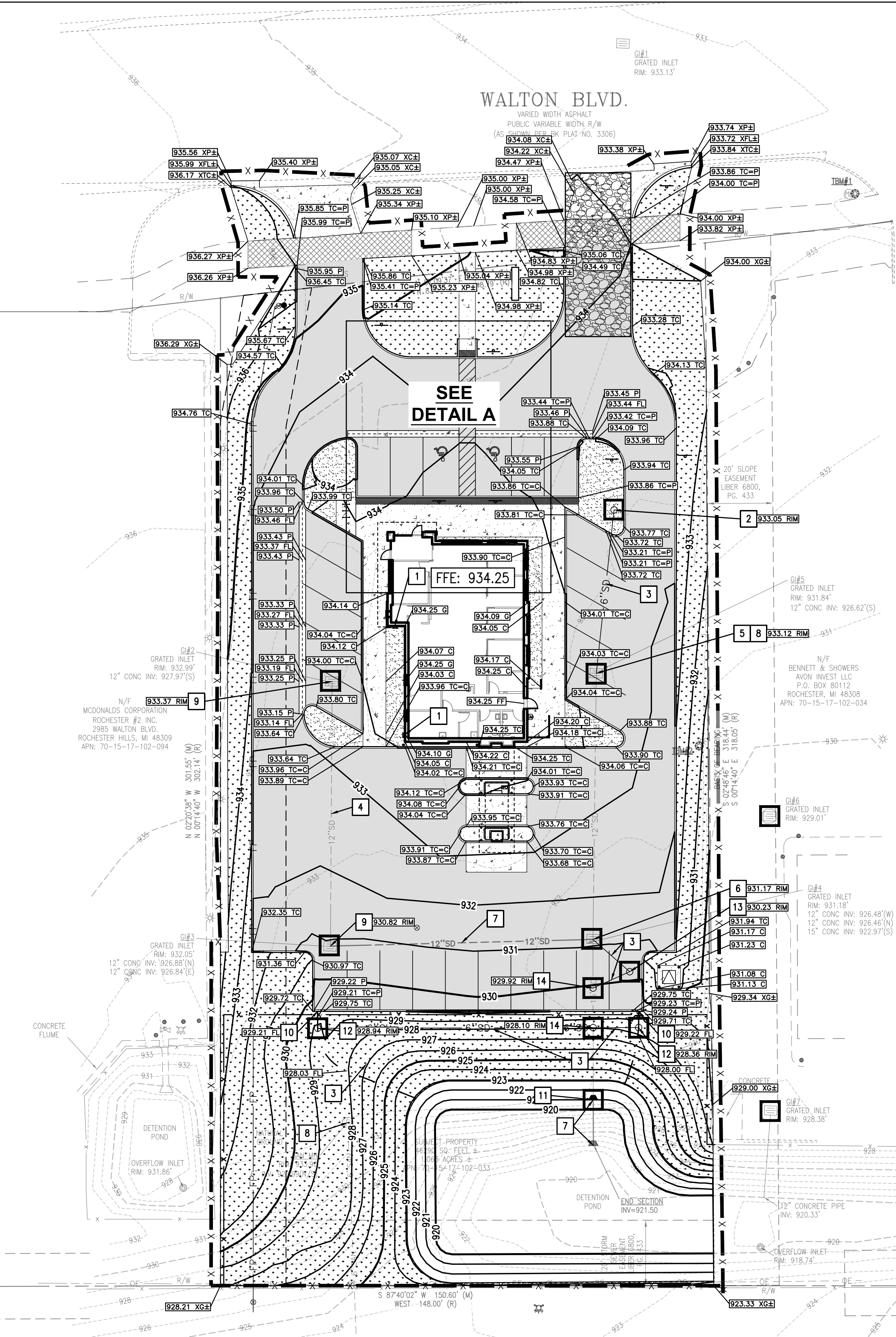
90.00 X---	INDICATES ELEVATION TO MATCH EXISTING ITEM
90.00 TC	INDICATES ELEVATION AT TOP OF CURB
90.00 G	INDICATES ELEVATION AT FINISHED GROUND
90.00 C	INDICATES ELEVATION AT TOP OF CONCRETE
90.00 FL	INDICATES FLOWLINE ELEVATION OF PIPE, SWALE, OR GUTTER
90.00 RIM	INDICATES RIM ELEVATION OF UTILITY
90.00 P	INDICATES ELEVATION AT TOP OF ASPHALT PAVEMENT
90.00 TC=C	INDICATES TOP OF CURB EQUAL TO CONCRETE SIDEWALK ELEVATION
90.00 TC=P	INDICATES TOP OF CURB EQUAL TO ASPHALT PAVEMENT ELEVATION
1.5%	DRAINAGE ARROW AND PROPOSED SLOPE

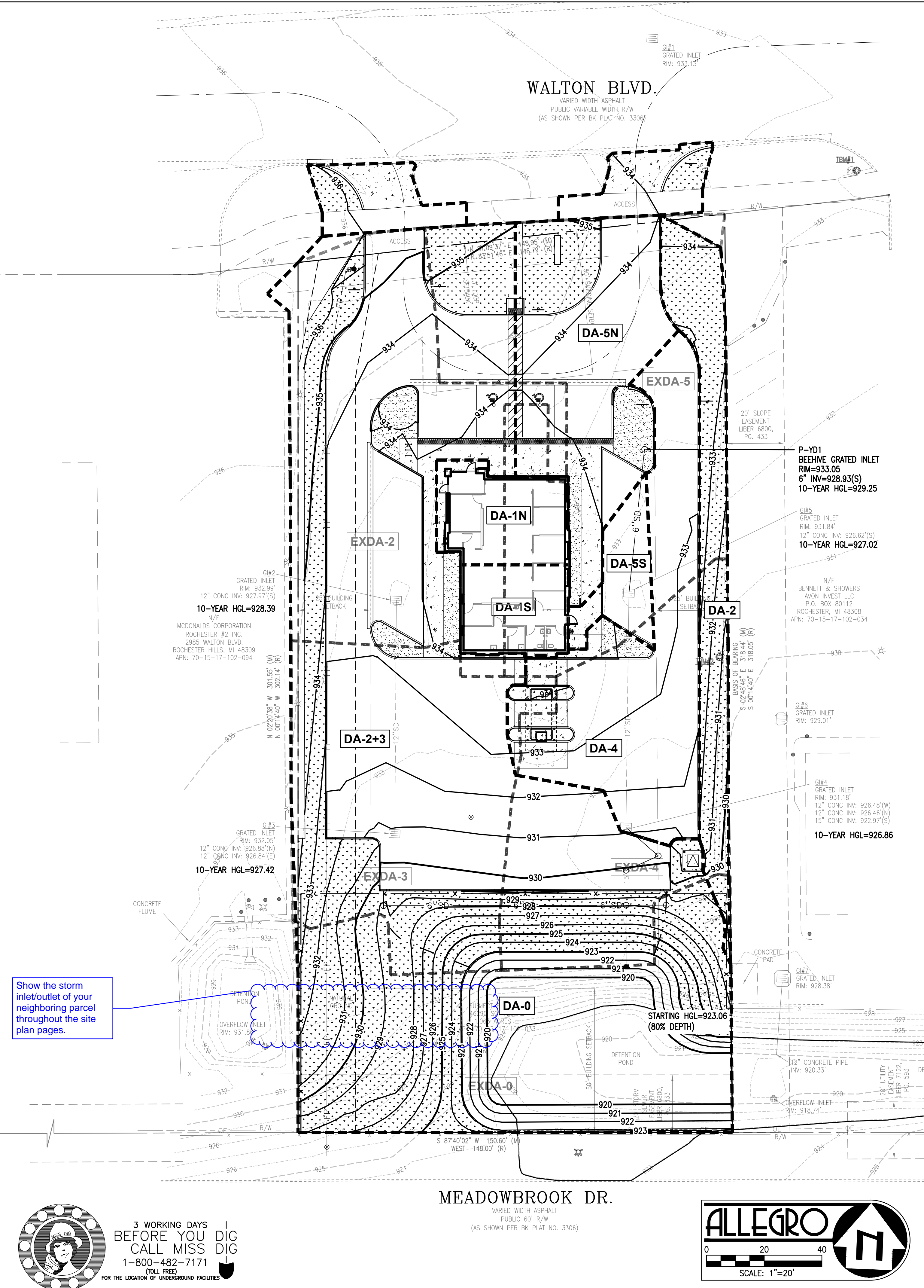
**EROSION CONTROL LEGEND**

□	INLET PROTECTION. SEE DETAIL 2 ON SHEET C5.2.
x x x	PERIMETER BARRIER. SEE DETAIL 1 ON SHEET C5.2.
○	TEMPORARY CONCRETE WASHOUT FACILITY. SEE DETAIL 4 ON SHEET C5.2. CONTRACTOR TO LOCATE AS PROJECT CONSTRUCTION REQUIRES.
+	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.
- PROPOSED PVC STORM DRAINPIPE.
- PLUG AND ABANDON EXISTING STORM DRAIN IN PLACE.
- CONNECT TO EXISTING STORM STRUCTURE. SEE SHEET C3.1 FOR INVERTS.
- ADD WEIR WALL TO EXISTING STORM STRUCTURE. SEE SHEET C3.1 FOR ELEVATIONS.
- DEMO AND REMOVE EXISTING LENGTH OF STORM DRAIN PIPING.
- ADJUST EXISTING STRUCTURE TO GRADE, PER DETAIL 5 ON SHEET C5.3. SEE SHEET C3.1 FOR ADJUSTED RIM ELEVATIONS.
- REMOVE EXISTING FRAME AND GRATE. CAVE-IN STRUCTURE AND FILL WITH AGGREGATE PER GEOTECH REPORT.
- PROPOSED CURB CUT FOR STORMWATER CONVEYANCE, PER DETAIL 6 ON SHEET C5.0.
- 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 C5.4.
- PROPOSED STORM MANHOLE JUNCTION STRUCTURE, PER DETAIL 1 ON SHEET C5.5. SEE SHEET C3.1 FOR INVERT ELEVATIONS.





**SURVEY NOTES:**

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**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 =  $1815 \times A \times C = 1815 \times 1.03 \times 0.65 = 1,215$  CFS
- WQ LOW =  $0.6 \times \frac{Q_{10}}{1.2} = 0.6 \times \frac{44,650}{1.2} = 22,325$  CFS
- SEE PAGE 4-24 OF ENGINEERING STANDARDS REGARDING MANUFACTURED TREATMENT DEVICES.

WATERSHED	TOTAL DRAINAGE AREA	IMPERVIOUS		C	Tc (MINUTES)	I <sub>0</sub> (IN/HR)	Q <sub>10</sub> (CFS)
		PERVIOUS	PERCENT				
		PERCENT	PERCENT				
EXDA-0	9,812 SF	0 SF	0%	0.25	15	4.375	0.25
EXDA-2	9,733 SF	7,770 SF	80%	0.85	15	4.375	0.82
		1,296 SF	13%				
EXDA-3	8,001 SF	7,277 SF	91%	0.89	15	4.375	0.70
		724 SF	9%				
EXDA-4	7,893 SF	7,457 SF	94%	0.91	15	4.375	0.72
		436 SF	6%				
EXDA-5	12,064 SF	7,851 SF	65%	0.71	15	4.375	0.87
		4,213 SF	35%				

WATERSHED	TOTAL DRAINAGE AREA	IMPERVIOUS		C	Tc (MINUTES)	I <sub>0</sub> (IN/HR)	Q <sub>10</sub> (CFS)
		PERVIOUS	PERCENT				
		PERCENT	PERCENT				
DA-0	8,370 SF	0 SF	0%	0.25	15	4.375	0.21
DA-1N	1,470 SF	1,470 SF	100%	0.95	15	4.375	0.12
DA-1S	1,171 SF	1,171 SF	100%	0.95	15	4.375	0.12
		0 SF	0%				
DA-2+3	22,267 SF	12,849 SF	58%	0.66	15	4.375	1.48
		9,418 SF	42%				
DA-4	5,736 SF	5,574 SF	97%	0.93	15	4.375	0.53
		162 SF	3%				
DA-5N	4,873 SF	3,472 SF	71%	0.75	15	4.375	0.36
		1,401 SF	29%				
DA-5S	710 SF	710 SF	100%	0.95	15	4.375	0.08
		0 SF	0%				

C GRASS = 0.25  
 C GRAVEL = 0.85  
 C IMPERVIOUS = 0.95  
 SOIL TYPE B (CAPAC SANDY LOAM, 0-4% SLOPE)

	IDF DATA:							
	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	

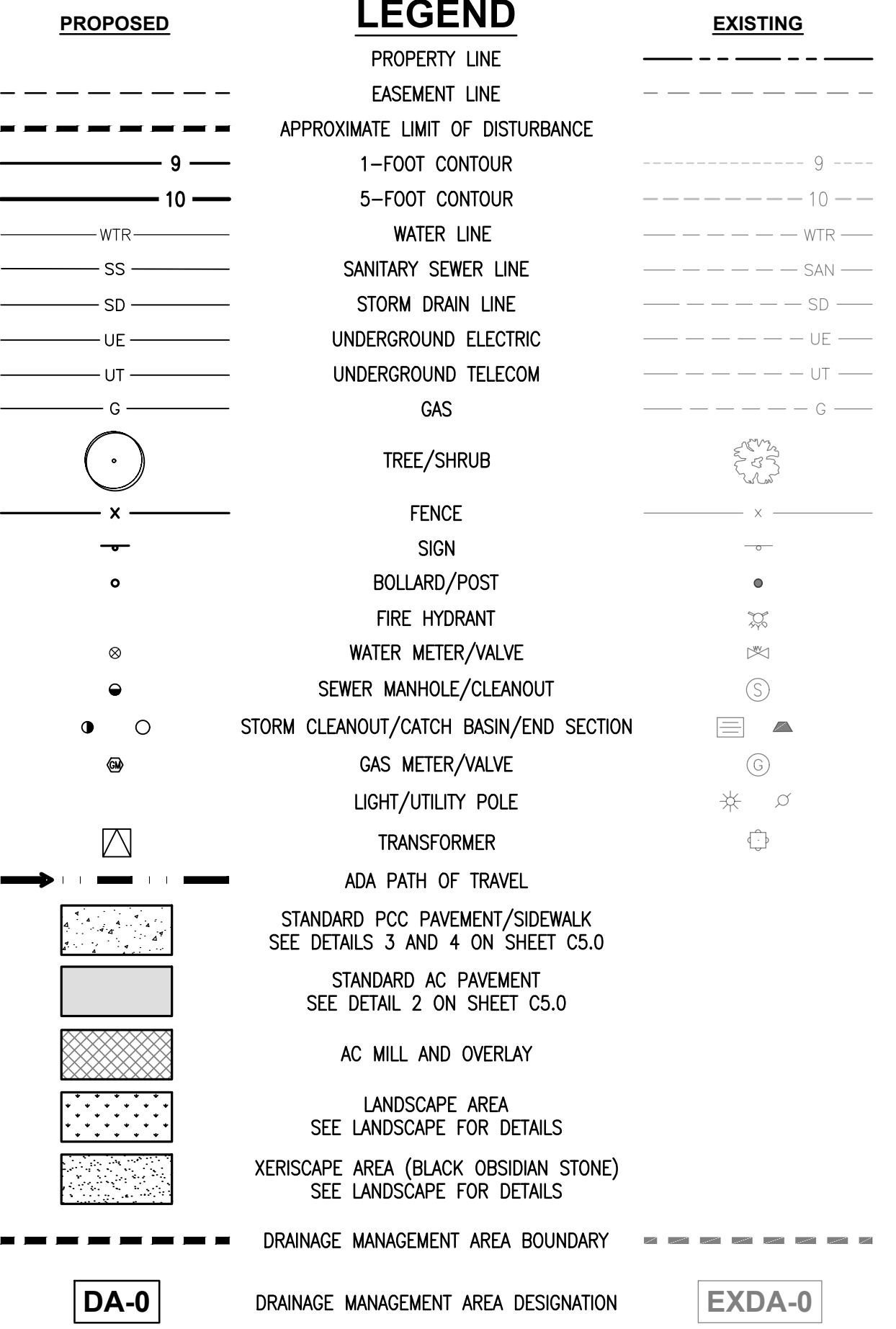
**STORMFILTER DESIGN NOTES**

STORMFILTER 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	27" [696 mm]	18" [458 mm]	LOW DROP
RECOMMENDED HYDRAULIC DROP (H)	3.0' [930 mm]	2.3' [700 mm]	1.8' [550 mm]
SPECIFIC FLOW RATE (gpm/sf) [L/s/m <sup>2</sup> ]	2 [1.30]	1.67 [1.08]	1 [0.65]
CARTRIDGE FLOW RATE (gpm) [L/s]	22.5 [1.42]	18.79 [1.19]	11.25 [0.71]

\* 1.67 gpm/sf [1.08 L/s/m<sup>2</sup>] SPECIFIC FLOW RATE IS APPROVED WITH PHOSPHOSORB® (PSORB) MEDIA ONLY.

SEE DETAIL 5 SHEET C5.4



**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<sub>10</sub> PRE = 3.36 CFS (NO DETENTION/NO WQ); EXDA-0+EXDA-2+EXDA-3+EXDA-4+EX-DA-5  
 Q<sub>10</sub> POSTrestricted = 0.04 CFS; DA-1N+DA-1S+DA-2+3+DA-4+DA-5N+DA-5S - DIRECTED TO POND  
 Q<sub>10</sub> POSTtotal = 0.04 CFS << Q<sub>10</sub> 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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Cleveland, OH 44115

new york.  
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New York City, NY 10036

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

vocon.partners llc

PROVIDED BY:

**ALLEGRO CIVIL ENGINEERS**

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

PROFESSIONAL SEAL:

AUSTIN J. HAHN  
ENGINEER  
No. 6201055046  
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:**

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08.22.2022		RESPONSE TO CITY COMMENTS

SHEET TITLE:

**DRAINAGE AREA MAP**

SHEET NUMBER:

**C2.2**

3 WORKING DAYS BEFORE YOU DIG  
CALL MISS DIG  
1-800-482-7171  
TOLL FREE  
FOR THE LOCATION OF UNDERGROUND FACILITIES

**ALLEGRO**

SCALE: 1"=20'



PROVIDED BY:



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CHICAGO, IL 60625  
(872) 270-3682

PROFESSIONAL SEAL:



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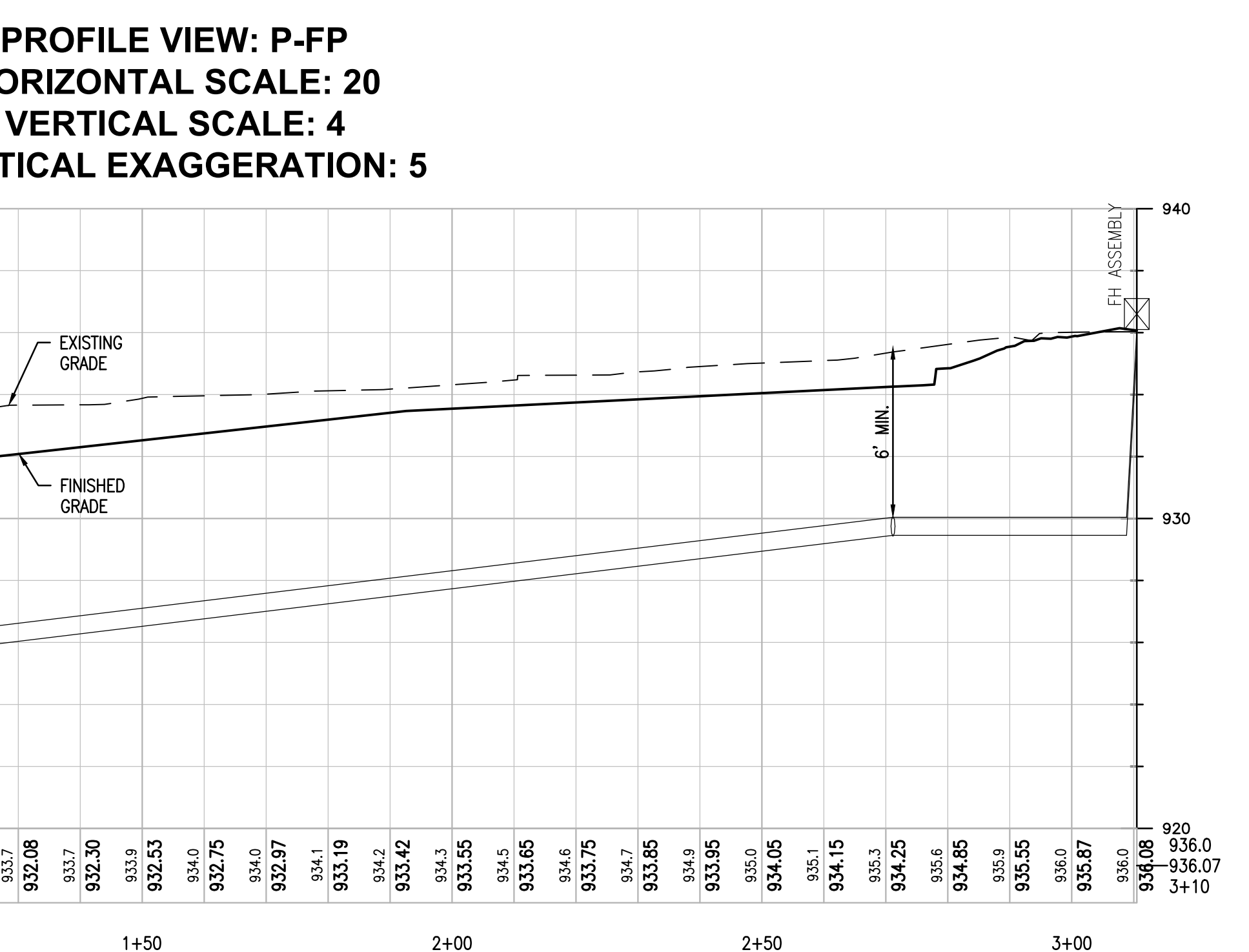
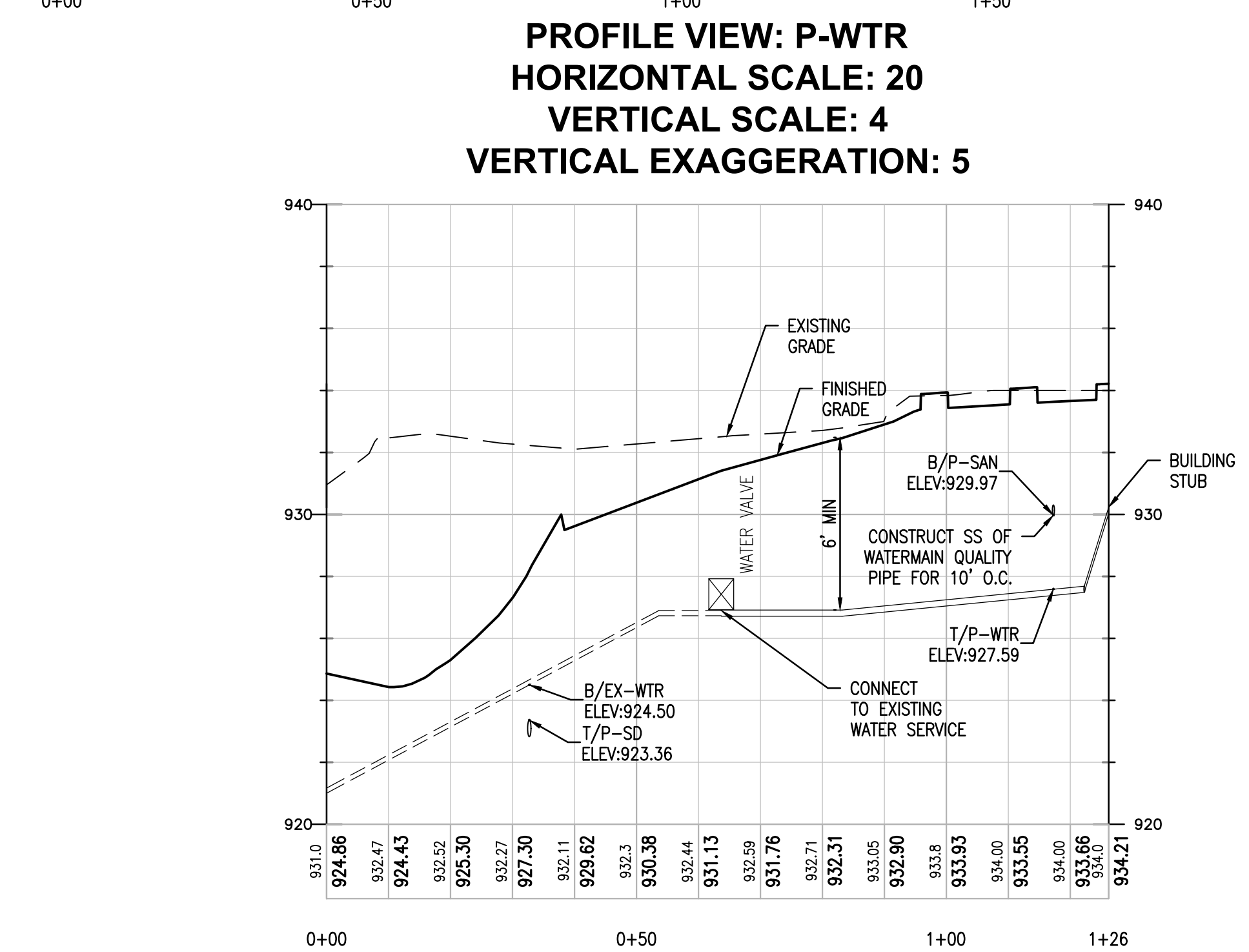
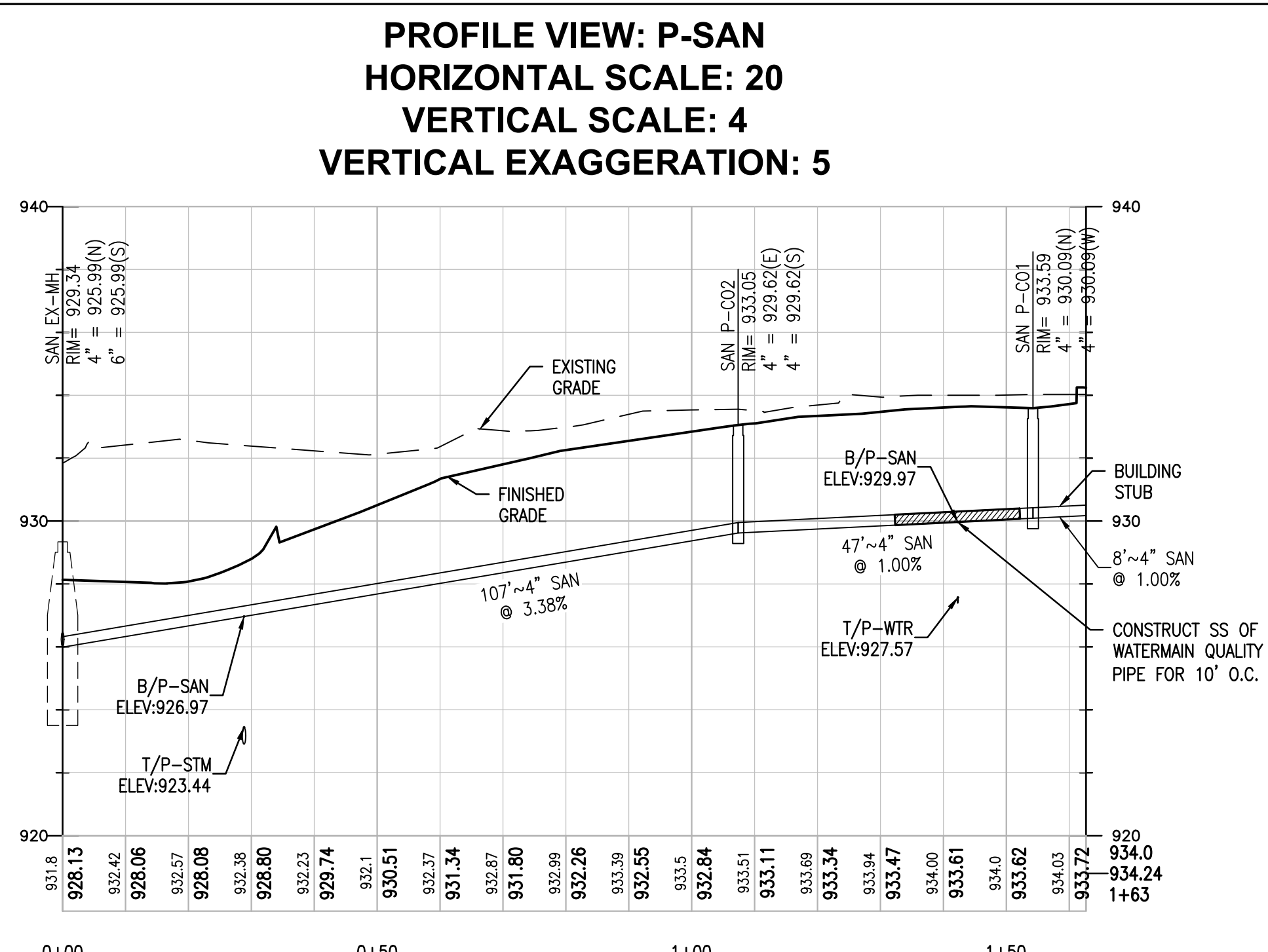
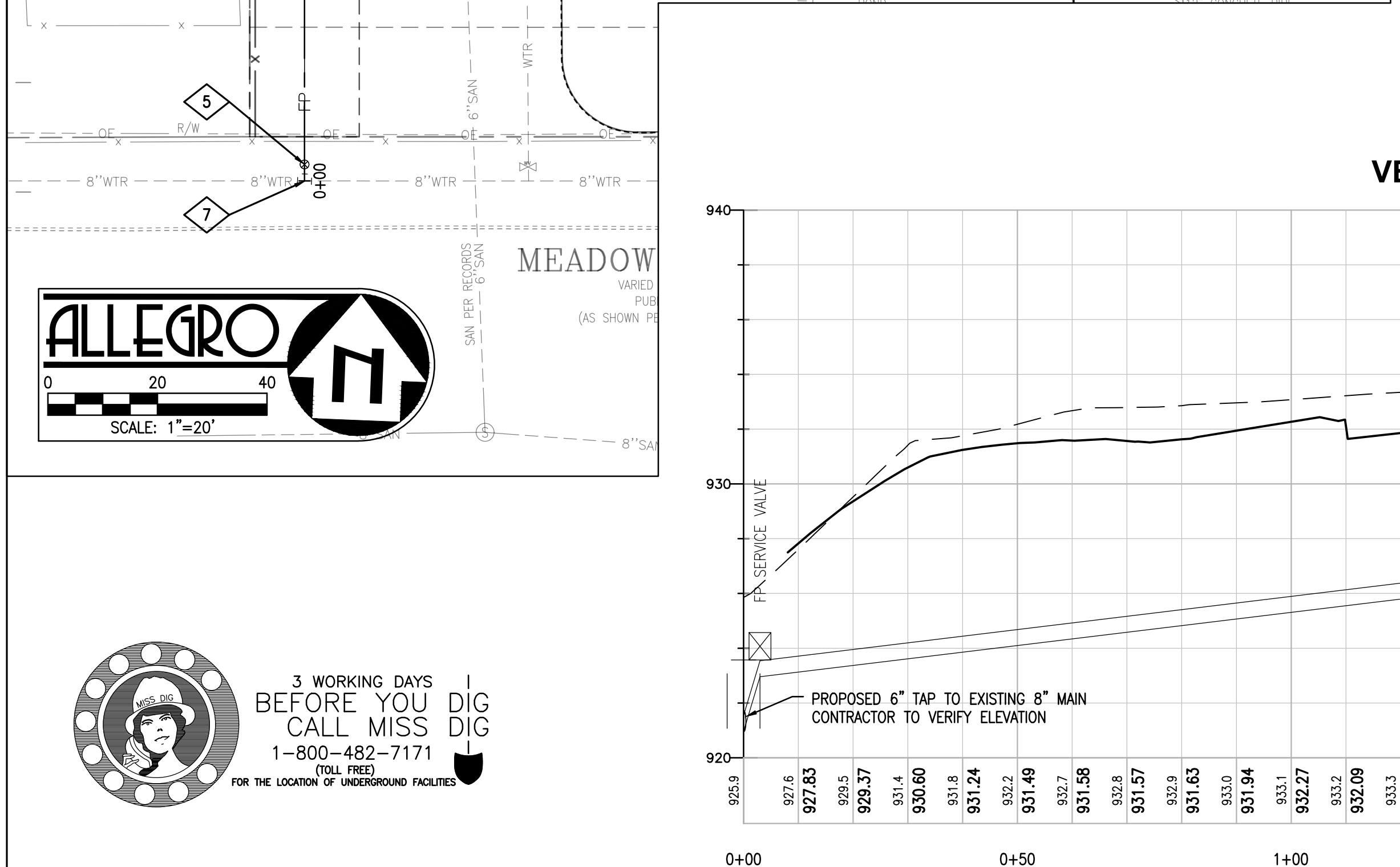
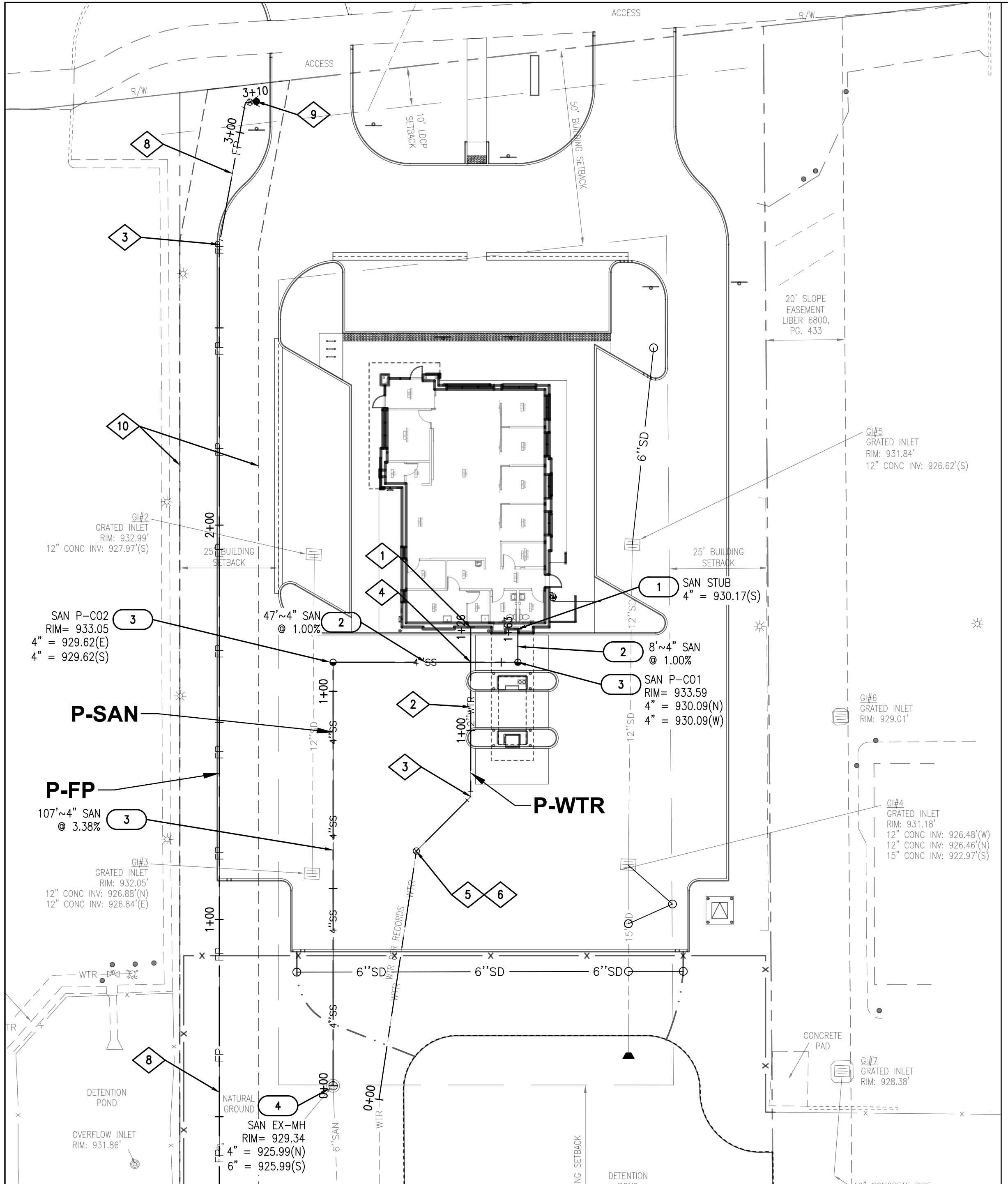
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SHEET TITLE:

**SANITARY SEWER & WATER MAIN PLAN & PROFILE**

SHEET NUMBER:

**C3.0**



PROPOSED	LEGEND	EXISTING
---	PROPERTY LINE	---
---	EASEMENT LINE	---
---	APPROXIMATE LIMIT OF DISTURBANCE	---
---	1-FOOT CONTOUR	---
---	5-FOOT CONTOUR	---
---	WATER LINE	---
---	SANITARY SEWER LINE	---
---	STORM DRAIN LINE	---
---	UNDERGROUND ELECTRIC	---
---	UNDERGROUND TELECOM	---
---	GAS	---
○	TREE/SHRUB	○
x	FENCE	x
+	SIGN	+
○	BOLLARD/POST	○
○	FIRE HYDRANT	○
○	WATER METER/VALVE	○
○	SEWER MANHOLE/CLEANOUT	○
○	STORM CLEANOUT/CATCH BASIN/END SECTION	○
○	GAS METER/VALVE	○
○	LIGHT/UTILITY POLE	○
○	TRANSFORMER	○

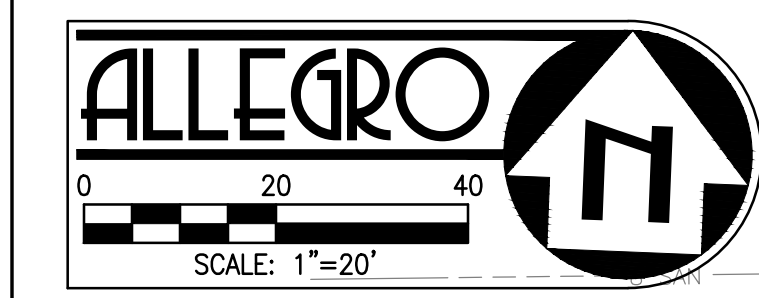
- SANITARY SEWER KEY NOTES**
- CONNECT PROPOSED PVC SANITARY SEWER TO SERVICE POC STUB. SIZE AND INVERT PER PLAN. SEE PLUMBING PLANS FOR CONTINUATION.
  - PROPOSED SANITARY PVC SEWER SERVICE PIPE. SIZE, LENGTH AND SLOPE PER PLAN. BEDDING PER DETAIL 2 ON SHEET C5.3.
  - PROPOSED TWO-WAY CLEANOUT, PER DETAIL 6 ON SHEET C5.2. RIM AND INVERT PER 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.
  - UTILITY CROSSING, PER DETAIL 3 ON SHEET C5.3.
  - 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.
  - PROPOSED FIRE HYDRANT ASSEMBLY, PER DETAIL 3 ON SHEET C5.4.
  - PROPOSED 20' WIDE WATER EASEMENT

- 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 S02°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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  - 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.

- UTILITY NOTES:**
- 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.



3 WORKING DAYS  
BEFORE YOU DIG  
CALL MISS DIG  
1-800-482-7171  
FOR THE LOCATION OF UNDERGROUND FACILITIES

PROVIDED BY:



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:

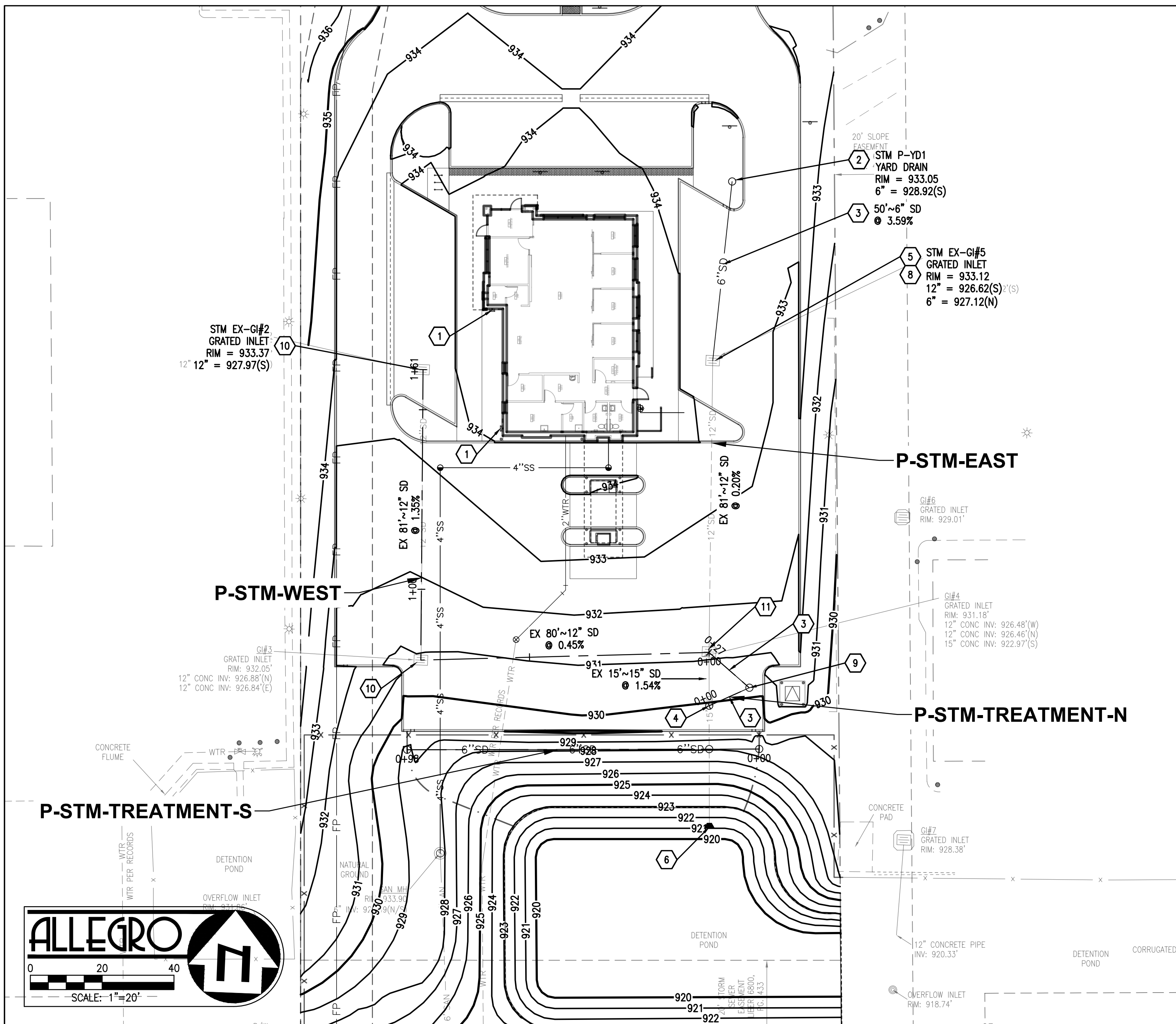
No.	Date	Description
1	07.19.2021	SITE PLAN REVIEW
2	05.04.2022	RESPONSE TO CITY COMMENTS
3	06.06.2022	RESPONSE TO CITY COMMENTS
4	08.22.2022	RESPONSE TO CITY COMMENTS

SHEET TITLE:

STORM SEWER  
PLAN & PROFILE

SHEET NUMBER:

C3.1



**SURVEY NOTES:**

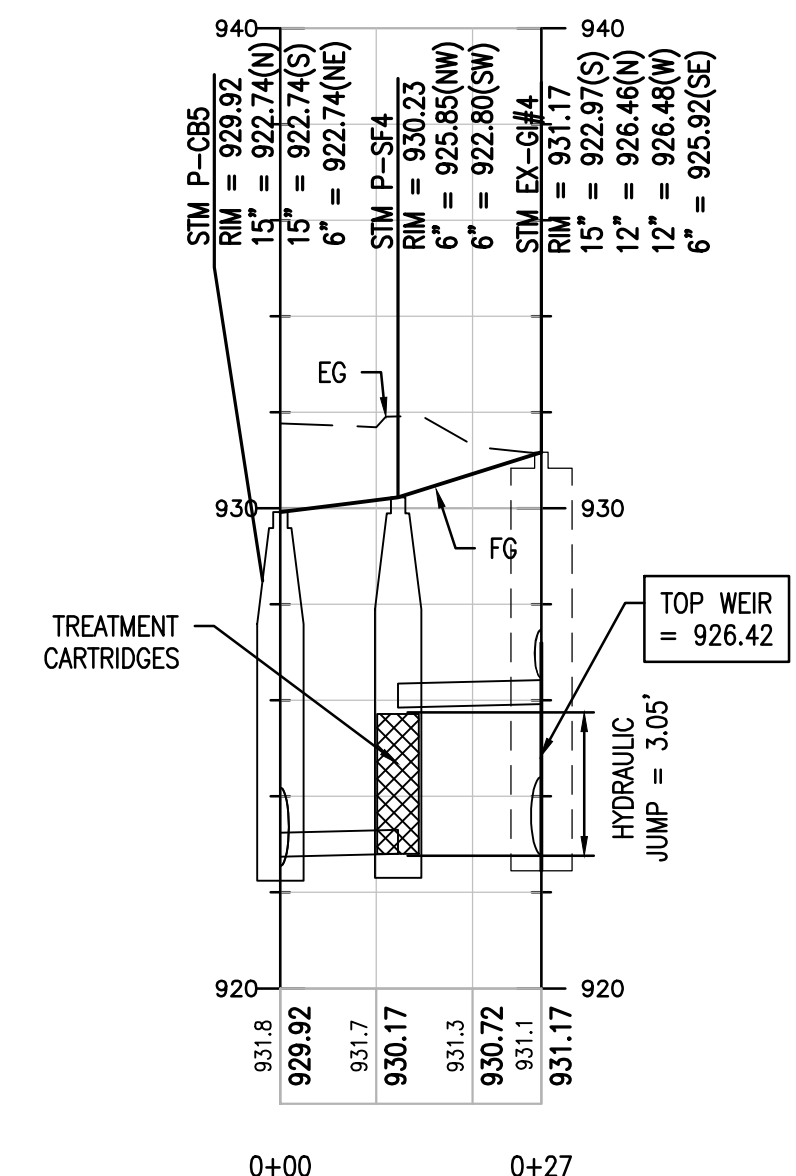
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- BASIS OF BEARING: GRID NORTH PER MICHIGAN STATE PLANE COORDINATE SYSTEM, SOUTHERN ZONE, NAD83-2011, BASED OFF OF THE WEST LINE OF THE SUBJECT PROPERTY BEARING 502°48'46" E PER GPS COORDINATE OBSERVATIONS.
- ELEVATIONS ESTABLISHED USING MDOT MONUMENT 63659 N: 431540.17, E: 1342471.37, 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
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**GENERAL NOTES:**

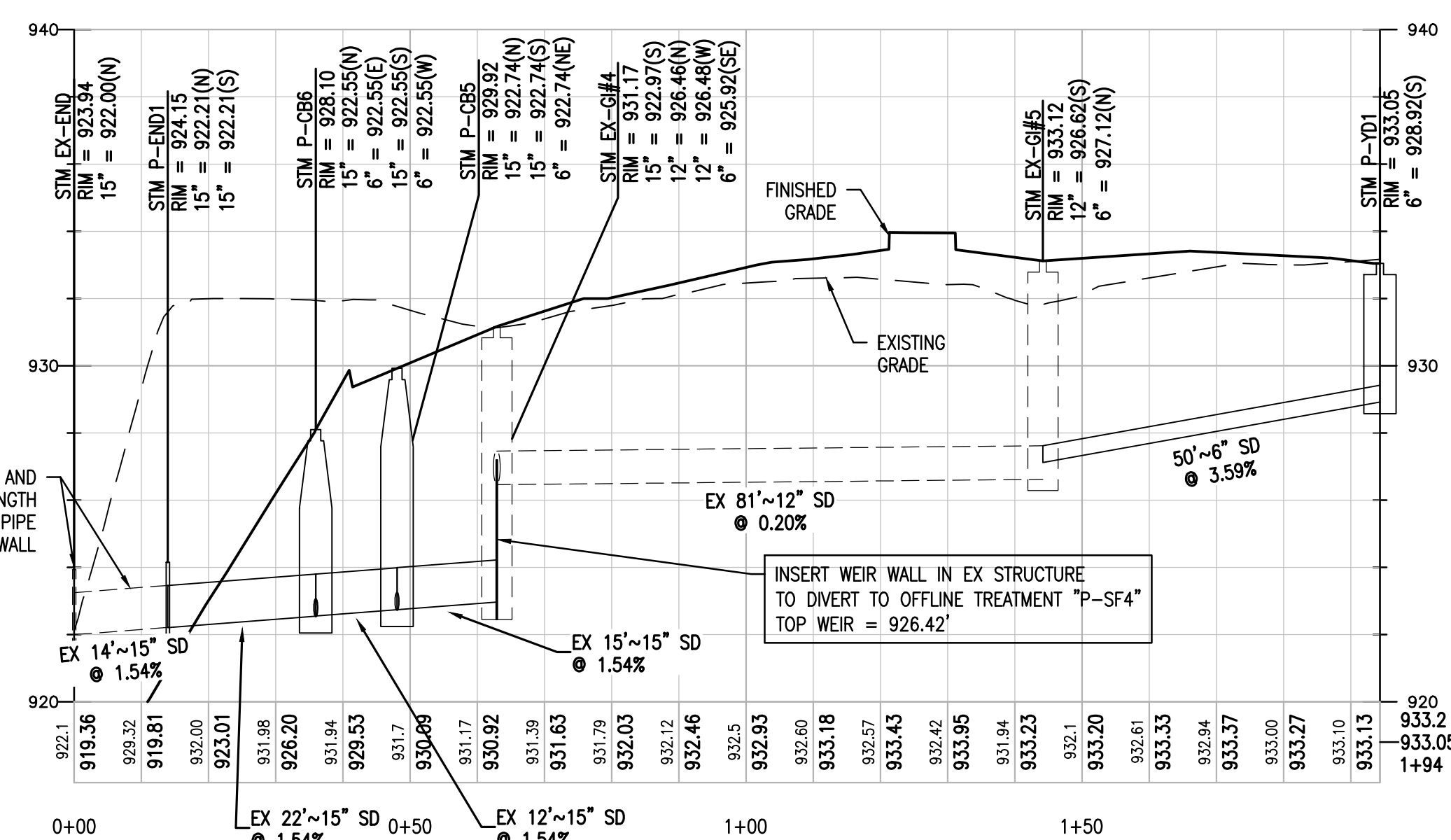
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PROPOSED	LEGEND	EXISTING
---	PROPERTY LINE	---
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---	1-FOOT CONTOUR	---
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---	SANITARY SEWER LINE	---
---	STORM DRAIN LINE	---
---	UNDERGROUND ELECTRIC	---
---	UNDERGROUND TELECOM	---
---	GAS	---
○	TREE/SHRUB	○
x	FENCE	x
+	SIGN	+
+	BOLLARD/POST	+
+	FIRE HYDRANT	+
+	WATER METER/VALVE	+
+	SEWER MANHOLE/CLEANOUT	+
○	STORM CLEANOUT/CATCH BASIN/END SECTION	○
+	GAS METER/VALVE	+
+	LIGHT/UTILITY POLE	+
+	TRANSFORMER	+

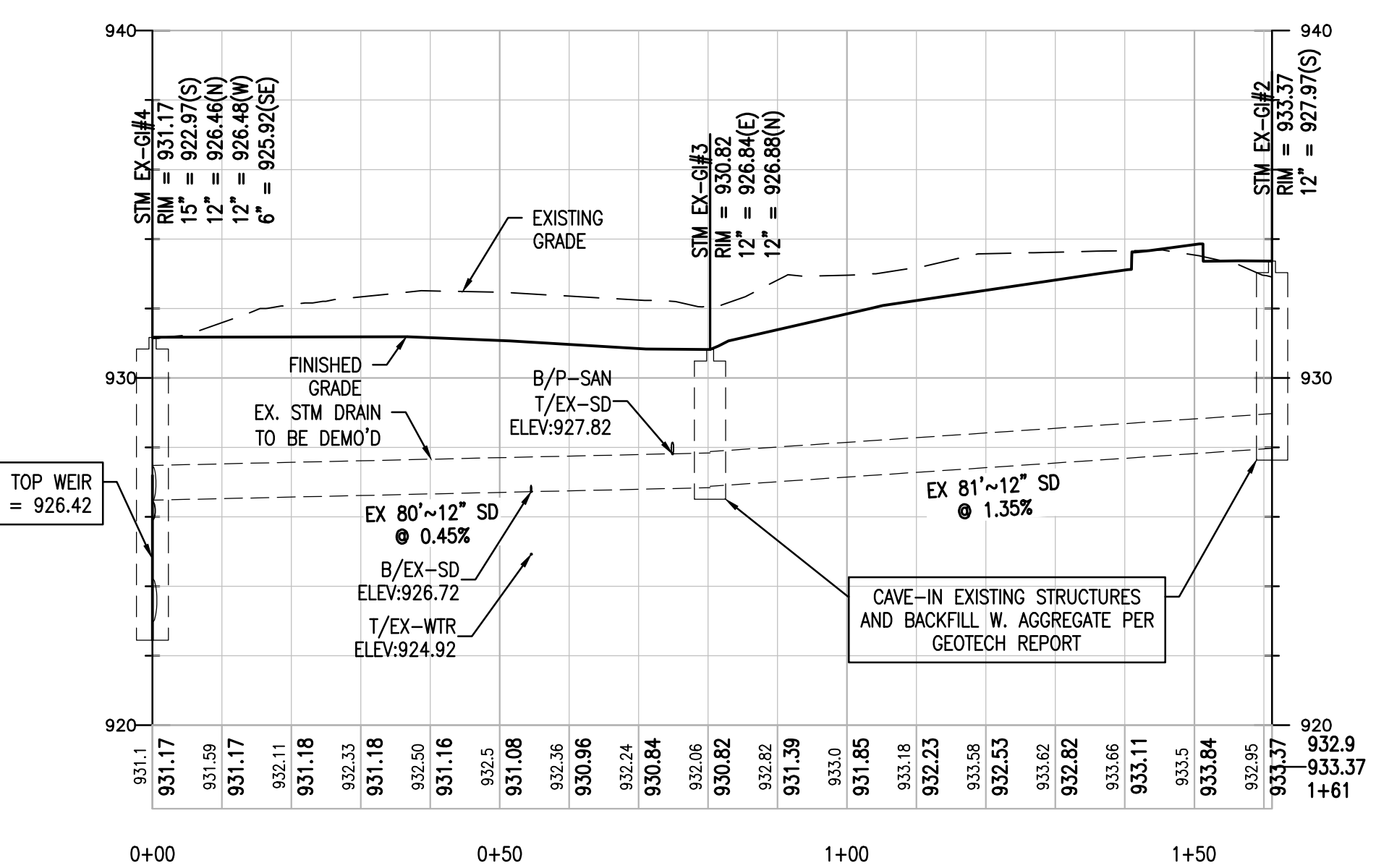
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HORIZONTAL SCALE: 20  
VERTICAL SCALE: 4  
VERTICAL EXAGGERATION: 5



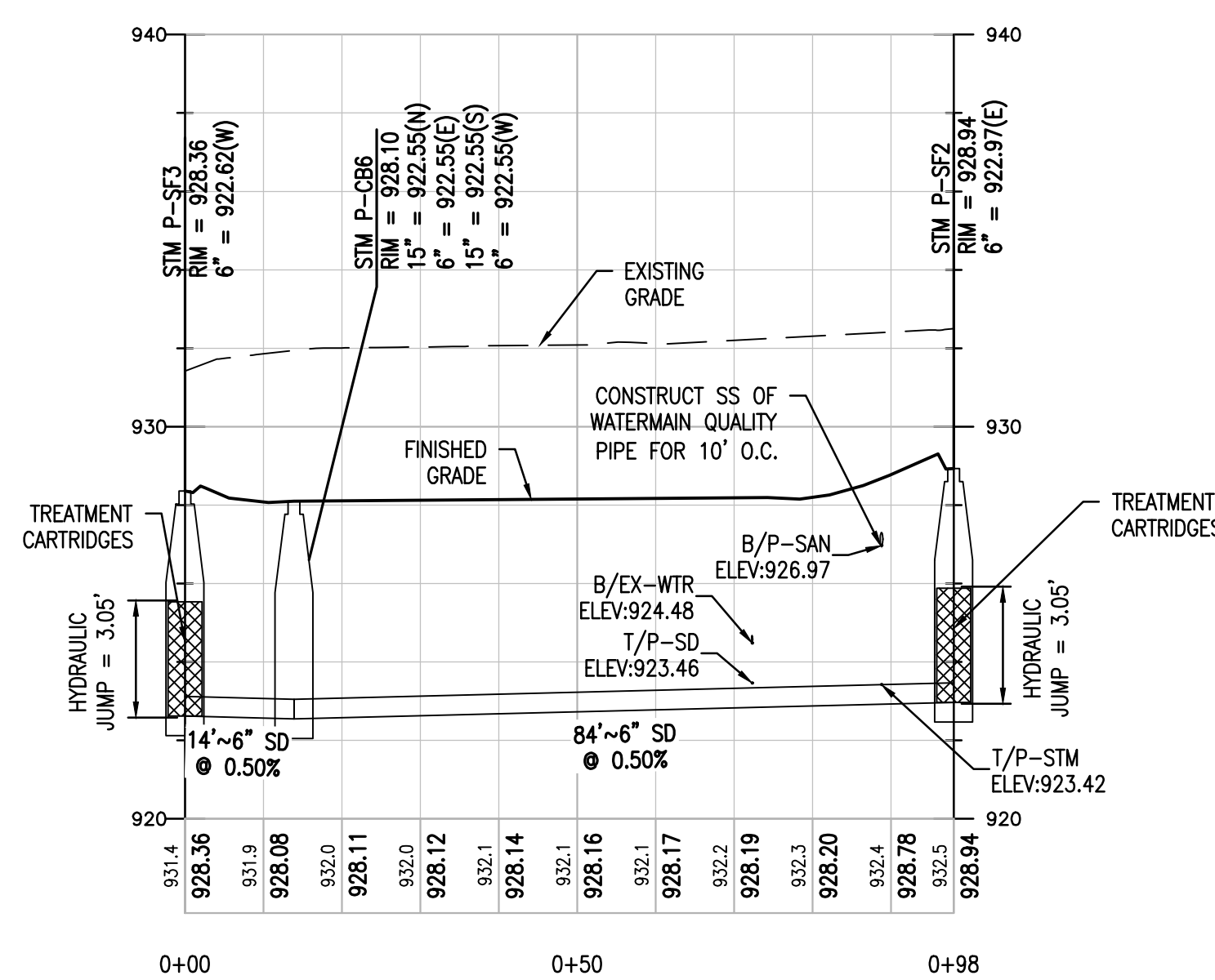
**PROFILE VIEW: P-STM-EAST**  
HORIZONTAL SCALE: 20  
VERTICAL SCALE: 4  
VERTICAL EXAGGERATION: 5



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



**PROFILE VIEW: P-STM-TREATMENT-S**  
HORIZONTAL SCALE: 20  
VERTICAL SCALE: 4  
VERTICAL EXAGGERATION: 5



PROVIDED BY:



ALLEGRO CIVIL ENGINEERS  
4322 N. LINCOLN AVE. SUITE A  
CHICAGO, IL 60625  
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PROFESSIONAL SEAL:



PROPOSED TENANT IMPROVEMENTS FOR:

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JOB NUMBER: 2021-177-002

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4	08.22.2022	RESPONSE TO CITY COMMENTS

SHEET TITLE:

SIGNING & PAVING PLAN

SHEET NUMBER:

C4.0

**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 S02°48'46"E PER GPS COORDINATE OBSERVATIONS.
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**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), LATEST EDITION.
- 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.
- ALL WALKS SHALL HAVE A MINIMUM 4 FOOT CLEAR WIDTH FOR ACCESSIBLE CONFORMANCE.

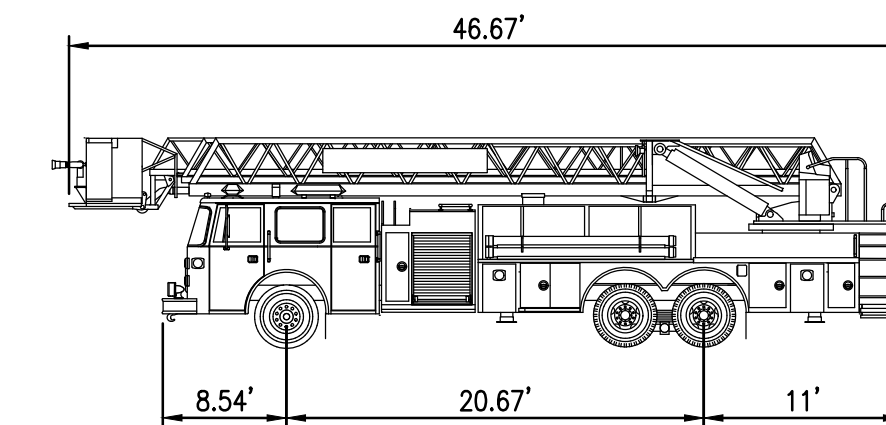
**FIRE DEPARTMENT NOTES:**

- 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.

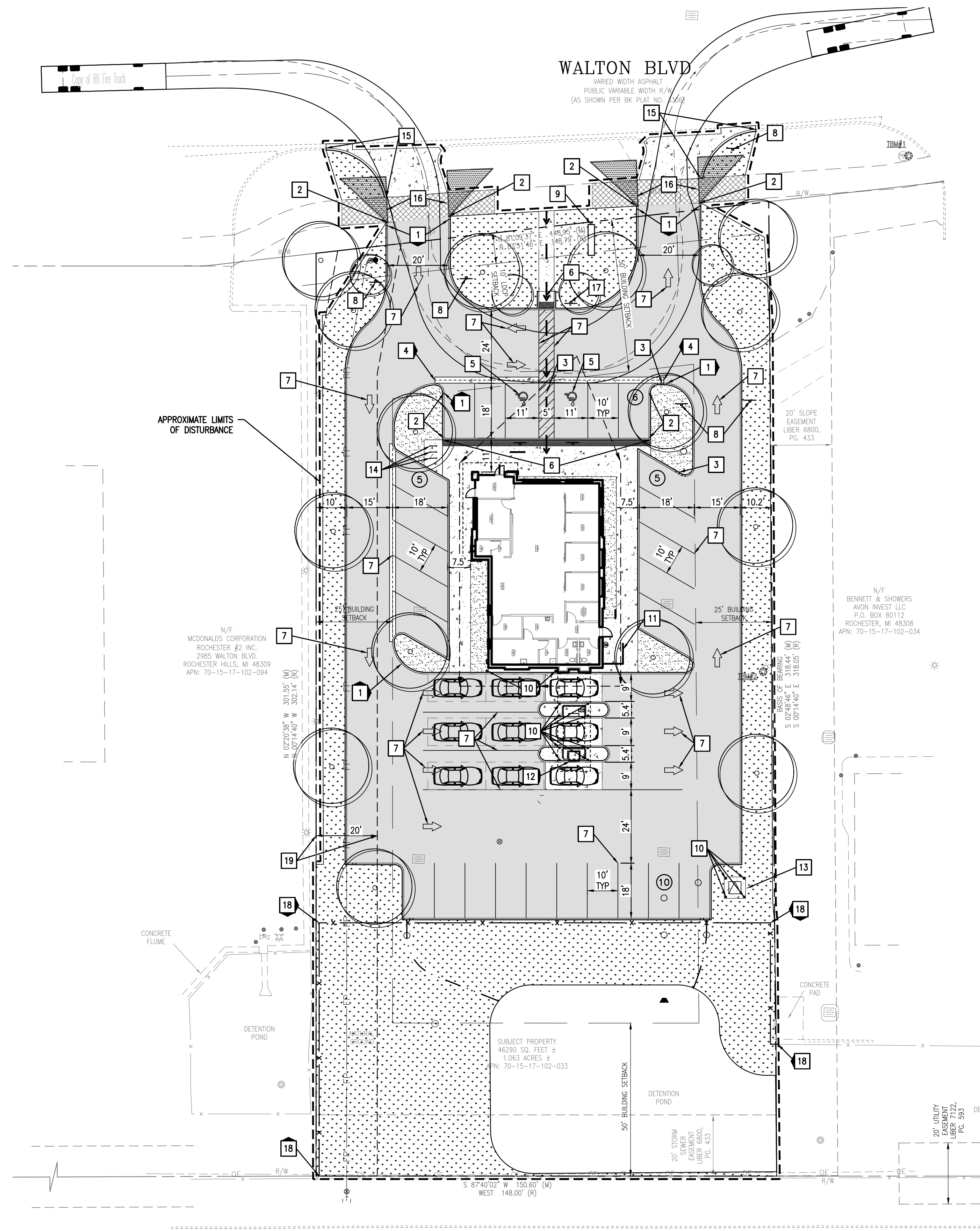
PROPOSED	LEGEND	EXISTING
---	PROPERTY LINE	---
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---	APPROXIMATE LIMIT OF DISTURBANCE	---
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---	STORM DRAIN LINE	---
---	UNDERGROUND ELECTRIC	---
---	UNDERGROUND TELECOM	---
---	GAS	---
○	TREE/SHRUB	○
x	FENCE	x
○	SIGN	○
○	BOLLARD/POST	○
○	FIRE HYDRANT	○
○	WATER METER/VALVE	○
○	SEWER MANHOLE/CLEANOUT	○
○	STORM CLEANOUT/CATCH BASIN/END SECTION	○
○	GAS METER/VALVE	○
○	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	---

**SITE PLAN KEY NOTES**

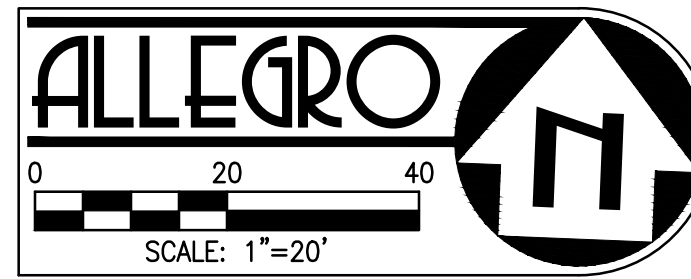
- PROPOSED 6" VERTICAL CURB, PER DETAIL 5 ON SHEET C5.0.
- PROPOSED TRANSITIONAL CURB (6" TO FLUSH), PER DETAIL 6 ON SHEET C5.0.
- PROPOSED CURB CUT WITH RIPRAP FOR STORMWATER CONVEYANCE, PER DETAIL 6 ON SHEET C5.0.
- PROPOSED 2' WIDE VALLEY GUTTER, PER DETAIL 7 ON SHEET C5.1.
- PROPOSED ADA PAVEMENT MARKING, WHEEL STOP, PER DETAILS 1 THRU 3 ON SHEET 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 C5.0.
- PROPOSED PAVEMENT STRIPING OR DIRECTIONAL ARROW, TRAFFIC WHITE PAINT, MINIMUM TWO COATS. DIMENSIONS PER MUTCD STANDARDS (TYP).
- PROPOSED "ONE WAY DO NOT ENTER" SIGN PER MUTCD STANDARDS. SIGN POST PER DETAIL 5 ON SHEET C5.1.
- 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 DETAILS.
- 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.
- PROPOSED 20' WIDE WATER EASEMENT

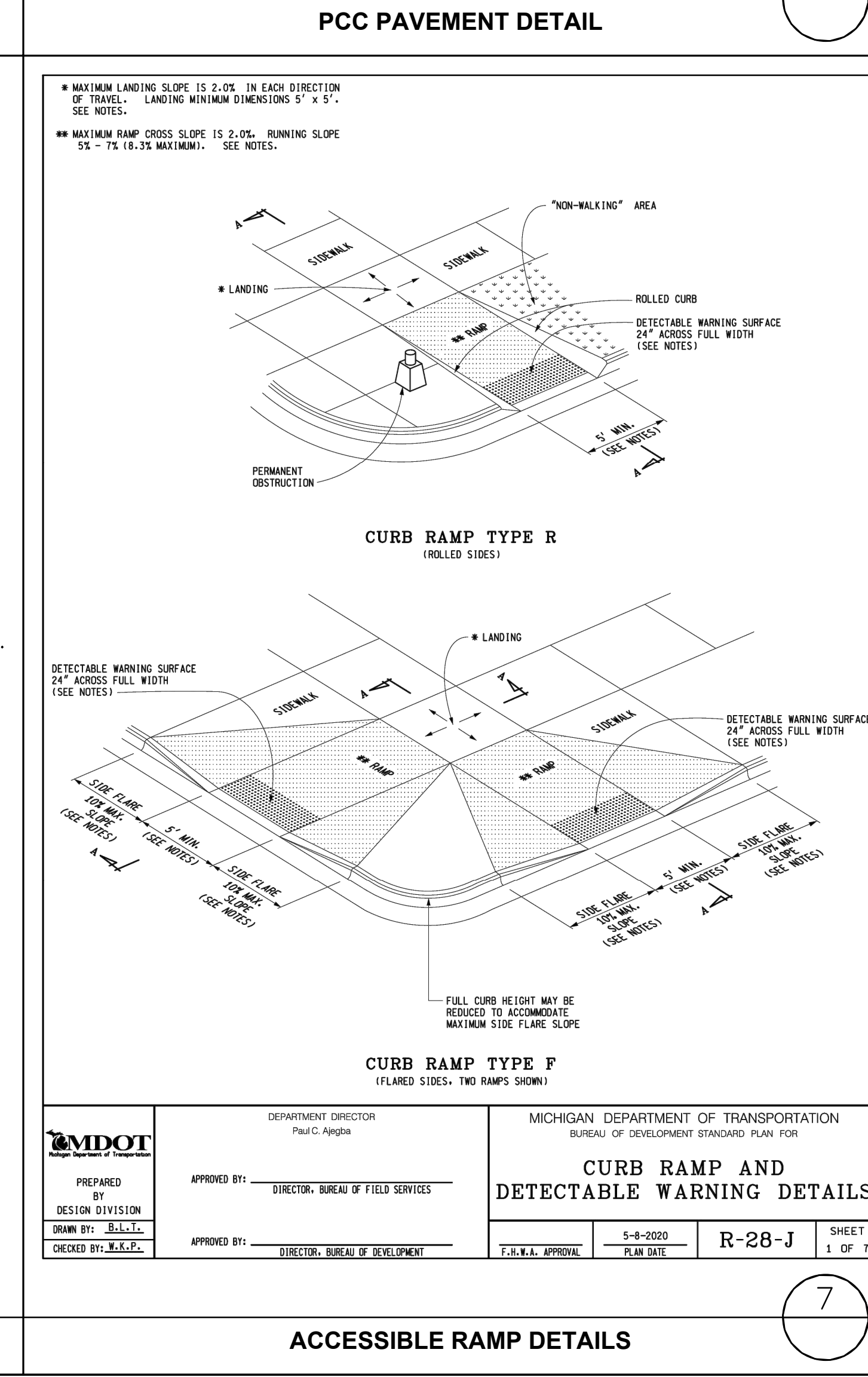
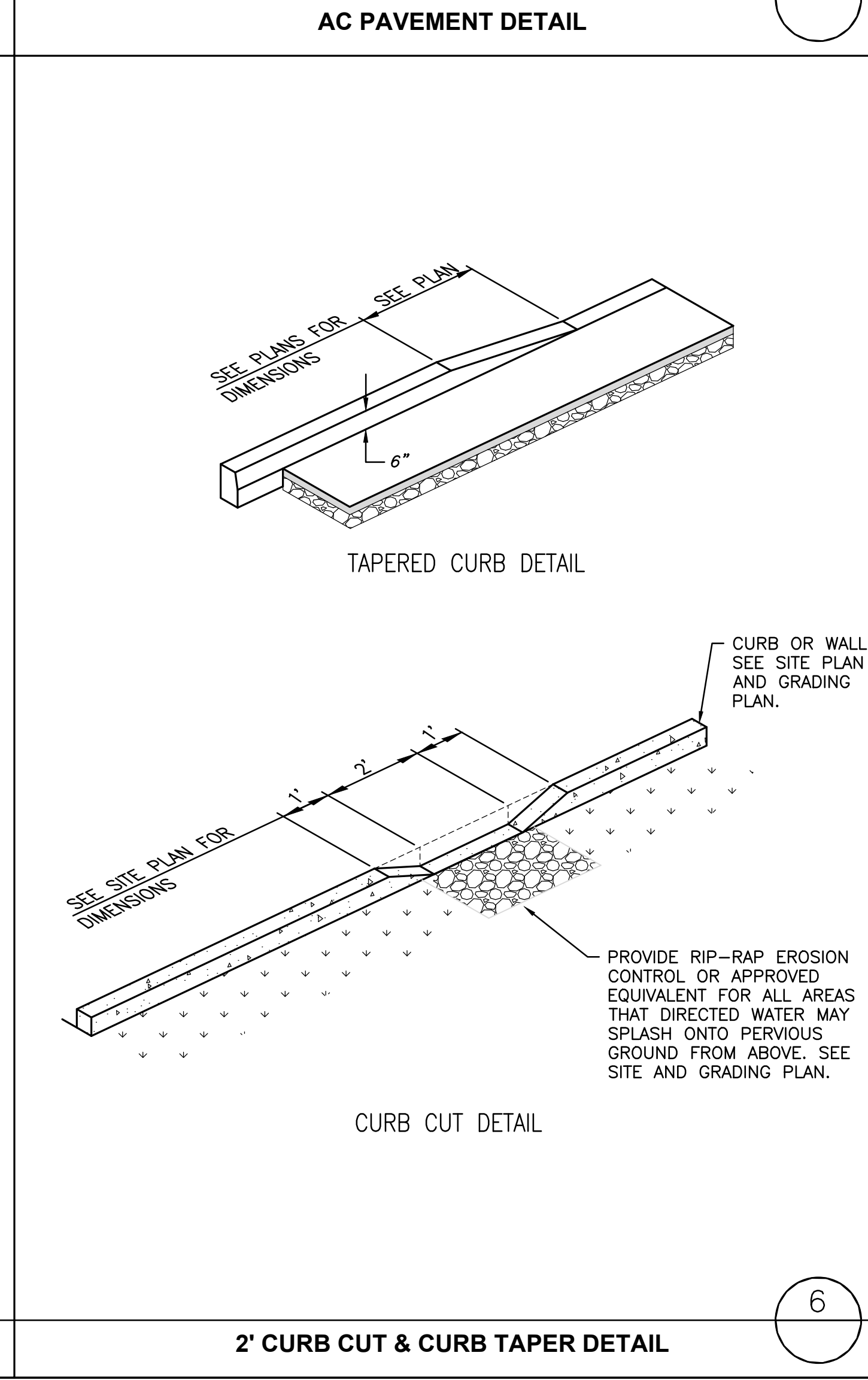
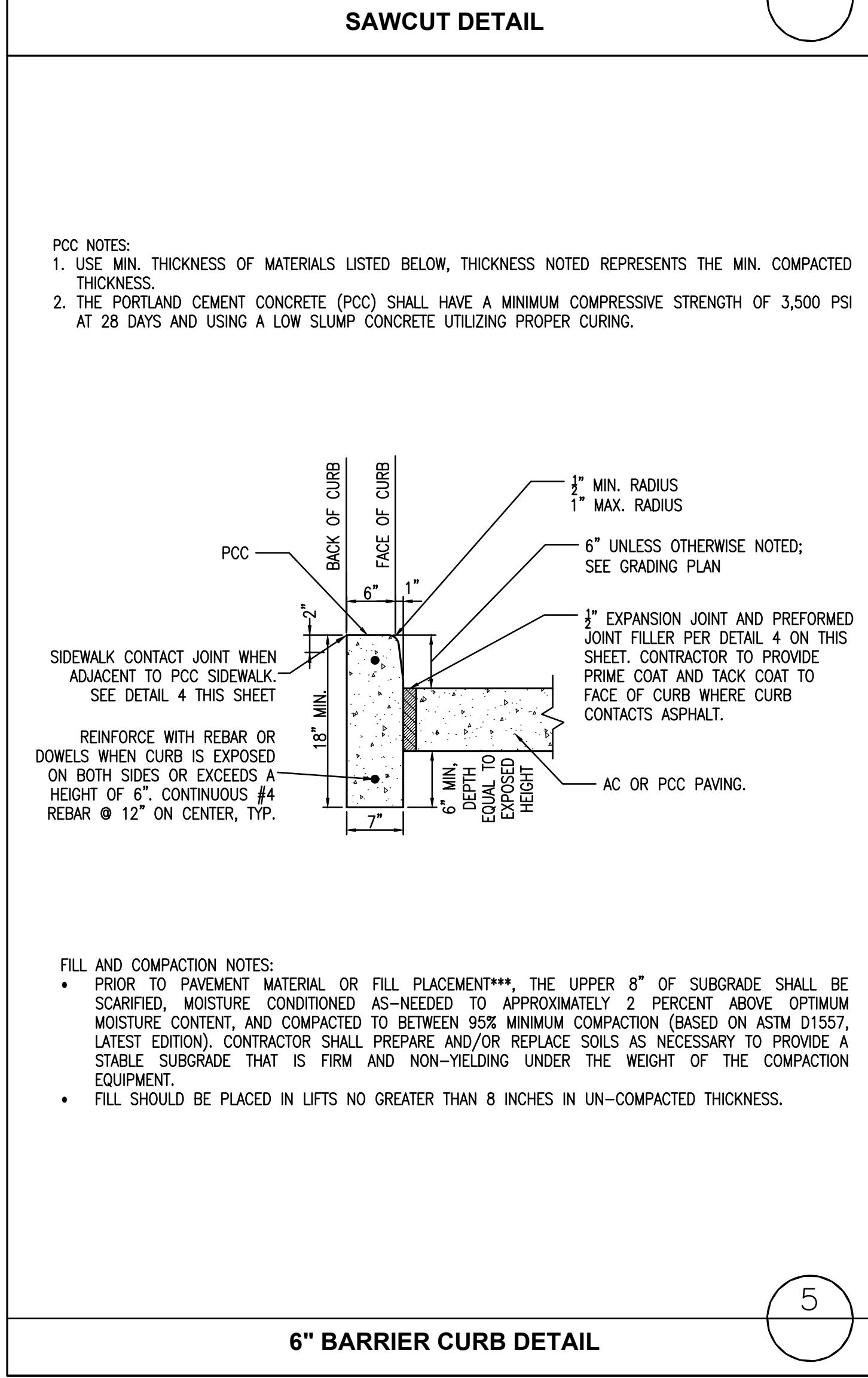
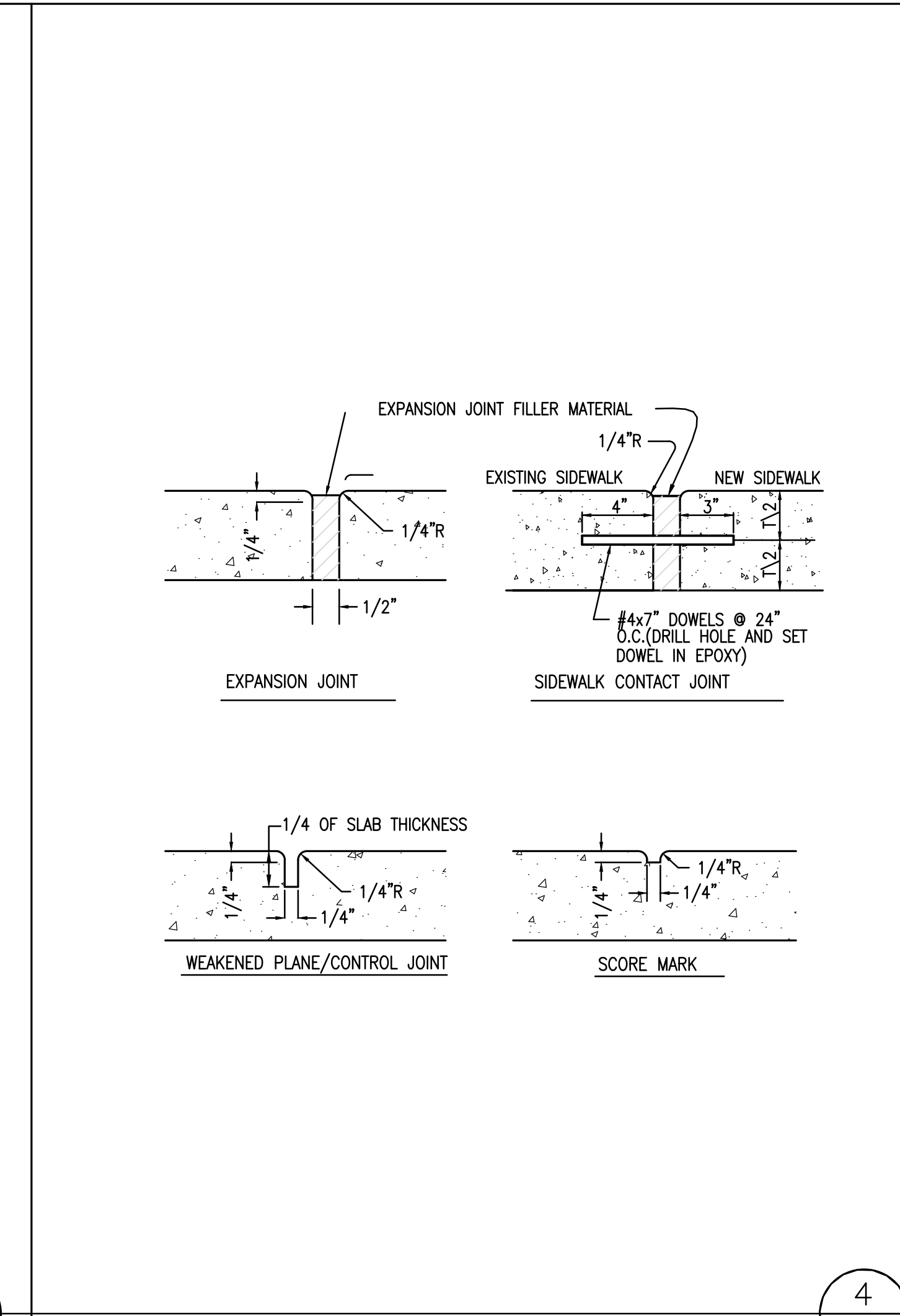
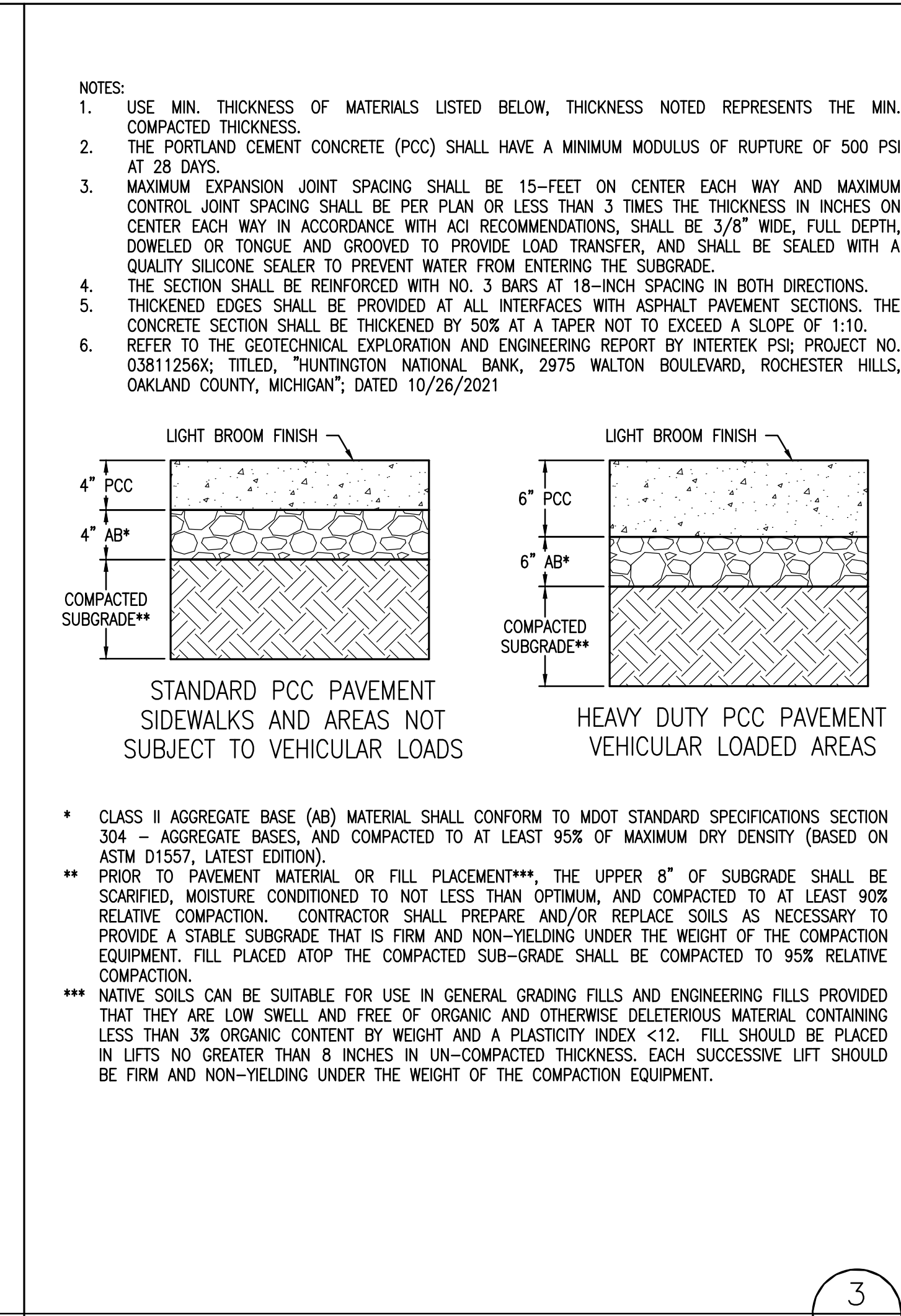
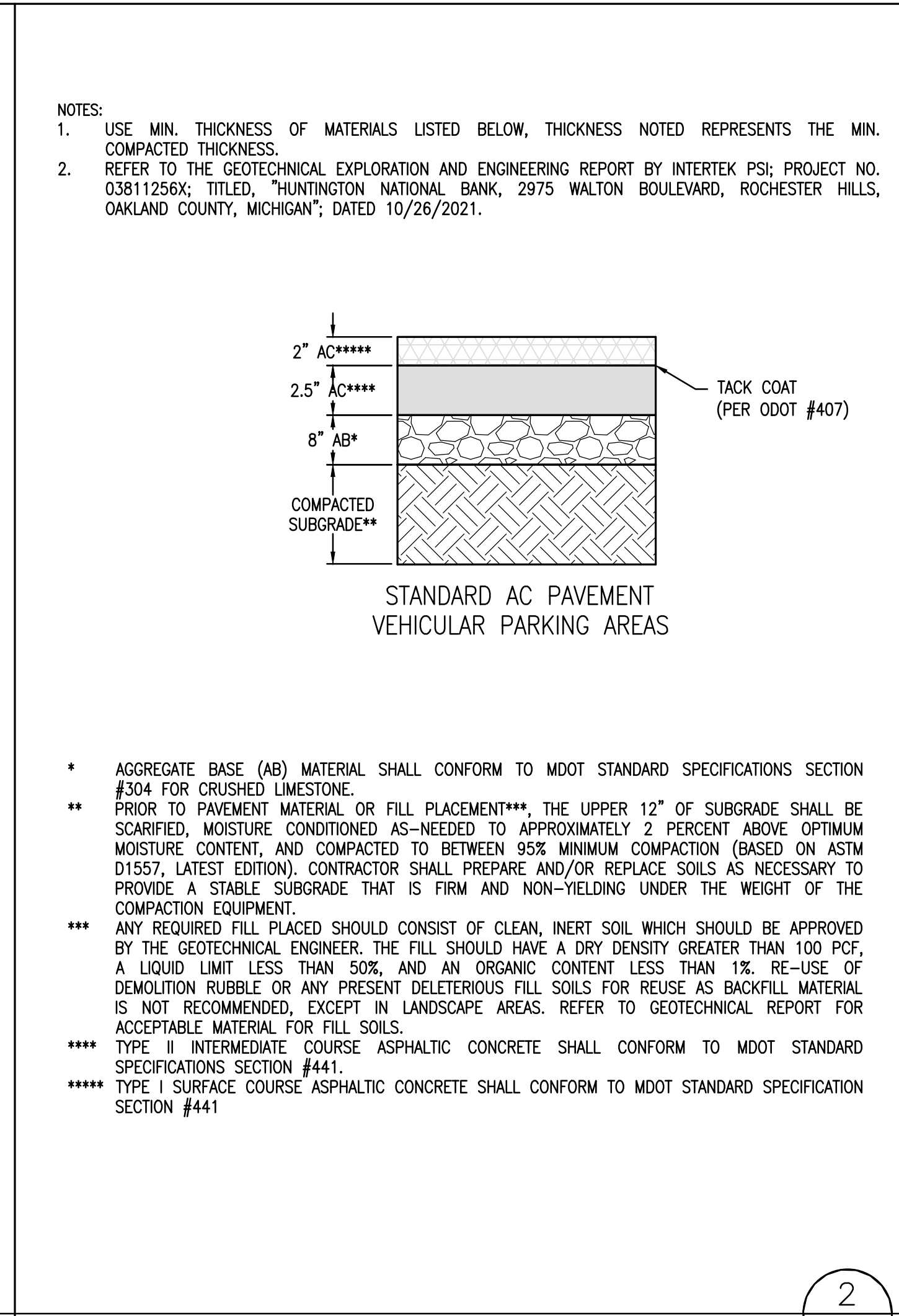
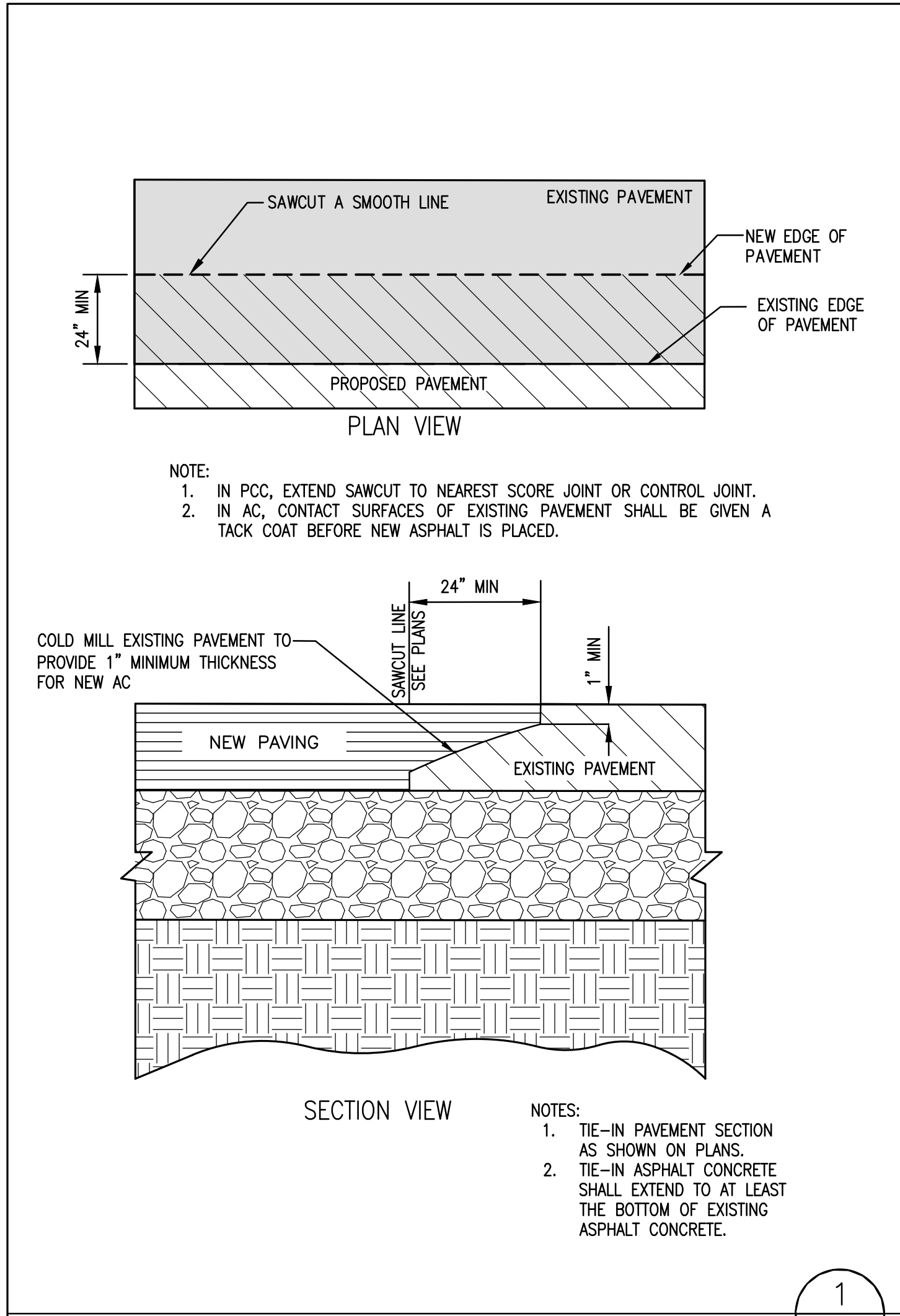


Rochester Hills Fire Truck 1	
Overall Body Length	40.21'
Overall Width	8.5'
Overall Body Height	7.5'
Min Body Ground Clearance	0.81'
Track Width	8.5'
Lock-to-lock time	5.00s
Turning Radius	42.5'
Max Wheel Angle	45'



MEADOWBROOK DR.  
VARIED WIDTH ASPHALT  
PUBLIC 60' R/W  
(AS SHOWN PER BK PLAT NO. 3306)





**vocon.**  
 cleveland. 3142 Prospect Avenue, Cleveland, OH 44115  
 new york. 530 5th Avenue, 16th Floor, New York City, NY 10036  
 los angeles. 555 West 5th Street, 35th Floor, Los Angeles, CA 90013  
 vocon.partners LLC

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

PROFESSIONAL SEAL:  
 AUSTIN J. HAHN  
 ENGINEER  
 No. 6201055048  
 EXP. 12/31/22

PROPOSED TENANT IMPROVEMENTS FOR:  
**HUNTINGTON NATIONAL BANK ROCHESTER HILLS**  
 2977 WALTON BLVD ROCHESTER HILLS, MI 48309

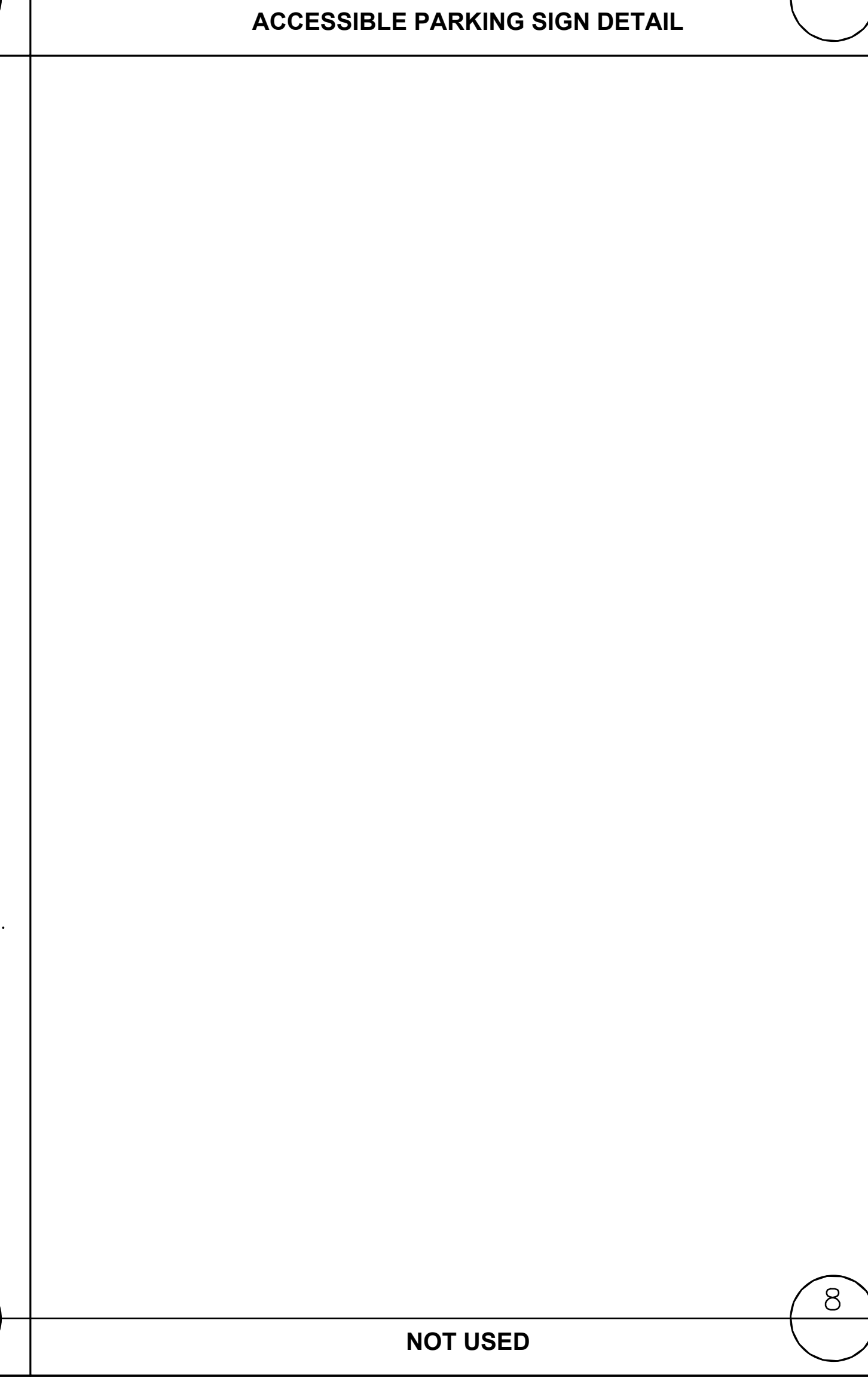
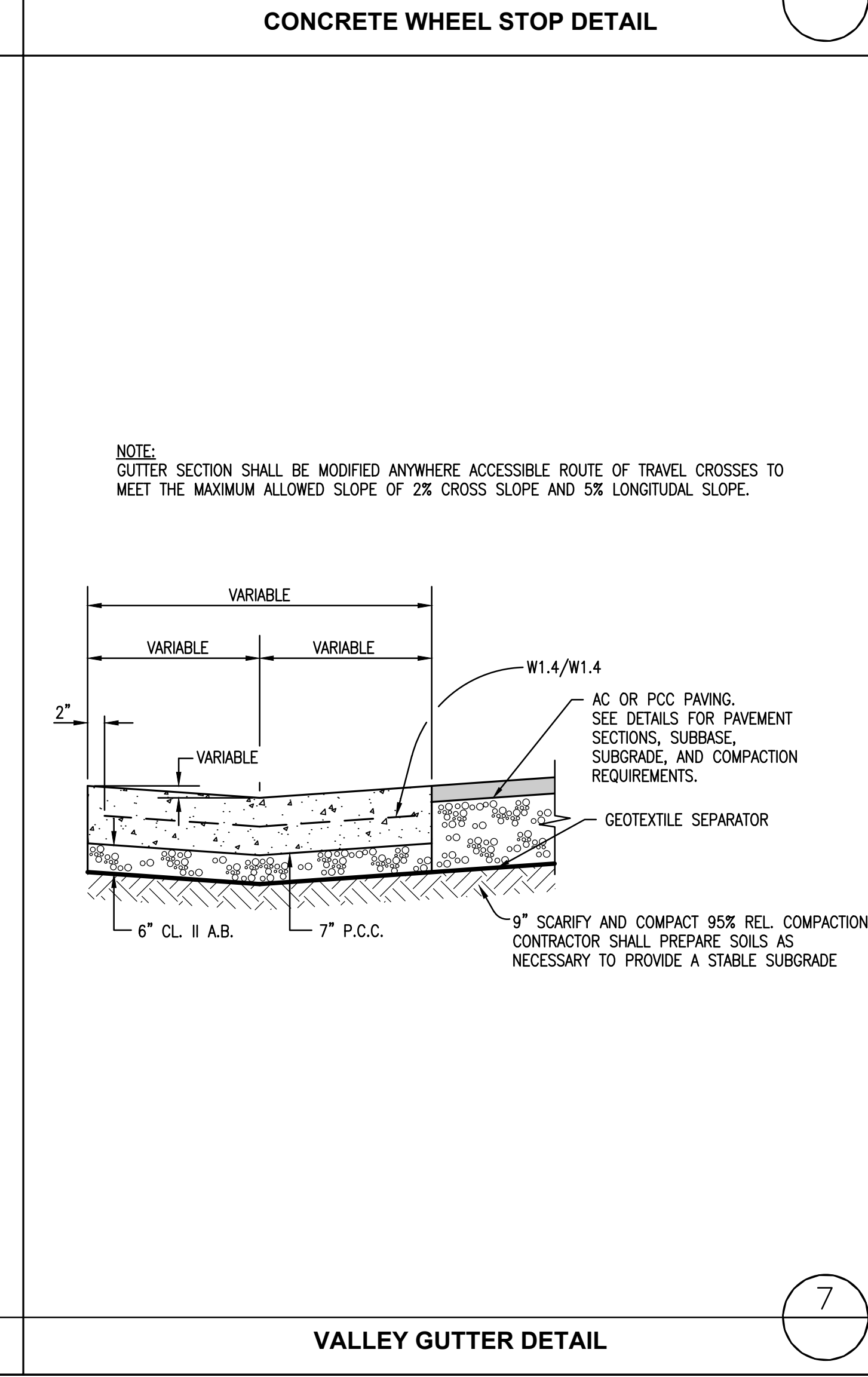
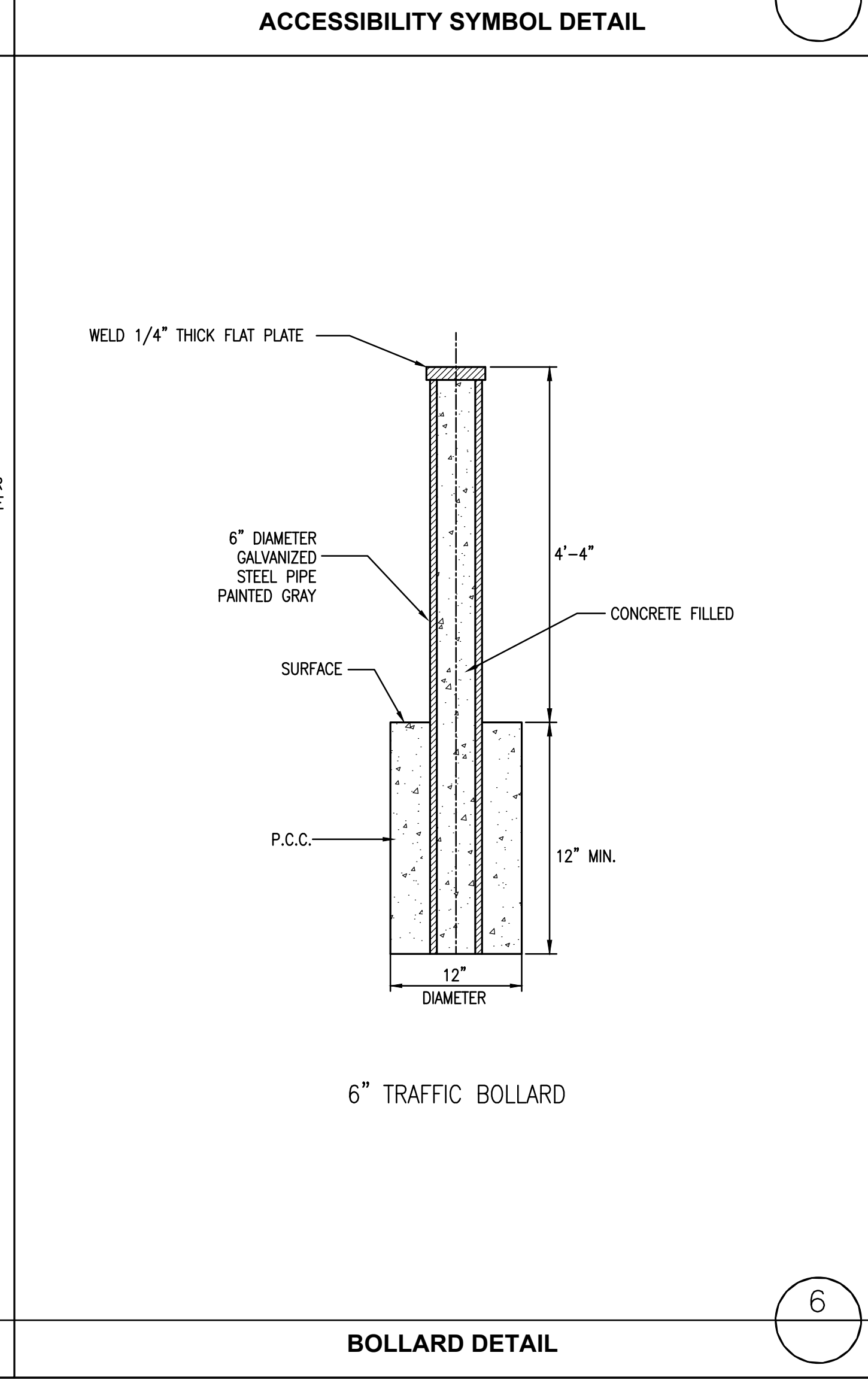
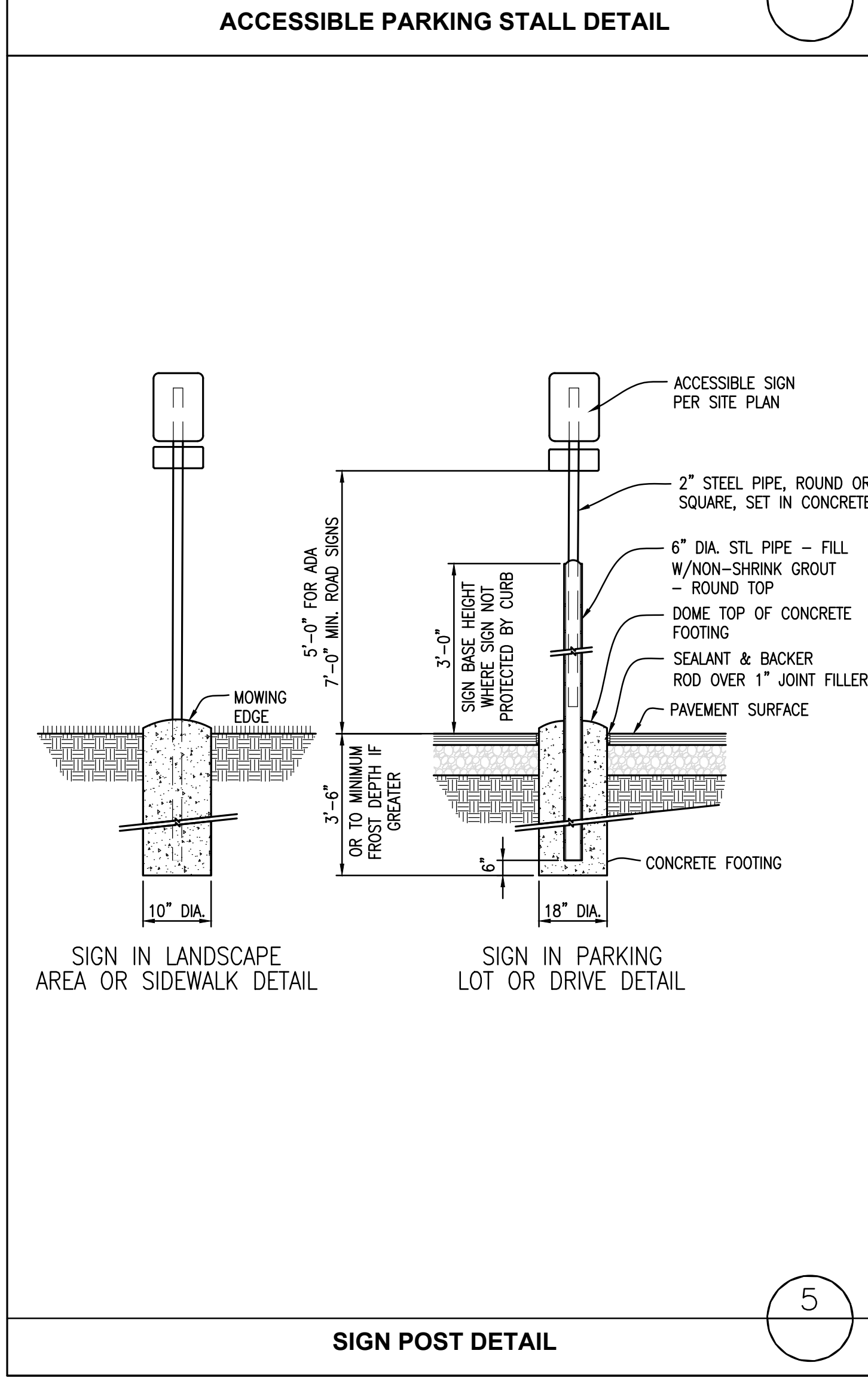
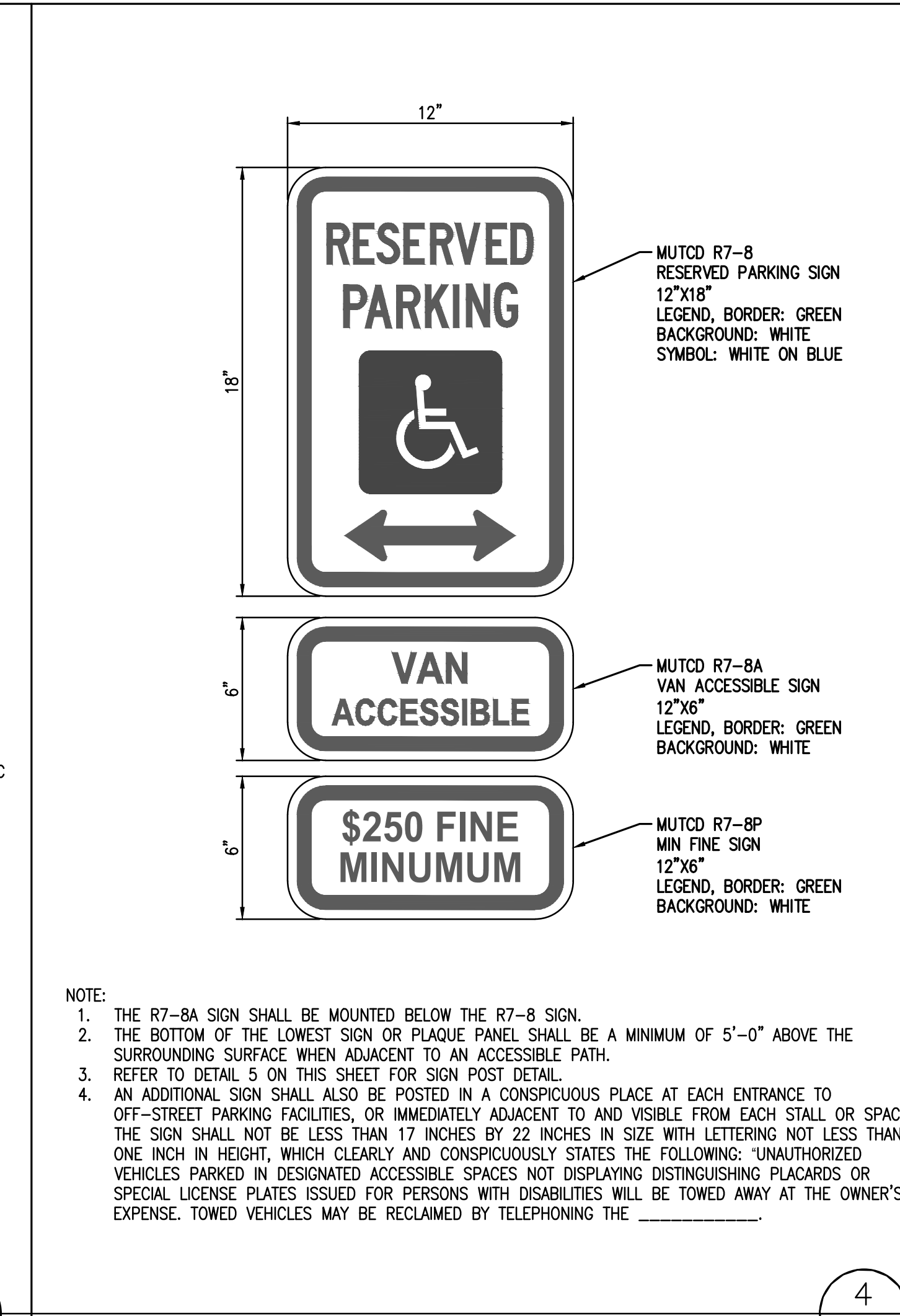
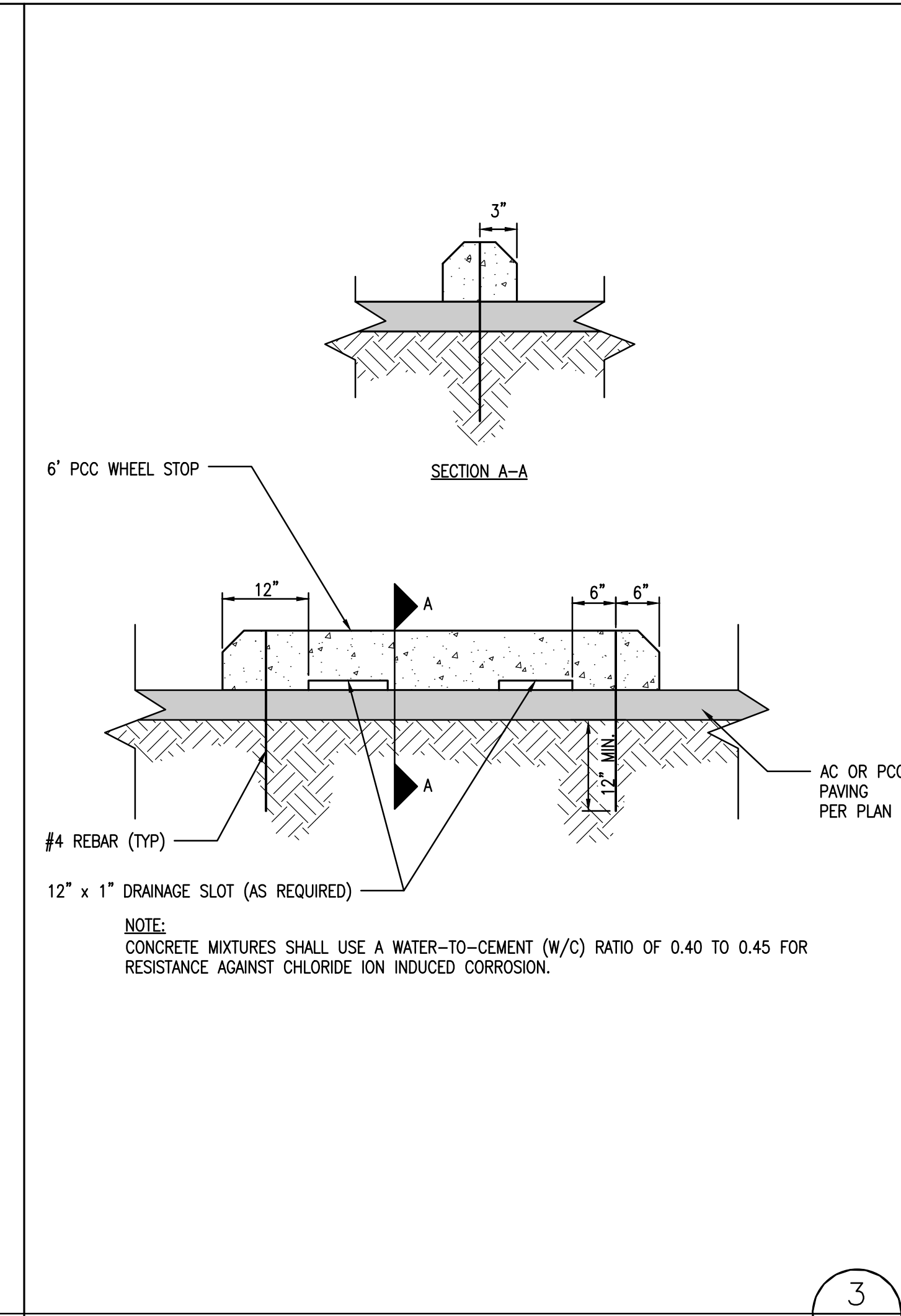
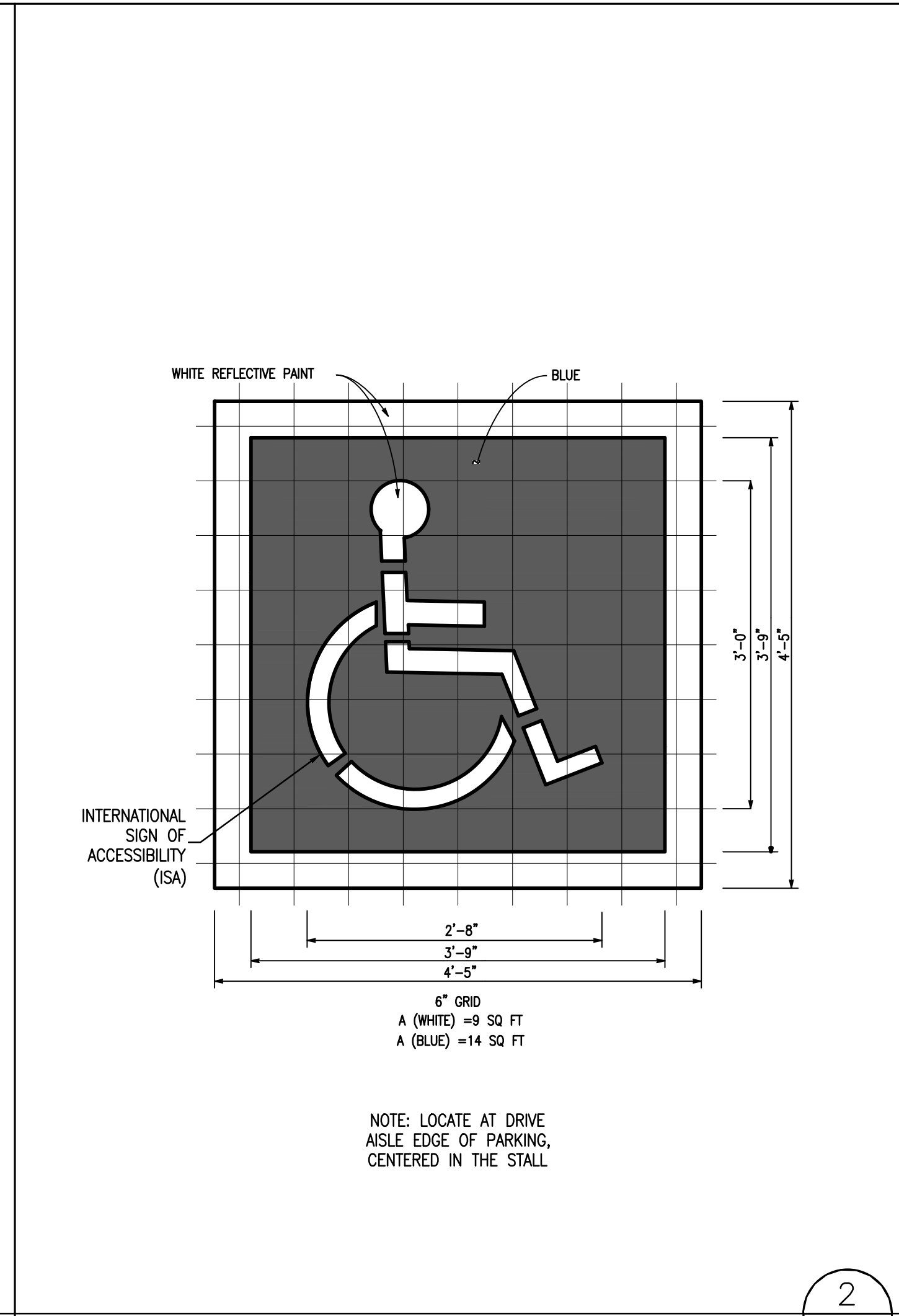
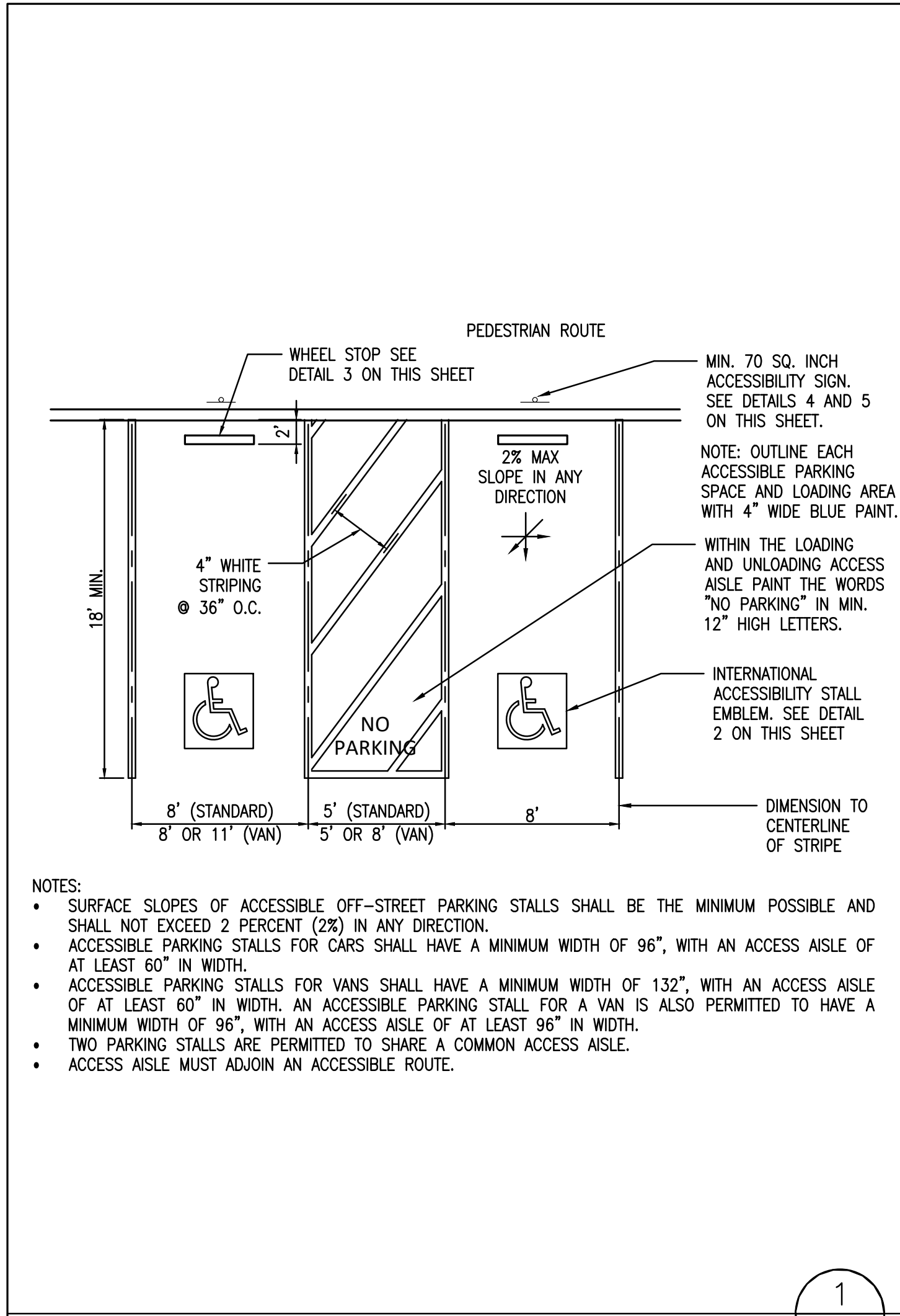
JOB NUMBER: 2021-177-002

**DRAWING RELEASE:**

No.	Date	Description
1	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: **CONSTRUCTION DETAILS**

SHEET NUMBER: **C5.0**



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**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

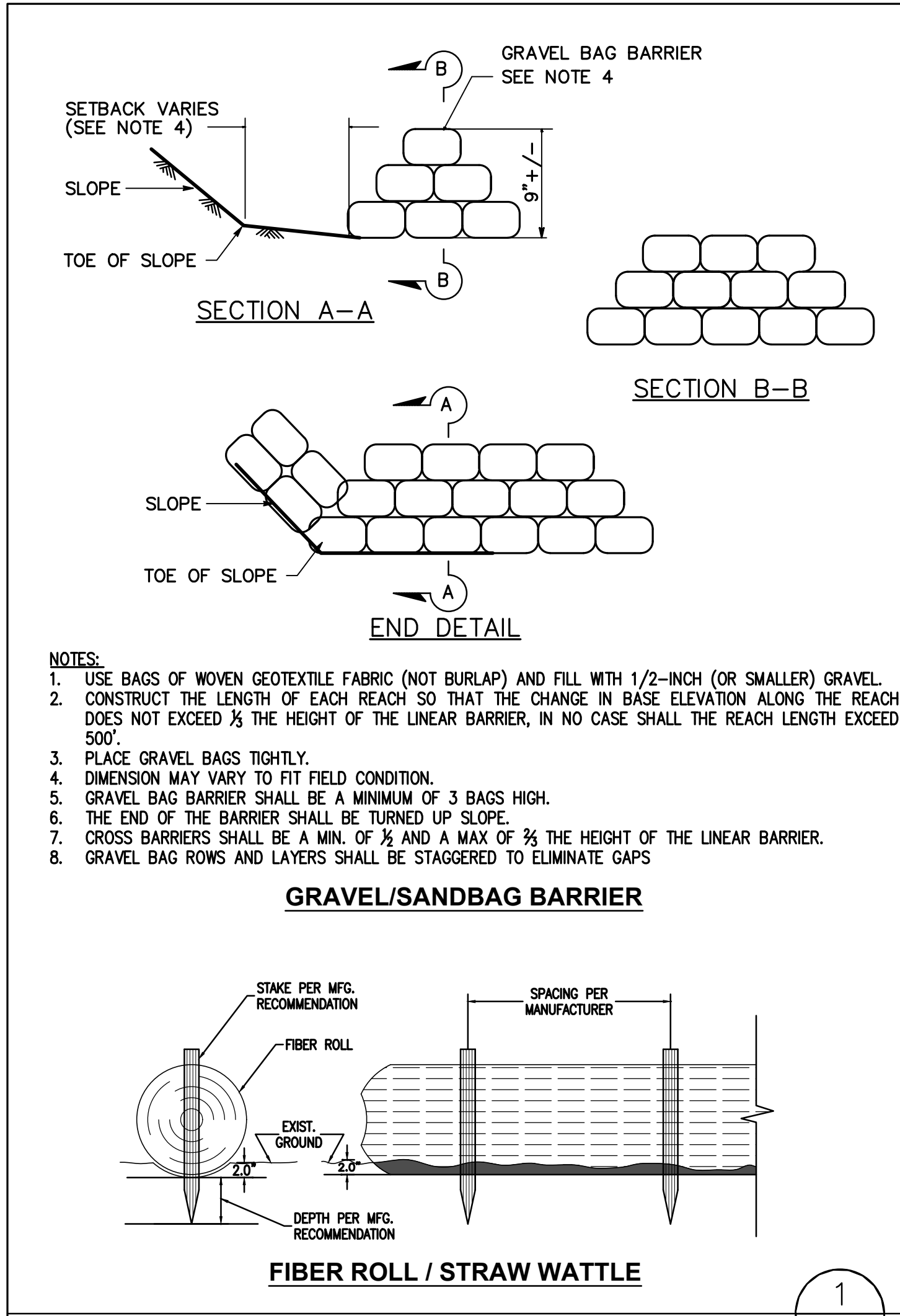
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**DRAWING RELEASE:**

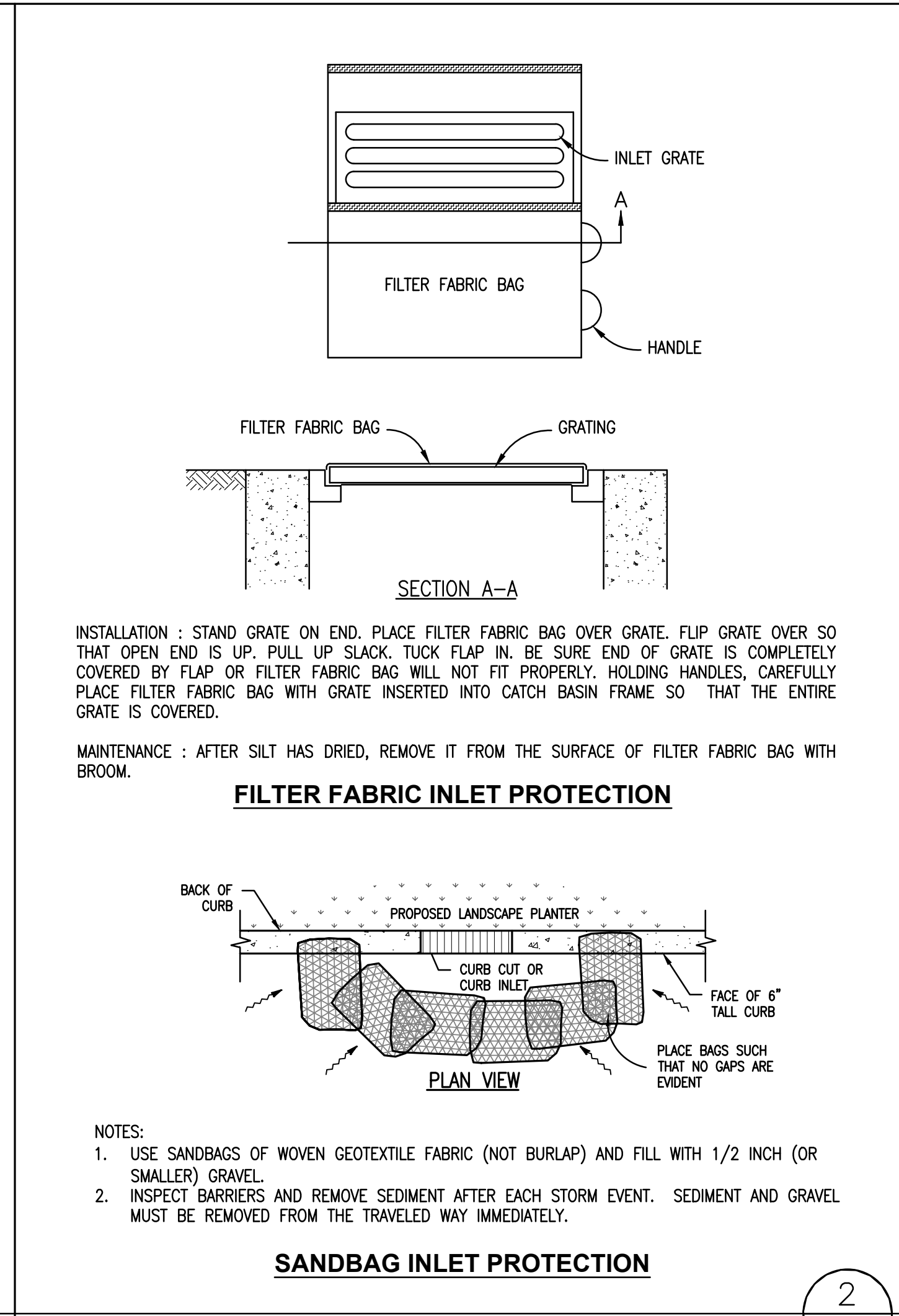
No.	Date	Description
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SHEET TITLE:  
**CONSTRUCTION DETAILS**

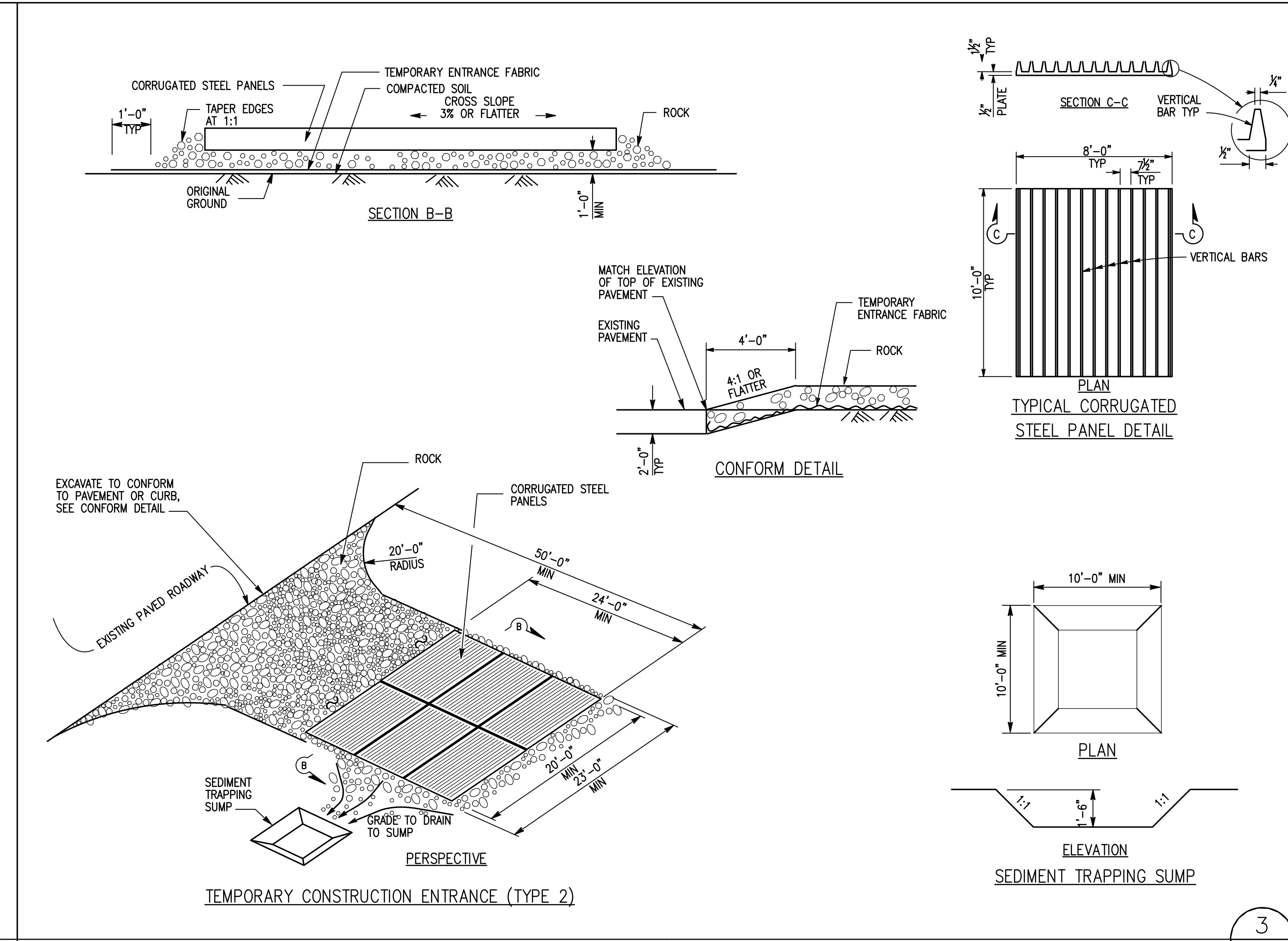
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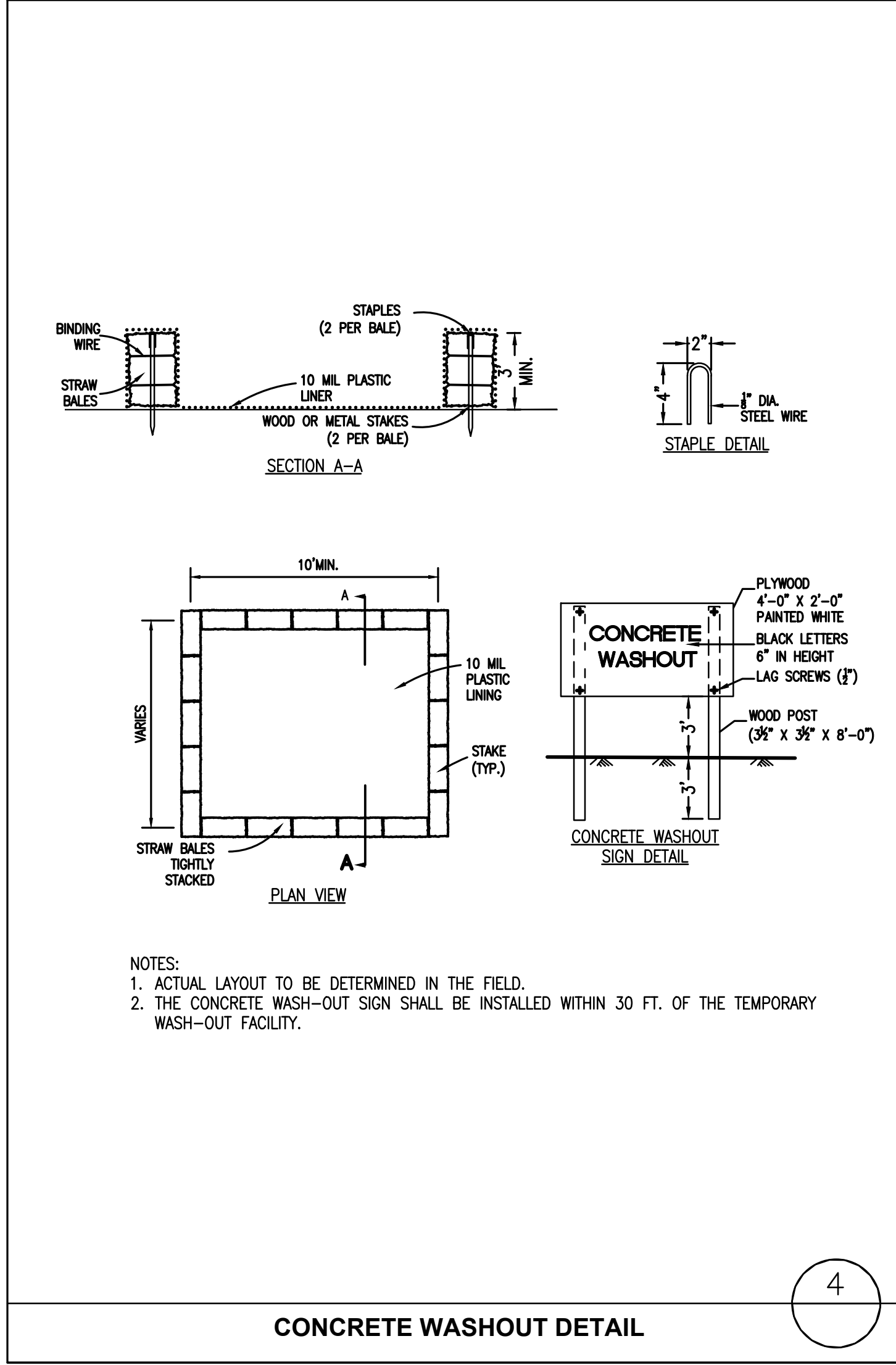
**EROSION CONTROL PERIMETER BARRIER DETAILS** ①



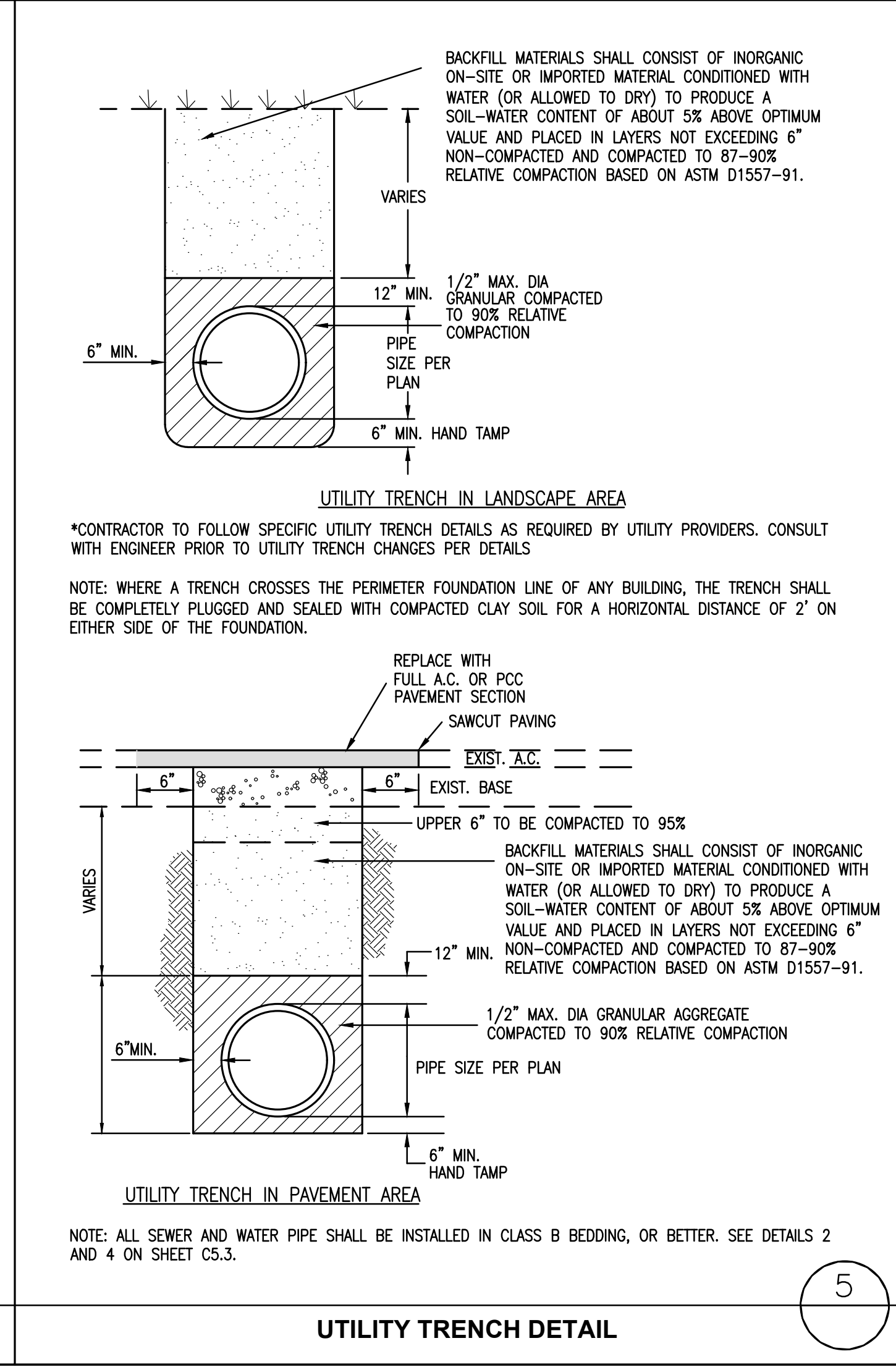
**CURB CUT/INLET PROTECTION DETAILS** ②



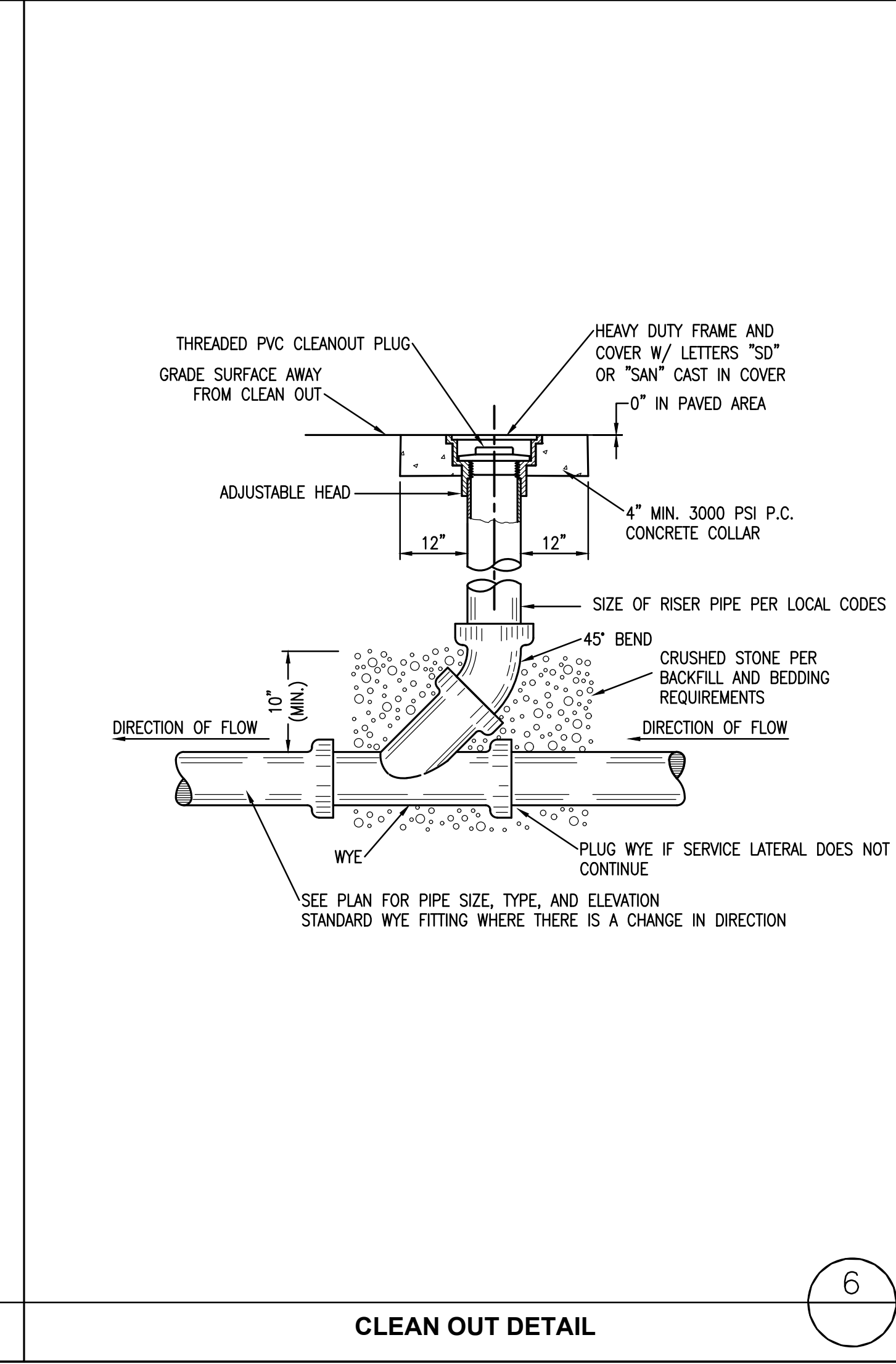
**STABILIZED CONSTRUCTION ENTRANCE/EXIT DETAIL** ③



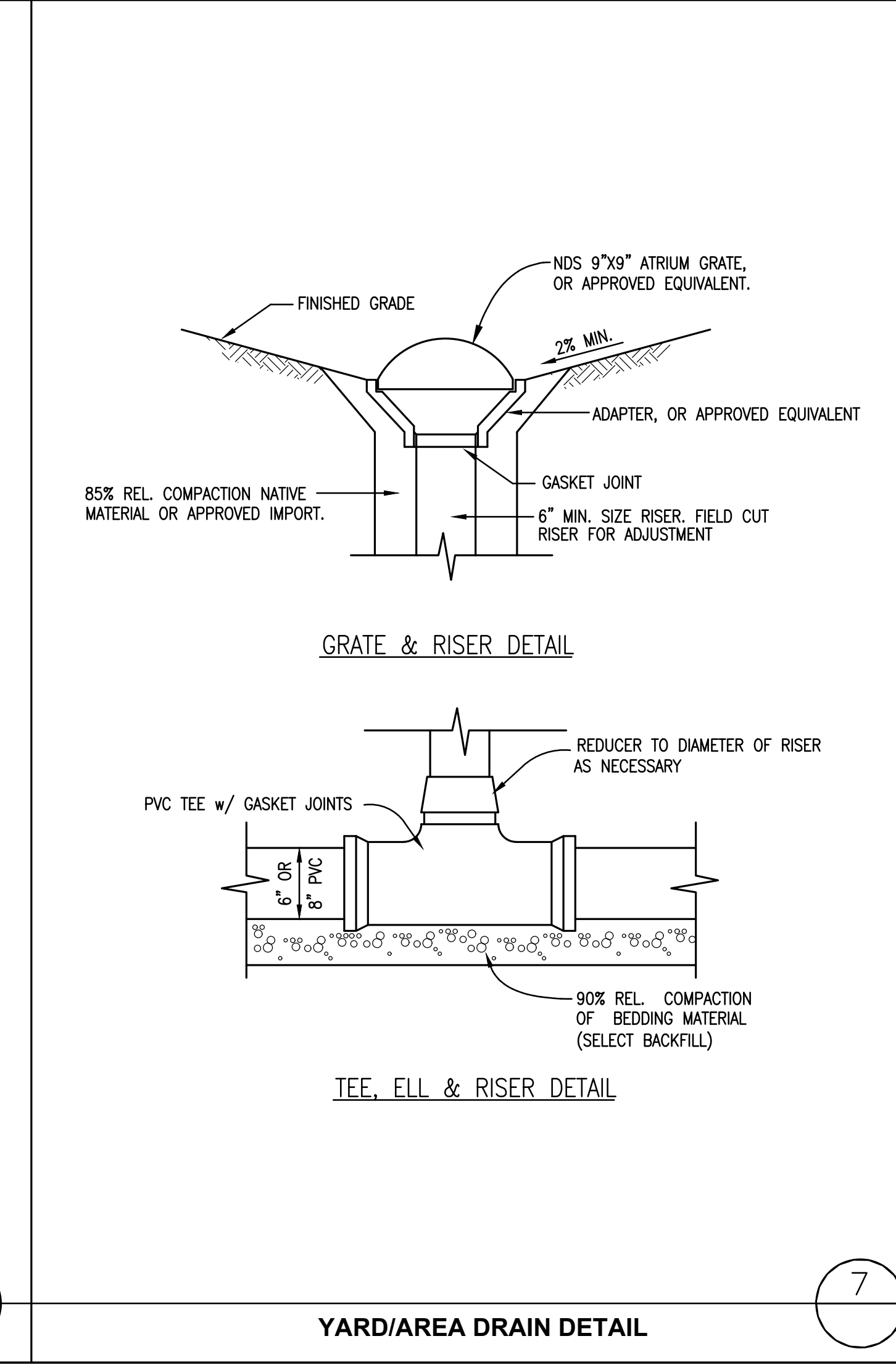
**CONCRETE WASHOUT DETAIL** ④



**UTILITY TRENCH DETAIL** ⑤



**CLEAN OUT DETAIL** ⑥



**YARD/AREA DRAIN DETAIL** ⑦

JOB NUMBER: 2021-177-002

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