

PLANNING AND DEVELOPMENT SERVICES STAFF REPORT

For Planning Commission Meeting of July 21, 2020

**SUBJECT: Argo Park Livery - Public Project Review
(1055 Long Shore Dr.) File No. PP20-003**

PROPOSED CITY PLANNING COMMISSION MOTION

WHEREAS, the City Administrator is directed to obtain comments and suggestions from the appropriate City departments with regard to certain City projects meeting private development regulations prior to recommending that City Council approve funding for them; and

WHEREAS, such projects are to be reviewed by the City Planning Commission prior to City Council approval;

WHEREAS, the City Administrator shall indicate which private development regulations are not being met for such projects;

RESOLVED, that the Ann Arbor City Planning Commission finds the City of Ann Arbor Argo Park Livery Project adheres to City private development standards notwithstanding the following:

- Public sidewalks are not provided along the project frontage.
- The existing drive approach off Longshore Drive is undefined from the public road pavement requiring a reduction in width and radii.
- Required storm water requirements do not meet city code.
- Planning Commission approval would be required to authorize activity in the natural features open space.

STAFF RECOMMENDATION

Staff recommends that the Planning Commission **approve** the motion above regarding this public project because it complies with regulations to except the identified conditions.

LOCATION

The site is located on the north side of the Argo Dam, west of Long Shore Drive (Northeast Area). This site is in the Huron River Watershed.

DESCRIPTION OF PETITION

This site is zoned PL (Public Land) and requires Planning Commission review as a public project exceeding \$250,000. The anticipated cost of this project is approximately \$500,000 in

construction costs. The purpose of the review is to evaluate the project against private development regulations as specified by City Council Resolution of March 20, 1989.

This proposal consists of expanding the existing bathroom by approximately 275 sq ft., paving the existing southern gravel parking lot thereby reducing the spaces from 26 to 24, replacing existing sidewalk around the perimeter of the livery building, new boat docks, a fishing dock, an accessible kayak launch, rain garden, additional bike racks, benches and way finding signs. Park, recreation and open space does not require automobile or bicycle parking.

There are three landmark trees within the project area that will be impacted by this project. One landmark tree will have a 6-inch diameter pvc storm water outlet pipe located within the dripline. This pipe will be hand dug to minimize root disruption. The other two landmark trees impacted include removal and replacement of sidewalk to increase accessibility to the park. Mitigation for this work is not required as there is minimal disturbance to these trees. Additionally, the sidewalk is existing and being replaced; not newly installed.

The natural features buffer setback will be impacted with installation or replacement of a boat docks, fishing dock, and sidewalk replacement. A floating accessible kayak launch is proposed along the shore line and will be removed seasonally.

This is a seasonal park facility with no additional vehicular trips anticipated from the proposed improvements.

SURROUNDING LAND USES AND ZONING

LAND USE		ZONING
NORTH	Single-family residences	R1C & R1B (Single-Family Residential)
EAST	Les Voyageurs, Longshore Park, Condominiums, single & two-family residences	PUD (Planned Unit Development, PL (Public Land), R4A (Multiple-Family Residential), R2A (Two-Family Residential) & R1B (Single-Family Residential).
SOUTH	Amtrak Parking, vacant	PUD
WEST	Huron River, Office and Industrial uses	M1 & M2 (Limited & Heavy Industrial District)

PROJECT HISTORY

By 1918, the Ann Arbor Parks system had expanded to 122 acres and included Douglas Park, Argo Bathing Beach, the Glen (the city owned portion of Nichols Arboretum), Riverside Park, and West Park. In 2015 the Cascades were added.



1915 Boat Livery on Argo Pond

PLANNING BACKGROUND

The Master Plan Land Use Element recommends Parks and Recreation for this site. The 2020-2025 Capital Improvements Plan (CIP) references the need to address recreational facility updates and infrastructure repairs as identified by staff. The Parks and Open Space Plan (PROS) recommends outdated restrooms be upgraded on a rotating/as needed basis for energy efficiency, cleanliness, barrier-free compliance, and aesthetics. Several of the community-wide parks and facilities contain entry roads and parking lots that are in need of renovation. In order to maintain safety and provide a positive user experience, these surfaces need to either be replaced or repaired, depending on their condition.

DEPARTMENT COMMENTS PENDING, DISMISSED OR UNRESOLVED

Storm Water Review – The plan does not meet city code stormwater requirements. In terms of code compliance, it is deficient in stormwater detention volume. Even with its deficiency, the plans are supported by staff for the following reasons:

- Being located on the river, water quality is more important than detention volume/ storage capacity.
- The rain garden will provide an improvement to water quality. It will capture parking lot run off, and treat it, before it ultimately makes its way to the river.
- As the site currently sits, runoff from the unpaved parking lot, is untreated.

Public Services - The City of Ann Arbor Public Services Standard Specification Specifications Division II, Section 8, *General design criteria*, requires that sidewalk shall be provided on both sides of all public streets. Sidewalks constructed in the public right-of-way and/or public paths

shall meet all requirements and guidelines as set forth in the ADA Standards for Accessible Design.

The existing drive approach is undefined from the public road pavement. The east radius of the approach should be reduced/tightened. The north portion of the approach may need to be modified to tighten the approach radius.

Floodplain Coordinator - A floodplain permit from the Michigan Department of Environment, Great Lakes, and Energy (EGLE) prior to the beginning of construction for the proposed project is required.

Traffic – Sidewalks will not be a part of this project and will be placed in the CIP for a future project.

Planning – The City Planning Commission is required to review all public projects before City Council approval if the project costs more than \$250,000 (see attached resolution).

Staff applies the City's private development standards for the review of public projects for the purpose of striving to adhere to these standards as close as practical. This project meets the private standards, such as land use, setbacks, storm water detention and height.

The Planning Commission, upon review and public hearing, may grant authorization for an activity with the natural features open space upon the determination that the proposed activity is in the public interest, and that the benefit which would reasonably be expected to accrue from the proposal shall be greater than the reasonably foreseeable detriments of the activity, per Section 5.29.4 of the Zoning Ordinance.

Impacts to the natural features open space will be minimal and improve the Park accessibility. There are no other feasible alternatives to staging, access, or restoration that would accomplish the project purpose or further reduce impacts.

The City Parks Dept. held a public meeting on February 14, 2019 informing them of the proposed changes to the Argo Livery. Meeting minutes are attached.

Prepared by Christopher Cheng
Reviewed by Brett Lenart
mg/7/14/20

Attachments: [Zoning Map](#)
[Aerial Map](#)
[Site Plan](#)
[Public Project Resolution](#)
[Public Project Meeting Minutes](#)

c: Owner: City of Ann Arbor
301 E. Huron Street
Ann Arbor, MI 48104

Petitioner: Hillary Hanzel, Landscape Architect IV

Community Services
301 E. Huron Street
Ann Arbor, MI 48104

Petitioner's Agent: Doug Schultz
Rowe Professional Services Co.
540 S. Saginaw St., Suite 200
Flint, MI

Building
Systems Planning
File No. PP20-003

1055 Long Shore Dr



Zoning Districts



- Township Islands
- City Zoning Districts
- Railroads
- Huron River
- Tax Parcels



Map date: 7/10/2020
Any aerial imagery is circa 2018 unless otherwise noted
Terms of use: www.a2gov.org/terms

1055 Long Shore Dr



-  Railroads
-  Tax Parcels



Map date: 7/10/2020
Any aerial imagery is circa 2018
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SITE PLAN SUBMITTAL FOR
CITY OF ANN ARBOR PARKS AND RECREATION
ARGO PARK LIVERY RESTROOM & SITE IMPROVEMENTS
CITY OF ANN ARBOR
WASHTENAW COUNTY, MICHIGAN

PROJECT NOTES

- REQUIRED STATEMENTS
 - THERE ARE NO PETITIONS, PREVIOUS APPLICATIONS, VARIANCES OR SITE PLAN ACTIONS FOR THE PROJECT. THE CITY PROVIDED EXTENSIVE PUBLIC INPUT AS PART OF THE GRANT APPLICATION.
 - THE PROJECT INCLUDES EXPANSION OF AN EXISTING RESTROOM, PAVING AN EXISTING GRAVEL PARKING LOT, REPLACING SIDEWALK, BOAT DOCKS AND EXISTING FISHING DOCK, ADDING AN ACCESSIBLE KAYAK LAUNCH, RAIN GARDEN, BIKE RACKS, BENCHES AND WAY FINDING SIGNAGE. THE EXISTING OFF STREET PARKING WILL CONTINUE TO BE USED, INCLUDING IMPROVEMENTS TO A 24 SPACE GRAVEL LOT, AND ADJACENT GRAVEL PARKING LOTS OF APPROXIMATELY 27 AND 30 SPACES. THE EASTERLY PARKING LOT IS CONNECTED BY A FOOTPATH TO MINIMIZE PEDESTRIAN CONGESTION ALONG THE ROAD. CONSTRUCTION WILL BE COMPLETED IN ONE PHASE IN THE FALL OF 2020 WITH A CONSTRUCTION BUDGET OF \$500,000.
- COMMUNITY ANALYSIS
 - THERE IS NO IMPACT ON PUBLIC SCHOOLS.
 - THERE IS NO CHANGE TO NEIGHBORING USES, THE PARK WILL FUNCTION AS IT DID PREVIOUSLY.
 - THERE IS NO IMPACT OF ADJACENT USES ON THE IMPROVEMENTS, NO FUNCTIONAL CHANGES.
 - THERE WILL BE NO CHANGE IN AIR QUALITY BUT WATER QUALITY WILL BE IMPROVED DUE TO REDUCED SURFACE WATER SILT MIGRATION ACROSS THE SITE AND INTO THE HURON RIVER THROUGH PAVING THE GRAVEL PARKING SURFACE AND TREATING FIRST FLUSH RUN OFF VIA A NEW RAIN GARDEN.
 - THERE IS NO HISTORIC IMPACT, IT IS NOT WITHIN A HISTORIC DISTRICT OR LISTED ON A HISTORIC REGISTER.
- NATURAL FEATURES DESCRIPTION AND IMPACTS
 - THE EXISTING TREES WITHIN THE PROJECT ARE A MIXTURE OF BIRCH, MAPLE AND A LIMITED AMOUNT OF OAK TREES THAT COULD BE CATEGORIZED FLOODPLAIN FOREST OR URBAN WOODLAND. THE PROJECT IS LOCATED ALONG THE HURON RIVER/ARGO POND. THE PROJECT AREA IS ON LEVEL GROUND, ALTHOUGH IMMEDIATELY TO THE EAST THERE IS A SLOPED WOODLOT THAT IS NOT BEING IMPACTED. THERE IS AN EXISTING DRAINAGE COURSE THAT OUTLETS TO THE RIVER LOCATED IMMEDIATELY NORTH OF THE PROJECT AREA THAT INCLUDES A BOARDWALK TO CONNECT TO AN ADJACENT PARKING LOT. THERE IS NO ENDANGERED SPECIES HABITAT LOCATION ON THE PROJECT SITE. THE TREE CONDITIONS VARY, WITH SOME DEADFALL WITHIN THE PROJECT AREA. MOST OF THE EXISTING TREES IN THE ACTIVE PARK AREA ARE IN GOOD CONDITION.
 - THERE ARE THREE LANDMARK TREES WITHIN THE PROJECT AREA THAT WILL BE PRESERVED. ONE TREE WILL HAVE A 6 INCH DIAMETER PVC STORM OUTLET LOCATED WITHIN THE DRIPLINE. THIS SMALL, SHALLOW PIPE CAN BE HAND-DUG TO MINIMIZE ROOT DISRUPTION. THE REST OF THE WORK THAT IS PROPOSED WITHIN THE ROOT ZONE OF THESE TREES INCLUDE REMOVAL AND REPLACEMENT OF SIDEWALK TO PROVIDE INCREASED ACCESSIBILITY WITHIN THE PARK.
 - OTHER TREES THAT ARE IMPACTED INCLUDE 1~4 INCH RIVER BIRCH, 1~MULTI-STEM (3~5 INCH) RIVER BIRCH, 1~MULTI-STEM (2~11 INCH) RIVER BIRCH REMOVED FOR SIDEWALK ACCESS AT A KEY PEDESTRIAN ACCESS POINT OF THE PARKING LOT. ONE 35 INCH AMERICAN ELM WILL HAVE MINOR GRADING WITHIN LESS THAN 25% OF THE PERIMETER OF THE DRIPLINE TO PROVIDE FOR THE RAIN GARDEN, REQUIRED FOR STORAGE CAPACITY. THE LOCATION OF THE RAIN GARDEN IS BASED ON COLLECTING SURFACE FLOW FROM THE PARKING LOT WITHOUT MORE INVASIVE STORM SEWER IMPROVEMENTS. A DETAILED TREE SURVEY IS INCLUDED ON THE SHEETS.
 - THE NATURAL FEATURES BUFFER SETBACK WILL HAVE FEATURES SUCH AS FISHING DOCK, BOAT DOCKS AND SIDEWALK REPLACED IN-KIND. A FLOATING ACCESSIBLE KAYAK LAUNCH WILL BE ADDED ALONG THE SHORELINE THAT WILL BE REMOVED SEASONALLY.
 - THE HURON RIVER FLOODPLAIN IS WITHIN THE PROJECT LIMITS; A FISHING DOCK WILL BE REPLACED WITH HELICAL ANCHORS THAT WILL REDUCE THE PROFILE OF THIS STRUCTURE. A FLOATING ACCESSIBLE LAUNCH WILL BE ADDED THAT WILL ADJUST WITH FLOOD LEVELS. NO NET CHANGE IN EARTHWORK WILL IMPACT THE FLOODPLAIN.
- TRAFFIC STATEMENT
 - THIS IS A SEASONAL PARK FACILITY. NO ADDITIONAL TRIPS WILL BE GENERATED AS A DIRECT RESULT OF THE IMPROVEMENTS AT THIS LOCATION. THE 24 PROPOSED PARKING SPACES ARE A REDUCTION OF THE APPROXIMATE 26 SPACES THE CURRENT GRAVEL LOT SUPPORTS. VEHICLE TRIPS PER UNIT PER PEAK HOUR HAS NOT BEEN PROVIDED.
- PHOTOMETRIC PLAN
 - NOT PROVIDED, SITE IS OPEN DAWN TO DUSK, NO SITE LIGHTING IS PROVIDED.

COMPARISON CHART

	EXISTING CONDITIONS	PROPOSED CONDITIONS
ZONING	PL	PL
LOT AREA	NA	NA
TOTAL FLOOR AREA	1,716 SFT	1,943 SFT
OPEN SPACE	0.7 ACRES	0.7 ACRES
NATURAL FEATURES BUFFER	25 FT	25 FT
REQUIRED SETBACKS	NA	NA
HEIGHT AND STORIES	NA	NA
OFF STREET VEHICLE PARKING	26 SPACES	24 SPACES
(NO REQUIREMENTS)		
ACCESSIBLE PARKING	2 SPACES	3 SPACES
BICYCLE PARKING	2 CLASS C	6 CLASS C
VARIANCES	NONE	NONE

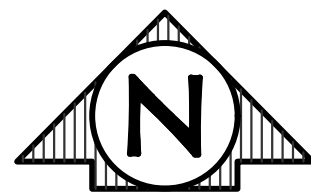
PROJECT LOCATION

PROJECT DISTURBANCE LIMITS



ARGO LIVERY - SITE VICINITY MAP

NOT TO SCALE



NOTE:
ZONING R4A: MULTIPLE FAMILY DWELLING
ZONING O: OFFICE
ZONING PUD: PLANNED UNIT DEVELOPMENT
ZONING PL: PUBLIC LAND

SURVEY ENGINEER

ROWE PSC
540 S. SAGINAW ST.
SUITE 200
FLINT, MI 48502
(810) 341-7500

ARCHITECT

MITCHELL AND MOUAT
ARCHITECTS
113 S. FOURTH AVE.
ANN ARBOR, MI 48104
(734) 662-6070

PROPERTY ADDRESS

CITY OF ANN ARBOR
ARGO PARK
1055 LONGSHORE DRIVE
ANN ARBOR, MI 48105

OWNER INFORMATION

CITY OF ANN ARBOR PARKS AND
RECREATION SERVICES AREA
301 E. HURON STREET
ANN ARBOR, MI 48104

DEVELOPMENT PROGRAM SUMMARY

THE ARGO KAYAK LIVERY RECEIVED A GRANT BY THE MICHIGAN DEPARTMENT OF NATURAL RESOURCES TO PROVIDE INCREASED ACCESSIBILITY TO THE EXISTING DEVELOPED PARK SITE. THE PROJECT INCLUDES EXPANSION OF AN EXISTING RESTROOM, PAVING AN EXISTING GRAVEL PARKING LOT, REPLACING SIDEWALK, BOAT DOCKS AND EXISTING FISHING DOCK, ADDING AN ACCESSIBLE KAYAK LAUNCH, RAIN GARDEN, BIKE RACKS, BENCHES AND WAY FINDING SIGNAGE.

SHEET INDEX

- COVER
- NOTES
- LEGEND
- EXISTING CONDITIONS
- NATURAL FEATURES PLAN
- NATURAL FEATURE DATA
- REMOVALS PLAN
- DIMENSIONAL LAYOUT PLAN
- NATURAL FEATURES OVERLAY PLAN
- ALTERNATIVE LAYOUT ANALYSIS PLAN
- UTILITY PLAN
- GRADING AND SESC PLAN
- SESC KEY
- LANDSCAPE PLAN
- 15-16 SITE DETAILS
- 17 KAYAK DETAILS
- 18-19 BOARDWALK DETAILS
- 20-21 SOIL BORING
- A1.1 ARCHITECTURAL PLANS

SHEET INDEX

ARGO NATURE AREA

Land owned by the City of Ann Arbor, known as Argo Nature Area, described as follows:

That part of the Northeast $\frac{1}{4}$ and Southeast $\frac{1}{4}$ of Section 20, the Northwest $\frac{1}{4}$ of Section 21, the Southwest $\frac{1}{4}$ of Section 16 and the Southeast $\frac{1}{4}$ of Section 17, Town 2 South, Range 6 East, City of Ann Arbor, Washtenaw County, Michigan, bounded on the North by the M-14 bridge, on the South by the Ann Arbor Railroad right of way, on the West by the Huron River and on the East by Long Shore Drive including the section of Long Shore Drive that curves to the East at its most southerly extent along a parcel included with this description and described as: Beginning at the Northwest corner of Block 2, Brown and Fuller's Addition, according to the plat thereof as recorded in Liber D of Deeds, pages 3 and 4, Washtenaw County Records; thence Westerly along the Southerly line of Long Shore Drive 30 rods for a Place of Beginning; thence Westerly 18 rods; thence Southerly parallel to the West line of Block 2, Brown and Fuller's Addition, to the Ann Arbor Railroad right of way; thence Easterly along the Northerly line of said right of way to a line parallel to and 30 rods West of the West line of said Block 2; thence Northerly to the Place of Beginning, being part of Section 20, Town 2 South, Range 6 East, City of Ann Arbor, Washtenaw County, Michigan.

Above land also described in the following deeds recorded at the Register of Deeds, Washtenaw County, Michigan: Liber 199, page 41, Liber 334, page 537, Liber 1043, page 285 - Parcels A-1 and A-2 only, Liber 1747, page 728 and Liber 2042, page 816.

Tax Parcel Nos.: 09-09-20-401-011 and 09-09-21-221-001

Part of Tax Parcel No. 09-09-20-101-011



PLAN SUBMITTALS AND CHANGES	
DATE	DESCRIPTION
04/17/20	SITE PLAN SUBMITTAL
05/22/20	SITE PLAN RESUBMITTAL
06/16/20	SITE PLAN RESUBMITTAL

REV:

SHT# 1 of 20
JOB No: 20C0027

ROWE PROFESSIONAL
SERVICES COMPANY



The Rowe Building
540 S. Saginaw St., Suite 200
Flint, MI 48502

PREPARED FOR
CITY OF ANN ARBOR PARKS & REC
ARGO PARK LIVERY
ANN ARBOR, WASHTENAW COUNTY, MICHIGAN
COVER SHEET

O: (810) 341-7500
F: (810) 341-7573
www.rowepsc.com

PLAN DATE: APRIL, 2020
PROJECT MGR: DRS
REVIEWER: AW
SCALE: NOT TO SCALE

GENERAL CONSTRUCTION NOTES

EMERGENCY CONTACTS
BEFORE BEGINNING WORK ON THE PROJECT, THE CONTRACTOR SHALL PROVIDE THE OWNER AND ENGINEER WITH THE NAMES AND TELEPHONE NUMBERS OF EMERGENCY CONTACTS. AT LEAST ONE PERSON REPRESENTING THE CONTRACTOR SHALL BE AVAILABLE TO RESPOND TO EMERGENCIES THROUGHOUT THE LIFE OF THE PROJECT, 24 HOURS A DAY, 7 DAYS A WEEK.

UNDERGROUND UTILITY IDENTIFICATION AND LOCATION
THE CONTRACTOR SHALL CALL MISS DIG (1-800-482-7171 OR 811) A MINIMUM OF THREE WORK DAYS IN ADVANCE OF BEGINNING EXCAVATION. THE CONTRACTOR IS RESPONSIBLE TO IDENTIFY AND NOTIFY UTILITY AGENCIES WITHIN THE PROJECT AREA WHICH DO NOT PARTICIPATE IN THE MISS DIG NOTIFICATION PROGRAM.

PUBLIC UTILITIES
EXISTING UTILITIES ARE SHOWN BASED UPON RECORDS AND LOCATIONS PROVIDED BY UTILITY AGENCIES AND OWNER. THE INFORMATION SHOWN IS CONSIDERED APPROXIMATE AND SHALL BE VERIFIED BY THE CONTRACTOR. UNLESS THE PLANS SPECIFICALLY SHOW THAT EXISTING UTILITIES ARE TO BE MOVED, THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN EXISTING UTILITIES.

VERIFICATION OF UNDERGROUND UTILITIES
THE CONTRACTOR SHALL EXCAVATE AND LOCATE ALL EXISTING UTILITIES IN THE PROJECT AREA IN ADVANCE OF CONSTRUCTION TO VERIFY THEIR ACTUAL LOCATION. POTENTIAL CONFLICTS SHALL BE REPORTED TO THE ENGINEER. THE CONTRACTOR SHALL MAKE SUCH CHANGES TO GRADE AND ALIGNMENT OF PROPOSED WORK AS DIRECTED BY THE ENGINEER TO AVOID CONFLICTS, AT NO INCREASE IN COST TO THE OWNER.

UTILITY SERVICE
UNLESS SPECIFICALLY PROVIDED OTHERWISE IN THE CONTRACT DOCUMENTS, ALL EXISTING UTILITIES ARE TO REMAIN IN SERVICE DURING THE PROJECT.

MAINTAINING TRAFFIC
LOCAL AND EMERGENCY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES WITHIN THE PROJECT AREA.

WHEN EXCAVATION, FRESH CONCRETE, OR OTHER CONSTRUCTION WORK WILL RESULT IN THE CLOSURE OF A STREET OR DRIVEWAY FOR A PERIOD OF TIME, THE CONTRACTOR IS RESPONSIBLE TO NOTIFY ALL AFFECTED RESIDENTS AND BUSINESSES IN ADVANCE.

THE CONTRACTOR SHALL NOTIFY EMERGENCY RESPONSE AGENCIES IN ADVANCE OF ROAD CLOSURES OR THE ESTABLISHMENT OF DETOURS.

SCHEDULE
THE CONTRACTOR SHALL COMPLETE ALL WORK IN AN EXPEDITIOUS MANNER AND SHALL NOT STOP WORK ON THE PROJECT ONCE BEGUN.

SURVEY CORNERS, BENCHMARKS, AND CONTROL POINTS
THE CONTRACTOR SHALL PRESERVE ALL GOVERNMENT CORNERS, PROPERTY CORNERS, BENCHMARKS, SURVEY CONTROL POINTS AND OTHER SURVEY POINTS WITHIN THE PROJECT AREA. WHERE CORNERS, BENCHMARKS, OR SURVEY POINTS ARE ENCOUNTERED WHICH WILL BE DISTURBED BY THE CONTRACTOR'S ACTIVITIES; A LICENSED SURVEYOR SHALL WITNESS THE POINT BEFORE DISTURBANCE AND SHALL RE-SET THE POINT FOLLOWING THE COMPLETION OF CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL PAY THE SURVEYOR TO WITNESS AND TO RE-SET THE POINTS.

PROTECTION OF TREES, SHRUBS, AND LANDSCAPING
ALL TREES, SHRUBS, AND LANDSCAPING WITHIN THE CONSTRUCTION AREA WHICH ARE NOT SPECIFICALLY DESIGNATED FOR REMOVAL SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. DAMAGED TREES, SHRUBS, AND LANDSCAPING SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

CONSTRUCTION SIGNING AND BARRICADING
THE CONTRACTOR SHALL PROTECT HAZARDOUS AREAS WITH BARRICADES. BARRICADES LEFT IN PLACE AFTER SUNSET SHALL BE LIGHTED.

THE CONTRACTOR SHALL PROVIDE SUITABLE SANDBAGS OR OTHER SUITABLE MEASURES FOR ANCHORING OF TEMPORARY SIGNS AND BARRICADES, TO PREVENT THEIR TIPPING OR DISPLACEMENT BY WIND OR AIR FLOW FROM VEHICLES.

THE CONTRACTOR SHALL PROVIDE SIGNING, BARRICADES, TRAFFIC REGULATORS, CONES, AND OTHER TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE REQUIREMENTS OF THE AGENCY HAVING JURISDICTION OVER STREETS OR ROADS IN THE PROJECT AREA, THE CURRENT MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND THE PLANS AND SPECIFICATIONS.

THE CONTRACTOR SHALL COVER OR REMOVE TEMPORARY SIGNS DURING PERIODS WHEN THEY ARE NOT APPROPRIATE.

TURF ESTABLISHMENT
ALL DISTURBED AREAS WHICH ARE NOT TO BE SURFACED WITH PAVEMENT, AGGREGATE OR OTHER APPROVED SURFACES SHALL BE ESTABLISHED WITH TURF.

TURF AREAS SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE.

DISTURBED AREAS SHALL BE SURFACED WITH THREE INCHES OF SCREENED TOPSOIL.

THE CONTRACTOR IS RESPONSIBLE TO ESTABLISH TURF WHICH IS SUBSTANTIALLY FREE OF BARE SPOTS AND FREE OF WEEDS. THE GROUND SURFACE IN TURF AREAS SHALL BE SMOOTH AND PROVIDE A NATURAL TRANSITION TO ADJACENT, UNDISTURBED AREAS.

THE CONTRACTOR IS RESPONSIBLE TO PROVIDE WATERING, WEEDING, RESEEDING, AND REWORKING AS NECESSARY TO ESTABLISH TURF AREAS TO THE REQUIRED STANDARD.

ADA COMPLIANCE
ALL PROPOSED CONSTRUCTION SHALL COMPLY WITH THE PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA), AND APPLICABLE GUIDELINES OR STANDARDS. WHERE EXISTING CONDITIONS AND/OR THE REQUIREMENTS OF THE PLANS WILL RESULT IN FINISHED CONDITIONS THAT DO NOT MEET THE ADA REQUIREMENTS, GUIDELINES, OR STANDARDS; THE CONTRACTOR SHALL NOTIFY THE ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO REMOVE AND REPLACE WORK DETERMINED TO BE NOT IN ACCORDANCE WITH APPLICABLE REQUIREMENTS, GUIDELINES, OR STANDARDS.

EARTHWORK
THE CONTRACTOR SHALL MAKE HIS OWN DETERMINATION OF THE EARTHWORK QUANTITIES, AND BASE HIS BID ON HIS DETERMINATION OF THE QUANTITIES OF WORK REQUIRED.

IF ADDITIONAL FILL MATERIAL MUST BE PROVIDED TO ATTAIN THE FINISH GRADES SHOWN ON THE PLANS, THE CONTRACTOR SHALL PROVIDE THE REQUIRED FILL MATERIAL, UNLESS A SPECIFIC BORROW AREA IS IDENTIFIED ON THE PLANS.

THE CONTRACTOR SHALL COORDINATE WITH CITY FOR EXCESS SOILS RESULTING FROM EXCAVATION AND EARTHWORK. AN AREA(S) WILL BE DESIGNATED FOR STOCKPILING OR 'BLENDING IN' THE EXCESS MATERIAL WITHIN THE PROJECT LIMITS.

BACKFILL AND EMBANKMENT
BACKFILL OF AN EXCAVATION UNDER OR WITHIN THE ONE ON ONE INFLUENCE OF AN EXISTING OR PROPOSED ROAD, SIDEWALK, DRIVEWAY, PAVEMENT, OR AGGREGATE SURFACE, SHALL BE SAND, MEETING THE REQUIREMENTS OF GRANULAR MATERIAL CLASS III AS DESCRIBED IN THE CURRENT MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION. THE SAND BACKFILL SHALL BE COMPACTED TO AT LEAST 95% OF ITS MAXIMUM UNIT WEIGHT.

BACKFILL OF AN EXCAVATION WHICH IS NOT UNDER OR WITHIN THE ONE ON ONE INFLUENCE OF AN EXISTING OR PROPOSED ROAD, SIDEWALK, DRIVEWAY, PAVEMENT, OR AGGREGATE SURFACE MAY BE SUITABLE EXCAVATED MATERIAL OR OTHER SOIL, WHICH IS FREE OF ORGANIC MATTER, STONES AND ROCKS, ROOTS, BROKEN CONCRETE, FROZEN MATERIAL, OR DEBRIS. THE BACKFILL SHALL BE COMPACTED TO AT LEAST 90% OF ITS MAXIMUM UNIT WEIGHT.

THE CONTRACTOR SHALL INDICATE THE SOURCE OF SAND USED FOR BACKFILL TO THE ENGINEER, AND PROVIDE THE ENGINEER WITH THE RESULTS OF A GRADATION TEST PERFORMED ON A SAMPLE OF THE SAND. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN ADVANCE OF USING SAND FROM OTHER SOURCES.

EMBANKMENT USED TO BUILD THE SUBGRADE TO REQUIRED ELEVATION SHALL BE SUITABLE SOIL EXCAVATED FROM THE PROJECT SITE, OR FURNISHED BY THE CONTRACTOR FROM OTHER SOURCES. SUITABLE SOIL IS FREE FROM ORGANIC MATTER, ROCKS AND STONES, FROZEN MATERIAL, BROKEN CONCRETE, AND DEBRIS.

EMBANKMENT CONSTRUCTED OF GRANULAR SOILS SHALL BE COMPACTED IN LIFTS NOT EXCEEDING 12 INCHES TO AT LEAST 95% OF ITS MAXIMUM UNIT WEIGHT.

EMBANKMENT CONSTRUCTED OF COHESIVE SOILS SHALL BE COMPACTED IN LIFTS NOT EXCEEDING 12 INCHES TO AT LEAST 95% OF ITS MAXIMUM UNIT WEIGHT.

DENSITY TESTING
THE MAXIMUM UNIT WEIGHT OF SAND AND OTHER GRANULAR SOILS WILL BE DETERMINED BY THE ONE POINT CONE TEST, AS DESCRIBED IN THE MICHIGAN DEPARTMENT OF TRANSPORTATION'S DENSITY TESTING AND INSPECTION MANUAL, EXCEPT WHEN ANOTHER TEST METHOD IS SPECIFIED.

THE MAXIMUM UNIT WEIGHT OF COHESIVE SOILS WILL BE DETERMINED BY THE ONE POINT PROCTOR TEST, AS DESCRIBED IN THE MICHIGAN DEPARTMENT OF TRANSPORTATION'S DENSITY TESTING AND INSPECTION MANUAL, EXCEPT WHEN ANOTHER TEST METHOD IS SPECIFIED.

WORK HOURS
UNLESS PROVIDED OTHERWISE IN THE CONTRACT DOCUMENTS OR LIMITED BY LOCAL ORDINANCE, THE CONTRACTOR SHALL WORK WITHIN OF THE FOLLOWING TIMES, UNLESS OTHERWISE APPROVED BY THE OWNER:
MONDAY THROUGH FRIDAY 7 A.M. TO 8 P.M.
SATURDAY 8 A.M. TO 6 P.M.

THE CONTRACTOR SHALL NOT WORK ON SUNDAYS OR HOLIDAYS, UNLESS OTHERWISE APPROVED BY THE OWNER.

DRAINAGE
THE CONTRACTOR SHALL MAINTAIN DRAINAGE OF THE PROJECT AREA AND ADJACENT AREAS. WHERE EXISTING DRAINAGE FACILITIES ARE DISTURBED OR BLOCKED BY CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY PROVISIONS FOR DRAINAGE.

WHERE CONSTRUCTION HAS DISTURBED EXISTING DITCHES, SWALES, OR OTHER DRAINAGE FACILITIES; THE CONTRACTOR SHALL RESTORE THEM TO THEIR GRADES AND DIMENSIONS WHICH EXISTED PRIOR TO THE BEGINNING OF CONSTRUCTION, UNLESS DIRECTED OTHERWISE.

DRAINAGE SHALL NOT BE REROUTED ONTO ADJACENT PROPERTIES NOR ALLOWED TO DRAIN ONTO ADJACENT PROPERTIES AT AN INCREASED RATE, AS A RESULT OF THE CONTRACTOR'S WORK.

SITE PROJECTS

SUBGRADE PREPARATION
TOPSOIL, PEAT, AND ORGANIC MATERIAL SHALL BE EXCAVATED AND REMOVED.

SOFT AND YIELDING SOILS SHALL BE REMOVED OR DRIED IF THE RESULT OF EXCESSIVE MOISTURE CONTENT.

PRIOR TO CONSTRUCTING FILLS, SUBBASE, OR PAVEMENT ON A SUBGRADE, THE SUBGRADE SHALL BE PROOF-ROLLED TO DETERMINE THE SUITABILITY OF THE SUBGRADE. THE CONTRACTOR SHALL DRIVE A HEAVY PIECE OF WHEELED CONSTRUCTION EQUIPMENT OVER THE SUBGRADE WHILE THE ENGINEER IS OBSERVING. THE CONSTRUCTION OF FILLS, SUBBASE, OR PAVEMENTS SHALL NOT PROCEED UNTIL THE SUBGRADE HAS BEEN DEMONSTRATED TO BE FREE OF SOFT AREAS.

THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN THE MOISTURE CONTENT OF SUBGRADE SOILS WITHIN A SUITABLE RANGE TO ALLOW FOR COMPACTION TO THE REQUIRED DENSITY. WHEN THE SOIL IS TOO DRY, THE CONTRACTOR SHALL ADD WATER. WHEN THE SOIL IS TOO WET, THE CONTRACTOR SHALL PROVIDE DRAINAGE OR AERATE THE SOIL.

THE SURFACE OF THE SUBGRADE SHALL BE COMPACTED TO AT LEAST 95% OF ITS MAXIMUM UNIT WEIGHT, PRIOR TO CONSTRUCTING FILLS, SUBBASE, OR PAVEMENTS.

HOT MIX ASPHALT (HMA) PAVING
PAVEMENTS WHICH ARE TO BE OVERLAID WITH A NEW PAVEMENT COURSE SHALL BE SWEEPED TO REMOVE ALL DIRT AND DEBRIS.

A BITUMINOUS BOND COAT SHALL BE APPLIED TO PAVEMENTS WHICH ARE TO BE OVERLAID WITH A NEW PAVEMENT COURSE AND ALLOWED TO CURE PRIOR TO CONSTRUCTING THE NEW PAVEMENT COURSE.

HMA PAVEMENT SHALL NOT BE PLACED WHEN THE SURFACE BEING OVERLAID IS WET, OR WHEN PRECIPITATION IS FORECAST OR THREATENING.

SIDEWALK CONSTRUCTION

SIDEWALKS SHALL BE CONSTRUCTED TO PROVIDE POSITIVE DRAINAGE OF THE SIDEWALK AND ADJACENT SURFACES.

EXCEPT WHERE NECESSARY TO PROVIDE POSITIVE DRAINAGE OR MEET EXISTING SURFACES, SIDEWALK SHALL BE CONSTRUCTED WITH A CROSS SLOPE SLOPED TOWARD THE STREET.

SIDEWALK CROSS SLOPES SHALL NOT EXCEED 2%.

IN TURF AREAS, THE SURFACE OF THE SIDEWALK SHALL BE ABOUT 1/4 INCH HIGHER THAN THE ADJACENT GROUND SURFACES, EXCEPT WHERE NECESSARY TO PROVIDE POSITIVE DRAINAGE OR MEET EXISTING SIDEWALKS, CURBS, OR PAVEMENTS.

SIDEWALK SHALL BE CONSTRUCTED ON A SAND BASE, COMPACTED TO AT LEAST 95% OF ITS MAXIMUM UNIT WEIGHT.

THE CONTRACTOR SHALL NOTIFY THE ENGINEER WHEN SIDEWALK FORMS HAVE BEEN SET AND THE SAND BASE PREPARED. CONCRETE SHALL NOT BE PLACED UNTIL THE ENGINEER HAS OBSERVED THE FORMS. CONCRETE DELIVERY SHALL BE SCHEDULED TO ALLOW SUFFICIENT TIME FOR ADJUSTMENT OF THE FORMS, IN THE EVENT THAT ADJUSTMENT IS NECESSARY.

THE CONTRACTOR SHALL PROTECT FRESH CONCRETE FROM DAMAGE BY THE WEATHER, TRAFFIC, OR VANDALISM. DAMAGED CONCRETE SHALL BE REPLACED BY THE CONTRACTOR'S EXPENSE.



Know what's **below**.
Call before you dig.

PLAN SUBMITTALS AND CHANGES	
SITE PLAN APPROVAL -- **NOT FOR CONSTRUCTION**	
DATE	DESCRIPTION
04/17/20	SITE PLAN SUBMITTAL
05/22/20	SITE PLAN RESUBMITTAL
06/16/20	SITE PLAN RESUBMITTAL

REV:

SHT# 2 OF 20
JOB No: 20C0027

ROWE PROFESSIONAL
SERVICES COMPANY



The Rowe Building
540 S. Saginaw St., Suite 200
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PREPARED FOR
CITY OF ANN ARBOR PARKS & REC
ARGO PARK LIVERY

NOTES SHEET

STRUCTURE SYMBOLS

	EXISTING CATCH BASIN IN CURB LINE
	PROPOSED CATCH BASIN IN CURB LINE
	EXISTING CATCH BASIN IN GREEN SPACE
	PROPOSED CATCH BASIN IN GREEN SPACE
	EXISTING STORM MANHOLE
	PROPOSED STORM MANHOLE
	PROPOSED CULVERT END SECTION
	EXISTING HEADWALL
	PROPOSED HEADWALL
	EXISTING WATER SHUTOFF (SERVICE VALVE)
	EXISTING GATE VALVE AND BOX (STOP BOX)
	PROPOSED GATE VALVE AND BOX
	EXISTING GATE VALVE AND WELL
	PROPOSED GATE VALVE AND WELL
	EXISTING SPRINKLER HEAD
	EXISTING WATER WELL
	EXISTING FIRE HYDRANT
	PROPOSED FIRE HYDRANT
	PROPOSED WATER MAIN FITTINGS
	EXISTING CLEAN OUT
	EXISTING SANITARY SEWER MANHOLE
	PROPOSED SANITARY SEWER MANHOLE
	EXISTING MONITORING WELL

EXISTING TOPOGRAPHICAL SYMBOLS

	SIGN
	STREET SIGN
	END OF PIPE
	SWAMP OR WETLAND
	DECIDUOUS TREE
	CONIFEROUS TREE
	TREE STUMP
	MAIL BOX
	SOIL BORING
	ROCK
	METAL POST
	BUMPER BLOCK

UTILITY SYMBOLS

	UTILITY POLE
	GUY ANCHOR CABLE
	LIGHT POLE / ORNAMENTAL LIGHT
	POWER LIGHT POLE
	TELEPHONE MANHOLE
	UNDERGROUND GAS LINE MARKER
	GAS RISER
	GAS VENT
	GAS VALVE
	RAILROAD SIGNAL
	METAL LIGHT POLE
	OUTLET
	CIRCUIT BREAKER PANEL
	ELECTRICAL TRANSFORMER PAD
	ELECTRICAL TRANSFORMER RISER
	ELECTRIC METER
	TELEPHONE PEDESTAL / RISER
	TRAFFIC SIGNAL ON POLE
	PHONE BOOTH / PAY PHONE

SURVEY SYMBOLS

	MONUMENT
	BENCHMARK
	TRAVERSE POINT
	SECTION CORNER
	FOUND SURVEY MONUMENTATION

MISCELLANEOUS SYMBOLS

	EXISTING STORM SEWER STRUCTURE NUMBER
	EXISTING SANITARY SEWER STRUCTURE NUMBER
	PROPOSED STORM SEWER STRUCTURE NUMBER
	PROPOSED SANITARY SEWER STRUCTURE NUMBER
	FLOW DIRECTION
	EXISTING RIP-RAP
	PROPOSED RIP-RAP

CAUTION SYMBOLS

	USED WITH UNDERGROUND GAS & ELECTRICAL LINES
	USED WITH FIBER OPTICS LINES

PLAN VIEW LINE TYPES

	EXISTING STORM SEWER
	EXISTING CULVERT
	PROPOSED STORM SEWER LESS THAN 24"
	PROPOSED STORM SEWER 24" AND GREATER
	EXISTING SANITARY SEWER
	PROPOSED SANITARY SEWER
	EXISTING WATER MAIN
	PROPOSED WATER MAIN
	SECTION LINE
	EXISTING RIGHT OF WAY
	PROPOSED RIGHT OF WAY
	PROPOSED EASEMENT
	EXISTING CENTER LINE DITCH
	PROPOSED DITCH CENTERLINE
	EXISTING CENTER LINE ROADWAY
	PARCEL LINE / LOT LINE
	EXISTING OVERHEAD UTILITIES
	UNDERGROUND ELECTRICAL LINE
	GAS LINE OR PETROLEUM PIPELINE
	UNDERGROUND TELEPHONE LINE
	UNDERGROUND CABLE TV LINE
	UNDERGROUND FIBER OPTIC
	PROJECT CONTROL LINE
	TREE LINE
	BRUSH LINE
	EXISTING FENCE
	PROPOSED FENCE
	EXISTING GUARD RAIL
	PROPOSED SLOPE STAKE LINE
	PROPOSED SILT FENCE

TOPOGRAPHY

	EXISTING CONTOURS MAJOR
	EXISTING CONTOURS MINOR
	PROPOSED CONTOUR MAJOR
	PROPOSED CONTOURS MINOR

PARCEL INFORMATION

401-069	PARCEL/TAX IDENTIFICATION NUMBER
#5324	ADDRESS/BUSINESS NAME

HATCHING LEGEND

	REMOVE PAVEMENT
	REMOVE SIDEWALK
	EXISTING GRAVEL SURFACE
	EXISTING SIDEWALK
	PROPOSED SIDEWALK
	PROPOSED EXPOSED AGGREGATE SIDEWALK
	EXISTING HMA PAVEMENT
	PROPOSED HMA PAVEMENT

PROPOSED CALLOUTS

TOPO CALLOUTS

	ADJ
	ADJ-X
	ADJ-B/O
	REC
	REL
	REL-B/O
	REM
	R&R
	SALV
	SAVE
	ABN
	CLR

PLAN VIEW

	ADJ	ADJUST STRUCTURE
	ADJ-X	ADJUST STRUCTURE W/ NEW COVER
	ADJ-B/O	ADJUST STRUCTURE BY OTHERS
	REC	RECONSTRUCT STRUCTURE
	REL	RELOCATE
	REL-B/O	RELOCATE BY OTHERS
	R	REMOVE
	R&R	REMOVE AND REPLACE
	SALV	SALVAGE
	S	SAVE
	A	ABANDON
	C	CLEARING
	B	BULKHEAD
	SR-F	SIDEWALK RAMP TYPE
	6	SOIL EROSION CONTROL MEASURE



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06/16/20	SITE PLAN RESUBMITTAL

PLAN DATE:	APRIL, 2020
PROJECT MGR:	DRS
REVIEWER:	AW
SCALE:	NOT TO SCALE

ROWE PROFESSIONAL SERVICES COMPANY

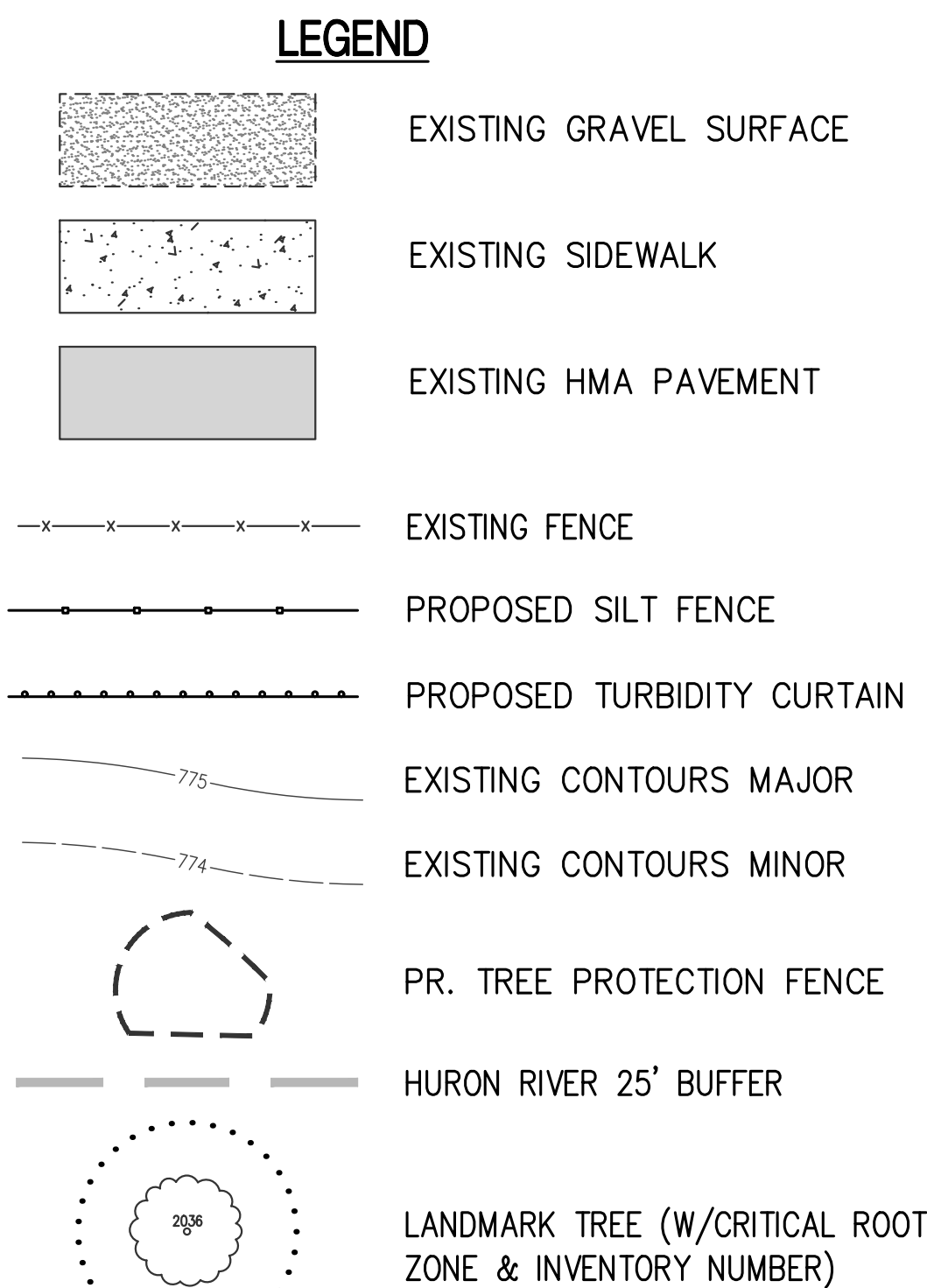
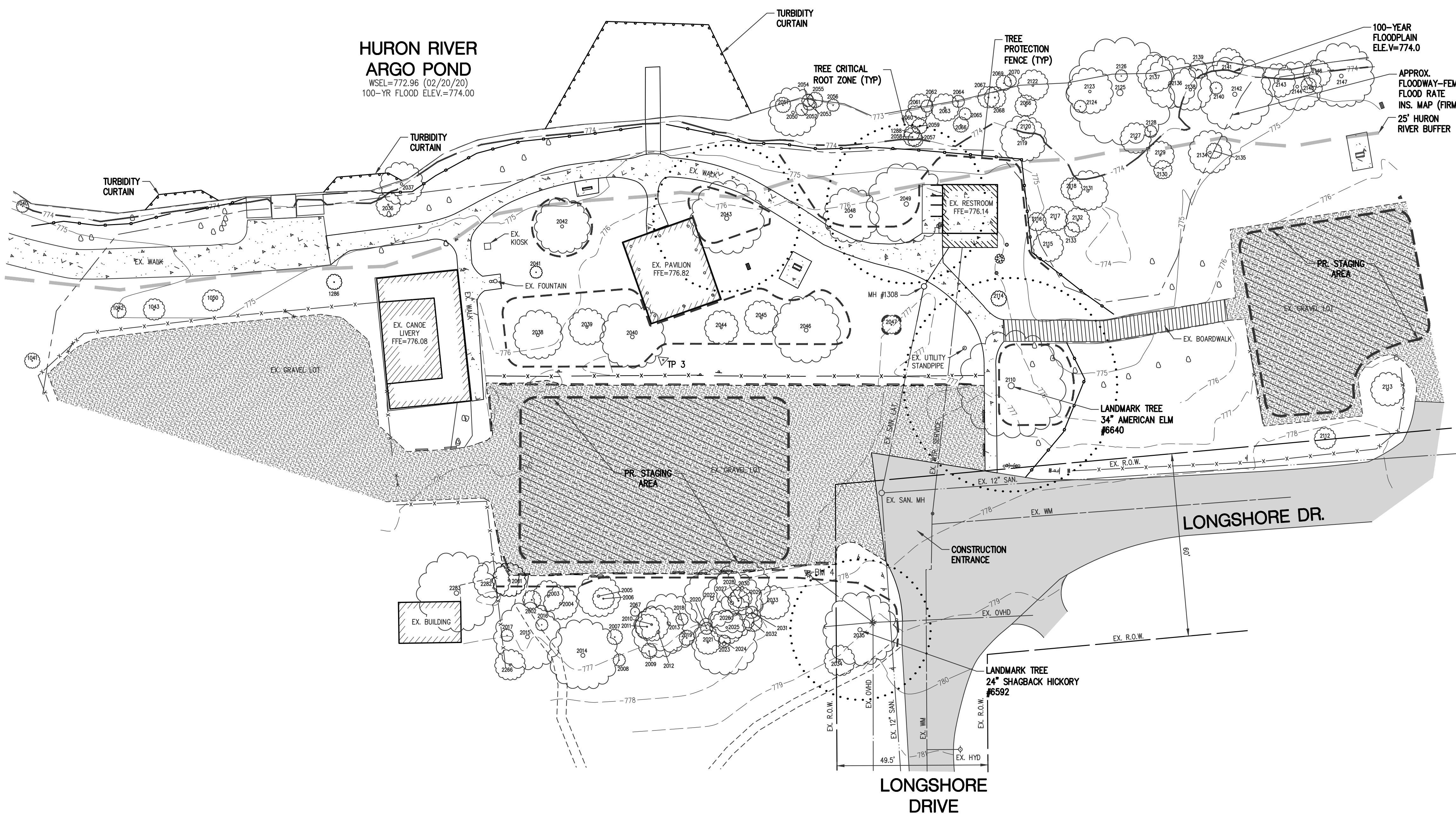
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ARGO PARK LIVERY

LEGEND SHEET

REV:	
SHT#	3 OF 20
JOB No:	20C0027



PLAN NOTES:

1. TREES & ROOT ZONES SHALL BE PROTECTED BY CONTRACTOR THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL HAND DIG AND LIMIT CONSTRUCTION TRAFFIC WITHIN TREE DRIPLINE.
2. NO LANDMARK TREES ARE BEING REMOVED AS PART OF THIS PROJECT.
3. THE SITE IS A DEVELOPED PARK THAT IS BEING UPDATED FOR ACCESSIBILITY. ALTERNATE SITES WERE NOT CONSIDERED AS THIS WAS AN EXISTING FACILITY THAT OFFERED MINIMAL IMPACT TO PROVIDE WATERFRONT ACCESS FOR THE PUBLIC.
4. IMPROVEMENTS WITHIN THE NATURAL FEATURE BUFFER INCLUDE REPLACEMENT OF SIDEWALK, AND EXISTING FISHING DOCK, BOAT DOCKS, AND THE ADDITION OF A SEASONAL ACCESSIBLE KAYAK LAUNCH.
5. CONSTRUCTION ACCESS AND STAGING AREAS SHALL BE LIMITED TO AVOID IMPACTS TO EXISTING TREE ROOT ZONES WITHIN THE DRIPLINES. SILT FENCE WILL BE ESTABLISHED WITHIN GRADING LIMITS.
6. A RAIN GARDEN IS PROPOSED (SEE SHEETS 13 & 14 FOR DETAILS) TO IMPROVE FIRST FLUSH WATER QUALITY OF RUN-OFF ACROSS THE SITE.
7. SEE NOTES SHEET (SHEET #2) FOR ADDITIONAL NOTES.
8. A JOINT PERMIT HAS BEEN APPLIED FOR BY THE CITY OF ANN ARBOR AND WILL BE EXECUTED PRIOR TO COMMENCEMENT OF SITE WORK. IT WILL BE NECESSARY TO OBTAIN A FLOODPLAIN PERMIT FROM THE MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY (EGLE) PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE PROPOSED PROJECT. CONTRACTOR TO FOLLOW PERMIT REQUIREMENTS.



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REV:

SHT# 5 OF 20
JOB No: 20C0027

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PREPARED FOR
**CITY OF ANN ARBOR PARKS & REC
ARGO PARK LIVERY**

NATURAL FEATURES PLAN

Argo Canoe Livery Site for the City of Ann Arbor Parks & Recreation Services					By: Blake Strozier, ROWE PSC 20C0027	Date:
POINT #	TAG #	DIA INCHES	COMMON NAME	BOTANICAL NAME	CONDITION	NOTES
1040	6544	4	Silver Birch	Betula pendula	Decent Condition; OK	
1041	6545	2 - 5"	Silver Birch	Betula pendula	Good Condition; OK	Multi-Stemmed
1042	6546	5	Silver Birch	Betula pendula	Decent Condition; OK	Has growth at base of the tree
1043	6547	3 - 7"	Paper Birch	Betula papyrifera	Decent Condition; OK	Has undergrowth; multi-stemmed
1050	6548	2 - 7"	Gray Birch	Betula populifolia	Good Condition; OK	Has growth around the base of the tree; multi-stemmed
1286	6556	3 - 5"	Gray Birch	Betula populifolia	Decent Condition; OK	Multi-Stemmed Tree
1288	6535	5	Gray Birch	Betula populifolia	Decent Condition; OK	Near river edge; has some growth around base of tree
2001	6569	2 - 11"	River Birch	Betula nigra	Good Condition; OK	Near edge of parking lot; multi-stemmed
2002	6570	6	River Birch	Betula nigra	Decent Condition; OK	Has vines growing on the bark up the tree
2003	6571	10	Sugar Maple	Acer saccharum	Decent Condition; OK	
2004	6572	2 - 11"	River Birch	Betula nigra	Decent Condition; OK	Gray color, has some signs of distress on the branches (broken at base)
2005	6573	14	Silver Maple	Acer saccharinum	Good Condition; OK	Next to Birch Tree in area
2006	6574	7	River Birch	Betula nigra	Decent Condition; OK	Has some suckers around the base of the tree
2007	6575	5	River Birch	Betula nigra	Decent Condition; OK	Has some suckers around the base of the tree
2008	6576	4	River Birch	Betula nigra	Decent Condition; OK	Next to dead tree;
2009	6577	5	Black Locust	Robinia pseudocacia	OK Condition	Has some bark damage on base of tree
2010	6578	11	Norway Maple	Acer platanoides	Good Condition; OK	Next to River Birch Tree in area
2011	6579	8	River Birch	Betula nigra	Decent Condition; OK	
2012	6581	17	Common Cottonwood	Populus deltoides	Decent Condition; OK	
2013	6582	19	Common Cottonwood	Populus deltoides	Decent Condition; OK	
2014	6564	23	Common Cottonwood	Populus deltoides	Good Condition; OK	
2015	6567	22	Norway Maple	Acer platanoides	Decent Condition; OK	Has some suckers on tree limbs
2016	6563	4	River Birch	Betula nigra	Decent Condition; OK	
2017	6568	4	River Birch	Betula nigra	Good Condition; OK	
2018	6584	4	River Birch	Betula nigra	OK Condition	No major growth at the base of the tree
2019	6583	5	Black Locust	Robinia pseudocacia	Not Good Condition	Upper canopy of tree is decaying; signs of tree damage
2020	6586	4	River Birch	Betula nigra	Decent Condition; OK	
2021	6587	8	Common Cottonwood	Populus deltoides	Good Condition; OK	
2022	6585	19	Black Walnut	Juglans nigra	Decent Condition; OK	Tree has some undergrowth at base
2023	6588	21	Common Cottonwood	Populus deltoides	Decent Condition; OK	Has Birch Tree growing from the side of the tree
2024	6589	4	River Birch	Betula nigra	Decent Condition; OK	Tree has some grayish/white marks on bark of the tree
2025	6590	11	Common Cottonwood	Populus deltoides	Good Condition; OK	
2026	6596	14	Common Cottonwood	Populus deltoides	Good Condition; OK	
2027	6597	2 - 20"	Common Cottonwood	Populus deltoides	OK Condition	Multi-Stemmed
2028	6598	7	Common Cottonwood	Populus deltoides	Decent Condition; OK	Next to Sugar Maple Tree
2029	6599	7	Sugar Maple	Acer saccharum	Good Condition; OK	
2030	6600	18	Common Cottonwood	Populus deltoides	Decent Condition; OK	Has some growth at the base of the tree
2031	6594	4	River Birch	Betula nigra	Decent Condition; OK	Has growth around the base of the tree
2032	6595	6	River Birch	Betula nigra	Good Condition; OK	
2033	6593	11	River Birch	Betula nigra	Decent Condition; OK	
2034	6591	10	River Birch	Betula nigra	Decent Condition; OK	Has some suckers at base of tree
2035	6592	24	Shagback Hickory	Carya ovata	Good Condition; OK	
2036	6555	8	Yellow Birch	Betula alleghaniensis	OK Condition	Next to river; tree is in ok condition
2037	6554	2 - 14"	River Birch	Betula nigra	Good Condition	Tree is on bank of the river
2038	6551	16	Gray Birch	Betula populifolia	Decent Condition; OK	Tree is in good condition
2039	6552	12	Gray Birch	Betula populifolia	Good Condition; OK	
2040	6553	21	Silver Maple	Acer saccharinum	Decent Condition; OK	
2041	6550	4	River Birch	Betula nigra	Good Condition; OK	
2042	6549	18	Silver Maple	Acer saccharinum	Decent Condition; OK	Tree has some growth at base of tree but not a lot
2043	6557	24	White Oak	Quercus alba	Decent Condition; OK	
2044	6562	2 - 11"	Crabapple	Malus sp.	Decent Condition; OK	Multi-Stemmed Tree
2045	6565	11	Crabapple	Malus sp.	Decent Condition; OK	
2046	6561	22	White Oak	Quercus alba	Good Condition; OK	
2047	6560	6	River Birch	Betula nigra	Good Condition; OK	
2048	6558	18	River Birch	Betula nigra	Good Condition; OK	Tree in decent condition; has some branches that have broken
2049	6559	26	White Oak	Quercus alba	Decent Condition; OK	
2050	6543	16	Gray Birch	Betula populifolia	Decent Condition; OK	

KEY
R – TREE SCHEDULED FOR REMOVAL
G – GRADING FOR PAVING INSIDE DRIP LINE
LM – LAND MARK TREE (NATURAL FEATURES SECTION
OF THE CITY OF ANN ARBOR DEVELOPMENT
STANDARDS)

2051	6532	3 - 5"	River Birch	Betula nigra	Decent Condition; OK	Has some undergrowth at base
2052	6542	2 - 4"	River Birch	Betula nigra	Good Condition; OK	Small bark, multi-stemmed
2053	6531	2 - 4"	River Birch	Betula nigra	Good Condition; OK	Multi-Stemmed Tree
2054	6530	2 - 4"	Silver Birch	Betula pendula	Decent Condition; OK	
2055	6533	2 - 5"	Yellow Birch	Betula alleghaniensis	Decent Condition; OK	
2056	6534	2 - 4"	River Birch	Betula nigra	OK Condition	
2057	6541	5	Gray Birch	Betula populifolia	Decent Condition; OK	
2058	6540	2 - 6"	River Birch	Betula nigra	Decent Condition; OK	Multi-Stemmed
2059	6539	5	River Birch	Betula nigra	Good Condition; OK	
2060	6537	7	Silver Birch	Betula pendula	Decent Condition; OK	
2061	6538	2 - 8"	Yellow Birch	Betula alleghaniensis	Good Condition; OK	Multi-Stemmed
2062	6536	4	Silver Birch	Betula pendula	Good Condition; OK	
2063	6606	2 - 9"	River Birch	Betula nigra	Good Condition; OK	Multi-Stemmed; near river's edge
2064	6609	4	River Birch	Betula nigra	Good Condition; OK	Tree is located near edge of water
2065	6608	4	Swamp White Oak	Quercus bicolor	Decent Condition; OK	
2066	6607	5	Swamp White Oak	Quercus bicolor	Decent Condition; OK	No growth at the base of the tree
2067	6610	3 - 7"	Swamp White Oak	Quercus bicolor	Decent Condition; OK	
2068	6611	7	River Birch	Betula nigra	Good Condition; OK	
2069	6612	5	River Birch	Betula nigra	OK Condition	Tree is located near edge of water; leaning over river
2070	6613	4	River Birch	Betula nigra	Decent Condition; OK	
2110	6640	35	American Elm	Ulmus americana	Decent Condition; OK	Good Condition; has some undergrowth - near park entrance
2111	6641	6	Ornamental Pear	Pyrus calleryana	Good Condition; OK	Tree is in good condition
2112	6642	7	Red Oak	Quercus rubra	Decent Condition; OK	
2113	6643	11	Silver Maple	Acer saccarinum	Decent Condition; OK	In parking lot area; still has some leaves on the tree
2114	6639	5	Yellow Birch	Betula alleghaniensis	Decentn Condition	Has some undergrowth at the base of the tree
2115	6638	7 - 10"	Swamp White Oak	Quercus bicolor	Bad Condition	ree has completely fallen over; has some smaller trees growing around i
2116	6618	6	River Birch	Betula nigra	Decent Condition; OK	Has dead tree in front of tree
2117	6619	8	River Birch	Betula nigra	Not in Good Condition	Tree appears to have grown under dead tree; physical signs of distress
2118	6620	7	River Birch	Betula nigra	Decent Condition; O K	
2119	6617	15	Norway Maple	Acer platanoides	Good Condition; OK	
2120	6616	6	Norway Maple	Acer platanoides	Decent Condition; OK	Has fallen tree on north side of tree
2121	6614	7	Swamp White Oak	Quercus bicolor	Decent Condition; OK	Has some growth around the base of the tree
2122	6615	3 - 10"	River Birch	Betula nigra	OK Condition	Multi-Stemmed; has broken branches and trees at base of tree
2123	6622	3 - 15"	River Birch	Betula nigra	Not in Good Condition	Lots of undergrowth; not in good condition
2124	6621	4	River Birch	Betula nigra	Bad Condition	Has lots of growth around the base of the tree
2125	6623	35	River Birch	Betula nigra	Bad Condition	Undergrowth and dead trees are at the base of the tree
2126	6624	4	River Birch	Betula nigra	Decent Condition	On the bank of the river; has some growth at base of tree
2127	6629	10	Bur Oak	Quercus macrocarpa	Good Condition; OK	Tree has dead branches and some dead tree material around base
2128	6625	2 - 4"	River Birch	Betula nigra	Decent Condition	Multi-Stemmed
2129	6630	9	River Birch	Betula nigra	OK Condition	Has fallen old trees and branches around the base of the tree
2130	6631	6	Paper Birch	Betula papyrifera	Decent Condition; OK	Has lots of undergrowth and dead trees at base of tree
2131	6635	13	Norway Maple	Acer platanoides	Good Condition; OK	Has suckers and fallen limbs around the tree
2132	6636	8	Paper Birch	Betula papyrifera	Bad Condition	Has lots of suckers at the base of the tree
2133	6637	5	Paper Birch	Betula papyrifera	Not in Good Condition	Tree is growing around larger tree that has been uprooted
2134	6626	14	Sugar Maple	Acer saccharum	Decent Condition; OK	Tree is leaning to one side
2135	6627	5	River Birch	Betula nigra	Good Condition; OK	
2136	6628	17	White Oak	Quercus alba	Decent Condition; OK	
2137	6605	12	River Birch	Betula nigra	Decent Condition; OK	
2138	6603	3 - 14"	Gray Birch	Betula populifolia	Decent Condition; OK	Multi-Stemmed Tree
2139	6604	2 - 6"	River Birch	Betula nigra	Good Condition; OK	Multi-Stemmed tree; on bark of tree there is minor growth
2140	6602	4	River Birch	Betula nigra	Good Condition; OK	
2141	6601	10	River Birch	Betula nigra	Good Condition; OK	
2142	228	3 - 24"	Silver Maple	Acer saccharinum	Decent Condition; OK	Does has some growth around the base of the tree; multi-stemmed
2143	247	11	Sugar Maple	Acer saccharum	Decent Condition	
2144	297	16	Silver Maple	Acer saccharinum	Good Condition; OK	
2145	298	5	Silver Birch	Betula pendula	Decent Condition	Has some growth at the base of the tree
2146	299	9	Silver Maple	Acer saccharinum	Decent Condition; OK	Tree is leaning to one side; has some damage
2147	300	21	Black Walnut	Juglans nigra	Not in Good Condition	Back of tree has been split; exposed - tree appears in distress
2266	6566	10	Black Walnut	Juglans nigra	Decent Condition; OK	
2267	6580	3	River Birch	Betula nigra	Good Condition; OK	



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PREPARED FOR

CITY OF ANN ARBOR PARKS & REC
ARGO PARK LIVERY

NATURAL FEATURES DATA SHEET

PLAN DATE: APRIL, 2020

PROJECT MGR: DRS

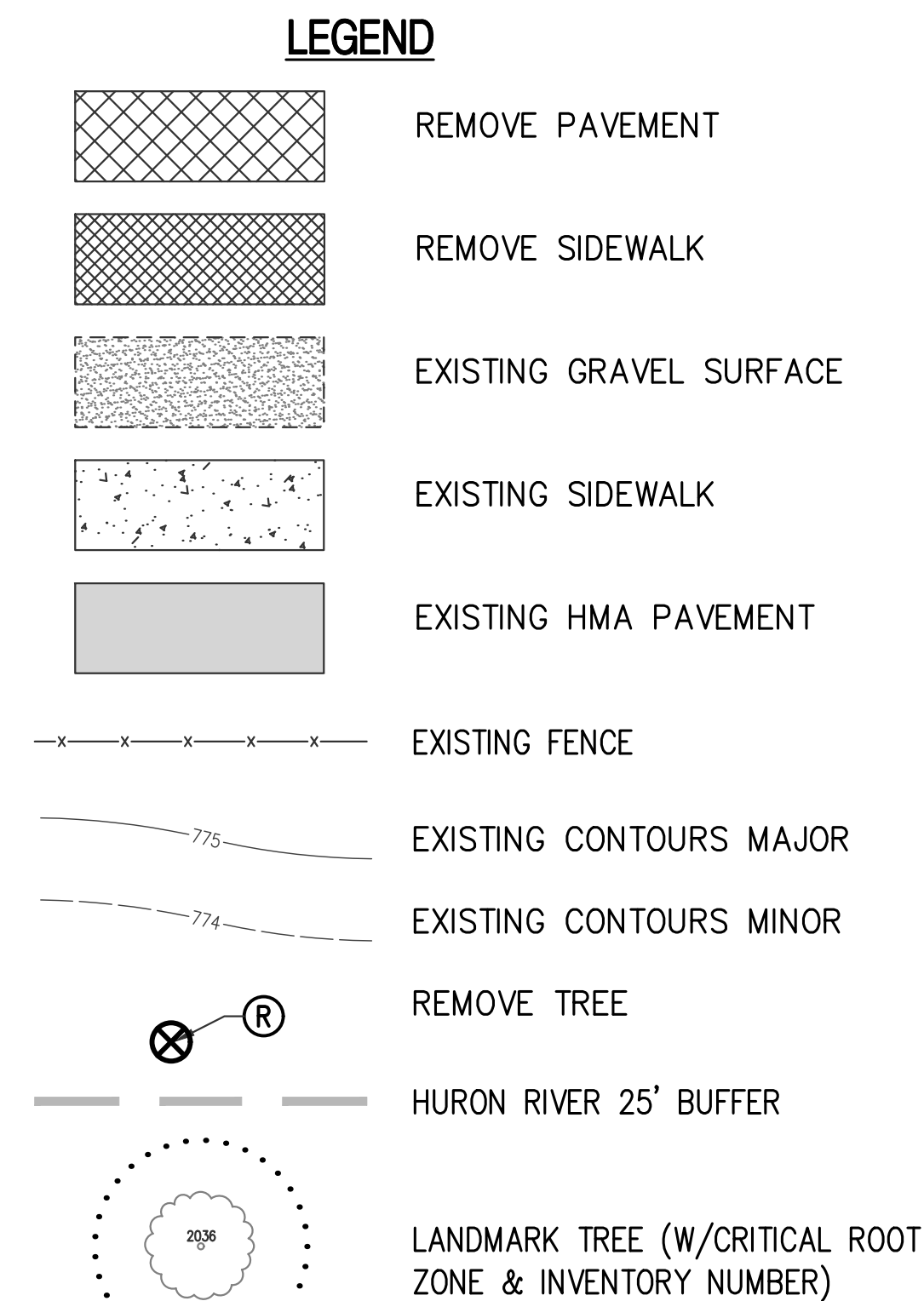
REVIEWER: AW

SCALE: XX

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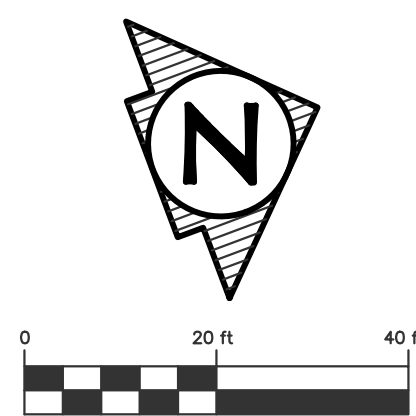
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- REMOVAL NOTES:**
1. TREES & ROOT ZONES SHALL BE PROTECTED BY CONTRACTOR THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL HAND DIG AND LIMIT CONSTRUCTION TRAFFIC WITHIN TREE DRILIPE.
 2. GRAVEL SURFACES SCHEDULED FOR REMOVAL IN PROPOSED AREAS SHALL BE REMOVED TO AN ADEQUATE DEPTH TO ESTABLISH HMA PAVEMENT PROFILE, INCLUDING SUBBASE.
 3. GRAVEL SURFACES SCHEDULED FOR REMOVAL IN PROPOSED TURF RESTORATION AREA SHALL BE REMOVED TO THE DEPTH OF NATIVE SOIL TO PROPERLY ESTABLISH TURF.
 4. SEE NOTES SHEET (SHEET #2) FOR ADDITIONAL NOTES.



Know what's **below**.
Call before you dig



PLAN SUBMITTALS AND CHANGES	
SITE PLAN APPROVAL – **NOT FOR CONSTRUCTION**	
DATE	DESCRIPTION
04/17/20	SITE PLAN SUBMITTAL
05/22/20	SITE PLAN RESUBMITTAL
06/16/20	SITE PLAN RESUBMITTAL

REV:

SHT# 7 OF 20
JOB No: 20C0027

PLAN DATE: APRIL 2020

PROJECT MGR: _____ DRS

REVIEWER: _____ AW

SCALE: $1'' = 20'$

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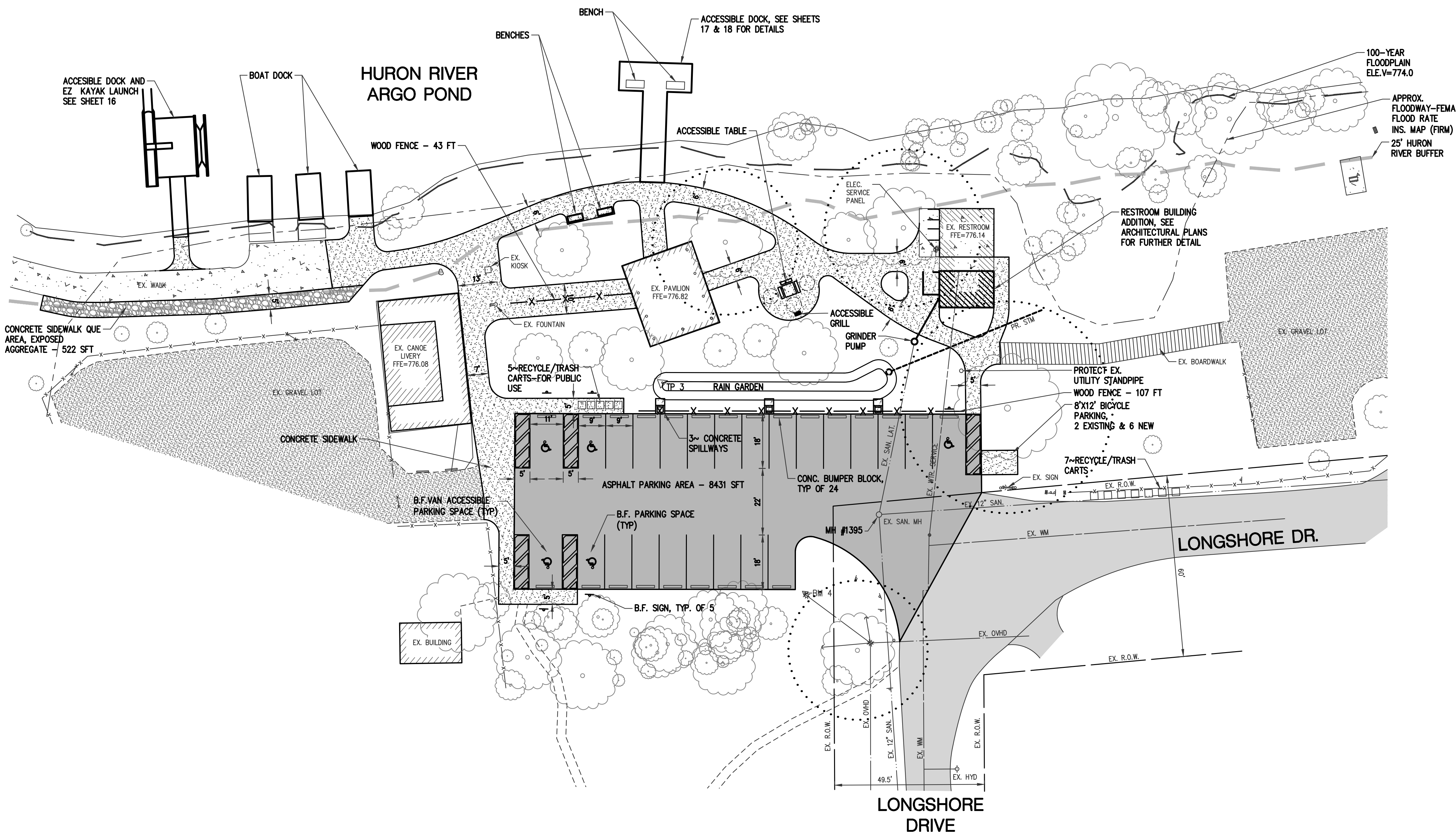
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REMOVALS PLAN

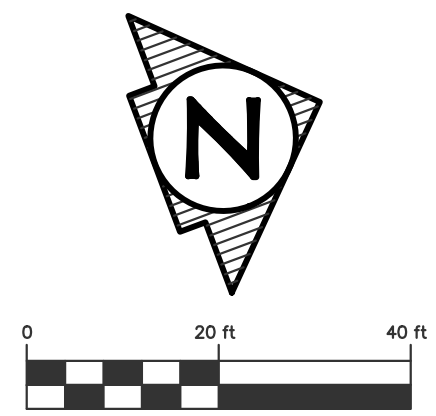
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LEGEND

- EXISTING GRAVEL SURFACE
- EXISTING SIDEWALK
- PROPOSED SIDEWALK
- PROPOSED EXPOSED AGGREGATE SIDEWALK
- EXISTING HMA PAVEMENT
- PROPOSED HMA PAVEMENT
- EXISTING FENCE
- PROPOSED FENCE
- HURON RIVER 25' BUFFER



PLAN SUBMITTALS AND CHANGES	
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REV: _____
SHT# 8 OF 20
JOB No: 20C0027

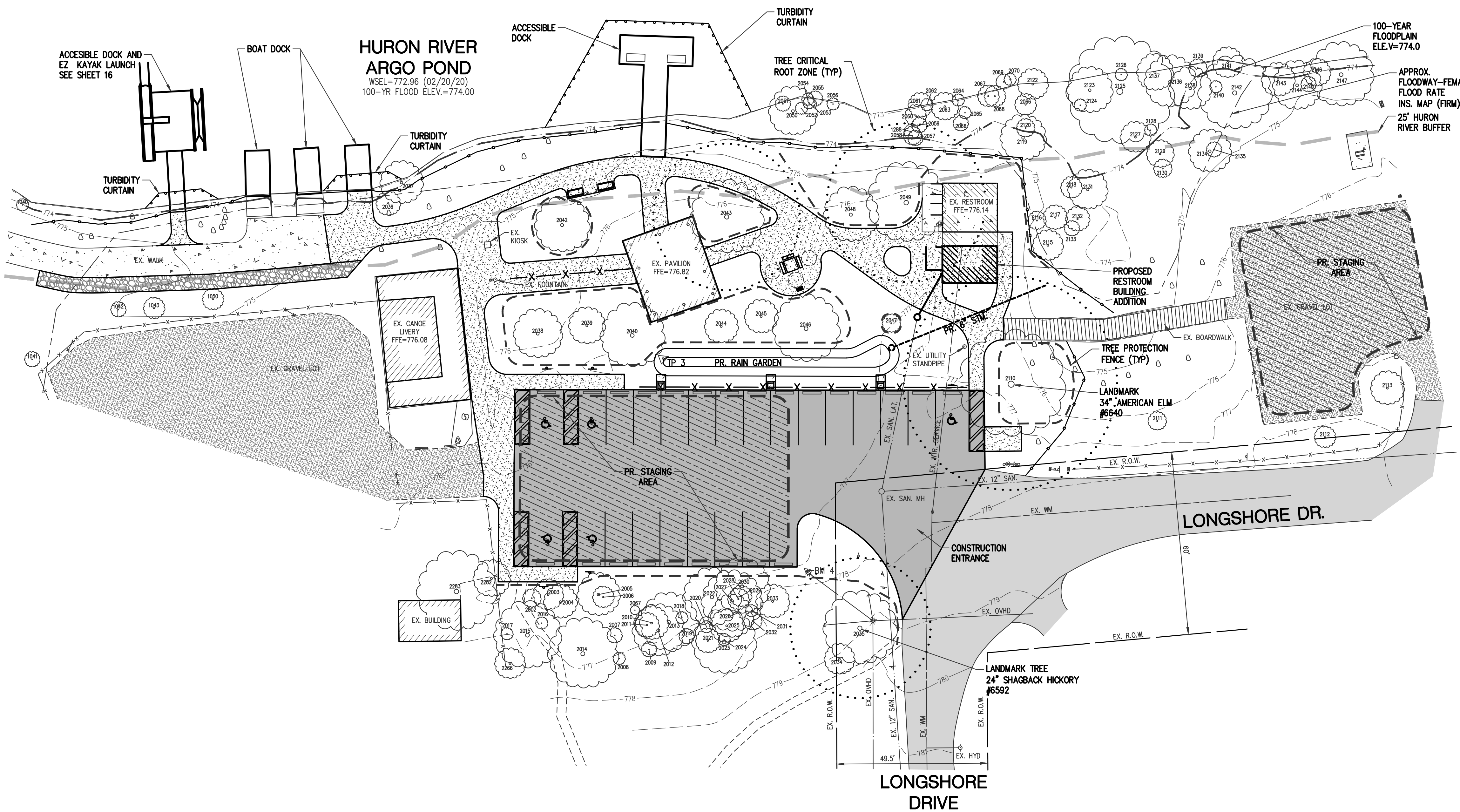
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DIMENSIONAL LAYOUT PLAN

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LEGEND

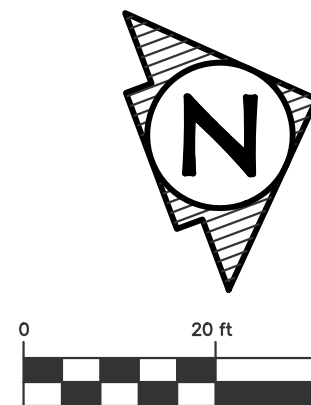
- EXISTING GRAVEL SURFACE
- EXISTING SIDEWALK
- PROPOSED SIDEWALK
- PROPOSED EXPOSED AGGREGATE SIDEWALK
- EXISTING HMA PAVEMENT
- PROPOSED HMA PAVEMENT
- EXISTING FENCE
- PROPOSED FENCE
- PROPOSED SILT FENCE
- PROPOSED TURBIDITY CURTAIN
- EXISTING CONTOURS MAJOR
- EXISTING CONTOURS MINOR
- PROPOSED CONTOUR MAJOR
- PROPOSED CONTOURS MINOR
- PR. TREE PROTECTION FENCE
- HURON RIVER 25' BUFFER
- LANDMARK TREE (W/CRITICAL ROOT ZONE & INVENTORY NUMBER)

PLAN NOTES:

- TREES & ROOT ZONES SHALL BE PROTECTED BY CONTRACTOR THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL HAND DIG AND LIMIT CONSTRUCTION TRAFFIC WITHIN TREE DRIPLINE.
- NO LANDMARK TREES ARE BEING REMOVED AS PART OF THIS PROJECT.
- THE SITE IS A DEVELOPED PARK THAT IS BEING UPDATED FOR ACCESSIBILITY. ALTERNATE SITES WERE NOT CONSIDERED AS THIS WAS AN EXISTING FACILITY THAT OFFERED MINIMAL IMPACT TO PROVIDE WATERFRONT ACCESS FOR THE PUBLIC.
- IMPROVEMENTS WITHIN THE NATURAL FEATURE BUFFER INCLUDE REPLACEMENT OF SIDEWALK, AND EXISTING FISHING DOCK, BOAT DOCKS, AND THE ADDITION OF A SEASONAL ACCESSIBLE KAYAK LAUNCH.
- CONSTRUCTION ACCESS AND STAGING AREAS SHALL BE LIMITED TO AVOID IMPACTS TO EXISTING TREE ROOT ZONES WITHIN THE DRIPLINES. SILT FENCE WILL BE ESTABLISHED WITHIN GRADING LIMITS.
- A RAIN GARDEN IS PROPOSED TO IMPROVE FIRST FLUSH WATER QUALITY OF RUN-OFF ACROSS THE SITE.
- SEE NOTES SHEET (SHEET #2) FOR ADDITIONAL NOTES.



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06/16/20	SITE PLAN RESUBMITTAL

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NATURAL FEATURES OVERLAY PLAN

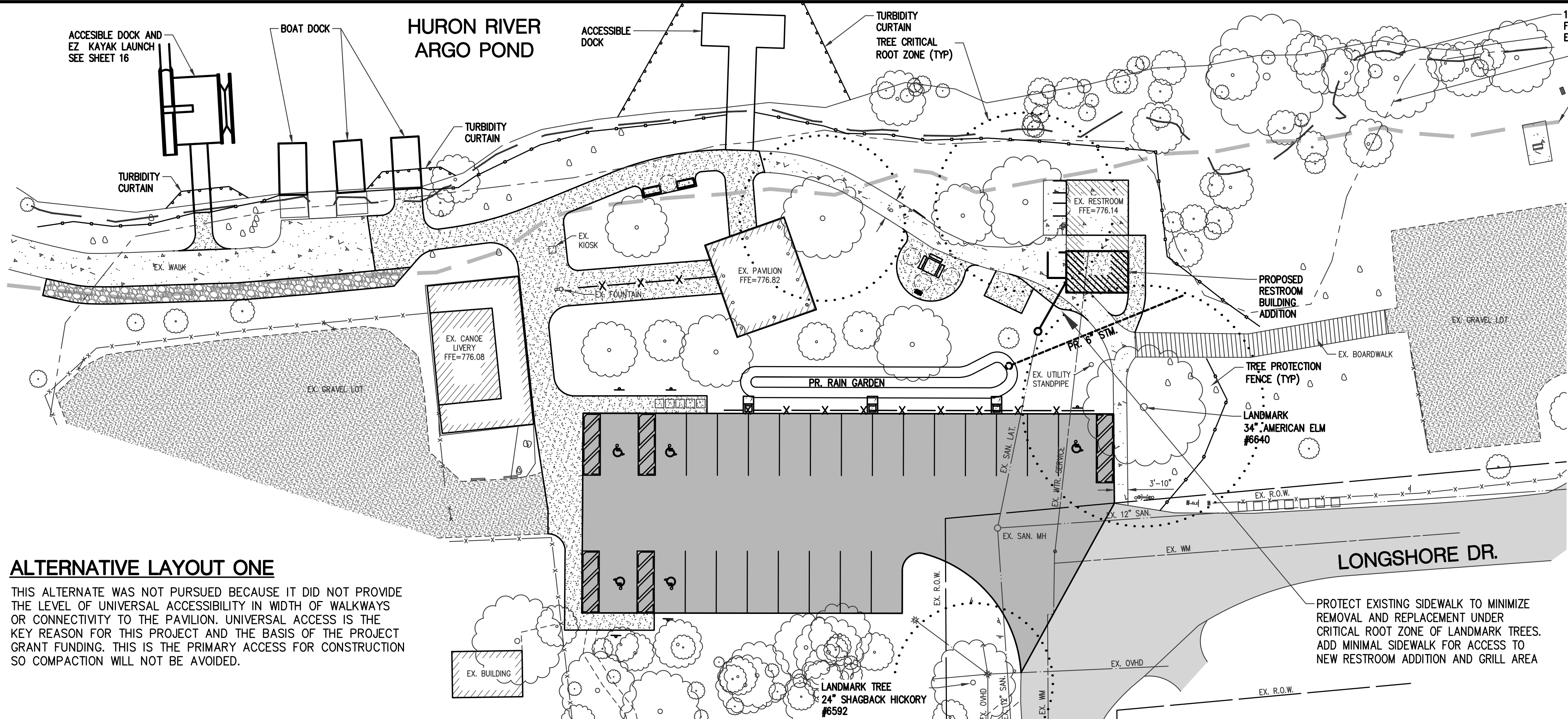
PLAN DATE: APRIL, 2020

PROJECT MGR: DRS

REVIEWER: AW

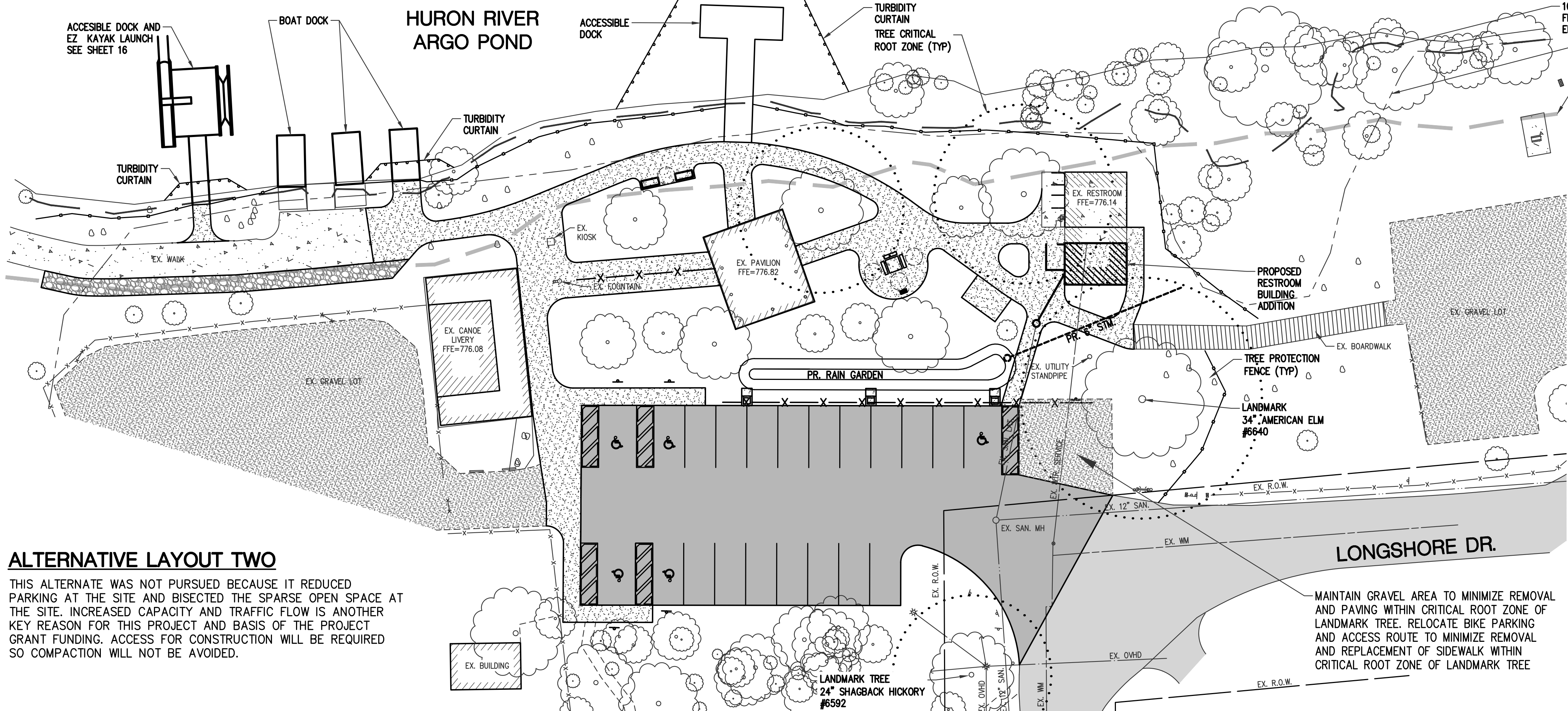
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ALTERNATIVE LAYOUT ONE

THIS ALTERNATE WAS NOT PURSUED BECAUSE IT DID NOT PROVIDE THE LEVEL OF UNIVERSAL ACCESSIBILITY IN WIDTH OF WALKWAYS OR CONNECTIVITY TO THE PAVILION. UNIVERSAL ACCESS IS THE KEY REASON FOR THIS PROJECT AND THE BASIS OF THE PROJECT GRANT FUNDING. THIS IS THE PRIMARY ACCESS FOR CONSTRUCTION SO COMPACTION WILL NOT BE AVOIDED.



ALTERNATIVE LAYOUT TWO

THIS ALTERNATE WAS NOT PURSUED BECAUSE IT REDUCED PARKING AT THE SITE AND BISECTED THE SPARSE OPEN SPACE AT THE SITE. INCREASED CAPACITY AND TRAFFIC FLOW IS ANOTHER KEY REASON FOR THIS PROJECT AND BASIS OF THE PROJECT GRANT FUNDING. ACCESS FOR CONSTRUCTION WILL BE REQUIRED SO COMPACTION WILL NOT BE AVOIDED.



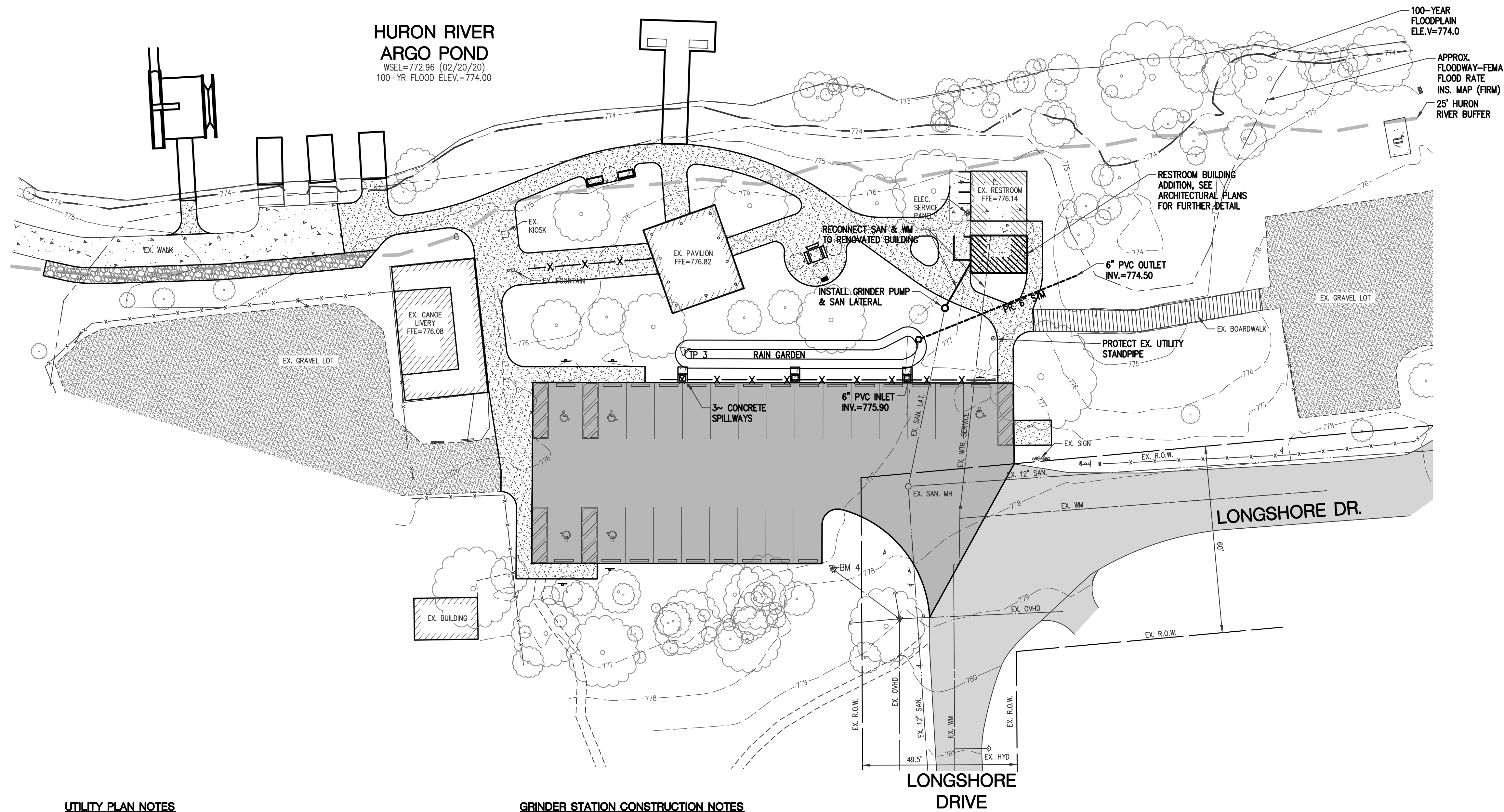
PLAN SUBMITTALS AND CHANGES	
DATE	DESCRIPTION
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06/16/20	SITE PLAN RESUBMITTAL

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REV:
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LEGEND

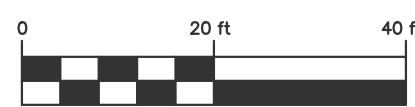
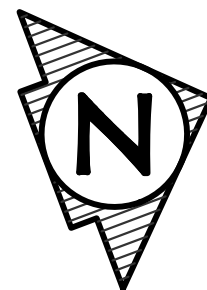
- EXISTING GRAVEL SURFACE
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- PROPOSED SIDEWALK
- PROPOSED EXPOSED AGGREGATE SIDEWALK
- EXISTING HMA PAVEMENT
- PROPOSED HMA PAVEMENT
- EXISTING SANITARY SEWER
- PROPOSED SANITARY LATERAL
- PROPOSED WATER SERVICE
- EXISTING FENCE
- PROPOSED FENCE
- EXISTING CONTOURS MAJOR
- EXISTING CONTOURS MINOR
- HURON RIVER 25' BUFFER

UTILITY PLAN NOTES

1. TREES & ROOT ZONES SHALL BE PROTECTED BY CONTRACTOR THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL HAND DIG AND LIMIT CONSTRUCTION TRAFFIC WITHIN TREE DRIPLINE.
2. THE EXISTING WATER LEAD WILL BE MAINTAINED TO THE EXISTING RESTROOM BUILDING AS PART OF ITS RENOVATION.
3. THE EXISTING SANITARY LEAD WILL BE MAINTAINED TO THE EXISTING RESTROOM BUILDING AS PART OF ITS RENOVATION; A NEW GRINDER PUMP IS PROPOSED TO ASSIST WITH MAINTENANCE OF THIS SYSTEM.
4. THE EXISTING SEASONAL PARK BUILDINGS WILL REMAIN; NO FIRE SUPPRESSION OR FACILITIES ARE SHOWN. NO FIREWALLS ARE IN THE BUILDINGS.
5. THERE ARE NOT UTILITY EASEMENTS. THE PROJECT IS LOCATED ON CITY PROPERTY.
6. NO SANITARY SEWER FLOW MITIGATION CALCULATIONS ARE PROVIDED; THE EXISTING SERVICE IS BEING MAINTAINED.
7. WATER SERVICE SHALL BE REPLACED IN KIND.
8. NO STORM SEWER IS PROPOSED.
9. SANITARY SEWER PIPING SHALL BE PVCC SDR 26.
10. STORM WATER MANAGEMENT IS PROVIDED PER THE CURRENT WASHTENAWU COUNTY WATER RESOURCES COMMISSION REQUIREMENTS.
11. SNOW STORAGE AREA IS NOT SHOWN, THIS IS A SUMMER SEASON FACILITY (NO PLOWING NECESSARY).
12. THE NEAREST FIRE HYDRANT IS APPROXIMATELY 600 FEET EAST ON LONG SHORE DRIVE
13. SEE NOTES SHEET (SHEET #2) FOR ADDITIONAL NOTES.

GRINDER STATION CONSTRUCTION NOTES

1. THE PROPOSED GRINDER STATION SHALL BE AN ENVIRONMENT ONE DUPLEX GRINDER PUMP STATION, MODEL DH152 (DEPTH TO BE DETERMINED), OR APPROVED EQUAL. THE STATION SHALL BE DESIGNED TO HANDLE ALL FLOW THE PROPOSED BATH HOUSE (SIX TOILETS AND SIX SINKS). THE STATION SHALL BE EQUIPPED WITH A DUPLEX PLUS ALARM PANEL BY ENVIRONMENT ONE.
2. THE CONTRACTOR SHALL INSTALL THE STATION IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE CONTRACTOR SHALL INSTALL A CONCRETE BALLAST AROUND THE STATION TO PREVENT FLOATING.
3. THE CONTROL PANEL SHALL BE AN ENVIRONMENT ONE PROTECT PLUS ALARM PANEL WITH A NEMA 4X ENCLOSURE.
4. THE CONTRACTOR SHALL PROVIDE A 240 VOLT SINGLE PHASE POWER SOURCE TO THE CONTROL PANEL. A MINIMUM OF A 30 AMP BREAKER WILL NEED TO BE PROVIDED. THE CONTROL PANEL SHALL BE MOUNTED IN A LOCATION THAT HAS A CLEAR LINE OF SIGHT TO THE PUMP STATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE WIRING CONFIGURATION REQUIRED BY THE MANUFACTURER.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING THE GRINDER PUMP STATION AND MAKING ALL REQUIRED CONNECTIONS.
6. THE MANUFACTURER'S REPRESENTATIVE IS JOE MOORE (DUBOIS COOPER ASSOCIATES, INC.). HIS PHONE NUMBER IS (734) 455-6700.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION / SIZING WITH THE MANUFACTURER. THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF SHOP DRAWINGS FOR REVIEW / APPROVAL PRIOR TO RELEASING EQUIPMENT FOR FABRICATION.



PLAN SUBMITTALS AND CHANGES

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JOB No: 20C0027

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UTILITY PLAN

PLAN DATE: APRIL, 2020

PROJECT MGR: DRS

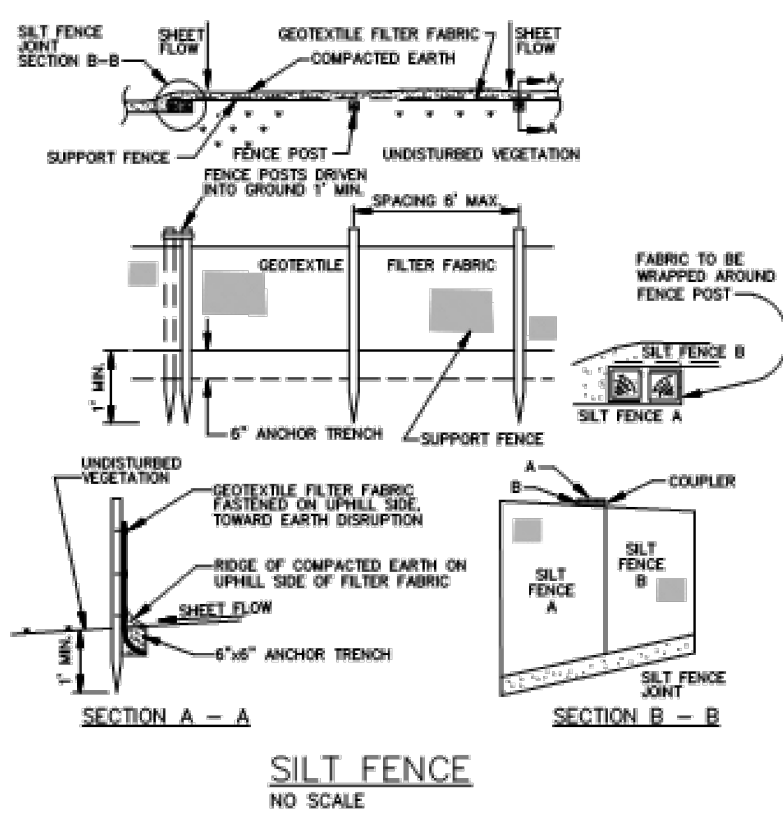
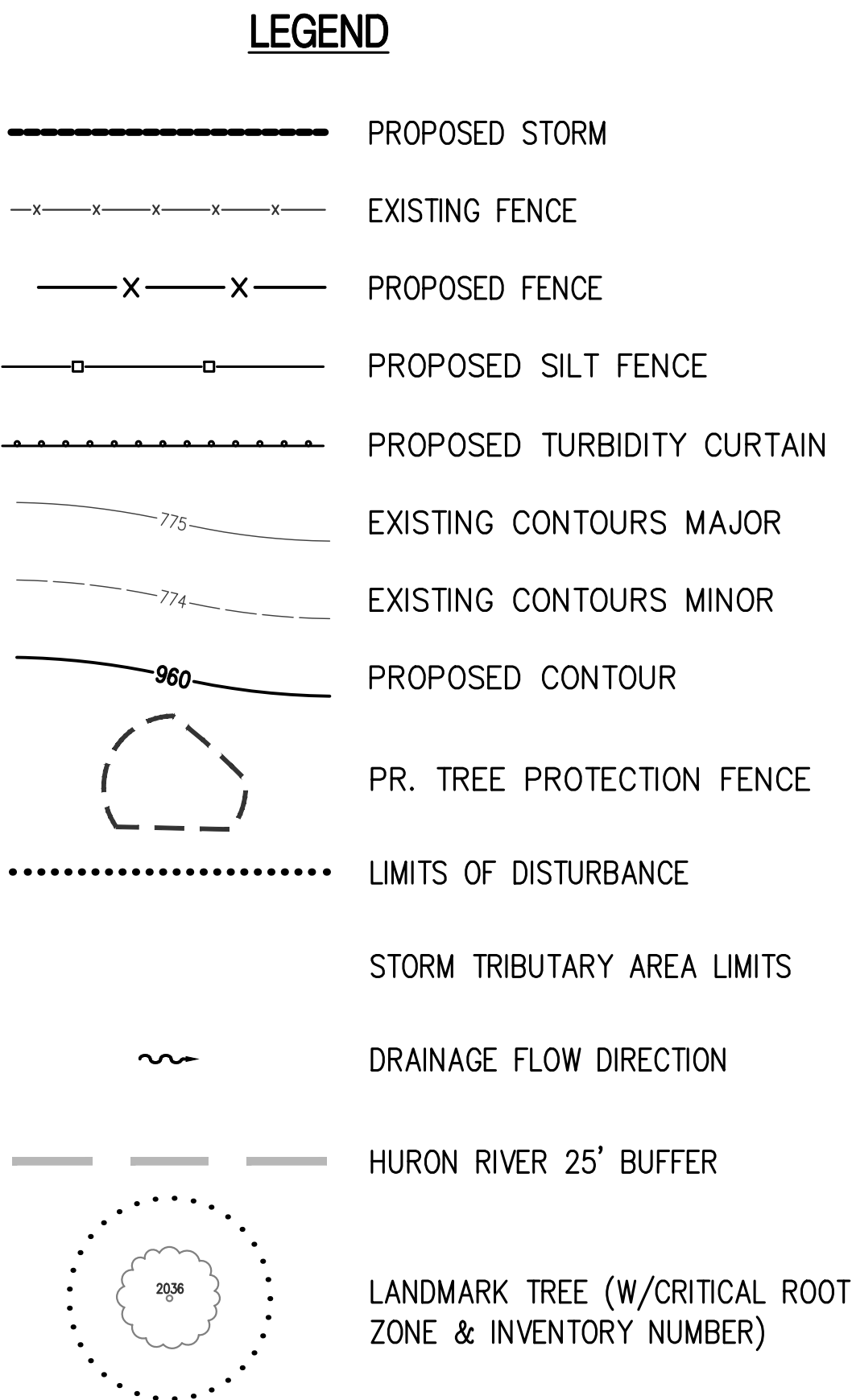
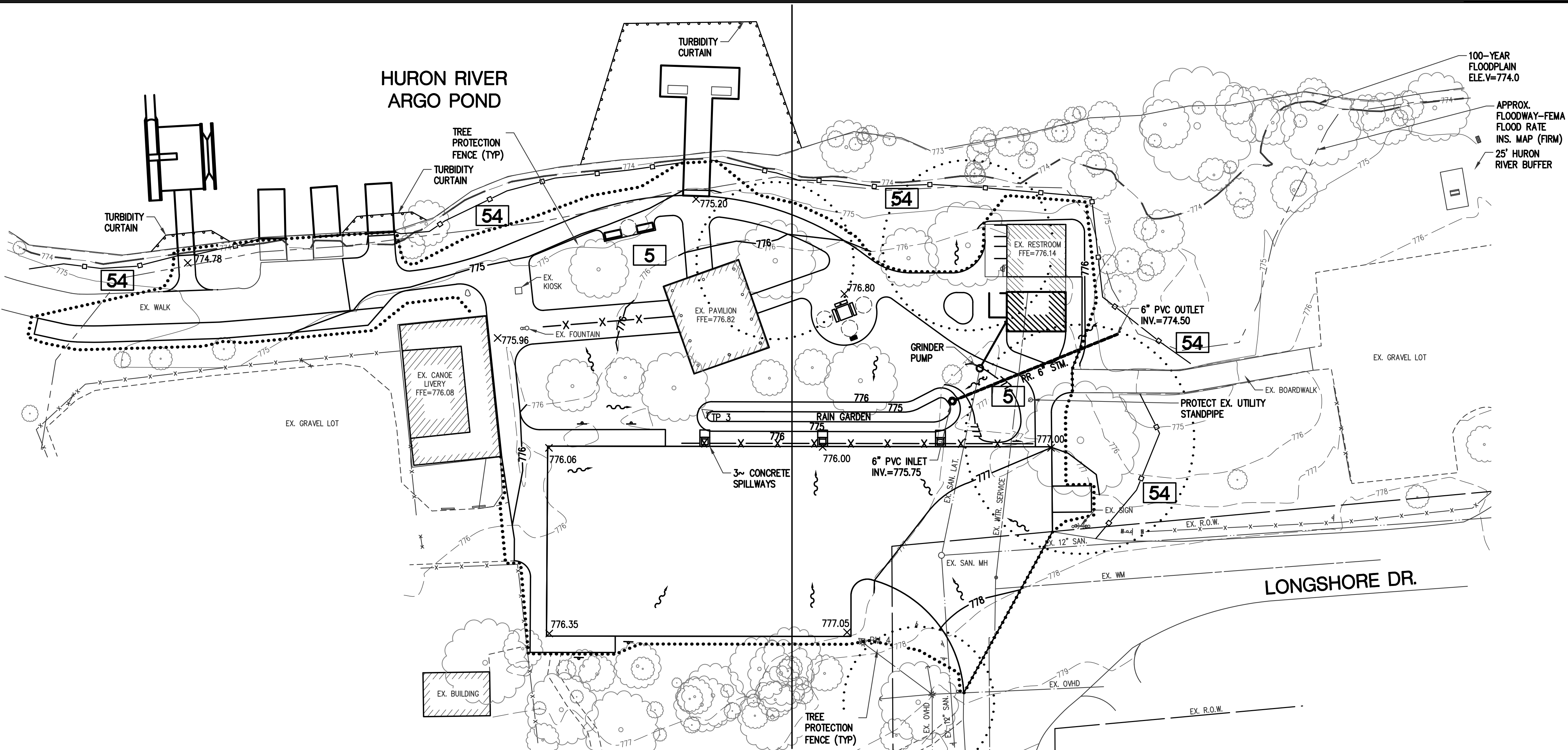
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STORM WATER MANAGEMENT SYSTEM CALCULATIONS

Site Area Data

Total Site Area /Drainage Area to Practice (DA):	12838.00	sf
Total Site Area Excluding "Self-crediting" BMPs:	12838.00	sf
Impervious Area:	0.21	ac

Total Site Area = 0.29 ac
% Impervious (I): 71.23

Worksheet 1. Determining post-development cover types, areas, curve numbers and runoff coefficients:

A. Washtenaw County Rational Method - Required for first flush runoff calculations
See Runoff Coefficient (C factor) worksheet

Weighted C = 0.75

Worksheet 2. Compute First Flush Volume

A. First Flush Runoff Calculations (V_f)
V_f = 1"x 1" x 43550 x (AC) = 800.92 ft³

A = Total Site Areas (ac) excluding "self-crediting" BMPs
C = Weighted Runoff Coefficient from Step 1

Worksheet 9. Compute Onsite Infiltration Requirement

Onsite Infiltration Requirement: V_{inf} = 800.92 ft³

First Flush volume requirement for the proposed surface area

Worksheet 11. Runoff Volume Credit

A. Compute Surface Storage Volume

Drainage Area	0.29	ac
Impervious Area	0.21	ac
Impervious %	71.23	%
Rain Garden Bottom Area	248.63	ft ²
Area at Ponding Depth	354.09	ft ²
Infiltration Area (Average Area)	301.36	ft ²
Left Side Slope (Z1)	3	ft/ft
Right Side Slope (Z2)	3	ft/ft
Ponding Depth/Design Water Depth	0.67	ft
Surface Storage Volume Provided	201.91	ft ³

Loading ratio = Impervious area / infiltration area 30.35
3:1 or flatter
3:1 or flatter
Maximum 8 inches
Rain Garden Surface Storage Volume = Bed Area X Average Design Water Depth

B. Compute Soil Storage Volume

Soil Media Depth:	30.00	in
Volume of Soil Media:		ft ³
Volume of Underdrain Gravel:		ft ³
Soil Storage Volume:	0	ft ³
Surface Storage Volume:	201.91	ft ³
Total Storage Volume:	201.91	ft ³

At least 18 inches where only herbaceous plant species will be utilized
Soil Media Porosity: No soil storage volume credit for selected granular material
Underdrain Porosity: If Soil Type A or Type B, no underdrain required

C. Compute Infiltration Volume

Design Infiltration Rate:	5.00	in/hr
Infiltration Area:	301.36	ft ²
Infiltration Volume:	753.40	ft ³

Maximum design infiltration rate is 10 in/hr, assume 5 in/hr for Soil Type B
Assume 6 hrs infiltration period

Total Volume Reduction by Proposed Structure BMPs: 955.31 ft³
Runoff Volume Infiltration Requirement (V_{inf}): 800.92 ft³
Runoff Volume Credit: 154.39 ft³

Worksheet 13. Summary (Site summary of infiltration)

A. Stormwater Management Summary

Runoff Volume Infiltration Requirement (V _{inf}):	800.92	ft ³
Design / Provided Infiltration Volume:	955.31	ft ³
% Minimum Required Infiltration Provided:	119.28%	

A. STORM WATER MANAGEMENT SYSTEM MAINTENANCE PLAN

- RESPONSIBILITY FOR MAINTENANCE
 - DURING CONSTRUCTION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO PERFORM THE MAINTENANCE.
 - FOLLOWING CONSTRUCTION, IT WILL BE THE RESPONSIBILITY OF CITY OF ANN ARBOR PARKS AND RECREATION STAFF TO PERFORM THE MAINTENANCE
- MAINTENANCE TASKS AND SCHEDULE
 - SEE THE CHART ON THIS SHEET. THE CHART DESCRIBES MAINTENANCE TASKS TO BE PERFORMED BY THE CITY OF ANN ARBOR PARKS AND RECREATION STAFF. IMMEDIATELY FOLLOWING THE CONSTRUCTION, THE CONTRACTOR WILL HAVE THE STORM WATER MANAGEMENT SYSTEM INSPECTED BY AN ENGINEER TO VERIFY GRADES OF THE DETENTION AND FILTRATION AREAS AND TO MAKE RECOMMENDATIONS FOR ANY NECESSARY SEDIMENT REMOVAL.
 -

MAINTENANCE PLAN BUDGET	
MONTHLY INSPECTION OF SYSTEM FOR SEDIMENT ACCUMULATION INCLUDING RAIN GARDEN SEDIMENT TRAPS	\$300.00
REMOVAL OF SEDIMENT ACCUMULATION, AS NEEDED	\$700.00
INSPECT FOR FLOATABLES AND DEBRIS ANNUALLY AND AFTER MAJOR STORMS	\$200.00
REMOVAL OF FLOATABLES AND DEBRIS ANNUALLY AND AFTER MAJOR STORMS	\$400.00
INSPECT SYSTEM FOR EROSION ANNUALLY AND AFTER MAJOR STORMS	\$200.00
RE-ESTABLISH PERMANENT VEGETATION ON ERODED SLOPES, AS NEEDED	\$500.00
CLEAN DRIVES AND PARKING AREAS SEMIANNUALLY	\$600.00
TOTAL ANNUAL BUDGET	\$2900.00

B. STORM WATER NARRATIVE

- EXISTING DRAINAGE PATTERNS.

THE EXISTING DRAINAGE PATTERNS ALLOWS SHEET DRAINAGE ACROSS THE SITE INTO THE ARGO POND/HURON RIVER. IT ACCUMULATES SEDIMENT FROM THE EXISTING GRAVEL PARKING SURFACE AND DISTRIBUTES THIS THROUGH THE SITE AS WELL AN CONVEYANCE INTO THE WATER.
- PROPOSED DRAINAGE PATTERN.

THE PROPOSED DRAINAGE OF THE NEW PAVED PARKING WILL SHEET FLOW TO THE RAIN GARDEN TO PROVIDE A FIRST FLUSH OF THE SURFACE DRAINAGE TO ASSIST WITH WATER QUALITY BEFORE BEING RELEASED TO AN EXISTING LOW AREA ON THE SITE WHICH WILL EVENTUALLY DRAIN TO THE HURON RIVER/ARGO POND. THE 100-YEAR FLOOD ELEVATION IS 774.00 PER NAV 88.
- UDC 5.22.B.2.A
THE PARK IS 180,682 SFT. DISTURBED AREA IS 14,773 (8%). 3,677 SFT IS NEW IMPERVIOUS AREA @ 50% = 1,838.5 (0.04 ACRES)
REQUIREMENT: 0.04 ACRES/800.92 CUBIC FEET IMPERVIOUS SURFACES PROVIDED FOR FIRST FLUSH STORM EVENT.
PROVIDED: 0.223/955.31 CUBIC FEET ACRES FIRST FLUSH STORM BASED ON AREA OF NEW PAVED PARKING.

C. SITE GRADING QUANTITIES

TOTAL NET EXCAVATION FOR THE SITE IS 13 CYD.

NO NET GAIN OR REDUCTION WITHIN THE 100-YEAR FLOOD PLAIN.

EXISTING IMPERVIOUS AREA (PAVING, SIDEWALKS, ROOF AREA) = 12,425 SFT

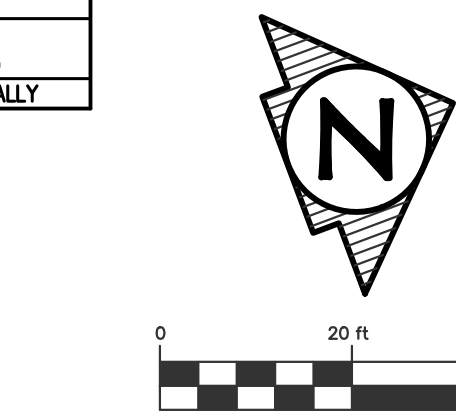
PROPOSED IMPERVIOUS AREA = 16,248 SFT.

D. GRADING NOTES

- TREES & ROOT ZONES SHALL BE PROTECTED BY CONTRACTOR THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL HAND DIG AND LIMIT CONSTRUCTION TRAFFIC WITHIN TREE DRIPLINE.
- ALL DISTURBED AREAS WITHIN LIMITS OF DISTURBANCE AND PROPOSED LANDSCAPE AREAS SHALL BE RESTORED WITH A MINIMUM OF THREE (3) INCHES OF TOPSOIL AND THEN SOD OR SEED/FERTILIZE/MULCH PER THE PLAN. PROVIDE SOD OR SEED AND EROSION CONTROL BLANKETS ON ALL SLOPES 3:1 OR STEEPER.
- SEE NOTES SHEET (SHEET #2) FOR ADDITIONAL NOTES.

	COMPONENTS						
	STREETS	STORM SEWER SYSTEM	CATCH BASIN SUMPS	CATCH BASIN CASTING	UNDERGROUND DETENTION	SWALES	OUTFLOW CONTROL STRUCTURE
INSPECT FOR SEDIMENT ACCUMULATION	X					X	X
REMOVAL OF SEDIMENT ACCUMULATION						X	X
INSPECT FOR FLOATABLES AND DEBRIS						X	X
CLEANING OF FLOATABLES AND DEBRIS						X	X
INSPECTION FOR EROSION						X	X
RE-ESTABLISH PERMANENT VEGETATION ON ERODED SLOPES						X	X
CLEAN STREETS	X					X	X

TOTAL SITE IMPERVIOUS SURFACE = /> 15,000 SFT.	REQUIRED	PROVIDED
FIRST FLUSH FOR NET CHANGE/IMPROVEMENTS		955.31 CFT
FIRST FLUSH, DETENTION OF BANKFULL AND 100 YEAR STORM	2669.87 CFT	



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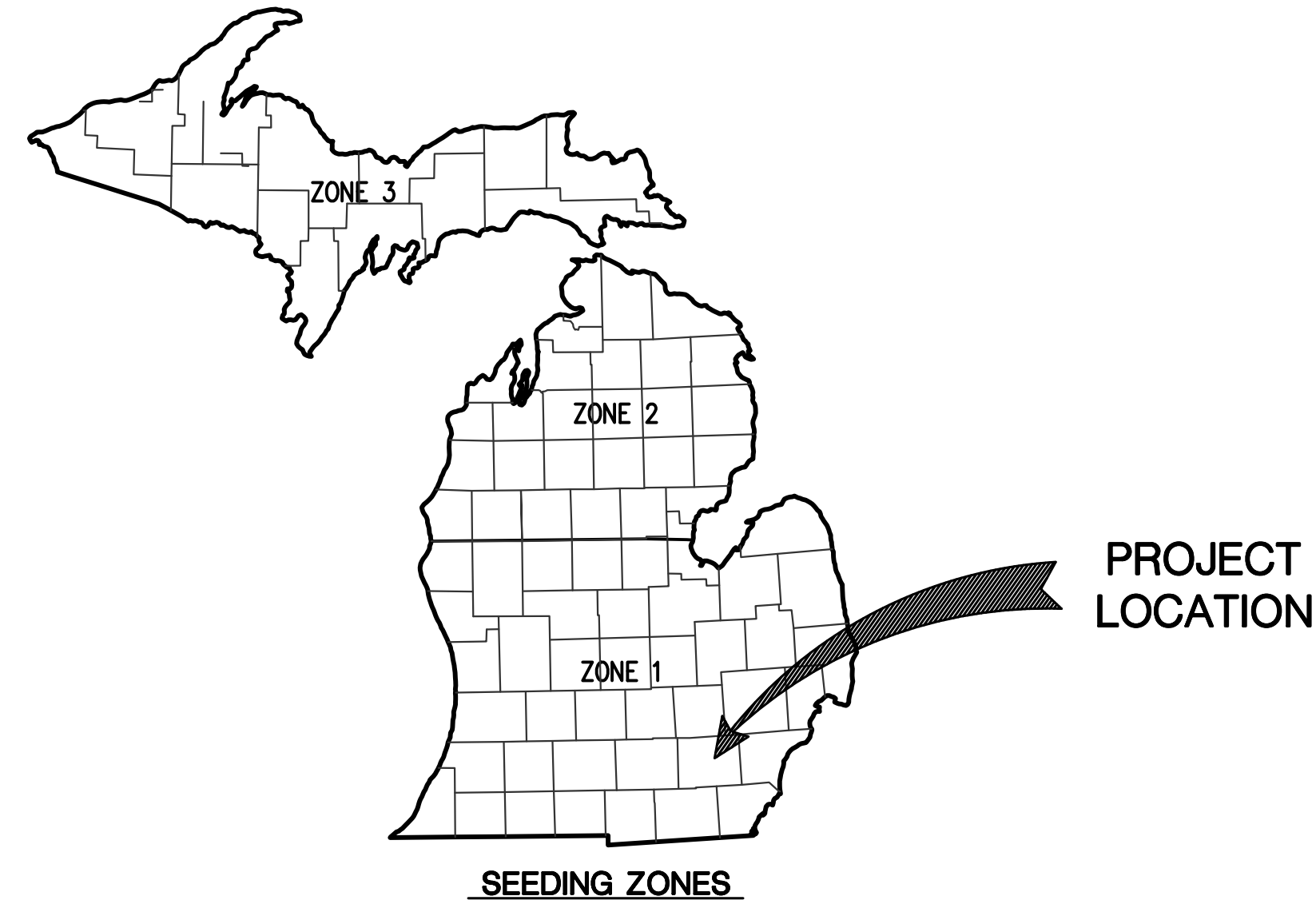
GRADING PLAN

MICHIGAN UNIFIED KEYING SYSTEM

SOIL EROSION SEDIMENTATION CONTROL MEASURES

* INDICATES APPLICABILITY OF A SPECIFIC CONTROL MEASURE TO ONE OR MORE OF THE SEVEN PROBLEM AREAS

KEY	DETAIL	CHARACTERISTICS	A	B	C	D	E	F	G
1	STRIPPING & STOCKPILING TOPSOIL	TOPSOIL MAY BE STOCKPILED ABOVE BORROW AREAS TO ACT AS A DIVERSION. STOCKPILE SHOULD BE TEMPORARILY SEED.	*				*	*	
2	SELECTIVE GRADING & SHAPING	WATER CAN BE DIVERTED TO MINIMIZE EROSION. FLATTER SLOPES EASE EROSION PROBLEMS.	*				*	*	*
3	GRUBBING OMITTED	SAVES COST OF GRUBBING, PROVIDES NEW SPROUTS, RETAINS EXISTING ROOT MAT SYSTEM, REDUCES WIND FILL AT NEW FOREST EDGE, DISCOURAGES EQUIPMENT ENTRANCE.	*				*		*
4	VEGETATIVE STABILIZATION	MAY UTILIZE A VARIETY OF PLANT MATERIAL. STABILIZES SOIL. SLOWS RUNOFF VELOCITY. FILTERS SEDIMENT FROM RUNOFF.	*	*	*		*	*	*
5	SEEDING	INEXPENSIVE AND VERY EFFECTIVE. STABILIZES SOIL, SLOWS MINOR EROSION. PROMOTES RUNOFF TO INFILTRATE SOIL, REDUCING RUNOFF VOLUME. SHOULD INCLUDE PREPARED TOPSOIL BED.	*		*		*	*	*
6	SEEDING WITH MULCH AND/OR MATING	FACILITATES ESTABLISHMENT OF VEGETATIVE COVER. EFFECTIVE FOR DRAGGABLES WITH LOW VELOCITY. EASILY PLACED IN SMALL QUANTITIES BY NON-OPERATED PERSONNEL. SHOULD INCLUDE PREPARED TOPSOIL BED.	*		*			*	*
7	HYDRO-SEEDING	EFFECTIVE ON LARGE AREAS. MULCH TACKING AGENT USED TO PROVIDE IMMEDIATE PROTECTION. MULCH SHOULD BE APPLIED. SHOULD INCLUDE PREPARED TOPSOIL BED.	*				*	*	*
8	SODDING	PROVIDES IMMEDIATE PROTECTION. CAN BE USED ON STEEP SLOPES WHERE SEED MAY BE DIFFICULT TO ESTABLISH. EASY TO PLACE, MAY BE REPAIRED IF DAMAGED. SHOULD INCLUDE PREPARED TOPSOIL BED.	*		*		*	*	*
9	VEGETATIVE BUFFER STRIP	SLOWS RUNOFF VELOCITY. FILTERS SEDIMENT FROM RUNOFF. REDUCES VOLUME OF RUNOFF ON SLOPES.	*	*					*
10	MULCHING	USED ALONE TO PROTECT EXPOSED AREAS FOR SHORT PERIODS. PROTECTS SOIL FROM IMPACT OF FALLING RAIN. PRESERVES SOIL, MOISTURE AND PROTECTS SEEDING FROM TEMPERATURE EXTREMES.	*				*	*	
11	ROUGHENED SURFACE	REDUCES VELOCITY AND INCREASES INFILTRATION RATES. COLLECTS WATER, SEED, AND MULCH BETTER THAN SMOOTH SURFACES.	*				*		
12	COMPACTION	HELPS HOLD SOIL IN PLACE, MAKING EXPOSED AREAS LESS VULNERABLE TO EROSION.	*				*		
17	BENCHES	REDUCES RUNOFF VELOCITY BY REDUCING EFFECTIVE SLOPE LENGTH. COLLECTS SEDIMENT. PROVIDES ACCESS TO SLOPES FOR SEEDING, MULCHING AND MAINTENANCE.	*					*	
20	BERM & DITCH	DIVERTS WATER TO A PREPARED DRAINAGEWAY. MAY BE USED AT INTERVALS ACROSS SLOPE TO REDUCE EFFECTIVE SLOPE LENGTH.	*					*	*
21	FILTER BERM	CONSTRUCTED OF GRAVEL OR STONE. INTERCEPTS AND DIVERTS RUNOFF TO STABILIZED AREAS OR PREPARED DRAINAGE SYSTEMS. SLOWS RUNOFF AND COLLECTS SEDIMENT.	*	*					*
33	SEDIMENTATION TRAP	MAY BE CONSTRUCTED OF A VARIETY OF MATERIALS. TRAPS SEDIMENT AND REDUCES VELOCITY OF FLOW. CAN BE CLEANED AND EXPANDED AS NEEDED.		*	*				
34	SEDIMENT BASIN	TRAPS SEDIMENT. RELEASES RUNOFF AT NON-EROSIVE RATES. CONTROLS RUNOFF AT SYSTEM OUTLETS. CAN BE VEGGAL, ADJUSTED.		*	*	*			
35	STORM SEWER	SYSTEM REMOVES COLLECTED RUNOFF FROM SITE, PARTICULARLY FROM PAVED AREAS. CAN ACCEPT LARGE CONCENTRATIONS OF RUNOFF. CONVEYS RUNOFF TO MUNICIPAL SEWER SYSTEM OR STABILIZED OUTFALL LOCATION. USE CATCH BASINS TO COLLECT SEDIMENT.						*	*
36	CATCH BASIN, DRAIN INLET	COLLECTS HIGH VELOCITY CONCENTRATED RUNOFF. MAY USE FILTERS OVER INLET.						*	*
37	SOD FILTER	INEXPENSIVE AND EASY TO CONSTRUCT. PROVIDES IMMEDIATE PROTECTION. PROTECTS AREAS AROUND INLETS FROM EROSION.				*			
38	STRAW BALE FILTER	INEXPENSIVE AND EASY TO CONSTRUCT. CAN BE LOCATED AS NECESSARY TO COLLECT SEDIMENT. MAY BE USED IN CONJUNCTION WITH SNOW FENCE FOR ADDED STABILITY.				*			*
39	ROCK FILTER	CAN UTILIZE MATERIAL FOUND ON SITE. EASY TO CONSTRUCT. FILTERS SEDIMENT FROM RUNOFF.				*			*
40	INLET SEDIMENT TRAP	EASY TO SHAPE. COLLECTS SEDIMENT. MAY BE CLEANED AND EXPANDED AS NEEDED.				*			
43	CULVERT SEDIMENT TRAP	EASY TO INSTALL AT INLET. KEEPS CULVERT CLEAN AND FREE FLOWING. MAY BE CONSTRUCTED OF LUMBER OR LOGS.		*					*
54	SILT FENCE	USES DEGRADABLE FABRIC AND POSTS OR POLES. EASY TO CONSTRUCT AND LOCATE AS NECESSARY.			*				*



PERMANENT SEEDING GUIDE

	APR	MAY	JUN	JUL	AUG	SEP	OCT	
IRRIGATED AND/OR MULCH								ZONE 1
WITHOUT IRRIGATION OR MULCH								ZONE 2
IRRIGATED AND/OR MULCH								ZONE 3
WITHOUT IRRIGATION OR MULCH								

SOIL EROSION & SEDIMENTATION CONTROL

1. DEVELOPER/PROPERTY OWNER SHALL SUBMIT A DETAILED EROSION CONTROL PLAN AND OBTAIN A SOIL EROSION & SEDIMENTATION CONTROL PERMIT PRIOR TO ANY EARTH CHANGES.
2. CONSTRUCTION OPERATION SHALL BE SCHEDULED AND PERFORMED SO THAT PREVENTATIVE EROSION CONTROL MEASURES ARE IN PLACE PRIOR TO EXCAVATION AND TEMPORARY STABILIZATION MEASURES ARE IN PLACE IMMEDIATELY FOLLOWING BACKFILLING AND/OR GRADING OPERATIONS.
3. BORROW AND FILL DISPOSAL AREAS WILL BE SELECTED AND APPROVED AT TIME OF PLAN REVIEW. SPECIAL PRECAUTIONS WILL BE TAKEN IN THE USE OF CONSTRUCTION EQUIPMENT TO PREVENT SITUATIONS THAT PROMOTE EROSION.
4. CLEANUP WILL BE DONE IN A MANNER TO INSURE THAT EROSION CONTROL MEASURES ARE NOT DISTURBED.
5. THE PROJECT WILL CONTINUALLY BE INSPECTED FOR SOIL EROSION AND SEDIMENT CONTROL COMPLIANCE. DEFICIENCIES WILL BE CORRECTED BY THE DEVELOPER WITHIN 24 HOURS.
6. TEMPORARY EROSION CONTROL MEASURES SHALL BE COMPLETELY REMOVED BY THE DEVELOPER UPON ESTABLISHMENT OF PERMANENT CONTROL MEASURES.
7. ALL TEMPORARY SOIL EROSION CONTROL MEASURES MUST BE REMOVED FROM ROAD RIGHT-OF-WAY AREAS PRIOR TO ACCEPTANCE OF STREETS FOR ROUTINE MAINTENANCE.
8. VEGETATION MUST BE ACCEPTABLY ESTABLISHED PRIOR TO FINAL RELEASE OF THE CONSTRUCTION GUARANTEE BY THE DESIGNATED SOIL EROSION SEDIMENTATION CONTROL AGENT.

CONSTRUCTION SEQUENCE

1. EXCAVATION AND STOCKPILING OF SOIL.
2. IMPLEMENTATION OF TEMPORARY EROSION CONTROL MEASURES; SELECTIVE GRADING, DIVERSIONS AS REQUIRED IN FIELD, PROTECTION OF STORM SEWER FACILITIES.
3. PERIODIC MAINTENANCE OF AFFECTED EROSION CONTROL MEASURES.
4. PERMANENT MEASURES; FINAL GRADING, SEEDING AND MULCHING.

TEMPORARY SEEDING GUIDE

ZONE 1											
TYPE OF SEED	APR	MAY	JUN	JUL	AUG	SEP	OCT				
SPRING OATS/BARLEY OR DOMESTIC RYEGRASS											
SUDANGRASS											
RYE OR PERENNIAL RYE											
WHEAT											
ZONE 2											
TYPE OF SEED	APR	MAY	JUN	JUL	AUG	SEP	OCT				
SPRING OATS/BARLEY OR DOMESTIC RYEGRASS											
SUDANGRASS											
RYE OR PERENNIAL RYE											
WHEAT											
ZONE 3											
TYPE OF SEED	APR	MAY	JUN	JUL	AUG	SEP	OCT				
SPRING OATS/BARLEY OR DOMESTIC RYEGRASS											
SUDANGRASS											
RYE OR PERENNIAL RYE											
WHEAT											

SOIL EROSION/SEDIMENTATION CONTROL OPERATION TIME SCHEDULE

CONSTRUCTION SEQUENCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
STRIP & STOCKPILE TOPSOIL												
ROUGH GRADE SEDIMENT CONTROL												
TEMP. CONTROL MEASURES												
STORM FACILITIES												
TEMP. CONSTRUCTION ROADS												
SITE CONSTRUCTION												
PERM. CONTROL MEASURES												
FINISH GRADING												

PLAN SUBMITTALS AND CHANGES

DATE	DESCRIPTION
04/11/20	SITE PLAN SUBMITTAL
05/22/20	SITE PLAN RESUBMITTAL
06/16/20	SITE PLAN RESUBMITTAL



Know what's below.
Call before you dig.

REV:

SHT# 13 of 20
JOB No: 20C0027

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SERVICES COMPANY



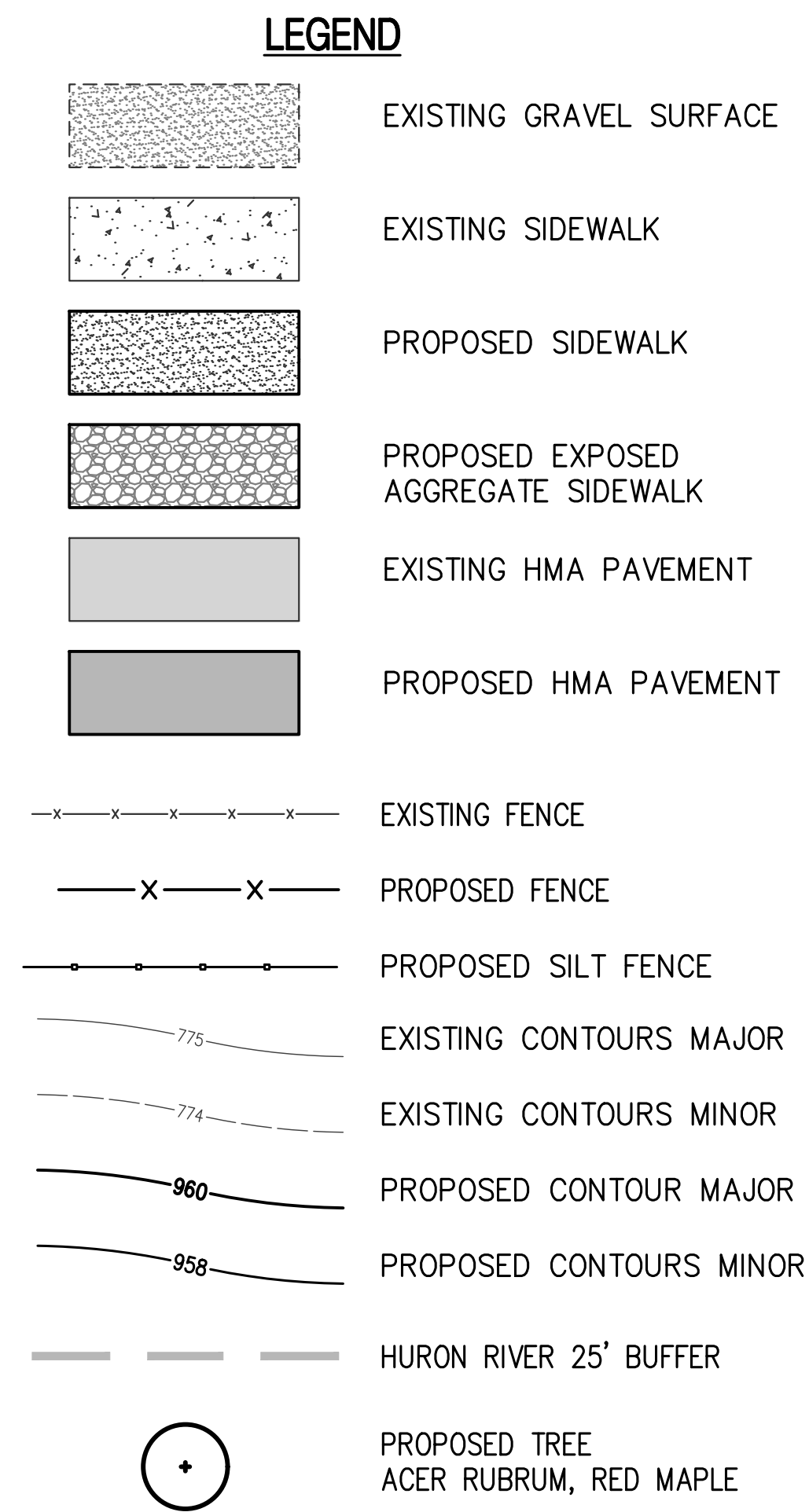
The Rowe Building
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Flint, MI 48502

PREPARED FOR
CITY OF ANN ARBOR PARKS & REC
ARGO PARK LIVERY

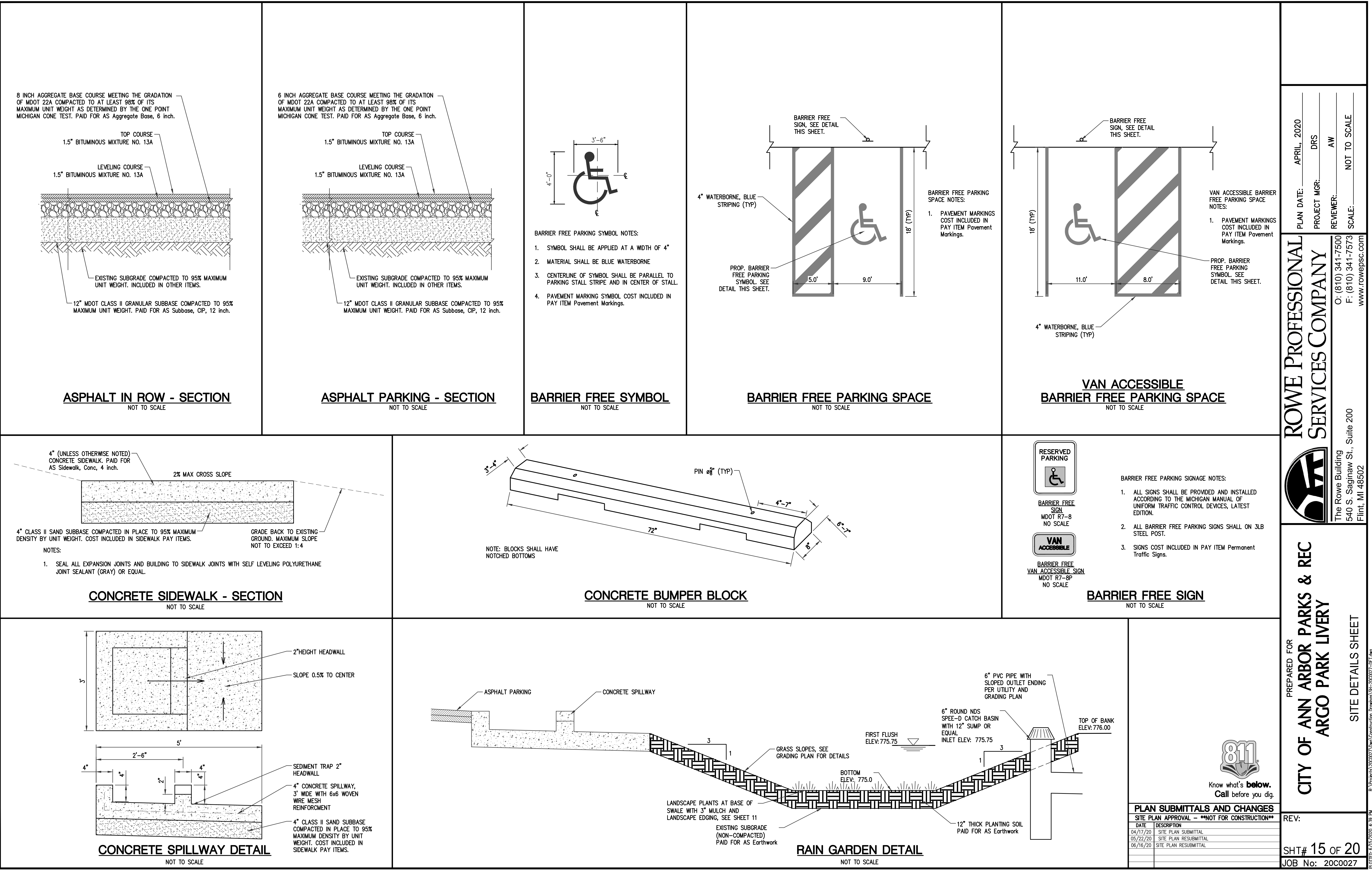
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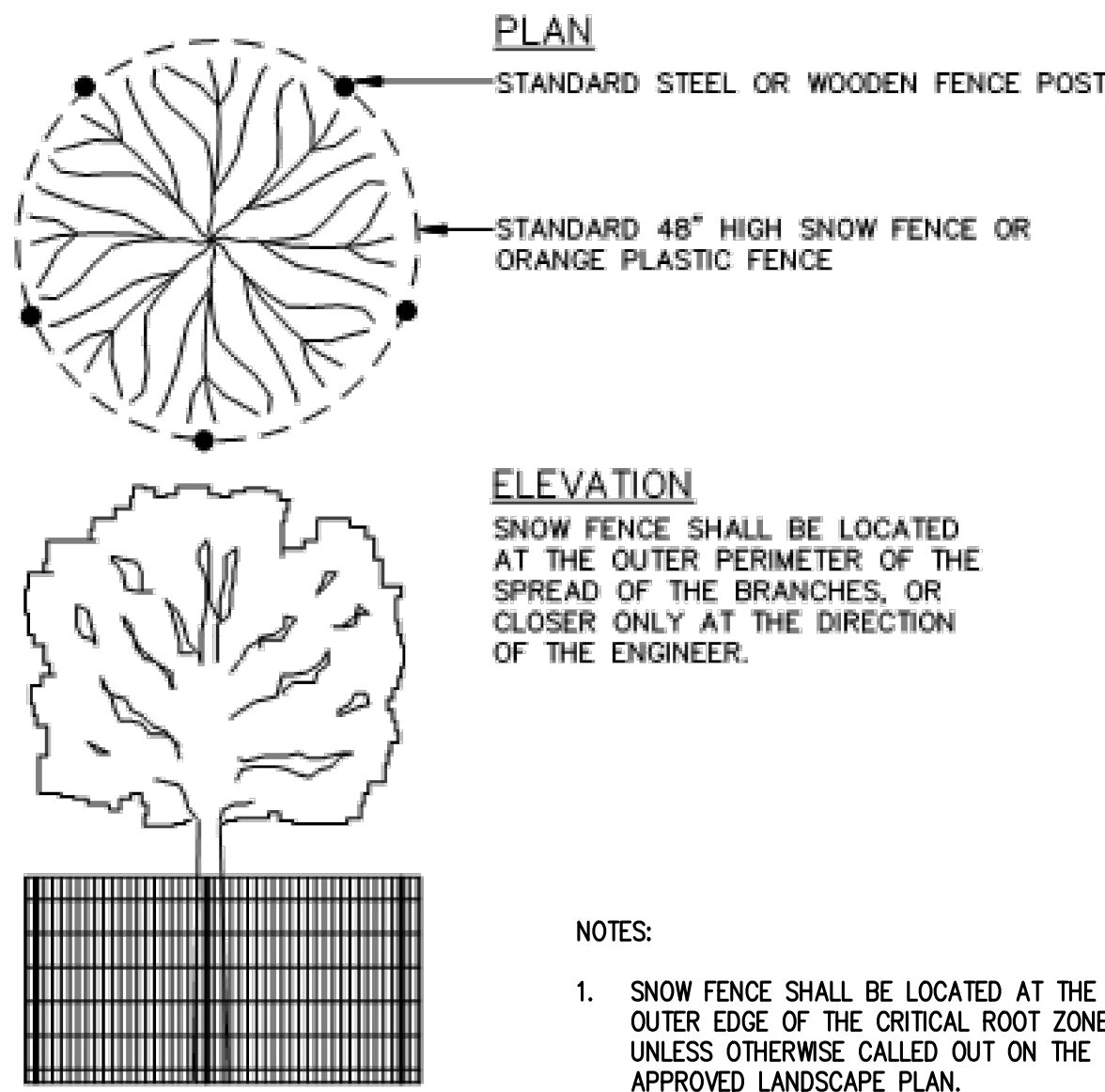
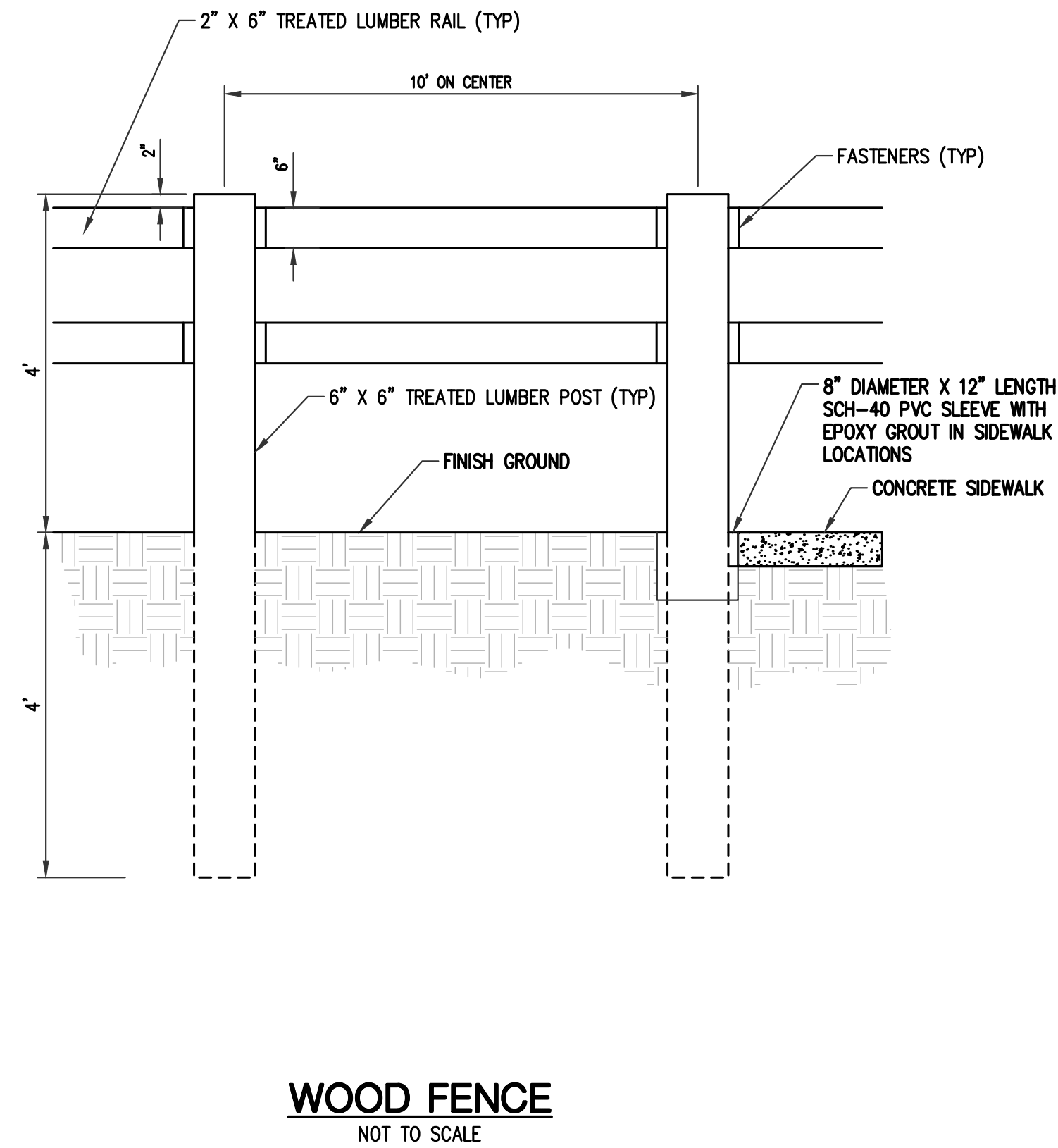
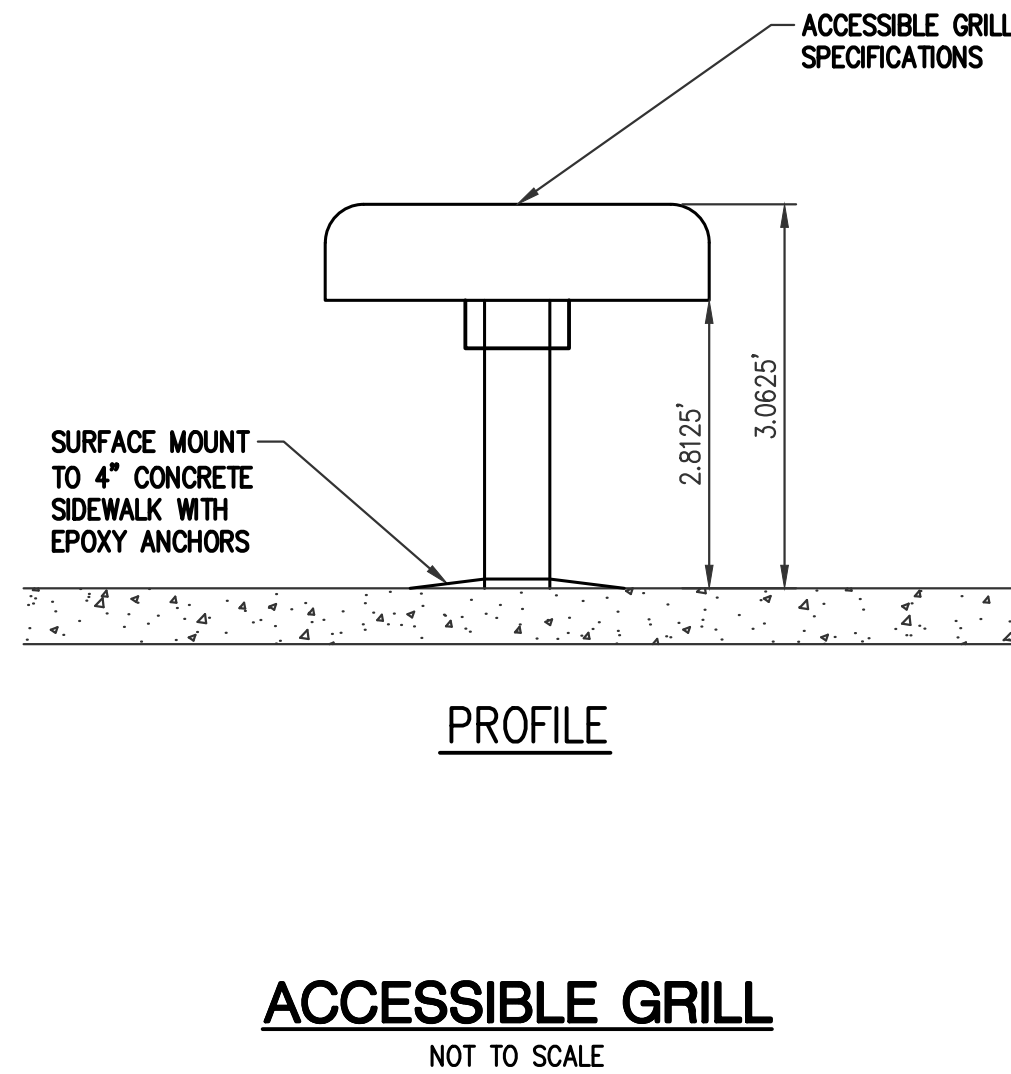
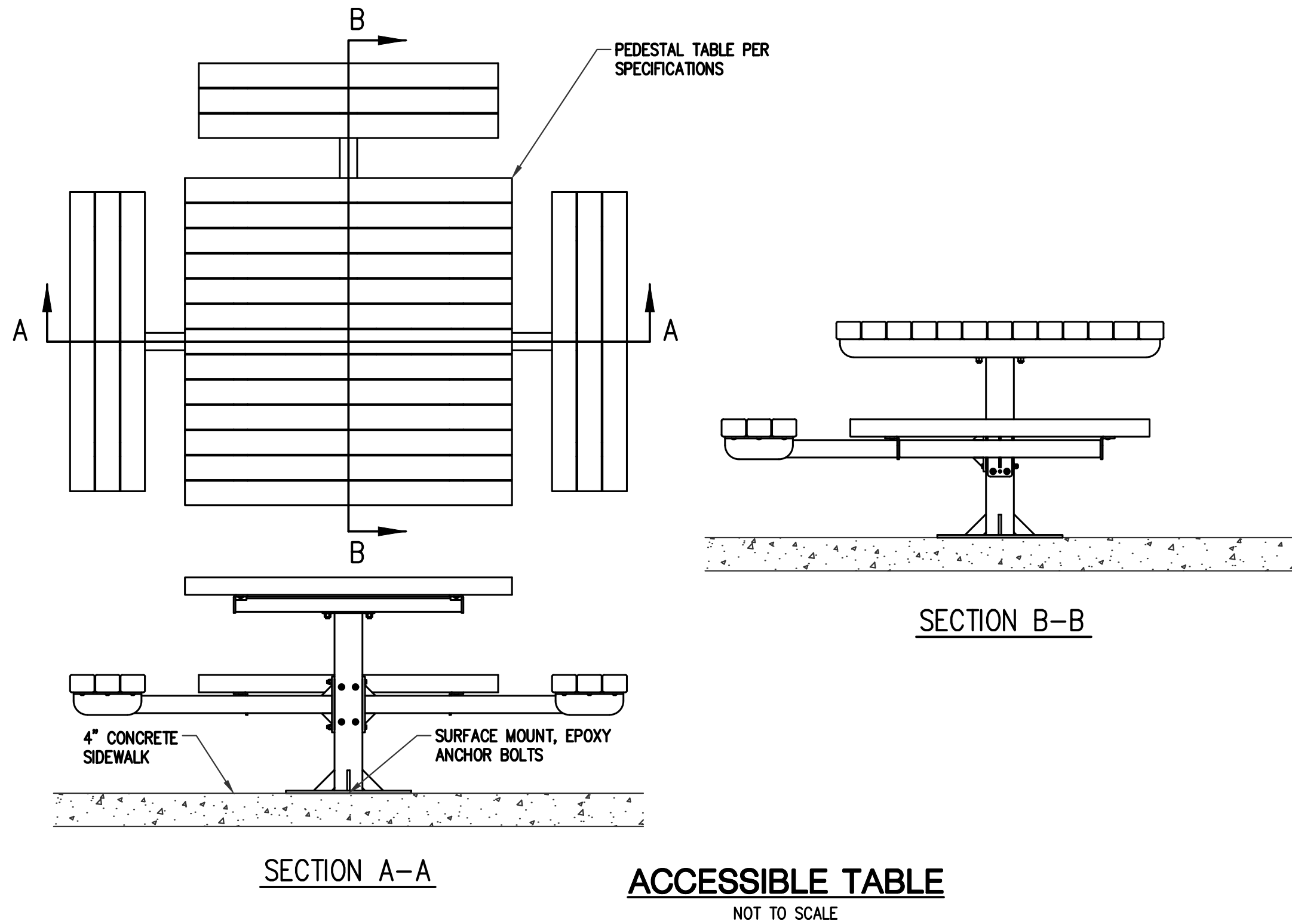
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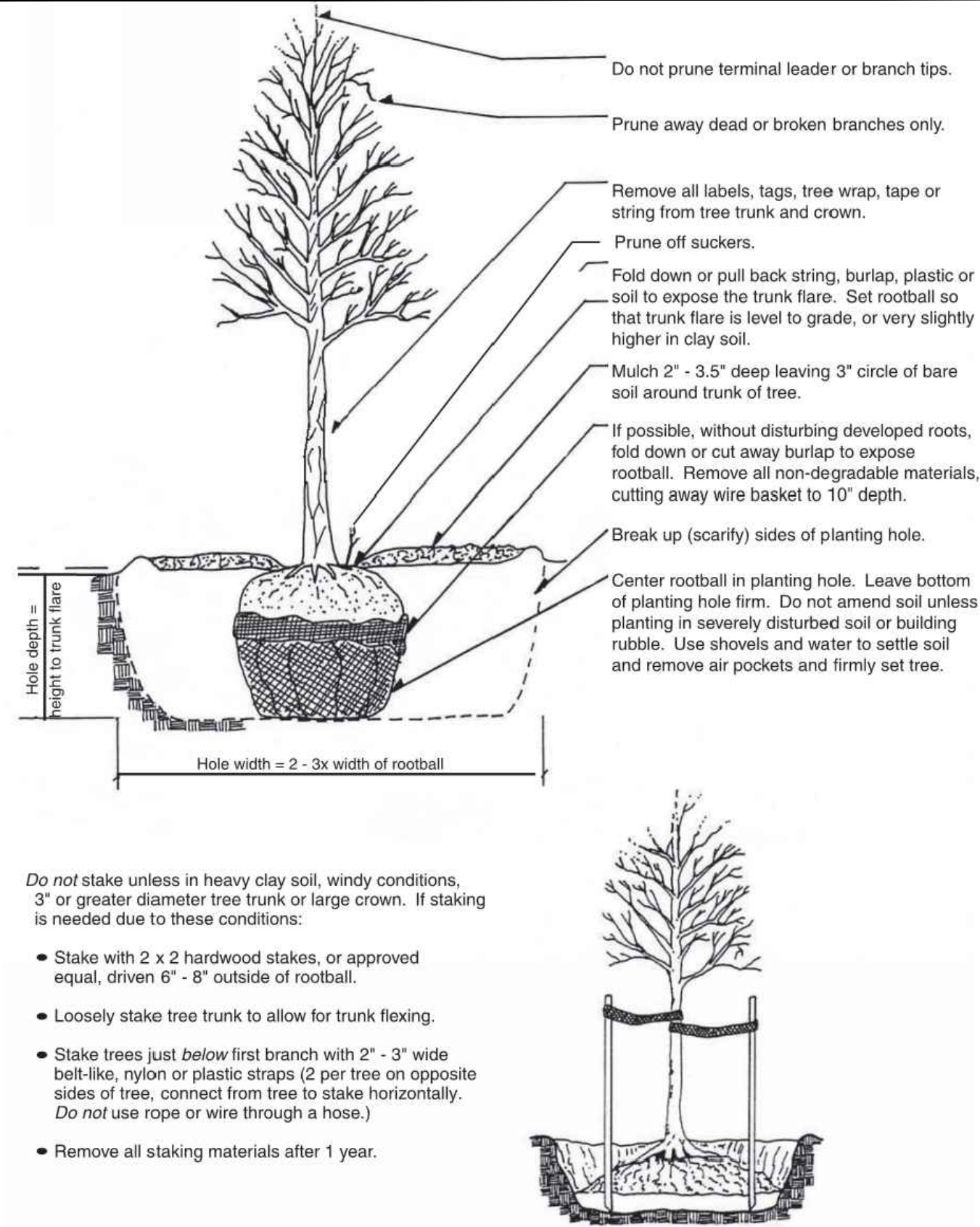


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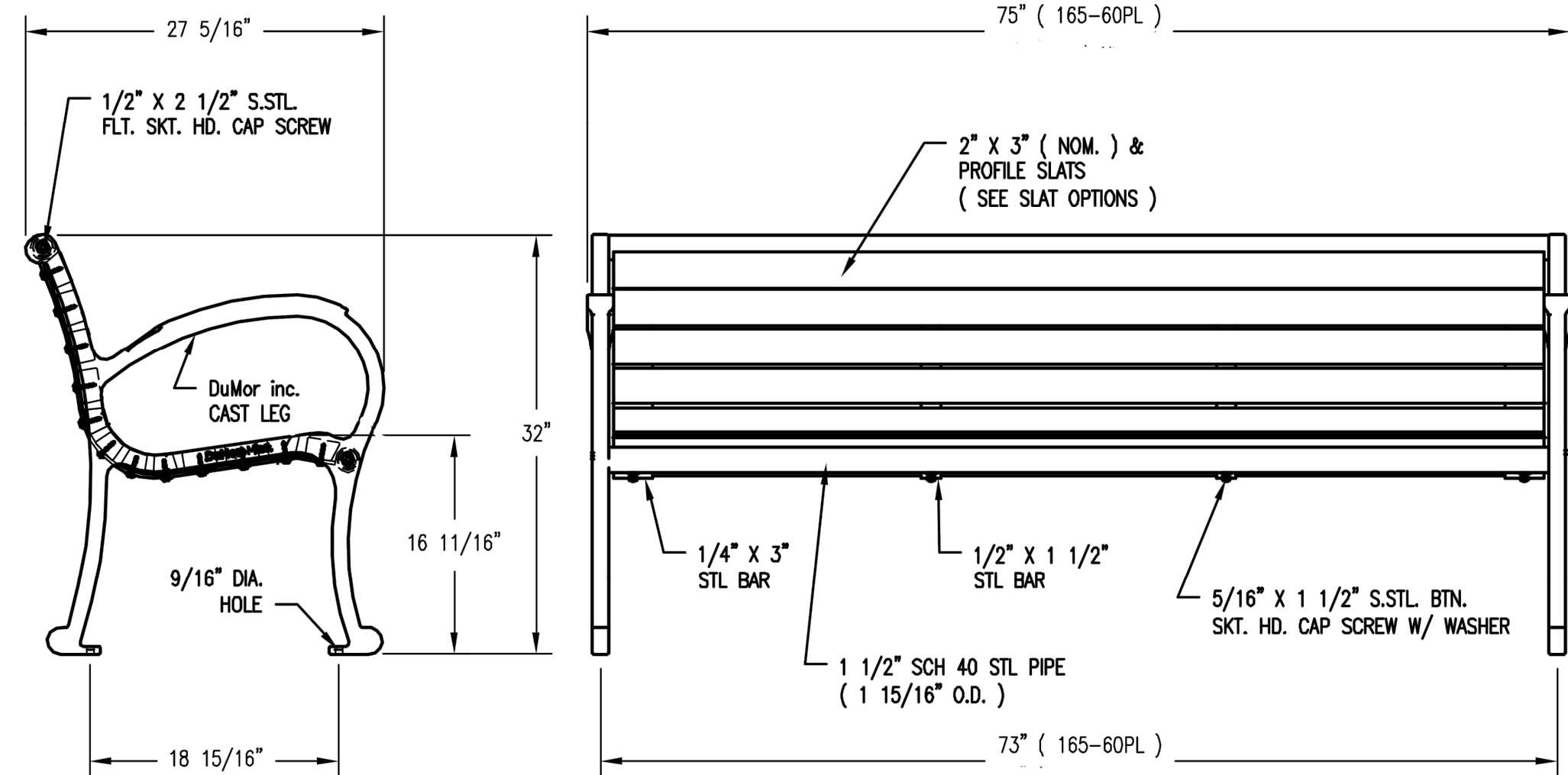




TREE PROTECTION
NOT TO SCALE



TREE PLANTING DETAIL
SCALE: NO SCALE



BENCH
NOT TO SCALE

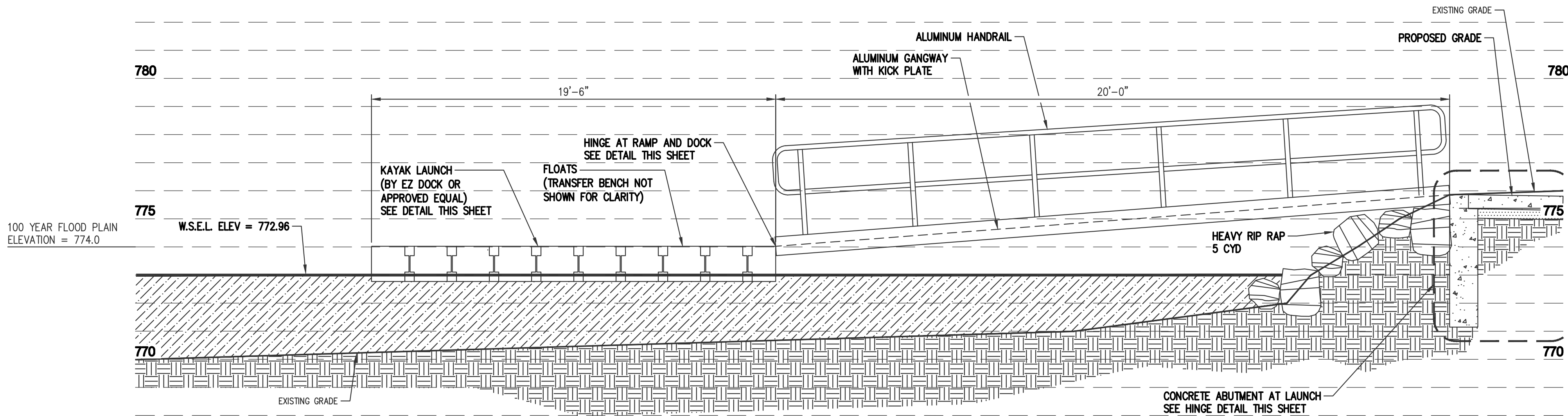
PLAN SUBMITTALS AND CHANGES	
SITE PLAN APPROVAL - **NOT FOR CONSTRUCTION**	
DATE	DESCRIPTION
04/17/20	SITE PLAN SUBMITTAL
05/22/20	SITE PLAN RESUBMITTAL
06/16/20	SITE PLAN RESUBMITTAL

PLAN DATE: APRIL, 2020
PROJECT MGR: DRS
REVIEWER: AW
SCALE: NOT TO SCALE

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F: (810) 341-7573
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PREPARED FOR
**CITY OF ANN ARBOR PARKS & REC
ARGO PARK LIVERY**
SITE DETAILS SHEET

REV:
SHT# 16 OF 20
JOB No: 20C0027



KAYAK LAUNCH SECTION
NOT TO SCALE

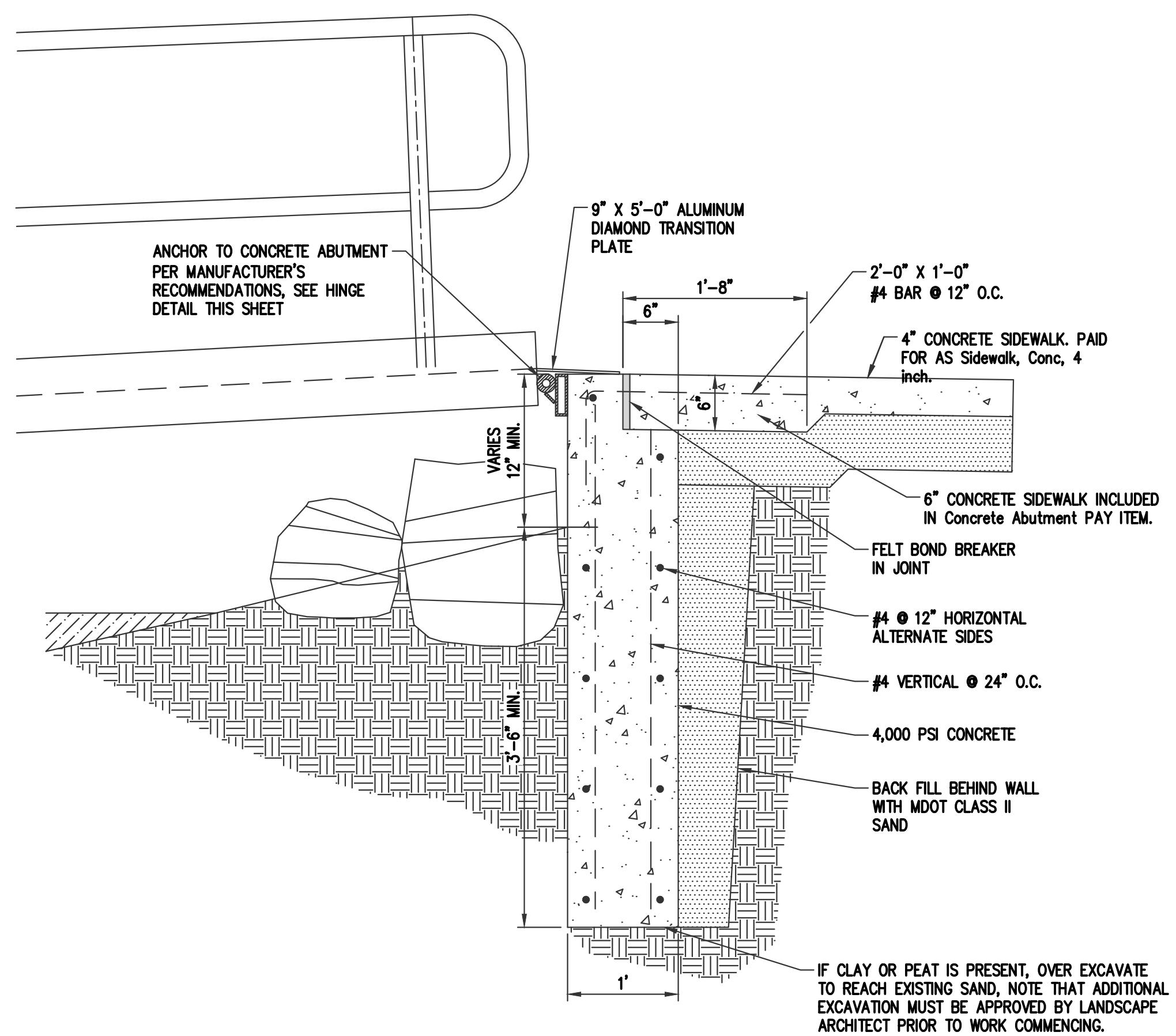
DOCK LIVE LOAD OF 62.5 LBS/SFT

EZ KAYAK LAUNCH, POLY 168"x60" (PRODUCT NUMBER: 200900) TO BE PROVIDED AND INSTALLED BY CITY (NOT IN CONTRACT)

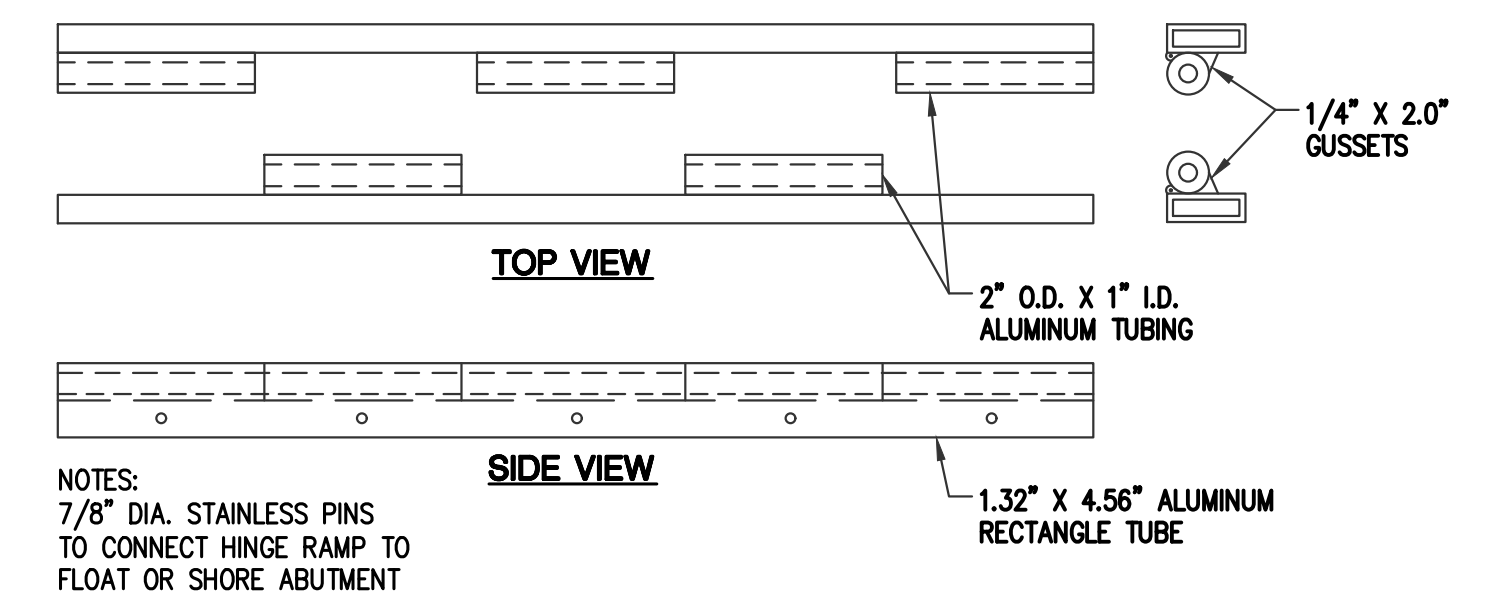
GANGWAY DRAWN WITHOUT HAND RAILINGS TO MORE CLOSELY DEPICT ANCHORING DETAILS
GANGWAY COMES WITH HAND RAILINGS

LOCATION OF THE SUPPLEMENTAL FLOAT POD BRACKET MAY NEED ADJUSTMENT BY THE INSTALLER TO ACHIEVE BALANCED FLOATATION OF THE DOCK SYSTEM

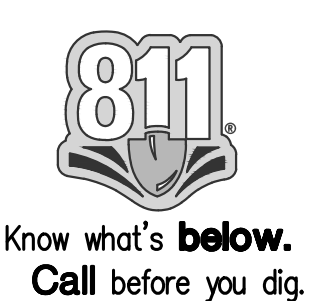
PLAN
EZ LAUNCH
NOT TO SCALE



CONCRETE ABUTMENT AT LAUNCH
NOT TO SCALE



HINGE DETAIL
NOT TO SCALE



PLAN SUBMITTALS AND CHANGES	
SITE PLAN APPROVAL -- **NOT FOR CONSTRUCTION**	
DATE	DESCRIPTION
04/17/20	SITE PLAN SUBMITTAL
05/22/20	SITE PLAN RESUBMITTAL
06/16/20	SITE PLAN RESUBMITTAL

REV:

SHT# 17 OF 20
JOB No: 20C0027

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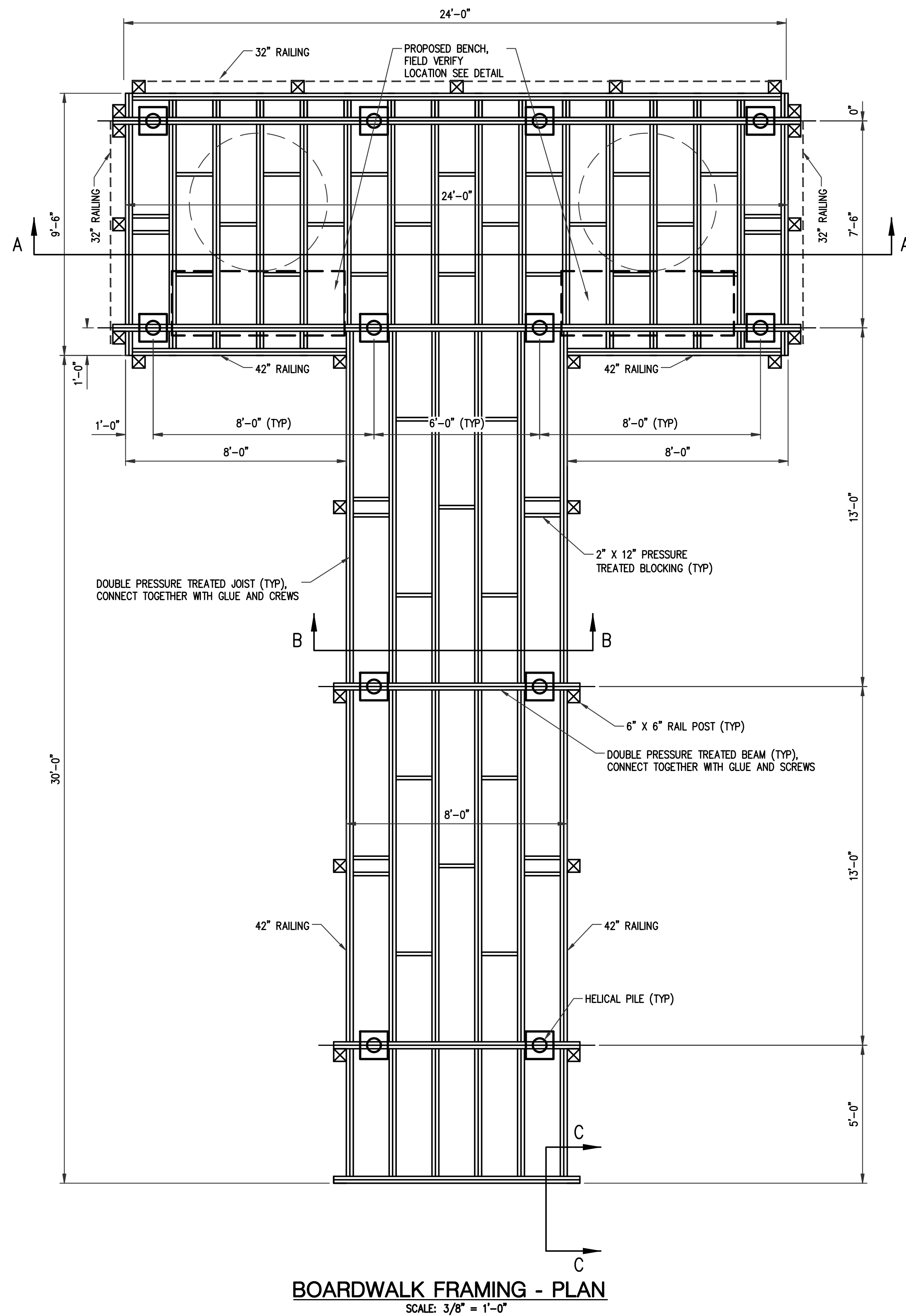


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KAYAK LAUNCH DETAILS SHEET



BOARDWALK NOTES:

THE DESIGN OF THIS STRUCTURE IS BASED ON CURRENT AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, PEDESTRIAN LOADING OF 90 PSF AND A MAINTENANCE VEHICLE H10 LOADING, NOT ACTING CONCURRENTLY.

ALL WORK AND MATERIALS REQUIRED TO INSTALL TIMBER BOARDWALK WILL BE PAID FOR AS Structure, Timber, Boardwalk.

ALL LUMBER MATERIALS SHALL BE PRESSURE TREATED WITH AN APPROVED PROCESS AND PRESERVATION IN ACCORDANCE WITH AMERICAN WOOD PROTECTION ASSOCIATION STANDARDS. SUITABLE FOR GROUND CONTACT.

ALL LUMBER SHALL BE IDENTIFIED BY THE GRADE MARK OF OR CERTIFICATE OF INSPECTING AGENCY.

ALL LUMBER SHALL BE SOUTHERN YELLOW PINE, GRADE OF LUMBER AS INDICATED IN THE SPECIAL PROVISIONS WITH PRESERVATION TREATMENT WITH RETENTION LEVEL OF 0.4 (LB/CU.FT.) OF ACQ-B.

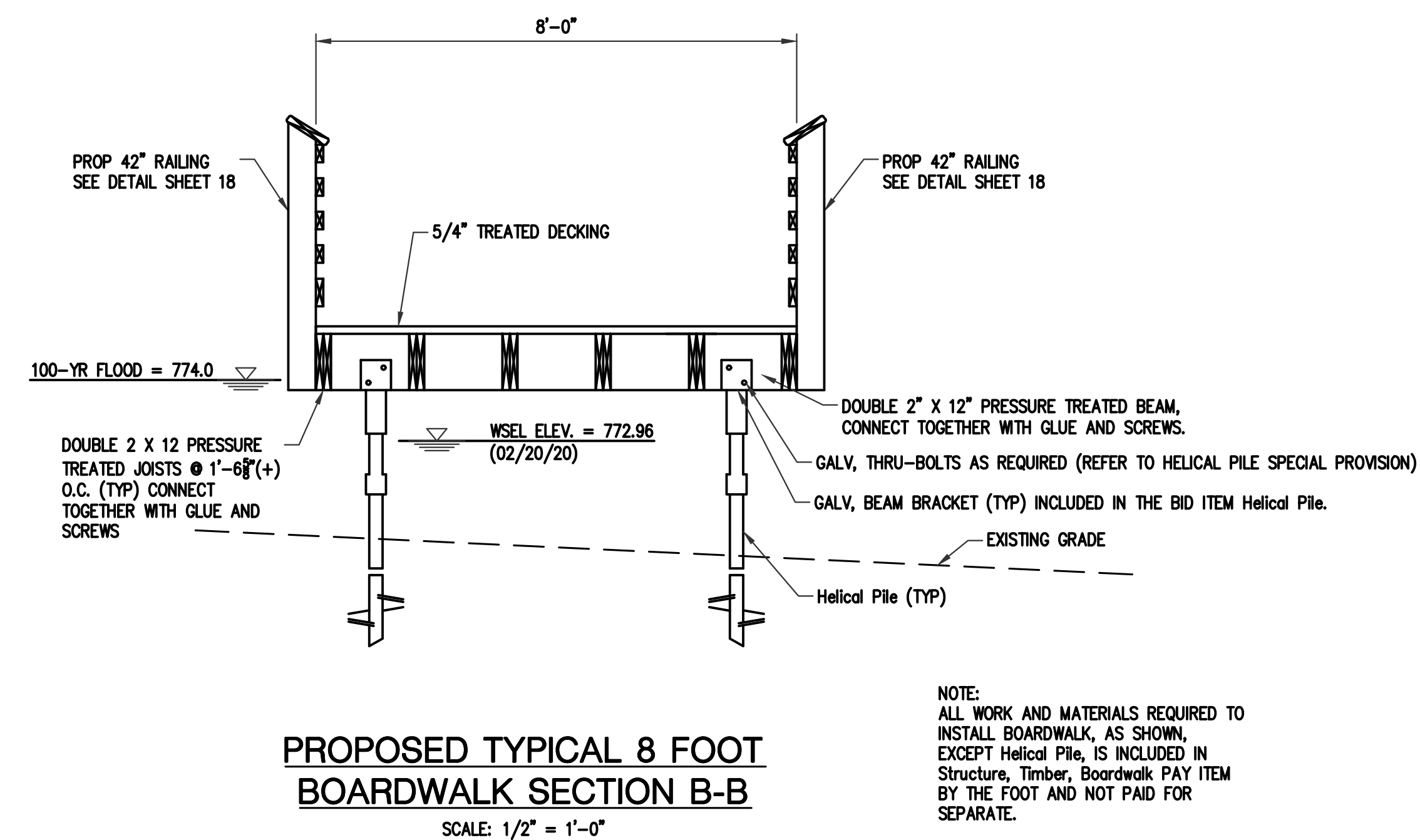
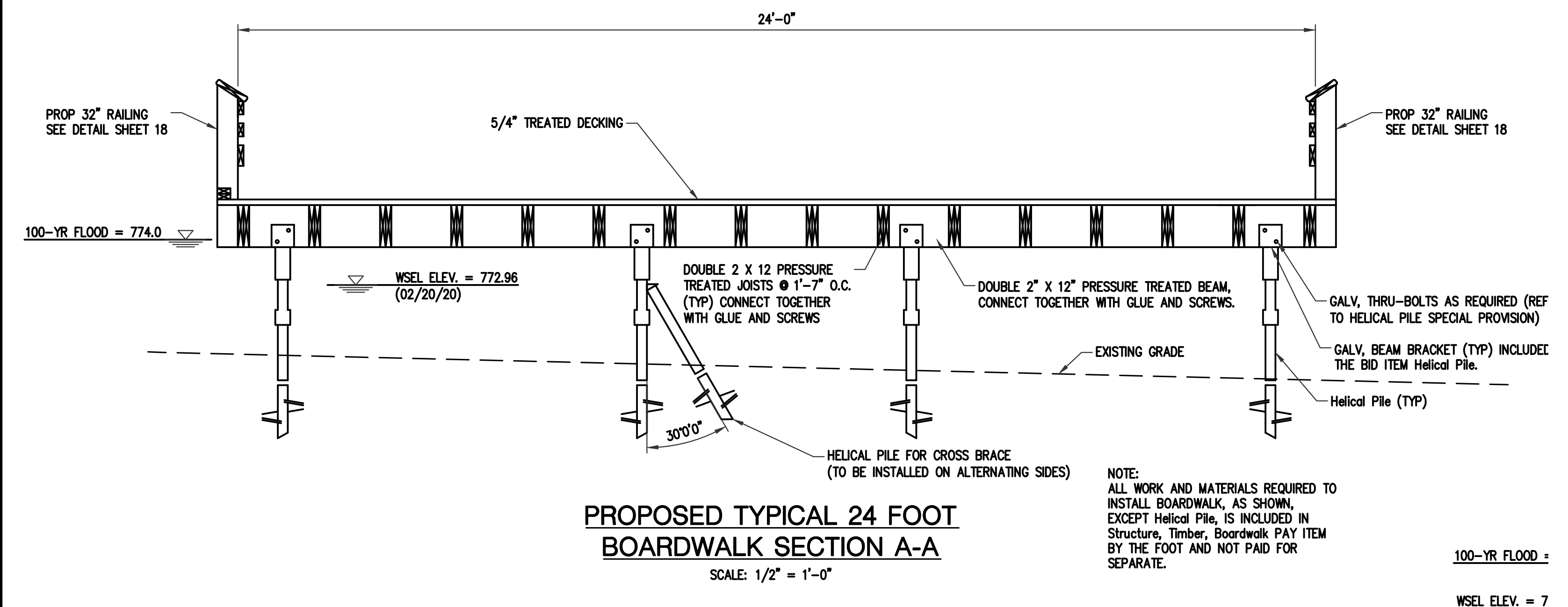
ALL SCREWS, BOLTS, AND NAILS SHALL BE HOT-DIPPED GALVANIZED STEEL.

ALL METAL HARDWARE INCLUDING JOIST HANGERS SHALL BE HOT-DIPPED GALVANIZED STEEL.

ALL NAILS SHALL MEET THE REQUIREMENTS OF ASTM F-1667.
WOOD SCREWS SHALL MEET THE REQUIREMENTS OF ANSI/ASME B18.2.1.
THREADED NAILS SHALL INCLUDE HELICAL (SPIRAL) AND ANNULAR (RING-SHRANK) NAILS.

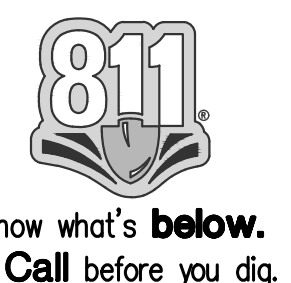
VERTICAL HELICAL PILES SHALL BE INSTALLED TO A MINIMUM ULTIMATE PILE CAPACITY OF 22 KIPS.

DESIGN HELICAL PILE SYSTEM FOR A DESIGN LIFE OF 50 YEARS.



NOTE:
ALL WORK AND MATERIALS REQUIRED TO INSTALL BOARDWALK, AS SHOWN, EXCEPT Helical Pile, IS INCLUDED IN Structure, Timber, Boardwalk PAY ITEM BY THE FOOT AND NOT PAID FOR SEPARATE.

100-YR FLOOD = 774.0
WSEL ELEV. = 7



PLAN SUBMITTALS AND CHANGES	
DATE	DESCRIPTION
04/17/20	SITE PLAN SUBMITTAL
05/22/20	SITE PLAN RESUBMITTAL
06/16/20	SITE PLAN RESUBMITTAL

REV:

SHT# 18 OF 20
JOB No: 20C0027

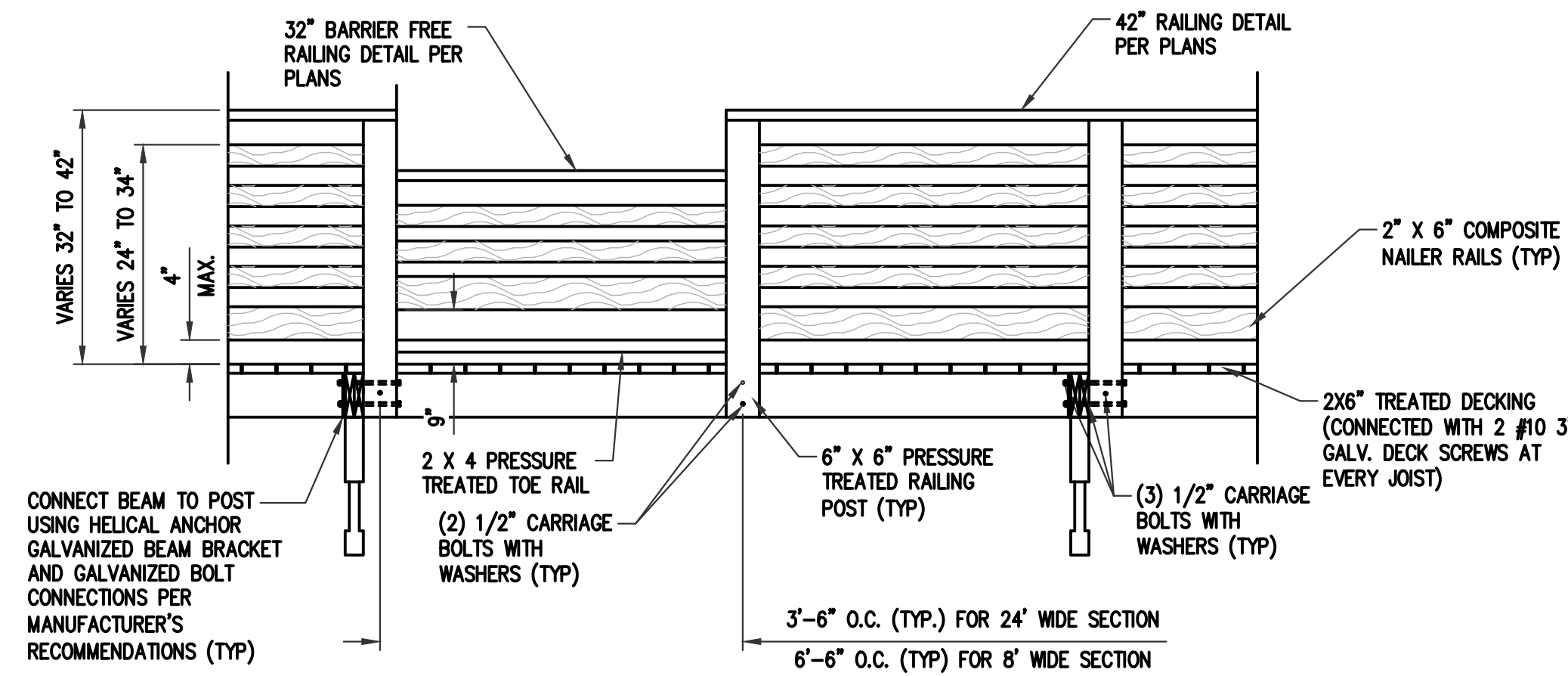
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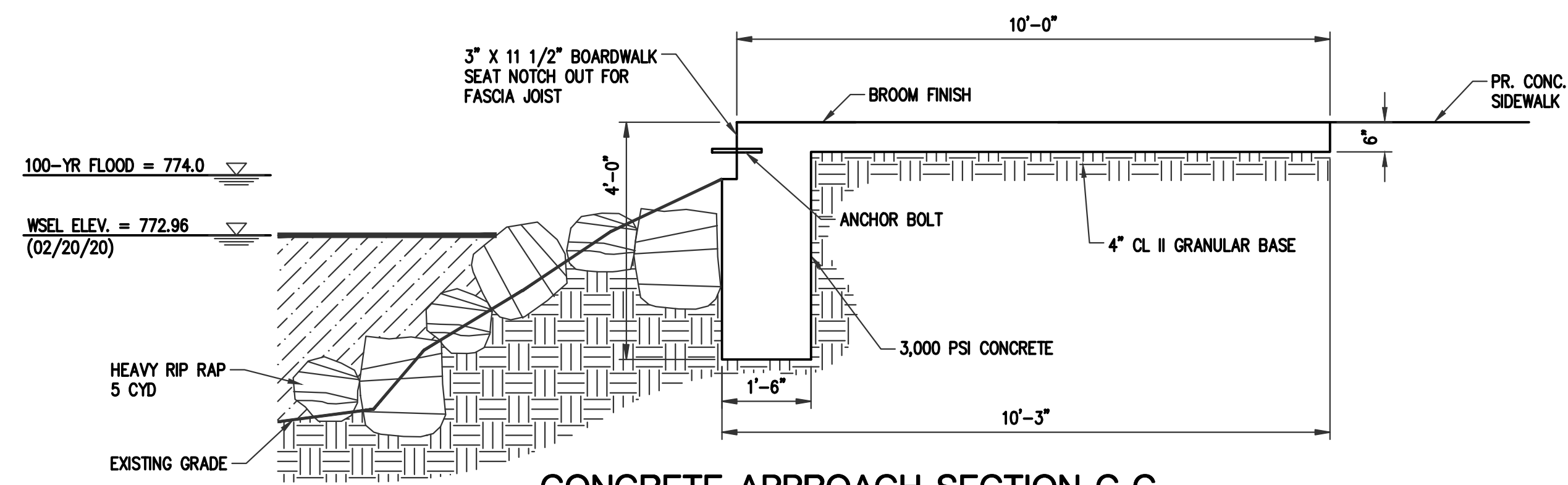
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PREPARED FOR
**CITY OF ANN ARBOR PARKS & REC
ARGO PARK LIVERY**

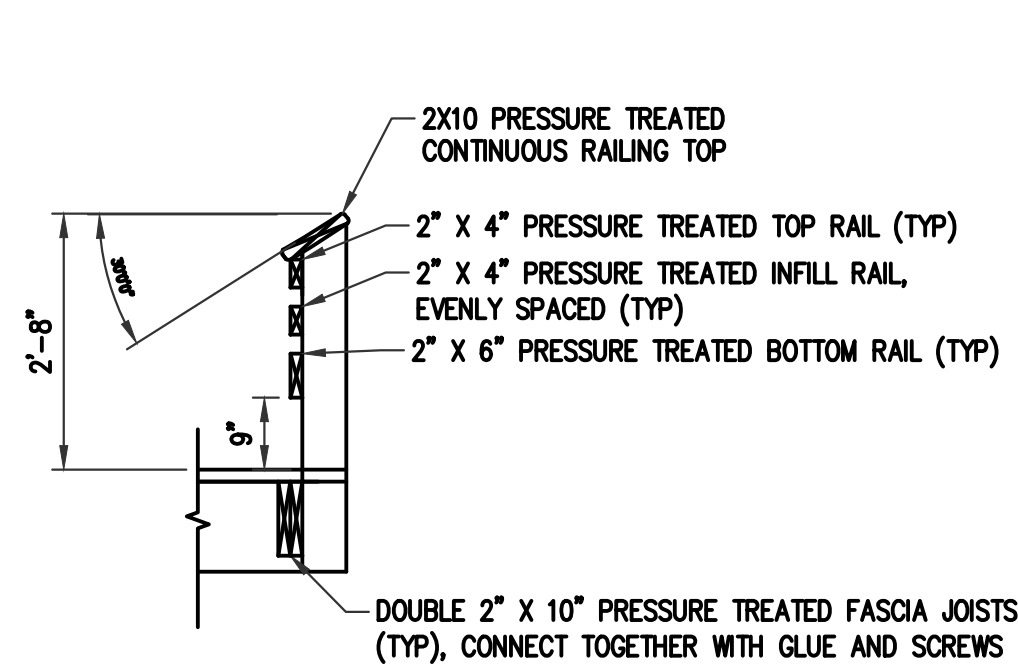
BOARDWALK DETAILS SHEET



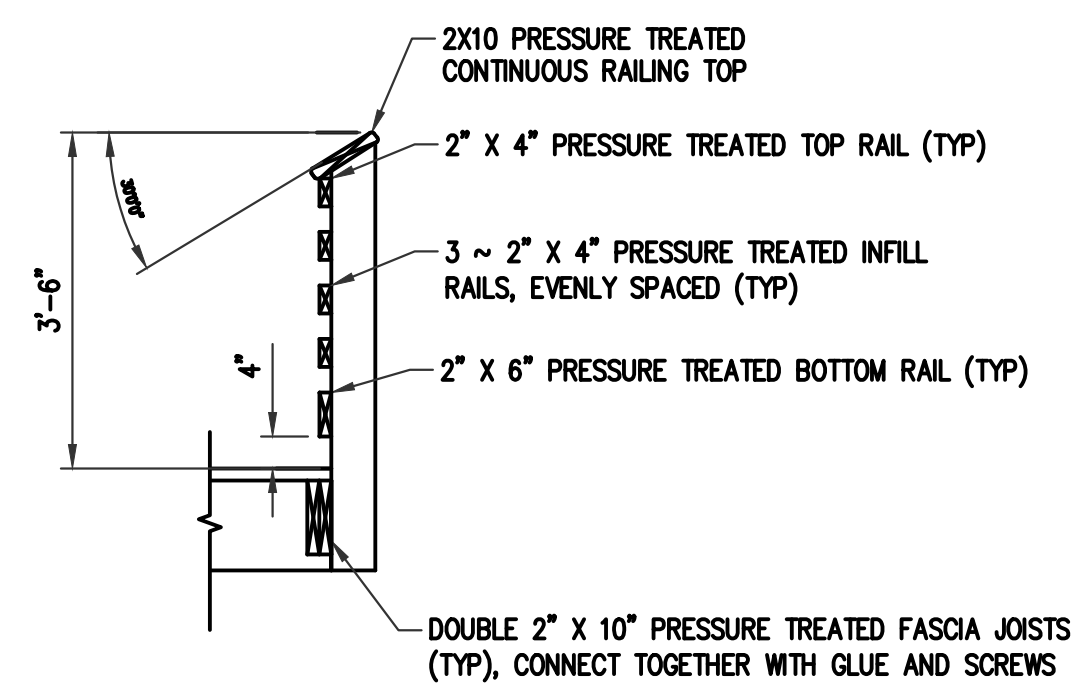
BOARDWALK RAILING ELEVATION
SCALE: 1/2" = 1'-0"



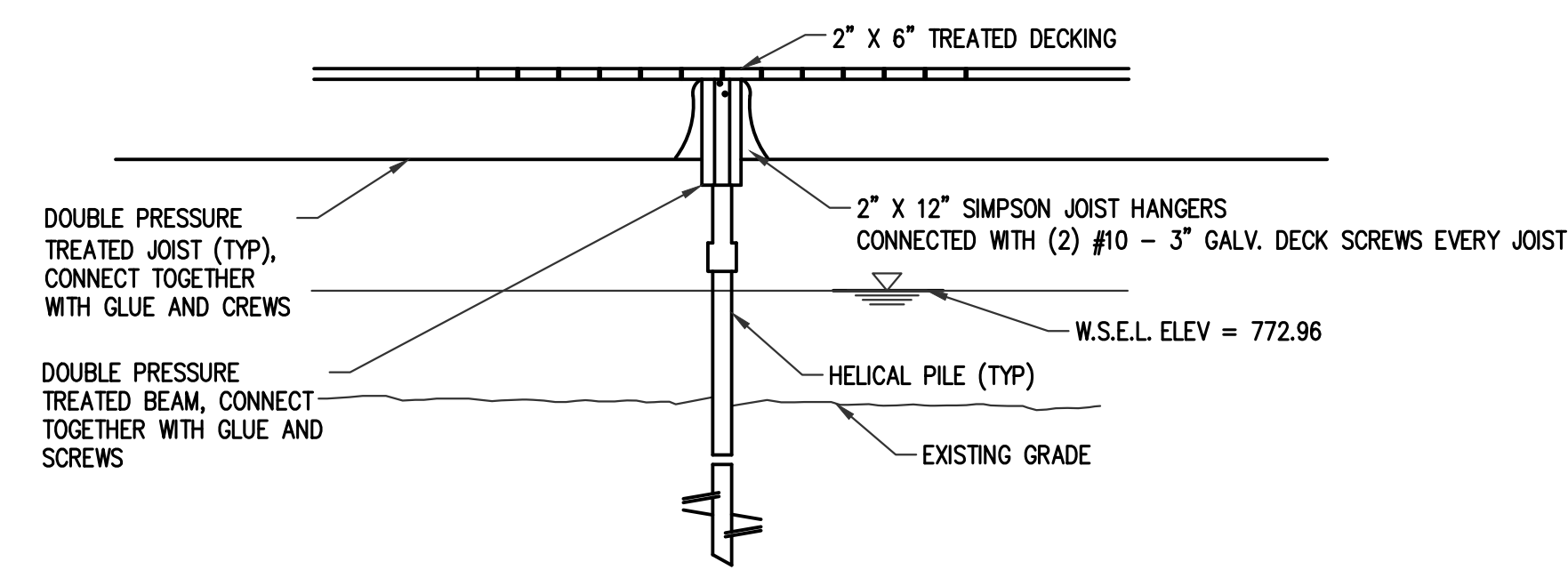
CONCRETE APPROACH SECTION C-C
SCALE: 1/2" = 1'-0"



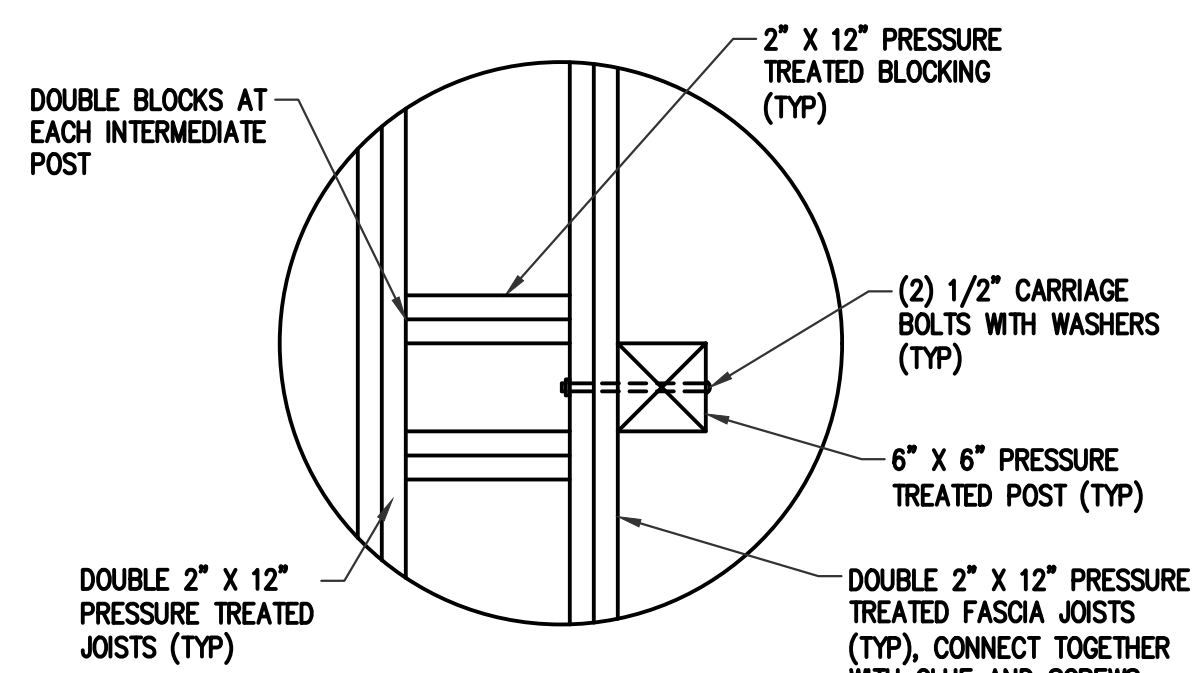
PROPOSED TYPICAL 32" RAILING DETAIL
SCALE: 1/2" = 1'-0"



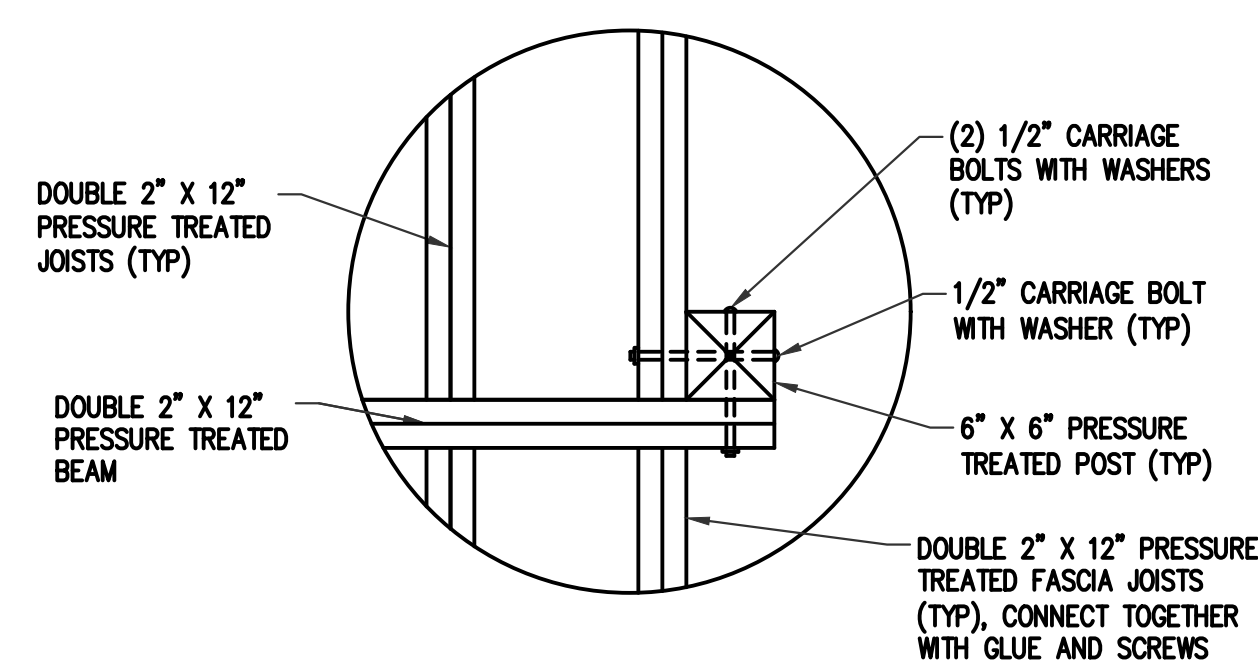
PROPOSED TYPICAL 42" RAILING DETAIL
SCALE: 1/2" = 1'-0"



BOARDWALK FRAMING CONNECTION
NOT TO SCALE



RAIL POST CONNECTION DETAIL
SCALE: 1" = 1'-0"



RAIL POST CONNECTION DETAIL - AT BEAM
SCALE: 1" = 1'-0"



Know what's **below.**
Call before you dig.

PLAN SUBMITTALS AND CHANGES	
SITE PLAN APPROVAL - **NOT FOR CONSTRUCTION**	
DATE	DESCRIPTION
04/17/20	SITE PLAN SUBMITTAL
05/22/20	SITE PLAN RESUBMITTAL
06/16/20	SITE PLAN RESUBMITTAL

REV:

SHT# 19 OF 20
JOB No: 20C0027

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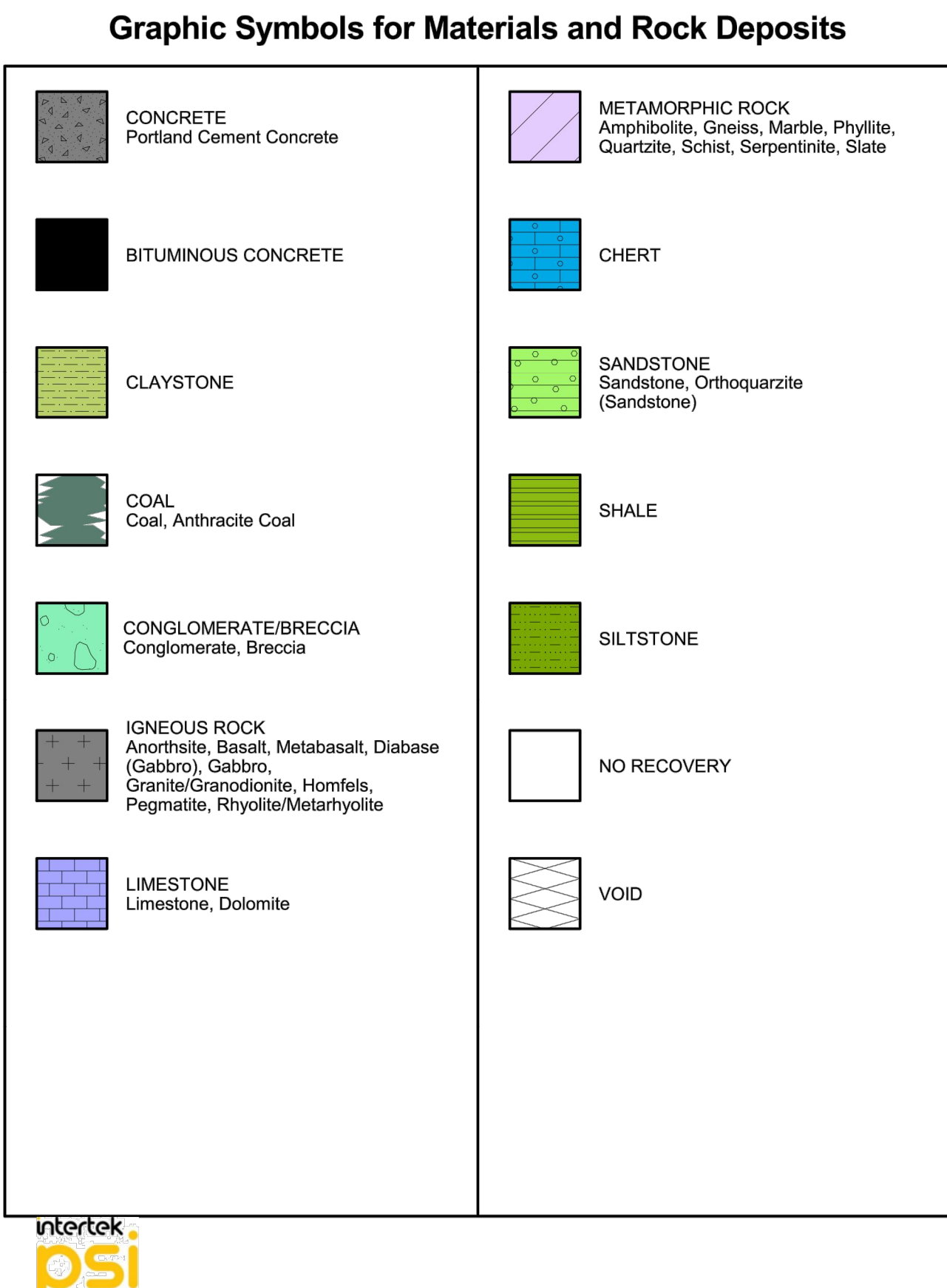
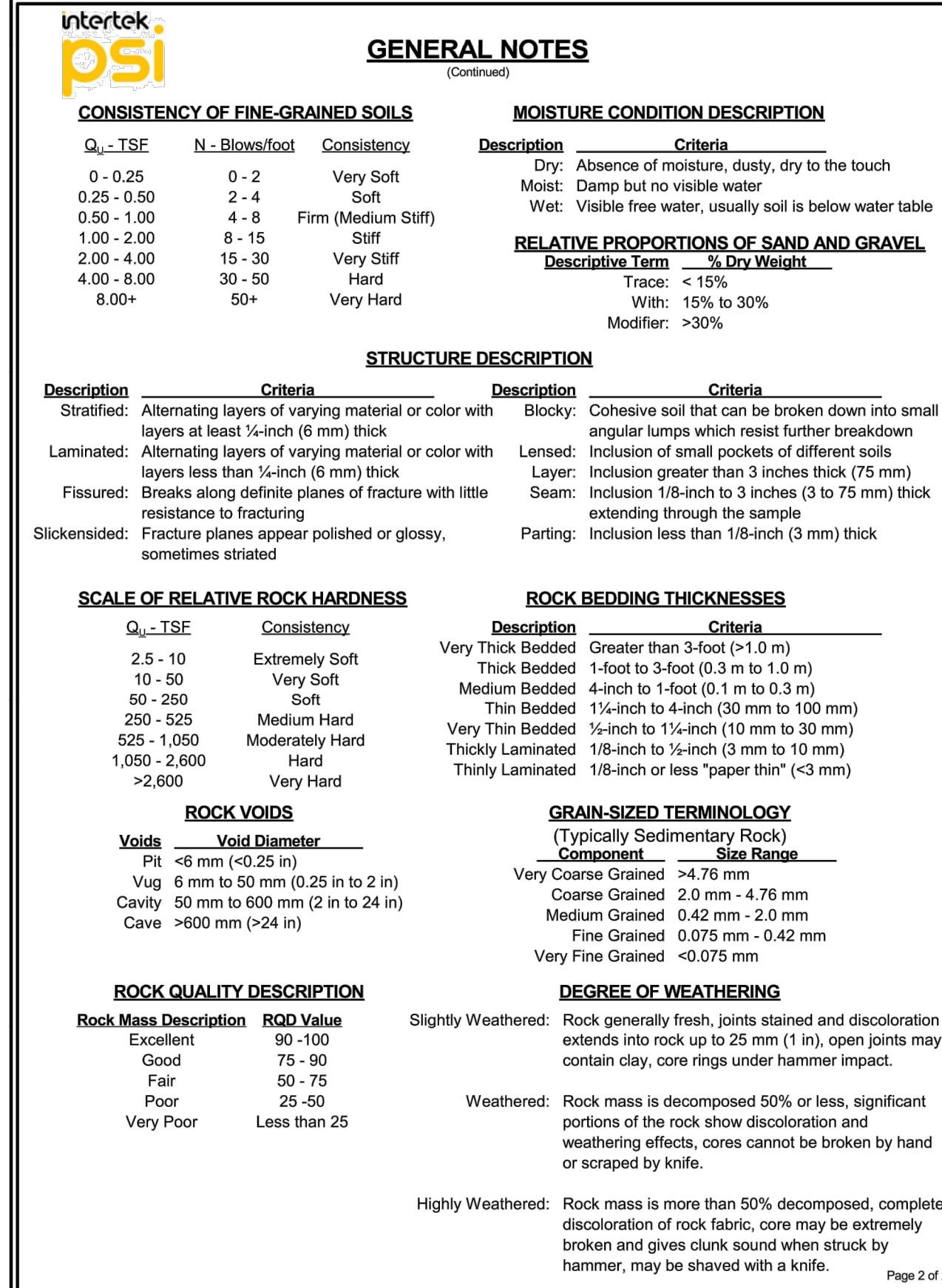
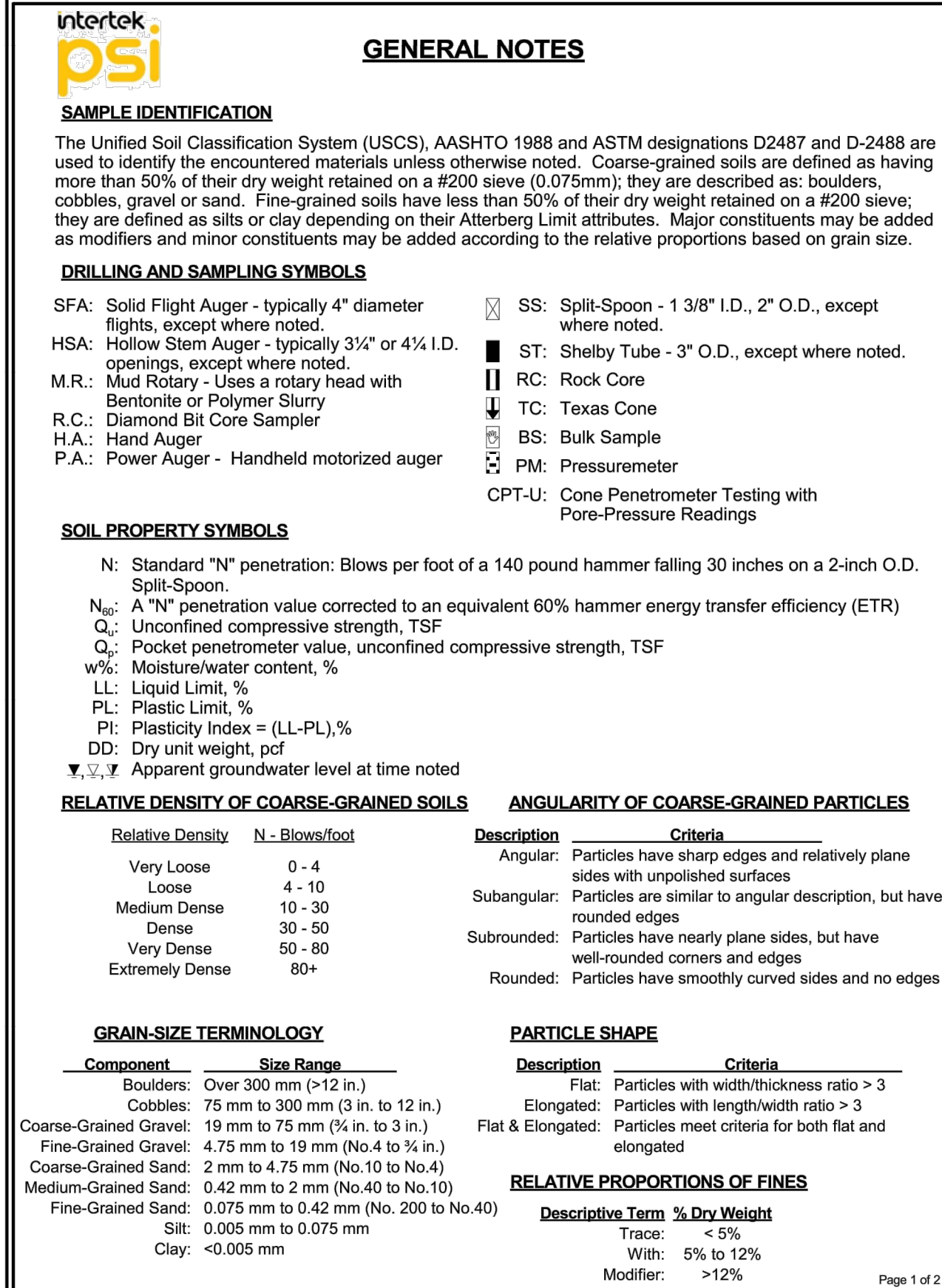
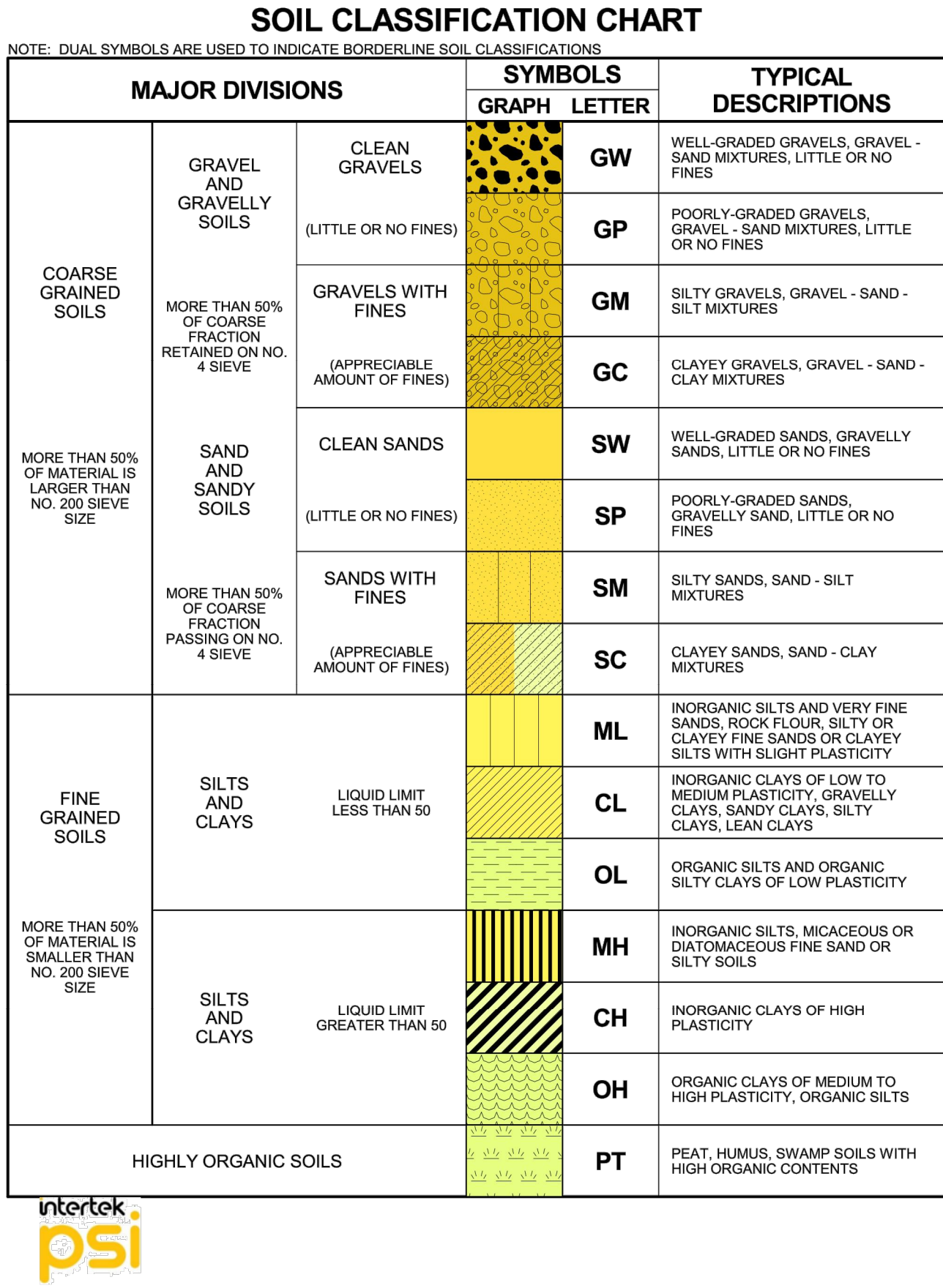
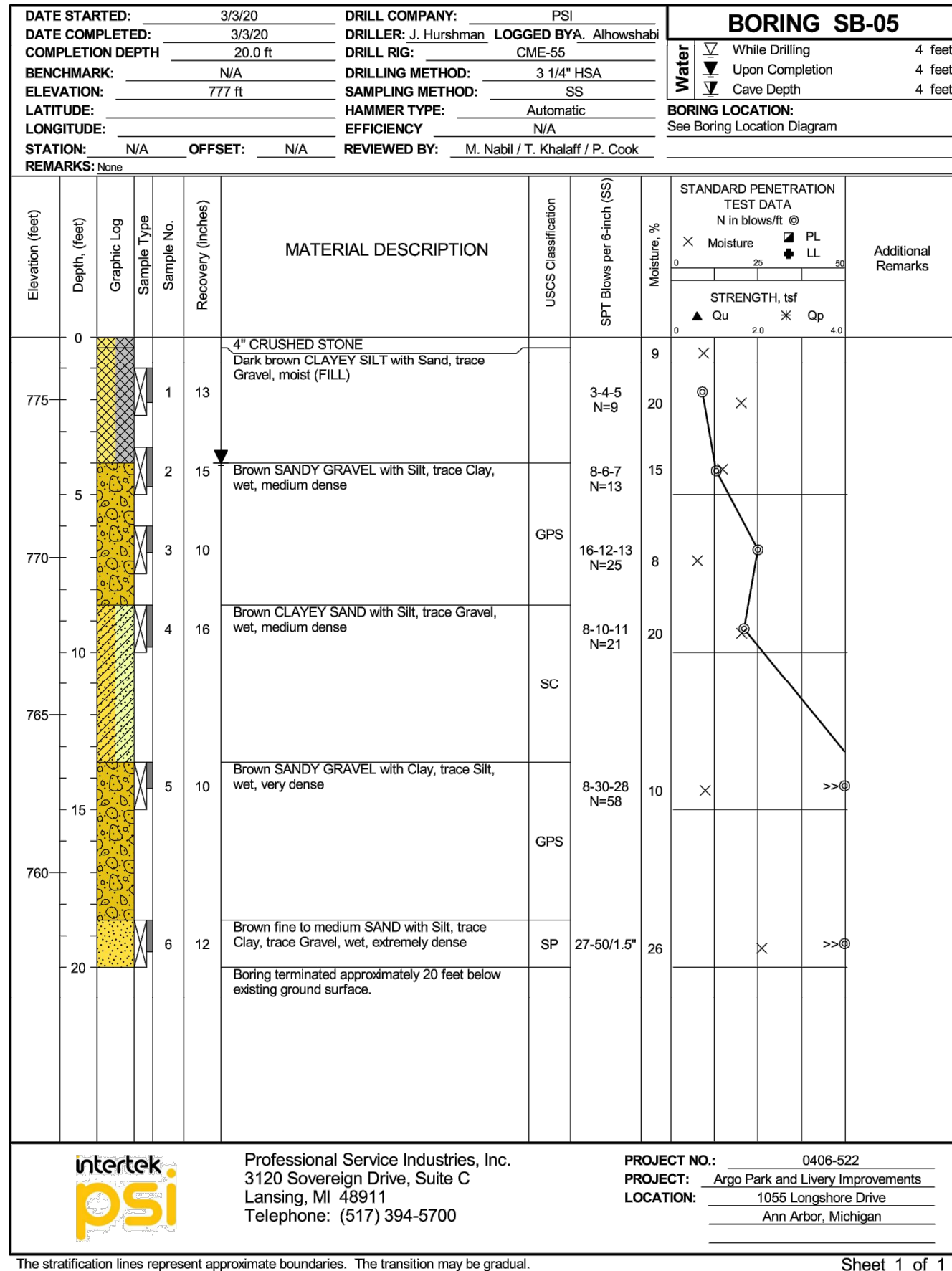
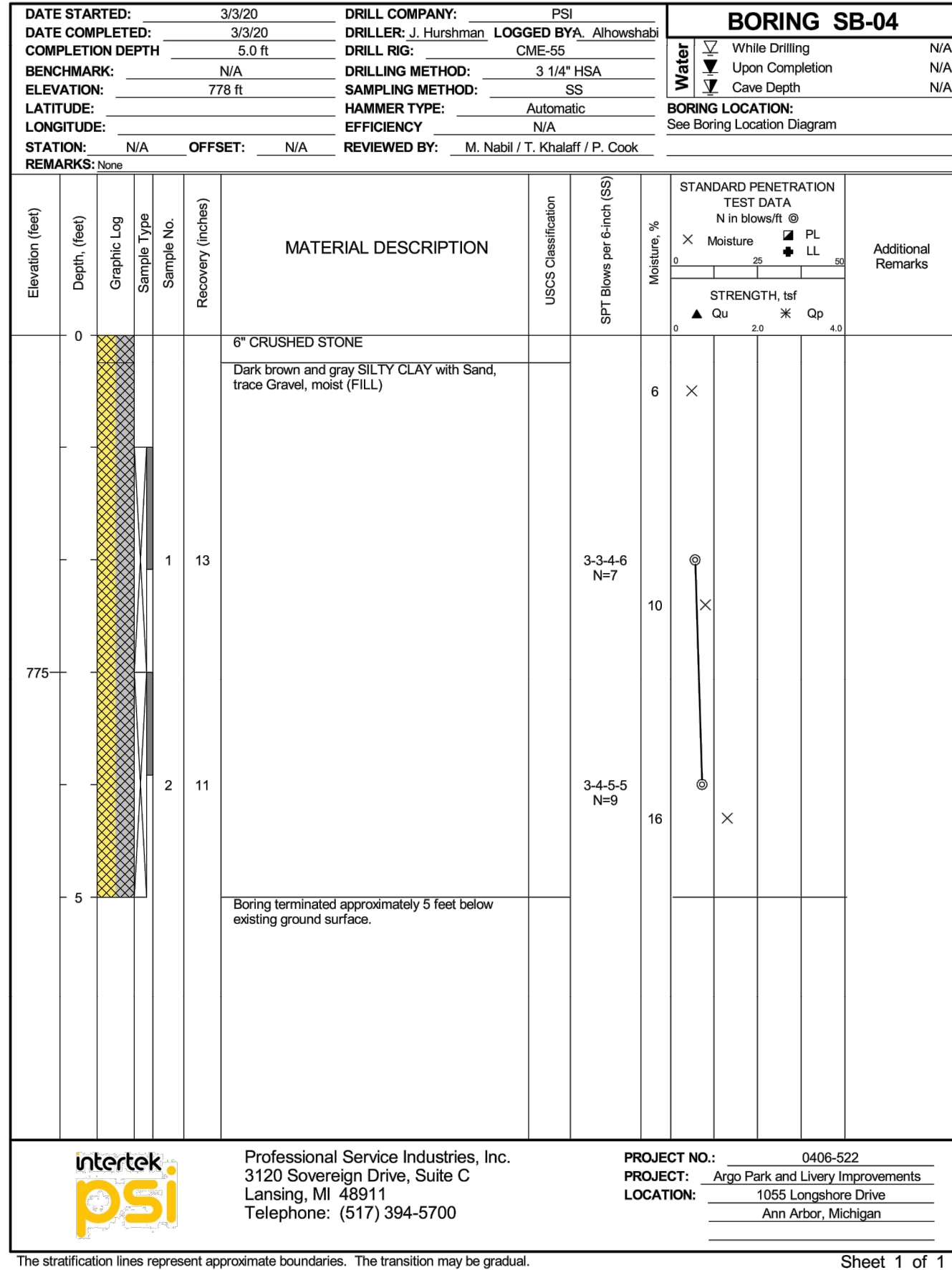


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ARGO PARK LIVERY

BOARDWALK DETAILS SHEET

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PLOTED: 6/15/2020 4:39 PM



PLAN SUBMITTALS AND CHANGES

DATE	DESCRIPTION
04/17/20	SITE PLAN SUBMITTAL
05/22/20	SITE PLAN RESUBMITTAL

REV: _____

SHT# 21 of 20

JOB No: 20C0027

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PLAN DATE: APRIL, 2020

PROJECT MGR: DRS

REVIEWER: AW

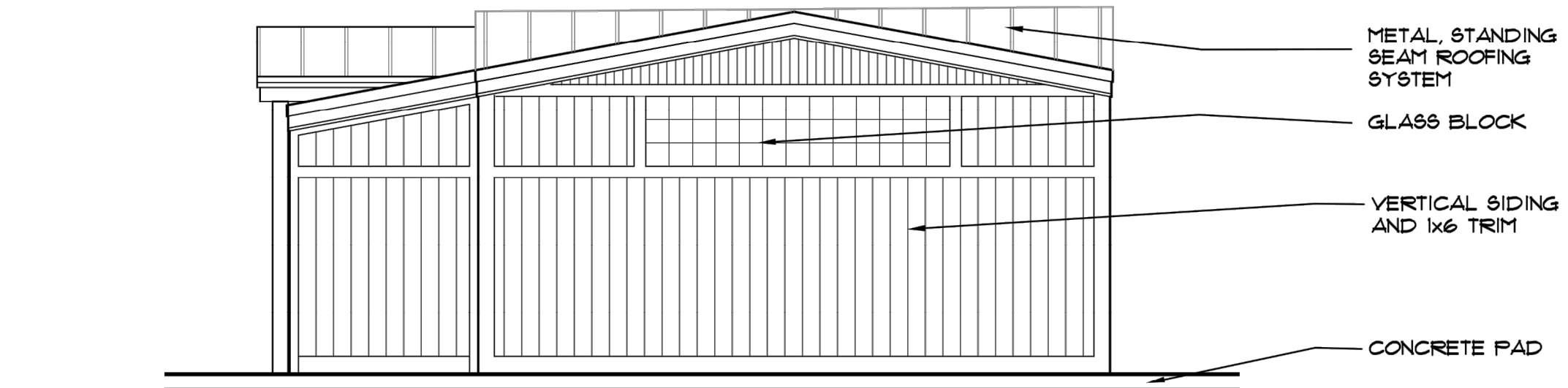
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ARGO PARK LIVERY

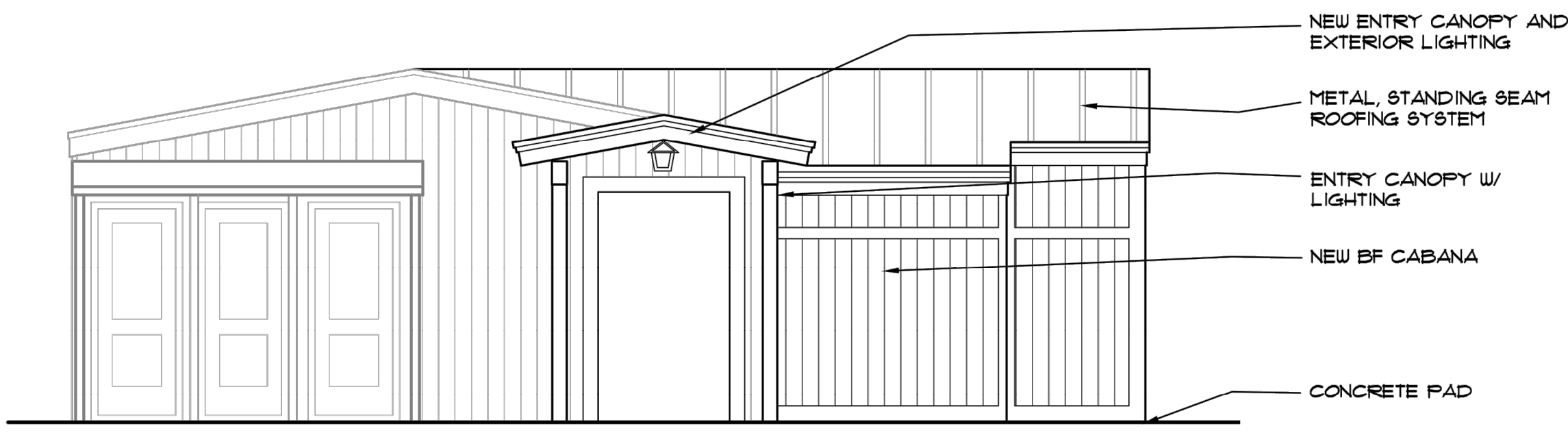
SOIL BORINGS SHEET

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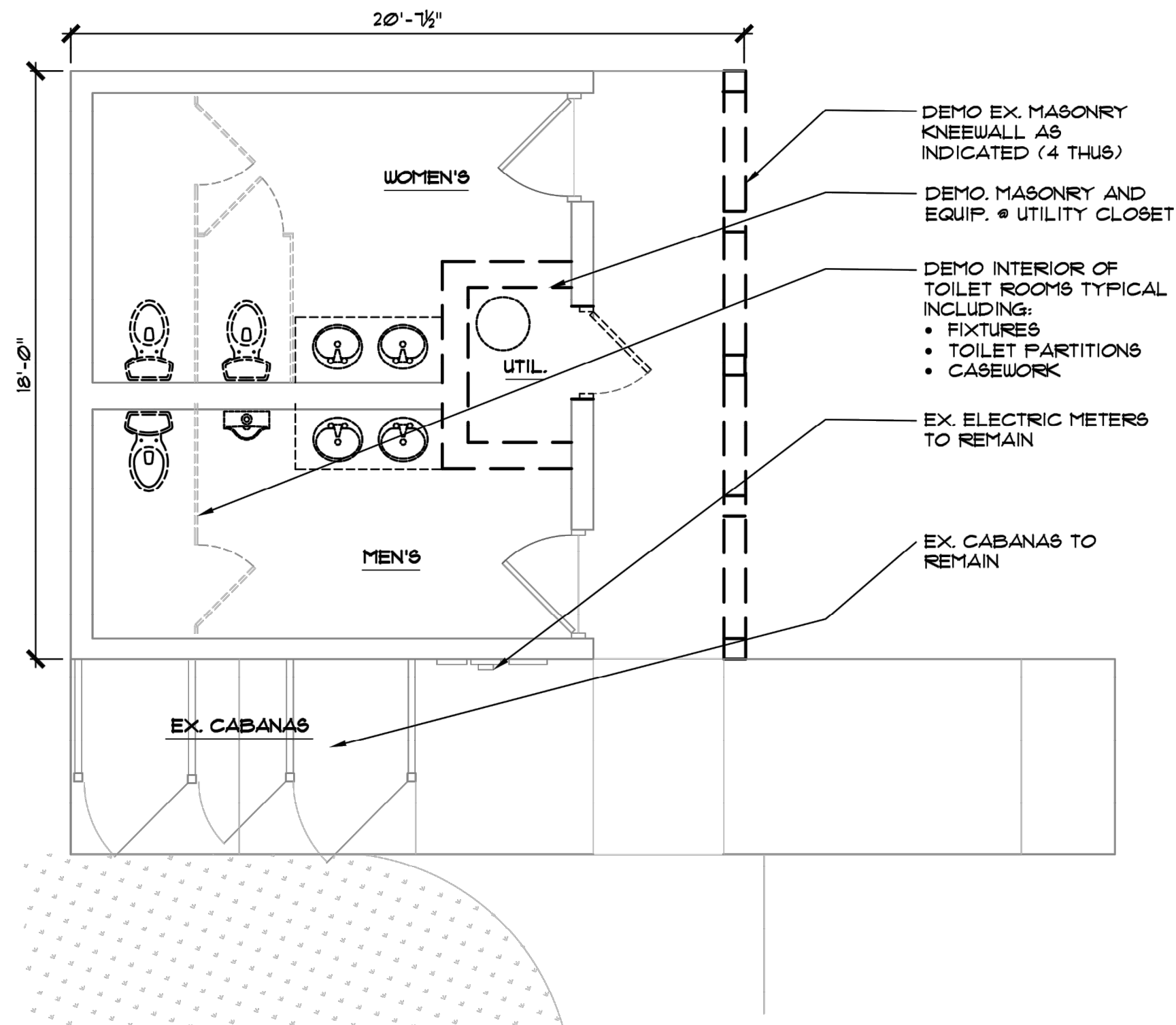




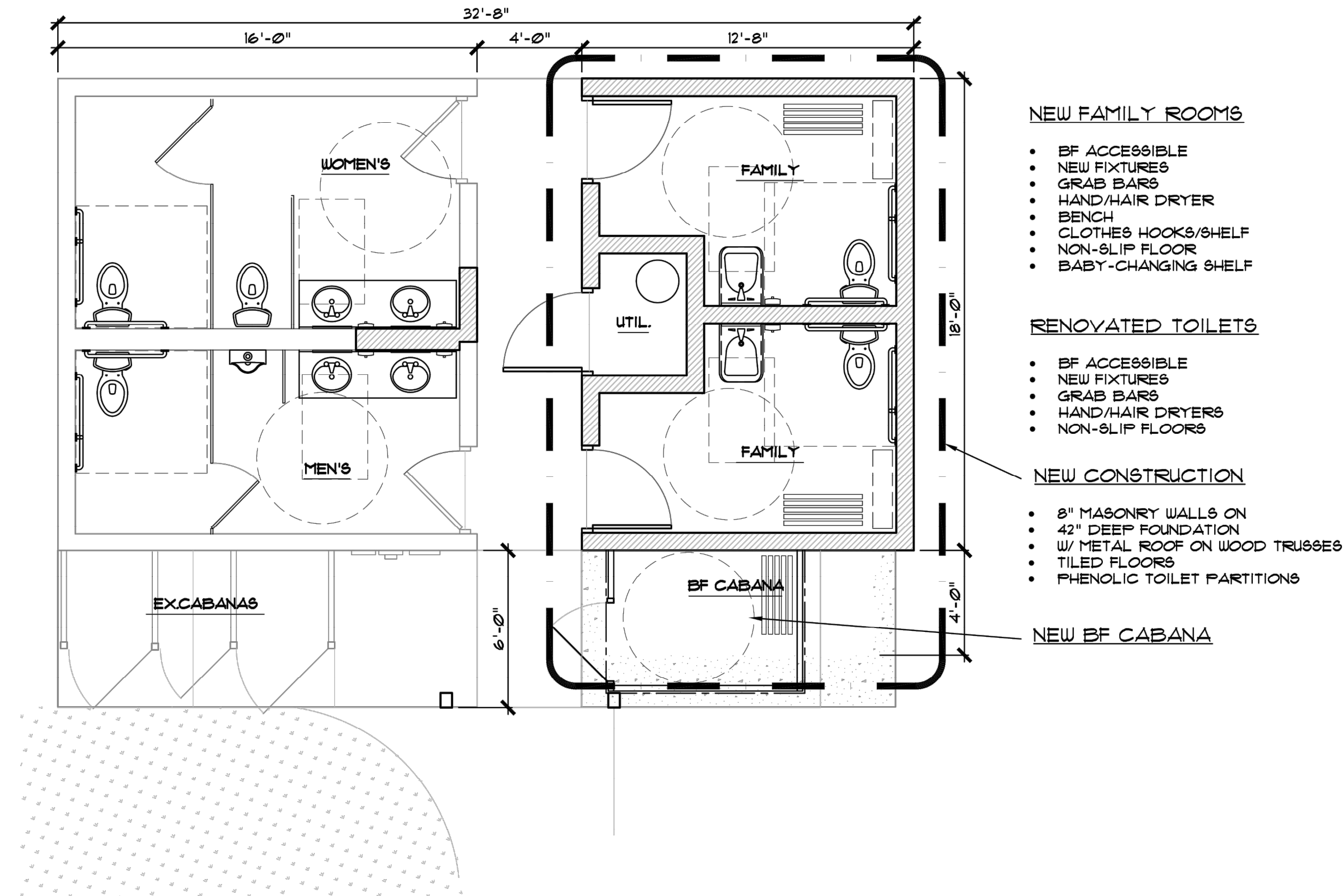
4 West Elevation
SCALE: 1/4"=1'-0"



3 South Elevation
SCALE: 1/4"=1'-0"



2 Demolition Floor Plan
SCALE: 1/4"=1'-0"



1 Proposed Floor Plan
SCALE: 1/4"=1'-0"

RESOLUTION REQUIRING THAT
MAJOR CITY IMPROVEMENTS BE REVIEWED
BY CITY DEPARTMENTS AND THE CITY PLANNING COMMISSION

- Whereas, Many public improvements undertaken by the City and other governmental units strive to meet private development standards; even though they are not required to meet some of the standards that are required of private developments;
- Whereas, It is desirable to have public improvements adhere as close as practical to the same development standards that are required of private developers;
- Whereas, The City and other governmental units can set a positive example for the private development community when it constructs new or expanded public facilities;
- Whereas, It is recognized that adopted standards do not exist for some projects, such as road re-construction, which makes it impossible to compare public and private projects;

RESOLVED, By City Council that the City Administrator is directed to obtain comments and suggestions from the appropriate City departments with regard to City projects meeting private development regulations prior to recommending that the City Council approve funding for them, and that if the following City improvements cost more than \$250,000 they are to be reviewed by the City Planning Commission prior to Council approval:

- 1) new or reconstructed streets which change the streets geometric configuration or operations;
- 2) new or expanded public buildings which would normally require site plan review; and,
- 3) new or expended parking lots or structures which would normally require site plan review.

RESOLVED, That in making a recommendation to the City Council the City Administrator shall indicate which private development regulations are not being met and indicate projects which do not have existing comparable private standards;

RESOLVED, That a copy of this resolution be sent to other governmental units that own property in the City with the request that they also obtain City review and comments regarding their proposed major improvements; and,

RESOLVED, That as a policy, City Council may proceed to construct public projects which do not meet all existing private development regulations when budget limitations prevent meeting such requirements.

DB:RAO:dcs-

APPROVED
BY COUNCIL

MAR 20 1989

W. NORTHCROSS
CITY CLERK

290

G-9



City of Ann Arbor

Formal Minutes

301 E. Huron St.
Ann Arbor, MI 48104

Public Meeting to Discuss Universal Access and Site Improvements to the Argo Livery

Thursday, February 21st, 2019

7:00 PM

Northside Elementary School,
912 Barton Drive, Multi-Purpose Room

MEETING PARTICIPANTS:

1. Hillary Hanzel, Landscape Architect/Park Planner, City of Ann Arbor
2. Josh Landefeld, Deputy Manager of Park and Recreation Services, City of Ann Arbor
3. Cheryl Saam, Livery Manager, City of Ann Arbor
4. Andrea Kline, Construction Manager, Huron River Watershed Council
5. Rachel Skylis
6. Clark Charnetski
7. Robin Schultz-Purves
8. William Purves
9. Mike Appel
10. Michael Heinrich

MEETING AGENDA:


1. Purpose of Meeting
2. Existing Conditions + Context
3. Project Goals
4. Preliminary Concept Plan
5. Questions + Feedback

PUBLIC COMMENTS:

- Is there consideration of a universal access exit at the end of the Cascades?
 - People like to go to through Cascades over and over again
- Will the future bathroom renovation be a part of this application or a future application?
- Only one bench currently, suggestion to have multiple benches for people sit at?
- Entrance to the Cascades by people with own tubes, improving areas for people to enter the water easier
- Lots of people attend the Cascades, use the B@B
- Who is the grant through and how much for?
- Are the city funds from livery operations?
 - Argo used to be a neighborhood park and is now a city-wide park.
 - Net from liveries should be used to reinvest into park
- How much is the project estimated at this point?

- Difficult to get into temporary restroom – moving forward with a temporary accessible restroom is not acceptable
 - “To not be good enough for an actual bathroom” is very degrading
- Considerations for grant
 - Restroom a priority when looking at grant applications
 - There are usually multiple iterations of the grants
- How large are the parking spots?
 - Make sure that there is at least 5 additional feet for van spaces
 - Ramps need at least 5 feet
- Add additional van accessible spot
 - How many spots would be lost if additional van spot was added
- How are the sewage handled at the site?
 - Has the city worked with DNR about what may be the best direction?
 - Who is the city’s architect?
- Kayaks with pontoons are becoming more common
- Can the city look at adding kayaks with pontoons?
- Can the city look into renting accessible kayaks?
- UMAISE looking for storage for their boats for rehab, potential for partnership may exist
- How much work would need to happen to get more groups to visit?
- How is the DTE property going to potential impact the current site?
- Wall St. Parking
- Craig Nielson Foundation – possible option for funding – focuses on spinal cord injuries
- Lowertown project may create a greater demand on the space as it will be a “neighborhood” park
- What are the next steps for the project / grant applications?

I, Hillary Hanzel, Landscape Architect of the City of Ann Arbor, Michigan, certify that this is a true copy of the public comments that occurred at the public meeting to discuss improvements to the Argo Livery that occurred on 02/26/2019.

Attest: 
Hillary Hanzel


Date Certified