

The map displays the Chester area in Merseyside, England. Key features include the River Mersey, the city of Chester, and surrounding areas like Wirral and South Wirral. A black square marks the 'PROJECT SITE' near the city center. A red line indicates a proposed route or boundary. A north arrow is in the top right corner.

NOTE TO SCALE

I/WE MAKE THIS STATEMENT BEING DULY SWORN ACCORDING TO LAW, I/WE STATE THAT FOR THE LAND INVOLVING THE ACCOMPANYING PLANS, WE ARE THE MAJORITY OWNERS OF THIS PROPERTY OR THE AUTHORIZED OFFICERS OF THE CORPORATION THAT OWNS THIS PROPERTY, AND ARE IN PEACEFUL POSSESSION OF IT, AND THAT THERE ARE NO SUITS PENDING AFFECTING THE TITLE OF SAME, AND THAT I/WE ACKNOWLEDGE AND ENDORSE THE ACCOMPANYING PLANS AND THAT WE WILL PROPOSE A RECORD PLAN FOR RECORDING (AS APPLICABLE), AFTER RECEIVING ALL REQUIRED CITY APPROVALS.

PRINTED NAME \_\_\_\_\_ PRINTED NAME \_\_\_\_\_  
SWORN AND SUBSCRIBED BEFORE THIS \_\_\_\_\_ OF \_\_\_\_\_, 20 \_\_\_\_\_

MY COMMISSION EXPIRES:

COUNTY PLANNING COMMISSION STAFF PERSON \_\_\_\_\_ DATE \_\_\_\_\_

DATE \_\_\_\_\_

DATE \_\_\_\_\_

DATE \_\_\_\_\_

[illegible]

I. THIS PLAN REFERENCES A:  
A.) A SURVEY BY: COLLIER ENGINEERING & DESIGN, INC.  
2000 MIDLANDT DRIVE, SUITE 100  
MOUNT LAUREL, NJ 08054

ENTITLED: BOUNDARY AND TOPOGRAPHIC SURVEY  
FOR CITY OF CHESTER  
PARCEL ID 49-07-00042-00  
CITY OF CHESTER  
COUNTY OF DELAWARE  
COMMONWEALTH OF PENNSYLVANIA

DATED: 08/21/2024

2. OWNER: CHESTER FIRST PARTNERSHIP LLC  
1 FOURTH STREET  
CHESTER, PA 19013

CITY OF CHESTER  
THOMAS MOORE  
1 FOURTH STREET  
CHESTER, PA 19013

3. SITE ADDRESS: 2ND STREET & PENNELL STREET  
CITY OF CHESTER, PENNSYLVANIA 19103

I. SITE/ZONING DATA

ZONING DISTRICT: LIC, LIGHT INDUSTRIAL/COMMERCIAL DISTRICT

DESCRIPTION	REQUIRED	EXISTING	PROPOSED
<b><u>DISTRICT LOT AND DIMENSIONS</u></b>			
MIN LOT AREA (SF)	12,000 SF	84,280 SF	84,280 SF
MIN LOT WIDTH (FT)	60'	280'	280'
MAX. BUILDING COVERAGE (% OF LOT)	70%	N/A	16.42% (13,839 SF)
MAX. IMPERVIOUS COVERAGE (% OF LOT)	90%	92.2 % (77,699 SF)	67.03% (56,495 SF)
<b><u>SETBACKS (GARAGE/OFFICE)</u></b>			
MIN. FRONT YARD SETBACK (FT) (WEST 2ND STREET)	10'	N/A	52.98'
MIN. FRONT YARD SETBACK (FT) (LOYD STREET)	10'	N/A	22.36'
MIN. FRONT YARD SETBACK (FT) (FRONT STREET)	10'	N/A	196.02'
MIN. FRONT YARD SETBACK (FT) (PENNNELL STREET)	10'	N/A	50.33'
MIN. SIDE YARD WIDTH, EACH (FT)	15'	N/A	N/A
MIN. REAR YARD DEPTH (FT)	15'	N/A	N/A
<b><u>HEIGHT (GARAGE/OFFICE)</u></b>			
MAX. HEIGHT (FT)	65' OR 5 STORIES	N/A	24.79'
<b><u>SETBACKS (SALT SHED)</u></b>			
MIN. FRONT YARD SETBACK (FT) (WEST 2ND STREET)	10'	N/A	198'
MIN. FRONT YARD SETBACK (FT) (LOYD STREET)	10'	N/A	226.5'
MIN. FRONT YARD SETBACK (FT) (FRONT STREET)	10'	N/A	48.5'
MIN. FRONT YARD SETBACK (FT) (PENNNELL STREET)	10'	N/A	10'
MIN. SIDE YARD WIDTH, EACH (FT)	15'	N/A	N/A
MIN. REAR YARD DEPTH (FT)	15'	N/A	N/A
<b><u>HEIGHT (SALT SHED)</u></b>			
MAX. HEIGHT (FT)	65' OR 5 STORIES	N/A	25.42'
<b><u>SETBACKS (MAINTENANCE FACILITY)</u></b>			
MIN. FRONT YARD SETBACK (FT) (WEST 2ND STREET)	10'	N/A	205'
MIN. FRONT YARD SETBACK (FT) (LOYD STREET)	10'	N/A	171.5'
MIN. FRONT YARD SETBACK (FT) (FRONT STREET)	10'	N/A	60'
MIN. FRONT YARD SETBACK (FT) (PENNNELL STREET)	10'	N/A	56.5'
MIN. SIDE YARD WIDTH, EACH (FT)	15'	N/A	N/A
MIN. REAR YARD DEPTH (FT)	15'	N/A	N/A
<b><u>HEIGHT (MAINTENANCE FACILITY)</u></b>			
MAX. HEIGHT (FT)	65' OR 5 STORIES	N/A	20.21'
<b><u>VEHICLE PARKING</u></b>			
MIN. PARKING SPACES	1 PER 2 EMPLOYEES 23x12 = 28	10 SPACES	31 TOTAL SPACES (INCLUDES 24 VEHICLE PASSENGER SPACES, 3 LARGE VEHICLE SPACES, 1 ADA SPACE, 1 ADA VAN SPACE)
MIN. STALL SIZE	9'x18'	9'x18'	9'x18'
<b><u>PARKING AREA BUFFER</u></b>			
MIN. BUFFER WIDTH	8'	N/A	13.5'
<b><u>BUFFER YARD</u></b>			
MIN. BUFFER WIDTH	8'	0'	10'
<b><u>DRIVE AISLE WIDTH</u></b>			
THE MINIMUM WIDTH FOR AISLES PROVIDING ACCESS TO STALLS WITH TWO-WAY TRAFFIC SHALL BE 24 FEET.			
<b><u>DRIVEWAYS</u></b>			

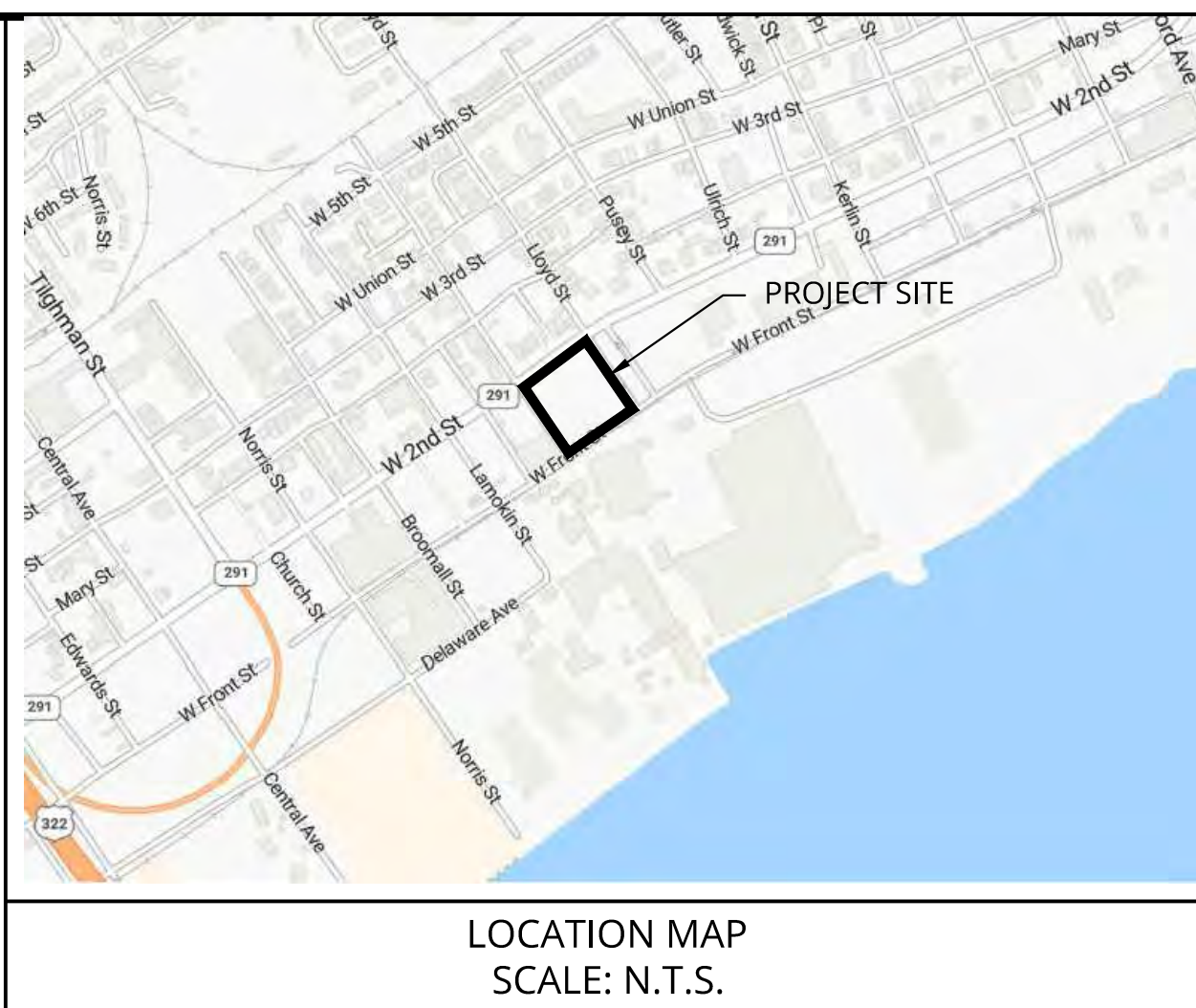
THE MINIMUM WIDTH FOR AISLES PROVIDING ACCESS TO STALLS WITH TWO-WAY TRAFFIC SHALL BE 24 FEET

	<u>REQUIRED</u>		<u>PROPOSED</u>	
WIDTH OF DRIVEWAY ONTO A PUBLIC STREET	ONE WAY (FT)	TWO WAY (FT)	ONE WAY (FT)	TWO WAY (FT)
MIN. WIDTH	12'	22'	15.5'	30'
MAX. WIDTH	20'	30'		

**NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.**

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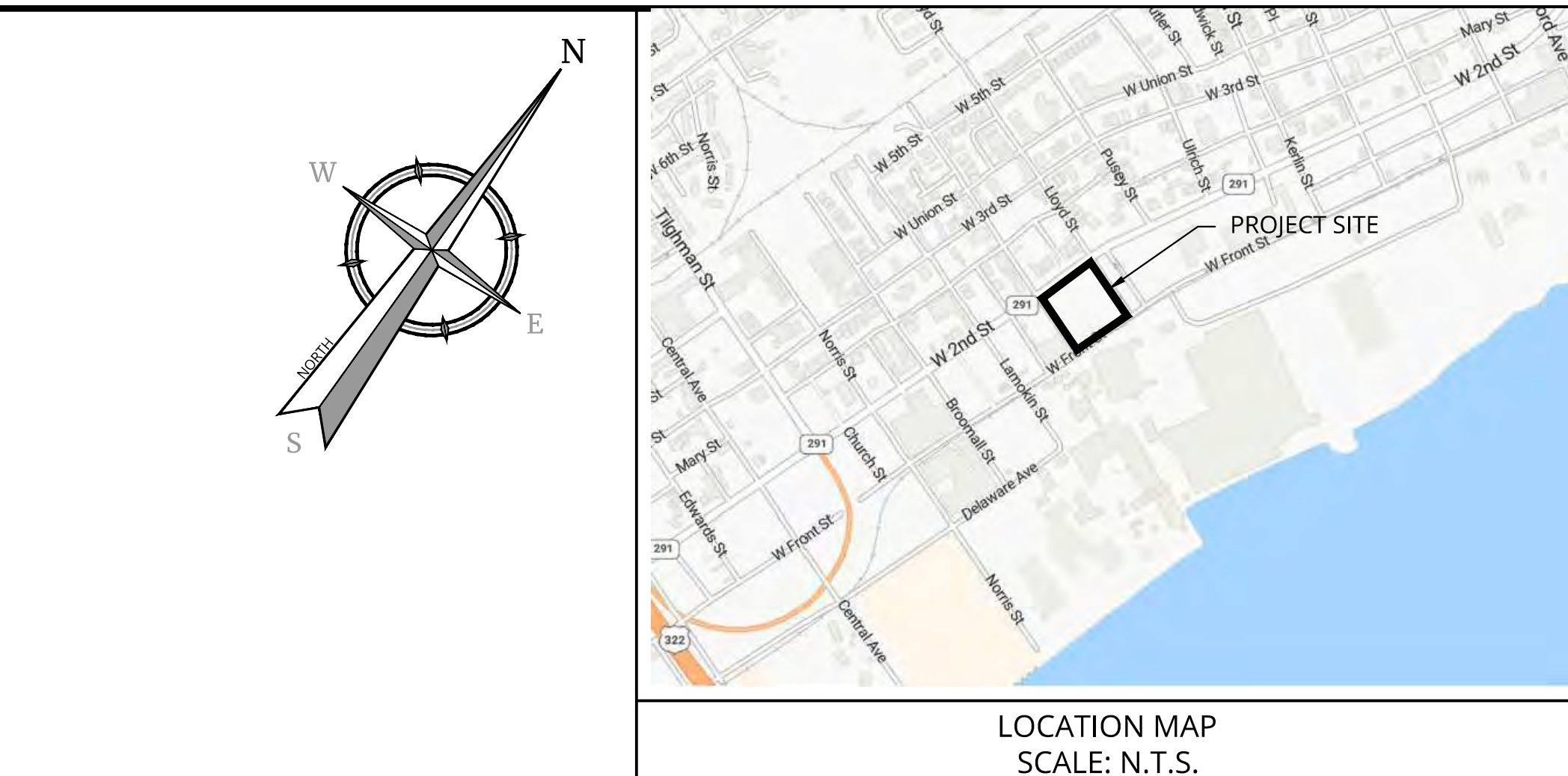
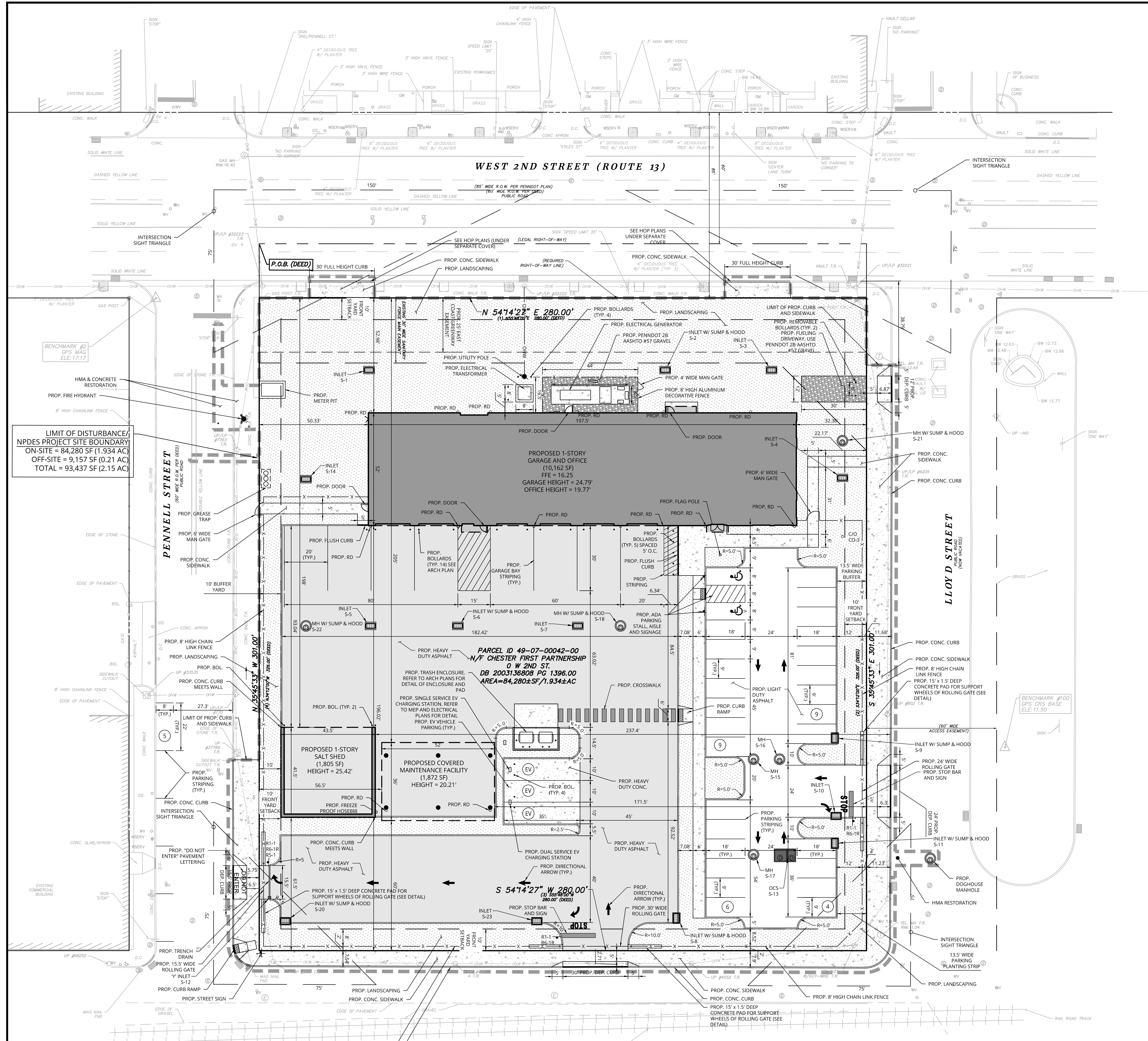
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REV	DATE	DRAWN BY	DESCRIPTION
1	4/27/2025	LPD	REVISED PLOT LAYOUT
2	4/28/2025	LPD	ISSUED FOR RFP
3	5/1/2025	LPD	
4	5/1/2025	LPD	
5	5/1/2025	LPD	
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**NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION**





- SITE PLAN GENERAL NOTES:**
- THE ACCURACY AND COMPLETENESS OF THIS INFORMATION HAS BEEN PROVIDED TO THE BEST ABILITY OF THE ENGINEER. HOWEVER, THE CONTRACTOR IS ADVISED TO VERIFY IN THE FIELD ALL THE FACTORS CONCERNING THE LOCATION OF ALL UTILITIES PRIOR TO BIDDING AND CONSTRUCTION. LOCATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE PLANS ARE TO BE CONSIDERED APPROXIMATE AND SHOULD BE VERIFIED BY THE CONTRACTOR.
  - THIS SET OF PLANS HAS BEEN PREPARED FOR THE PURPOSES OF MUNICIPAL AND AGENCY REVIEW AND APPROVAL. THIS SET OF PLANS SHALL NOT BE UTILIZED AS CONSTRUCTION DOCUMENTS UNTIL ALL APPROVALS REQUIRED HAVE BEEN OBTAINED. ALL CONDITIONS OF APPROVAL HAVE BEEN SATISFIED AND THE DRAWINGS HAVE BEEN STAMPED 'ISSUED FOR CONSTRUCTION'. THIS SHALL INCLUDE APPROVAL OF ALL CATALOG CUTS, SHOP DRAWINGS AND/OR DESIGN CALCULATIONS AS REQUIRED BY THE PROJECT OWNER AND/OR MUNICIPAL ENGINEER.
  - GEOTECHNICAL INFORMATION AND SOIL TEST PIT LOCATIONS SHOWN HEREON ARE AS PRESENTED IN A REPORT ENTITLED "REPORT OF GEOTECHNICAL EXPLORATION, PROPOSED PUBLIC WORKS GARAGE AND SHED, WEST 2ND STREET AND LLOYD STREET, CITY OF CHESTER, DELAWARE COUNTY, PENNSYLVANIA," DATED "NOVEMBER 14, 2024," PREPARED BY COLLIER ENGINEERING & DESIGN, INC.
  - INFILTRATION INFORMATION AND SOIL TEST PIT LOCATIONS HEREON ARE AS PRESENTED IN A REPORT ENTITLED "REPORT OF STORMWATER INFILTRATION EXPLORATION, PROPOSED PUBLIC WORKS GARAGE AND SHED, WEST 2ND STREET AND LLOYD STREET, CITY OF CHESTER, DELAWARE COUNTY, PENNSYLVANIA," DATED "NOVEMBER 14, 2024," PREPARED BY COLLIER ENGINEERING & DESIGN, INC.
  - THIS SET OF PLANS IS NOT DEPICTING ENVIRONMENTAL CONDITIONS OR A CERTIFICATION/WARRANTY REGARDING THE PRESENCE OR ABSENCE OF ENVIRONMENTALLY IMPACTED SITE CONDITIONS. MASER CONSULTING HAS PERFORMED NO EXPLORATORY OR TESTING SERVICES, INTERPRETATIONS, CONCLUSIONS OR OTHER SITE ENVIRONMENTAL SERVICES RELATED TO THE DETERMINATION OF THE POTENTIAL FOR CHEMICAL, TOXIC, RADIOACTIVE OR OTHER TYPE OF CONTAMINANTS AFFECTING THE PROPERTY AND THE UNDERSIGNED PROFESSIONAL IS NOT QUALIFIED TO DETERMINE THE EXISTENCE OF SAME. SHOULD ENVIRONMENTAL CONTAMINATION OR WASTE BE DISCOVERED, THE OWNER AND CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LAWS AND REGULATIONS.
  - DO NOT SCALE DRAWINGS AS THEY PERTAIN TO ADJACENT AND SURROUNDING PHYSICAL CONDITIONS, BUILDINGS, STRUCTURES, ETC. THEY ARE SCHEMATIC ONLY, EXCEPT WHERE DIMENSIONS ARE SHOWN THEREON.
  - EXISTING UTILITY INFORMATION SHOWN HEREON HAS BEEN COLLECTED FROM VARIOUS SOURCES AND CANNOT BE GUARANTEED AS TO ACCURACY OR COMPLETENESS. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO EXCAVATION. WHERE EXISTING UTILITIES ARE TO BE CROSSED BY PROPOSED CONSTRUCTION, TEST PITS SHALL BE DUG BY THE CONTRACTOR PRIOR TO CONSTRUCTION TO ASCERTAIN EXISTING UTILITIES, MATERIALS AND SIZES. TEST PIT INFORMATION SHALL BE GIVEN TO THE ENGINEER PRIOR TO CONSTRUCTION, TO PERMIT ADJUSTMENT AS REQUIRED TO AVOID CONFLICTS. ANY EXISTING UTILITY SERVICE CONNECTIONS, LOCATED BY THE CONTRACTOR, CAPABLE OF SERVING THE PROPOSED USE SHALL BE REUSED AS LONG AS THEY ARE IN GOOD CONDITION AND MEET THE UTILITY AUTHORITY'S STANDARDS AND SPECIFICATIONS. IF THE EXISTING UTILITY SERVICES DO NOT MEET THE ABOVE CRITERIA, THEN NEW SERVICE LINES SHALL BE INSTALLED.
  - FINAL LOCATIONS, NUMBERS AND SIZE OF ALL PROPOSED UTILITIES SERVING BUILDINGS ARE TO BE VERIFIED WITH THE ARCHITECT, OWNER AND APPROPRIATE UTILITY AUTHORITY BY THE CONTRACTOR.
  - ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION FOR SITE IMPROVEMENTS SHOWN HEREON SHALL BE IN ACCORDANCE WITH:  
A. PENNSYLVANIA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," AS CURRENTLY AMENDED.  
B. CURRENT PREVALING BOROUGH SPECIFICATIONS, STANDARDS AND REQUIREMENTS.  
C. CURRENT PREVALING UTILITY COMPANY AUTHORITY AND OWNER SPECIFICATIONS, STANDARDS AND REQUIREMENTS.
  - THE CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED CONSTRUCTION PERMITS NECESSARY FOR THE CONSTRUCTION AND COMPLETION OF THE APPROVED IMPROVEMENTS.
  - THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER REMOVAL AND DISPOSAL OF ANY AND ALL EXISTING OBJECTS, STRUCTURES, ETC. THAT ARE IN THE WAY OF PROPOSED CONSTRUCTION, OR INDICATED AS TO BE REMOVED.
  - THE PROPERTY IS SERVICED BY PRIVATE WATER AND PUBLIC SEWER.
  - ALL CONCRETE IS TO HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI.
  - ALL SIGNING AND STRIPING SHALL CONFORM TO MUTCD (MANUEL ON UNIFORM TRAFFIC CONTROL DEVICES) STANDARDS.
  - ALL CURB RADII ARE SFT UNLESS OTHERWISE NOTED.
  - ALL PROPOSED PEDESTRIAN FACILITIES REFLECTED ON THESE PLANS SHALL BE CONSTRUCTED TO COMPLY WITH THE FOLLOWING STANDARDS:  
A. PENNDOT DESIGN MANUAL 2, CHAPTER 4.  
B. PENNDOT STANDARDS FOR ROADWAY CONSTRUCTION, PUBLICATION 72M, RC-47M.  
C. U.S. ACCESS BOARD, PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG) AND ADA ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES (ADAAG).
  - BY GRAPHIC PLOTTING THE PROPERTY LIES WITHIN FLOOD "ZONE X" AREAS TO BE OUTSIDE THE 0.2% CHANCE FLOODPLAIN, AS SHOWN ON THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAPS FOR THE CITY OF CHESTER, DELAWARE COUNTY, PA, PANEL 203 OF 250 COMMUNITY PANEL NUMBER 40450203H, AND LAST REVISED NOVEMBER 3, 2017.
  - ALL RETAINING WALLS GREATER THAN FOUR (4) FEET SHALL REQUIRE SUBMISSION OF PLANS, DETAILS AND STRUCTURAL CALCULATIONS FOR REVIEW AND APPROVAL BY A GEOTECHNICAL/STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
  - ALL UTILITIES SHALL BE LOCATED UNDERGROUND.
  - THIS SET OF PLANS IS NOT DEPICTING ENVIRONMENTAL CONDITIONS OR A CERTIFICATION/WARRANTY REGARDING THE PRESENCE OR ABSENCE OF ENVIRONMENTALLY IMPACTED SITE CONDITIONS.
  - THE CONTRACTOR IS RESPONSIBLE FOR PROJECT SAFETY, INCLUDING PROVISION OF ALL APPROPRIATE SAFETY DEVICES AND TRAINING REQUIRED.

**SITE DATA CHART**

ZONING DISTRICT: LIC: LIGHT INDUSTRIAL/COMMERCIAL DISTRICT

EXISTING USE, PROPOSED USE	REQUIRED	EXISTING	PROPOSED
WAREHOUSING OR STORAGE			
PUBLIC WORKS FACILITIES			
<b>DISTRICT LOT AND DIMENSIONS</b>			
MIN. LOT AREA (SF)	12,000 SF	84,280 SF	84,280 SF
MIN. LOT WIDTH (FT)	80'	280'	280'
MAX. BUILDING COVERAGE (% OF LOT)	70%	N/A	16.42% (13,839 SF)
MAX. IMPERVIOUS COVERAGE (% OF LOT)	90%	92.2% (77,699 SF)	67.21% (56,642 SF)
<b>SETBACKS (GARAGE/OFFICE)</b>			
MIN. FRONT YARD SETBACK (FT) (WEST 2ND STREET)	10'	N/A	52.98'
MIN. FRONT YARD SETBACK (FT) (LLOYD STREET)	10'	N/A	33.36'
MIN. FRONT YARD SETBACK (FT) (FRONT STREET)	10'	N/A	194.02'
MIN. FRONT YARD SETBACK (FT) (PENNELL STREET)	10'	N/A	50.33'
MIN. SIDE YARD WIDTH (EACH FT)	15'	N/A	N/A
MIN. REAR YARD DEPTH (FT)	15'	N/A	N/A
<b>HEIGHT (GARAGE/OFFICE)</b>			
MAX. HEIGHT (FT)	65' OR 5 STORIES	N/A	24.79'
<b>SETBACKS (SALT SHED)</b>			
MIN. FRONT YARD SETBACK (FT) (WEST 2ND STREET)	10'	N/A	198'
MIN. FRONT YARD SETBACK (FT) (LLOYD STREET)	10'	N/A	224.5'
MIN. FRONT YARD SETBACK (FT) (FRONT STREET)	10'	N/A	61.5'
MIN. FRONT YARD SETBACK (FT) (PENNELL STREET)	10'	N/A	10'
MIN. SIDE YARD WIDTH (EACH FT)	15'	N/A	N/A
MIN. REAR YARD DEPTH (FT)	15'	N/A	N/A
<b>HEIGHT (SALT SHED)</b>			
MAX. HEIGHT (FT)	65' OR 5 STORIES	N/A	25.42'
<b>SETBACKS (MAINTENANCE FACILITY)</b>			
MIN. FRONT YARD SETBACK (FT) (WEST 2ND STREET)	10'	N/A	205'
MIN. FRONT YARD SETBACK (FT) (LLOYD STREET)	10'	N/A	171.5'
MIN. FRONT YARD SETBACK (FT) (FRONT STREET)	10'	N/A	60'
MIN. FRONT YARD SETBACK (FT) (PENNELL STREET)	10'	N/A	56.5'
MIN. SIDE YARD WIDTH (EACH FT)	15'	N/A	N/A
MIN. REAR YARD DEPTH (FT)	15'	N/A	N/A
<b>HEIGHT (MAINTENANCE FACILITY)</b>			
MAX. HEIGHT (FT)	65' OR 5 STORIES	N/A	20.21'
<b>VEHICLE PARKING</b>			
MIN. PARKING SPACES	1 PER 12 EMPLOYEES 23x12 = 28	10 SPACES	31 TOTAL SPACES (INCLUDES 24 VEHICLE PASSENGER SPACES, 3 LARGE VEHICLE SPACES, 1 ADA SPACE, 1 ADA VAN SPACE)
MIN. STALL SIZE	9'x18'	9'x18'	9'x18'
<b>PARKING AREA BUFFER</b>			
MIN. BUFFER WIDTH	8'	N/A	13.5'
<b>BUFFER YARD</b>			
MIN. BUFFER WIDTH	8'	0'	10'
<b>DRIVE AISLE WIDTH</b>			
THE MINIMUM WIDTH FOR AISLES PROVIDING ACCESS TO STALLS WITH TWO-WAY TRAFFIC SHALL BE 34 FEET.			
<b>DRIVEWAYS</b>			
WIDTH OF DRIVEWAY ONTO A PUBLIC STREET	ONE WAY (FT)	TWO WAY (FT)	ONE WAY (FT)
MIN. WIDTH	12'	22'	15.5'
MAX. WIDTH	20'	30'	30'

**ABBREVIATIONS**

D.C. = DEPRESSIONED CURB	UV = UNKNOWN VALVE	MLW = MEAN LOW WATERLINE
BT = BOTTOM OF TUB	MH = MANHOLE	TLW = TOP OF WALL
TC = TOP OF CURB	DEP. = DEPRESSION	BW = BOTTOM WALL
BD = BOLLARD	CL = CENTERLINE	
GR = GRATE	PM = PARKING METER	
MB = MAILBOX	MHWL = MEAN HIGH WATERLINE	
FF = FINISH FLOOR		

**PADEP ACT 2 REMEDIATION NOTES:**

- SHOULD SOIL SAMPLING ANALYTICAL RESULTS FOR THE STORMWATER BASIN EXCAVATION SIDEWALLS AND BOTTOM MEET PADEP STATEWIDE HEALTH STANDARDS (25 PA CODE CHAPTER 260) FOR MANGANESE. THE CED ENVIRONMENTAL CONSULTANT WILL NOTIFY THE CONTRACTOR THAT PADEP ACT 2 CAPPING NOTES #9 & #10 BELOW IS NO LONGER REQUIRED. CED ENVIRONMENTAL CONSULTANT POINTS OF CONTACT ARE KURT MARTIN (732) 546-7513 AND DONALD BOWMAN, P.E. (609) 752-5545.
- AS A GENERAL MATTER, MATERIAL EXCAVATED DURING CONSTRUCTION ACTIVITIES MAY BE UTILIZED AS FILL OR GRADING MATERIAL ON SITE, UNLESS THE MATERIAL IS UNSUITABLE FOR THAT PURPOSE.
- THE CONTRACTOR SHALL PREPARE AN OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) HEALTH AND SAFETY PLAN PER 29 CFR 1910 FOR WORKERS PERFORMING INTRUSIVE ACTIVITIES IN CONTACT WITH SOIL OR GROUNDWATER.
- SOIL AND OTHER EXCAVATED MATERIALS ARE PERMITTED TO BE REUSED ON SITE, MATERIALS WHICH ARE LIKELY TO INTERFERE WITH IMPLEMENTATION, AND ARE THEREFORE CONSIDERED "UNSUITABLE", INCLUDE:
  - SLUDGE.
  - FLOWABLE PRODUCT.
  - SOIL/FILL SATURATED WITH SEPARATE PHASE LIQUIDS (I.E. OIL, GREASE).
  - STORAGE TANK REMAINS CONTAINING FLOWABLE PRODUCT AND/OR SEPARATE PHASE LIQUIDS, AND
  - BURIED WASTE (I.E. PLASTIC BATTERY CASINGS) FROM THE 401 WASHINGTON STREET PROPERTY.
- A REPRESENTATIVE WITH EXPERIENCE IN ASSESSING ENVIRONMENTAL CONDITIONS (SUCH AS THE CED ENVIRONMENTAL CONSULTANT) SHALL BE AVAILABLE WHENEVER INTRUSIVE ACTIVITIES ARE BEING CONDUCTED ON THE PROJECT PROPERTY. IF UNSUITABLE MATERIALS, AS DESCRIBED ABOVE, ARE ENCOUNTERED, THE REPRESENTATIVE SHALL BE NOTIFIED AND

RESPOND WITHIN TWO (2) HOURS OF NOTIFICATION TO EVALUATE SITE CONDITIONS AND THE SUITABILITY OF THE MATERIALS FOR REUSE ON SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REMOVE UNSUITABLE MATERIAL FROM THE SUBJECT PROPERTY. THE FACILITY AND METHODS OF MANAGEMENT SHALL BE DETERMINED BY THE SUBJECT PROPERTY OWNER, THEIR CONTRACTOR AND THE REPRESENTATIVE. THE MATERIALS IN QUESTION SHOULD BE REMOVED FROM THE SUBJECT PROPERTY IN THE SHORTEST TIME FRAME REASONABLY ACHIEVABLE BASED ON CONDITIONS.

6. IF CONSTRUCTION AND DEMOLITION (C&D) DEBRIS (I.E. REBAR, STEEL, STRUCTURAL MEMBERS, CONCRETE) IS EXCAVATED FROM THE GROUND DURING CONSTRUCTION ACTIVITIES, IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO TAKE THAT MATERIAL OFF-SITE AND MANAGE IT IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

7. C&D DEBRIS THAT IS FOUND TO BE COMMINGLED WITH UNSUITABLE MATERIALS (I.E. TANK REMAINS CONTAINING SLUDGE AND/OR FLOWABLE PRODUCTS) SHALL BE REMOVED FROM THE SUBJECT PROPERTY AND MANAGED BY THE SUBJECT PROPERTY OWNER AND THEIR DESIGNATED CONTRACTOR IN THE SHORTEST TIME FRAME REASONABLY ACHIEVABLE BASED ON CONDITIONS.

8. FILL MATERIALS (I.E. SOIL, STONE) IMPORTED FROM OFF-SITE SOURCES SHALL MEET THE CURRENT PADEP MANAGEMENT OF FILL POLICY (DOCUMENT NO. 258-2182-773) DEFINITION FOR "CLEAN FILL".

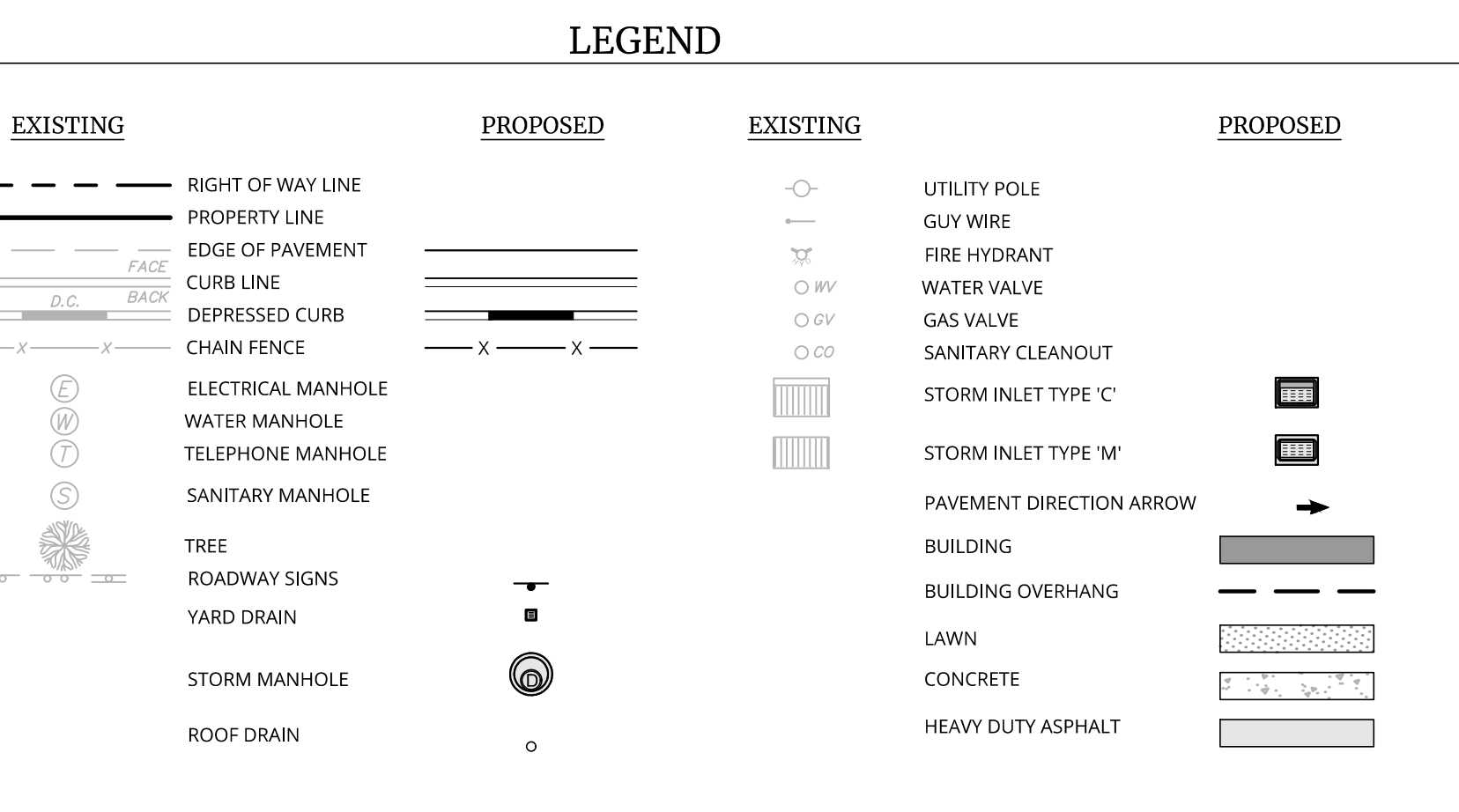
9. ONCE PEROUS AREAS ON THIS DRAWING HAVE BEEN EXCAVATED TO A DEPTH OF TWO FEET BELOW FINISHED GRADE, THE CONTRACTOR SHALL PLACE A DEMARCATION BARRIER (ORANGE DELINEATION GEOTEXTILE FABRIC) ON THE SURFACED.

10. THE CONTRACTOR SHALL PREPARE AN AS-BUILT SURVEY BY A PENNSYLVANIA-LICENSED LAND SURVEYOR WHICH WILL IDENTIFY CAP BOUNDARIES AND DETAILS.

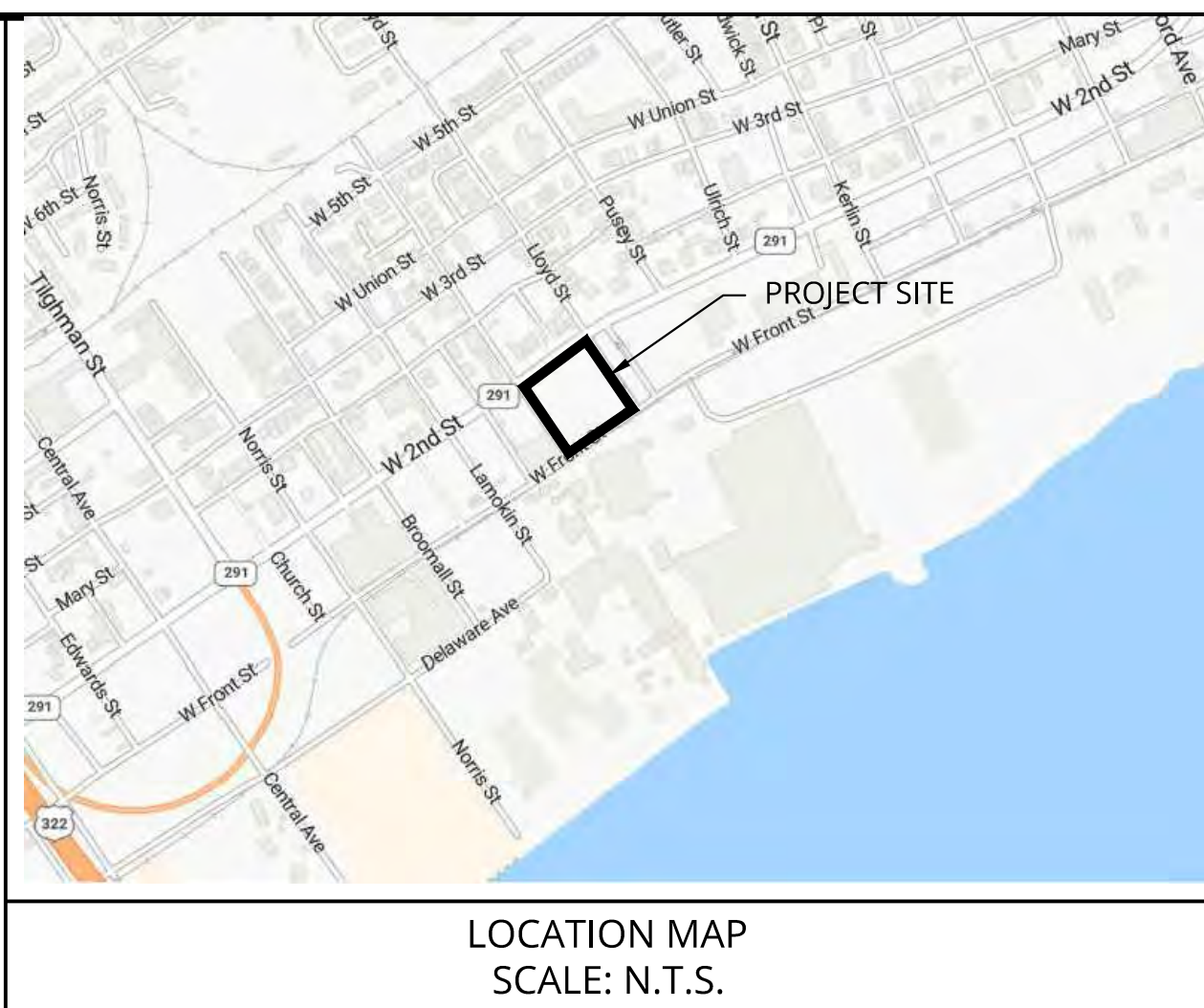
CONSTRUCTION FENCE TO BE INSTALLED AT THE DISCRETION OF THE CONSTRUCTION MANAGER. THE CONSTRUCTION FENCE MUST BE INSTALLED TO MAINTAIN SAFE VEHICULAR AND PEDESTRIAN TRAFFIC PATTERNS AT ALL TIMES THROUGHOUT CONSTRUCTION.

ALL EXISTING FEATURES WITHIN LIMIT OF DISTURBANCE TO BE REMOVED UNLESS OTHERWISE NOTED. STREET LIGHTS, AND UTILITY MAINS SHALL REMAIN INCLUDING, BUT NOT LIMITED TO STORM SEWERS, SANITARY SEWERS, ELECTRIC, TELEPHONE, AND GAS INCLUDING ASSOCIATED MANHOLES, INLETS, AND VALVES, ETC.

ALL STREET SIGNS WITHIN THE LIMIT OF WORK TO BE PROTECTED AND RE-INSTALLED.







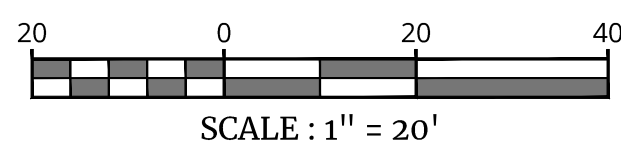
1. THE ACCURACY AND COMPLETENESS OF THIS INFORMATION HAS BEEN PROVIDED TO THE BEST ABILITY OF THE ENGINEER, HOWEVER, THE CONTRACTOR IS ADVISED TO VERIFY IN THE FIELD ALL THE FACTORS CONCERNING THE LOCATION OF ALL UTILITIES PRIOR TO BIDDING AND CONSTRUCTION. LOCATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE PLANS ARE TO BE CONSIDERED APPROXIMATE AND MUST BE FIELD VERIFIED BY THE CONTRACTOR.

- ### PAEPD CAP ACT 2 REMEDIATION NOTES:
1. SHOULD SOIL SAMPLING ANALYTICAL RESULTS FOR THE FORTHWATER BASIN EXCAVATION SEDIMENTS AND BOTTOM MUD MEET PAEPD STATEWIDE HEALTH STANDARDS (25 PA CODE 71.01) AND/OR FEDERAL STANDARDS, THE CONSULTANT WILL NOTIFY THE CONTRACTOR THAT PAEPD ACT 2 CAPRII NOTIONS #18 & #19 (B) BELOW) IS NO LONGER REQUIRED. CEN ENVIRONMENTAL CONSULTANT POINTS OF CONTACT ARE KURT MARTIN (732) 546-7513 AND DONALD BOWMAN, PE. (609) 753-5545.
  2. AS A GENERAL MATTER, MATERIAL EXCAVATED DURING CONSTRUCTION ACTIVITIES MAY BE UTILIZED AS FILL OR GRADING MATERIAL ON SITE, UNLESS THE MATERIAL IS UNSUITABLE FOR THAT PURPOSE.
  3. THE CONTRACTOR SHALL PREPARE AN OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) HEALTH AND SAFETY PLAN PER 29 CFR 1910 FOR WORKERS PERFORMING INTENSIVE ACTIVITIES IN CONTACT WITH SOIL OR GROUNDWATER.
  4. SOIL AND OTHER EXCAVATED MATERIALS ARE PERMITTED TO BE REUSED ON SITE. MATERIALS WHICH ARE LIKELY TO INTERFERE WITH IMPLEMENTATION, AND ARE THEREFORE CONSIDERED UNSUITABLE, INCLUDE:
    - FLOWABLE PRODUCT;
    - SOIL/FILL SATURATED WITH SEPARATE PHASE LIQUIDS (E.G. OIL, GREASE);
    - WASHINGTON STREET PROPERTY
    - STORAGE TANK REMAINS CONTAINING FLOWABLE PRODUCT AND/OR SEPARATE PHASE LIQUIDS; AND BURNED WASTE (E.G. PLASTIC BATTERY CASINGS) FROM THE 401
  5. A REPRESENTATIVE WITH EXPERIENCE IN ASSESSING ENVIRONMENTAL CONDITIONS (SUCH AS THE CEN ENVIRONMENTAL CONSULTANT) SHALL BE AVAILABLE WHENEVER INTENSIVE ACTIVITIES ARE BEING CONDUCTED ON THE SUBJECT PROPERTY. IF UNSUITABLE MATERIALS, AS DESCRIBED ABOVE, ARE ENCOUNTERED, THE REPRESENTATIVE SHALL BE NOTIFIED AND RESPOND WITHIN TWO (2) HOURS OF NOTIFICATION TO EVALUATE SITE CONDITIONS AND THE SUITABILITY OF THE MATERIALS FOR REUSE ON SITE. IF IT IS THE CONTRACTOR'S DETERMINATION TO REMOVE UNSUITABLE MATERIAL FROM THE SUBJECT PROPERTY, THE FACILITY AND METHODS OF MANAGEMENT SHALL BE DETERMINED BY THE SUBJECT PROPERTY OWNER, THEIR CONTRACTOR AND THE REPRESENTATIVE. THE MATERIALS IN QUESTION SHOULD BE REMOVED FROM THE SUBJECT PROPERTY IN THE SHORTEST TIME FRAME REASONABLY ACHIEVABLE.
  6. IF CONSTRUCTION AND DEMOLITION (C&D) DEBRIS (E.G. REBAR, STEEL STRUCTURAL MEMBERS, CONCRETE) IS EXCAVATED FROM THE GROUND DURING CONSTRUCTION ACTIVITIES, IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO TAKE THAT MATERIAL OFF-SITE AND MANAGE IT IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
  7. C&D DEBRIS THAT IS FOUND TO BE COMINGLED WITH UNSUITABLE MATERIALS (E.G. TANK REMAINS CONTAINING SLUDGE AND/OR FLOWABLE PRODUCT) SHALL BE REMOVED FROM THE SUBJECT PROPERTY AND MANAGED BY THE SUBJECT PROPERTY OWNER AND THEIR DESIGNATED CONTRACTOR IN THE SHORTEST TIME FRAME REASONABLY ACHIEVABLE BASED ON CONDITIONS.
  8. FILL MATERIALS (E.G. SOIL, STONE) IMPORTED FROM OFF-SITE SOURCES MEET THE CURRENT P&D MANAGEMENT OF FILL POLICY (DOCUMENT NO. 238-2182-773) DEFINITION FOR NON-DEPOSITION.
  9. ONCE PERVIOUS AREAS ON THIS DRAWING HAVE BEEN EXCAVATED TO A DEPTH OF TWO FEET BELOW FINISHED GRADE, THE CONTRACTOR SHALL PLACE A DEMARCATION BARRIER (ORANGE DELINEATION GEOTEKSTILE FABRIC) ON THE SURGRADE.
  10. THE CONTRACTOR SHALL PREPARE AN AS-BUILT SURVEY BY A PENNSYLVANIA-LICENSED LAND SURVEYOR WHICH WILL IDENTIFY CAP BOUNDARIES AND DETAILS.

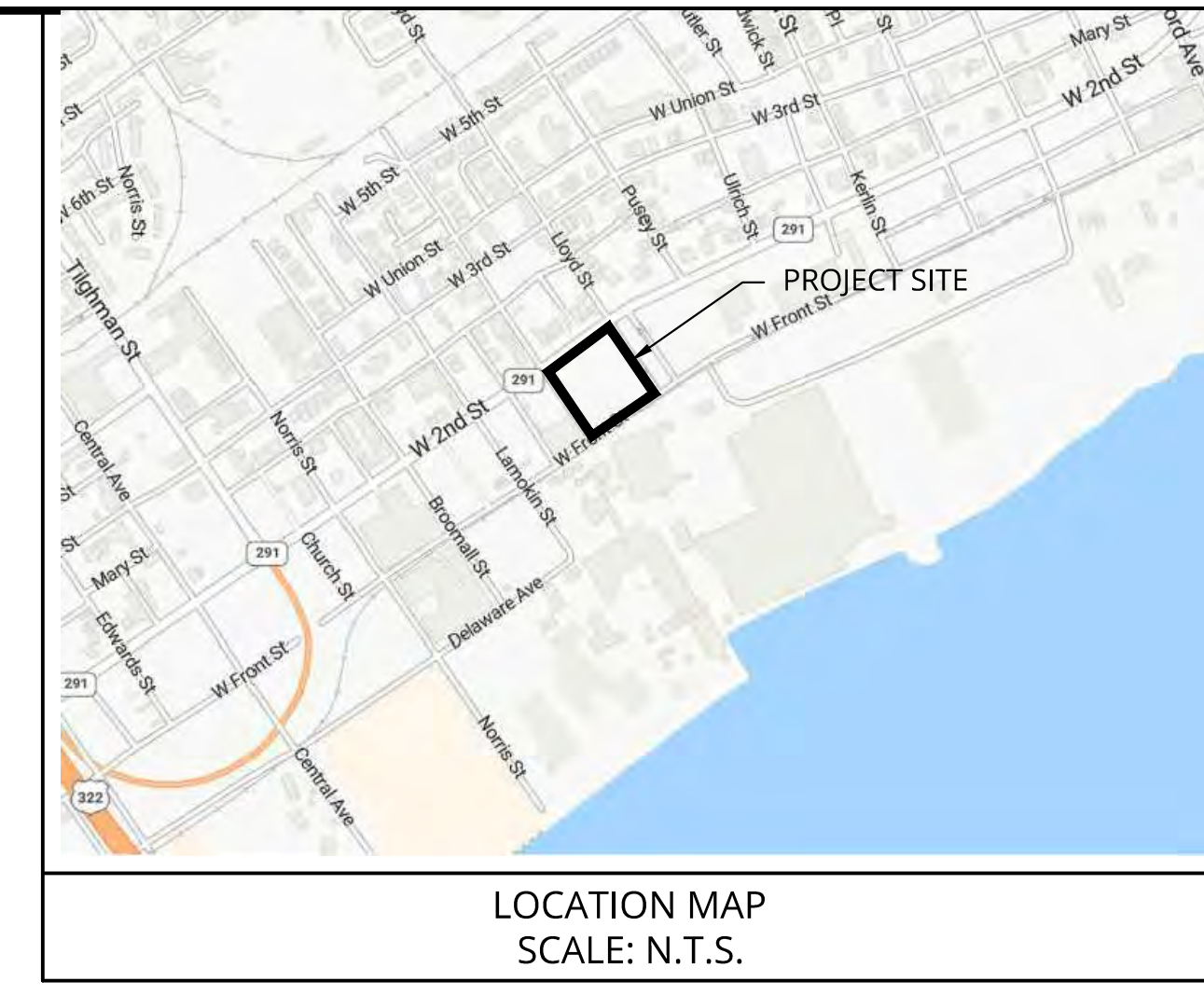
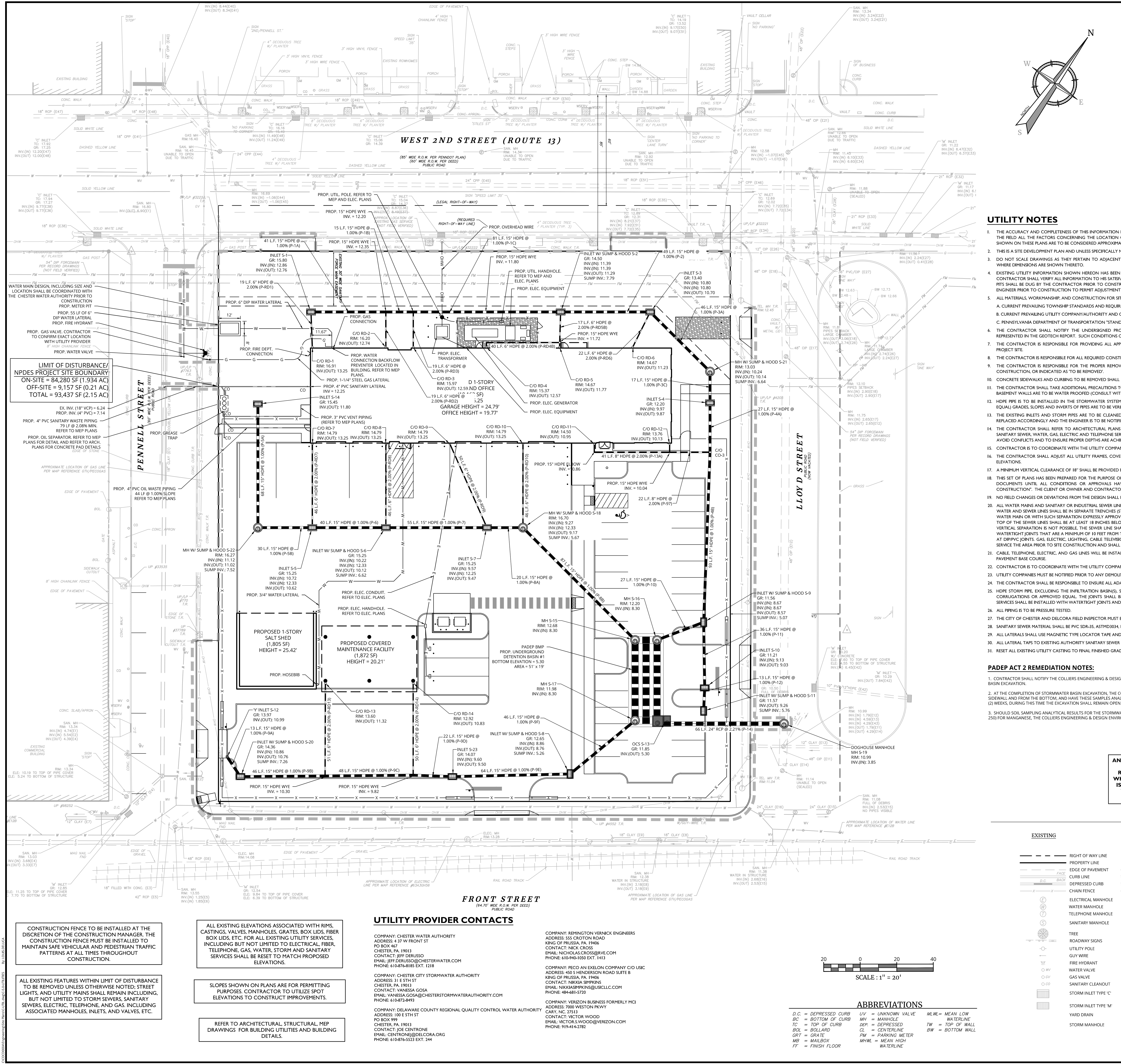
EXISTING		PROPOSED		EXISTING		PROPOSED	

REFER TO ARCHITECTURAL, STRUCTURAL, MEP  
DRAWINGS FOR BUILDING UTILITIES AND BUILDING  
DETAILS.

D.C. = DEPRESSED CURB	UV = UNKNOWN VALVE	MLWL = MEAN LOW
BC = BOTTOM OF CURB	MM = MANHOLE	WATERLINE
TC = TOP OF CURB	DPH = DEPRESSED	TW = TOP OF WALL
BOL = BOLLARD	CL = CENTERLINE	BW = BOTTOM WALL
GRT = GRATE	PM = PARKING METER	
MB = MAILBOX	MHWL = MEAN HIGH	
FF = FINISH FLOOR	WATERLINE	







- ### UTILITY NOTES
- THE ACCURACY AND COMPLETENESS OF THIS INFORMATION HAS BEEN PROVIDED TO THE BEST ABILITY OF THE ENGINEER, HOWEVER, THE CONTRACTOR IS ADVISED TO VERIFY IN THE FIELD ALL THE FACTORS CONCERNING THE LOCATION OF ALL UTILITIES PRIOR TO BIDDING AND CONSTRUCTION. LOCATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE PLANS ARE TO BE CONSIDERED APPROXIMATE AND MUST BE FIELD VERIFIED BY THE CONTRACTOR.
  - THIS IS A SITE DEVELOPMENT PLAN AND UNLESS SPECIFICALLY NOTED ELSEWHERE HEREON IS NOT A SURVEY.
  - DO NOT SCALE DRAWINGS AS THEY PERTAIN TO ADJACENT AND SURROUNDING PHYSICAL CONDITIONS, BUILDINGS, STRUCTURES, ETC. THEY ARE SCHEMATIC ONLY, EXCEPT WHERE DIMENSIONS ARE SHOWN THERE TO.
  - EXISTING UTILITY INFORMATION SHOWN HEREON HAS BEEN COLLECTED FROM VARIOUS SOURCES AND CANNOT BE GUARANTEED AS TO ACCURACY OR COMPLETENESS. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO EXCAVATION. WHERE EXISTING UTILITIES ARE TO BE CROSSED BY PROPOSED CONSTRUCTION, TEST PITS SHALL BE DUG BY THE CONTRACTOR PRIOR TO CONSTRUCTION. TO ASCERTAIN EXISTING INVERTS, MATERIALS AND SIZES, TEST PIT INFORMATION SHALL BE GIVEN TO THE ENGINEER PRIOR TO CONSTRUCTION TO PERMIT ADJUSTMENT AS REQUIRED TO AVOID CONFLICTS.
  - ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION FOR SITE IMPROVEMENTS SHOWN HEREON SHALL BE IN ACCORDANCE WITH THE FOLLOWING UNLESS OTHERWISE NOTED:
    - CURRENT PREVAILING TOWNSHIP STANDARDS AND REQUIREMENTS.
    - CURRENT PREVAILING UTILITY COMPANY/AUTHORITY AND OWNER SPECIFICATIONS, STANDARDS AND REQUIREMENTS.
    - PENNSYLVANIA DEPARTMENT OF TRANSPORTATION 'STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION', AS CURRENTLY AMENDED.
  - THE CONTRACTOR SHALL NOTIFY THE UNDERSIGNED PROFESSIONAL IMMEDIATELY IF ANY FIELD OR SOIL CONDITIONS ENCOUNTERED DIFFER MATERIALLY FROM THOSE REPRESENTED IN THE GEOTECH REPORT. SUCH CONDITIONS COULD RENDER THE DESIGNS SHOWN HEREON INAPPROPRIATE OR INEFFECTIVE.
  - THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL APPROPRIATE SAFETY DEVICES AND TRAINING TO ALL WORKERS IN ORDER TO MAINTAIN SAFE CONDITIONS ON THE PROJECT SITE.
  - THE CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED CONSTRUCTION PERMITS NECESSARY FOR THE CONSTRUCTION AND COMPLETION OF THE APPROVED IMPROVEMENTS.
  - THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER REMOVAL AND DISPOSAL OF ANY AND ALL EXISTING OBJECTS, STRUCTURES, ETC. THAT ARE IN THE 'WAY' OF PROPOSED CONSTRUCTION, OR INDICATED AS 'TO BE REMOVED'.
  - CONCRETE SIDEWALKS AND CURBING TO BE REMOVED SHALL BE SAW CUT OR REMOVED TO THE NEAREST EXPANSION JOINT.
  - THE CONTRACTOR SHALL TAKE ADDITIONAL PRECAUTIONS TO WATERPROOF AREAS WHERE THE EXTERIOR FINISHED GRADE IS HIGHER THAN THE FINISHED FLOOR ELEVATION. ALL BASEMENT WALLS ARE TO BE WATER PROOFED (CONSULT WITH ARCHITECT FOR SPECIFICATIONS).
  - HOPE PIPE IS TO BE INSTALLED IN THE STORMWATER SYSTEM SHALL BE CONSTRUCTED IN CONFORMANCE TO THE MANUFACTURER'S SPECIFICATIONS (ADS INC. OR APPROVED EQUAL) GRADES, SLOPES AND INVERTS OF PIPS ARE TO BE VERIFIED AND CONFORMED BY THE CONTRACTOR PRIOR TO BACKFILLING.
  - THE EXISTING INLETS AND STORM PIPES ARE TO BE CLEANED AND INSPECTED PRIOR AND AFTER CONSTRUCTION. IF ANY STRUCTURE IS FOUND TO BE DAMAGED, IT SHALL BE REPLACED ACCORDINGLY AND THE ENGINEER IS TO BE NOTIFIED.
  - THE CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATIONS AND SIZES OF ALL UTILITIES ENTERING THE BUILDING, INCLUDING SANITARY SEWER, WATER, GAS, ELECTRIC AND TELEPHONE SERVICE CONNECTIONS. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND TO ENSURE PROPER DEPTHS ARE ACHIEVED.
  - CONTRACTOR IS TO COORDINATE WITH THE UTILITY COMPANIES AS TO THE LOCATION AND SCHEDULING OF SERVICE CONNECTIONS TO THE UTILITY SUPPLY FACILITIES.
  - THE CONTRACTOR SHALL ADJUST ALL UTILITY FRAMES, COVERS, MANHOLES, VALVE BOXES AND OTHER UTILITY FACILITY STRUCTURES TO BE FLUSH WITH FINISH SURFACE GRADE ELEVATIONS.
  - A MINIMUM VERTICAL CLEARANCE OF 10' SHALL BE PROVIDED BETWEEN PROPOSED SANITARY SEWER FACILITIES AND EXISTING PROPOSED UTILITIES.
  - THIS SET OF PLANS HAS BEEN PREPARED FOR THE PURPOSE OF MUNICIPAL AND AGENCY REVIEW AND APPROVAL. THIS SET OF PLANS SHALL NOT BE UTILIZED AS CONSTRUCTION DOCUMENTS UNTIL ALL CONDITIONS OR APPROVALS HAVE BEEN SATISFIED ON THE DRAWINGS AND EACH DRAWING HAS BEEN REVISED TO INDICATE 'ISSUED FOR CONSTRUCTION'. THE CLIENT OR OWNER AND CONTRACTOR ARE RESPONSIBLE TO ASSURE THAT THE APPROVED PLANS ONLY ARE USED FOR BIDDING AND CONSTRUCTION.
  - NO FIELD CHANGES OR DEVIATIONS FROM THE DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL FROM THE ENGINEER AND THE CITY.
  - ALL WATER MAINS AND SANITARY OR INDUSTRIAL SEWER LINES SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 10 FEET. IF SUCH LATERAL SEPARATION IS NOT POSSIBLE, THE WATER AND SEWER LINES SHALL BE IN SEPARATE TRENCHES (STEP TRENCHES ARE PROHIBITED) WITH THE TOP OF THE SEWER LINE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN OR WITH SUCH SEPARATION EXPRESSLY APPROVED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION. AT CROSSINGS OF SEWER LINES AND WATER MAINS, THE TOP OF THE SEWER LINES SHALL BE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN (SEWER SERVICE LATERALS ARE NOT SUBJECT TO THIS REQUIREMENT) IF SUCH LATERAL SEPARATION IS NOT POSSIBLE, THE SEWER LINE SHALL BE OF WATERTIGHT CONSTRUCTION (THAT IS DUCTILE IRON PIPE WITH MECHANICAL RESTRAINT JOINTS), WITH WATERTIGHT JOINTS THAT ARE A MINIMUM OF 10 FEET FROM THE WATER MAIN. CONTRACTOR SHALL USE TRANSITION COUPLING, POWERLOK MODEL #3001-BAAB OR EQUIVALENT AT DRIPPING JOINTS. GAS, ELECTRIC, LIGHTING, CABLE TELEVISION AND ELECTRICAL SERVICE PLANS, IF REQUIRED, SHALL BE PREPARED BY THE RESPECTIVE UTILITY COMPANIES THAT SERVICE THE AREA PRIOR TO SITE CONSTRUCTION AND SHALL BE INSTALLED PER ORDINANCE REQUIREMENTS.
  - CABLE, TELEPHONE, ELECTRIC, AND GAS LINES WILL BE INSTALLED UNDERGROUND. CROSSINGS OF PROPOSED PAVEMENTS WILL BE INSTALLED PRIOR TO THE CONSTRUCTION OF PAVEMENT BASE COURSE.
  - CONTRACTOR IS TO COORDINATE WITH THE UTILITY COMPANIES AS TO THE LOCATION AND SCHEDULING OF SERVICE CONNECTIONS TO THE UTILITY SUPPLY FACILITIES.
  - UTILITY COMPANIES MUST BE NOTIFIED PRIOR TO ANY DEMOLITION, EXCAVATION AND/OR CONSTRUCTION. CALL 1-800-242-1476 TO ORDER UTILITY MARK-OUTS AT THE SITE.
  - THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE ALL ADA ACCESSIBLE ENTRANCES ARE CONSTRUCTED IN ACCORDANCE WITH THE ADA STANDARDS AND SPECIFICATIONS.
  - HOPE STORM PIPE, EXCLUDING THE INFILTRATION BARRELS, SHALL BE ADS N-12 WT 80 PIPE PER ASTM F596 AND HAVE A SHOOT-AND-PAIND INTERIOR WITH ANNUULAR EXTERIOR CORRUGATIONS OR APPROVED EQUAL. THE JOINTS SHALL BE WATERTIGHT ACCORDING TO THE REQUIREMENTS OF ASTM D3212. SANITARY, WATER, FIRE, AND STORM SEWER SERVICES SHALL BE INSTALLED WITH WATERTIGHT JOINTS AND MATERIALS.
  - ALL PIPING IS TO BE PRESSURE TESTED.
  - THE CITY OF CHESTER AND DELCORA FIELD INSPECTOR MUST BE PRESENT DURING ALL TESTING.
  - SANITARY SEWER MATERIAL SHALL BE PVC SDR-35, ASTM D3034, F497.
  - ALL LATERALS SHALL USE MAGNETIC TYPE LOCATOR TAPE AND BE LAID DIRECTLY OVER THE TOP OF ALL LATERALS, 2 FEET BELOW GRADE AS PER DELCORA STANDARDS.
  - ALL LATERAL TAPS TO EXISTING AUTHORITY SANITARY SEWER MAINS SHALL BE DONE BY THE OWNERS CONTRACTOR AND INSPECTED BY DELCORA ENGINEERING STAFF.
  - RESET ALL EXISTING UTILITY CASTING TO FINAL FINISHED GRADES ALONG THE SIDEWALK.

- ### PADEP ACT 2 REMEDIATION NOTES:
- CONTRACTOR SHALL NOTIFY THE COLLIER ENGINEERING & DESIGN ENVIRONMENTAL CONSULTANT AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF STORMWATER BASIN EXCAVATION.
  - AT THE COMPLETION OF STORMWATER BASIN EXCAVATION, THE COLLIER ENGINEERING & DESIGN ENVIRONMENTAL CONSULTANT WILL COLLECT TWELVE (12) SOIL SAMPLES FROM EACH SIDEWALL AND FROM THE BASE OF THE BASIN. THE SAMPLES ANALYZED BY A PADEP-LICENSED LABORATORY FOR MANGANESE. LABORATORY TURNAROUND TIME IS APPROXIMATELY TWO (2) WEEKS. DURING THIS TIME THE EXCAVATION SHALL REMAIN OPEN.
  - SHOULD SOIL SAMPLING ANALYTICAL RESULTS FOR THE STORMWATER BASIN EXCAVATION AND BOTTOM MEET PADEP STATEWIDE HEALTH STANDARDS (25 PA CODE CHAPTER 250) FOR MANGANESE, THE COLLIER ENGINEERING & DESIGN ENVIRONMENTAL CONSULTANT WILL NOTIFY THE CONTRACTOR THAT PADEP ACT 2 CANNING.

ANY EXCAVATION WORK PERFORMED IN THE CHESTER FORCE MAIN RIGHT-OF-WAY IS TO BE PERFORMED WHILE A REPRESENTATIVE OF DELCORA IS ON SITE. COORDINATE INSPECTION WITH THE DELCORA ENGINEERING DEPARTMENT, 610-876-5523

### LEGEND

EXISTING	PROPOSED	EXISTING	PROPOSED
RIGHT-OF-WAY LINE	RIGHT-OF-WAY LINE	PAVEMENT DIRECTION ARROW	PAVEMENT DIRECTION ARROW
PROPERTY LINE	PROPERTY LINE	BUILDING	BUILDING
EDGE OF PAVEMENT	EDGE OF PAVEMENT	LAWN	LAWN
CURB LINE	CURB LINE	CONCRETE	CONCRETE
DEPRESSED CURB	DEPRESSED CURB	HEAVY DUTY ASPHALT	HEAVY DUTY ASPHALT
CHAIN FENCE	CHAIN FENCE	MAJOR CONTOUR	MAJOR CONTOUR
ELECTRICAL MANHOLE	ELECTRICAL MANHOLE	MINOR CONTOUR	MINOR CONTOUR
TELEPHONE MANHOLE	TELEPHONE MANHOLE	SPOT ELEVATION	SPOT ELEVATION
SANITARY MANHOLE	SANITARY MANHOLE	TOP OF CURB ELEV.	TOP OF CURB ELEV.
TREE	TREE	BOTTOM OF CURB ELEV.	BOTTOM OF CURB ELEV.
ROADWAY SIGNS	ROADWAY SIGNS	UG FIBER OPTIC LINE	UG FIBER OPTIC LINE
UTILITY POLE	UTILITY POLE	UG CABLE TV LINE	UG CABLE TV LINE
GUY WIRE	GUY WIRE	UG GAS LINE	UG GAS LINE
FIRE HYDRANT	FIRE HYDRANT	UG TELEPHONE LINE	UG TELEPHONE LINE
WATER VALVE	WATER VALVE	UG ELECTRIC LINE	UG ELECTRIC LINE
GAS VALVE	GAS VALVE	OVERHEAD WIRE	OVERHEAD WIRE
SANITARY CLEANOUT	SANITARY CLEANOUT	WATER MAIN	WATER MAIN
STORM INLET TYPE 'C'	STORM INLET TYPE 'C'	GAS MAIN	GAS MAIN
STORM MANHOLE	STORM MANHOLE	SAN. SEWER LATERAL	SAN. SEWER LATERAL
YARD DRAIN	YARD DRAIN	SAN. SEWER MAIN	SAN. SEWER MAIN
STORM PIPING	STORM PIPING	STORM PIPE	STORM PIPE
FORCE MAIN	FORCE MAIN	SANITARY PIPING	SANITARY PIPING
		FORCE MAIN	FORCE MAIN

### ABBREVIATIONS

D.C. = DEPRESSED CURB	L.V. = UNKNOWN VALVE	M.H. = MEAN LOW
BC = BOTTOM OF CURB	M.H. = MANHOLE	WATERLINE
TC = TOP OF CURB	DEP. = DEPRESSED	FW = TOP OF WALL
CL = CENTERLINE	DEP. = DEPRESSED	GW = BOTTOM WALL
ROL = ROLLAR	FM = PARKING METER	
MB = MAILBOX	M.H. = MEAN HIGH	
FF = FINISH FLOOR	WATERLINE	

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FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

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**Gabrielle Buchter**  
PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER  
LICENSE NUMBER: PED096502  
COLLIERS ENGINEERING & DESIGN, INC.

**PRELIMINARY/FINAL LAND DEVELOPMENT PLAN**  
FOR  
**CITY OF CHESTER**

**PROJECT TYPE:**  
PUBLIC WORKS FACILITIES

**LOCATION:**  
2ND ST. & PENNELL ST.  
CITY OF CHESTER, PA 19013

**PHILADELPHIA**  
2 Penn Plaza, Suite 900  
1500 JK Boulevard  
Philadelphia, PA 19102  
PHONE: 215.861.9021  
COLLIERS ENGINEERING & DESIGN, INC. (A DIVISION OF MASER CONSULTING)

**Colliers**  
Engineering & Design

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	10/11/2024	LPD	GBB

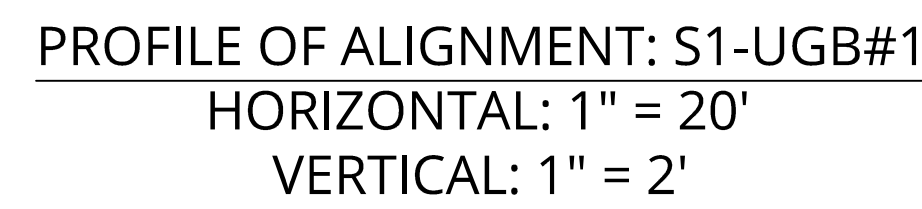
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SHEET TITLE:
UTILITIES PLAN

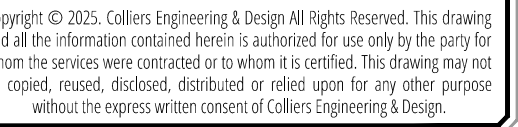
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NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.









**MASER**  
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FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
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PRELIMINARY/FINAL LAND  
DEVELOPMENT PLAN  
FOR  
CITY OF CHESTER

PROJECT TYPE:  
PUBLIC WORKS FACILITIES

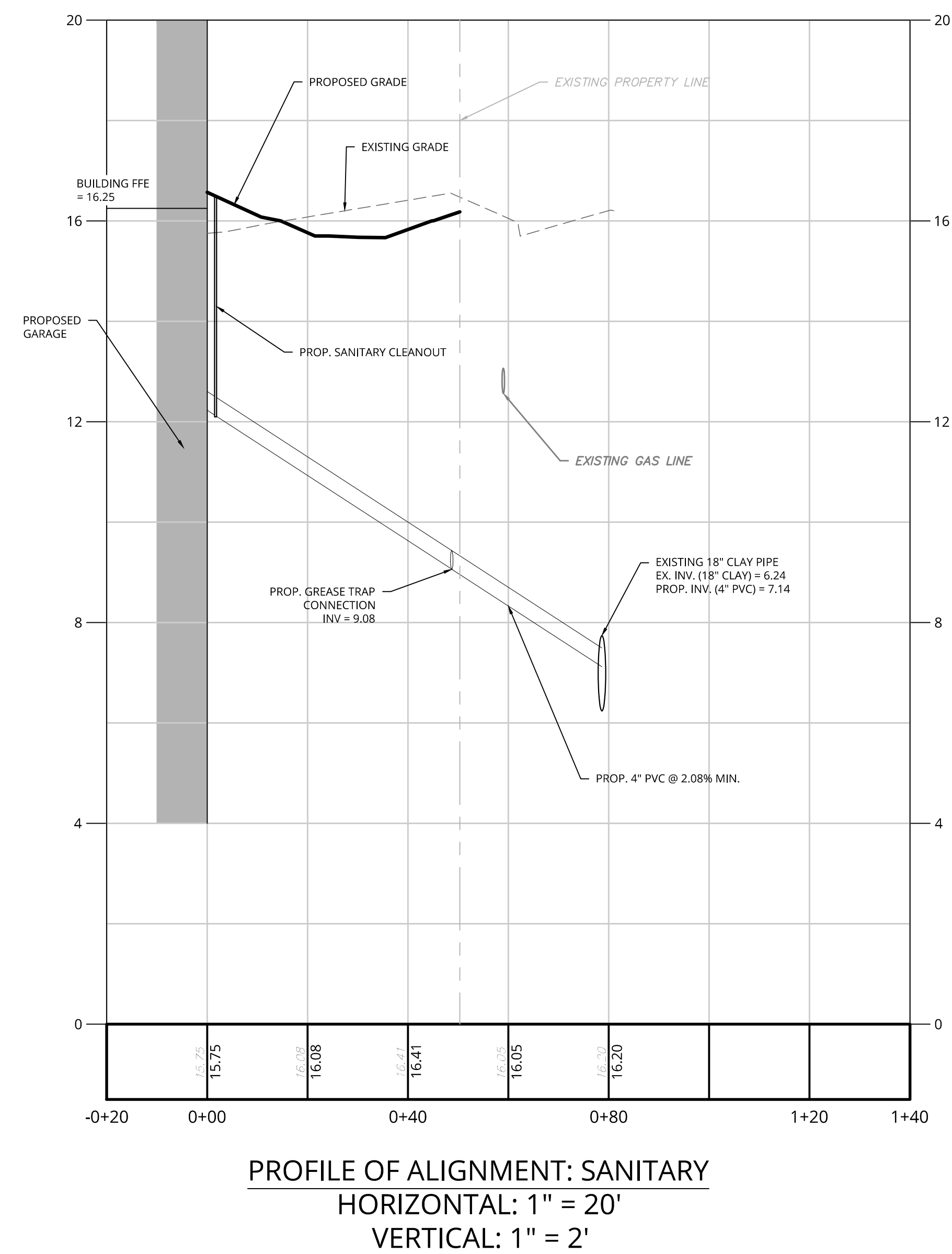
**LOCATION:**  
2ND ST. & PENNELL ST.  
CITY OF CHESTER, PA 19013



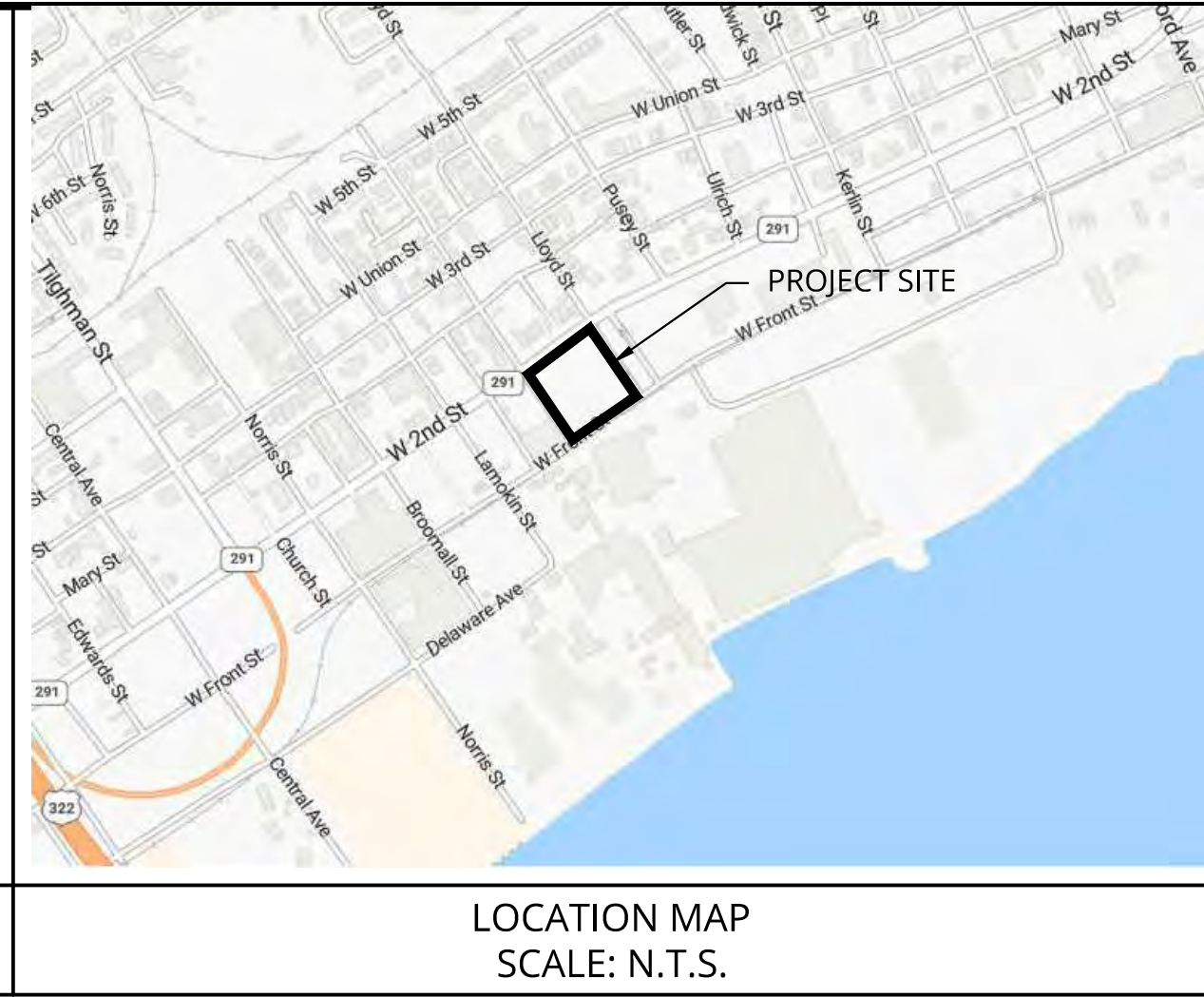
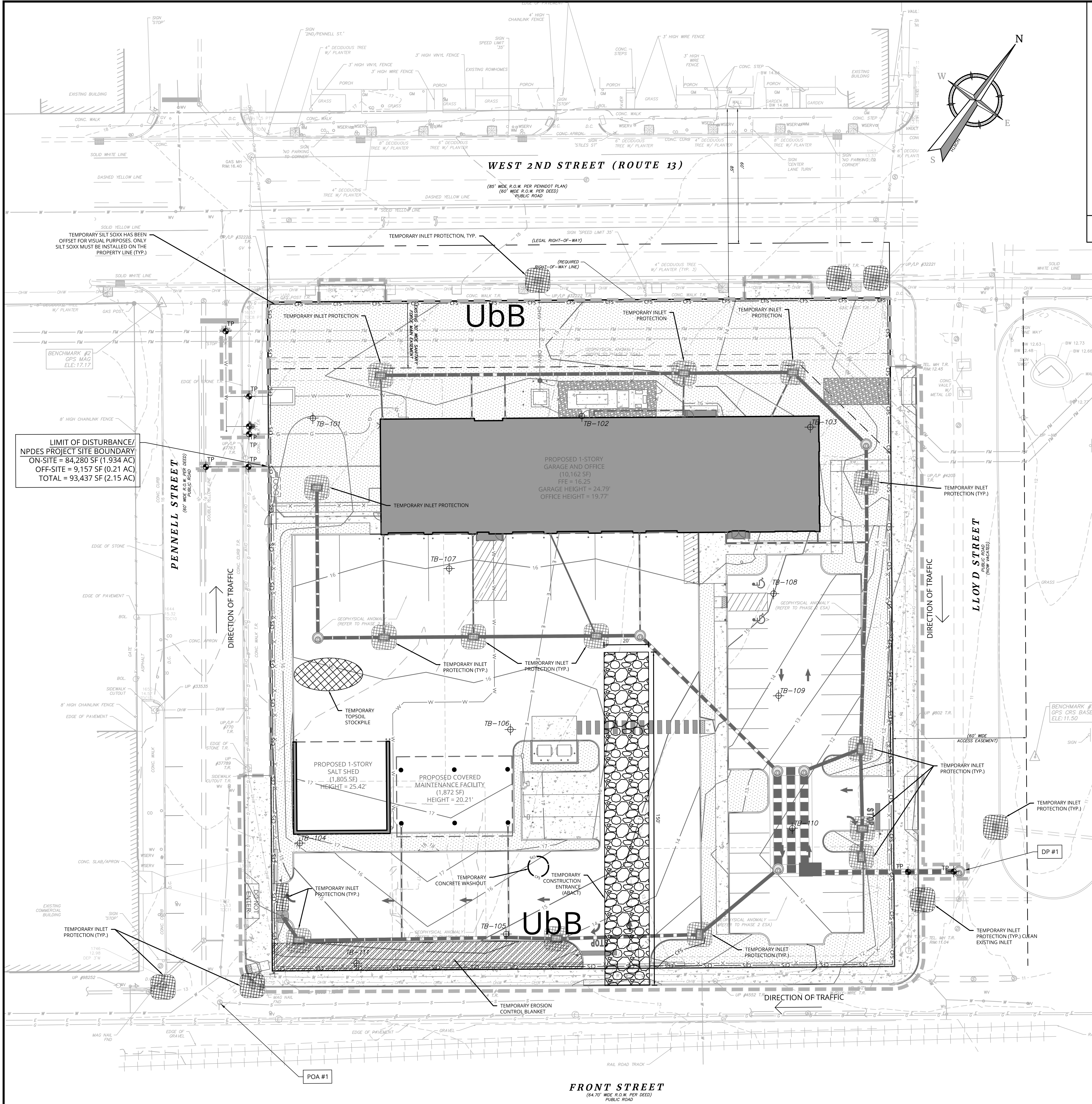
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10/11/2024	LPD	GEB
PROJECT NUMBER:	DRAWING NAME:	
COC00004	C-PROF	

## PROFILES

TEST NUMBER: 5.2







- CONSTRUCTION SEQUENCE NOTES:**
- ALL WORK IS TO OCCUR WITHIN THE LIMIT OF DISTURBANCE LINES AS INDICATED ON THE PLAN. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
  - CONSTRUCT ALL CHANNELS AND OTHER DRAINAGE APPURTENANCES FROM DOWNSTREAM TO UPSTREAM UNLESS OTHERWISE NOTED.
  - LIMIT TREE REMOVAL TO ONLY WHAT IS REQUIRED FOR CONSTRUCTION.
  - UPON REACHING FINAL GRADE, AREAS TO BE STABILIZED BY VEGETATION MUST NOT EXCEED 15,000 SQUARE FEET WITHOUT BEING STABILIZED.
  - THE SITE MUST BE IMMEDIATELY SEEDED, MULCHED, OR OTHERWISE PROTECTED FROM ACCELERATED EROSION AND SEDIMENTATION WHEN A TEMPORARY CESSATION OF EARTH DISTURBANCE ACTIVITIES OCCURS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE WHICH WILL BE REACTIVATED WITHIN ONE YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN ONE YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
  - STABILIZE SLOPES, CHANNELS, DITCHES, AND OTHER DISTURBED AREAS AS THEY REACH FINAL GRADE. ROUND CUT AND FILL SLOPES SUCH THAT RUNOFF IS DIRECTED AWAY FROM THE INTERSECTION OF THE CONSTRUCTED SLOPE AND THE EXISTING GRADE. STABILIZE FILL SLOPES IN 1'S TO 25-FOOT VERTICAL INCREMENTS AND INSTALL SLOPE PIPES AS NECESSARY TO PREVENT RUNOFF FROM UPSTREAM AREAS FROM SHEET FLOWING DOWN NEWLY CONSTRUCTED SLOPES.
  - CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING, AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPs SPECIFIED BY THE CONSTRUCTION SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.
  - UPON THE INSTALLATION OR STABILIZATION OF ALL PERIMETER SEDIMENT CONTROL BMPs AND AT LEAST 3 DAYS PRIOR TO PROCEEDING WITH THE BULK EARTH DISTURBANCE ACTIVITIES, THE PERMITTEE OR CO-PERMITTEE SHALL PROVIDE NOTIFICATION TO THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT.
  - WITHIN 30 DAYS AFTER THE COMPLETION OF EARTH DISTURBANCE ACTIVITIES AUTHORIZED BY THIS PERMIT, INCLUDING THE PERMANENT STABILIZATION OF THE SITE AND PROPER INSTALLATION OF PCSM BMPs IN ACCORDANCE WITH THE APPROVED PCSM PLAN, OR UPON SUBMISSION OF THE NOT IF SOONER, THE PERMITTEE SHALL FILE WITH THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT A STATEMENT SIGNED BY A LICENSED PROFESSIONAL AND BY THE PERMITTEE CERTIFYING THAT WORK HAS BEEN PERFORMED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THIS PERMIT AND THE APPROVED E&S AND PCSM PLANS. COMPLETION CERTIFICATES ARE NEEDED TO ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE PERMIT AND THE APPROVED E&S AND PCSM PLANS.
  - UPON TEMPORARY CESSATION OF AN EARTH DISTURBANCE OR ANY STAGE OR PHASE OF AN ACTIVITY WHERE A CESSATION OF EARTH DISTURBANCE ACTIVITY OCCURS, THE SITE SHALL BE IMMEDIATELY SEEDED, MULCHED, OR AS OTHERWISE NOTED PROTECTED FROM ACCELERATED EROSION AND SEDIMENTATION PENDING FUTURE EARTH DISTURBANCE ACTIVITIES TO COMPLY WITH THE ABACT REQUIREMENTS.
- CONSTRUCTION SEQUENCE:**
- ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. DEVIATION FROM THIS SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION.
- \*AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, THE PCSM PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE FROM THE LOCAL COUNTY CONSERVATION DISTRICT TO AN ON-SITE PRE-CONSTRUCTION MEETING.
  - ALL EXISTING UTILITIES SHOWN ON THE PLAN ARE SHOWN AT APPROXIMATE LOCATIONS. THE ENGINEER DOES NOT GUARANTEE ALL EXISTING UTILITIES ON SITE ARE SHOWN ON THE PLAN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE OF ALL UTILITIES AND TO CALL THE PENNSYLVANIA ONE CALL SYSTEM (1-800-242-1776) AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES OR EXPANDING INTO A PREVIOUSLY UNMARKED AREA.
  - MARK LIMIT OF DISTURBANCE.
  - INSTALL THE CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT STATION ALONG FRONT STREET AS SHOWN ON THE PLANS. CLEAR AND GRUB AS NEEDED FOR THE INSTALLATION OF THE ROCK CONSTRUCTION ENTRANCES.
  - INSTALL COMPOST FILTER SOCKS AND INLET PROTECTION ON EXISTING INLETS AS INDICATED IN STAGE 1 OF CONSTRUCTION. COMPOST FILTER SOCKS SHALL BE INSTALLED PARALLEL TO EXISTING CONTOURS OR CONSTRUCTED LEVEL ALIGNMENTS. CLEAR AND GRUB AS NEEDED FOR THE INSTALLATION OF THE COMPOST FILTER SOCKS. NOTE: IF ADDITIONAL COMPOST FILTER SOCKS ARE REQUIRED, THEY SHALL BE INSTALLED DOWNGRADE OF ANY DISTURBANCE AREAS AS NEEDED. CONTACT THE DELAWARE COUNTY CONSERVATION DISTRICT TO REVIEW ANY REVISIONS. ALL EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSTALLED IN ACCORDANCE WITH THEIR RESPECTIVE DETAIL AND IN WORKING ORDER PRIOR TO DISTURBING AN AREA.
  - ESTABLISH THE TOPSOIL STOCKPILE LOCATIONS AND PLACE DOWNLOPE COMPOST FILTER SOCK. ESTABLISH THE STAGING AREA LOCATION, AS SHOWN ON THE PLANS.
  - REMOVE ALL ITEMS LISTED AS TO BE REMOVED. THE EXISTING STRUCTURES, FOUNDATIONS, AND PAVEMENT, IF FEASIBLE, ARE TO BE DEMOLISHED ONLY TO THEIR FOUNDATIONS AND BACKFILLED AS NECESSARY.
  - \*BEGIN BULK EARTHWORK ACTIVITIES BY CLEARING THE REMAINING AREAS WITHIN THE LIMITS OF DISTURBANCE AND EXCAVATE AREA FOR THE UNDERGROUND BASIN. EXCAVATE 2' OF MATERIAL IN ALL PROPOSED LANDSCAPE AREAS AND UTILIZE AS ON-SITE FILL WHERE APPLICABLE. ANY SOIL TAKEN OFF-SITE MUST BE TESTED AND DOCUMENTED FOR ENVIRONMENTAL PURPOSES.
  - INSTALL THE DOGHOUSE STORM MANHOLE LOCATED IN LLOYD ST., THE BASIN OUTFALL CONVEYANCE PIPE AND THE BASIN OUTLET STRUCTURE.
  - \*INSTALL GEOTEXTILE, PVC LINER, MANHOLES AND PIPES ASSOCIATED WITH UNDERGROUND BASIN 1 AND DIRECT RUNOFF INTO THE PROPOSED STORM CONVEYANCE SYSTEM. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY. ALL OPEN TRENCHES MUST BE PROTECTED. WATER, WHICH ACCUMULATES IN THE OPEN TRENCH, WILL BE COMPLETELY REMOVED BY FILTER BAG PUMPING, BEFORE PIPE PLACEMENT AND/OR BACKFILLING BEGINS.
  - \*ROUGH GRADE THE BUILDING PADS AND BEGIN INSTALLATION OF THE BUILDINGS FOUNDATIONS, UTILITIES AND BASE AGGREGATE FOR THE DRIVEWAYS, AND PARKING LOTS AS EARTHWORK ALLOWS, UTILIZING THE 2' OF EXCAVATED MATERIAL FROM THE LANDSCAPE AREAS. IMMEDIATELY STABILIZE STEEP SLOPES WITH EROSION CONTROL MATTING. DO NOT PLACE EROSION CONTROL MATTING ON OR UNDER COMPOST FILTER SOCKS. ADJUST COMPOST FILTER SOCKS AS NEEDED TO FIT PROPOSED IMPROVEMENTS. AS CONSTRUCTION REQUIRES, ADD AND ADJUST COMPOST FILTER SOCKS.
  - INSTALL THE PROPOSED STORM CONVEYANCE SYSTEM, WORKING UPSLOPE. ADJUST CONSTRUCTION ENTRANCE AS NEEDED. INSTALL INLET PROTECTION ON ANY PROPOSED INLETS AS SHOWN ON THE PLANS. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY. ALL OPEN TRENCHES MUST BE PROTECTED. WATER, WHICH ACCUMULATES IN THE OPEN TRENCH, WILL BE COMPLETELY REMOVED BY FILTER BAG PUMPING, BEFORE PIPE PLACEMENT AND/OR BACKFILLING BEGINS.
  - CONTINUE CONSTRUCTION OF THE BUILDINGS, INCLUDING THE INSTALLATION OF UTILITY SERVICE CONNECTIONS FOR ELECTRIC TO THE CONNECTION POINT IN 2ND STREET, AS SHOWN ON THE PLANS. INSTALL CONNECTIONS FOR WATER, SANITARY AND GAS. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE OR CONDUIT PLACEMENT AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY. ALL OPEN TRENCHES MUST BE PROTECTED. WATER, WHICH ACCUMULATES IN THE OPEN TRENCH, WILL BE COMPLETELY REMOVED BY FILTER BAG PUMPING, BEFORE PIPE PLACEMENT AND/OR BACKFILLING BEGINS.
  - INSTALL SANITARY LINE TO OIL SEPARATOR FROM THE PROPOSED BUILDING CONNECTION TO THE CONNECTION IN PENNELL STREET. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY. ALL OPEN TRENCHES MUST BE PROTECTED. WATER, WHICH ACCUMULATES IN THE OPEN TRENCH, WILL BE COMPLETELY REMOVED BY FILTER BAG PUMPING, BEFORE PIPE PLACEMENT AND/OR BACKFILLING BEGINS.
  - INSTALL THE PROPOSED ROOF DRAIN SYSTEM WORKING FROM MANHOLE S-18 AND S-21 UPSLOPE TO THE PROPOSED BUILDING ROOF DRAIN CLEANOUT. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY. ALL OPEN TRENCHES MUST BE PROTECTED. WATER, WHICH ACCUMULATES IN THE OPEN TRENCH, WILL BE COMPLETELY REMOVED BY FILTER BAG PUMPING, BEFORE PIPE PLACEMENT AND/OR BACKFILLING BEGINS.
  - CONTINUE INSTALLATION OF THE PAVEMENT BASE COURSE FOR THE DRIVEWAYS, AND PARKING LOTS IN ACCORDANCE WITH THE PLAN DETAILS, DIRECTING STORMWATER TO THE PROPOSED INLETS. INSTALL CURBING. ADJUST COMPOST FILTER SOCKS AS NEEDED TO FIT PROPOSED IMPROVEMENTS.
  - FINALIZE GRADING IN ALL LAWN AREAS BY PLACING GEOTEXTILE, 18" OF IMPORTED CLEAN FILL, AND 6" OF TOPSOIL WITHIN ALL PROPOSED LANDSCAPE AREAS. IMMEDIATELY STABILIZE AREAS AFTER GRADING COMPLETION. GRADED AREAS SHOULD BE SCARIFIED OR OTHERWISE LOOSENEED TO A DEPTH OF 3" TO 5" PRIOR TO TOPSOIL PLACEMENT TO PERMIT BONDING. PREPARE AND SEED LANDSCAPE RESTORATION AREAS.
  - INSTALL PROPOSED SIDEWALKS, CURBS, AND ADA RAMPS.
  - INSTALL PROPOSED STREET SIGNS, LIGHT POLES/FITURES, AND PROPOSED TREES.
  - COMPLETE PAVING IN ACCORDANCE WITH THE PLAN DETAILS. ONCE PAVING IS COMPLETED, ADD PAVEMENT MARKINGS.
  - \*ONCE THE ABOVE IMPROVEMENTS ARE COMPLETED AND THE SITE IS STABILIZED, CONTACT THE DELAWARE COUNTY CONSERVATION DISTRICT FOR FINAL INSPECTION PRIOR TO CONVERSION OR REMOVAL OF PRIMARY E&S BMPs. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION CONTROLS MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION CONTROLS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, RE-GRADING, RESEEDING, RE-MULCHING, AND RE-NETTING, MUST BE PERFORMED IMMEDIATELY. CONTACT THE DCDD PRIOR TO REMOVING TEMPORARY E&S BMPs.
  - UPON ACHIEVING A MINIMUM 70% PERENNIAL VEGETATIVE COVER OVER THE ENTIRE OPENED/TEMPORARILY DISTURBED AREA, ALL THE REMAINING TEMPORARY E&S CONTROLS SHOULD BE REMOVED, INCLUDING COMPOST FILTER SOCKS, ROCK CONSTRUCTION ENTRANCES, AND INLET PROTECTION. ALL AREAS DISTURBED DURING THE REMOVAL PROCESS SHOULD BE IMMEDIATELY STABILIZED WITH PERMANENT SEEDING, AS INDICATED ON THE PLANS.
  - THE PERMITTEE SHALL SUBMIT A NOTICE OF TERMINATION TO THE DCDD ONCE SITE WORK IS COMPLETED.
  - \* CRITICAL STAGES OF CONSTRUCTION NOTED ABOVE MUST BE COMPLETED WHILE A LICENSED ENGINEER IN THE STATE OF PA IS PRESENT ON SITE.

CONSTRUCTION FENCE TO BE INSTALLED AT THE DISCRETION OF THE CONSTRUCTION MANAGER. THE CONSTRUCTION FENCE MUST BE INSTALLED TO MAINTAIN SAFE VEHICULAR AND PEDESTRIAN TRAFFIC PATTERNS AT ALL TIMES THROUGHOUT CONSTRUCTION.

ALL EXISTING FEATURES WITHIN LIMIT OF DISTURBANCE TO BE REMOVED UNLESS OTHERWISE NOTED. STREET LIGHTS, AND UTILITY MAINS SHALL REMAIN INCLUDING, BUT NOT LIMITED TO STORM SEWERS, SANITARY SEWERS, ELECTRIC, TELEPHONE, AND GAS, INCLUDING ASSOCIATED MANHOLES, INLETS, AND VALVES, ETC.

THE LIMIT OF DISTURBANCE LINE IS SHOWN THICK FOR GRAPHICAL PURPOSES ONLY. IT IS THE INTENT OF THE PROJECT SCOPE TO DISTURB WITHIN THE PROPERTY AND LIMITS SHOWN.

SILT SOXES GRAPHICALLY DEPICTED OFFSET FROM THE PROPERTY LINE FOR PLAN LEGIBILITY. SILT SOXES SHALL BE PLACED AT THE PROPERTY LINE/LIMIT OF DISTURBANCE LINE.

CONTRACTOR MUST INSTALL PIPE TRENCHING FOR THE LENGTH OF PIPE THAT CAN BE INSTALLED WITHIN ONE (1) WORKING DAY. DURING EXCAVATION, SPOILS MUST BE PLACED UPSLOPE OF TRENCH AND THE TRENCH AREA MUST BE BACKFILLED AND STABILIZED WITH SEED AND MULCH, AT THE END OF EACH WORK DAY.

THIS PLAN IS INTENDED FOR SOIL EROSION AND SEDIMENTATION POLLUTION CONTROL ONLY.

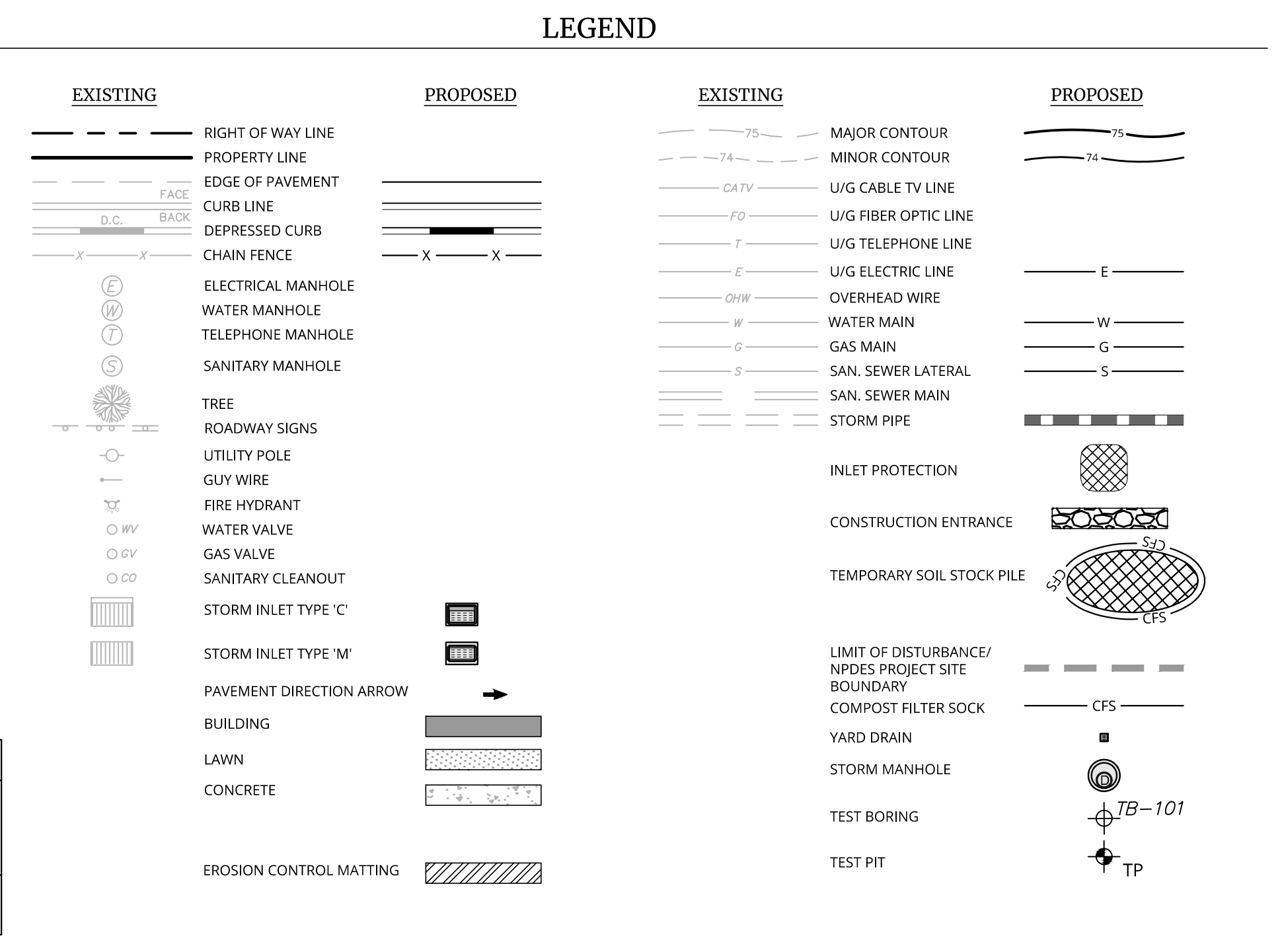
TEST BORING TABLE	
BORING ID	BORING DEPTH
TB-101	34.50
TB-102	27.30
TB-103	15.50
TB-104	30
TB-105	48.30
TB-106	33.50
TB-107	15
TB-108	13.80
TB-109	16
TB-110	12.70
TB-111	16

\* FROM REPORT OF GEOTECHNICAL EXPLORATION DATED 11/14/24 BY COLLIER ENGINEERING & DESIGN

NOTE:  
CONTRACTOR TO REMOVE ALL GRITS AND DEBRIS FROM INLETS AND MANHOLES WITH SUMPS

SCALE: 1" = 20'

SOILS SCHEDULE				
MAP SYMBOL	SOIL	HYDROLOGIC SOIL GROUP	DEPTH TO BEDROCK (FT. BELOW GRADE)	DEPTH TO SEASONAL HIGH WATER TABLE (FT. BELOW GRADE)
Ubb	URBAN LAND, GRAVELLY SAND SUBSTRATUM, 0 TO 8 PERCENT SLOPES	B		
			FLOOD HAZARD POTENTIAL	HYDRIC (H)/HYDRIC COMPONENT (HC)
			NONE	



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**PRELIMINARY/FINAL LAND DEVELOPMENT PLAN**

FOR  
**CITY OF CHESTER**

**PROJECT TYPE:**  
PUBLIC WORKS FACILITIES

**LOCATION:**  
2ND ST. & PENNELL ST.  
CITY OF CHESTER, PA 19013

**Colliers**  
Engineering & Design

PHILADELPHIA  
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Philadelphia, PA 19102  
Phone: 215.961.9021  
COLLIERS ENGINEERING & DESIGN, INC. IS AN EQUAL OPPORTUNITY EMPLOYER

SCALE: AS SHOWN  
DATE: 10/11/2024  
PROJECT NUMBER: CDD0004  
DRAWN BY: LPD  
CHECKED BY: GEB  
DRAWING NAME: C-SESC

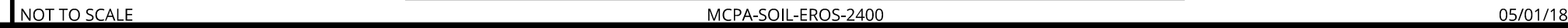
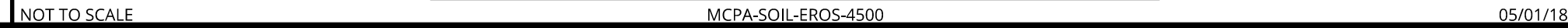
SHEET TITLE:  
**SOIL EROSION & SEDIMENT CONTROL PLAN**

SHEET NUMBER:  
6.0

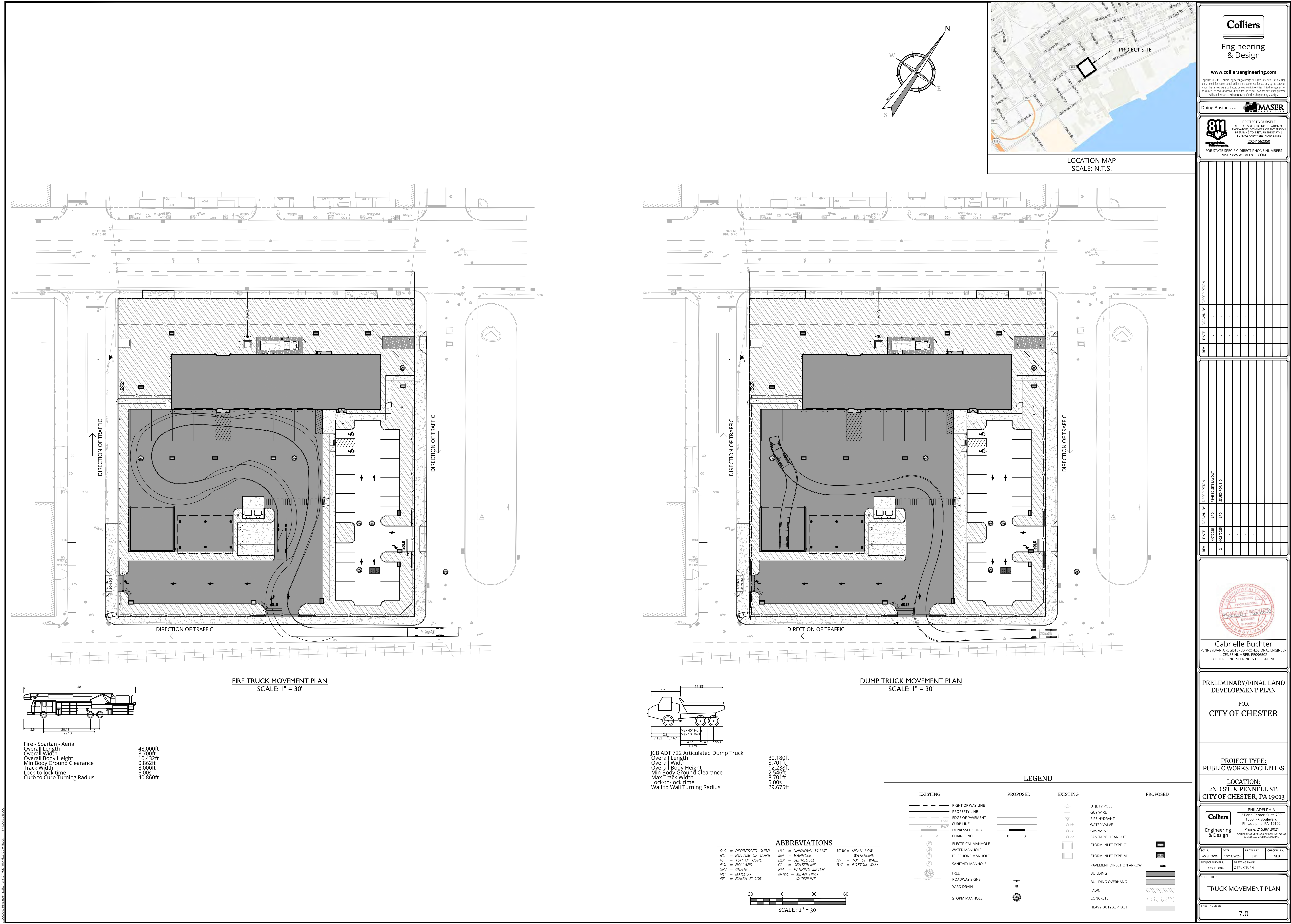












Fire - Spartan - Aerial  
Overall Length 48,000ft  
Overall Width 8,700ft  
Overall Height 10,432ft  
Min Body Ground Clearance 0.862ft  
Track Width 8,000ft  
Lock-to-lock time 6.00s  
Curb to Curb Turning Radius 40,860ft

FIRE TRUCK MOVEMENT PLAN  
SCALE: 1" = 30'

JCB ADT 722 Articulated Dump Truck  
Overall Length 30,180ft  
Overall Width 8,701ft  
Overall Body Height 12,238ft  
Min Body Ground Clearance 2,546ft  
Max Track Width 8,701ft  
Lock-to-lock time 5,00s  
Wall to Wall Turning Radius 29,675ft

DUMP TRUCK MOVEMENT PLAN  
SCALE: 1" = 30'

ABBREVIATIONS  
D.C. = DEPRESSED CURB  
BC = BOTTOM OF CURB  
TC = TOP OF CURB  
B.O. = BOLLARD  
GR = GRATE  
MB = MAILBOX  
FF = FINISH FLOOR  
L.V. = UNKNOWN VALVE  
MH = MANHOLE  
CL = CENTERLINE  
PM = PARKING METER  
M.H.W. = MEAN HIGH WATERLINE  
M.L.W. = MEAN LOW WATERLINE  
TW = TOP OF WALL  
BW = BOTTOM WALL

LEGEND

- | EXISTING           | PROPOSED           | EXISTING                 | PROPOSED                 |
|--------------------|--------------------|--------------------------|--------------------------|
| RIGHT OF WAY LINE  | RIGHT OF WAY LINE  | UTILITY POLE             | UTILITY POLE             |
| PROPERTY LINE      | PROPERTY LINE      | GUY WIRE                 | GUY WIRE                 |
| EDGE OF PAVEMENT   | EDGE OF PAVEMENT   | FIRE HYDRANT             | FIRE HYDRANT             |
| CURB LINE          | CURB LINE          | WATER VALVE              | WATER VALVE              |
| DEPRESSED CURB     | DEPRESSED CURB     | GAS VALVE                | GAS VALVE                |
| CHAIN FENCE        | CHAIN FENCE        | SANITARY CLEANOUT        | SANITARY CLEANOUT        |
| ELECTRICAL MANHOLE | ELECTRICAL MANHOLE | STORM INLET TYPE 'C'     | STORM INLET TYPE 'C'     |
| WATER MANHOLE      | WATER MANHOLE      | STORM INLET TYPE 'M'     | STORM INLET TYPE 'M'     |
| TELEPHONE MANHOLE  | TELEPHONE MANHOLE  | PAVEMENT DIRECTION ARROW | PAVEMENT DIRECTION ARROW |
| SANITARY MANHOLE   | SANITARY MANHOLE   | BUILDING                 | BUILDING                 |
| TREE               | TREE               | BUILDING OVERHANG        | BUILDING OVERHANG        |
| ROADWAY SIGNS      | ROADWAY SIGNS      | LAWN                     | LAWN                     |
| YARD DRAIN         | YARD DRAIN         | CONCRETE                 | CONCRETE                 |
| STORM MANHOLE      | STORM MANHOLE      | HEAVY DUTY ASPHALT       | HEAVY DUTY ASPHALT       |

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REV	DATE	DESCRIPTION	BY	DATE	DESCRIPTION
1	4/27/2025	REVISED SITE LAYOUT	LPD		
2	6/26/2025	CHECKED FOR BIDD	LPD		

GABRIELLE BUCHTER

PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER

LICENSE NUMBER: PE096502

COLLIERS ENGINEERING & DESIGN, INC.

PRELIMINARY/FINAL LAND DEVELOPMENT PLAN

FOR

CITY OF CHESTER

PROJECT TYPE:

PUBLIC WORKS FACILITIES

LOCATION:

2ND ST. & PENNELL ST.

CITY OF CHESTER, PA 19013

Colliers

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COLLIERS ENGINEERING & DESIGN, INC. DOES BUSINESS AS MASER CONSULTING

SCALE:

AS SHOWN

DATE:

10/11/2024

DRAWN BY:

LPD

CHECKED BY:

GB

PROJECT NUMBER:

COC00004

DRAWING NAME:

C-TRUCK-TURN

SHEET TITLE:

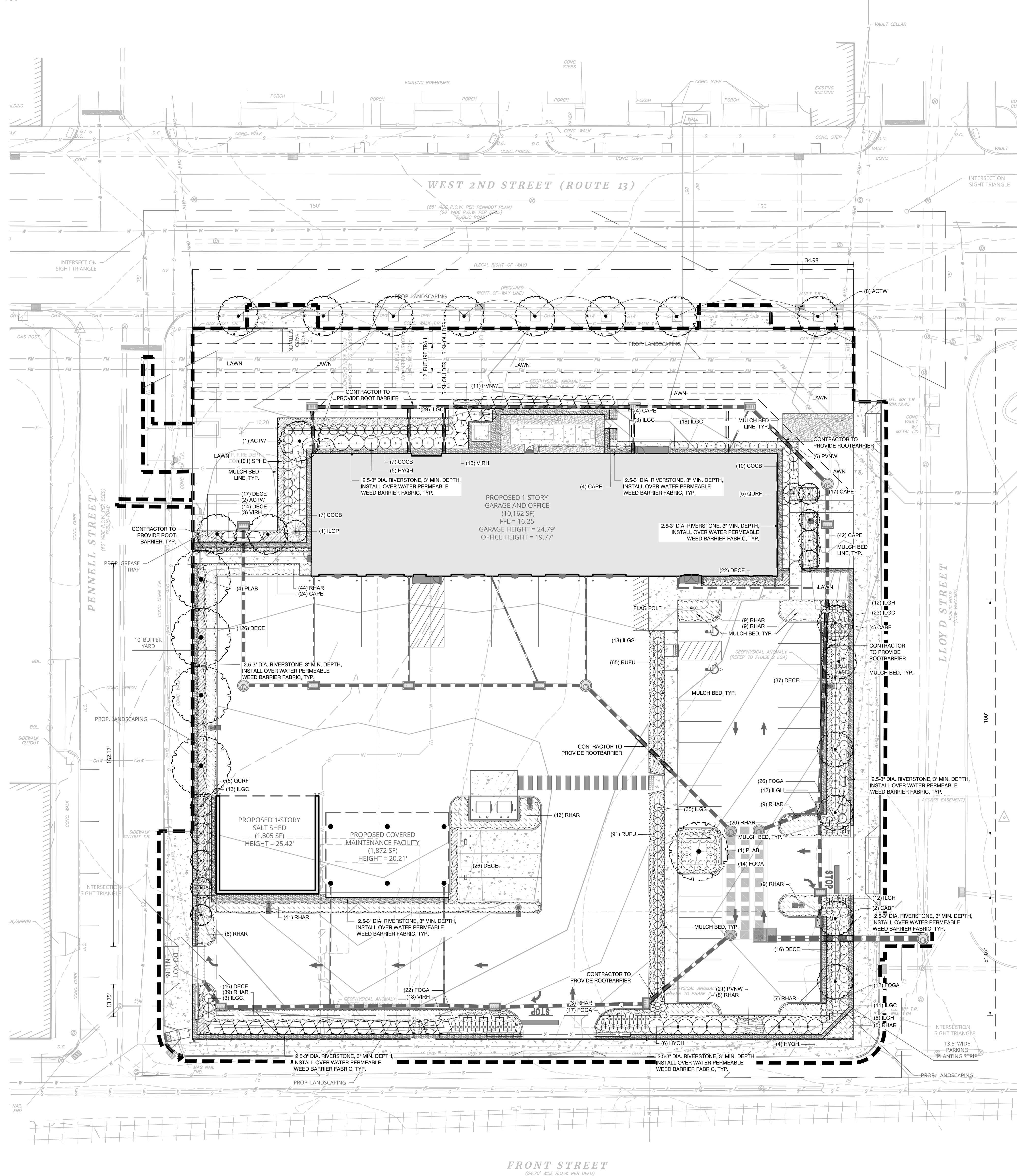
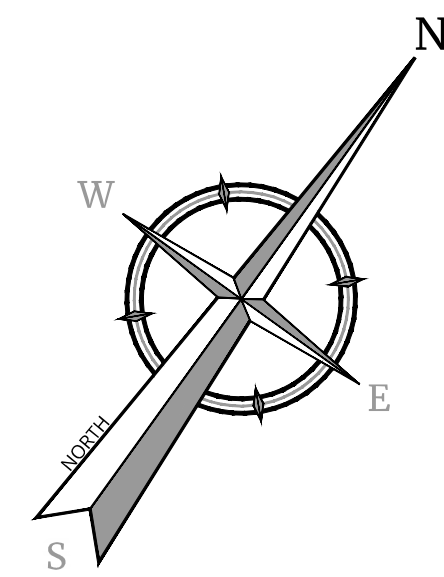
TRUCK MOVEMENT PLAN

SHEET NUMBER:

7.0

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.





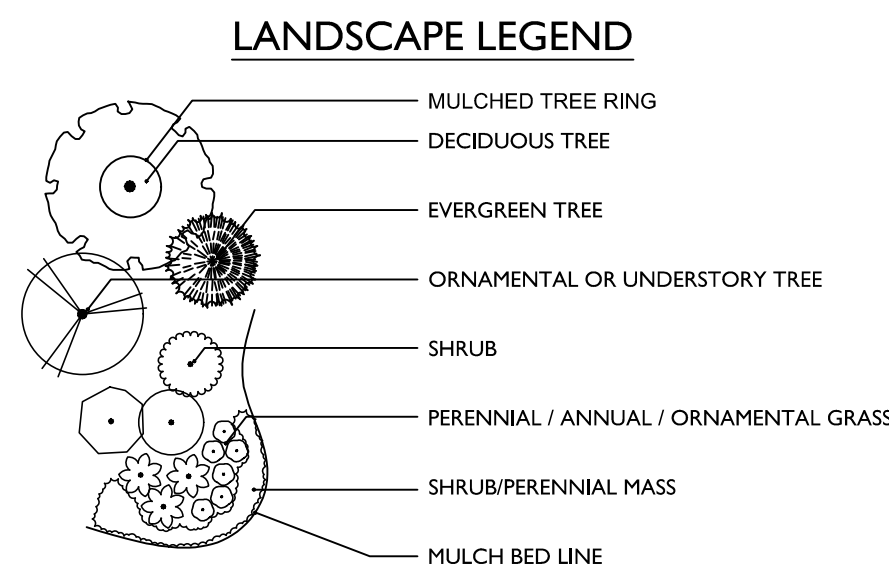
PLANT SCHEDULE										
CODE	QTY	BOTANICAL NAME	COMMON NAME	MAT. HT.	MAT. SPRD.	INSTLT. HT.	MIN. CAL.	COND.	REMARKS	
DECIDUOUS TREES										
ACTV	11	ACER TRUNCATUM 'WARRENRED'	PACIFIC SUNSET MAPLE	25' - 30'	20' - 25'	14' - 16'	3" - 3.5" CAL.	B&B	STRAIGHT, SYMMETRICAL, FULL CROWN	
CASE	1	CARPINUS BETULUS 'FASTIGIATA'	COULMARN HORNBEEAM	30' - 40'	20' - 30'	14' - 16'	3" - 3.5" CAL.	B&B	STRAIGHT, SYMMETRICAL, FULL, LOW BRANCHED	
PLAB	5	PLATANUS X ACERIFOLIA 'BLOODGOOD'	BLOODGOOD LONDON PLANE TREE	75' - 100'	60' - 75'	14' - 16'	3" - 3.5" CAL.	B&B	STRAIGHT, SYMMETRICAL, FULL CROWN	
QURF	10	QUERCUS ROBUR F. FASTIGIATA	PYRAMIDAL ENGLISH OAK	50 - 60'	10' - 20'	14' - 16'	3" - 3.5" CAL.	B&B	STRAIGHT, SYMMETRICAL, FULL CROWN, LOW BRANCHED	
EVERGREEN TREES										
ILOP	1	ILEX OPACA	AMERICAN HOLLY	15' - 30'	10' - 20'	10' - 12'	N/A	B&B	STRAIGHT, SYMMETRICAL, DENSE, LOW BRANCHED	
CODE	QTY	BOTANICAL NAME	COMMON NAME	MAT. HT.	MAT. SPRD.	INSTLT. HT.	INSTLT. SPRD.	COND.	REMARKS	
DECIDUOUS SHRUBS										
FOGA	24	CORDUS SERICEA 'BAILEY'S REDTWIN'	BAILEY'S REDTWIN DOGWOOD	8' - 10'	24' - 30'	24' - 30'	#5 CAN	WELL FURNISHED, DENSE, SPACE EVENLY		
FOGA	91	FOTHERGILLIA GARDENII	DWARF FOTHERGILLIA	4' - 3'	18" - 24"	18" - 24"	#3 CAN	WELL FURNISHED, LOW BRANCHED, SPACE EVENLY		
HYQH	15	HYDRANGEA QUERCIFOLIA	OAKLEAF HYDRANGEA	8' - 10'	18" - 24"	18" - 24"	#5 CAN	(4) GAMES MIN. DENSE, WELL FURNISHED		
VIKH	36	VIBURNUM X RHYTIDOPHYLLUM 'ALLEGHANY'	LEATHERLEAF VIBURNUM	10' - 10'	4' - 5'	24" - 30"	B&B	WELL FURNISHED, SYMMETRICAL, LOW BRANCHED		
EVERGREEN SHRUBS										
ILGH	44	ILEX GLABRA 'CHAMZIN'	NORDIC HOLLY	4' - 4'	24" - 30"	18" - 24"	#5 CAN	WELL FURNISHED, DENSE, LOW BRANCHED, SPACE EVENLY		
ILGC	100	ILEX GLABRA 'COMPACTA'	COMPACT INBERRY	4' - 4'	24" - 30"	24" - 30"	B&B	WELL FURNISHED, DENSE, LOW BRANCHED, SPACE EVENLY		
ILGS	53	ILEX GLABRA 'SHAMROCK'	SHAMROCK INBERRY	4' - 4'	18" - 24"	18" - 24"	#5 CAN	SYMMETRICAL, DENSE, LOW BRANCHED		
CODE	QTY	BOTANICAL NAME	COMMON NAME	MAT. HT.	MAT. SPRD.	INSTLT. HT.	INSTLT. SPRD.	COND.	REMARKS	
SHRUB AREAS										
RHAR	225	RHUS AROMATICA 'GRO-LOW'	GRO-LOW FRAGRANT SUMAC	2' - 2'	8'	12' - 15'	18" - 24"	#5 CAN	DENSE, WELL FURNISHED, SYMMETRICAL, LOW BRANCHED	
CODE	QTY	BOTANICAL NAME	COMMON NAME	MAT. HT.	MAT. SPRD.	INSTLT. HT.	INSTLT. SPRD.	COND.	REMARKS	
GROUND COVERS										
CAPE	91	CAREX PENNSYLVANICA	PENNSYLVANIA SEDGE	9" - 1.5'	9" - 2'	6" - 9"	24" O.C.	#1 CAN	HEAVY, CLUMP, WELL ROOTED	
RUFU	156	RUBUS KILGUSII 'GOLDSTURM'	GOLDSTURM BLACK-EYED SUSAN	1.5' - 1.5'	2'	10" - 12"	24" O.C.	#1 CAN	HEAVY, CLUMP, WELL ROOTED	
GRASSES										
DECE	270	DESCHAMPSIA CESPITOSA	TUFTED HAIR GRASS	1.5' - 1.5'	2.5'	12" - 18"	24" O.C.	#1 CAN	HEAVY, CLUMP, WELL ROOTED	
SPN4	38	PANDUA VIRGATUM 'NORTHWIND'	NORTHWIND SWITCH GRASS	2' - 2'	2'	12" - 18"	24" O.C.	#1 CAN	HEAVY, CLUMP, WELL ROOTED	
SPHE	101	SPOBOROLUS HETEROLEPIS	PRAIRIE DOGSSEED	2' - 2'	2'	12" - 15"	24" O.C.	#1 CAN	HEAVY, CLUMP, WELL ROOTED	

# LANDSCAPE COMPLIANCE CHART

ZONE	MIN. LIGHT INDUSTRIAL/COMMERCIAL		
ARTICLE 13B.118			
A BUFFER YARD ALSO REQUIRED TO BE PROVIDED BY THE FOLLOWING IF THEY ARE ADJACENT AND VISIBLE FROM A PUBLIC STREET			
<p>(1) ADJACENT LOT LINES AND STREET ROW OF ANY NEWLY DEVELOPED OR EXPANDED OUTDOOR INDUSTRIAL STORAGE OR LOADING AREA, OR</p> <p>(2) ADJACENT LOT LINES AND STREET ROW OF ANY NEWLY DEVELOPED OR EXPANDED AREA ROUTINELY USED FOR THE OVERSEER PARKING OF 4 OR MORE TRUCKS, TRAILER TRUCKS OR TRAILERS OF TRUCKS OR TRAILER TRUCKS</p>			
ARTICLE 13B.119			
EACH PLANTING SCENARIO SHALL MEET THE FOLLOWING REQUIREMENTS:			
AN AVERAGE (1) DECIDUOUS SHADY CANOPY WITH A HEAD-TRUNK DIAMETER OF 7" MEASURED 4' ABOVE THE GROUND OR AN AVERAGE (2) EVERGREEN SHADY CANOPY WITH A HEAD-TRUNK DIAMETER OF 7" MEASURED 4' ABOVE THE GROUND	REQUIRED	PROVIDED	DEFICIENT
(1) 57 (2) 0	1	2	0
1.023.03.17 (1) OF 10 BUFFER YARDS 1.5' X 2.4' OR 10' X 10' TREES	REQUIRED	PROVIDED	DEFICIENT
1.023.03.17 (2) OF 10 BUFFER YARDS 1.5' X 2.4' OR 10' X 10' TREES	REQUIRED	PROVIDED	DEFICIENT
1	2	2	0
ARTICLE 13B.120			
BY PARKING LOT TREES			
FOR EACH 10 NEW STREET PARKING SPACES, ONE NEW DECIDUOUS TREE SHALL BE PLANTED THAT MEETS THE STREET TREE REQUIREMENTS OF SECTION 16B.00.0			
DECIDUOUS TREES REQUIRED	REQUIRED	PROVIDED	DEFICIENT
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BY PARKING LOT TREES			
FOR EACH 10 NEW STREET PARKING SPACES, ONE NEW DECIDUOUS TREE SHALL BE PLANTED THAT MEETS THE STREET TREE REQUIREMENTS OF SECTION 16B.00.0			
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- ### GENERAL NOTES
1. THIS SHEET IS TO BE USED FOR LANDSCAPE PURPOSES ONLY.
  2. REFER TO CIVIL SITE PLANS FOR ADDITIONAL GENERAL NOTES

1. REFER TO SHEET #1 FOR GENERAL PLANTING NOTES AND LANDSCAPE DETAILS.
2. REFER TO THIS FOR PLANT SCHEDULES.
3. PLANT LOCATIONS INDICATED ON THE LANDSCAPE PLAN ARE APPROXIMATE; ACTUAL LOCATION OF PLANT MATERIAL IS SUBJECT TO SITE CONDITIONS.
4. THE LANDSCAPE PLAN SHALL TAKE PRECEDENCE OVER THE PLANT SCHEDULES IN THE EVENT OF A CONFLICT.
5. LAWN AREAS SHALL BE STABILIZED WITH SEED UNLESS OTHERWISE INDICATED ON THE PLAN. REFER TO THE LAWN SEE HIK NOTES ON THE LANDSCAPE DETAIL SHEET AND THE SOILWORK AND SEEDMENT CONTROL PLAN FOR APPROVED SEED MIXTURES.
6. SOILWORK SHALL BE A BLEND OF TURFGRASS SPECIES SUITABLE TO THE PROJECT LOCATION AND CLIMATE AVAILABLE.
7. ALL SHADE TREES PLANTED ADJACENT TO PEDESTRIAN WALKWAYS, WALKWAY ACCESSES, OR WITHIN SIGN TRIANGLE OR RIGHT-OF-WAY SHALL BE A MINIMUM OF 10 FEET TALL AND 1.5 INCHES DBH. ALL OTHER TREES SHALL BE TO 7.5" ABOVE GRADE. ALL SHRUBS WITHIN SIGN TRIANGLE OR RIGHT-OF-WAY SHALL BE 4 FEET TALL AND 1.5 INCHES DBH. ALL TREES AND SHRUBS ADJACENT TO CURB AND ARE TO BE APPROPRIATELY PRUNED.
8. COBALT BUCKLE TO SUPPLY AND INSTALL 12" DIA. ROOT BARRIER WHEN TREE SOIL COLLAR WITH 5' OF 5" DEEP GROUND UTILITY.



- NOTES:  
I. LANDSCAPE SYMBOLS ON THE PLAN VARY AND MAY  
DEVIATE FROM THE LANDSCAPE LEGEND SYMBOLS SHOWN ABOVE.

### HATCH & SEED MIX KEY

[illegible][illegible]

**Matthew Kirk Bradley**  
PENNSYLVANIA REGISTERED LANDSCAPE ARCHITECT  
LICENSE NUMBER: LAD03341  
COLLIERS ENGINEERING & DESIGN, INC.

PRELIMINARY/FINAL LAND  
DEVELOPMENT PLAN

FOR  
F CHESTER

PROJECT TYPE:  
PUBLIC WORKS FACILITIES

LOCATION:  
2ND ST. & PENNELL ST.  
CITY OF CHESTER, PA 19013

**Colliers**  
Engineering  
& Design

**PHILADELPHIA**  
2 Penn Center, Suite 700  
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Philadelphia, PA, 19102  
Phone: 215.861.9021

COLLIERS ENGINEERING & DESIGN, INC. DOING  
BUSINESS AS MASER CONSULTING

SHEET TITLE:

LANDSCAPE PLAN

## 8.0



## GENERAL PLANTING NOTES

### A. GENERAL

- THIS PLAN SHALL BE USED FOR LANDSCAPE PLANTING PURPOSES ONLY. EXAMINE ALL ENGINEERING DRAWINGS AND FIELD CONDITIONS FOR SPECIFIC LOCATIONS OF UTILITIES AND STRUCTURES. NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES OR LOCATION CONFLICTS PRIOR TO PLANTING INSTALLATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UTILITIES MARKINGS AND COMPLIANCE WITH ALL FEDERAL, STATE, OR LOCAL CODES, LAWS, ORDINANCES OR REGULATIONS GOVERNING UPON THIS WORK.
- OWNER OR HIS/HER REPRESENTATIVE SHALL BE NOTIFIED PRIOR TO BEGINNING PLANTING OPERATIONS.

### B. PLANT MATERIAL

#### 1. PLANT MATERIAL

- PLANT MATERIAL SHALL CONFORM WITH THE STANDARDS SET FORTH IN THE "ANSI Z60.1 (LATEST ADDITION) AMERICAN STANDARD FOR NURSERY STOCK" AS PUBLISHED BY AMERICAN HORTICULTURE IN REGARD TO QUALITY, SIZE OF PLANTING, SPREAD OF ROOTS, SIZE OF ROOTBALL, AND BRANCHING PATTERN AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.
- PLANTS SHALL BE TYPICAL OF THEIR SPECIES AND VARIETY, HAVE NORMAL GROWTH HABITS, WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VISCEROUS ROOT SYSTEMS, AND FREE FROM DEFECTS, INJURY, DISEASE, AND/OR INFESTATION, WITH ROOT BALLS INTACT.
- ALL PLANTS MUST BE HARDY UNDER CLIMATE CONDITIONS THAT EXIST AT THE PROJECT SITE AND GROWN AT NURSERY AT SAME HARDNESS ZONE AS THE PROJECT LOCATION.
- ALL PLANT MATERIAL SHALL BEAR THE SAME RELATION TO FINISHED GRADE AT THE NURSERY. THE PLANT MATERIAL SHALL BE PLANTED AT THE SAME LEVEL WHEN PLANTED.
- PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY TO THE SITE. IN THE EVENT THERE IS NOT POSSIBLE, THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO PROTECT THE PLANT MATERIAL FROM DAMAGE PRIOR TO INSTALLATION.
- THE LANDSCAPE ARCHITECT OR OWNER SHALL HAVE THE RIGHT, AT ANY STAGE OF THE OPERATION, TO REJECT ANY AND ALL PLANT MATERIAL WHICH IN THEIR OPINION DOES NOT MEET THE REQUIREMENTS OF THESE PLANS.
- PLANT QUALITIES: THE LANDSCAPE PLAN SHOULD TAKE PRECEDENCE OVER THE PLANT SCHEDULE IF ANY PLANT DISCREPANCIES OCCUR. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY PLANT QUALITY DISCREPANCIES PRIOR TO PLACING ORDERS.
- PLANT SIZE: THE CONTRACTOR SHALL FURNISH PLANT MATERIAL IN THE CALIPER, HEIGHT, SIZE OR SPREAD INDICATED IN THE PLANT SCHEDULE.
- SUBSTITUTIONS: NO PLANT SUBSTITUTIONS SHALL BE PERMITTED WITH REGARD TO SIZE, SPECIES, OR VARIETY WITHOUT WRITTEN PERMISSION OF THE MUNICIPALITY, LANDSCAPE ARCHITECT, OR OWNER. WRITTEN PROOF OF THE PLANT MATERIAL UNAVAILABILITY MUST BE DOCUMENTED BY THE CONTRACTOR.
- GUARANTEE: PLANT MATERIAL SHALL BE GUARANTEED FOR **ONE (1) YEAR** AFTER THE DATE OF FINAL ACCEPTANCE. ANY PLANT MATERIAL THAT IS DEAD, DYING, DEFOLIATING, AND/OR LOST MORE THAN 50% OF ITS NATURAL FORM WITHIN THAT PERIOD SHALL BE REMOVED, INCLUDING STUMP, AND REPLACED WITH A SIMILAR SIZE AND SPECIES AT THE EXPENSE OF THE CONTRACTOR WITHIN **ONE YEAR OR ONE GROWING SEASON**. TREE STAKES AND ARBOR TIE SHALL BE REMOVED AT THE END OF THE GUARANTEE PERIOD. THE CONTRACTOR IS RESPONSIBLE FOR FULLY MAINTAINING ALL PLANT MATERIALS, LAWN, AND SEEDING AREAS (INCLUDING, BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZING, AND REMOVAL OF STAKES) UNTIL FINAL ACCEPTANCE BY THE OWNER.

### C. TOPSOIL REQUIREMENTS

#### 1. TOPSOIL REQUIREMENTS: SEE PENNDOT SECTION 801 FOR REFERENCE AND SOIL ADDITIVES.

- UNACCEPTABLE TOPSOIL SOURCES: DO NOT OBTAIN TOPSOIL FROM THE FOLLOWING SOURCES: AREAS CONTAINING CHEMICALLY CONTAMINATED SOILS, AREAS FROM WHICH THE ORIGINAL SURFACE HAS BEEN STRIPPED OR COVERED OVER, SUCH AS BORROW PITS, OPEN MINES, DEMOLITION SITES, DUMPS, LANDFILLS, NO TOPSOIL FROM WET EXCAVATION OR ACID PRODUCING SOILS.
- TOPSOIL SHALL BE UNIFORM QUALITY, FREE FROM HARD CLODS, STIFF CLAY, HARD PAN, SAND, LARGE STONE, CEMENT, ASH, SLAG, CONCRETE, TAR, BOARDS, CHIPS, MULCH, OR ANY OTHER UNSUBSTANTIAL MATERIALS. NO TOPSOIL SHALL BE DELIVERED IN A FROZEN OR MUDDY CONDITION.
- TOPSOIL PH REQUIREMENTS ARE AS FOLLOWS: PH < 4.1 TOPSOIL IS UNACCEPTABLE. 4.1 < PH < 5.8 ADD PULVERIZED LIME TO INCREASE THE PH TO 6.5 BEFORE USE. 5.8 < PH < 7.0 TOPSOIL IS ACCEPTABLE. NO REMEDIATION NEEDED. 7.0 < PH < 7.2 DECREASE PH TO AT LEAST 6.8 BEFORE USE. PH > 7.2 TOPSOIL IS UNACCEPTABLE.
- ORGANIC CONTENT: ENSURE THAT TOPSOIL HAS A MINIMUM ORGANIC CONTENT OF 2.75% BY WEIGHT. IF THE ORGANIC CONTENT IS LESS THAN 2.75%, INCREASE THE ORGANIC CONTENT BY ADDING SOIL ADDITIVES AT A RATE NECESSARY TO ATTAIN THE MINIMUM ORGANIC CONTENT. THE ORGANIC CONTENT SHALL NOT EXCEED 8% BY WEIGHT AND SHALL BE SAMPLED IN ACCORDANCE WITH THE ASSOCIATION OF AGRICULTURAL CHEMISTS.
- GRADATION/PARTICLE SIZE: PROVIDE TOPSOIL CONFORMING TO THE PARTICLE SIZE REQUIREMENTS IN TABLE 101-2.1.2 AND THAT HAS NO MORE THAN 10 PERCENT RETAINED ON A NO. 10 SIEVE WHEN MECHANICALLY GRADED. THE DEPARTMENT WILL DETERMINE THE PARTICLE SIZE DISTRIBUTION FOR THE PORTION OF THE TOPSOIL PASSING THE NO. 10 SIEVE USING HYDROMETER ANALYSIS ACCORDING TO ASTM D 78 AND D 200 (PM 100) 40 - 100% COMPOSITION, 30 - 60% PM 10 TO 60% PM 10, 30% COMPOSITION, CLAY (60% PM 10 AND SMALLER) 10 - 30% COMPOSITION.
- PREPARATION OF SUBGRADE:
  - HOLLOW, DEPRESSIONS, AND GULLIES SHALL BE FILLED WITH ACCEPTABLE SANDY LOAM AS OUTLINED ABOVE OR SOIL AS DESCRIBED HEREON. SOIL TO BE ONE PART EACH OF TOPSOIL, MOISTENED PEAT MOSS, AND PARENT MATERIAL.
  - LOOSEN SUBSOIL BY SCANNING, RIPPING OR TILLING USING DISKS, HARROWS OR OTHER SUITABLE EQUIPMENT TO A DEPTH OF 4"-6" IMMEDIATELY BEFORE PLACING ANY TOPSOIL. REPEAT IN AREAS WHERE SEED OR PLANTINGS ARE PROPOSED AND THERE HAS BEEN COMPACTED SOIL.
- TESTING AND APPROVAL OF SOILS:
  - THE CONTRACTOR SHALL SUBMIT A CERTIFIED REPORT SHOWING THE ANALYSIS OF REPRESENTATIVE SAMPLES OF TOPSOIL. TESTING SHALL BE PERFORMED BY PENN STATE COOPERATIVE RESEARCH & EXTENSION TESTING LABORATORIES OR LABORATORIES APPROVED BY STATE AND LOCAL REGULATIONS. PRICE BID SHALL INCLUDE ALL INSPECTION AND LABORATORY FEES.

### D. PLANTING PROCEDURES

#### 1. PLANTING BEDS

- PROVIDE PLANTING PITS AS INDICATED ON PLANTING DETAILS. BACKFILL PLANTING PITS WITH SOILS AS OUTLINED IN SECTION C. PRIOR BACKFILL SOIL TO BE AT MINIMUM ONE PART EACH OF TOPSOIL, MOISTENED PEAT MOSS, AND PARENT MATERIAL.
- PLANTING BEDS SHALL RECEIVE **FOUR (4) INCHES** OF DOUBLE SHREDDED HARDWOOD MULCH AND TREATED WITH A PRE-EMERGENT HERBICIDE. NO MULCH SHALL COME IN DIRECT CONTACT WITH ROOT FLECK/CORTEX. UNDER NO CIRCUMSTANCES SHALL THE ROOT CROWN BE BURIED.
- MULCH SHALL BE DOUBLE SHREDDED GROUND HARDWOOD BARK MULCH. SHALL BE AGED A MINIMUM OF ONE (1) YEAR FOR PARTIAL DECOMPOSITION. SHALL BE SCREENED TO EXCLUDE PARTICLES LARGER THAN ONE (1) INCH IN DIAMETER. SHALL BE COMPOSED OF BARK AND HAVE A LOW WOOD CONTENT WITH NO HIDDEN WOODS FROM CONSTRUCTION DEBRIS, PALETS, AND/OR PRESSURE TREATED LUMBER, AND BE FREE OF WEEDS, SEEDS, AND GREEN LEAF MATTER. IT SHALL BE NATURALLY DARK BROWN IN COLOR. NO DIED MULCH WILL BE ACCEPTED.
- SHRUB MASSES SHALL BE PLANTED IN CONTINUOUS MULCHED BEDS.
- PLANT LOCATIONS: THE LOCATION OF ALL PLANT MATERIAL INDICATED ON THE LANDSCAPE PLANS ARE APPROXIMATE. THE FINAL LOCATION OF ALL PLANT MATERIAL AND PLANTING BEDLINES SHALL BE DETERMINED IN THE FIELD AT THE TIME OF INSTALLATION FOLLOWING THE BASIC INTENT OF THE APPROVED PLANS, UNLESS THERE IS A SPECIFIC DIMENSION OR LOCATION SHOWN.
- PLANTING DATES: PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICES. PLANTING SEASONS ARE DEFINED AS MARCH 15 THROUGH MAY 15 AND SEPT 15 THROUGH NOV 15. PLANTING IS ACCEPTABLE DURING THE WINTER MONTHS IF WEATHER PERMITS AND THE GROUND IS NOT FROZEN, AND IN THE SUPPLEMENTAL WATERING IS PROVIDED. SOIL MUST BE FROST FREE, FRIABLE, AND NOT MUDDY AT TIME OF PLANTING.
- PLANTING METHODS:
  - TREES SHALL BE SUPPORTED IMMEDIATELY AFTER PLANTING. PLANT MATERIAL SHALL BE PROPERLY SECURED, STAKED, AND PLANTED IN CONFORMANCE WITH THE TYPICAL PLANTING DETAILS.
  - STAKES SHALL BE EIGHT (8) FEET LONG, OF SOUND, DURABLE UNFINISHED LUMBER, CAPABLE OF WITHSTANDING ABOVEGROUND AND UNDERGROUND CONDITIONS DURING THE PERIOD OF GUARANTEE WITH TOP AND BOTTOM DIMENSIONS OF TWO INCHES BY TWO INCHES IN DIAMETER.
  - THREE STAKES SHALL BE EQUALLY SPACED ABOUT THE TREE IN A TRIANGULAR PATTERN AND SHALL BE DRIVEN VERTICALLY INTO THE GROUND 2" TO 3" FEET IN A MANNER THAT DOES NOT INJURE THE ROOT BALL.
  - TREES SHALL BE FASTENED TO EACH STAKE AT A HEIGHT OF FIVE FEET BY MEANS OF ARBOR TIE TREE TIE (2" WIDE RECOMMENDED FOR TREES UP TO 2 1/2 INCHES IN CALIPER).
  - SET PLANTS PLUMB AND STRAIGHT. SET AT SUCH LEVEL THAT AFTER SETTLEMENT A NORMAL OR NATURAL RELATIONSHIP TO THE CROWN OF THE PLANT WITH THE GROUND SURFACE WILL BE ESTABLISHED. LOCATE PLANTS IN CENTER OF FIT.
  - AT TIME OF INSTALLATION, THE CONTRACTOR SHALL WATER NEWLY INSTALLED PLANT MATERIAL. THE CONTRACTOR SHALL PROVIDE REGULAR WATERING TO ENSURE THE ESTABLISHMENT, GROWTH, AND SURVIVAL OF ALL PLANTS.
  - B&B PLANTS SHALL BE HANDLED FROM THE BOTTOM OF THE ROOTBALL ONLY. PLANTS WITH BROKEN, SPLIT, OR DAMAGED ROOTBALLS SHALL BE REJECTED.
  - CORD BINDING OF ALL B&B PLANTS SHALL BE CUT AND REMOVED, ALONG WITH THE BURLAP OF THE UPPER 1" OF THE ROOT BALL. ALL WIRE BASKETS ARE TO BE REMOVED PRIOR TO BACKFILLING PLANT PIT.

### E. MAINTENANCE

#### 1. PRUNING

- EACH TREE AND SHRUB SHALL BE PRUNED IN ACCORDANCE WITH AMERICAN STANDARD FOR NURSERY STOCK TO PRESERVE THE NATURAL CHARACTER OF THE PLANT. ALL DEAD WOOD OR SUCKERS AND ALL BROKEN OR BADLY BRUISED BRANCHES SHALL BE REMOVED. PRUNING SHALL BE DONE WITH CLEAN, SHARP TOOLS.
- SHADE TREES PLANTED NEAR PEDESTRIAN OR VEHICULAR ACCESS SHOULD NOT BE BRANCHED LOWER THAN 7' AT ABOVE GRADE. PLANT MATERIAL LOCATED WITHIN SIGHT TRIANGLE EASEMENTS SHALL NOT EXCEED A TREES HEIGHT OF 3' ABOVE THE ELEVATION OF THE ADJACENT CURB. STREET TREES PLANTED IN SIGHT TRIANGLE EASEMENTS SHALL BE PRUNED TO NOT TO HAVE BRANCHES LOWER THAN 7'.
- THE CENTRAL LEADER SHALL NOT BE CUT OR DAMAGED.
- LAWN AREAS:
  - THE LANDSCAPE CONTRACTOR SHALL TEST THE SOIL TO CONFIRM SUITABILITY FOR THE PROPOSED SEED MIX AND SUPPLEMENT AS REQUIRED TO MEET THE REQUIRED PH & NUTRIENT LEVELS.
  - ALL DISTURBED AREAS SHALL BE STABILIZED WITH SEED UNLESS OTHERWISE INDICATED ON THE LANDSCAPE PLANS. SEED SHALL BE IN ACCORDANCE WITH THE LAWN SEED MIX NOTES AND THE SOIL EROSION AND SEDIMENT CONTROL DISTRICTS SEED SPECIFICATIONS AS NOTED ON THE SOIL EROSION AND SEDIMENT CONTROL DETAILS SHEET.
  - SOD, IF SPECIFIED, SHALL CONSIST OF A STATE CERTIFIED MIXTURE. ALL DISTURBED AREAS INDICATED AS LAWN OR SOD SHALL BE TOPSOILED, LIMED, AND FERTILIZED & FINE GRADED PRIOR TO LAWN INSTALLATION.
- EXISTING VEGETATION: EXISTING TREES AND SHRUBS TO BE PRESERVED ON SITE SHALL BE PROTECTED AGAINST CONSTRUCTION DAMAGE BY SNOW FENCING. FENCING SHALL BE PLACED OUTSIDE THE INDIVIDUAL TREE CANOPY. TREES TO REMAIN SHALL BE IDENTIFIED IN THE FIELD PRIOR TO COMMENCEMENT OF CONSTRUCTION. TREE PROTECTION FENCING SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF CONSTRUCTION, GRADING, OR CLEARING. EXISTING VEGETATION BEING PRESERVED AND LOCATED AT THE EDGE OF THE NEW TREELINE SHALL BE PRUNED AND TRIMMED TO REMOVE ALL DEAD, DAMAGED, OR DISEASED BRANCHES.
- SITE CLEANUP: PLANTING DEBRIS (WIRE, TYRINE, RUBBERHOSE, BACKFILL, ETC.) SHALL BE REMOVED FROM THE SITE AFTER PLANTING IS COMPLETE. THE PROPERTY IS TO BE LEFT IN A NEAT, ORDERLY CONDITION IN ACCORDANCE WITH ACCEPTED PLANTING PRACTICES.

## GENERAL PLANT MAINTENANCE RECOMMENDATIONS

### TREES, SHRUBS, PERENNIALS

#### FERTILIZATION:

- TREES AND SHRUBS: ONCE PER YEAR (USUALLY LATE FALL-EARLY WINTER).
- PERENNIALS: TWICE PER YEAR (USUALLY EARLY SPRING AND LATE SPRING-EARLY SUMMER).
- EVERGREENS: ONCE PER YEAR, AS NEEDED.

#### SOIL TESTING:

- ONCE PER YEAR FROM AT LEAST (3) AREAS ACROSS SITE, USUALLY IN EARLY SPRING DURING THE ESTABLISHMENT PERIOD (2 GROWING SEASONS). SOIL TESTS AFTER THE ESTABLISHMENT PERIOD AS NECESSARY.

#### WEED CONTROL:

- MULCHED TREE RINGS, MULCHED SHRUB AND PERENNIAL BEDS: WEED ENTIRE SITE ONCE EVERY (2) WEEKS.
- WEEDING SHOULD BE DONE ALL AT ONCE.

#### PEST/DISEASE CONTROL:

- MONITOR THE SITE MONTHLY FOR DISEASE AND PEST INFESTATIONS.
- ANY TREATMENTS SHOULD BE CONSIDERED AN ALTERNATE (ONLY NEEDED AS NECESSARY).

#### PRUNING:

- ANY TREE OR SHRUB PRUNING SHOULD BE IN ACCORDANCE WITH THE PRUNING SECTION OF THE GENERAL NOTES.
- ORNAMENTAL GRASSES SHOULD BE CUT BACK LATE WINTER/EARLY SPRING.

#### MULCH:

- MULCH BEDS TO 4" IN DEPTH AS NOTED IN THE PLANTING DETAILS. INSTALL NEW MULCH AS NECESSARY TO MAINTAIN A 4" DEPTH.
- MULCHING SHOULD TAKE PLACE IN SPRING, ONCE A YEAR.
- PULL MULCH AWAY FROM SHRUB, PERENNIAL, AND GRASS CROWNS AS WELL AS AWAY FROM TREE TRUNKS PER PLANTING DETAILS.

#### BED EDGING:

- BEDS AND TREE MULCH RINGS SHOULD BE EDGED AT THE TIME OF SPRING MULCHING.

#### WINTER PROTECTION:

- APPLY ANTI DESCICANT TO EVERGREENS MONTHLY DURING WINTER - UP TO 4 APPLICATIONS (PER RUTGERS COOPERATIVE EXTENSION).

#### EARLY SPRING START UP

- CLEAN UP NURSERY PLANT DEBRIS.
- PRUNE DEAD WOOD OUT OF PLANT MATERIAL.
- DEAD/HEAD ANY PERENNIALS LEFT STANDING OVER WINTER.
- REMOVE ANY PLANT THAT APPEAR DISEASED OR UNHEALTHY AND REPLACE WITH SAME SPECIES, PER PLANTING SCHEDULE.
- REPLACE PLANTS THAT HAVE DIED OVER WINTER: FILL SPOTS IN PLANT BEDS APPEARING BARE, PER PLANTING SCHEDULE.

### LAWN CARE

#### FERTILIZATION:

- (2) TIMES A YEAR, GENERALLY SPRING AND FALL (PER THE PENN STATE EXTENSION OFFICE).

#### MOWING:

- HOW WHEN TURF REACHES 3"-3 1/2" TALL IN SPRING AND FALL. 1" TALL IN SUMMER. MOWING SHOULD TYPICALLY TAKE PLACE FROM MARCH THROUGH EARLY NOVEMBER (PER THE PENN STATE EXTENSION OFFICE).

#### WEED CONTROL:

- (1) PRE-EMERGENT HERBICIDE APPLICATION IN MARCH TO MID-APRIL FOR CRABGRASS AND OTHER ANNUAL GRASS WEED CONTROL, AND (1) PRE-EMERGENT APPLICATION IN APRIL FOR ANNUAL BROADLEAF WEED CONTROL (PER THE PENN STATE EXTENSION OFFICE).
- (2) POST-EMERGENT BROADLEAF HERBICIDE APPLICATIONS: IN SPRING (MID-MARCH THROUGH MID-MAY) AND AGAIN IN FALL (LATE AUGUST THROUGH OCTOBER) FOR BROADLEAF WEEDS (PER THE PENN STATE EXTENSION OFFICE).

#### PEST/DISEASE CONTROL:

- MONITOR THE SITE MONTHLY FOR DISEASE AND PEST INFESTATIONS.
- ANY TREATMENTS SHOULD BE CONSIDERED AN ALTERNATE (ONLY NEEDED AS NECESSARY).

#### MISCELLANEOUS LAWN CARE:

- RESEED: RESEED ANY BARE LAWN AREAS IN SEPTEMBER THROUGH EARLY OCTOBER.
- DETHATCH: DETHATCH LAWN EVERY (2) YEARS IN EITHER EARLY SPRING OR FALL.
- AERATE: AERATE LAWNS EVERY (2) YEARS IN BOTH SPRING AND FALL.
- LIME: APPLY LIME ANY TIME OF THE YEAR BUT ONLY IF A SOIL TEST SHOWS PH IS LOWER THAN 6.0. SOIL TESTS WILL GIVE SPECIFIC RECOMMENDATIONS FOR AMOUNT OF LIME NEEDED.

## LAWN SEED MIX NOTES ERNMX-113

COMMERCIAL CONSERVATION MIX BY ERNST CONSERVATION SEEDS  
HEIGHT: 28 FEET  
SEEDING RATE: 75-150 LBS PER ACRE

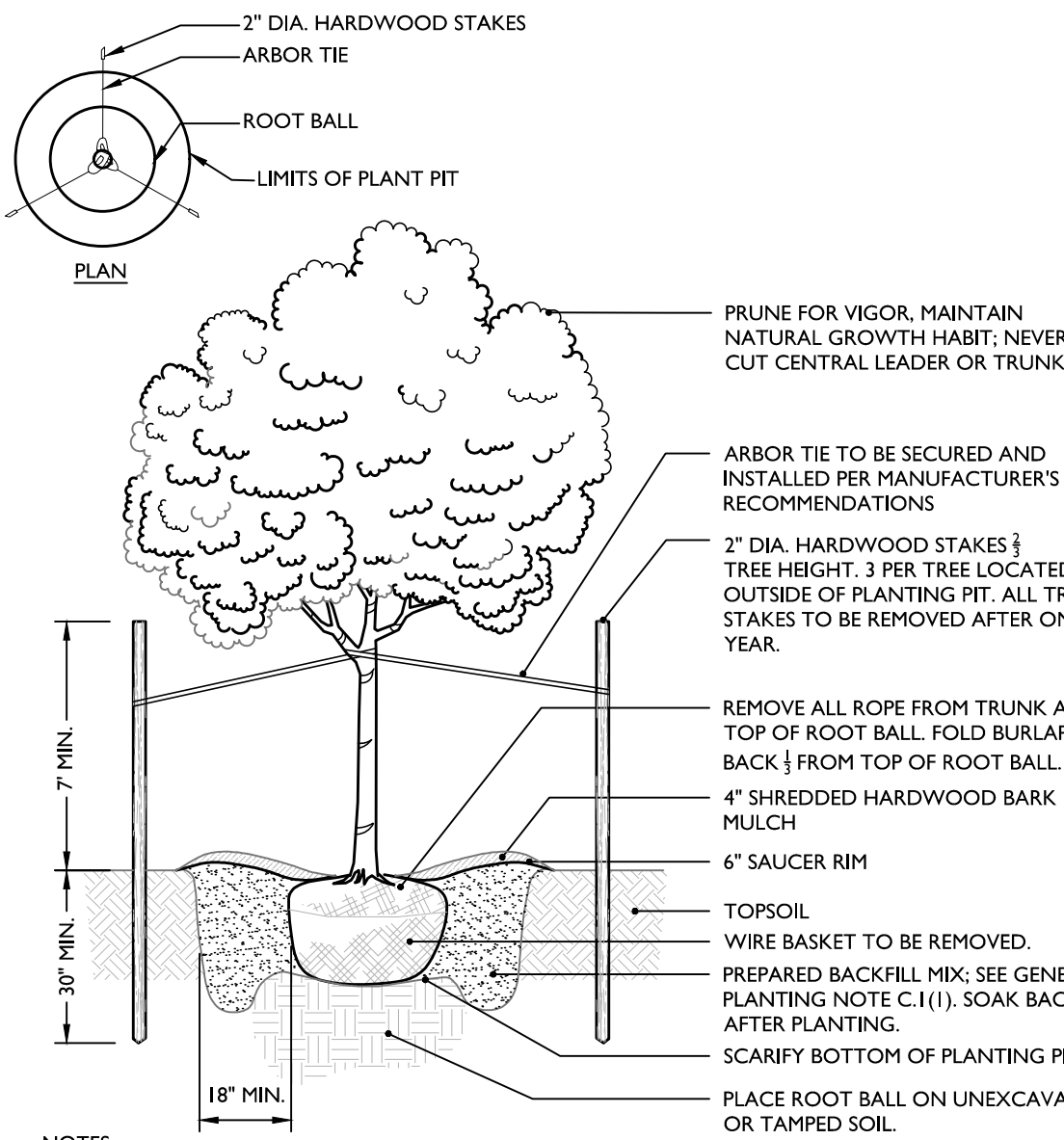
MIX COMPOSITION  
25.0% FESTUCA RUBRA, CREEDING RED RESCUE  
25.0% LOLIUM MULTICOLOR, ANNUAL RYEGRASS  
25.0% LOLIUM PERENNE "BIGLEAGUE", PERENNIAL RYEGRASS, "BIGLEAGUE"  
25.0% LOLIUM PERENNE, BLACKCAT, IF, PERENNIAL RYEGRASS, BLACKCAT & (TURF TYPE)

OPTIMUM SEEDING DATES:  
8/1 - 10/1 (ZONE 5s, 6s); 8/15 - 10/15 (ZONE 6s); 8/15 - 10/30 (ZONE 7s, 7s)

ACCEPTABLE SEEDING DATES:  
3/15 - 5/31 (ZONE 5s, 6s); 3/1 - 4/30 (ZONE 6s); 2/1 - 4/30 (ZONE 7s, 7s)

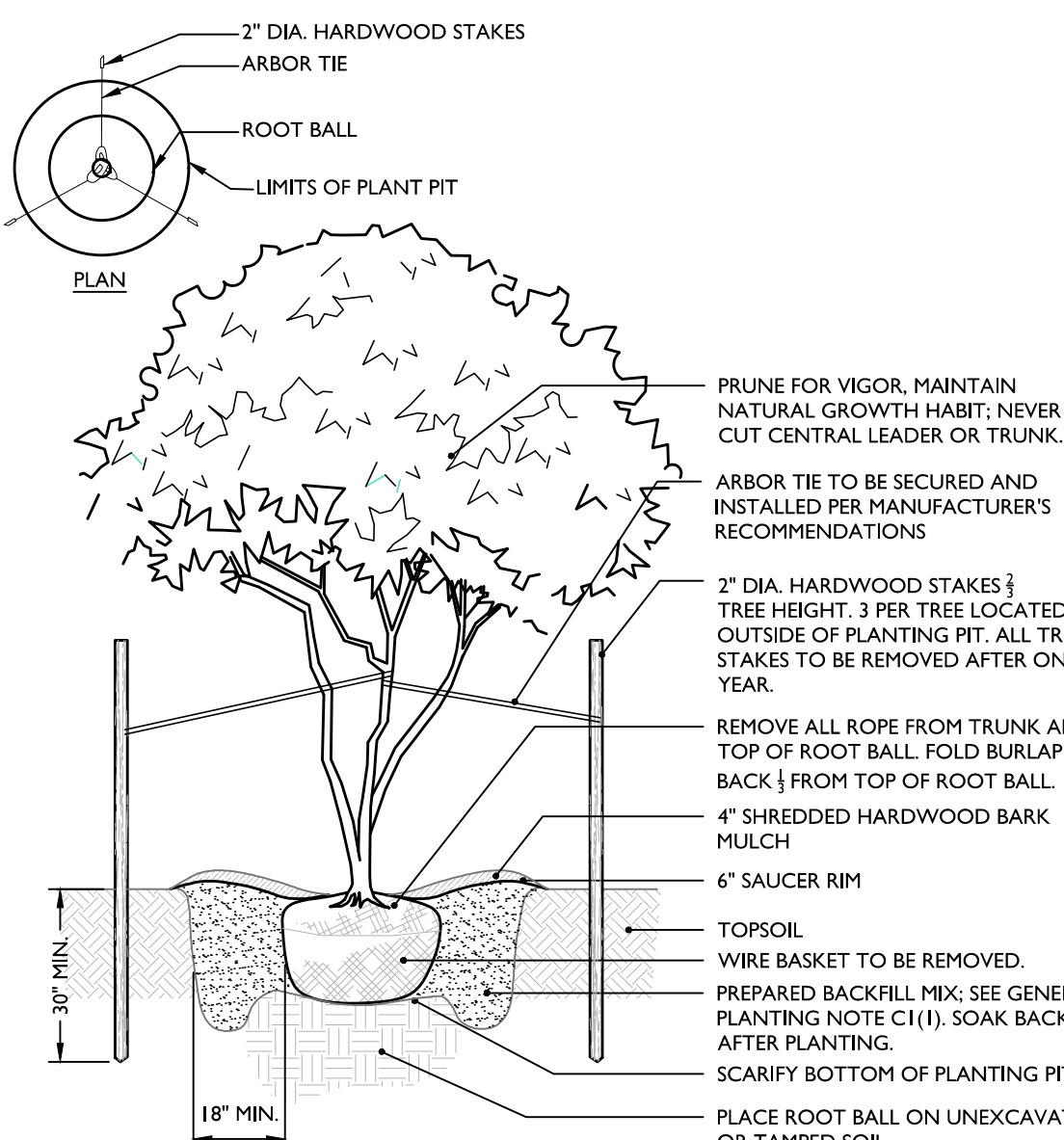
SUMMER SEEDING DATES \*:  
6/1 - 7/31 (ZONE 5s, 6s); 5/1 - 8/14 (ZONE 6s, 7s, 7s)

\* NOTE: SUMMER SEEDING SHOULD ONLY BE CONDUCTED WHEN THE SITE IS IRRIGATED.



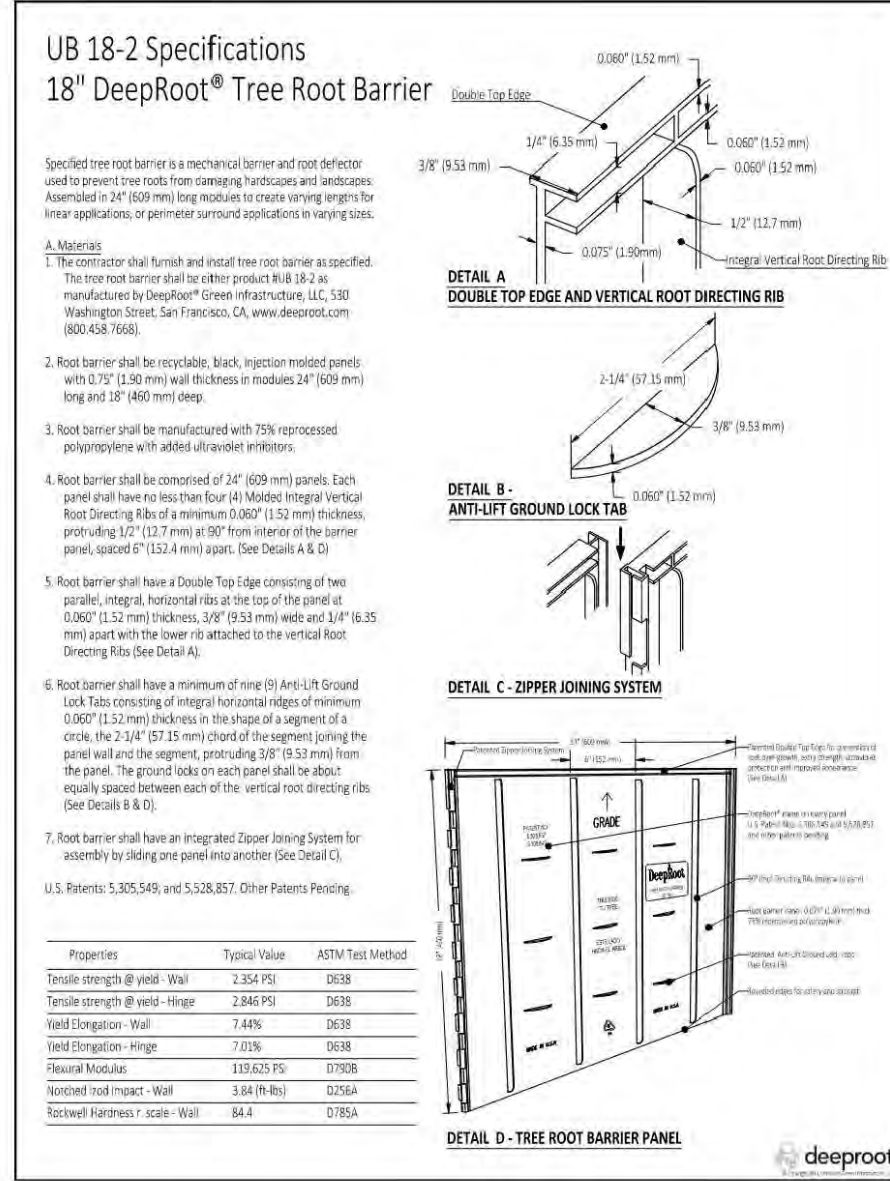
- NOTES:
- NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
  - PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.
  - WHEN TAGGING TREES AT THE NURSERY MARK THE NORTH SIDE OF THE TREE AND WHEN INSTALLING ROTATE TREE TO FACE NORTH WHENEVER POSSIBLE.
  - SHOULD SOIL SAMPLING ANALYTICAL RESULTS FOR THE STORMWATER BASIN EXCAVATION SIDEWALLS AND BOTTOM MEET PADEP STATEWIDE HEALTH STANDARDS (25 PA CODE CHAPTER 250) FOR MANGANESE, THE CED ENVIRONMENTAL CONSULTANT WILL NOTIFY THE CONTRACTOR THAT PADEP ACT 2 CAPPING (NOTE IS BELOW) IS NO LONGER REQUIRED.
  - AN ORANGE GEOTEXTILE DEMARCATION FABRIC BARRIER (MIRAFI 140NLO ORANGE DELINEATION, GEOTEXTILE FABRIC: <https://www.paramountmaterials.com/products/mirafi-140nlo-orange-delineation-geotextile-fabric> OR EQUIVALENT) SHALL BE PLACED OVER THE ENTIRE BOTTOM OF EACH PLANTING.
  - BACKFILL EACH PLANTING WITH MATERIAL (INCLUDING TOPSOIL) MEETING THE DEFINITIONS OF "CLEAN FILL" AND "CLEAN FILL CONCENTRATION LIMITS (CCLSL)" PER PADEP "MANAGEMENT OF FILL POLICY" (DOCUMENT NO. 258-2182-773 DATED JANUARY 16, 2021). CONTRACTOR SHALL PROVIDE A COPY OF A COMPLETED PADEP FORM PR001 "CERTIFICATION OF CLEAN FILL" (INCLUDING ELECTRONIC ACKNOWLEDGEMENTS FROM PADEP FOR SIGNATURES BY THE DONOR SITE AND BY THE CITY OF CHESTER DRW FACILITY CONSTRUCTION SITE) TO THE CED ENVIRONMENTAL CONSULTANT PRIOR TO IMPORT OF CLEAN FILL MATERIAL (INCLUDING TOPSOIL) TO EACH PLANTING.

### DECIDUOUS TREE PLANTING DETAIL

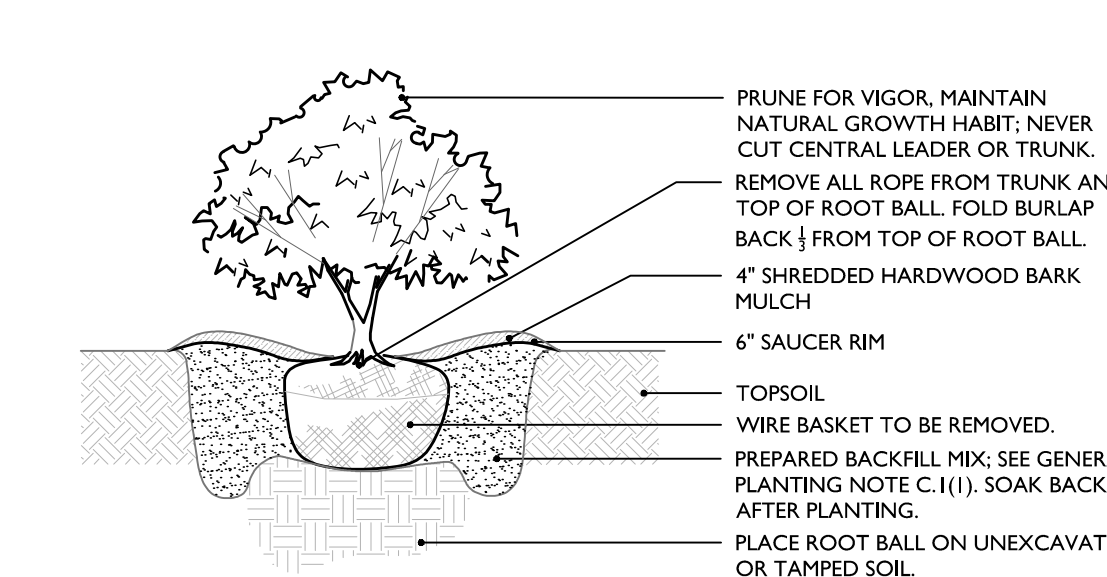


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  - PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.
  - WHEN TAGGING TREES AT THE NURSERY MARK THE NORTH SIDE OF THE TREE AND WHEN INSTALLING ROTATE TREE TO FACE NORTH WHENEVER POSSIBLE.
  - SHOULD SOIL SAMPLING ANALYTICAL RESULTS FOR THE STORMWATER BASIN EXCAVATION SIDEWALLS AND BOTTOM MEET PADEP STATEWIDE HEALTH STANDARDS (25 PA CODE CHAPTER 250) FOR MANGANESE, THE CED ENVIRONMENTAL CONSULTANT WILL NOTIFY THE CONTRACTOR THAT PADEP ACT 2 CAPPING (NOTE IS BELOW) IS NO LONGER REQUIRED.
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### MULTI-LEADER TREE PLANTING DETAIL



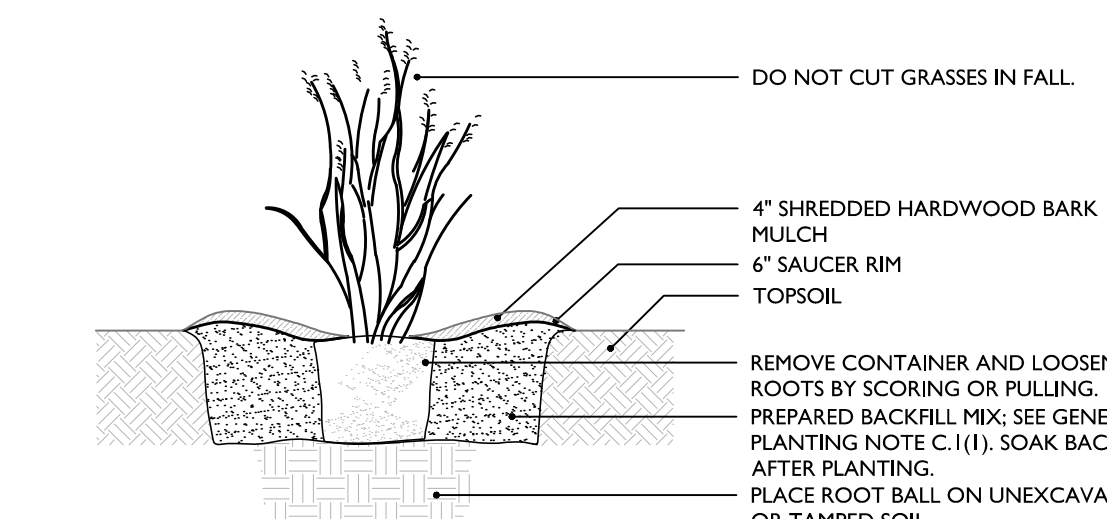
### DEEPROOT ROOT BARRIER



### NOTES:

- NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
- PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.
- SHOULD SOIL SAMPLING ANALYTICAL RESULTS FOR THE STORMWATER BASIN EXCAVATION SIDEWALLS AND BOTTOM MEET PADEP STATEWIDE HEALTH STANDARDS (25 PA CODE CHAPTER 250) FOR MANGANESE, THE CED ENVIRONMENTAL CONSULTANT WILL NOTIFY THE CONTRACTOR THAT PADEP ACT 2 CAPPING (NOTE IS BELOW) IS NO LONGER REQUIRED.
- AN ORANGE GEOTEXTILE DEMARCATION FABRIC BARRIER (MIRAFI 140NLO ORANGE DELINEATION, GEOTEXTILE FABRIC: <https://www.paramountmaterials.com/products/mirafi-140nlo-orange-delineation-geotextile-fabric> OR EQUIVALENT) SHALL BE PLACED OVER THE ENTIRE BOTTOM OF EACH PLANTING.
- BACKFILL EACH PLANTING WITH MATERIAL (INCLUDING TOPSOIL) MEETING THE DEFINITIONS OF "CLEAN FILL" AND "CLEAN FILL CONCENTRATION LIMITS (CCLSL)" PER PADEP "MANAGEMENT OF FILL POLICY" (DOCUMENT NO. 258-2182-773 DATED JANUARY 16, 2021). CONTRACTOR SHALL PROVIDE A COPY OF A COMPLETED PADEP FORM PR001 "CERTIFICATION OF CLEAN FILL" (INCLUDING ELECTRONIC ACKNOWLEDGEMENTS FROM PADEP FOR SIGNATURES BY THE DONOR SITE AND BY THE CITY OF CHESTER DRW FACILITY CONSTRUCTION SITE) TO THE CED ENVIRONMENTAL CONSULTANT PRIOR TO IMPORT OF CLEAN FILL MATERIAL (INCLUDING TOPSOIL) TO EACH PLANTING.

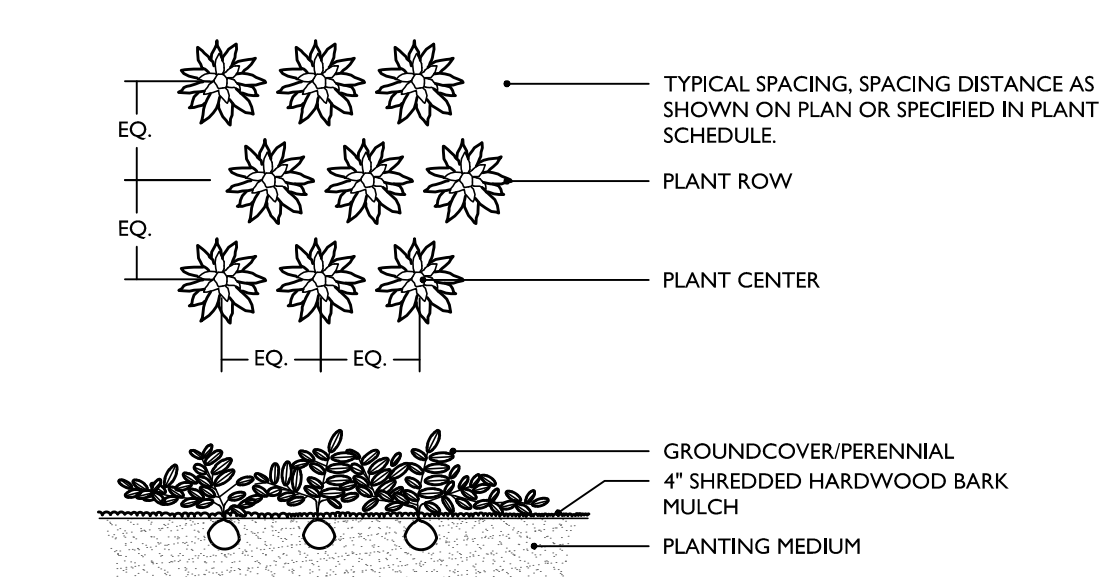
### SHRUB PLANTING DETAIL



### NOTES:

- NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
- PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.
- SHOULD SOIL SAMPLING ANALYTICAL RESULTS FOR THE STORMWATER BASIN EXCAVATION SIDEWALLS AND BOTTOM MEET PADEP STATEWIDE HEALTH STANDARDS (25 PA CODE CHAPTER 250) FOR MANGANESE, THE CED ENVIRONMENTAL CONSULTANT WILL NOTIFY THE CONTRACTOR THAT PADEP ACT 2 CAPPING (NOTE IS BELOW) IS NO LONGER REQUIRED.
- AN ORANGE GEOTEXTILE DEMARCATION FABRIC BARRIER (MIRAFI 140NLO ORANGE DELINEATION, GEOTEXTILE FABRIC: <https://www.paramountmaterials.com/products/mirafi-140nlo-orange-delineation-geotextile-fabric> OR EQUIVALENT) SHALL BE PLACED OVER THE ENTIRE BOTTOM OF EACH PLANTING.
- BACKFILL EACH PLANTING WITH MATERIAL (INCLUDING TOPSOIL) MEETING THE DEFINITIONS OF "CLEAN FILL" AND "CLEAN FILL CONCENTRATION LIMITS (CCLSL)" PER PADEP "MANAGEMENT OF FILL POLICY" (DOCUMENT NO. 258-2182-773 DATED JANUARY 16, 2021). CONTRACTOR SHALL PROVIDE A COPY OF A COMPLETED PADEP FORM PR001 "CERTIFICATION OF CLEAN FILL" (INCLUDING ELECTRONIC ACKNOWLEDGEMENTS FROM PADEP FOR SIGNATURES BY THE DONOR SITE AND BY THE CITY OF CHESTER DRW FACILITY CONSTRUCTION SITE) TO THE CED ENVIRONMENTAL CONSULTANT PRIOR TO IMPORT OF CLEAN FILL MATERIAL (INCLUDING TOPSOIL) TO EACH PLANTING.

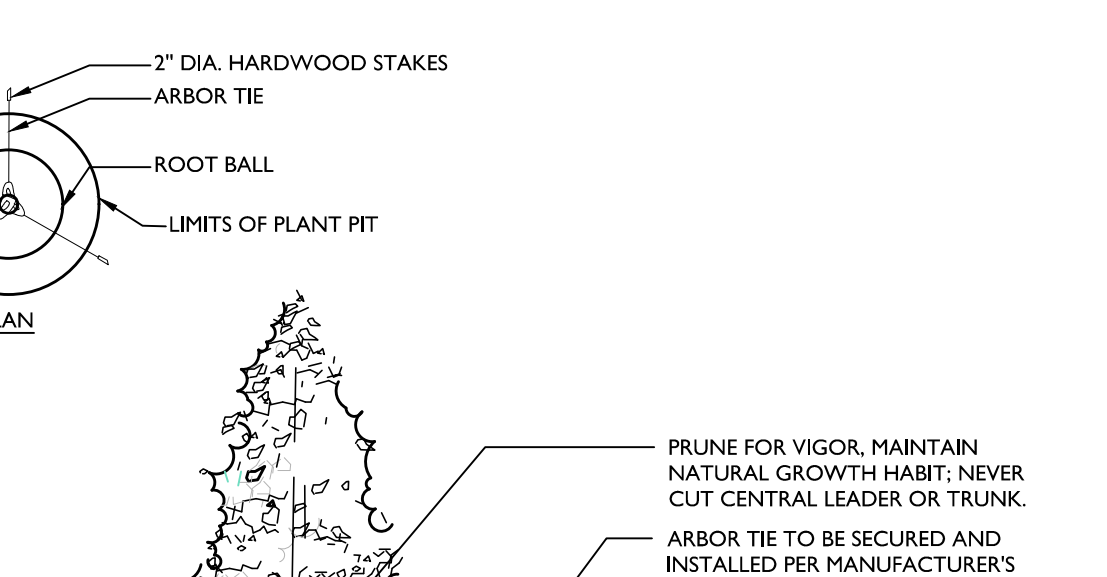
### ORNAMENTAL GRASS PLANTING DETAIL



### NOTES:

- PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.
- SHOULD SOIL SAMPLING ANALYTICAL RESULTS FOR THE STORMWATER BASIN EXCAVATION SIDEWALLS AND BOTTOM MEET PADEP STATEWIDE HEALTH STANDARDS (25 PA CODE CHAPTER 250) FOR MANGANESE, THE CED ENVIRONMENTAL CONSULTANT WILL NOTIFY THE CONTRACTOR THAT PADEP ACT 2 CAPPING (NOTE IS BELOW) IS NO LONGER REQUIRED.
- AN ORANGE GEOTEXTILE DEMARCATION FABRIC BARRIER (MIRAFI 140NLO ORANGE DELINEATION, GEOTEXTILE FABRIC: <https://www.paramountmaterials.com/products/mirafi-140nlo-orange-delineation-geotextile-fabric> OR EQUIVALENT) SHALL BE PLACED OVER THE ENTIRE BOTTOM OF EACH PLANTING.
- BACKFILL EACH PLANTING WITH MATERIAL (INCLUDING TOPSOIL) MEETING THE DEFINITIONS OF "CLEAN FILL" AND "CLEAN FILL CONCENTRATION LIMITS (CCLSL)" PER PADEP "MANAGEMENT OF FILL POLICY" (DOCUMENT NO. 258-2182-773 DATED JANUARY 16, 2021). CONTRACTOR SHALL PROVIDE A COPY OF A COMPLETED PADEP FORM PR001 "CERTIFICATION OF CLEAN FILL" (INCLUDING ELECTRONIC ACKNOWLEDGEMENTS FROM PADEP FOR SIGNATURES BY THE DONOR SITE AND BY THE CITY OF CHESTER DRW FACILITY CONSTRUCTION SITE) TO THE CED ENVIRONMENTAL CONSULTANT PRIOR TO IMPORT OF CLEAN FILL MATERIAL (INCLUDING TOPSOIL) TO EACH PLANTING.

### GROUND COVER/PERENNIAL PLANTING DETAIL



### NOTES:

- NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
- PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.
- WHEN TAGGING TREES AT THE NURSERY MARK THE NORTH SIDE OF THE TREE AND WHEN INSTALLING ROTATE TREE TO FACE NORTH WHENEVER POSSIBLE.
- SHOULD SOIL SAMPLING ANALYTICAL RESULTS FOR THE STORMWATER BASIN EXCAVATION SIDEWALLS AND BOTTOM MEET PADEP STATEWIDE HEALTH STANDARDS (25 PA CODE CHAPTER 250) FOR MANGANESE, THE CED ENVIRONMENTAL CONSULTANT WILL NOTIFY THE CONTRACTOR THAT PADEP ACT 2 CAPPING (NOTE IS BELOW) IS NO LONGER REQUIRED.
- AN ORANGE GEOTEXTILE DEMARCATION FABRIC BARRIER (MIRAFI 140NLO ORANGE DELINEATION, GEOTEXTILE FABRIC: <https://www.paramountmaterials.com/products/mirafi-140nlo-orange-delineation-geotextile-fabric> OR EQUIVALENT) SHALL BE PLACED OVER THE ENTIRE BOTTOM OF EACH PLANTING.
- BACKFILL EACH PLANTING WITH MATERIAL (INCLUDING TOPSOIL) MEETING THE DEFINITIONS OF "CLEAN FILL" AND "CLEAN FILL CONCENTRATION LIMITS (CCLSL)" PER PADEP "MANAGEMENT OF FILL POLICY" (DOCUMENT NO. 258-2182-773 DATED JANUARY 16, 2021). CONTRACTOR SHALL PROVIDE A COPY OF A COMPLETED PADEP FORM PR001 "CERTIFICATION OF CLEAN FILL" (INCLUDING ELECTRONIC ACKNOWLEDGEMENTS FROM PADEP FOR SIGNATURES BY THE DONOR SITE AND BY THE CITY OF CHESTER DRW FACILITY CONSTRUCTION SITE) TO THE CED ENVIRONMENTAL CONSULTANT PRIOR TO IMPORT OF CLEAN FILL MATERIAL (INCLUDING TOPSOIL) TO EACH PLANTING.

### EVERGREEN TREE PLANTING DETAIL



NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
1	4/27/2025	REVISED DETAIL LAYOUT	UPFS	UPFS
2	5/20/2025	REVISED DETAIL LAYOUT	UPFS	UPFS

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
1	4/27/2025	REVISED DETAIL LAYOUT	UPFS	UPFS
2	5/20/2025	REVISED DETAIL LAYOUT	UPFS	UPFS