SITE PLAN SET

FOR

PROPOSED COMMERCIAL CONTRACTOR UNITS

PLAT MAP 10, LOT 42 **ZONING DISTRICT GB1** GENERAL BUSINESS 1 ACRE DISTRICT 71 HARKNEY HILL ROAD COVENTRY, RHODE ISLAND

OWNER

AJB REAL ESTATE, LLC **2 STATION STREET COVENTRY, RHODE ISLAND 02816**

APPLICANT

ANDREW BARBER P.O. BOX 7090 WARWICK, RHODE ISLAND 02886 (401) 265-9392

ENGINEERS



Crossman Engineering

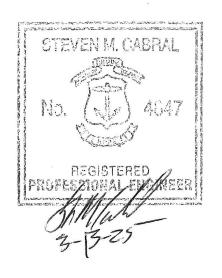
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North Attleboro, MA 02760

Email: cei@crossmaneng.com

SEPTEMBER 2024 SHEET 1 of 16





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MISCELLANEOUS DETAILS PLAN No. 2 **MISCELLANEOUS DETAILS PLAN No. 3**

PHASE 1 BUILDING REFERNCE PLANS (3 SHEETS)

BUILDING RENDERING

	REVISIONS							
No.	DATE	DESCRIPTION						
1	10/16/24	TRC COMMENTS						
2	02/20/25	PRELIMINARY SUBMISSION						
3	03/13/25	KCWA SUBMISSION						

GENERAL NOTES

- 1. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING DRAINAGE AND UTILITIES, BOTH UNDERGROUND AND OVERHEAD, BEFORE EXCAVATION BEGINS IN ACCORDANCE WITH "DIG SAFE PROGRAM LAW" ENACTED BY THE R.I. LEGISLATURE AND BY CONTACTING THE INDIVIDUAL UTILITY COMPANIES. EXCAVATION SHALL BE IN ACCORDANCE WITH ALL STATUTES, ORDINANCES, RULES AND REGULATIONS OF ANY MUNICIPALITY, STATE OR FEDERAL AGENCY THAT MAY APPLY. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- 2. SPECIFICATIONS TO GOVERN THIS PROJECT ARE R.I.D.O.T. STANDARD SPECIFICATIONS AND DETAILS. FOR ALL EXCAVATION, PLACEMENT OF FILL, PIPE, BITUMINOUS PAVEMENT, CONCRETE AND SAWCUTTING, THE CONTRACTOR SHALL PERFORM THE WORK IN FULL COMPLIANCE WITH THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AMENDED FEBRUARY 2025 EDITION, WITH LATEST REVISIONS UNLESS OTHERWISE SHOWN ON PLANS. THE "METHOD OF MEASUREMENT" AND "BASIS OF PAYMENT" ARE NOT APPLICABLE. THESE SPECIFICATIONS CAN BE OBTAINED ON—LINE AT:

http://www.dot.ri.gov/business/bluebook.php

- 3. ALL WORK SHALL CONFORM TO RIDOT'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AMENDED FEBRUARY 2025, AND THE RHODE ISLAND STANDARD DETAILS, FEBRUARY 25, 2025, AND AS AMENDED
- 4. THE CONTRACTOR MUST VERIFY PRIOR TO CONSTRUCTION THAT ALL REQUIRED AUTHORIZATION TO PERFORM WORK HAS BEEN OBTAINED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION OPERATIONS INCLUDING ALL ACTIONS OR OMISSIONS OF ANY SUBCONTRACTORS, AGENTS OR EMPLOYEES. THE CONTRACTOR MUST ENSURE THAT THE CONDITIONS OF ALL PERMITS, SPECIFICATIONS AND FEDERAL, STATE AND LOCAL REGULATIONS ARE STRICTLY ENFORCED. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ASPECTS OF ON—SITE SAFETY INCLUDING ANY DAMAGE TO EXISTING STRUCTURES.
- 5. WORK SHOWN ON THE PLANS FOR WHICH THERE ARE NO PARTICULAR DETAILS OR SPECIFICATIONS DOES NOT RELIEVE THE CONTRACTOR FROM FURNISHING AND INSTALLING THE WORK. THE CONTRACTOR SHALL THOROUGHLY EXAMINE THE CONTRACT DOCUMENTS AND PLANS AND INSPECT THE SITE, AND THE BID PRICE SHALL INCLUDE ALL SERVICES AND MATERIALS NECESSARY TO COMPLETE THE PROJECT. ANY CHANGES TO THE PROJECT OR THE INSTALLATION OF AN ITEM FOR WHICH NO PARTICULAR DETAIL OR SPECIFICATION WAS PROVIDED MUST BE REVIEWED BY AND MUST BE ACCEPTABLE TO THE ENGINEER.
- 6. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO ANY WORK. THE CONTRACTOR SHALL PERFORM TEST PITS TO LOCATE EXISTING UTILITY STUBS AT CONNECTION POINTS. THE CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY COMPANIES FOR NEW PIPES, CONDUITS AND SERVICES.
- 7. ALL DISTURBED AREAS OUTSIDE THE LIMIT OF DISTURBANCE SHALL BE REPLACED IN KIND UNLESS OTHERWISE SHOWN.
- 8. THERE ARE NO AGRICULTURAL USES ON THIS PROPERTY.
- 9. THERE ARE NO KNOWN EXISTING EASEMENTS ON THIS SITE.

LAYOUT NOTE

THE LAYOUT SHOWN REPRESENTS A GRAPHICAL DESIGN, AND PRIOR TO THE CONSTRUCTION, THE CONTRACTOR SHALL ENGAGE A PROFESSIONAL LAND SURVEYOR (PLS) REGISTERED IN THE STATE OF RHODE ISLAND TO SET AND VERIFY ALL LINES AND GRADES. ALL EXISTING UTILITY LOCATIONS AND ELEVATIONS ARE TO BE CONFIRMED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY ITEM FOUND WHICH DOES NOT MATCH THE PLANS MUST BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO CONSTRUCTION FOR REVIEW. NO WORK SHALL PROCEED UNTIL AUTHORIZED BY THE ENGINEER.

MAINTENANCE AND PROTECTION OF TRAFFIC NOTES

- 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MAINTENANCE AND PROTECTION OF PEDESTRIAN AND VEHICULAR TRAFFIC INCLUDING POLICE PROTECTION. ALL TEMPORARY CONSTRUCTION SIGNS, BARRICADES AND LANE CLOSURES SHALL BE IN CONFORMANCE WITH THE LATEST REVISIONS OF MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.)
- 10. TEMPORARY CONSTRUCTION SIGNS AND ALL APPLICABLE TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF WORK IN ANY AREA OPEN TO TRAFFIC.
- 11. THE PRIVATE VEHICLES OF CONSTRUCTION WORKERS WILL NOT BE PARKED IN THE ROADWAY RIGHT-OF-WAY.
- 12. ALL MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL SETUPS, SIGNS, CHANNELING DEVICES, ETC., SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 2009 EDITION, LATEST REVISIONS.
- 13. SIGN MOUNTINGS SHALL BE IN ACCORDANCE WITH THE STATE D.O.T. SPECIFICATIONS FOR TEMPORARY CONSTRUCTION SIGNS.

CONSTRUCTION NOTES

- 1. THE CONTRACTOR IS REQUIRED TO OBTAIN AND REVIEW ALL ENGINEERING AND PERMIT DOCUMENTS COMPLETED FOR FINAL DESIGN, INCLUDING TOWN PLANNING BOARD APPROVALS AND RIDEM PERMIT CONDITIONS.
- 2. THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO INSTALLATION OF UTILITIES ON SITE. THE COORDINATION IS NECESSARY FOR THE ENGINEER TO SCHEDULE SITE INSPECTIONS AS REQUIRED.
- 3. THE CONTRACTOR IS REQUIRED TO MAINTAIN DETAILED AS—BUILT INFORMATION FOR ALL UTILITY AND WATER LINE INSTALLATION. AS—BUILT INFORMATION INCLUDES MATERIALS, PIPE DEPTH NOTATIONS AND SWING TIE LOCATIONS (2 MINIMUM) FROM NEW PIPE TO PERMANENT STRUCTURES. ALL PIPE BEND/ELBOW LOCATIONS SHALL BE DIMENSIONED. REFER TO THE KCWA REQUIREMENTS.
- 4. AS-BUILT PLANS SHALL BE SUBMITTED TO THE TOWN ENGINEER FOR APPROVAL. APPROVED AS-BUILT PLANS SHALL BE RECORDED IN THE TOWN LAND RECORDS.
- 5. THE CONTRACTOR SHALL COORDINATE ALL WORK WITHIN THE STREET R.O.W. WITH RIDOT AND THE TOWN ENGINEER.

PROPOSED STANDARD PAVEMENT STRUCTURE

- 1 1/2" BITUMINOUS CONCRETE SURFACE COURSE, CLASS I-1 HTM
- 2 1/2" BITUMINOUS CONCRETE BASE COURSE8" GRAVEL BORROW SUBBASE

CLEARING NOTES

THE SOILS ON SITE ARE MAPPED AS MERRIMAC SANDY LOAM AND HINKLEY GRAVELLY SAND. THESE SOILS TYPICALLY HAVE DEEP GROUNDWATER TABLES AND EXCELLENT INFILTRATION CAPABILITIES.

FLOOD ZONE NOTE

THE SITE IS WITHIN FLOOD ZONE X, AREAS OF MINIMAL FLOODING, ACCORDING TO NATIONAL FLOOD HAZARD LAYER FIRMETTE MAP NUMBER 44003C0111H).

NOTES

- 1. NOOSENECK HILL ROAD AND HARKNEY HILL ROAD ARE A RIDOT MAINTAINED ROADWAYS. A RIDOT PAP IS REQUIRED.
- 2. THE PROPOSED IMPROVEMENTS WILL REQUIRE PERMITS FROM RIDEM. THE PERMITS ANTICIPATED ARE:
- RIDEM RIPDES PERMIT
- RIDEM STORMWATER CONSTRUCTION PERMIT AND WATER QUALITY CERTIFICATION
 RIDEM OWTS DESIGN
- 3. THE SITE IS NOT WITHIN A WELLHEAD PROTECTION AREA.
- 4. THE SITE IS WITHIN A RIDEM NATURAL HERITAGE AREA (Id128). THE SITE IS NOT WITHIN A CRITICAL RESOURCE AREA OR WITHIN A TOWN OF COVENTRY HISTORIC DISTRICT.
- 5. THERE ARE NO WETLANDS ON SITE OR WITHIN 200' OF THE SITE, AS INDICATED ON THE RIDEM ENVIRONMENTAL RESOURCE MAP. A R.I.D.E.M. FRESHWATER WETLANDS APPLICATION WOULD NOT BE REQUIRED.
- 6. THE SITE ULTIMATELY DRAINS TO THE MAPLE ROOT POND (WATERBODY ID RI0006013L-12).
- 7. THE SITE IS LOCATED WITHIN THE CENTRAL COVENTRY FIRE DISTRICT.
- 8. THE GROUNDWATER CLASSIFICATION FOR THIS SITE IS GAA.
- 9. THE SITE IS NOT ON THE NATIONAL REGISTER OF HISTORIC PLACES.
- 10. THERE ARE NO EXISTING TREES 50 YEARS OLD OR OLDER ON SITE.
- 11. THERE ARE NO AGRICULTURAL USES ON THIS PROPERTY.
- 12. THERE ARE NO KNOWN EXISTING EASEMENTS ON THIS SITE.
- 13. PROPOSED UTILITY CONNECTIONS:

 WATER KCWA
 - SEPTIC OWTS

 ELECTRIC/GAS RI ENERGY

 COMMUNICATIONS VERIZON/OTHER
- 14. THERE ARE NO CEMETERIES ON SITE OR ADJACENT TO THE SITE.
- 15. A BOUNDARY AND EXISTING CONDITIONS SHOWN HAVE BEEN FIELD SURVEYED BY CROSSMAN ENGINEERING IN SEPTEMBER 2024. FINAL PLANS WILL BE PROVIDED WITH THE FINAL DESIGN.

PROJECT INFORMATION

PROPOSED DRIVEWAY LENGTH = 340 L.F. (2-DRIVEWAYS)	EXISTING		PROPOSED
PROPOSED CATCH BASINS = 6 PROPOSED DRAINAGE MANHOLE = 1		PROPERTY LINE	
PROPOSED 6" HDPE PIPE = 180' L.F.		STATE HIGHWAY LINE	
PROPOSED DRAINAGE PIPE = 550 L.F. ± PROPOSED BUILDING SEWER PIPE = 360 L.F.		BITUMINOUS BERM	
PROPOSED BITUMINOUS BERM = 1,100 L.F. ± PROPOSED CUT/FILL = BALANCED SITE ANTICIPATED		CONCRETE CURB	
	~O→ NO.	UTILITY POLE	
	₩ LP	LIGHT POLE	⊛- ■
	(SIZE) D	DRAIN LINE	——— (SIZE) D———
	(SIZE) W	WATER LINE	(SIZE) W
	(2)	DRAINAGE MANHOLE	● DMH
		CATCH BASIN	■ СВ
	+3+	HYDRANT	
	○WG	WATER GATE	● WG

----XXX-----

_ _ _ _ _ OHW_ _ _ _ _ _

X ELEV.

SAW CUT AND MATCH PAVEMENT

LIMIT OF DISTURBANCE

STRAW WATTLE

TEST PIT

APPROX. OWTS LOCATION

GAS LINE

ELECTRIC LINE

OVERHEAD WIRES

LEGEND

CONTOURS

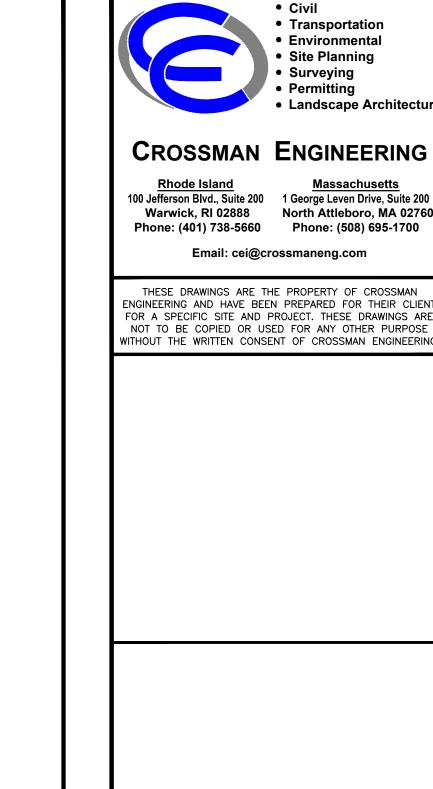
SPOT GRADES

CHAIN LINK FENCE

OVERHEAD WIRES

STATE HIGHWAY LINE

* * * * * * * *



PROJECT TITLE:

PROPOSED COMMERCIAL CONTRACTOR UNITS

PLAT MAP 10 LOT 42
ZONING DISTRICT GB1
GENERAL BUSINESS
1 ACRE DISTRICT
71 HARKNEY HILL ROAD
COVENTRY, RI

PREPARED FOR:

ANDREW BARBER P.O. BOX 7090 WARWICK, RI 02886

DD 477117G MIMI D

GENERAL NOTES and LEGEND

SEPTEMBER 2024 NO SCALE

DWG. NAME:

2872-02-NOTE.dwg

REVISIONS ∧

 NUMBER
 REMARKS
 DATE

 1
 TRC Comments
 10/16/24

 2
 Preliminary Submission
 02/20/25

 3
 KCWA Submission
 03/13/25

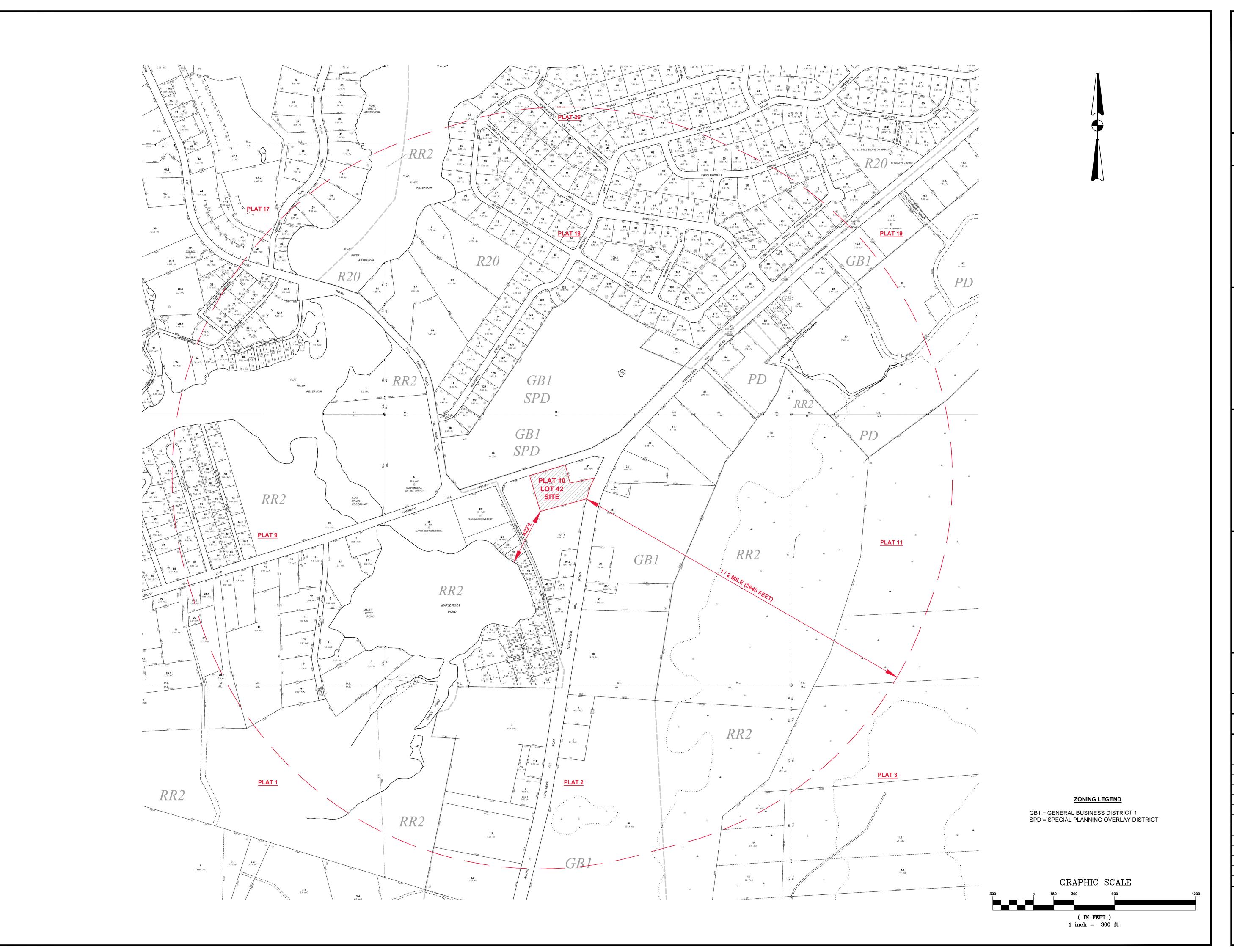
DRAWING NUMBER

SHEET: 2 OF: 16

SOIL EVALUATION DATA

SOIL EVALUATIONS WERE CONDUCTED BY CROSSMAN ENGINEERING ON OCTOBER 31, 2024.

- "	TEST PIT 1		- 11	TEST PIT 2		- 11	TEST PIT 3		- 11	TEST PIT 4		- "	TEST PIT 5	
0"— 10"—	Dark Yellowish Brown Loamy Sand	A (Friable)	0″ 	Dark Yellowish Brown Sandy Loam	A (Friable)	0″— 9"—	Dark Yellowish Brown Sandy Loam	A (Friable)	0″— 10 " —	Dark Yellowish Brown Sandy Loam	A (Friable)	0"— 8"—	Dark Yellowish Brown Sandy Loam	A (Friable)
18"—	Light Olive Brown Loamy Fine Sand	Bw1 (Friable)	20"—	Light Olive Brown Loamy Fine Sand	Bw1 (Friable)	9 — 16"—	Light Olive Brown Loamy Fine Sand	Bw1 (Friable)	21"—	Light Olive Brown Loamy Fine Sand	Bw1 (Friable)	25"—	Light Olive Brown Loamy Fine Sand	Bw1 (Friable)
30"—	Light Yellowish Brown Loamy Fine Sand	Bw2 (Friable)	26"—	Light Yellowish Brown Loamy Fine Sand	Bw2 (Friable)	20"—	Light Yellowish Brown Loamy Fine Sand	Bw2 (Friable)	130"—	Light Yellowish Brown Gravelly Cobbly Sand	C1 (Loose)	29"—	Light Yellowish Brown Loamy Fine Sand	Bw2 (Friable)
132"—	Light Yellowish Brown Gravelly Cobbly Sand	C1 (Loose)	120"	Light Yellowish Brown Gravelly Cobbly Sand	C1 (Loose)	120"—	Light Yellowish Brown Gravelly Cobbly Sand	C1 (Loose)		NO REFUSAL NO WATER SEEPAGE ESHWT=>102" TOTAL DEPTH=130"		126"—	Light Yellowish Brown Gravelly Cobbly Sand	C1 (Loose)
	NO REFUSAL NO WATER SEEPAGE ESHWT=>96" TOTAL DEPTH=132"			NO REFUSAL NO WATER SEEPAGE ESHWT=>96" TOTAL DEPTH=120"			NO REFUSAL NO WATER SEEPAGE ESHWT=>102" TOTAL DEPTH=120"						NO REFUSAL NO WATER SEEPAGE ESHWT=>102" TOTAL DEPTH=126"	





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PROJECT TITLE:

PROPOSED COMMERCIAL CONTRACTOR UNITS

PLAT MAP 10 LOT 42 **ZONING DISTRICT GB1** GENERAL BUSINESS 1 ACRE DISTRICT 71 HARKNEY HILL ROAD COVENTRY, RI

PREPARED FOR:

ANDREW BARBER P.O. BOX 7090 WARWICK, RI 02886

DRAWING TITLE:

VICINITY MAP

SEPTEMBER 2024 1"=300' DWG. NAME:

2872-03-VICINITY.dwg

REVISIONS

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NUMBER	REMARKS	DATE
1	TRC Comments	10 /16 /24
2	Preliminary Submission	02/20/25
3	KCWA Submission	03/13/25

DRAWING NUMBER

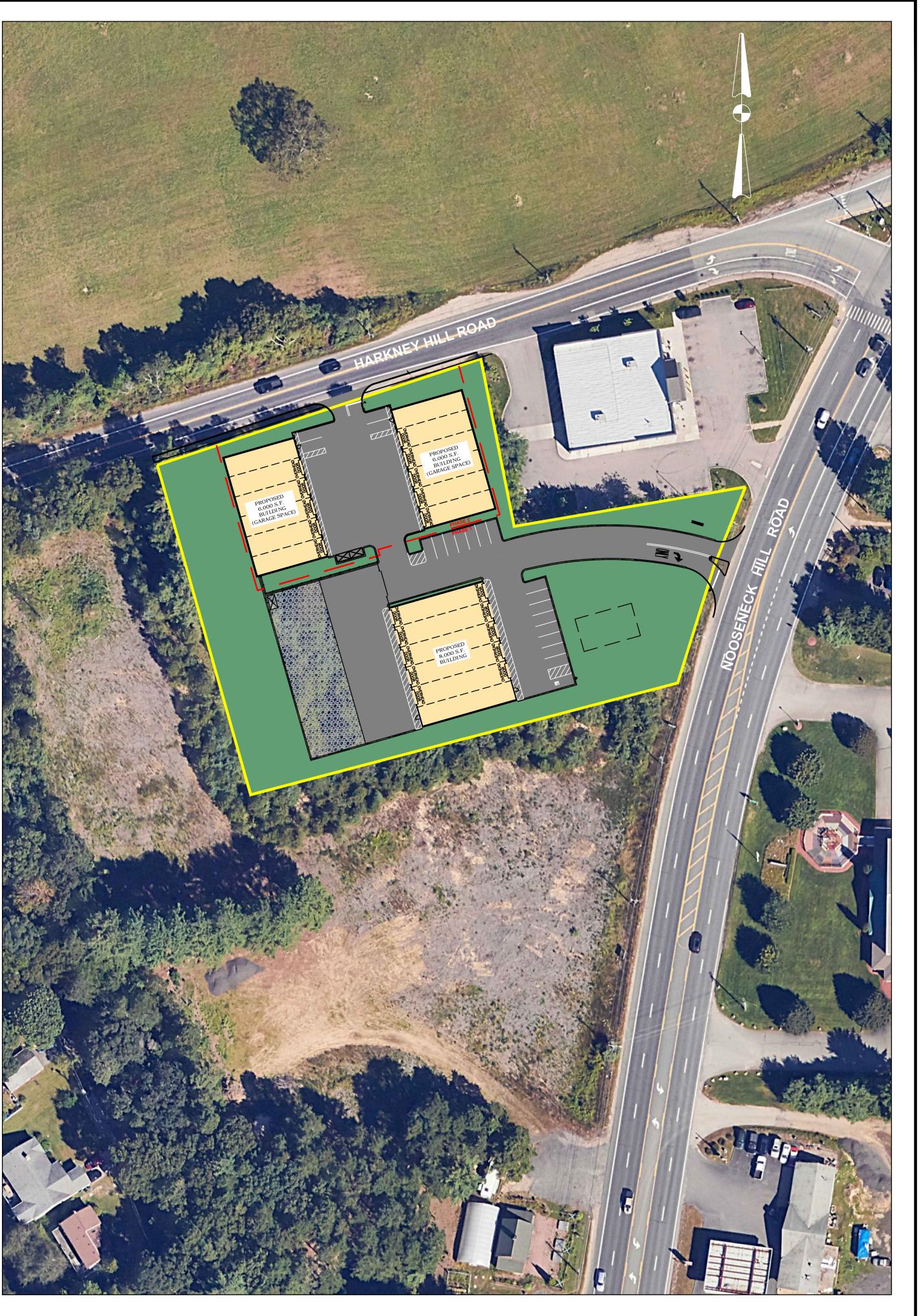
SHEET: 3 OF: 16



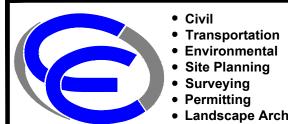


(IN FEET) 1 inch = 50 ft.

MmA: Merrimac Sandy Loam, 0 to 3% Slopes HkA: Hinckley Gravelly Sandy Loam, 0 to 3% Slopes



POST DEVELOPMENT



CROSSMAN ENGINEERING

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PROPOSED COMMERCIAL **CONTRACTOR UNITS**

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PREPARED FOR:

ANDREW BARBER P.O. BOX 7090 WARWICK, RI 02886

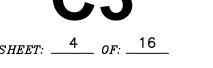
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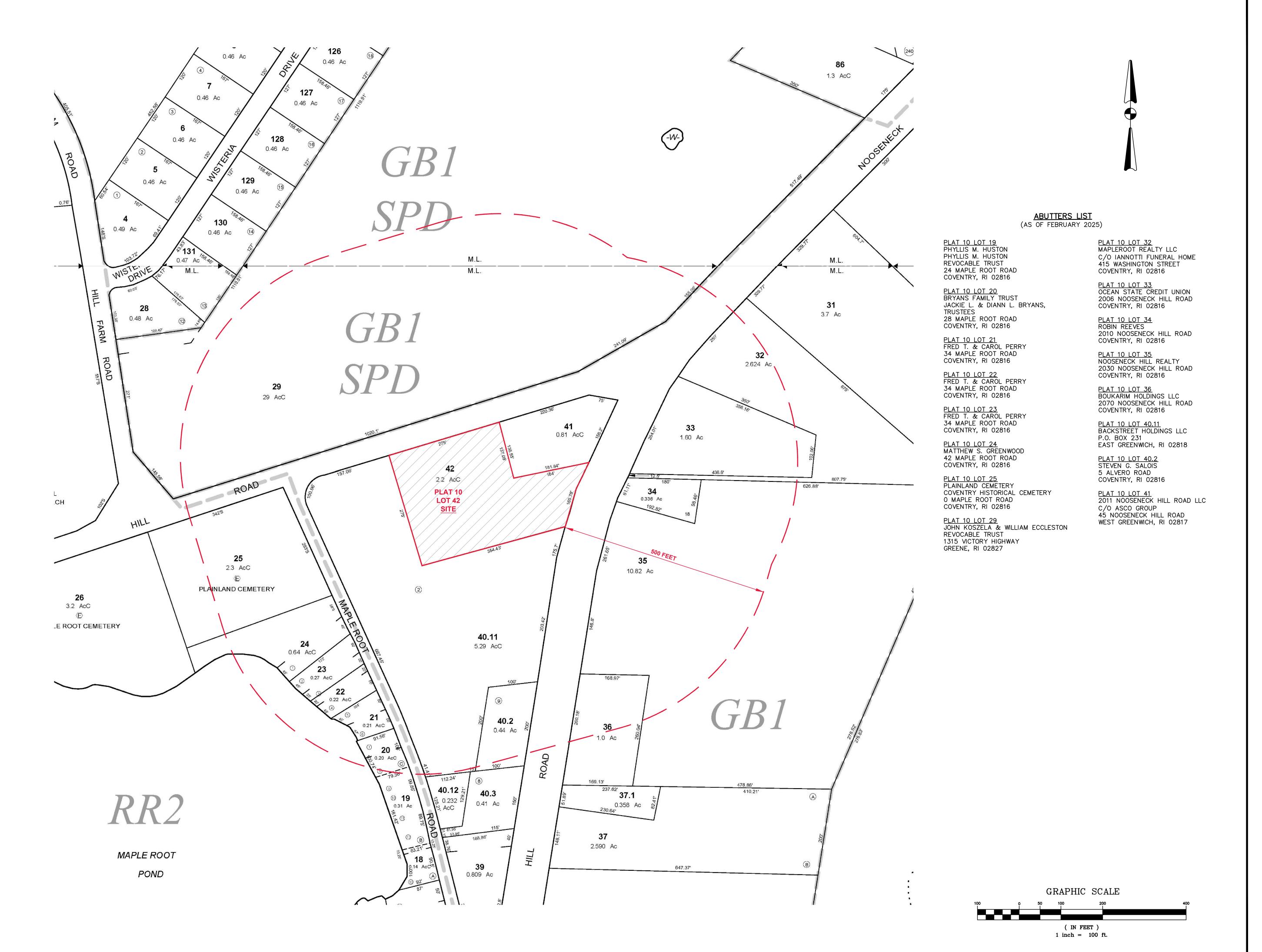
AERIAL MAP

DAID.	DOALL.				
SEPTEMBER 2024	1"=50				
DWG. NAME:					
2872-04-	AERIAL.dwg				
REVISIONS					
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NUMBER	REMARKS	DATE
1	TRC Comments	10 /16 /24
2	Preliminary Submission	02/20/25
3	KCWA Submission	03/13/25

DRAWING NUMBER







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PROJECT TITLE:

PROPOSED COMMERCIAL **CONTRACTOR UNITS**

PLAT MAP 10 LOT 42 **ZONING DISTRICT GB1 GENERAL BUSINESS** 1 ACRE DISTRICT 71 HARKNEY HILL ROAD **COVENTRY, RI**

PREPARED FOR:

ANDREW BARBER P.O. BOX 7090 **WARWICK, RI 02886**

DRAWING TITLE:

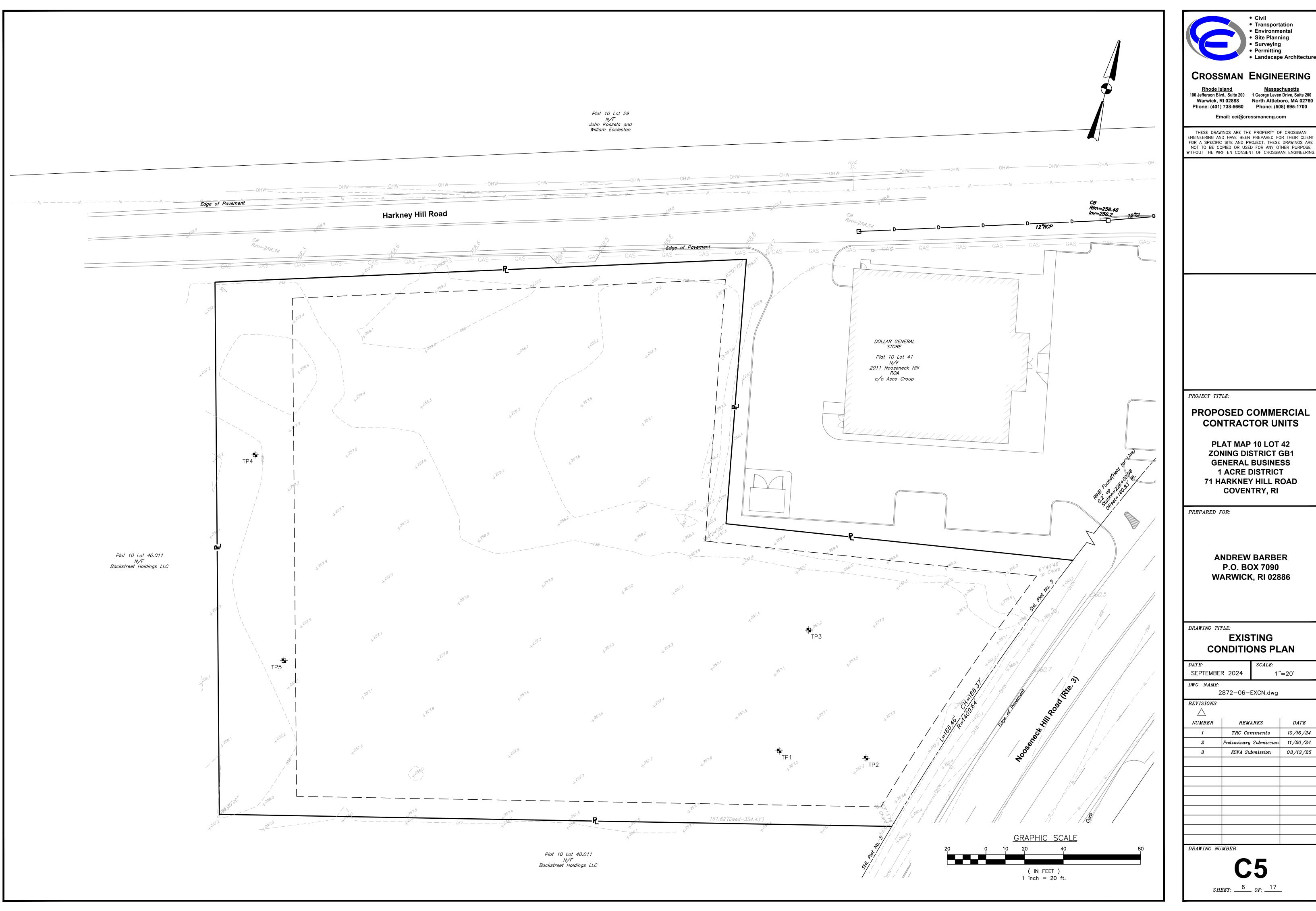
500' RADIUS MAP

SEPTEMBER 2024 1"=100' DWG. NAME: 2872-05-RADIUS.dwg REVISIONS

NUMBER

REMARKS DATE10 /16 /24 TRC Comments Preliminary Submission 02/20/25 KCWA Submission 03/13/25

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PROPOSED COMMERCIAL

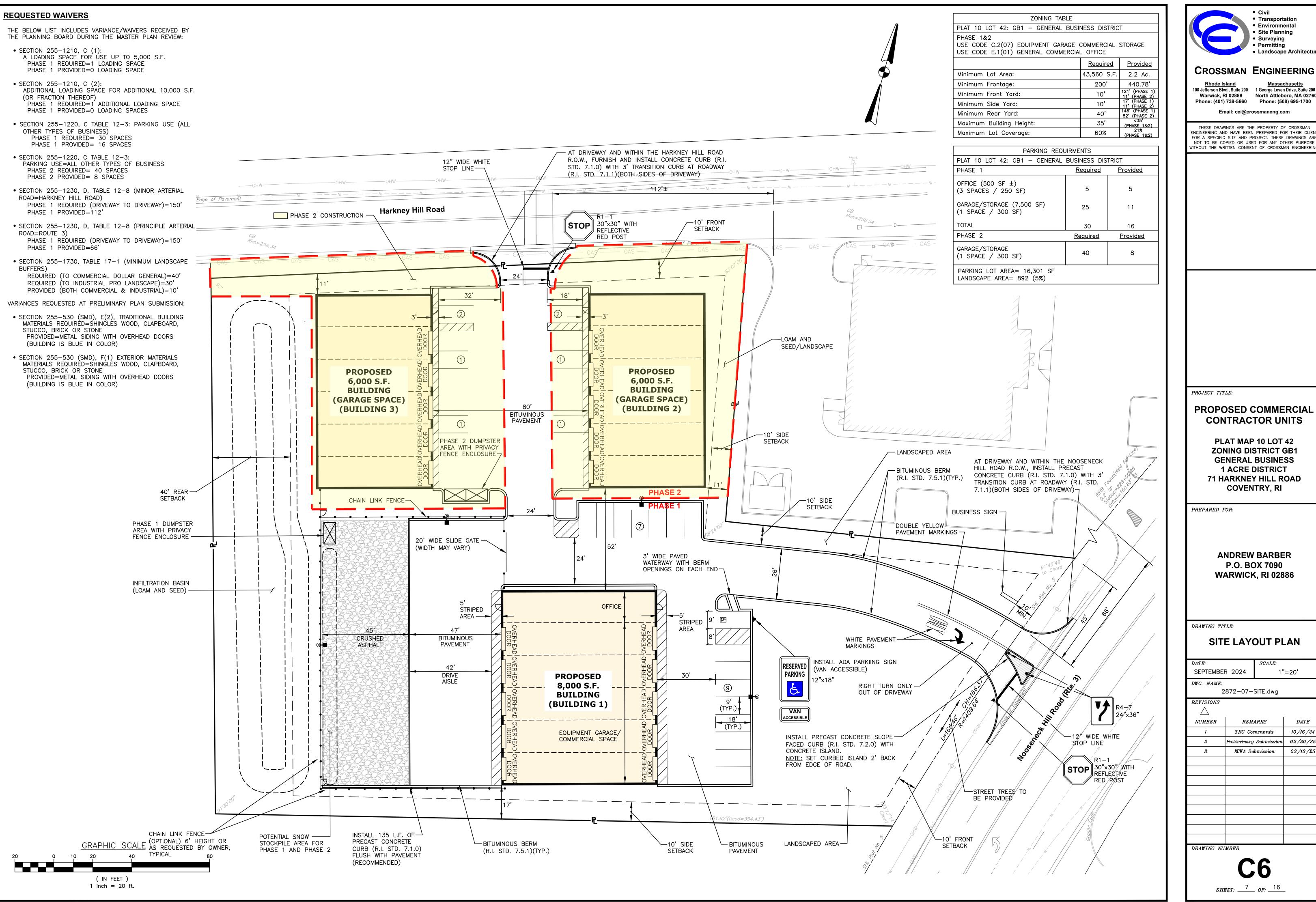
ZONING DISTRICT GB1 GENERAL BUSINESS 1 ACRE DISTRICT 71 HARKNEY HILL ROAD COVENTRY, RI

P.O. BOX 7090 WARWICK, RI 02886

CONDITIONS PLAN

1"=20'

NUMBER	REMARNS	DAIL
1	TRC Comments	10 /16 /24
2	Preliminary Submission	11/20/24
3	KCWA Submission	03/13/25





Surveying Permitting Landscape Architectur

Rhode Island Massachusetts

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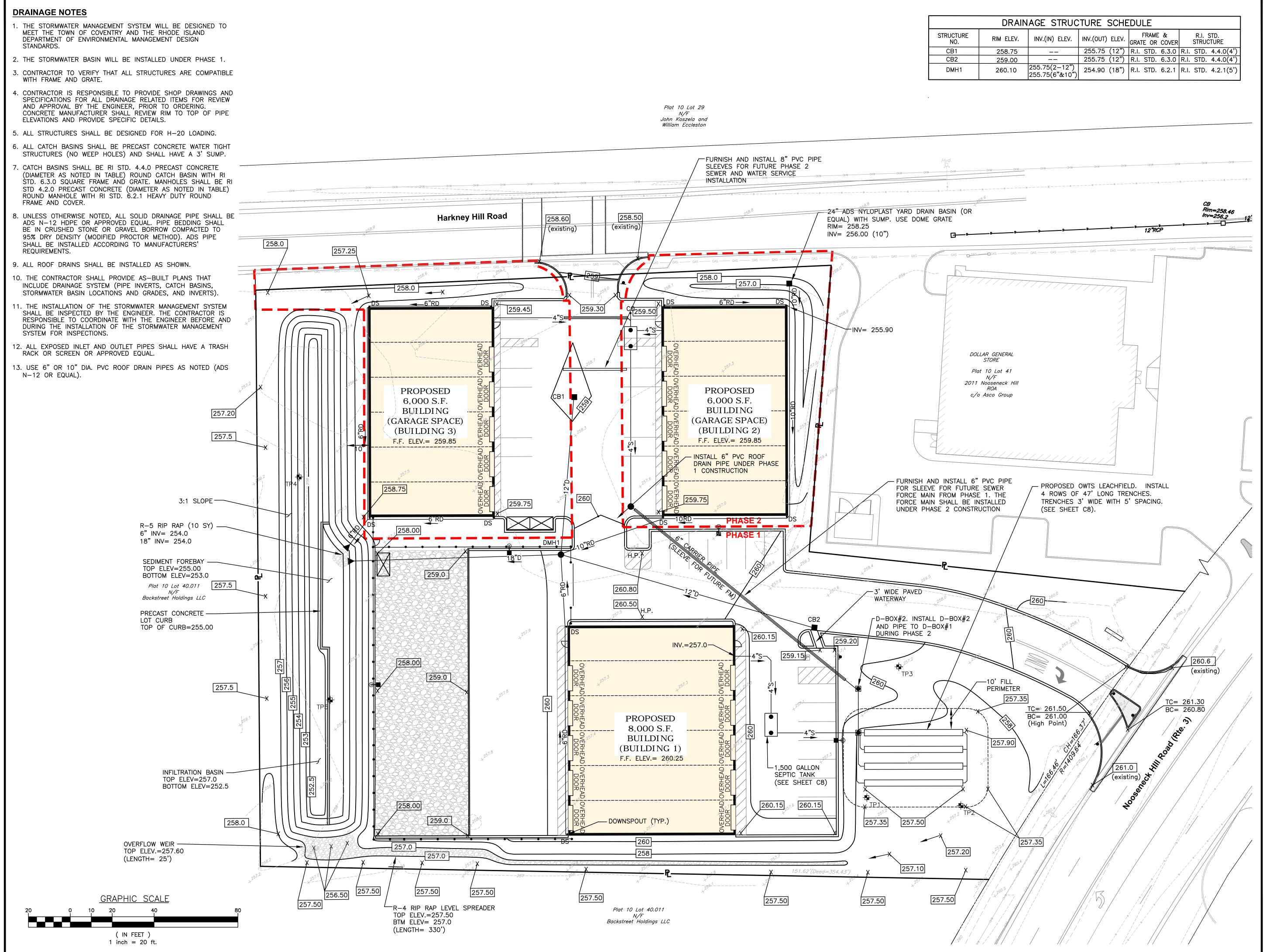
ANDREW BARBER P.O. BOX 7090 **WARWICK, RI 02886**

SITE LAYOUT PLAN

SEPTEMBER 2024 1"=20' 2872-07-SITE.dwg

\rightharpoonup		
NUMBER	REMARKS	DATE
1	TRC Comments	10 /16 /24
2	Preliminary Submission	02/20/25
3	KCWA Submission	03/13/25

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> PLAT MAP 10 LOT 42 **ZONING DISTRICT GB1 GENERAL BUSINESS** 1 ACRE DISTRICT 71 HARKNEY HILL ROAD COVENTRY, RI

PREPARED FOR:

ANDREW BARBER P.O. BOX 7090 **WARWICK, RI 02886**

DRAWING TITLE:

GRADING and **DRAINAGE PLAN**

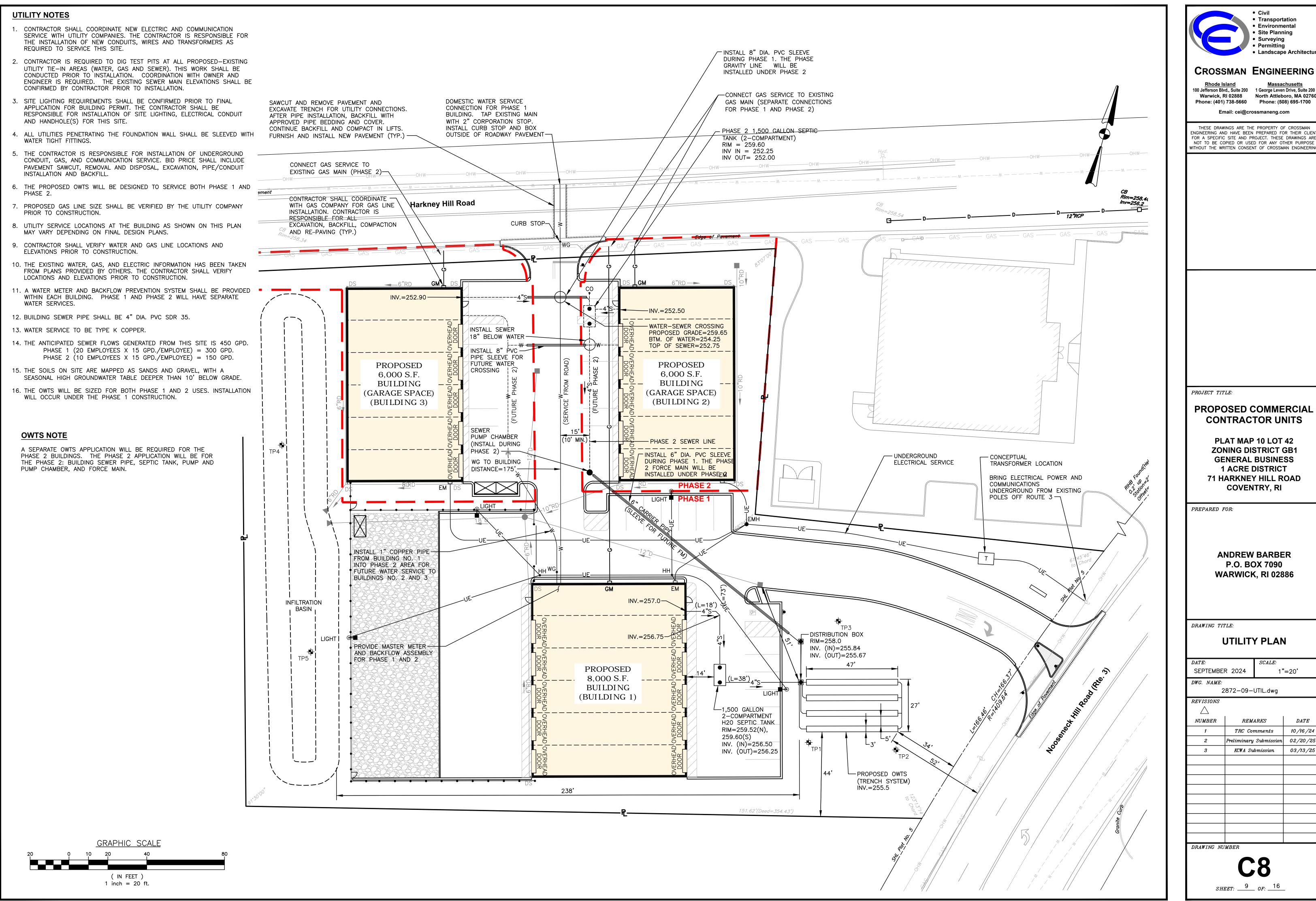
SEPTEMBER 2024 1"=20' DWG. NAME: 2872-08-GRADE.dwg

REVISIONS

NUMBERREMARKS DATE10 /16 /24 TRC Comments Preliminary Submission 02/20/25 KCWA Submission 03/13/25

DRAWING NUMBER

SHEET: 8 OF: 16





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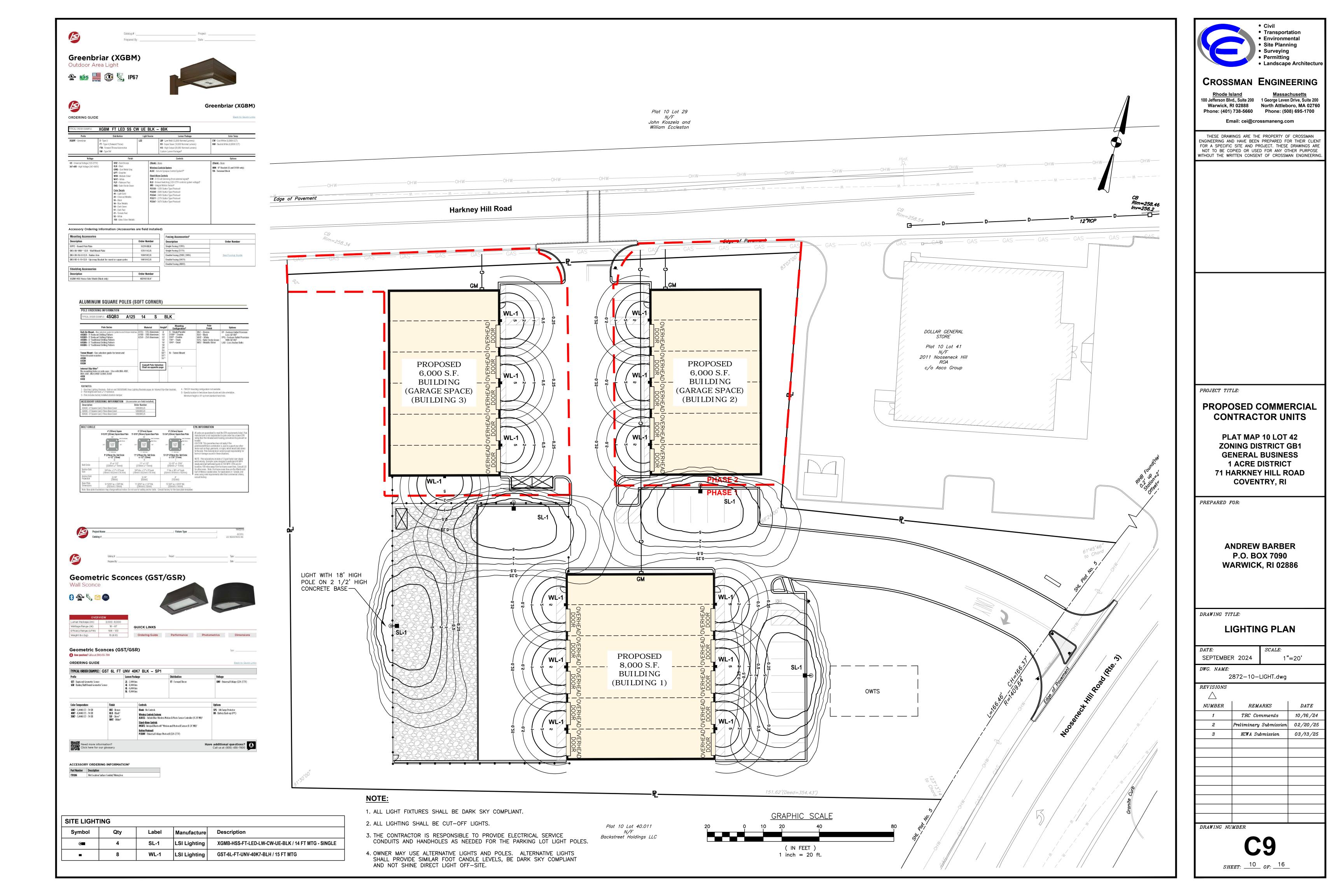
UTILITY PLAN

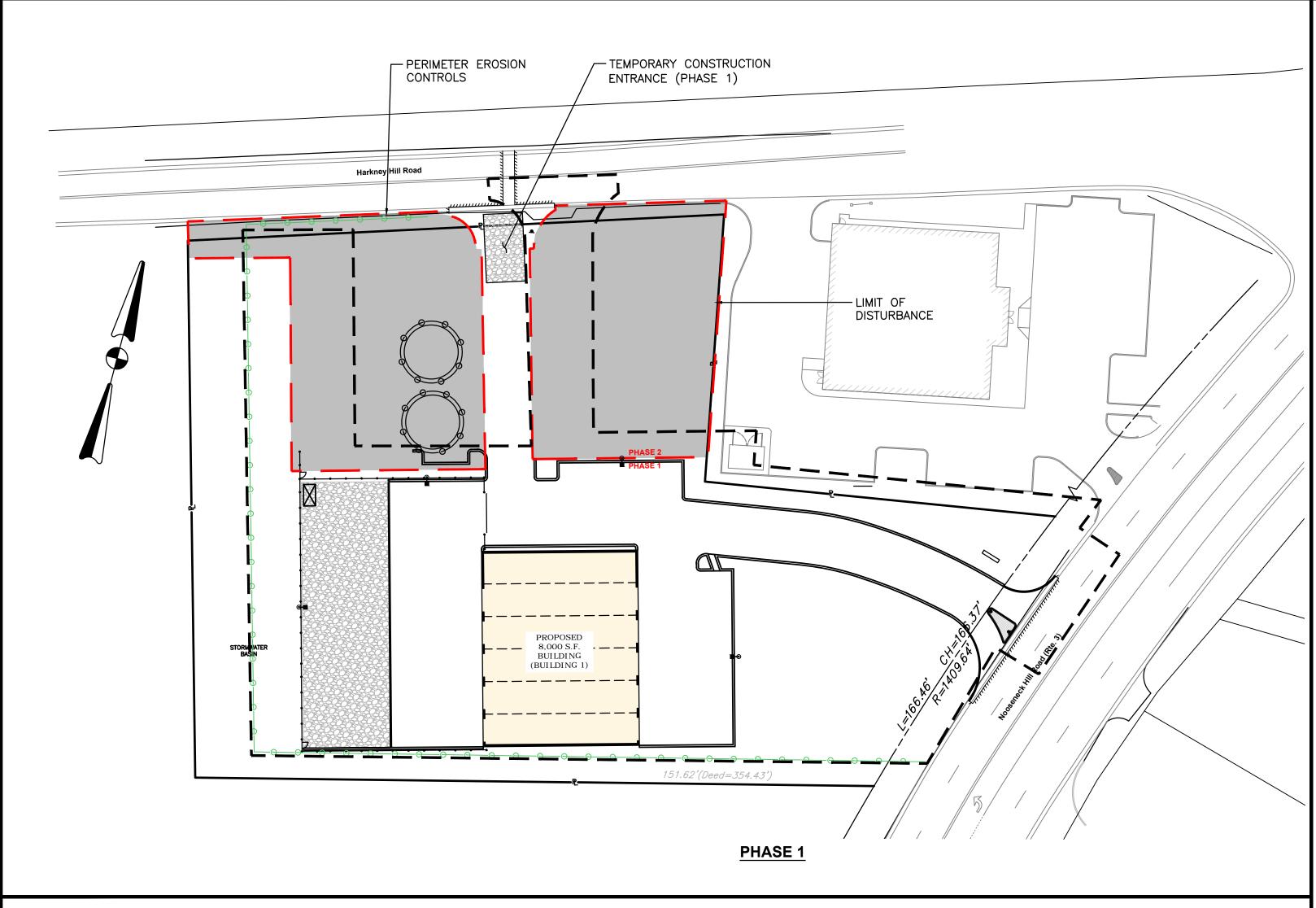
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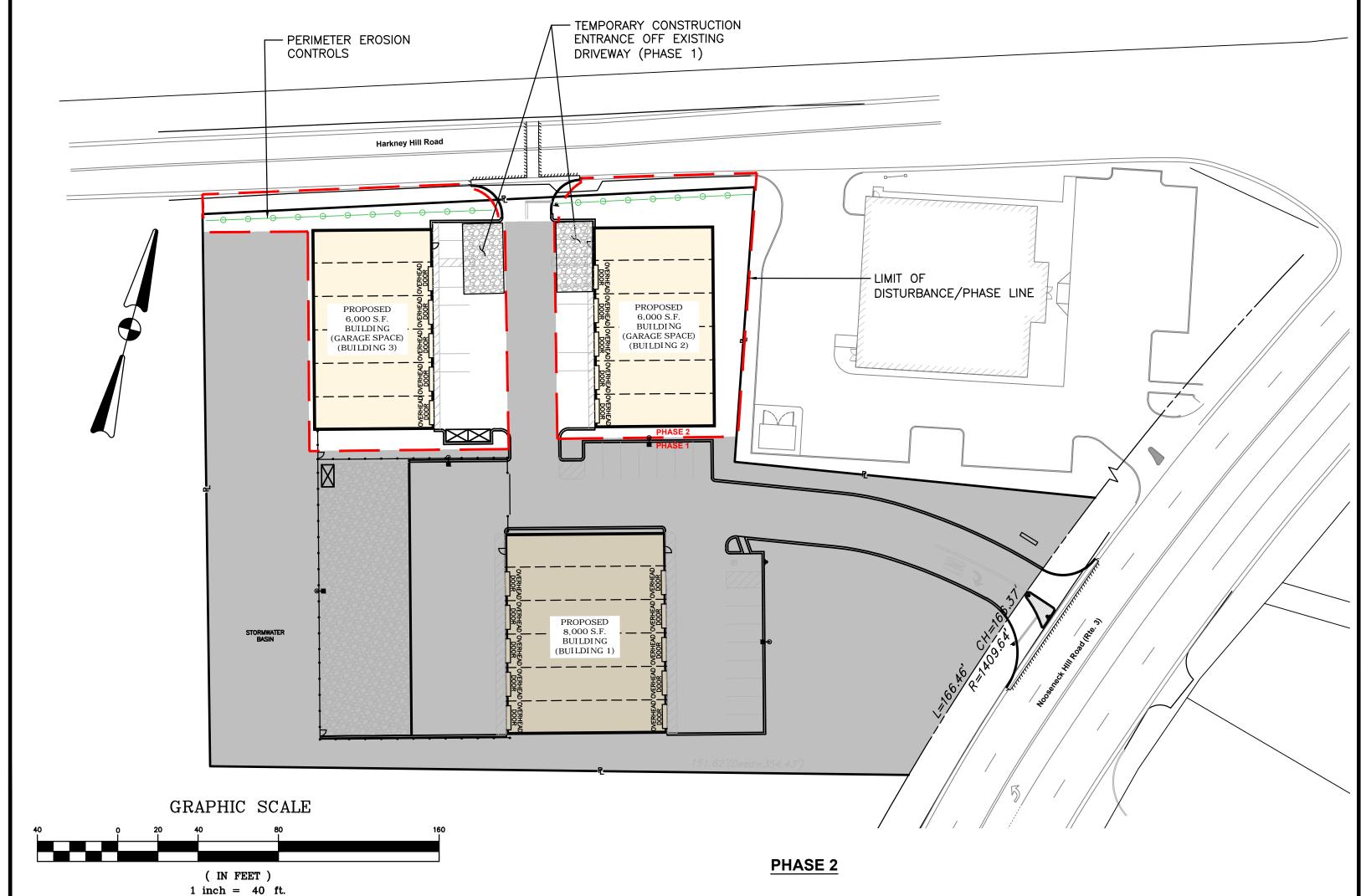
2872-09-UTIL.dwg

REVISIONS

NUMBER	REMARKS	DATE
1	TRC Comments	10 /16 /24
2	Preliminary Submission	02/20/25
3	KCWA Submission	03/13/25
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DUST CONTROL NOTES

ON AN AS-NEEDED BASIS OR AS DIRECTED BY THE TOWN, RIDEM OR OWNER, THE CONTRACTOR SHALL UTILIZE ONE OF THE FOLLOWING METHODS TO CONTROL DUST:

A. THE EXPOSED SOIL SURFACE SHOULD BE MOISTENED PERIODICALLY WITH ADEQUATE WATER TO CONTROL DUST.

B. CALCIUM CHLORIDE SHOULD BE EITHER LOOSE DRY GRANULES OR FLAKE FINE ENOUGH TO FEED THROUGH A SPREADER AT A

RATE THAT WILL KEEP SURFACE MOIST BUT NOT CAUSE POLLUTION OR PLANT DAMAGE.

THE METHODS SHOULD BE REPEATED AS NEEDED, AND SPECIAL ATTENTION MUST BE GIVEN TO THE ACCESS DRIVES.

INSPECTION/MAINTENANCE NOTES

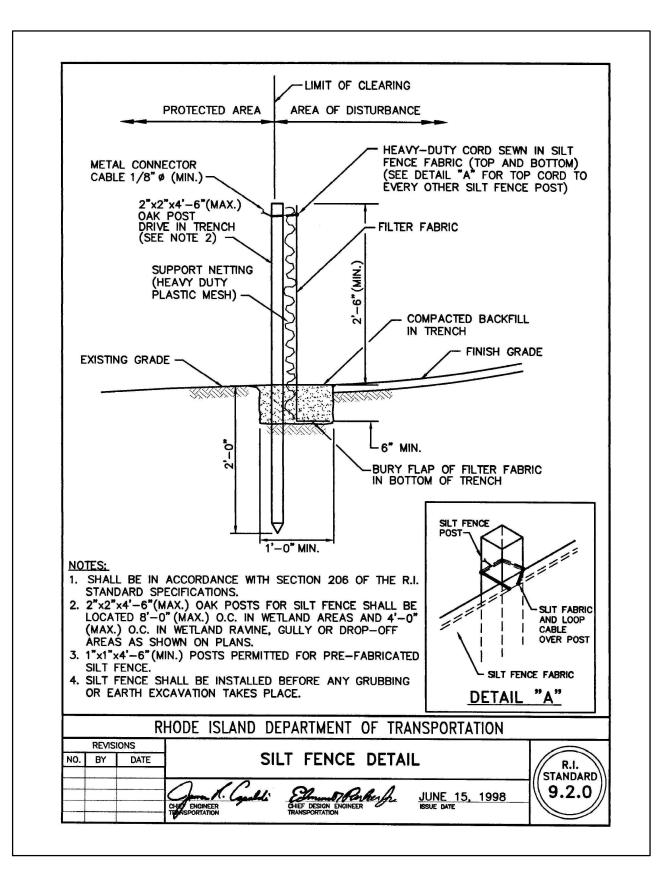
- 1. PRIOR TO COMMENCING GRUBBING OPERATIONS AND EARTHWORK, STRAW WATTLE SHALL BE PLACED INSIDE SAWCUT EDGE AND ALONG THE DOWNGRADIENT LIMIT OF DISTURBANCE TO PREVENT SEDIMENT FROM ENTERING EXISTING ROADWAY DRAINAGE SYSTEM. AND ABUTTING PROPERTIES AND THE CONTRACTOR SHALL INSTALL DRIPLINE TREE PROTECTION DEVICES ALONG THE PROPOSED TREELINE/EXISTING TREES TO REMAIN.
- 2. EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING THE DRAINAGE SYSTEM.
- 3. ALL DISTURBED AREAS WHICH BECOME SUBJECT TO EROSIVE TENDENCIES WHETHER THEY BE NEWLY FILLED OR EXCAVATED SHALL RECEIVE SLOPE PROTECTION - SUCH AS RIP-RAP.
- 4. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING PERIODS OF RAINFALL.
- 5. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION CONTROL MAINTENANCE AND SHALL INSPECT / REPLACE DAILY DURING CONSTRUCTION, FOLLOWING RAINFALL AND WEEKLY DURING NON CONSTRUCTION PERIODS.
- 6. ADDITIONAL STRAW WATTLE OR SANDBAGS SHALL BE LOCATED AS CONDITIONS WARRANT OR AS DIRECTED BY THE ENGINEER.
- 7. THE LATEST VERSION OF THE "RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK" PREPARED BY THE R.I. STATE CONSERVATION COMMITTEE, MUST BE UTILIZED BY THE CONTRACTOR AS A GUIDE.
- 8. THE CONTRACTOR IS RESPONSIBLE FOR ALL DUST CONTROL AND FOR THE ENTIRE PROJECT DURATION, INCLUDING TEMPORARY SHUT-DOWN PERIODS, MUST MONITOR AND REPAIR, AS NEEDED, ALL SLOPES TO ENSURE A STABLE PRODUCT.

GENERAL PROJECT WIDE NOTES

- I. CONTRACTOR SHALL OBTAIN A SOIL EROSION AND SEDIMENT CONTROL PERMIT FROM THE TOWN ENGINEER PRIOR TO THE COMMENCEMENT OF ANY WORK ONSITE; SOIL EROSION AND SEDIMENT CONTROL MEASURES MUST BE PROPERLY MAINTAINED THROUGHOUT CONSTRUCTION.
- 2. CONTRACTOR SHALL INSTALL TEMPORARY MEASURES SUCH AS; FIBER MATTING, CRUSHED STONE, HAY OR STRAW IN AREAS WHERE SLOPES OR STABILIZATION HAS FAILED.
- 3. IF SEDIMENT IS TRACKED OR ERODED INTO THE ROADWAY, THE CONTRACTOR WILL BE REQUIRED TO SWEEP DAILY.
- 4. STRAW WATTLE (OR SILT FENCE OR STAKED HAYBALES) SHALL BE INSTALLED AROUND THE PERIMETER OF THE AREA TO BE DISTURBED BY CONSTRUCTION. ADDITIONAL APPLICATIONS OF THESE CONTROLS MEASURES MAY BE REQUIRED DURING THE CONSTRUCTION PROCESS. THE CONTRACTOR SHALL INSPECT THE SITE AT A MINIMUM OF ONCE PER WEEK OR WITHIN 24 HOURS AFTER A STORM EVENT.
- 5. IF EROSION OR EROSIVE TENDENCIES ARE APPARENT ON THE SITE, THE CONTRACTOR IS RESPONSIBLE TO INSTALL ADDITIONAL CONSTRUCTION BMP'S SUCH AS SAND BAGS AS DIRECTED BY THE TOWN OR ENGINEER DURING CONSTRUCTION.
- 6. IF SEDIMENT OR DEBRIS IS TRACKED ONTO EXISTING PAVED AREAS ADJACENT TO THE CONSTRUCTION AREA, THE CONTRACTOR IS REQUIRED TO SWEEP THE PAVEMENT ON A DAILY BASIS. THE AREA SHALL BE INSPECTED DAILY.
- 7. THE CONTRACTOR IS RESPONSIBLE TO KEEP THE SITE CLEAN OF TRASH. RECOMMENDED DAILY PATROL OF THE CONSTRUCTION SHOULD BE CONDUCTED TO PICK-UP TRASH. THE OPERATOR SHALL REQUIRE THE CONTRACTOR TO HAVE PORTABLE SANITARY FACILITIES ON SITE. ROUTINE CLEANING AND WASTE DISPOSAL OF THESE PORTABLE SANITARY FACILITIES IS REQUIRED.

EROSION CONTROL AND SOIL STABILIZATION PROGRAM

- 1. EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING THE DRAINAGE SYSTEM, ADJACENT PROPERTY, AND ROADWAYS.
- 2. TEMPORARY TREATMENTS SHALL CONSIST OF A HAY, STRAW, OR FIBER MULCH PROTECTIVE COVERS, SUCH AS A MAT OR FIBER LINING (BURLAP, JUTE, FIBERGLASS NETTING, EXCELSIOR BLANKETS). THEY SHALL BE INCORPORATED INTO THE WORK AS WARRANTED OR AS ORDERED BY THE OWNER.
- 3. HAY OR STRAW APPLICATIONS SHALL BE IN THE AMOUNT OF 3,000-4,000 LBS/ACRE.
- 4. STOCKPILES SHALL HAVE NO SLOPE STEEPER THAN 2:1 AND SHALL BE SURROUNDED BY STRAW WATTLE, STAKED HAY BALES OR SILT FENCING.
- 5. STOCKPILES EXPOSED FOR EXCESSIVE PERIODS SHALL RECEIVE TEMPORARY TREATMENT CONSISTING OF HAY, STRAW OR FIBER MATTING.
- 6. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION CONTROL MAINTENANCE AND SHALL INSPECT/REPLACE AS
- 7. ADDITIONAL HAY BALES OR SANDBAGS SHALL BE LOCATED AS CONDITIONS WARRANT OR AS DIRECTED BY THE ENGINEER, OWNER, MUNICIPAL REPRESENTATIVES OR LOCAL D.O.T.
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING DUST CONTROL AT NO ADDITIONAL COST TO THE OWNER.
- 9. PROPOSED CATCH BASINS SHALL BE PROTECTED BY SILT SACKS.
- 10. THE STRAW WATTLE MAY BE INSTALLED ON THE EXISTING PAVEMENT /IMPERVIOUS AREAS WITH OUT STAKES. CONTRACTOR SHALL INSPECT DAILY, IF SOIL EROSION OR SEDIMENT IS OBSERVED IN THESE AREAS, THE CONTRACTOR SHALL RELOCATE OR INSTALL ADDITIONAL STRAW WATTLE IN LOCATIONS THAT CAN BE STAKED. THIS WORK IS INCLUDED IN THE PROJECT SCOPE.
- 11. SILT FENCE OR STAKED HAYBALES MAY BE USED IN LIEU OF STRAW WATTLE.
- 12. AN ALTERNATE COMPOST SOCK OR FILTER SOCK PRODUCT MAY BE USED IN LIEU OF STRAW WATTLE UPON APPROVAL OF THE ENGINEER.



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PROJECT TITLE:

PROPOSED COMMERCIAL CONTRACTOR UNITS

PLAT MAP 10 LOT 42 **ZONING DISTRICT GB1 GENERAL BUSINESS** 1 ACRE DISTRICT 71 HARKNEY HILL ROAD COVENTRY, RI

PREPARED FOR:

ANDREW BARBER P.O. BOX 7090 **WARWICK, RI 02886**

DRAWING TITLE: **SOIL EROSION and** SEDIMENT CONTROL PLAN

DATE:	SCALE:
SEPTEMBER 2024	1"=40'
DWG. NAME:	

2872-11-SOIL.dwg *REVISIONS*

NUMBERREMARKS DATETRC Comments 10 /16 /24 |Preliminary Submission| 02/20/25 KCWA Submission 03/13/25

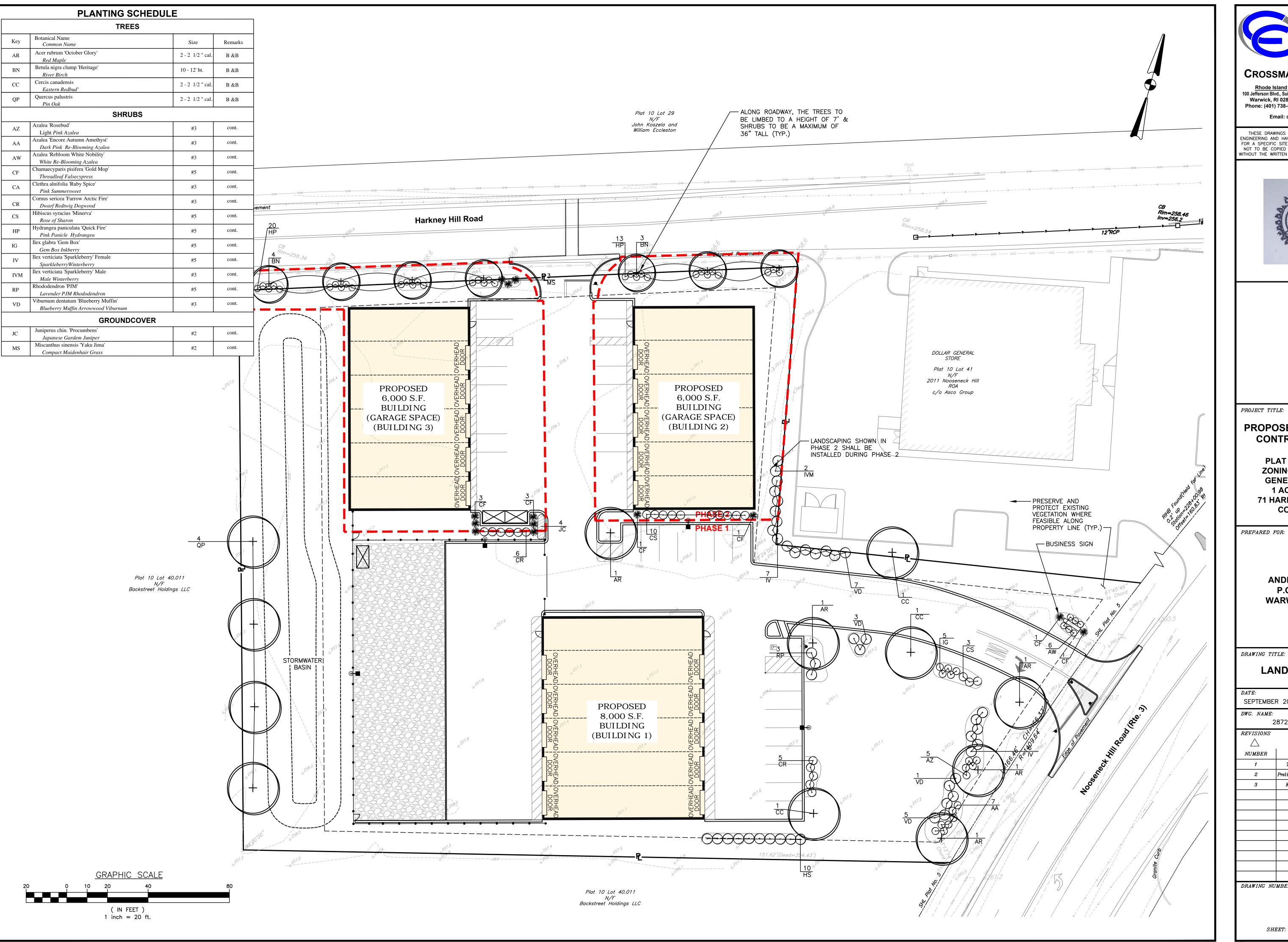
DRAWING NUMBER

SHEET: 11 OF: 16

LEGEND

LIMIT OF DISTURBANCE

SEDIMENT CONTROL MEASURE





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PROPOSED COMMERCIAL **CONTRACTOR UNITS**

PLAT MAP 10 LOT 42 **ZONING DISTRICT GB1 GENERAL BUSINESS** 1 ACRE DISTRICT 71 HARKNEY HILL ROAD **COVENTRY, RI**

ANDREW BARBER P.O. BOX 7090 **WARWICK, RI 02886**

DRAWING TITLE:

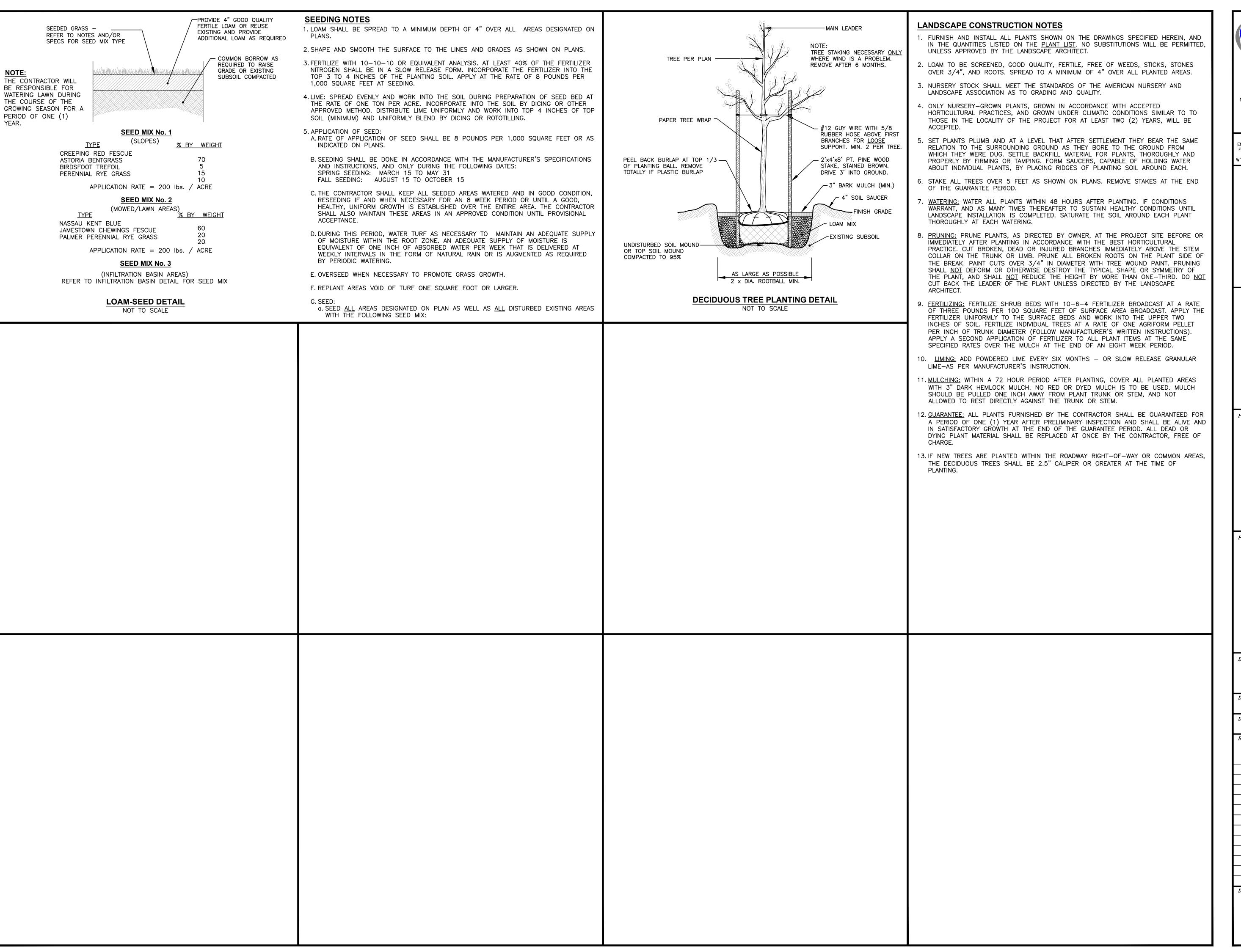
LANDSCAPE PLAN

SEPTEMBER 2024 1"=20' 2872-12-LAND.dwg

NUMBER	NUMBER REMARKS		
1	TRC Comments	10 /16 /24	
2	Preliminary Submission	02/20/25	
3 KCWA Submission		03/13/25	

DRAWING NUMBER

SHEET: 12 OF: 16





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PROJECT TITLE:

PROPOSED COMMERCIAL **CONTRACTOR UNITS**

PLAT MAP 10 LOT 42 **ZONING DISTRICT GB1 GENERAL BUSINESS** 1 ACRE DISTRICT 71 HARKNEY HILL ROAD COVENTRY, RI

PREPARED FOR:

ANDREW BARBER P.O. BOX 7090 **WARWICK**, **RI 02886**

DRAWING TITLE:

LANDSCAPE DETAILS

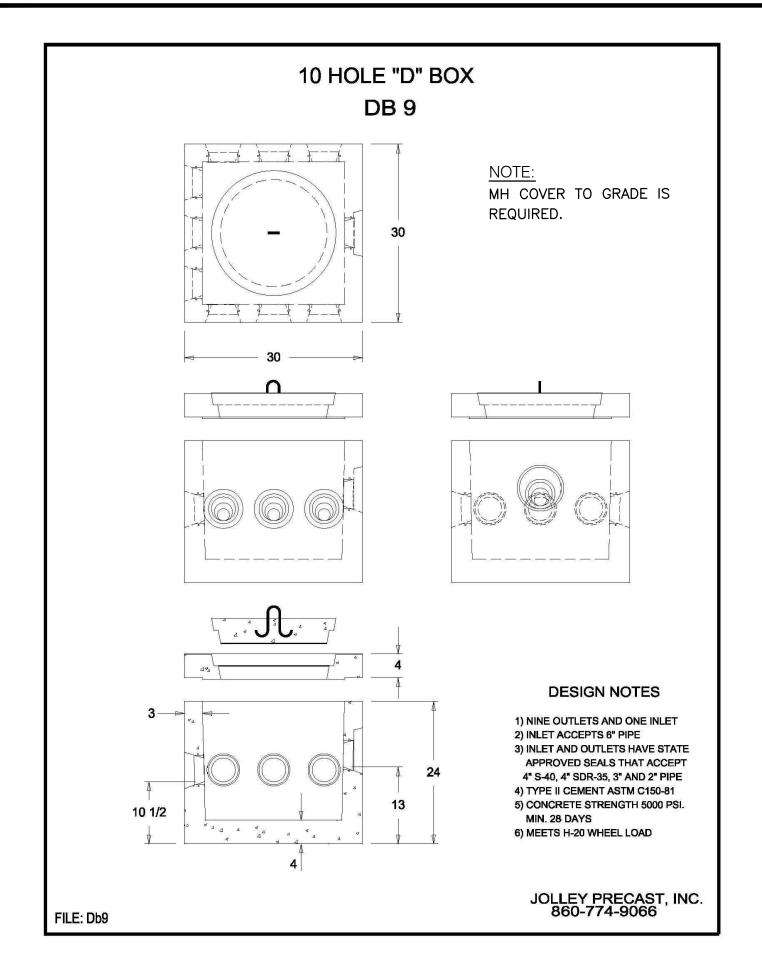
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PTEMBER 2024	AS SHOWN		
G. NAME:			

2872-13-LANDDET.dwg

NUMBER

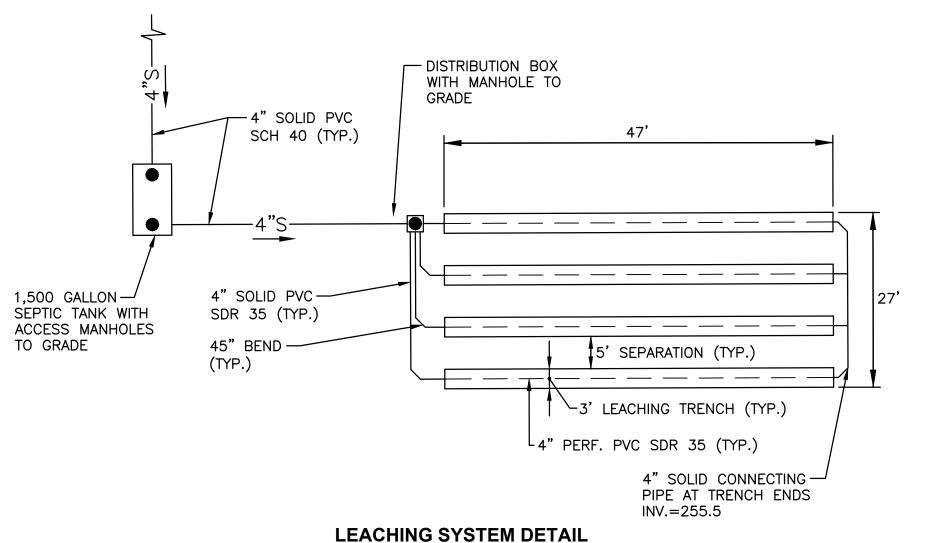
NUMBER	REMARKS	DATE	
1	TRC Comments	10 /16 /24	
2	Preliminary Submission	02/20/28	
3	KCWA Submission	03/13/25	

DRAWING NUMBER



D-BOX DETAIL NOT TO SCALE

ALTERNATE PRECAST MANUFACTURER MAY BE USED BUT WILL REQUIRE APPROVAL FROM ENGINEER PRIOR TO CONSTRUCTION.



NOT TO SCALE

DESIGN FLOW:

UNIT FLOW DESIGN DESIGN UNITS FLOW(gpd) <u>USE</u> RATE (gpd/unit) COMMERCIAL/ 15 GPD/EMPLOYEE 20 EMPLOYEES (PHASE 1) 450 GPD CONTRACTOR UNITS 10 EMPLOYEES (PHASE 2)

SEPTIC TANK SIZING

TOTAL FLOW = 450 GAL.

REQUIRED TANK SIZE = 1,000 GALLON TANK

PROVIDED TANK SIZE = 1,500 GALLON TANK

PHASE NOTE

AN EFFLUENT SCREEN SHALL BE INSTALLED IN THE SEPTIC TANK.

LEACHING SYSTEM SIZING:

TYPE OF SYSTEM: TRENCH (6" STONE BELOW PIPE) LOADING RATE = 0.61 GALS./S.F./DAY

MIN. LEACHING AREA REQUIRED = 450 GPD/0.61 GAL/S.F./DAY = 738 S.F. TOTAL TRENCH LENGTH REQUIRED = (738 S.F.) / (4.2 S..F/L.F.) = 176 L.F.

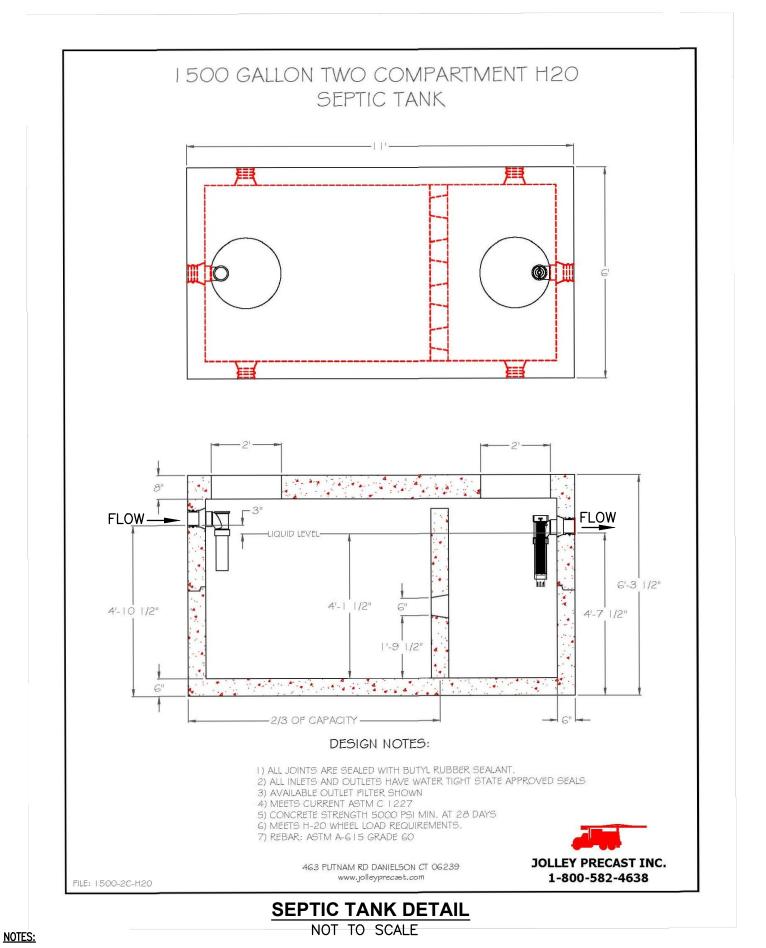
30 EMPLOYEES TOTAL

TOTAL TRENCH LENGTH PROVIDED = $4 \times 45' = 180$ L.F.

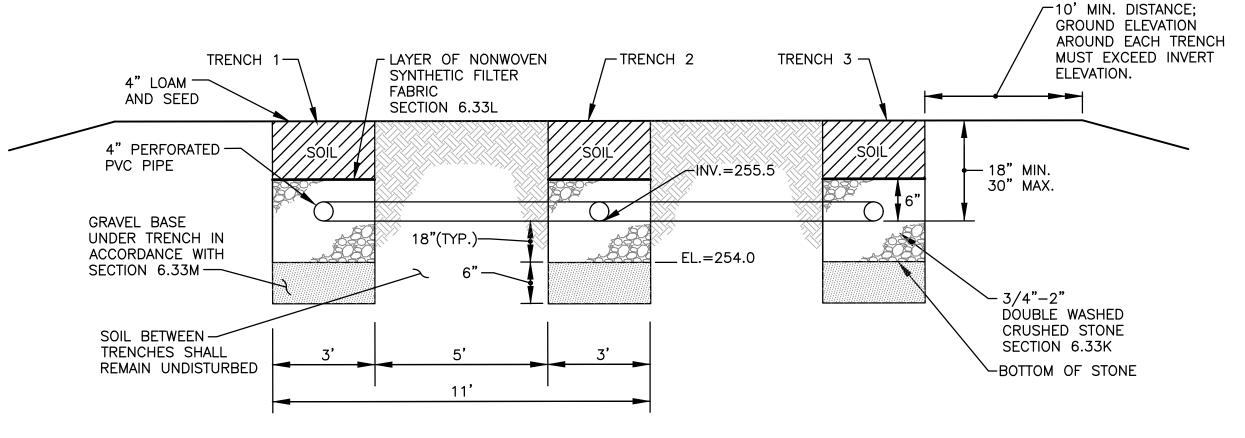
THE LEACHFIELD IS SIZED FOR PHASE 1 AND 2. WHEN PHASE 2 IS UNDER CONSTRUCTION, A NEW OWTS APPLICATION WILL BE REQUIRED FOR THE PHASE 2: BUILDING SEWER, SEPTIC TANK, PUMP CHAMBER AND PUMP AND FORCE MAIN.

ONSITE WASTEWATER TREATMENT SYSTEM NOTES

- 1. REMOVE A HORIZON SOIL AND B HORIZON SOILS (Bw1, Bw2 & Bw3) AND ANY UNDESIRABLES FROM THE LEACH FIELD AREA AND FROM THE AREA 5' AROUND THE LEACH FIELD. REMOVE ALL TREES AND BRUSH AROUND SYSTEM PLUS (10) FEET. SOIL REMOVAL IS NOT ALLOWED IN THE WATER TABLE. A MINIMUM 5' OVER DIG AROUND THE LEACH FIELD IS REQUIRED. NO NATIVE A HORIZON, B HORIZON SOILS SHALL REMAIN BETWEEN ELJEN TRENCHES OR ELJEN UNITS.
- 2. NO VEHICULAR TRAFFIC IS ALLOWED ON LEACH FIELD.
- 3. THERE ARE NO KNOWN EXISTING WELLS WITHIN 200' OF THE SYSTEM AND THERE ARE NO KNOWN EXISTING OR PROPOSED PUBLIC WELLS WITHIN 500'.
- 4. MINIMUM ELEVATION OF TRENCH INVERT TO BE MAINTAINED WITHIN 10 FEET OF TRENCHES. INSTALL OWTS GRAVEL IN TRENCH AND ADJACENT TO TRENCHES TO ESTABLISH PROPOSED GRADES.
- 5. SURFACE RUNOFF TO BE DIVERTED FROM SYSTEM.
- 6. USE WATERTIGHT BOOT WITH STAINLESS STEEL CLAMP FOR SEPTIC TANK INLET AND OUTLET OPENINGS.
- 7. ONLY AFTER THE OWTS APPROVAL AND COORDINATION WITH THE DESIGN ENGINEER, THE LICENSED INSTALLER MUST FOLLOW THE R.I.D.E.M. "OWTS RULES AND REGULATIONS OUTLINED IN TITLE 250 - DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, CHAPTER 150 - WATER RESOURCES, SUBCHAPTER 10 - WASTEWATER & STORMWATER, PART 6 - RULES ESTABLISHING MINIMUM STANDARDS RELATING TO LOCATION, DESIGN, CONSTRUCTION AND MAINTENANCE OF ONSITE WASTEWATER TREATMENT SYSTEMS, 07/01/22."
- 8. NO KNOWN DRAINS, PROPOSED DRAINS OR UNDERDRAINS DISCHARGING INTO A SURFACE WATER SUPPLY ARE WITHIN 100' OF LEACH FIELD.
- 9. ALL DISTURBED AREAS ARE TO RECEIVE 4" OF LOAM & SEED, UNLESS OTHERWISE NOTED.
- 10. THERE ARE NO WETLANDS WITHIN 50' OF THE PROPOSED OWTS AND NO WETLANDS WITHIN 200' OF THE SITE. ALL KNOWN WATERCOURSES, WETLANDS, DRAINS AND STORMWATER MANAGEMENT SYSTEMS WITHIN 200' OF THE PROPOSED OWTS ARE SHOWN.
- 11. GARBAGE DISPOSAL GRINDERS ARE NOT ALLOWED FOR HOUSES.
- 12. THERE ARE NO PUBLIC SEWERS WITHIN 200' OF THE PARCEL.
- 13. THE SITE IN NOT WITHIN THE CRITICAL RESOURCE AREA AS DEFINED BY SECTION 6.42-6.45 OF THE OWTS RULES AND REGULATIONS. THE NEAREST CRITICAL RESOURCE AREA IS THE PROVIDENCE WATER SUPPLY PUBLIC WATERSHED IS APPROXIMATELY 2 MILES NORTH OF THE SITE.
- 14. THE SITE IS NOT WITHIN THE WATERSHED OF THE PUBLIC WATER SUPPLY AS DEFINED IN SECTION 6.44, AND DRAINS WITHIN THE VICINITY DO NOT DISCHARGE DIRECTLY OR INDIRECTLY TO A CRITICAL RESOURCE AREA IDENTIFIED IN SECTION 6.42.
- 15. NO OWTS CONSTRUCTION SHALL BEGIN UNTIL AUTHORIZED BY R.I.D.E.M. AND THE OWTS DESIGNER.
- 16. CONTRACTOR MUST NOTIFY ENGINEER 3 DAYS BEFORE START OF CONSTRUCTION
- 17. CONTRACTOR SHALL INSTALL AN 8" GRAVEL OR CRUSHED STONE LEVELING PAD UNDER THE SEPTIC TANK
- 18. CONTRACTOR SHALL PROVIDE WATER TIGHT CERTIFICATES FOR THE SEPTIC TANK AND D-BOX.
- 19. PRIOR TO PURCHASE, THE CONTRACTOR SHALL PROVIDE SUBMITTALS FOR THE D-BOX, SEPTIC TANK. GRAVEL AND PIPE FOR APPROVAL
- 20. AT THE TIME OF PHASE 2 CONSTRUCTION, A SEPARATE OWTS APPLICATION WILL BE REQUIRED FOR THE PHASE 2 COMPONENTS, INCLUDING THE PHASE 2 BUILDING SEWER, SEPTIC TANK, PUMP CHAMBER, PUMP AND FORCE MAIN.



- 1. ALTERNATE PRECAST MANUFACTURER MAY BE USED BUT WILL REQUIRE APPROVAL FROM ENGINEER PRIOR TO CONSTRUCTION.
- 2. INLET TEE SHALL EXTEND DOWNWARD AT LEAST 1' BELOW FLOW LINE.
- 3. OUTLET TEE SHALL EXTEND DOWNWARD 1/3 THE DEPTH OF THE FLOW LINE.



TYPICAL TRENCH CROSS SECTION NOT TO SCALE

OF 4" SOLID PVC EXTENDED INTO TRENCH 4 ROWS - (45 L.F./ROW) M.H. TO -/-INV.=255.0 PERFORATED PIPE (SDR 35 PVC) GRADE _BTM STONE=254.0 (44 L.F. TO INSTALLED LEVEL BLDG 74" SOLID PVC (CONNECT TO PHASE 1 BUILDING) **VARIES** M.H. RISER ' OF 4" SOLID PVC **⊢**Μ.Η. ΤΟ TRENCH) 2'-25' TO GRADE 1 (FM FOR PHASE 2) \ GRADE EXTENDED INTO TRENCH F.F. ELEV. ∠MIN. ELEV.=TRENCH CAP PIPE END ~NONWOVEN (VARIES) INVERT=255.5 FINISH GRADE FILTER FABRIC 1%(MIN.)—<u>►</u> 10 (MIN.) 4" PVC (SCH40) BLDG. $1=257.0^{-1}$ INV.=256.5 *BLDG. 2=252.5 └2" OF 3/4" TO 2" *BLDG. 3=252.9 1,500 GAL. -SEPARATE OUTLET FOR EACH INV.=256.25 DOUBLE WASHED SEPTIC TANK DISTRIBUTION LINE (TYP.) ESHWT 249.2 CRUSHED STONE 4" SOLID PVC. ABOVE PIPE *PUMP CHAMBER WILL (SCH 40), 1% MIN. 5'(MIN.) BE REQUIRED -4" SOLID PVC SDR 35, 6" OF 3/4" TO 2" TIGHT JOINTS (TYP.) DOUBLE WASHED CRUSHED STONE DISTRIBUTION BOX-RESTRICTIVE LAYER 6" GRAVEL BASE → BELOW PIPE INV.(IN) = 256.84(NOT ENCOUNTERED) INV.(OUT) = 256.67TYPICAL SYSTEM PROFILE

NOT TO SCALE



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PROJECT TITLE:

PROPOSED COMMERCIAL CONTRACTOR UNITS

PLAT MAP 10 LOT 42 **ZONING DISTRICT GB1 GENERAL BUSINESS** 1 ACRE DISTRICT 71 HARKNEY HILL ROAD COVENTRY, RI

PREPARED FOR:

ANDREW BARBER P.O. BOX 7090 **WARWICK**, **RI 02886**

DRAWING TITLE:

MISCELLANEOUS DETAILS PLAN No. 1

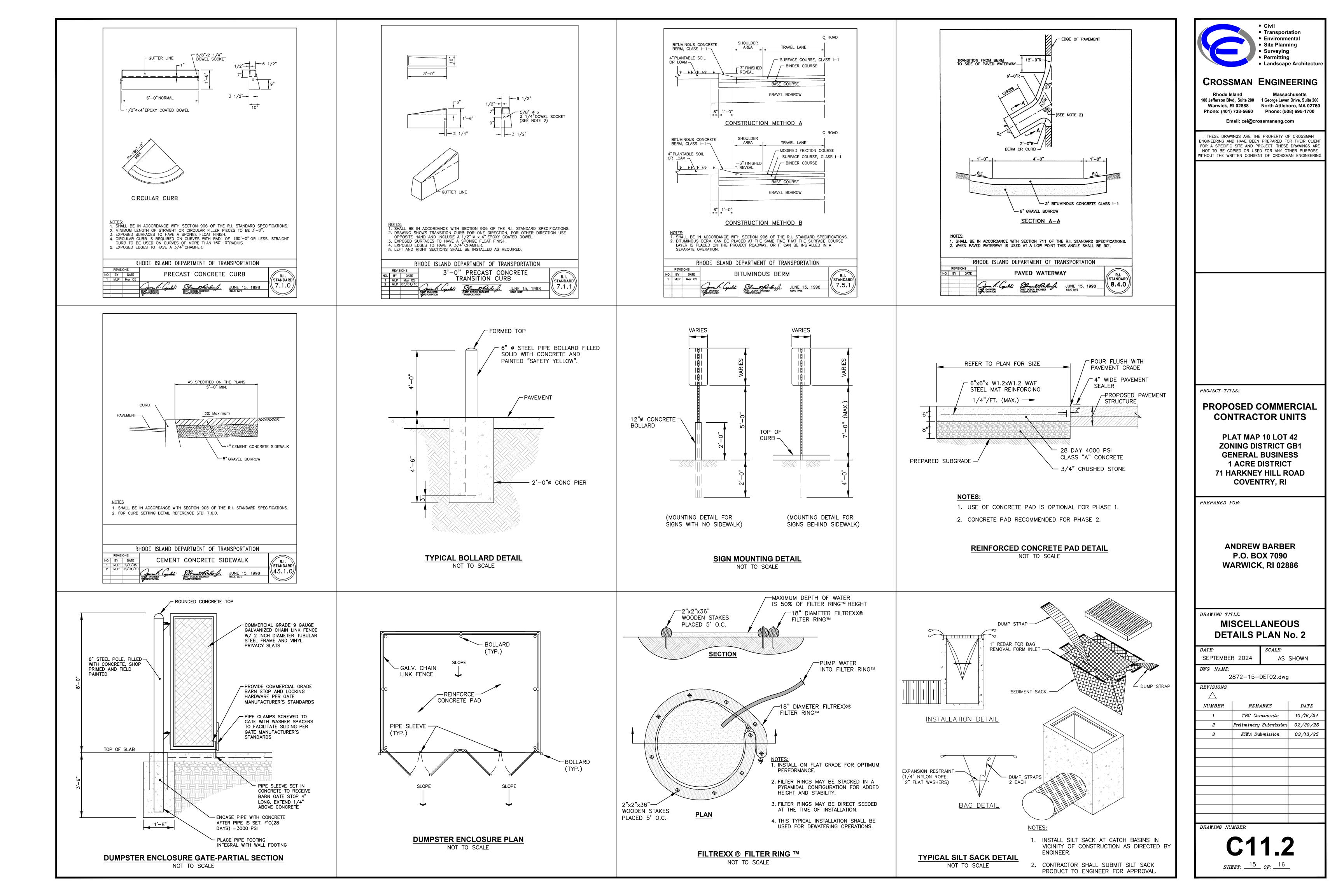
SCALE: SEPTEMBER 2024 AS SHOWN DWG. NAME: 2872-14-DET01.dwg

REVISIONS

NUMBERREMARKSDATETRC Comments 10 /16 /24 Preliminary Submission 02/20/25 KCWA Submission 03/13/25

DRAWING NUMBER

SHEET: 14 OF: 16



EMBANKMENT NOTES:

- THE INFILTRATION BASIN EMBANKMENTS ARE TO BE CONSTRUCTED WITH APPROVED COMMON BORROW. NO SOIL/ROCK GREATER THAN 2" SHALL BE UTILIZED. COMMON BORROW SHALL MEET OR EXCEED AN IN-PLACE DENSITY OF 100 lb./cf. ALL MATERIAL SHALL BE PLACED IN 8 TO 12 INCH LIFTS AND COMPACTED TO 95% MAXIMUM DENSITY. FILL MATERIAL WILL NOT CONTAIN FROZEN MATERIALS OR BE PLACED ON FROZEN SURFACES. COMMON BORROW SHALL MEET SPECIFICATION SECTION 202.20 IN THE RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2024 EDITION.
- 2. UPON COMPLETION OF CLEARING AND GRUBBING OPERATIONS, THE EMBANKMENT AREAS ARE TO BE EXCAVATED. IF ANY ORGANIC OR UNSUITABLE MATERIAL IS ENCOUNTERED, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR REVIEW OF EXCAVATION AREA. THE DEPTH OF EXCAVATION WILL BE DETERMINED BY THE ENGINEER BASED UPON THE LOCAL CONDITIONS. NO FILL MATERIAL SHALL BE PLACED UNTIL THE FOUNDATION PREPARATION HAS BEEN COMPLETED. ALL WATER SHALL BE REMOVED FROM THE FOUNDATION PRIOR TO PLACING THE EMBANKMENT.
- 3. THE FILL MATERIAL MUST BE SPREAD IN UNIFORM LAYERS AND FALL WITHIN THE SPECIFIED OPTIMUM WATER CONTENT RANGE IN ORDER TO ACHIEVE THE REQUIRED COMPACTION. EACH LAYER IS TO BE COMPACTED PRIOR TO LAYING AN ADDITIONAL LAYER. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER HIS SELECTED METHOD OF COMPACTION, COMPACTION EQUIPMENT AND THE SEQUENCE OF OPERATIONS NECESSARY TO OBTAIN THE REQUIRED DENSITY. THE WATER CONTENT AT COMPACTION SHOULD BE IN THE RANGE BETWEEN ONE PERCENTAGE POINT BELOW AND TWO PERCENTAGE POINTS ABOVE STANDARD AASHTO OPTIMUM WATER CONTENT. THE MATERIAL SHALL BE PROCESSED TO A UNIFORM WATER CONTENT BY ADDING WATER TO THE MATERIAL IN ADVANCE OF THE FILL PLACEMENT.
- . BACKFILL MATERIAL AROUND STRUCTURES AND PIPE IS TO BE PLACED TO PREVENT THE MOVEMENT OF WATER. THE OPTIMUM WATER CONTENT MUST BE MAINTAINED IN THE SAME RANGE AS IN THE EMBANKMENT. THE BACKFILL MUST BE PLACED IN LAYERS LESS THAN 4 INCHES IN THICKNESS AND DISTRIBUTED UNIFORMLY AROUND THE STRUCTURE/PIPE. ALL COMPACTION WILL BE TO 95% MAXIMUM DENSITY AND MAY REQUIRE HAND TAMPERS OR SMALL POWER EQUIPMENT.
- 5. EMBANKMENT DAMAGE COMMONLY RESULTS FROM IMPROPER CONSTRUCTION OF CONDUIT AND STRUCTURAL BACKFILL WITHIN THE EMBANKMENT BECAUSE SEEPAGE WILL OCCUR WITH IMPROPER BACKFILL AND COMPACTION. THEREFORE, STRUCTURES AND PIPES ARE TO BE CONSTRUCTED AS THE EMBANKMENT CONSTRUCTION RISES TO THE RESPECTIVE PIPE OR STRUCTURE. THIS WILL PREVENT THE DISTURBANCE OF CONSTRUCTED EMBANKMENT MATERIAL, PIPES FROM THE OUTLET STRUCTURE TO THE OUTFALL SHALL HAVE AN ANTI-SEEP COLLAR.

PROPOSED 3:1 SLOPE GRADE (MAX.) 4" TOPSOIL -SLOPE AND SEED* (MAX.) −3' MIN* TOP OF BERM-**EMBANKMENT** 3:1 SLOPE — (MAX.) BTM OF BASIN -NOTE: WHEN EXCAVATING FOR INFILTRATION BASIN, ALL TOPSOIL, SUBSOIL, FILL, AND SILT LOAM SOILS SHALL BE REMOVED. REPLACE WITH RIDEM OWTS GRAVEL SANDS OR EQUAL TO ACHIEVE PROPOSED GRADES *USE TOPSOIL MIX FOR BASINS

INFILTRATION BASIN TYPICAL SECTION NOT TO SCALE

INFILTRATION BASIN (BMP 2) SUMMARY

TOP OF BERM	BOTTOM OF BASIN	OVERFLOW WEIR CREST ELEVATION	GROUNDWATER ELEVATION	SEPARATION TO GROUNDWATER
358.5	353.00	357.60	349.40	3.50'

INFILTRATION BASIN SEED MIX (SEED MIX NO. 2)

APPLICATION RATE = 15-25 LBS. / ACRE (SEASONALLY FLOODED MIX)

- (BASIN BOTTOM AREA)
- 20% FOX SEDGE, PA ECOTYPE (CAREX VULPINOIDEA, PA ECOTYPE) 16% VIRGINIA WILD RYE, PA ECOTYPE (ELYMUS VIRGINICUS, PA ECOTYPE)
- 15% RIVERBANK WILD RYE, PA ECOTYPE (ELYMUS RIPARIUS, PA ECOTYPE)
- 15% JAPANESE MILLET (ECHINOCHLOA CRUSGALLI VAR. FRUMENTACEA) 15% DEER TONGUE, 'TIOGA' (PANICUM CLANDESTINUM (DICHANTHELIUM
- 9% BLUNT BROOM SEDGE, PA ECOTYPE (CAREX SCOPARIA, PA
- 5% SWITCHGRASS, 'CAVE-IN-ROCK' (PANICUM VIRGATUM, 'CAVE-IN-ROCK')
- 2% GREEN BULRUSH, PA ECOTPE (SCIRPUS ATROVIRENS, PA ECOTYPE)
- 2% AWL SEDGE, PA ECOTYPE (CAREX STIPATA, PA ECOTYPE) 1% AUTUMN BENTGRASS, APB (AGROSTIS PERENNANS, APB)

TOPSOIL MIX FOR BASINS

PLANTING SOIL SHALL MEET THE BELOW COMPOSITION;

SAND: 85-88%

SOIL FINES: 8-12% (NO MORE THAN 2% CLAY) ORGANIC MATTER: 3-5%

FINISHED SURFACE - IDENTIFICATION TAPE EARTH EXCAVATION TRENCH BACKFILL (REFER TO NOTE 1) EARTH/ — COMPACT PIPE BACKFILL (REFER TO NOTE 1) PIPE SPRING COMPACT BEDDING AND BACKFILL TO PIPE SPRING LINE (REFER PROVIDE INITIAL CUSHION OF MATERIAL OVER PIPE SUFFICIENT TO NOTE 1) TO PREVENT DAMAGE DURING HALF SECTION | HALF SECTION

1. PIPE BEDDING AND BACKFILL TO SPRING LINE SHALL CONSIST OF CRUSHED STONE-3/4" MINUS. PIPE BACKFILL SHALL CONSIST OF CRUSHED STONE (WRAPPED IN FILTER FABRIC) OR GRAVEL (3" MINUS, WITH SIEVE ANALYSIS APPROVED BY ENGINEER), OR OTHER APPROVED MATERIAL. TRENCH BACKFILL SHALL CONSIST OF SUITABLE EXCAVATED MATERIAL OR OTHER APPROVED MATERIAL. ALL BEDDING/BACKFILL TO BE COMPACTED TO 95% DRY DENSITY, MODIFIED PROCTOR METHOD.

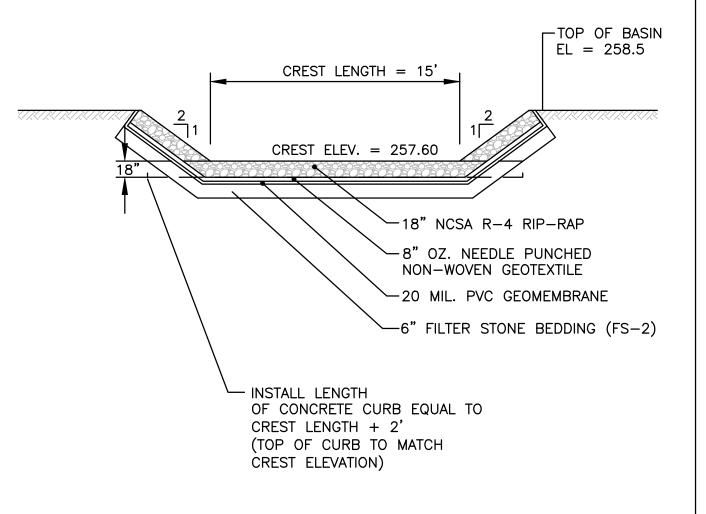
IN ROCK

2. ALL TRENCH EXCAVATION AND ANY SHEETING AND SHORING SHALL BE DONE IN ACCORDANCE WITH ALL STATE AND LOCAL CODES AND OSHA REGULATIONS

3. MINIMUM TRENCH WIDTH SHALL BE OUTSIDE DIAMETER OF PIPE AT BELL PLUS 12". MAXIMUM TRENCH WIDTH SHALL BE OUTSIDE DIAMETER OF PIPE AT BELL PLUS 24".

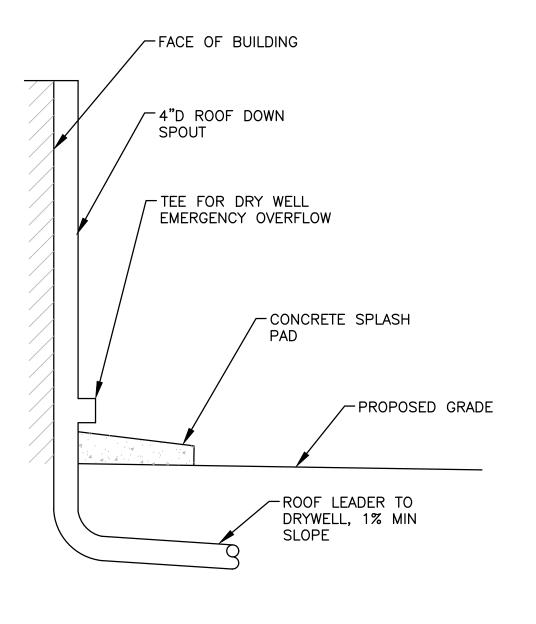
TRENCH DETAIL

NOT TO SCALE



RIP RAP SHALL CONTINUE ON INSIDE AND OUTSIDE OF BASIN SLOPE AT OVERFLOW WEIR LOCATION.

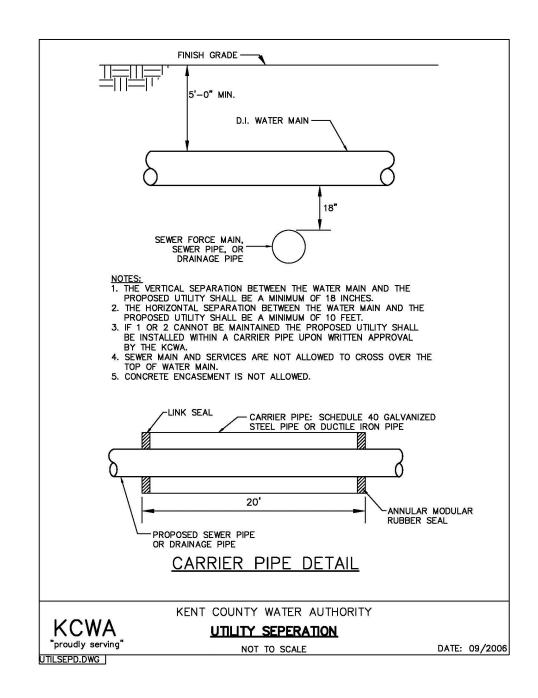
TYPICAL BASIN OVERFLOW WEIR DETAIL NOT TO SCALE

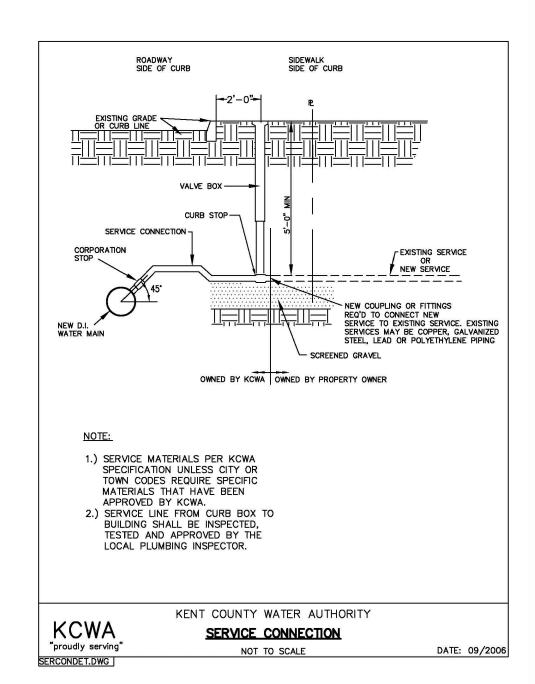


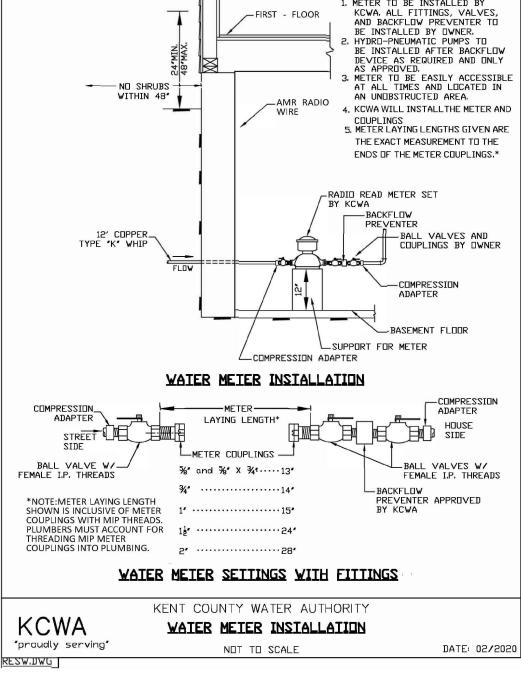
ROOF DOWN SPOUT DETAIL

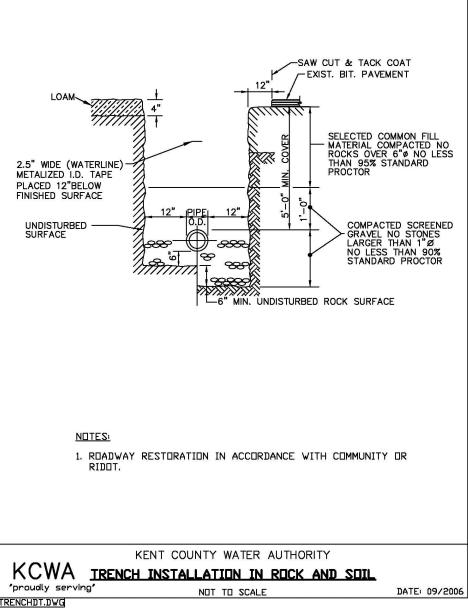
NOT TO SCALE

1. METER TO BE INSTALLED BY KCWA, ALL FITTINGS, VALVES, AND BACKFLOW PREVENTER TO BE INSTALLED BY OWNER. HYDRO-PNEUMATIC PUMPS TO









WATER SERVICE NOTE

ANY CONFLICT ENCOUNTERED DURING CONSTRUCTION WITH THE PROPOSED WATER SYSTEM MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND KENT COUNTY WATER AUTHORITY PRIOR CONTINUATION OF CONSTRUCTION.

WATER NOTES

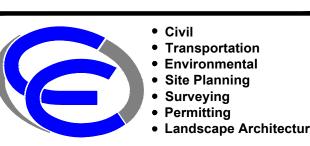
- 1. ALL INSTALLATION, JOINTS, CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE CURRENT RULES AND REGULATIONS OF THE KENT COUNTY WATER AUTHORITY AND ANSI/AWWA C600 STANDARDS.
- 2. FOR THE DOMESTIC WATER LINE, THE CONTRACTOR SHALL INSTALL A CORPORATION STOP, 3/4" WATER SERVICE, AND CURB BOX TO THE LOT AND A 12' TYPE "K" COPPER WHIP AT THE POINT OF ENTRY INTO BUILDING.
- PRESSURE AND LEAKAGE TESTS AND DISINFECTING PIPES SHALL BE PERFORMED BY THE CONTRACTOR IN CONFORMANCE TO KENT COUNTY WATER AUTHORITY REQUIREMENTS. AMERICAN WATER WORKS ASSOCIATION (AWWA) RECOMMENDATIONS. AND GOVERNMENTAL AGENCIES HAVING JURISDICTION. THE CONTRACTOR MUST FOLLOW THE REQUIREMENTS SET FORTH IN SECTIONS 3.22 AND 3.23 OF THE RULES AND REGULATIONS OF THE KENT COUNTY WATER AUTHORITY.
- 4. ALL GATE VALVES, FITTINGS, PIPE, JOINTS, ETC. SHALL BE DESIGNED FOR 1.5 TIMES WORKING PRESSURE BUT NOT LESS THAN 250 PSI.
- WATER PIPE SHALL BE LOCATED AT A DEPTH OF COVER EQUAL TO 5' MINIMUM. A MINIMUM OF 10-FEET HORIZONTAL OR 18-INCH VERTICAL SEPARATION SHALL BE MAINTAINED IN THE PLACEMENT OF WATER MAINS, SERVICES, OR APPURTENANCES WITHIN THE VICINITY OF SEWER FACILITIES, OR VICE VERSA. WHERE THE ABOVE SEPARATION DISTANCES CANNOT BE ACHIEVED, THE SANITARY SEWER PIPE SHALL BE ENCASED WITHIN A DUCTILE IRON CARRIER PIPE FOR A DISTANCE EQUAL TO 10-FEET ON EITHER SIDE OF THE AREA OF CONCERN. CONCRETE ENCASEMENT IS NOT ALLOWED. UTILITY SEPARATION SHALL CONFORM TO THE RULES AND REGULATIONS OF THE KENT COUNTY WATER AUTHORITY.
- ALL SYSTEM COMPONENTS AND CONSTRUCTION METHODS, SUCH AS GATE VALVE, PIPE, THRUST BLOCKS (AS REQUIRED), FITTINGS, CASTINGS, ETC. SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO PURCHASE AND INSTALLATION. THIS SUBMISSION SHALL INCLUDE MANUFACTURER'S LITERATURE, SHOP DRAWINGS, PROPOSED CONSTRUCTION METHODS, ETC.
- WATER LINE TRENCH TO BE AWWA TYPE 5. COMPACTION MUST BE ACCOMPLISHED IN 6" LIFTS. A METALIZED DETECTABLE IDENTIFICATION TAPE 2.5" IN WIDTH. BLUE IN COLOR AND PRINTED WITH "CAUTION WATERLINE BURIED BELOW" SHALL BE UTILIZED OVER ALL MAINS. TAPE SHALL BE SET AT APPROXIMATELY 1'-0" BELOW FINISHED GRADE.
- CORPORATION STOPS SHALL BE BALL TYPE WITH EITHER STAINLESS STEEL, SYNTHETIC COATED BRASS BALL OR NICKEL COATED BRASS BALL DESIGNED FOR POTABLE WATER SERVICE UP TO 300 PSI. BODY SHALL BE HEAVY CAST LEAD FREE "ENVIROBRASSII" UNS ALLOY NUMBER C89520 ASTM B584-98A AND/OR AWWA C800/ASTM B-62 MEETING OR EXCEEDING THE LEAD LEACHING PERFORMANCE SPECIFICATIONS OF ANSI/NSF 61 STANDARD. ALL CORPORATION STOPS SHALL MEET OR EXCEED DESIGN STANDARDS OF AWWA C800 ALONG WITH THE DESIGN AND OPEN LEFT
- WATER UTILIZED FOR DISINFECTION, PRESSURE TESTING AND FLUSHING WHICH IS OBTAINED DIRECTLY FROM THE KENT COUNTY WATER AUTHORITY SYSTEM, MUST FLOW THROUGH AN ISOLATED CONNECTION TO THE KENT COUNTY WATER AUTHORITY SYSTEM VIA AN APPROVED METER, TESTABLE BACK FLOW PREVENTION DEVICE AND JUMPER LINE. REFER TO THE CURRENT RULES AND REGULATIONS OF THE KENT COUNTY WATER AUTHORITY.
- 10. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL COMPLETE AND SUBMIT THE "CONTRACTOR'S MATERIAL AND TEST CERTIFICATE" FOR UNDERGROUND PIPING TO THE KENT COUNTY WATER AUTHORITY AND ENGINEER. IN ADDITION, THE CONTRACTOR IS REQUIRED TO SUBMIT THE FOLLOWING ITEMS TO THE ENGINEER FOR THEIR REVIEW
- AND APPROVAL: - TYPE AND MANUFACTURER OF SERVICE BOXES
- TYPE AND MANUFACTURER OF CORPORATIONS AND CURB STOPS - TYPE AND MANUFACTURER OF VALVE BOXES
- 11. AS-BUILT DRAWINGS MUST BE FURNISHED BY THE CONTRACTOR TO, AND APPROVED BY, KENT COUNTY WATER AUTHORITY PRIOR TO WATER SERVICE ACTIVATION. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE KENT COUNTY WATER AUTHORITY AND ENGINEER TWO (2) SETS OF AS BUILT PLANS (ONE BLUE LINE, ONE REPRODUCIBLE COPY-MYLAR OR SEPIA) WHICH INDICATES: a. ALL CURB STOPS WITH APPROPRIATE LOCATING MEASUREMENTS, SUCH AS

WATER MAIN TO CURB STOP OFFSET. b. LOCATIONS AND TOP ELEVATIONS ON ALL BENDS, FITTINGS AND VALVES c. A SCHEDULE OF MATERIALS WHICH INDICATES: ITEM QUANTITY

MANUFACTURER 3. DESCRIPTION

a. INCLUDE SERIAL #'S AS APPLICABLE b. MATERIAL

c. OPERATION CHARACTERISTICS



CROSSMAN ENGINEERING

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PROJECT TITLE:

PROPOSED COMMERCIAL **CONTRACTOR UNITS**

PLAT MAP 10 LOT 42 **ZONING DISTRICT GB1 GENERAL BUSINESS** 1 ACRE DISTRICT 71 HARKNEY HILL ROAD **COVENTRY. RI**

PREPARED FOR:

ANDREW BARBER P.O. BOX 7090 **WARWICK**, **RI 02886**

DRAWING TITLE:

MISCELLANEOUS DETAILS PLAN No. 3

SEPTEMBER 2024 AS SHOWN

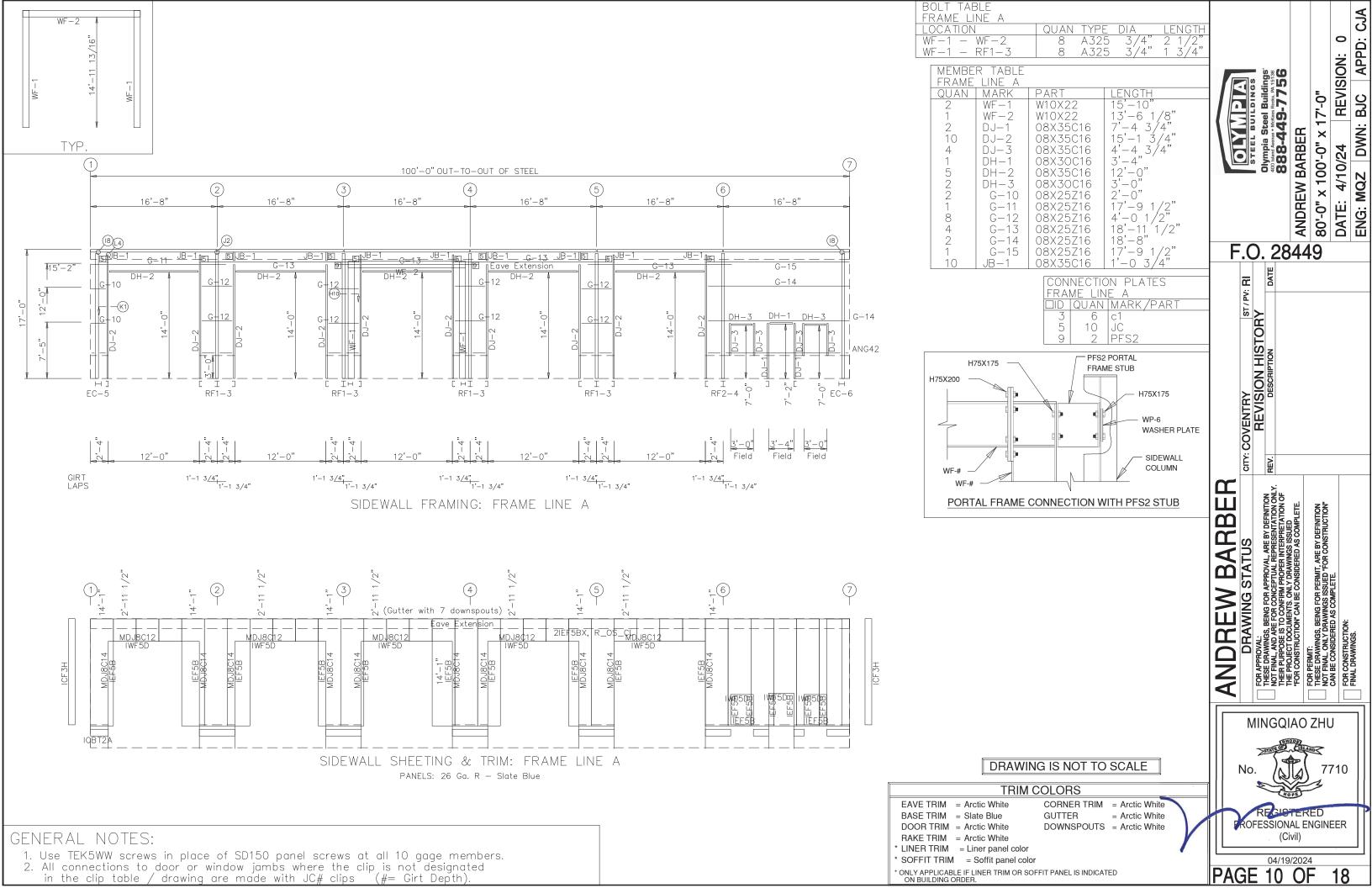
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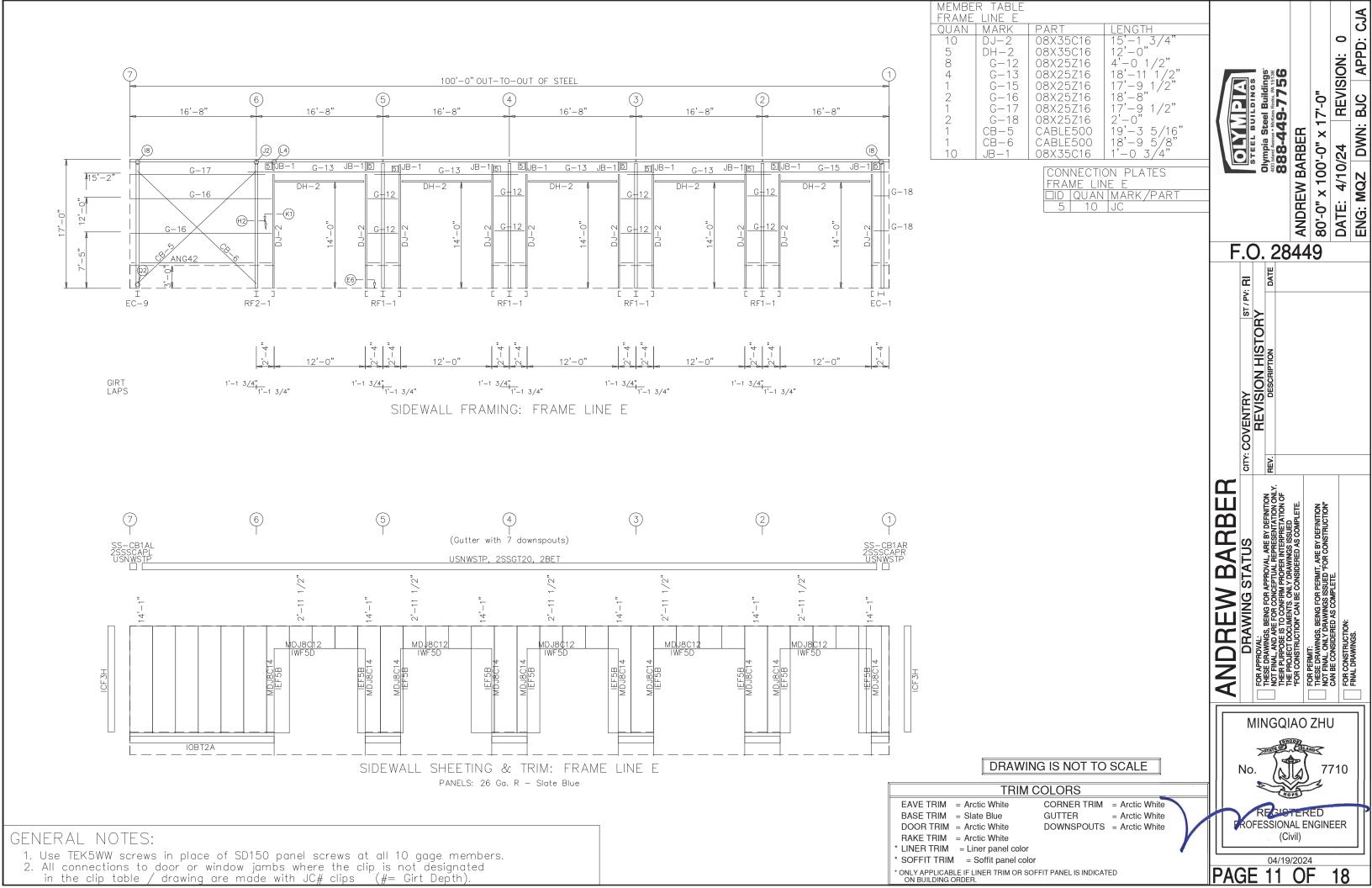
REVISIONS

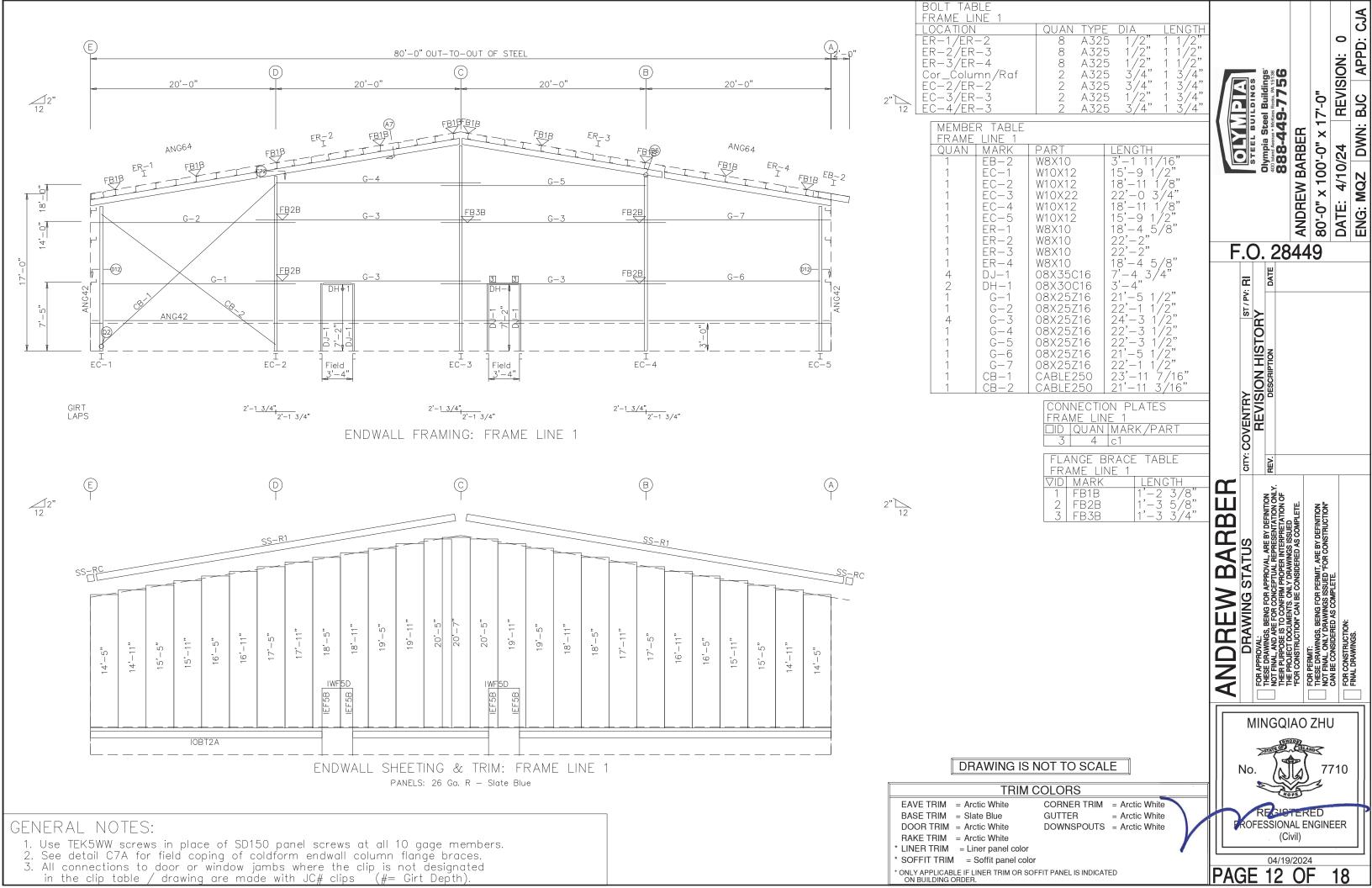
NUMBER REMARKS DATE10 /16 /24 TRC Comments Preliminary Submission 02/20/25 03/13/25 KCWA Submission

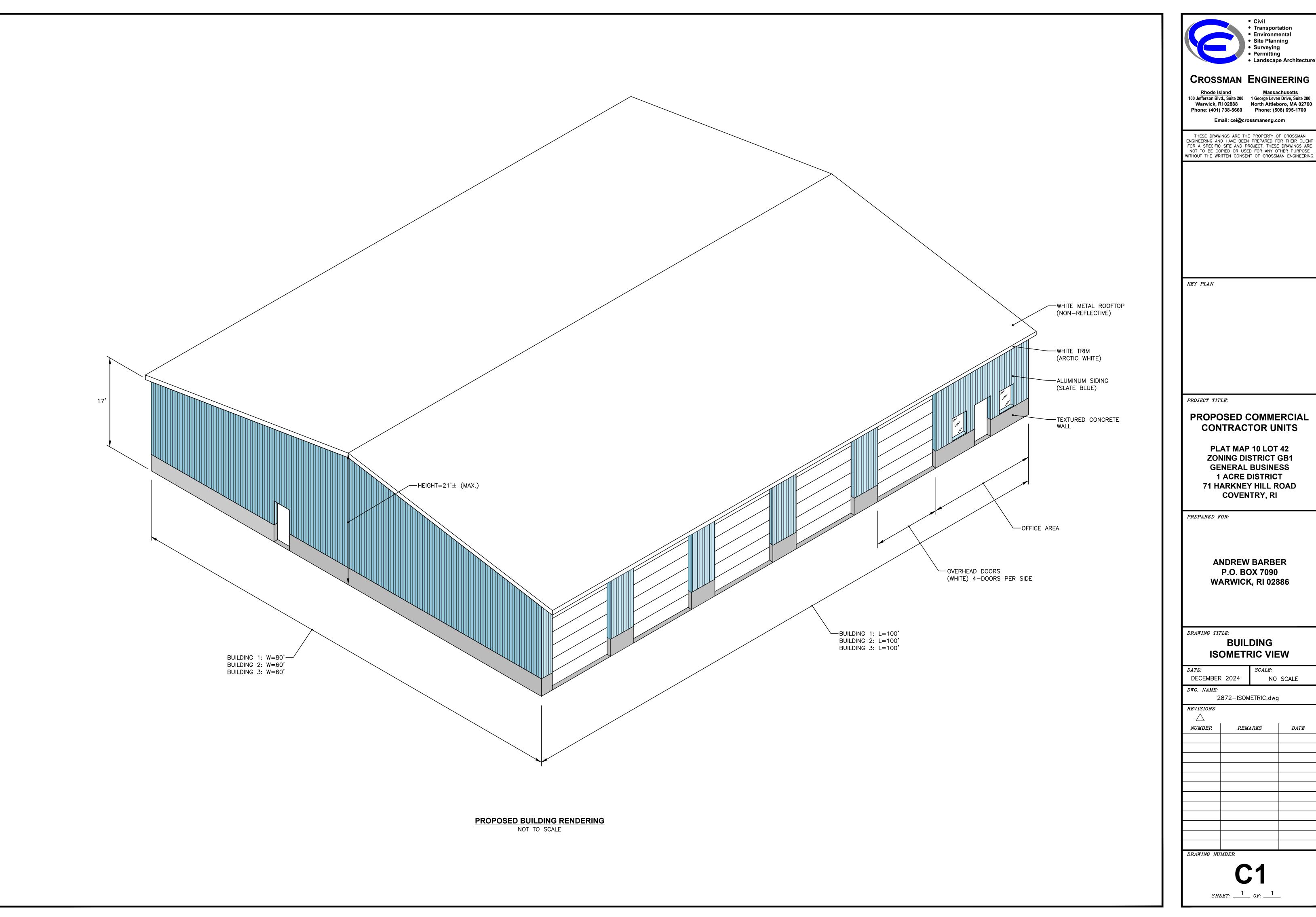
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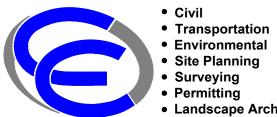
SHEET:











Landscape Architecture

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ANDREW BARBER P.O. BOX 7090 **WARWICK, RI 02886**

BUILDING ISOMETRIC VIEW

NO SCALE 2872-ISOMETRIC.dwg

REMARKSDATE