Addendum #1

Stevens Farm Project – Heavy Use Area and Manure Storage

February 21, 2025

Larson Design Group (LDG) has received several questions and concerns regarding the Stevens Farm Project building design. Due to the nature of some of these questions, a re-evaluation of the design was performed and the following changes or clarifications to the plan set have been documented in this addendum. The following list specifies each change or clarification in relation to the plan sheet number. These sheets are attached to this addendum for reference.

G-001:

- Construction Note #2 was modified to be consistent with Earthfill Note #4, which specified a maximum size of 3” diameter objects within the fill material.

G-002:

- Earthfill Note #4 was modified to call out an “on-site” inspector instead of the original “NRCS inspector” language. NRCS does not have any involvement with this project. All earthfill will be approved by the inspector on-site.

CS102:

- Keynote #1 was edited to further clarify that the 15” high curb along the feed table was referring to detail 1/C-510 (4’ T-Wall).
- Keynote #4 was removed. On the plan, leaders with notes numbered “4” were changed to “3.”
- All exterior building walls, excepting the wall along the feed table, are to be 4’ above FFE. The applicable detail for this is 1/C5-11, which shows a partially buried 6’ T-Wall (4’ above FFE, 2’ of cover over the footer).

C-506:

- For further clarification, the wall along the feed table (plan left) was labeled as “4’ T-Wall.”
- For further clarification, the opposing wall (plan right) was labeled as “6’ T-Wall.”

C-511:

- This sheet is removed from the plan set as a 4’ T-wall is not required in locations outside of the feed table. See existing Detail 1/C-510 for 4’ T-wall at feed table.

Larson Design Group

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C-512:

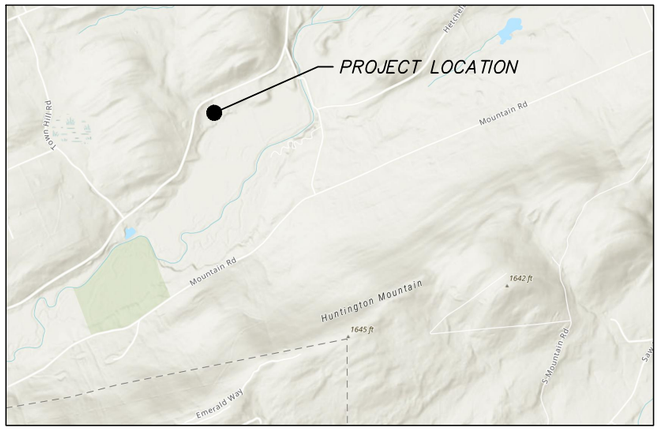
- For further clarification, the detail sheet title has been enhanced to address confusion regarding wall heights, and is now shown as: “Partially Buried 6’ T-wall Without Surcharge.”
- The detail section view has been edited to reflect the relationship between the top of wall, finished floor elevation, and top of footer elevations. Detail now clarifies that there is a 6’ total wall height (4’ above grade and 2’ buried footer depth).

The remainder of the plan set will remain unchanged for this addendum. A complete plan set will be issued upon issuance of contract awarding that will contain all materials of this addendum.

Should there be further questions on the design, please direct them to Jen Lauri at the Luzerne Conservation District at jennifer@luzcd.org or 570-674-7991, Ext. 7.

HEAVY USE AREA AND MANURE STORAGE

STEVENS FARM
LUZERNE COUNTY, PA
LOCATION MAP:
685 WATERTON ROAD, SHICKSHINNY PA 18655



CONSTRUCTION NOTES

1. CLEAR AND GRUB THE ENTIRE AREA WITHIN THE WORK LIMITS
2. ALL FILL MATERIAL MUST NOT CONTAIN FROZEN MATERIAL, SOD, ROOTS, OR OTHER PERISHABLE MATERIAL, OR ROCK LARGER THAN 3" IN DIAMETER. (1)
3. 6" OF TOPOSOIL WILL BE INCORPORATED INTO THE EARTHFILL TO MEET THE NEAT LINES SHOWN ON THE TYPICAL SECTION.
4. ALL AREAS DISTURBED DURING CONSTRUCTION WILL BE SEEDED ACCORDING TO NRCS CRITICAL AREA PLANTING SPECIFICATION.

LDG TAKES SAFETY VERY SERIUOUSLY, HOWEVER, THE SAFETY COMMITMENT AND THE JOB SITE PRACTICES OF THE CONTRACTOR ARE BEYOND THE CONTROL OF LDG. IT IS STRONGLY RECOMMENDED THAT SAFE WORKING CONDITIONS AND ACCIDENT PREVENTION PRACTICES BE THE TOP PRIORITY OF ANY JOB SITE. LOCAL, STATE, AND FEDERAL SAFETY AND HEALTH STANDARDS SHOULD ALWAYS BE FOLLOWED TO HELP ENSURE WORKER SAFETY. MAKE CERTAIN ALL EMPLOYEES KNOW THE SAFEST AND MOST PRODUCTIVE WAY OF CONSTRUCTING THE DESIGNED PRACTICES. EMERGENCY PROCEDURES ARE ALSO RECOMMENDED. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE A SAFE WORK ENVIRONMENT FOR THEIR EMPLOYEES.

GENERAL NOTES

1. ALL FEDERAL, STATE, AND LOCAL LAWS, RULES, AND REGULATIONS GOVERNING THE CONSTRUCTION OF THIS FACILITY SHALL BE STRICTLY FOLLOWED. THE OWNER OR OPERATOR IS RESPONSIBLE FOR OBTAINING ALL CONSTRUCTION PERMITS.

   IT IS THE RESPONSIBILITY OF THE EXCAVATING CONTRACTOR TO COMPLY WITH PA ACT 187 (1996) AND ALL ITS REVISIONS BEFORE PERFORMING ANY EXCAVATION. THE PA ONE-CALL PHONE NUMBER IS 1(800)-242-1776. THE SERIAL NUMBER FOR DESIGN IS 20250171484 DATED 1/17/2025. CONTRACTOR TO PROVIDE ONE-CALL FOR CONSTRUCTION.
2. A MEETING BETWEEN THE LANDOWNER, CONTRACTOR, LUZERNE CONSERVATION DISTRICT REPRESENTATIVE, AND ENGINEER SHALL BE REQUIRED PRIOR TO ANY EXCAVATION OR CONSTRUCTION WORK.
3. A COPY OF THE SPECIFICATIONS AND DRAWINGS SHALL BE ONSITE DURING ALL PHASES OF CONSTRUCTION.
4. OSHA REGULATIONS SHALL BE FOLLOWED AT ALL TIMES.
5. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING ALL MEASURES NECESSARY TO PROTECT WORK IN PROGRESS FROM ENVIRONMENTAL CONDITIONS SUCH AS TEMPERATURE EXTREMES, SURFACE, AND GROUND WATER
6. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ACTUAL FIELD MEASUREMENTS SHOWN ON THE PLANS.
7. IN THE EVENT ROCK, UNSTABLE SOILS, OR SEEPS ARE ENCOUNTERED DURING EXCAVATION, WORK SHALL BE STOPPED AND THE ENGINEER SHALL DETERMINE HOW TO PROCEED.
8. THE CONTRACTOR IS RESPONSIBLE FOR THE SECURITY OF THE JOB SITE UNTIL THE WORK HAS BEEN CERTIFIED BY THE ENGINEER.
10. CERTIFICATION OF CONFORMANCE SHALL CERTIFY THAT ALL WORK WAS PERFORMED TO DESIGN SPECIFICATIONS.
11. THE OWNER IS RESPONSIBLE FOR ENSURING THAT ALL LIVESTOCK ARE REMOVED FROM THE WORK SITE AND THAT LIVESTOCK WILL REMAIN EXCLUDED FROM THE WORK SITE UNTIL THE PROJECT HAS BEEN THROUGH A FINAL CERTIFICATION AND APPROVED FOR USE. TEMPORARY LIVESTOCK CONFINEMENT/EXCLUSION FENCE MAY BE NEEDED TO ENSURE LIVESTOCK ARE NOT ABLE TO ENTER THE WORK SITE.
12. EMERGENCY RESPONSE STRATEGIES FOR MANURE SPILLS ARE NECESSARY. CONTACT INFORMATION FOR EMERGENCIES SHOULD BE INCLUDED IN THE EMERGENCY RESPONSE SECTION OF THE NUTRIENT MANAGEMENT PLAN AND IN OPERATION AND MAINTENANCE PLANS FOR BEST MANAGEMENT PRACTICES (BMP'S).

AS-BUILT / DESIGN INFORMATION

QUALITY ASSURANCE STATEMENT					ENGINEER STATEMENT		
To the best of my knowledge, I certify that the practices have been installed as per the attached drawings and specifications, based on the information provided to me and/or observations I have made.					*In my professional opinion, I certify that the practices have been installed as per the attached drawings and specifications, based on the information provided to me and/or observations I have made.*		
Practice Code	*CIN*	*Description*	*Planned Amount*	*Inspector (Initials)*	*As-Built Amount (by Inspector)*	*Certification (Engineer/JAA Signature)*	*Date Certified*
313		WASTE STORAGE FACILITY	1 QTY.				
367		ROOFS AND COVERS	1 QTY.				
468		PROTECTED OUTLET	5.5 S.Y				
516		LIVESTOCK PIPELINE	140 L.F				
533		PUMPING PLANT	1 QTY.				
558		GUTTERS/DOWNSPOUTS	425 L.F				
560		ACCESS ROAD	1,900 S.Y				
561		HUA PROTECTION	8,000 S.F				
614		WATERING FACILITY	2 WATERERS				
620		UNDERGROUND OUTLET	900 L.F				
642		WATER WELL	1 QTY.				

DRAWING SHEET INDEX

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MARK	DATE	COMMENTS
1	2025-02-20	ADDENDUM #1
0	2024-12-16	REVIEW SET

Eric Stevens
685 WATERTON ROAD
SHICKSHINNY,PA 18655

STEVENS FARM PROJECT
685 WATERTON ROAD
SHICKSHINNY,PA 18655

COVER SHEET
BID SET

Date: 2025-01-31
Project No.: 13655-002
Sheet No.: G-001

NOT FOR CONSTRUCTION

OWNER RESPONSIBILITIES

1. THE OWNER IS RESPONSIBLE FOR ENSURING THAT ALL LIVESTOCK ARE REMOVED FROM THE WORK SITE AND THAT LIVESTOCK WILL REMAIN EXCLUDED FROM THE WORK SITE UNTIL THE PROJECT HAS RECEIVED FINAL CERTIFICATION AND IS APPROVED FOR USE.

2. THE OWNER IS TO PROVIDE REASONABLE ACCESS TO THE WORK SITE.

3. THE OWNER OR OPERATOR IS RESPONSIBLE FOR OBTAINING ALL CONSTRUCTION PERMITS.

EXCAVATION NOTES

1. NO EXCAVATION SHALL BEGIN UNTIL THE EXCAVATOR HAS COMPLIED WITH ALL PA ONE–CALL REQUIREMENTS AND ANY UTILITY COMPANY RESPONSES.
2. ALL EROSION AND SEDIMENT PRACTICES SHALL BE INSTALLED PRIOR TO BEGINNING EXCAVATION.
3. OSHA STANDARDS SHALL BE FOLLOWED FOR ALL EXCAVATION.
4. TOPSOIL SHALL BE STRIPPED AND STOCKPILED TO BE RE–DISTRIBUTED WHEN THE PROJECT IS COMPLETE.
5. ALL MANURE–LADEN SOIL SHALL BE REMOVED AND SPREAD ACCORDING TO THE LANDOWNER'S NUTRIENT MANAGEMENT PLAN.
6. THE SITE SHALL BE EXCAVATED UNTIL GOOD, STABLE SOIL IS ENCOUNTERED,.
7. IF SEEPS ARE ENCOUNTERED DURING EXCAVATION, PROVIDE CLEAN 2B–STONE BACKFILL UP TO THE SEEP ELEVATION.
8. IF ROCK REFUSAL IS MET BEFORE DESIGN SUBGRADE, CHANGES IN DESIGN ELEVATIONS WILL REQUIRE DESIGNER AND LANDOWNER APPROVAL.
9. EXCESS MATERIAL SHALL BE DISPOSED OF AS DIRECTED BY THE LANDOWNER AND THE INSPECTOR.
10. A UNIFORM LAYER OF 2B–STONE (AASHTO #57), 3" THICK SHALL BE PLACED ABOVE SUBGRADE TO BED ALL CONCRETE. STONE DEPTH TO BE MEASURE AFTER COMPACTION. STONE SHALL NOT BE PLACED UNTIL EARTHEN SUBGRADE ELEVATION AND COMPACTION IS APPROVED BY THE INSPECTOR.
11. ALLOW 1' OVERLAP BETWEEN ADJACENT PANELS OF GEOTEXTILE WHERE APPLICABLE.
12. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE CONSTRUCTION SITE UNTIL THE WORK HAS BEEN COMPLETED AND CERTIFIED BY THE DESIGN ENGINEER. THIS INCLUDES DEWATERING THE SITE AS NECESSARY, AS WELL AS PREVENTING UPSLOPE RUNOFF FROM ENTERING THE WORK AREA. IT IS STRONGLY RECOMMENDED THAT ALL PLANNED DIVERSIONS OR SWALES BE INSTALLED FIRST AND ALL PERIMETER DRAIN OUTLETS BE INSTALLED BEFORE STONE OR CONCRETE IS PLACED, IF POSSIBLE.
13. FINAL GRADING SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES. SWALES SHALL BE SHAPED AS NECESSARY ALONG THE HEAVY USE AREA AND MANURE STORAGE TO DIRECT STORMWATER AWAY FROM THE STRUCTURES.

EARTHFILL NOTES

1. EARTHEN BACKFILL SHALL BE PLACED IN A MANNER THAT PREVENTS DAMAGE TO THE STRUCTURES AND ALLOWS THE STRUCTURES TO ASSUME THE LOADS FROM THE EARTH BACKFILL GRADUALLY AND UNIFORMLY. THE HEIGHT OF THE EARTH BACKFILL ADJACENT TO THE STRUCTURE SHALL BE INCREASED AT THE SAME RATE ON ALL SIDES OF THE STRUCTURE.
2. BACKFILL SHALL BE PLACED IN EVEN, HORIZONTAL LAYERS. IF NECESSARY, OVER–EXCAVATE TO AN APPROXIMATELY LEVEL SURFACE AND BUILD SUBGRADE IN EVENLY COMPACTED, HORIZONTAL LIFTS OF SPECIFIED THICKNESS.
3. BACKFILL SHALL BE PLACED AT OPTIMUM MOISTURE CONTENT. BACKFILLED MATERIAL SHALL HAVE ENOUGH MOISTURE SO THAT WHEN FORMED INTO A BALL, IT WILL NOT BREAK IF STRUCK SHARPLY WITH A PENCIL. BACKFILLING NEWLY POURED WALLS MAY NOT BEGIN UNTIL 14–DAYS AFTER THE FINAL CONCRETE PLACEMENT. COMPACT USING THE FOLLOWING EQUIPMENT AND LIFT THICKNESS:
   FOOTINGS AND STRUCTURE FLOOR:
   - (3) PASSES OF SHEEPSFOOT OR VIBRATORY ROLLER IN 6–INCH LIFTS WITHIN 3 FEET OF WALLS. A ROLLER CAN BE USED BEYOND 3 FEET OF THE WALL WITHOUT THE VIBRATORY FUNCTION ON. DO NOT USE ANY VIBRATORY EQUIPMENT WITHIN A DISTANCE EQUAL TO THE WALL HEIGHT
   - (3) PASSES BY HAND COMPACTOR OR SMALL, MANUALLY DIRECTED PLATE VIBRATOR IN 6–INCH LIFTS

   BEYOND 3 FEET OF WALLS:
   - (3) PASSES BY TRACK EQUIPMENT (>4,000 LBS) IN 6–INCH LIFTS
   - (3) PASSES BY RUBBER TIRED EQUIPMENT IN 6–INCH LIFTS
   - (3) PASSES OF VIBRATORY ROLLER IN 6–INCH LIFTS
4. AVOID BACKFILL CONTAINING ROCKS OR CLODS GREATER THAN 3" DIAMETER, DEBRIS, ROOTS, FROZEN SOIL, OR OTHER UNSUITABLE MATERIAL AS DETERMINED BY THE ON–SITE INSPECTOR. 1
5. IF SEEPS ARE ENCOUNTERED DURING EXCAVATION, PROVIDE CLEAN, AASHTO #57 STONE 1' ABOVE THAT ELEVATION AND EXTEND THE STONE A MINIMUM OF 4' LEFT/RIGHT OF THE SEEP LOCATION. IN ADDITION TO THE CONTROL MEASURES, IMPLEMENTATION OF CORRUGATED PIPE MAY ALSO BE NECESSARY.

PIPE NOTES

1. ALL PIPES SHALL MEET MINIMUM MATERIAL SPECIFICATIONS:
   1.1. SCH 40 PVC SHALL MEET ASTM–D1785
   1.2. SDR–35 SHALL MEET ASTM–D3034
   1.3. CORRUGATED POLYETHYLENE TUBING SHALL MEET ASTM–F405
2. ALL FITTINGS SHALL BE PRESSURE–RATED, WATERTIGHT AND MEET MINIMUM MATERIAL SPECIFICATIONS OF PIPE.
3. PIPES SHALL BE INSTALLED TO SPECIFIED DEPTH AND TO MINIMUM DESIGN GRADE.
4. TRENCHES FOR PIPELINES SHALL BE FREE OF ROCKS AND SHARP–EDGED MATERIALS. A SUPPLY OF AASHTO #57 BEDDING, OR OTHER SUITABLE GRANULAR MATERIAL, SHALL BE AVAILABLE TO BED PIPELINES IN UNSTABLE SOILS OR AS DIRECTED BY NRCS INSPECTORS.
5. PIPES SHALL BE BACKFILLED AS SHOWN ON DESIGN DETAILS. ANY PIPE TO BE PLACED IN A TRAFFIC AREA IS TO BE BEDDED AS PER DESIGN DETAILS AND BACKFILLED TO THE SURFACE WITH 2A MODIFIED OR 2RC AGGREGATE. ANY PIPE NOT SPECIFICALLY DETAILED MAY BE BACKFILLED WITH MOIST EARTH, FREE OF LARGE CLODS OR ROCKS, AND HAND COMPACTED IN 6–INCH LIFTS. DO NOT DRIVE MACHINERY OVER RECENTLY BACKFILLED PIPES. MOUND BACKFILL 10% OF TRENCH DEPTH TO ALLOW FOR SETTLEMENT.

PUMPING PLANT NOTES

1. PROVIDE 8'X8' INSULATED ROOM FOR PUMPING PLANT. COORDINATE LOCATION WITH LANDOWNER.

GEOTEXTILE NOTES

1. SEE TABLE 1 AND 2, BELOW:

Table 1 Requirements for woven geotextiles

Property	Test Method	Class I	Class II & III	Class IV
Tensile strength (pounds) 1/	ASTMD4632 grab test	200 minimum in any principal direction	120 minimum in any principal direction	180 minimum in any principal direction
Elongation at failure (percent) 1/	ASTMD4632 grab test	<50	<50	<50
Puncture (pounds) 1/	ASTMD4833	90 minimum	60 minimum	60 minimum
Ultraviolet light (% residual tensile strength)	ASTMD4355 150-hr exposure	70 minimum	70 minimum	70 minimum
Apparent opening size (AOS)	ASTMD4751	As specified, but no smaller than 0.212 mm(#70) 2/	As specified, but no smaller than 0.212 mm(#70) 2/	As specified, but no smaller than 0.212 mm(#70) 2/
Percent open area (percent)	CWO-02215-86	4.0 minimum	4.0 minimum	1.0 minimum
Permitivity sec -1/	ASTMD4491	0.10 minimum	0.10 minimum	0.10 minimum

1/ Minimum average roll value (weakest principal direction).
2/ U.S. standard sieve size
Note: CWO is a USACE reference

Table 2 Requirements for nonwoven geotextiles

Property	Test Method	Class I	Class II	Class III	Class IV 3/
Tensile strength (lb) 1/	ASTMD 4632 grab test	180 minimum	120 minimum	90 minimum	115 minimum
Elongation at failure (%) 1/	ASTMD 4632	≥50	≥50	≥50	≥50
Puncture (pounds)	ASTMD 4833	80 minimum	60 minimum	40 minimum	40 minimum
Ultraviolet light (% residual tensile strength)	ASTMD 4355 150-hr exposure	70 minimum	70 minimum	70 minimum	70 minimum
Apparent opening size (AOS)	ASTMD4751	As specified max. #40 2/	As specified max. #40 2/	As specified max. #40 2/	As specified max. #40 2/
Permitivity sec -1/	ASTMD4491	0.70 minimum	0.70 minimum	0.70 minimum	0.10 minimum

1/ Minimum average roll value (weakest principal direction).
2/ U.S. standard sieve size.
3/ Heat-bonded or resin-bonded geotextile may be used for classes III and IV. They are particularly well suited to class IV. Needle-punched geotextiles are required for all other classes.

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0	2024-12-16	REVIEW SET

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GENERAL NOTES
BID SET

Date: 2025-01-31
Project No.: 13655-002
Sheet No.: G-002

NOT FOR CONSTRUCTION

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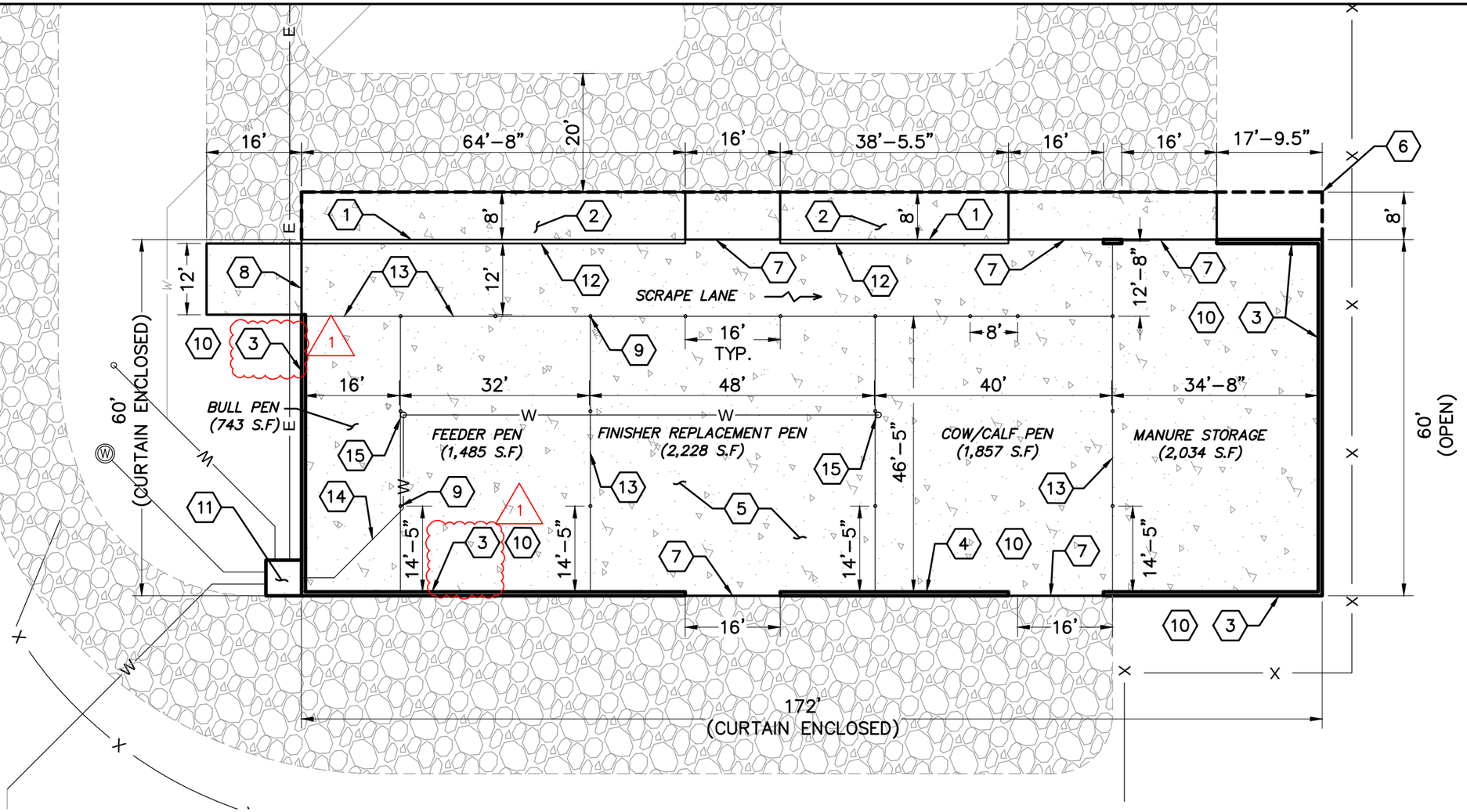

1 BUILDING LAYOUT PLAN

SCALE: 1"=20'

20 0 20 40 FEET

SCALE: 1"=20'

Typical Site Plan Keynotes

1. PROPOSED 15" HIGH CURB/4' CONCRETE T–WALL.
2. PROPOSED FEED TABLE.
3. PROVIDE 6' CONCRETE T–WALL.
4. ~~PROVIDE 4' CONCRETE T–WALL.~~
5. REINFORCED CONCRETE SLAB.
6. PROPOSED 8' ROOF OVERHANG.
7. PROPOSED 16' LIVESTOCK GATE.
8. PROPOSED 12' LIVESTOCK GATE.
9. 6"ø STEEL POSTS TO BE PROVIDED AT A LATER DATE AT THE DISCRETION OF THE OWNER, TYP.
10. INSTALL SAFETY FENCING ALONG TOP OF 4' AND 6' WALL.
11. PROVIDE 6'X6' INSULATED ROOM ON CONCRETE SLAB WITH ROOF AND TIMBER FRAME WALLS TO HOUSE PUMPING PLANT. PROVIDE 100–AMP SERVICE PANEL FOR ELECTRIC. CONTRACTOR TO HIRE ELECTRICIAN TO PERFORM WIRING.
12. INSTALL SLANT BAR ENCLOSURES.
13. ALL INTERIOR GATES TO BE INSTALLED AT A LATER DATE AT THE DISCRETION OF THE OWNER, TYP.
14. 1.5" PVC SCHEDULE 40 WATER SUPPLY LINE. MINIMUM BURY DEPTH OF 3.5'.
15. NEW DOUBLE BOWL FREEZE–PROOF WATERER. THRIFTY KINK #XT2–2000, OR EQUAL.

Legend

PROPOSED

- REINFORCED CONCRETE
- BUILDING LINE/WALL
- CURB
- GRAVEL
- W — WATER SUPPLY LINE

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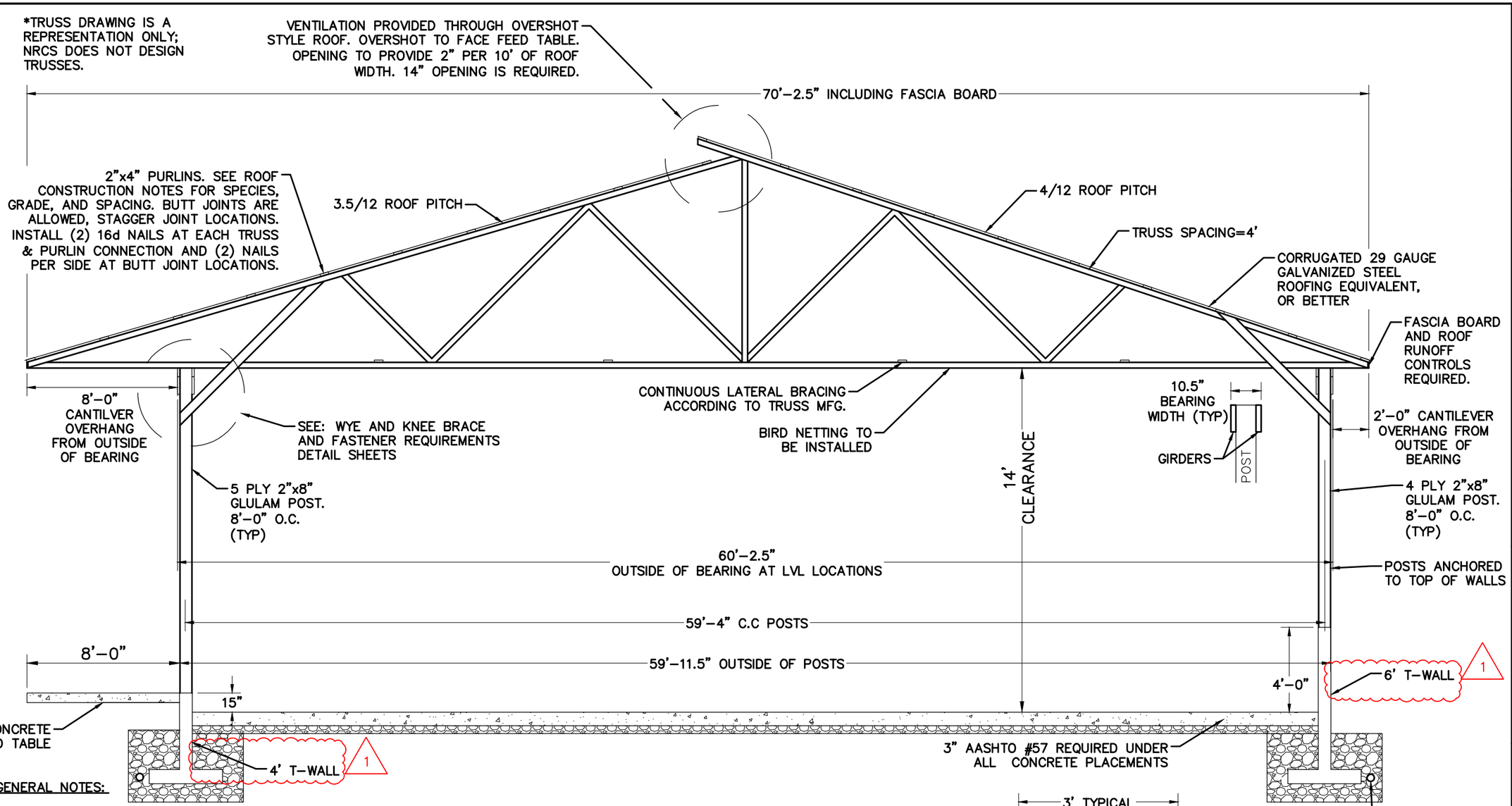
BUILDING LAYOUT PLAN
BID SET

Date: 2025-01-31

Project No.: 13655-002

Sheet No.: CS102

NOT FOR CONSTRUCTION



GENERAL NOTES:

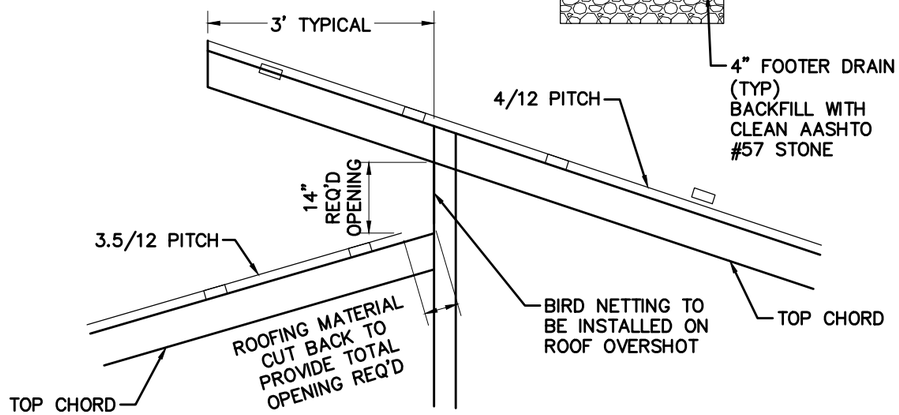
1) TRUSS SHOP DRAWINGS SHALL BE PROVIDED TO THE NRCS DESIGN ENGINEER FOR APROVAL PRIOR TO THE TRUSSES BEING MADE.

2) TRUSS SHALL BE DESIGNED WITH THE FOLLOWING PARAMETERS:
   - 2)a. IMPORTANCE FACTOR: CAT II (I=1.00)
   - 2)b. BUILDING CLASSIFCATION: PARTIALLY ENCLOSED
   - 2)c. UNBALANCED SNOW LOAD SHALL BE INCLUDED.
   - 2)d. GRAVITY REACTIONS MUST YIELD A MINIMUM OF: 40 PSF (TCLL + TCDL + BCDL) COMBINED LOADING
   - 2)e. UPLIFT REACTIONS MUST YIELD A MINIMUM OF 16.0 PSF UNIFORM UPLIFT

3) KNEE BRACES SHALL BE INSTALLED ON 45 DEGREES AND SHALL EXTEND TO THE TOP CHORD OF THE TRUSS.

4) TRUSS SHALL HAVE CANTILEVERED OVERHANGS; NO TAILED.SLOPING OVERHANGS ALLOWED.

1 BUILDING AND TRUSS PROFILE
SCALE: N.T.S



VENTILATION REQUIREMENTS

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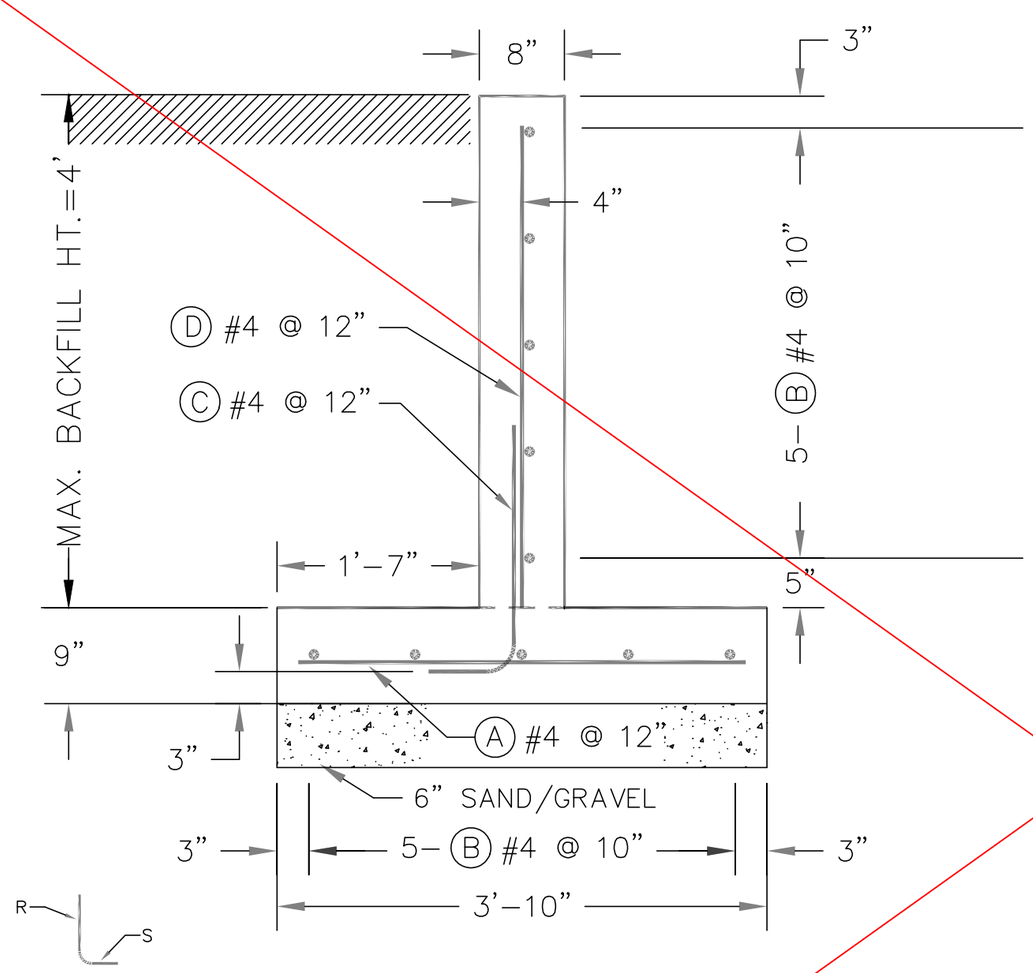
BUILDING DETAILS
BID SET

Date: 2025-01-31
Project No.: 13655-002
Sheet No.: C-506

NOT FOR CONSTRUCTION



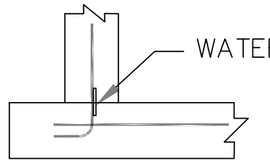
TYPE 2 BAR

C.J=CONSTRUCTION JOINT

LIQUID-TIGHT JOINT _ YES _ NO

LIQUID-TIGHT JOINT OPTIONS

1) NON-METALIC WATERSTOP (PVC)
2) HYDROPHILIC WATERSTOP



CONSTRUCTION JOINT OPTIONS

1. IF SLAB AND WALL ARE POURED SEPARATELY, THE SLAB SURFACE MUST BE THOROUGHLY CLEANED WITH WATER AND A WIRE BRUSH. THE SURFACE OF THE JOINT SHALL BE KEPT MOIST FOR AT LEAST 1 HOUR PRIOR TO PLACEMENT OF NEW CONCRETE.

2. THE SLAB AND WALL MAY BE POURED AT THE SAME TIME ELIMINATING THE NEED FOR A CONSTRUCTION JOINT.

4-FOOT WALL CORNER DETAILS	SEE PA-025
SLAB CORNER DETAILS	SEE PA-023
RESTRAINING SLAB OPTIONS	SEE PA-024

GENERAL DESIGN NOTES:

- DRAINAGE SHALL BE AWAY FROM THE WALL.
- THE MINIMUM TOP WIDTH OF THE BACKFILL AGAINST THE WALL SHALL BE EQUAL TO OR GREATER THAN THE BACKFILL HEIGHT.
- MAXIMUM FOOTING CONTACT PRESSURE IS 900 psf/ft.

DESIGN STRENGTHS: WORKING STRESS DESIGN

CONCRETE f_c = 4,000 psi STEEL f_s = 20,000 psi (GRADE 40)

WALL DESIGN LOADING: 313 STANDARD - LATERAL EARTH PRESSURE VALUES, SEE SECTION IV OF THE FIELD OFFICE TECHNICAL GUIDE.

- MANURE LOAD INSIDE = 65 psf/ft.
- SOIL BACKFILL LOAD OUTSIDE = 60 psf/ft. AND 85 psf/ft.
- NO HORIZONTAL SURCHARGE ADDED.
- SOIL BACKFILL DENSITY = 110 pcf.
- WATER TABLE MUST BE BELOW THE FOOTING ELEVATION

STEEL SCHEDULE

MARK	SIZE	TYPE	R	S	LENGTH	TOTAL LENGTH
A	4	STR	---	---	3'-6"	
B	4	STR	---	---		
*C	4	2	2'-0"	9"	2'-9"	
*D	4	STR	---	---	3'-9"	
L	4	2	2'-0"	9"	2'-9"	
L1	4	STR	---	---	3'-9"	
#4 BARS, TOTAL LENGTH						

* MARK C & D BARS MAY BE COMBINED TO AVOID SPLICE. THEN MARK C BAR IS 4'-3" x 9".

NOTES:

1. FOR FROST PROTECTION, A 2-FOOT BACKFILL IS REQUIRED.
2. DIMENSIONS ARE TO THE REINFORCING BAR SURFACE.

ESTIMATED QUANTITIES

CONCRETE	(0.21 CU.YDS./LIN.FT.) _____	CU. YDS.
STEEL	(20.67 FT./LIN. FT.) _____	FT.
STEEL	(35.0 FT./CORNER) _____	FT.

- CONCRETE SHALL MEET PA 313 OR 561 SPECIFICATION REQUIREMENTS.
- MINIMUM SPLICE LENGTH FOR ALL #4 BARS IS 16".
- STEEL QUANTITY DOES NOT INCLUDE SPLICE LENGTHS.
- REBAR SHALL BE GRADE 60.

TOTAL LENGTH OF WALL _ FT.

NOT APPLICABLE 1

WALL RESTRAINT REQUIREMENTS
- 5" THICK SLAB, SAFETY FACTOR AGAINST SLIDING 1.5 MIN

BACKFILL HEIGHT (OUTSIDE LOAD)	SLAB LENGTH NO INSIDE LOAD	SLAB LENGTH FULL INSIDE LOAD
4 FEET	27 FEET	NO SLAB
3 FEET	7 FEET	NO SLAB
2 FEET	NO SLAB	NO SLAB
1 FOOT	NO SLAB	2 FOOT **
0 FOOT	NO SLAB	2 FOOT **

** MINIMUM SLAB LENGTH OF 2 FEET REQUIRED AND MUST BE TIED INTO THE WALL FOOTING.
SLAB POURED WITH WALL FOOTING:
#3 BARS @ 18" SPACING (MINIMUM REINFORCEMENT)
SLAB NOT POURED WITH WALL FOOTING:
#3 DOWEL BARS - 3'-0" LENGTH @4'-0" SPACING

1 4' T-WALL WITHOUT SURCHARGE

SCALE: N.T.S

LDG
Larson Design Group
3000 WESTINGHOUSE DRIVE
SUITE 400
CRANBERRY TWP, PA 16066
(877) 323-6603

MARK	DATE	COMMENTS
0	2024-12-16	REVIEW SET
1	2025-02-20	ADDENDUM #1

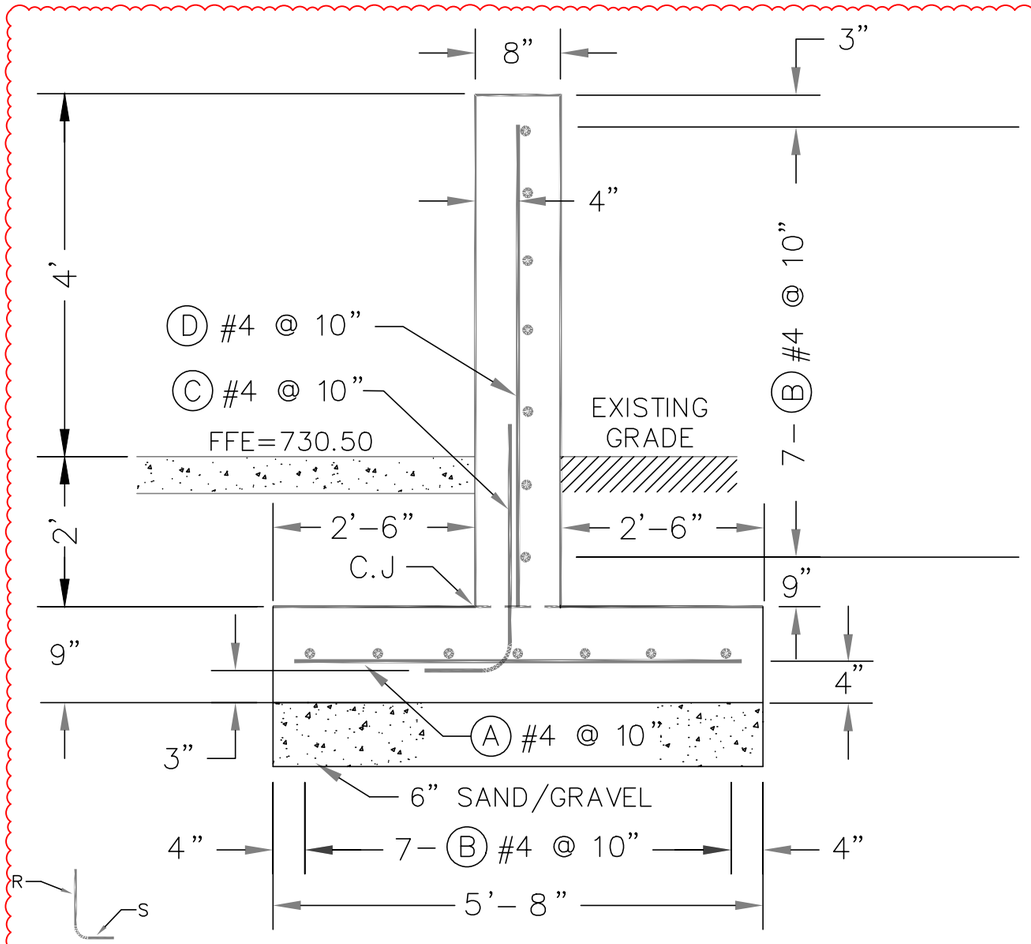
Eric Stevens
685 WATERTON ROAD
SHICKSHINNY,PA 18655

STEVENS FARM PROJECT
685 WATERTON ROAD
SHICKSHINNY,PA 18655

BUILDING DETAILS
BID SET

Date: 2025-01-31
Project No.: 13655-002
Sheet No.: C-511

NOT FOR CONSTRUCTION



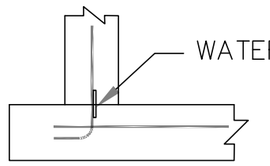
TYPE 2 BAR

C.J=CONSTRUCTION JOINT

LIQUID–TIGHT JOINT _ YES _ NO

LIQUID–TIGHT JOINT OPTIONS

1) NON–METALIC WATERSTOP (PVC)
2) HYDROPHILIC WATERSTOP



CONSTRUCTION JOINT OPTIONS

1. IF SLAB AND WALL ARE POURED SEPARATELY, THE SLAB SURFACE MUST BE THOROUGHLY CLEANED WITH WATER AND A WIRE BRUSH. THE SURFACE OF THE JOINT SHALL BE KEPT MOIST FOR AT LEAST 1 HOUR PRIOR TO PLACEMENT OF NEW CONCRETE.

2. THE SLAB AND WALL MAY BE POURED AT THE SAME TIME ELIMINATING THE NEED FOR A CONSTRUCTION JOINT.

6–FOOT WALL CORNER DETAILS	SEE PA–027A
SLAB CORNER DETAILS	SEE PA–023
RESTRAINING SLAB OPTIONS	SEE PA–024

1

GENERAL DESIGN NOTES:

- DRAINAGE SHALL BE AWAY FROM THE WALL.
- THE MINIMUM TOP WIDTH OF THE BACKFILL AGAINST THE WALL SHALL BE EQUAL TO OR GREATER THAN THE BACKFILL HEIGHT.
- MAXIMUM FOOTING CONTACT PRESSURE IS 1,220 psf/ft.

DESIGN STRENGTHS: WORKING STRESS DESIGN

CONCRETE f_c = 4,000 psi STEEL f_s = 20,000 psi (GRADE 40)

WALL DESIGN LOADING: 313 STANDARD – LATERAL EARTH PRESSURE VALUES, SEE SECTION IV OF THE FIELD OFFICE TECHNICAL GUIDE.

- MANURE LOAD INSIDE = 65 psf/ft.
- SOIL BACKFILL LOAD OUTSIDE = 60 psf/ft.
- NO HORIZONTAL SURCHARGE ADDED.
- SOIL BACKFILL DENSITY = 110 pcf.
- WATER TABLE MUST BE BELOW THE FOOTING ELEVATION

WALL RESTRAINT REQUIREMENTS
– 5" THICK SLAB, SAFETY FACTOR AGAINST SLIDING 1.5 MIN

BACKFILL HEIGHT (OUTSIDE LOAD)	SLAB LENGTH NO INSIDE LOAD	SLAB LENGTH FULL INSIDE LOAD
6 FEET	20 FEET	NO SLAB
5 FEET	6 FEET	NO SLAB
4 FEET	NO SLAB	5 FEET **
3 FEET	NO SLAB	5 FEET **
2 FEET	NO SLAB	5 FEET **
1 FOOT	NO SLAB	5 FEET **
0 FOOT	NO SLAB	5 FEET **

** MINIMUM SLAB LENGTH OF 5 FEET REQUIRED AND MUST BE TIED INTO THE WALL FOOTING.
SLAB POURED WITH WALL FOOTING:
#3 BARS @ 18" SPACING (MINIMUM REINFORCEMENT)
SLAB NOT POURED WITH WALL FOOTING:
#3 DOWEL BARS – 3'–0" LENGTH @ 20" SPACING
#4 DOWEL BARS – 3'–0" LENGTH @ 20" SPACING

STEEL SCHEDULE

MARK	SIZE	TYPE	R	S	LENGTH	TOTAL LENGTH
A	4	STR	---	---	5'–3"	
B	4	STR	---	---		
*C	5	2	2'–3"	1'–0"	3'–3"	
*D	4	STR	---	---	5'–9"	
L	4	2	2'–0"	9"	2'–9"	
L1	4	STR	---	---	5'–9"	
			#4 BARS, TOTAL LENGTH			
			#5 BARS, TOTAL LENGTH			

ESTIMATED QUANTITIES

CONCRETE	(0.21 CU.YDS./LIN.FT.) _____	CU. YDS.
STEEL	(20.67 FT./LIN. FT.) _____	FT.
STEEL	(35.0 FT./CORNER) _____	FT.

- CONCRETE SHALL MEET PA 313 OR 561 SPECIFICATION REQUIREMENTS.
- MINIMUM SPLICE LENGTH FOR ALL #4 BARS IS 16".
- MINIMUM SPLICE LENGTH FOR ALL #5 BARS IS 17".
- STEEL QUANTITY DOES NOT INCLUDE SPLICE LENGTHS.
- SUBSTITUTION OF GRADE 60 BARS IS PERMITTED.

TOTAL LENGTH OF WALL _ FT.

NOTES:

1. FOR FROST PROTECTION, A 2–FOOT BACKFILL IS REQUIRED.
2. DIMENSIONS ARE TO THE REINFORCING BAR SURFACE.

1 PARTIALLY BURIED 6' T–WALL WITHOUT SURCHARGE

SCALE: N.T.S

1

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