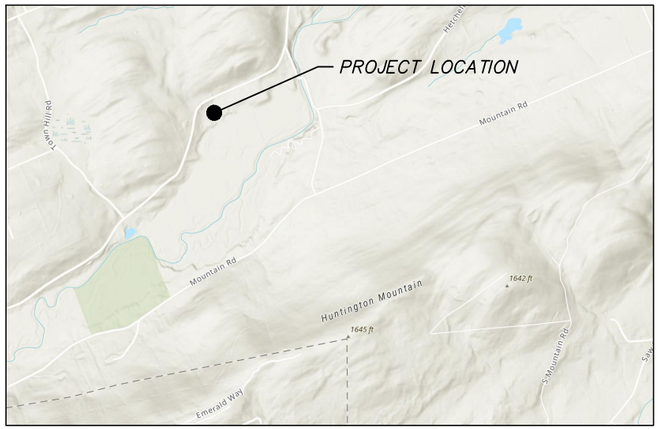
HEAVY USE AREA AND MANURE STORAGE

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 8" IN DIAMETER.
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
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

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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 NRCS INSPECTOR.
5. IF SEEPS ARE ENCOUNTERED DURING EXCAVATION, PROVIDE CLEAN, ASHTO #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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GENERAL NOTES
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Date: 2025-01-31
Project No.: 13655-002
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NOT FOR CONSTRUCTION

CONCRETE CONSTRUCTION NOTES

REINFORCEMENT

1. REINFORCING STEEL IS TO BE GRADE 60. WHERE 6"X6" W2.9XW2.9 (6 GAGE) IS SPECIFIED; THE FABRIC SHALL BE MATS, NOT ROLLS, SUPPORTED ON STEEL CHAIRS. NO CINDER OR CONCRETE BRICKS ARE PERMITTED. SUPPORT SHALL BE OFTEN ENOUGH SO REINFORCEMENT STAYS AT THE REQUIRED LOCATION WITHIN THE SLAB OR FOOTING. A 5' (MAX) CHAIR SPACING IS REQUIRED.
2. FORM OIL SHALL NOT BE SPRAYED ON ANY REBAR, WATERSTOPS, OR CONCRETE.

CONCRETE

1. 4,000 PSI 28–DAY COMPRESSIVE STRENGTH
2. MAXIMUM WATER–CEMENT RATIO 0.50
3. AIR–CONTENT 5 TO 7%, WITH AIR–ENTRAINMENT
4. MAX CONCRETE TEMPERATURE IS 9S°
5. SLUMP SHALL BE 2 TO 4 INCHES PRIOR TO ADDITION OF SUPERPLASTICIZING ADMIXTURES BEING ADDED, 3 TO 6 INCHES WITHOUT USE OF SUPERPLASTICIZERS.
6. SLUMP CAN BE 7.5 INCHES MAX WITH THE ADDITION OF SUPERPLASTICIZING ADMIXTURES.
7. CONCRETE ADMIXTURES SHALL MEET ASTM–C260 FOR AIR ENTRAINMENT, AND ASTM C494 TYPE A, D, F OR G FOR WATER–REDUCTION AND SET–RETARDATION AND TYPES C OR E FOR NON–CORROSIVE ACCELERATORS.
8. ADMIXTURES SHALL BE INCLUDED IN THE DESIGN MIX. FOLLOW DOSAGES AND RECOMMENDATIONS OF MANUFACTURER.
9. THE CONTRACTOR(S) SHALL PROVIDE A DESIGN MIX TO LDG FOR APPROVAL PRIOR TO ORDERING CONCRETE. ALL LOAD TICKETS SHALL BE PROVIDED TO AND APPROVED BY THE INSPECTOR ON SITE AND SHALL REFLECT ALL MATERIALS AND QUANTITIES INCLUDING ADMIXTURES, AMOUNT OF WATER (METERED WATER AND FREE MOISTURE IN THE AGGREGATE), AND TOTAL SIZE OF THE BATCH. THE BATCH TICKET MUST INDICATE THE AMOUNT OF WATER THAT MAY BE ADDED ON–SITE WHILE MAINTAINING THE DESIGN REQUIREMENTS OR NO WATER MAY BE ADDED.
10. CEMENTITIOUS MATERIAL MAY CONTAIN UP TO 20% SLAG IN THE MIX.
11. THE CONCRETE MIX MAY CONTAIN TYPE 1L PORTLAND–LIMESTONE CEMENT: NOT TO EXCEED 10% LIMESTONE CONTENT

PLACEMENT

1. CONCRETE SHALL ONLY BE PLACED IN THE PRESENCE OF AN LDG INSPECTOR.
2. PLACEMENT DURING HOT OR COLD WEATHER WILL REQUIRE A WRITTEN PLAN IN ADVANCE DETAILING CONCRETE CONDITIONS, PLACEMENT PROVISIONS, AND A CURING PLAN.
3. CONCRETE SHALL NOT BE PLACED UNTIL THE SUBGRADE, FORMS, AND STEEL REINFORCEMENTS HAVE BEEN INSPECTED AND APPROVED BY LDG. NOTIFICATION SHALL BE GIVEN FAR ENOUGH IN ADVANCE TO PROVIDE TIME FOR INSPECTION.
4. NO WATER MAY BE ADDED AFTER A SUPERPLASTICIZER.
5. CONCRETE SHALL BE CONVEYED FROM THE MIXER TO THE FORMS AS RAPIDLY AS PRACTICAL BY METHODS THAT WILL PREVENT SEGREGATION OF THE AGGREGATES OR LOSS OF MORTAR. CONCRETE SHALL BE PLACED WITHIN 1.5 HOURS AFTER THE INTRODUCTION OF CEMENT TO THE AGGREGATE UNLESS AN APPROVED SET–RETARDING ADMIXTURE IS USED IN THE MIX; DURING PERIODS OF HOT WEATHER, IT MAY BE NECESSARY TO REDUCE THIS TIME.
6. CONCRETE SHALL NOT BE DROPPED MORE THAN 5 FEET VERTICALLY. SUPERPLASTICIZED CONCRETE SHALL NOT BE DROPPED MORE THAN 12 FEET VERTICALLY.
7. FORMED WALLS SHALL BE PLACED IN 2' LAYERS UNLESS SUPERPLASTICIZER IS USED, IN WHICH CASE THE MAXIMUM LAYER SHALL BE S'. EACH LAYER SHALL BE CONSOLIDATED TO ENSURE A GOOD BOND WITH THE PRECEDING LAYER.
8. CONCRETE SHALL BE CONSOLIDATED BY VIBRATING IMMEDIATELY AFTER PLACEMENT AND EXTEND A MINIMUM OF 6" INTO THE PREVIOUSLY CONSOLIDATED LAYER.
9. CONCRETE SHALL BE WORKED INTO CORNERS, ANGLES, AND ALL AROUND REINFORCEMENT AND EMBEDDED ITEMS IN A MANNER THAT PREVENTS SEGREGATION OR THE FORMATION OF "HONEYCOMBING".
10. VIBRATION SHALL NOT BE USED TO MAKE CONCRETE FLOW.
11. IF THE SURFACE OF A PREVIOUSLY PLACED LAYER OF CONCRETE HAS TAKEN A SET TO THE DEGREE THAT IT WILL NOT MIX WITH THE PRECEDING LAYER WHEN VIBRATED, THE CONTRACTOR SHALL DISCONTINUE PLACING CONCRETE AND FORM A CONSTRUCTION JOINT TO AVOID A "COLD JOINT". VINYL WATERSTOP AND FORM MATERIAL SHALL BE ON SITE PRIOR TO STARTING THE PLACEMENT OF ANY CONCRETE.
12. THE LANDOWNER HAS THE OPTION OF HAVING GROOVES FLOATED OR CUT INTO THE STRUCTURE FLOOR(S) FOR ADDED TRACTION FOR ANIMALS AND EQUIPMENT. THIS DECISION WILL BE CONVEYED TO THE CONTRACTOR(S) DURING PRICE SOLICITATION.

CURING

1. CONCRETE SHALL BE ALLOWED TO CURE AT LEAST 24 HOURS PRIOR TO BEGINNING FORM OR REINFORCEMENT PLACEMENT FOR ADJACENT CONSTRUCTION.
2. NO EQUIPMENT SHALL BE ALLOWED ON CONCRETE SLABS OR FLOORS UNTIL THE CONCRETE HAS CURED FOR A MINIMUM OF 7 DAYS. THIS INCLUDES ANY MOTORIZED MATERIAL HANDLING EQUIPMENT, PALLETS OF FORMS, ETC. SKID LOADERS USED FOR TRANSPORTING CONCRETE INTO FORMS SHALL NOT BE ALLOWED ON SLABS OR FLOORS FOR A MINIMUM OF 14 DAYS.
3. FORMS FOR WALLS SHALL NOT BE REMOVED FOR AT LEAST 24 HOURS AFTER PLACING THE CONCRETE. IF FORMS ARE REMOVED IN LESS THAN 7 DAYS, THE EXPOSED CONCRETE SHALL BE SPRAYED WITH CURING COMPOUND.
4. CURING COMPOUND SHALL BE APPLIED IN A UNIFORM LAYER OVER ALL SURFACES REQUIRING PROTECTION AT A RATE AS DESIGNATED BY THE MANUFACTURER. CURING COMPOUND SHALL BE REAPPLIED IF DISTURBED WITHIN 3 HOURS AFTER BEING APPLIED.
5. WALLS SHALL BE ALLOWED TO CURE FOR A MINIMUM OF 7 DAYS BEFORE INSTALLING "DRILL SET" POST BRACKET ANCHORS. WALLS SHALL BE ALLOWED TO CURE FOR A MINIMUM OF 3 DAYS BEFORE INSTALLING POSTS IN/ON "WET SET" BRACKETS. ALL WALL TIES, HONEY–COMBING, AND AIR HOLES > 3/4" SHALL BE PARGED WITH NON–SHRINK GROUT.
6. RANDOM CRACKING IN THE WALLS AND FLOOR SHALL BE EVALUATED AND DETERMINED IF THE CONCRETE NEEDS TO BE REMOVED OR REPAIRED. REMOVAL AND REPAIR SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND AT NO INCREASE IN COST.
7. IF MAJOR REPAIRS ARE REQUIRED, THE CONTRACTOR SHALL PREPARE A WRITTEN REPAIR PLAN WITH ALL MATERIALS AND METHODS CLEARLY STATED AND SHALL BE APPROVED BY THE LDG ENGINEER OF AUTHORITY BEFORE PROCEEDING WITH THE REPAIR.

JOINTS

1. BEFORE NEW CONCRETE IS PLACED ON OR AGAINST CONCRETE THAT HAS SET, THE SURFACE OF CONSTRUCTION JOINTS SHALL BE CLEANED OF ALL LAITANCE AND DEBRIS BY HIGH–PRESSURE WATER CUTTING, WASHING AND WIRE–BRUSHING, OR AS APPROVED BY THE ENGINEER. THE SURFACE OF THE IN–PLACE CONCRETE SHALL BE CUT TO EXPOSE CLEAN, SOUND AGGREGATE, BUT NOT SO DEEP TO UNDERCUT THE EDGES OF THE LARGE AGGREGATE. ALL CONSTRUCTION JOINTS SHALL BE WETTED FOR AT LEAST 1–HOUR PRIOR TO NEW PLACEMENT AND STANDING WATER SHALL BE REMOVED.
2. SLAB CONTROL JOINTS SHALL BE SAW–CUT AS SOON AS POSSIBLE, BUT NO LATER THAN 24 HOURS AFTER PLACEMENT OF THE CONCRETE, AT THE INTERVALS INDICATED ON THE DRAWINGS. ALL JOINTS SHALL BE WATER TIGHT AND AS SHOWN ON THE DETAIL DRAWINGS. THE SAW–CUTS SHALL BE THOROUGHLY CLEANED AND DRIED SO THE SEALANT AND PRIMER WILL BOND TO THE CONCRETE.
3. FOR THE JOINTS IN THE DRAWINGS THAT CALL FOR AN ELASTOMERIC SEALANT, THE SEALANT SHALL MEET THE REQUIREMENTS STATED IN THE CONSTRUCTION SPECIFICATION, INCLUDED IN THIS DESIGN PACKAGE, AND SHALL ALSO MEET THE FOLLOWING: THE SEALANT SHALL BE TYPE S (SINGLE COMPONENET), CLASS 25, AND MEET THE REQUIREMENT FOR TYPE (ABLE TO BE IMMERSED IN LIQUID). SOME SEALANTS REQUIRE A PRIMER TO BE USED BEFORE THE SEALANT IS APPLIED; PRIMERS SHALL BE USED NO MATTER IF THE JOINT IS LOCATED IN A "SUBMERGED" CONDITION OR NOT. IT IS RECOMMENDED THAT THE PRIMER IS SUPPLIED BY THE SAME MANUFACTURER AS THE SEALANT, THIS WILL ENSURE THAT THE SEALANT AND PRIMER ARE COMPATIBLE.

TESTING REQUIREMENTS

1. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE CONCRETE MEETS THE DESIGN REQUIREMENTS. THE CONTRACTOR SHALL TEST THE CONCRETE AS NEEDED; SLUMP, AIR ENTRAINMENT, CONCRETE TEMPERATURE, AND CYLINDERS. ALL CONCRETE FOR TESTING OR MAKING CYLINDERS SHALL BE TAKEN FROM THE DISCHARGE END OF THE PUMP TRUCK. THE LDG, PACD, OR CONSERVATION DISTRICT INSPECTOR MAY TEST THE CONCRETE AS THEY FEEL THE NEED TO DO SO. THE CONTRACTOR IS NOT TO RELY ON THE INSPECTOR TO PROVIDE THE TESTING SERVICE.

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GENERAL NOTES
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Date: 2025-01-31
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TRUSS DESIGN NOTES

1. TRUSSES SHALL BE USED FOR THIS ROOF. SHOP DRAWINGS SHALL BE PROVIDED TO THE LDG DESIGN ENGINEER FOR APPROVAL PRIOR TO ORDERING THE TRUSSES AND "PE"(PROFESSIONAL ENGINEER) SEALED SHOP DRAWINGS SHALL BE SUPPLIED BY THE TRUSS PLATE INSTITUTE CERTIFIED MANUFACTURER AT THE TIME OF TRUSS DELIVERY. (TRUSS AND STRINGER CONFIGURATION SHOWN IN THE DRAWINGS IS FOR ILLUSTRATION PURPOSES ONLY) LDG DOES NOT DESIGN ROOF TRUSSES.
   *MAKE THE TRUSS DESIGNER AWARE OF KNEE BRACING BEING USED.
2. ALL NAILS SHALL HAVE FULL HEADS; CLIPPED HEADS ARE NOT ACCEPTABLE.
3. ALL NAILS AND BOLTS USED WITH PRESSURE TREATED WOOD SHALL BE HOT-- DIP GALVANIZED NAILS THAT MEET THE MINIMUM GALVANIZED COATING REQUIREMENTS FOR THE MOST RESTRICTIVE WOOD PRESERVATIVE TREATMENT METHOD. (I.E. CCA TREATED WOOD REQUIRES A MINIMUM COATING RATING OF G--90 HOWEVER ACQ TREATED WOOD REQUIRES A COATING RATING OF G--185. WHEN THE WOOD TYPES ARE MIXED, USE THE G--185 CONNECTORS. CONSULT WITH INDIVIDUAL FASTENER, HARDWARE MANUFACTURER FOR RECOMMENDATIONS)
   CAUTION: NEW WOOD PRESERVATIVE TREATMENT METHODS REQUIRE SPECIAL FASTENERS AND CONNECTORS. ALL PLATES AND FASTENERS USED WITH ACQ, CBA OR CA TREATMENT FORMULAS MUST CONFORM TO ASTM STANDARDS; ASTM A153 FOR HOT-- DIP FASTENERS, AND A653 FOR HOT-- DIP CONNECTOR AND SHEET PRODUCTS. THIS CHANGE INCREASES THE GALVANIZED COATING REQUIREMENTS TO A DESIGNATION OF G--185.STAINLESS STEEL FASTENERS AND CONNECTIONS MAY BE USED IN PLACE OF HOT-- DIP GALVANIZED PRODUCTS.
4. NAILS FOR GENERAL FRAMING CAN BE COMMON, FULL HEAD SIZE 16D OR LARGER, SMOOTH NAILS. GENERAL FRAMING INCLUDES PURLINS, DIAGONAL BRACES, LATERAL BRACES, ETC.
5. BOLTS, SCREWS, OR METAL PLATE CONNECTORS MAY BE USED INSTEAD OF NAILS. SUCH SUBSTITUTIONS SHALL PROVIDE A CONNECTION OF EQUAL OR GREATER STRENGTH AND DURABILITY, ACCORDING TO THE NOTION AT FOREST PRODUCTS ASSOCIATION'S (NFPA) NATION AT DESIGN SPECIFICATION. ALTERNATE CONNECTORS MUST BE APPROVED BY THE DESIGN ENGINEER.
6. ALL WOOD IN CONTACT WITH THE GROUND OR MANURE SHALL BE PRESSURE TREATED AS PER AMERICAN WOOD PRESERVER'S ASSOCIATION STANDARD (POSTS SHALL BE TREATED TO 0.6 #/CU.FT. AND ALL OTHER WOOD SHALL BE TREATED TO 0. 4 #/CU.FT.)
7. ALL STRUCTURAL MEMBERS WHICH INCLUDES: ALL WYE AND KNEE BRACING, BEARING BLOCKS, TRUSS SUPPORT BLOCKS, AND GIRDERS/HEADERS; (EXCLUDING MICROLLAM GIRDERS/HEADERS) SHALL BE SOUTHERN YELLOW PINE OR DOUGLAS FIR--LURCH NO. 2 GRADE
   (SURFACE DRY, USED AT 19% MAXIMUM MOISTURE CONTENT).
   ALL SECONDARY MEMBERS SUCH AS PERMANENT OR CONTINUOUS BRACING SHALL BE (SYP) SOUTHERN PINE NO. 3, (SPF) SPRUCE-- PINE-- FIR NO. 2 OR BETTER.
   PURLINS SHALL BE SYP NO. 2, SPF NO. 2, OR BETTER IF SPACED AT 2' CENTERS.
   PURLINS SHALL BE SYP NO. 3 OR BETTER IF SPACED AT 1.5' CENTERS.
8. POSTS ARE TO BE 4-- PLY & 5-- PLY 2X8 GLU LAMINATED (AS SHOWN IN THE DRAWING) & PRESSURE TREATED, #2 GRADE SYP (SOUTHERN YELLOW PINE). POSTS ARE TO BE FULLY PRESSURE TREATED THE ENTIRE HEIGHT.
9. GALVANIZED ANGLE IRON (1/4" THICK X 3" WIDE BOTH WAYS) CAN BE INSTALLED ON THE CORNERS OF THE POSTS AT ENTRANCE LOCATIONS. OTHER MEANS OF POST PROTECTION MAY BE USED IF APPROVED BY THE DESIGN ENGINEER.
10. KNEE AND WYE BRACING ARE REQUIRED FOR THE POSTS AND GIRDERS AS SHOWN. NO WYE BRACING SHALL BE INSTALLED ON THE "INSIDE" OF THE ENTRANCE LOCATIONS.
11. PERMANENT CONTINUOUS LATERAL BRACING IS REQUIRED, ACCORDING TO THE TRUSS MFG DRAWINGS. CONTINUOUS LATERAL BRACING MUST BE INSTALLED WITH STAGGERED SIDE BY SIDE OVERLAP CONNECTIONS (NO BUTT TO BUTT CONNECTIONS). THE ENDS OF THE BRACES MUST EXTEND FULLY PAST THE TRUSS AND ALLOW A 2-NAIL CONNECTION WITHOUT USING TOENAILS.
12. PERMANENT DIAGONAL BRACING IS REQUIRED AT EACH END OF THE BUILDING AND AT INTERVALS NOT TO EXCEED WHAT IS SHOWN IN THE DRAWINGS. ALL BRACING SHALL BE INSTALLED AS PER THE TRUSS PLATE INSTITUTE BCSI-B3 AND THE DETAILED DRAWING.
13. ROOFING MATERIAL SHALL BE STEEL OR ALUMINUM. STEEL SHALL BE: GALVANIZED STEEL, PAINTED GALVANIZED STEEL, OR PAINTED STEEL. TYPE OF ROOFING TO BE DISCUSSED WITH LANDOWNER PRIOR TO BID SOLICITATION. STEEL ROOFING MATERIAL SHALL BE 29 GAUGE MINIMUM. ALUMINUM ROOFING MATERIAL SHALL HAVE A MINIMUM NOMINAL THICKNESS OF 0.018 INCHES. GALVALUME ROOFING IS NOT PERMITTED FOR USE.
14. ROOF FASTENERS SHALL BE A COMBINATION OF ZINC COATED STEEL AND NEOPRENE WASHER. DOUBLE STITCH THE SEEMS OF THE ROOF EDGES. TYPICAL STEEL ROOF SHALL FASTENERS ON A 9" SPACING ON THE PURLINS 24" ON CENTER.
15. END TRUSSES SHALL BE FACED WITH ROOFING MATERIAL, AS SPECIFIED ABOVE. THIS SHALL BE DISCUSSED WITH THE LANDOWNER PRIOR TO BID SOLICITATION.
16. VENTILATION SHALL BE PROVIDED BY AN "OVERSHOT" TOP CHORD OF THE TRUSS, AS SHOWN ON THE DRAWINGS; A MINIMUM OF 14" OPENING IS REQUIRED FOR THIS STRUCTURE.
17. BIRD NETTING IS REQUIRED ON THE BOTTOM CHORD OF THE TRUSS.
18. GIRDER REQUIREMENTS:
    1.75" x 9.25" LVL'S: MOMENT RATING=6,271 FT-LBS, FB=2,900 PSI, FV=320 PSI, E=2.0x10^6
    HEADER REQUIREMENTS:
    7" x 18" PSL: MOMENT RATING=87,235 FT-LBS, FB=2,900 PSI, FV=290 PSI, E=2.0X10^6
19. THE ROOF WAS DESIGNED TO CARRY A COMBINED LOADING OF 40 PSF, ACCORDING TO ASCE-7 (MOST CONSERVATIVE COMBINED LOAD FORMULA), ON THE ENTIRE ROOF SURFACE. THE ROOF WAS ALSO DESIGNED FOR A UNIFORM UPLIFT OF 14.5 PSF UNDER THE ENTIRE ROOF. THIS ROOF IS DESIGNED FOR (2) "EN CLOSED" SIDES; MAJOR STRUCTURAL CHANGES MAY BE NEEDED IF THE SIDES THAT ARE LABELED AS "OPEN" ARE ENCLOSED. CONSULT WITH THE DESIGN ENGINEER IF ADDITIONAL ENCLOSED SIDES ARE BEING CONSIDERED.

DESIGN CRITERIA

THE FOLLOWING DESIGN CRITERIA ARE SUITABLE FOR AGRICULTURAL BUILDINGS.

• STRUCTURAL CODES:	2018 IBC, ASCE 7-16, NDS 2018, ACI 318-14 ASAE EP486.3, ASAE EP484
• BUILDING RISK CATEGORY:	II
• DEAD LOADS:	
•• TOP CHORD OF ROOF TRUSS:	5 PSF
•• BOTTOM CHORD OF ROOF TRUSS:	5 PSF
•• TOTAL ROOF LOAD:	10 PSF
• SNOW LOADS	
•• GROUND SNOW LOAD, PG:	35 PSF
•• SNOW RISK FACTOR:	1.0
•• THERMAL FACTOR, CT:	1.2
•• EXPOSURE FACTOR, CE:	1.0
•• SLOPED ROOF FACTOR, CS:	1.0
•• FLAT ROOF SNOW LOAD, PF:	26.95
•• SLOPED ROOF SNOW LOAD, PS:	24 PSF
•• UNBALANCED WINDWARD SNOW LOAD:	7 PSF
•• UNBALANCED LEEWARD SNOW LOAD:	
••• 60 FT WIDE BUILDINGS:	45 PSF 10 FT FROM THE RIDGE, THEN 24 PSF
•• SNOW DRIFT LOAD:	NOT EVALUATED; REQUIRES ADDITIONAL DESIGN
•• SLIDING SNOW LOAD:	NOT EVALUATED; REQUIRES ADDITIONAL DESIGN
• ROOF LIVE (CONSTRUCTION) LOADS:	30 PSF
• WIND LOADS:	
•• BASIC (ULTIMATE) WIND SPEED:	105 MI/H
•• EXPOSURE CATEGORY:	C
•• BUILDING MID-HEIGHT:	25 (OR LESS)
•• WIND DIRECTIONALITY FACTOR, KD:	0.85
•• TOPOGRAPHIC FACTOR, KZT:	1.0
•• VELOCITY PRESSURE, QH:	22.7 PSF
•• BUILDING ENCLOSURE CATEGORY:	
••• SHEATHED SIDEWALLS:	PARTIALLY ENCLOSED (ALSO ENCLOSED, PARTIALLY OPEN)
••• OPEN SIDEWALLS:	OPEN (ALSO PARTIALLY OPEN)
• SEISMIC LOADS:	NOT EVALUATED
• RAIN AND ICE LOADS:	NOT EVALUATED
• STORAGE LOADS (FILL):	
•• DRY BULK DENSITY:	70 PCF
•• ANGLE OF INTERNAL FRICTION:	32°
•• ANGLE OF FILL LINE:	32°
•• KA:	0.85 (RANKINE)
•• EFD	60 PSF/FT (APPLIED AT 32°)

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MARK	DATE	COMMENTS
0	2024-12-16	REVIEW SET

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SHICKSHINNY,PA 18655

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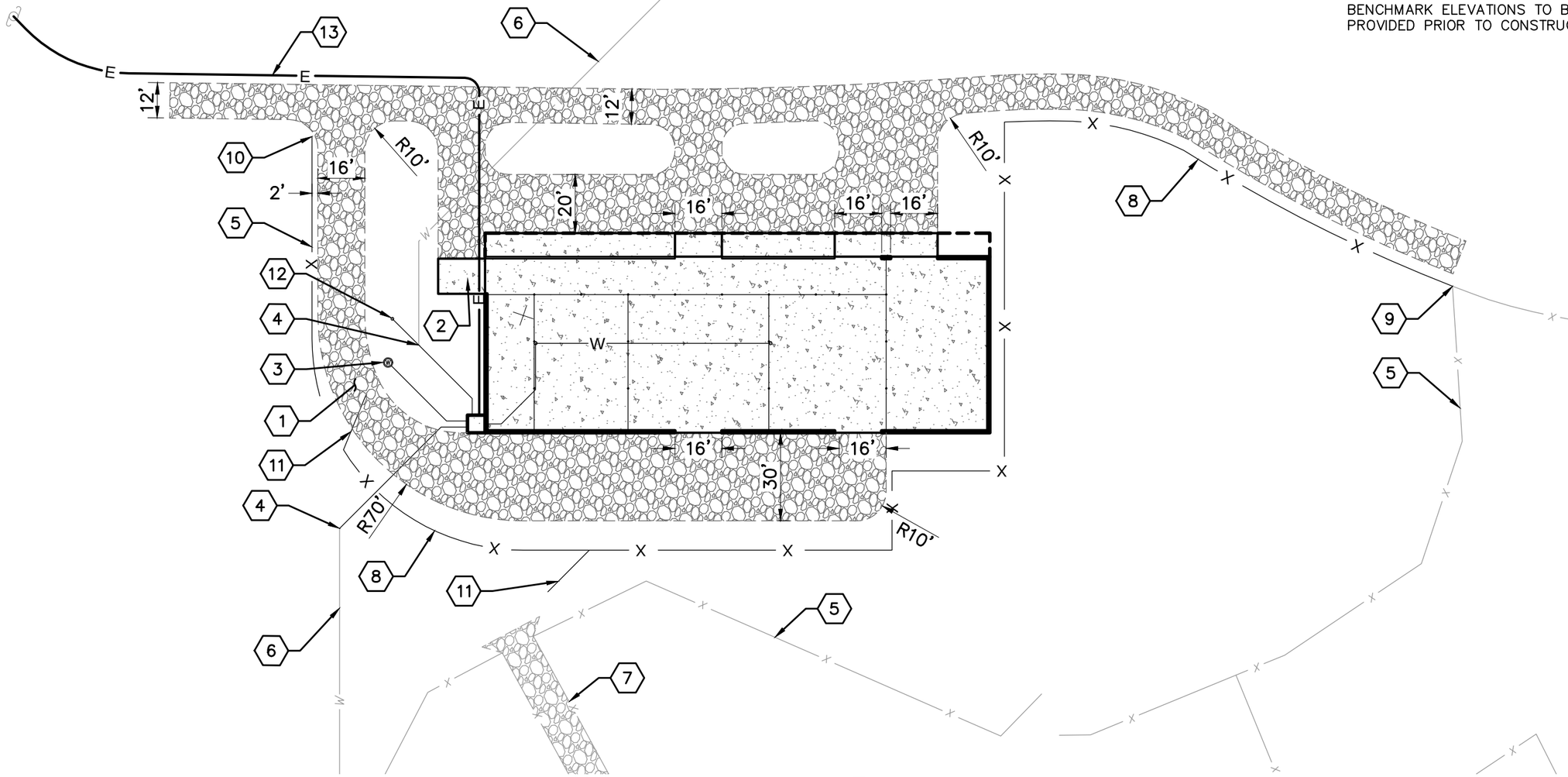
685 WATERTON ROAD
SHICKSHINNY,PA 18655

GENERAL NOTES
BID SET

Date: 2025-01-31
Project No.: 13655-002
Sheet No.: G-004

NOT FOR CONSTRUCTION

BENCHMARK ELEVATIONS TO BE PROVIDED PRIOR TO CONSTRUCTION.



1 SITE PLAN
SCALE: 1"=40'

N

40 0 40 80 FEET
SCALE: 1"=40'

Typical Site Plan Keynotes

1. PROPOSED ACCESS ROAD.
2. REINFORCED CONCRETE SLAB.
3. PROVIDE DOMESTIC WATER WELL. WELL TO BE DRILLED AFTER CONSTRUCTION OF MANURE STORAGE AND HEAVY USE AREA.
4. CONNECT TO EXISTING WATER SUPPLY LINE INSTALLED IN OTHER PHASE/CONTRACT AND EXTEND TO INSULATED ROOM. 1.5" POLYETHYLENE, MINIMUM BURY DEPTH OF 3.5'. ACTUAL LOCATION OF CONNECTION TO BE DETERMINED IN FIELD.
5. FENCING TO BE INSTALLED IN OTHER PHASE/CONTRACT.
6. SITE WATER TO BE INSTALLED IN OTHER PHASE/CONTRACT
7. ANIMAL WALKWAY TO BE INSTALLED IN OTHER PHASE/CONTRACT.
8. PROVIDE NEW HIGH TENSILE FENCING (1/C-504). A MINIMUM OF 3-STRAND ELECTRIFIED FENCE SHALL BE USED WITH A MINIMUM WOODEN POST WIDTH OF 4".
9. CONNECT TO EXISTING HIGH TENSILE FENCING INSTALLED IN OTHER PHASE/CONTRACT. ACTUAL LOCATION OF CONNECTION TO BE DETERMINED IN FIELD.
10. CONNECTION OF PROPOSED FENCE TO EXISTING FENCE. ACTUAL LOCATION OF CONNECTION TO BE DETERMINED IN FIELD.
11. PROVIDE SLINKY GATE.
12. PROPOSED FROST PROOF POST HYDRANT.
13. ELECTRICAL SERVICE. PROVIDE (3) #1CU WIRES AND (1) #6CU GROUND WIRE. RUN IN 1.5" SCHEDULE 40 CONDUIT.

Legend

PROPOSED

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

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SITE PLAN
BID SET

Date: 2025-01-31
Project No.: 13655-002
Sheet No.: CS101

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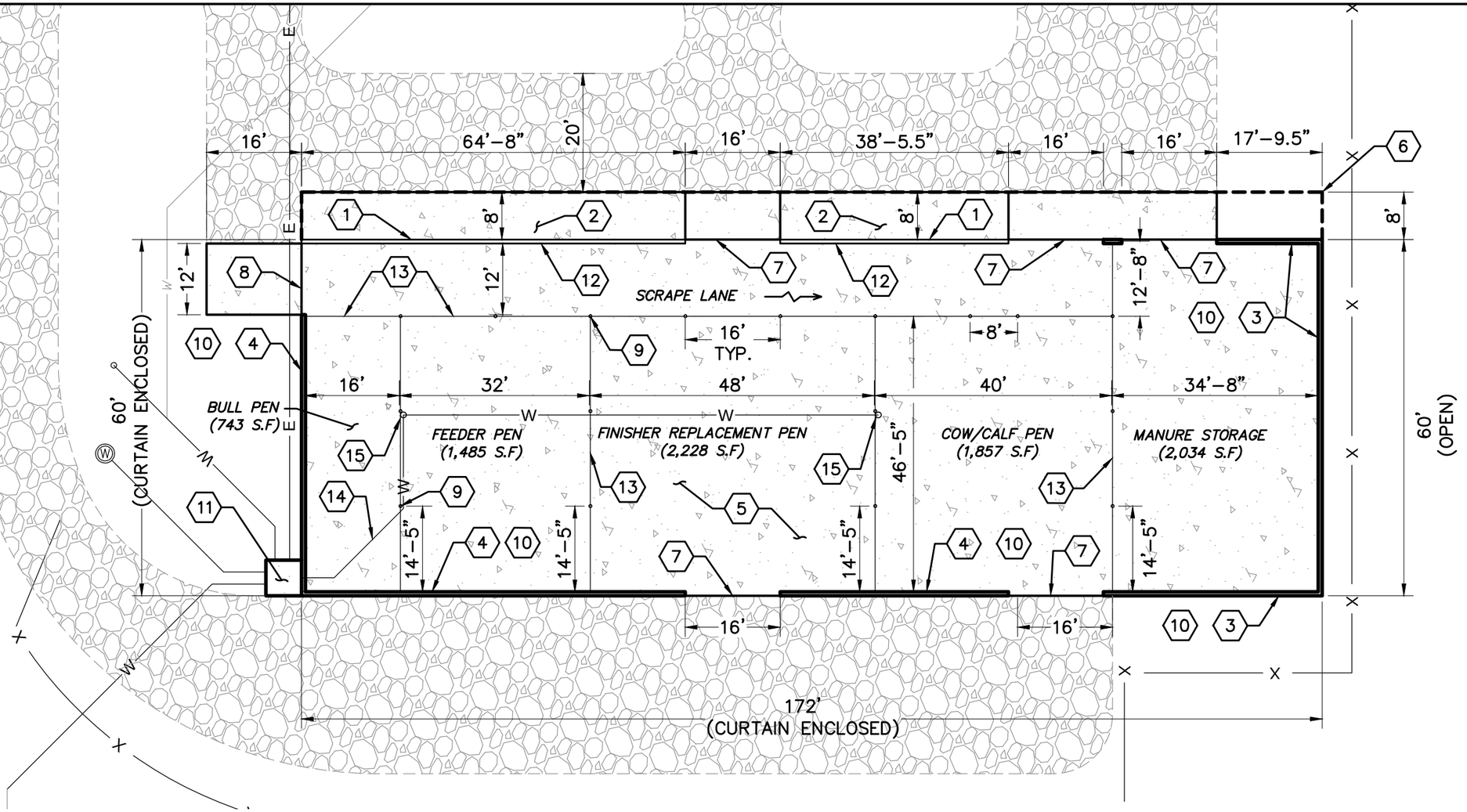

1 BUILDING LAYOUT PLAN

SCALE: 1"=20'

20 0 20 40 FEET

SCALE: 1"=20'

Typical Site Plan Keynotes

1. PROPOSED 15" HIGH CURB.
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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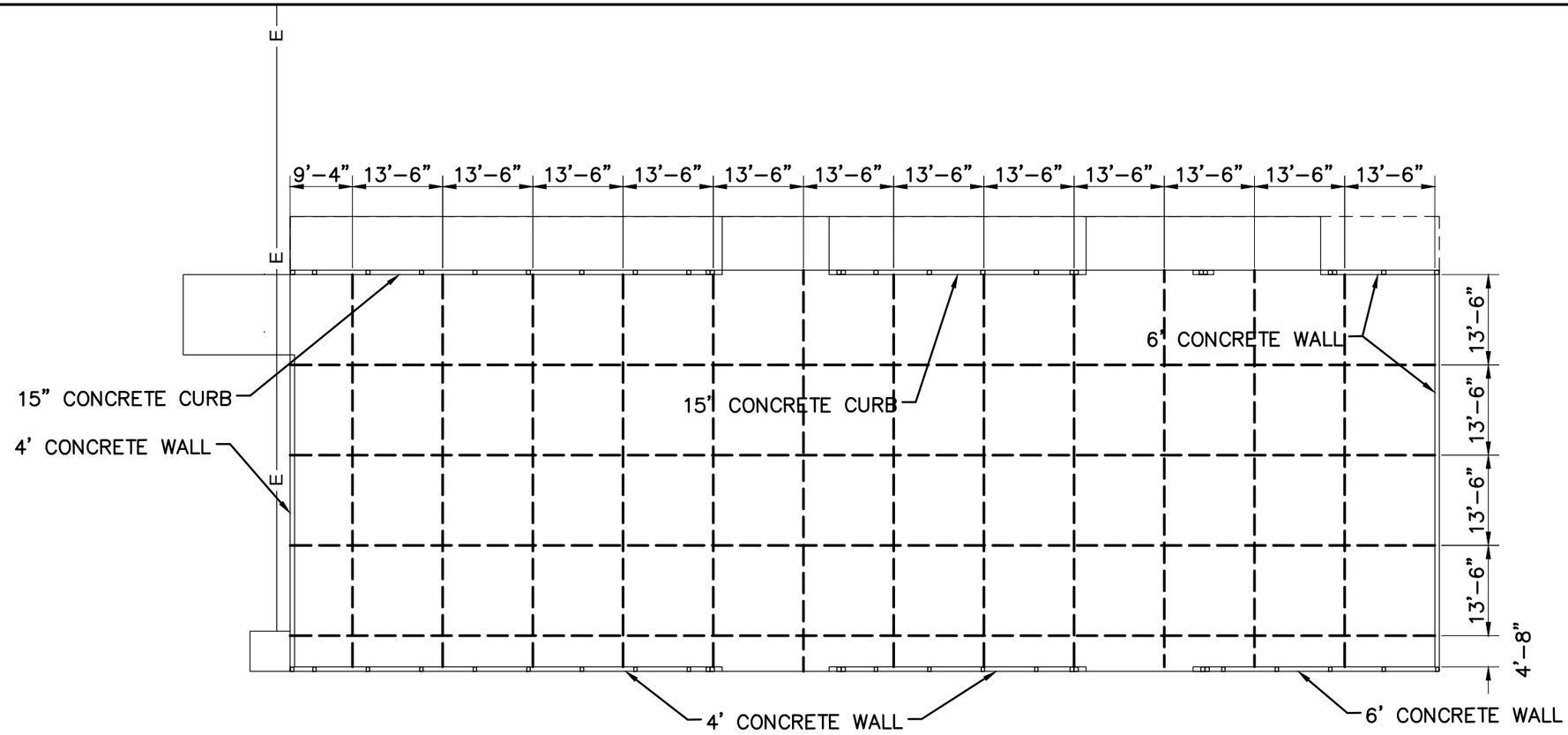
BUILDING LAYOUT PLAN
BID SET

Date: 2025-01-31

Project No.: 13655-002

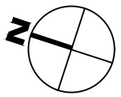
Sheet No.: CS102

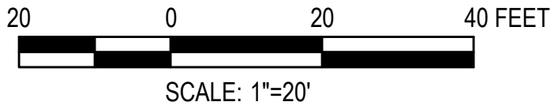
NOT FOR CONSTRUCTION



1 CONTROL JOINT PLAN

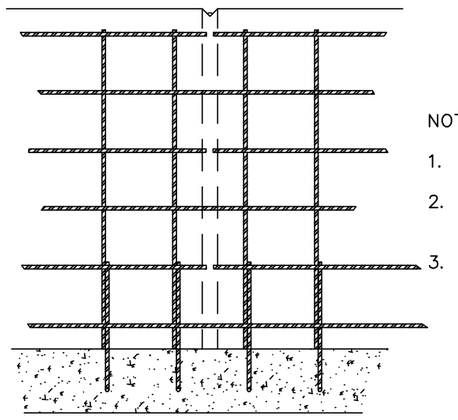
SCALE: 1"=20'





SCALE: 1"=20'

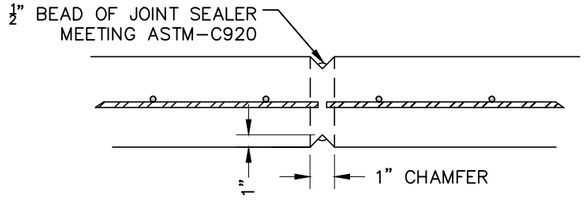
WALL JOINT – PROFILE VIEW



NOTES:

1. CUT 50% OF HORIZONTAL STEEL AT JOINT.
2. NUMBER OF HORIZONTAL BARS TO BE CUT WILL BE DETERMINED BY WALL HEIGHT.
3. ALL CONCRETE WALL JOINTS MUST BE AT LEAST 2' FROM A POST.

WALL JOINT – PLAN VIEW



Legend

FLOOR JOINT

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CONTROL JOINT PLAN
BID SET

Date: 2025-01-31
Project No.: 13655-002
Sheet No.: CS103

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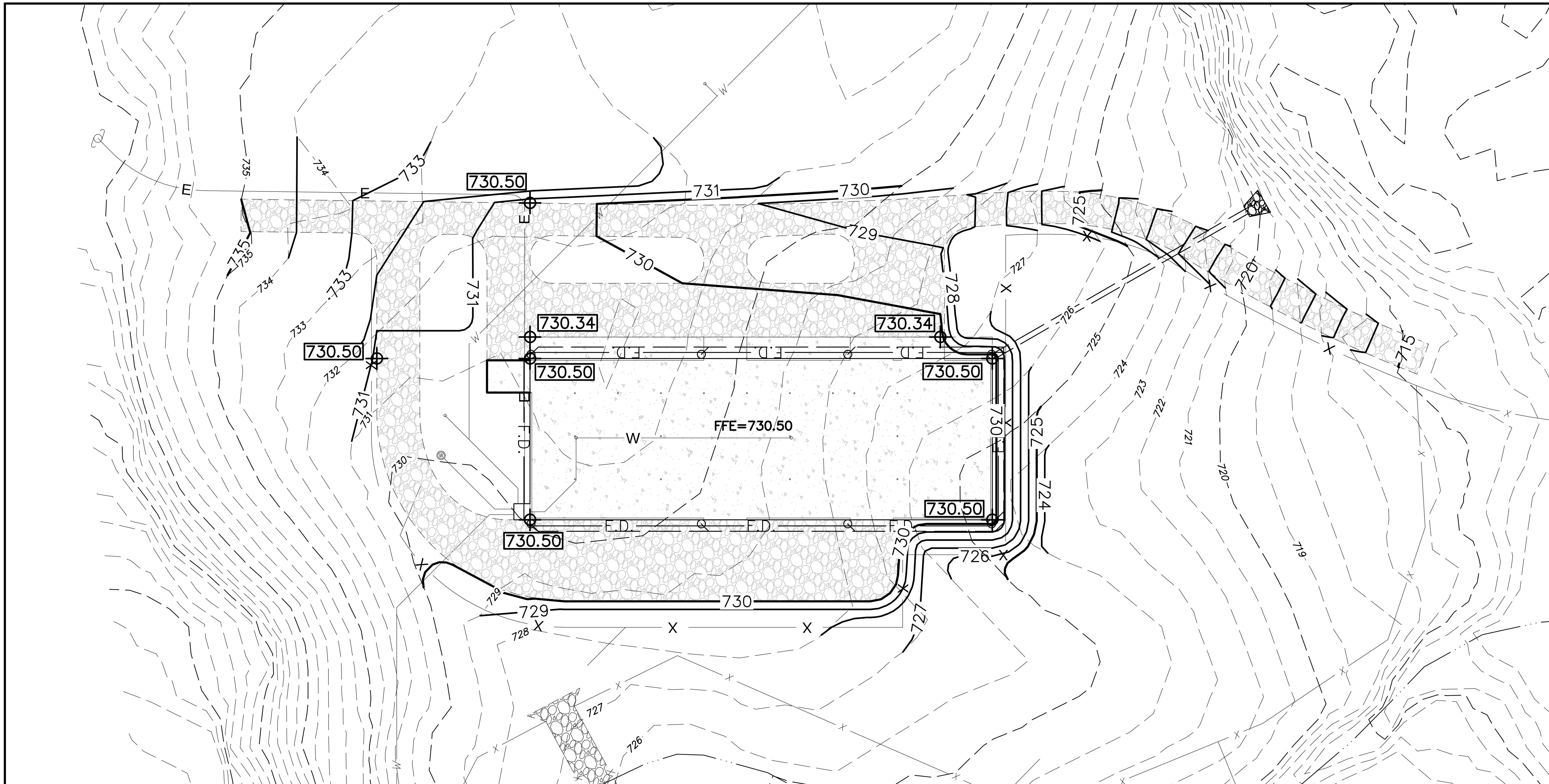

1 GRADING PLAN
SCALE: 1"=40'

40 0 40 80 FEET

SCALE: 1"=40'

Legend

PROPOSED

Symbol	Description
	REINFORCED CONCRETE
	BUILDING LINE/WALL
	CURB
	GRAVEL
—W—	WATER SUPPLY LINE
— — —	STORM PIPE
—F.D.—F.D.—	FOUNDATION DRAIN

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GRADING PLAN
BID SET

Date: 2025-01-31

Project No.: 13655-002

Sheet No.: CG101

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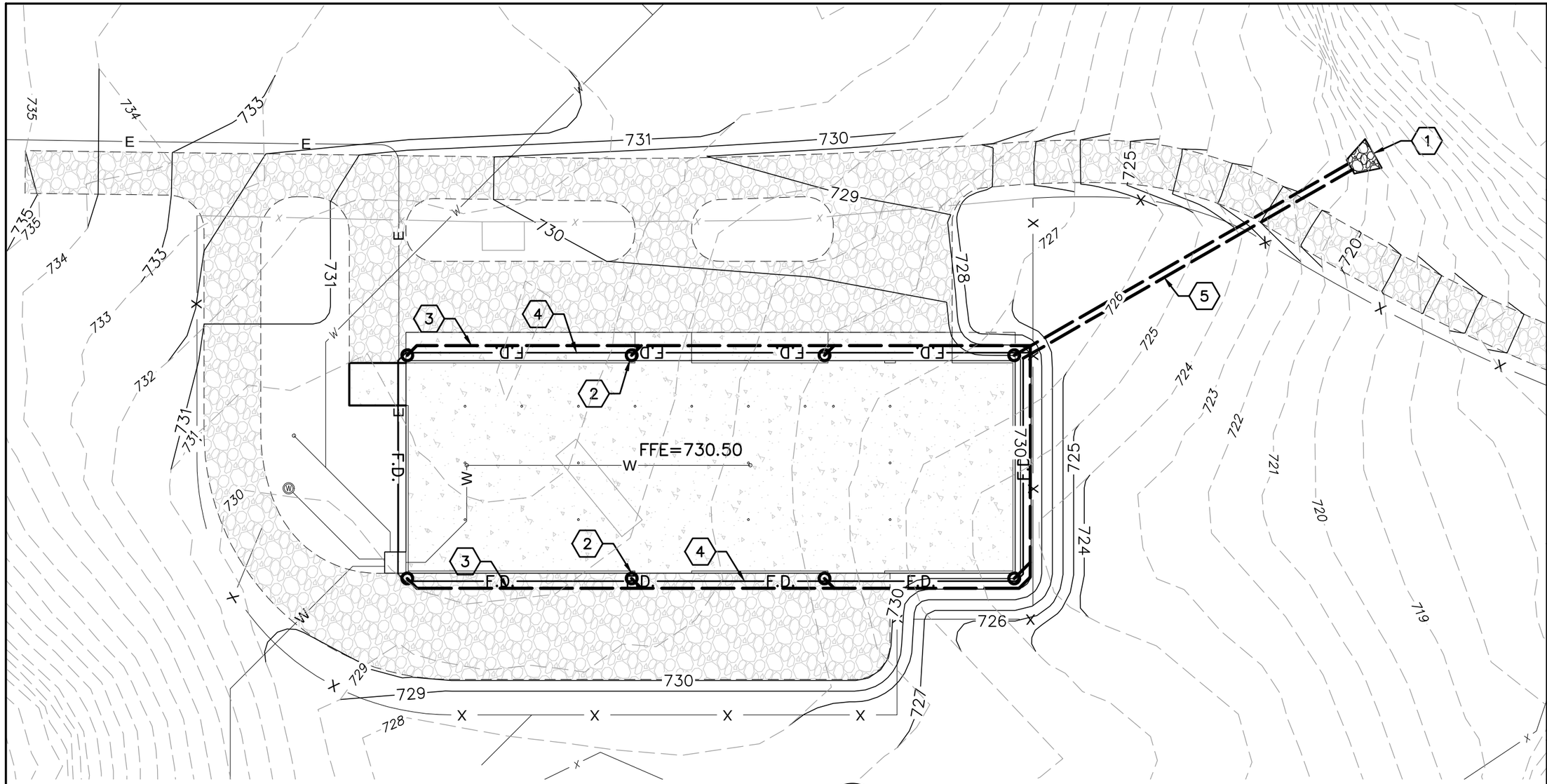

1 BUILDING DRAINAGE PLAN

SCALE: 1"=20'

20 0 20 40 FEET

SCALE: 1"=20'

Typical Site Plan Keynotes

1. RIP-RAP APRON
2. DOWNSPOUT, TYPICAL OF 8. SEE GUTTER AND DOWNSPOUT DETAILS FOR LOCATION ENLARGEMENT.
3. 6" PVC (SCH 40) ROOF LEADER MANIFOLD PIPING. RUN @ 2.0% MINIMUM.
4. FOOTER DRAIN, 4" CPT PERFORATED
5. 4" PVC (SCH 40) PIPE. RUN @ 2.0% MINIMUM FROM FOOTER DRAIN

Legend

PROPOSED

- REINFORCED CONCRETE
- BUILDING LINE/WALL
- CURB
- GRAVEL
- W — WATER SUPPLY LINE
- STORM PIPE
- F.D. F.D. — FOUNDATION DRAIN

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BUILDING DRAINAGE PLAN
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Date: 2025-01-31

Project No.: 13655-002

Sheet No.: CG102

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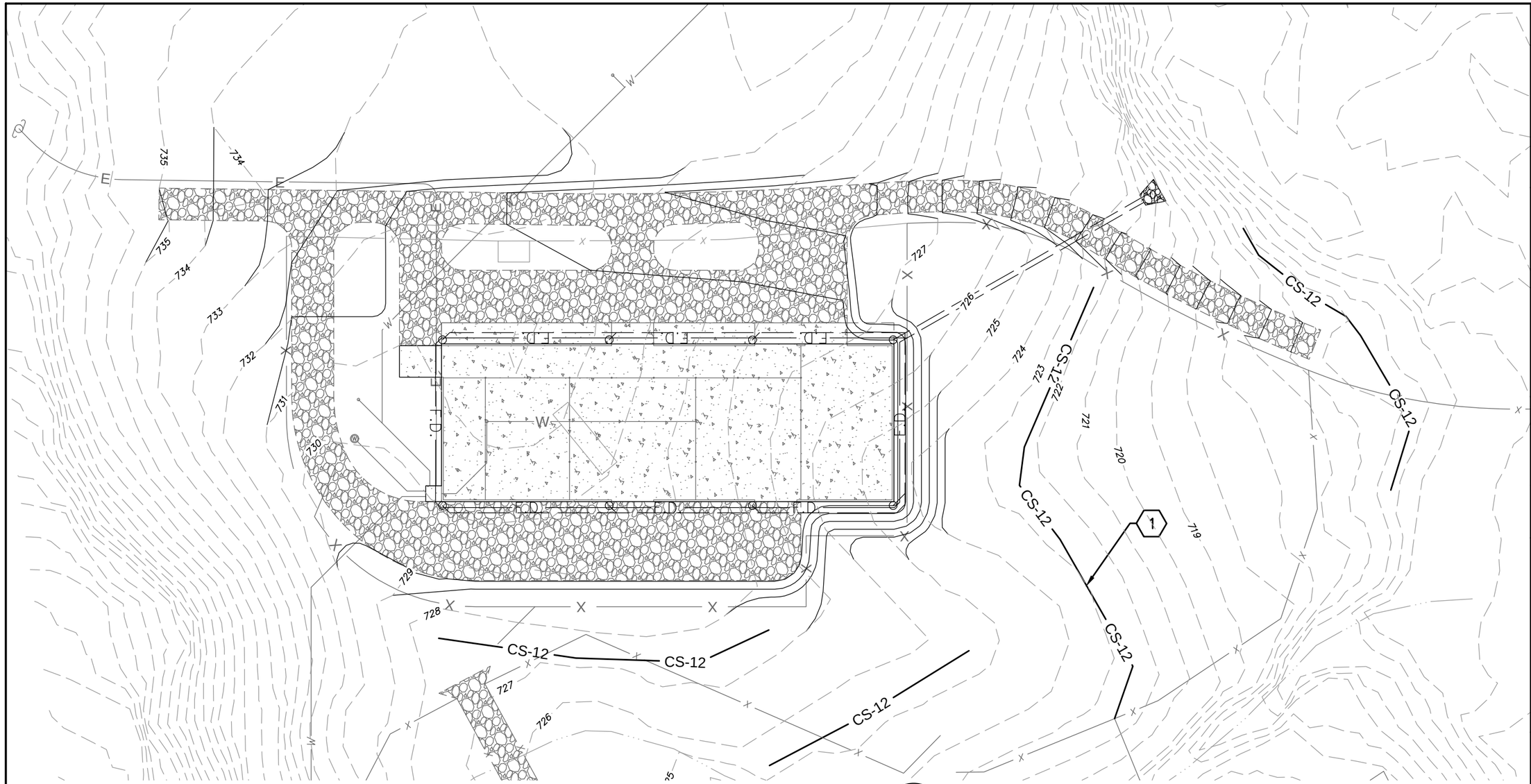

1 EROSION AND SEDIMENT CONTROL PLAN

SCALE: 1"=150'

150 0 150 300 FEET

SCALE: 1"=150'

Typical Site Plan Keynotes

1	EROSION AND SEDIMENT POLLUTION CONTROL DEVICE (12" COMPOST FILTER SOCK). REFER TO SHEET C-501 FOR E&S DETAILS / FINAL SEEDING RECOMMENDATIONS.

ADDITIONAL NOTES:

AREA OF DISTURBANCE IS .8 ACRES

AREA OF DISTURBANCE IS NOT CONNECTED TO THE WATERS OF THE COMMONWEALTH

GENERAL SITE PERMITTING INFORMATION

1. PROPOSED AREA OF DISTURBANCE IS LESS THAN 1 ACRE. (Y) / N (INCLUDES EXCAVATION, SPOIL PILE, FOOTER DRAIN ETC.)
2. NAME OF RECEIVING WATER BODY: HUNTINGTON CREEK
   DISTANCE FROM WORK AREA TO STREAM: >50 FT
3. ARE THERE ANY APPARENT WETLANDS WITHIN THE PROJECT WORK AREA AND/OR RECEIVING RUNOFF FROM THE AREA OF DISTURBANCE? (Y) / N

SOIL TYPE(S) IN AREA OF DISTURBANCE: CHENANGO GRAVELLY LOAM (ChB), WYOMING GRAVELLY LOAM (WyD) AND WAYLAND SILT LOAM (Wa)

4. ARE THERE ANY GENERAL PERMITS REQUIRED FOR THIS PROJECT? CONTACT LOCAL CONSERVATION DISTRICT OFFICE FOR MORE INFORMATION.

Legend

PROPOSED

CS-12 — 12" COMPOST FILTER SOCK

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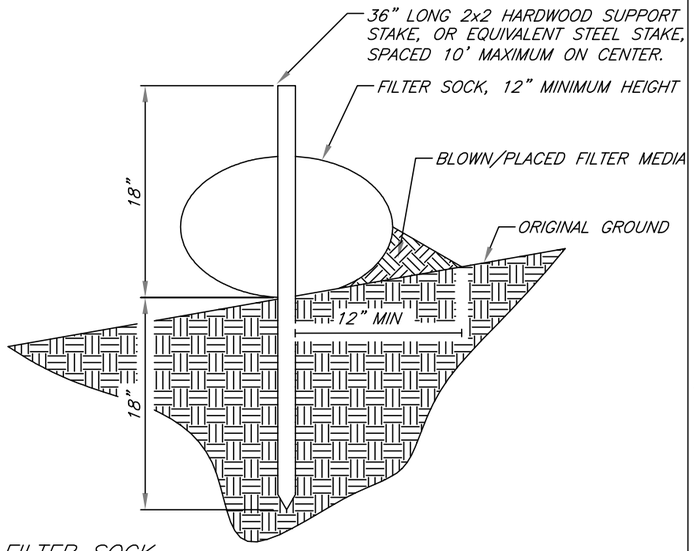
EROSION AND SEDIMENT CONTROL PLAN
BID SET

Date: 2025-01-31

Project No.: 13655-002

Sheet No.: CG103

NOT FOR CONSTRUCTION



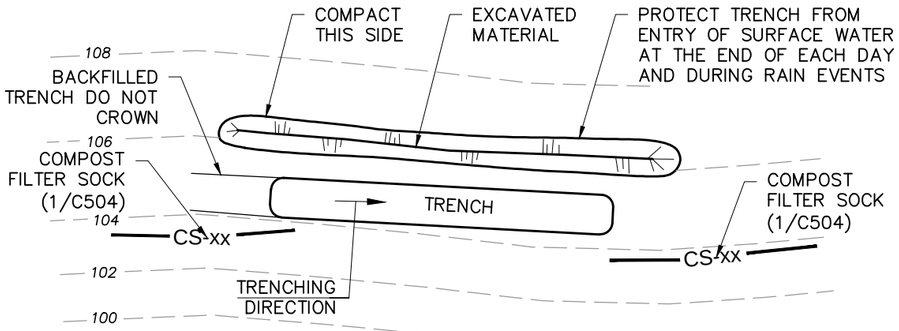
FILTER SOCK

NOTES:

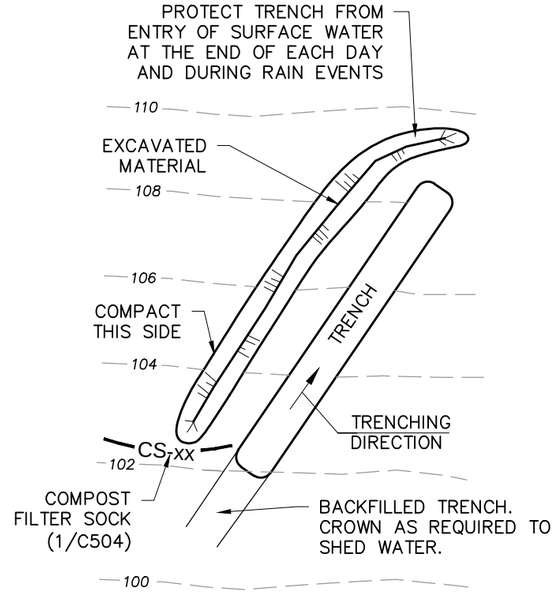
1. FILTER SOCK SHALL BE INSTALLED DOWN SLOPE OF THE DISTURBED AREAS OF THE CONSTRUCTION SITE.
2. TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.
3. FILTER SOCK SHALL BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8' UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.
4. STAKES MAY BE INSTALLED IMMEDIATELY DOWN SLOPE OF THE SOCK IF SO SPECIFIED BY THE MANUFACTURER.
5. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVE GROUND HEIGHT OF THE SOCK.
6. SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
7. BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
8. UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.
9. ANY SECTION OF SILT FENCE WHICH HAS BEEN UNDERMINED OR TOPPED SHALL BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET.

1 FILTER SOCK

SCALE: N.T.S



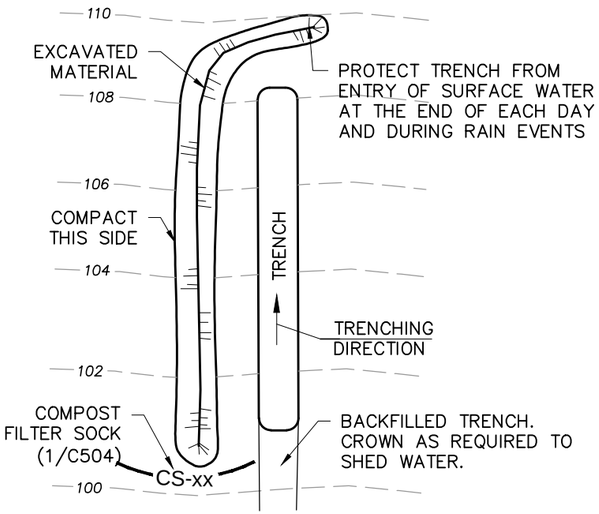
CONSTRUCTION PARALLEL TO SLOPE



CONSTRUCTION DIAGONAL TO SLOPE

2 PLACEMENT OF EXCAVATED TRENCH MATERIAL

SCALE: N.T.S



CONSTRUCTION PERPENDICULAR TO SLOPE

Seeding Preparation

1. When grading is finished, apply lime and fertilizer in accordance with soil test recommendations.
2. If soil test results are not available, apply 4 ton per acre of agricultural grade limestone and fertilize at the rate of 1,000 lbs. Of 10–20–20 or equivalent per acre.
3. Lime and one–half (1/2) the amount of the fertilizer shall be incorporated 4 to 6 inches into the soil.
4. Work area with chisel plow or similar type equipment, making sure lime and fertilizer are worked well into the soil.
5. Follow with the balance of fertilizer and seed.

Seeding Recommendation

6. The seed mixture shall be the following or similar if approved by the NRCS representative.

Nurse Crop (required with every permanent seed application):

Oats	64	lbs/acre PLS
Wheat	90	lbs/acre PLS
Annual Rye	40	lbs/acre PLS

Permanent Stabilization:

Perennial Rye	40	lbs/acre PLS
PLUS		
Tall Fescue	80	lbs/acre PLS

NOTE: This mixture is suitable for frequent mowing. Do not cut shorter than 4".

PLS means pure, live, seed. PLS is the product of the percentage of pure seed times percentage germination divided by 100. For example, to secure the actual planting rate for switchgrass, divide 12 lbs PLS by the PLS percentage shown on the seed tag. Thus, if the PLS content of a given seed lot is 35%, divide by .35 to obtain 34.4 lbs of seed, the amount of seed required to plant 1 acre.

If partial completion of any part of the project is accomplished, and this area will be disturbed again BUT not for a period of 20 days or more, those areas must be seeded with a TEMPORARY cover–seeding.

Temporary Seed and mulch will be applied at the following fates:

Annual Ryegrass	40 lbs/Acre
Winter Rye	3 Bu/Acre
Winter Wheat	3 Bu/Acre
Spring Oats	3 Bu/Acre

Planting Recommendation

Seed can be applied with a drill or broadcast seeder.

Band seeding is not permitted.

If broadcast, harrow or disk lightly to cover seed. Roll with cultipacker or similar roller in same direction as seeding. (Double drilling gives better distribution of seeding and helps to spread the water while plants are small. Drill first lengthwise and then crosswise (in a zig–zag pattern). Optimum planting time is early spring or mid summer

7. As soon as seeding is finished, mulch with 3 Tons/Acre of hay or straw, making a layer 1 to 1.5 inches deep. Set disk straight and go over mulch to press straw into the soil.

Tackifiers can also be used for anchoring mulch.

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MARK	DATE	COMMENTS
0	2024-12-16	REVIEW SET

Eric Stevens
685 WATERTON ROAD
SHICKSHINNY,PA 18655

STEVENS FARM PROJECT
685 WATERTON ROAD
SHICKSHINNY,PA 18655

E&S DETAILS

BID SET

Date: 2025-01-31

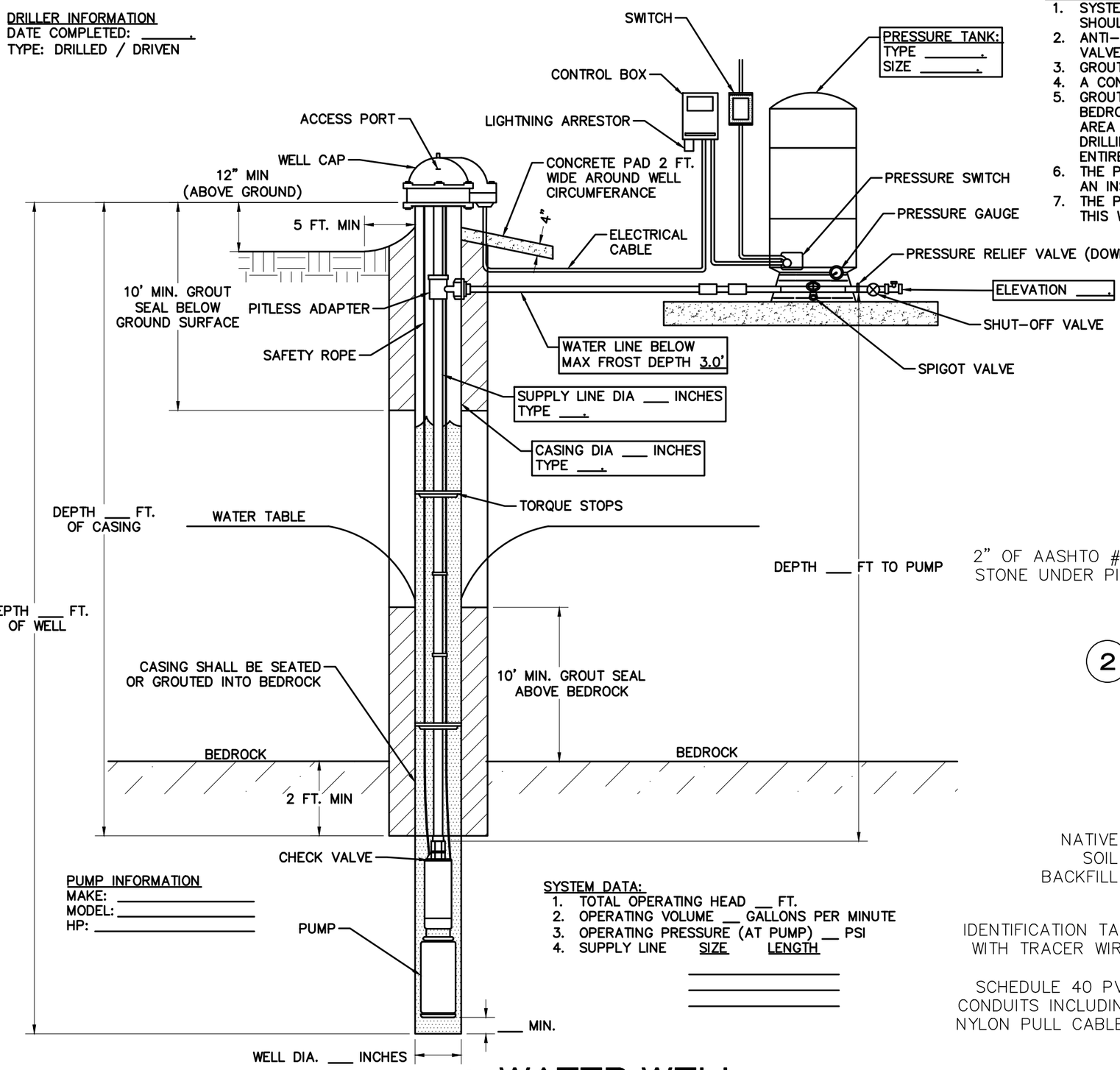
Project No.: 13655-002

Sheet No.: C-501

NOT FOR CONSTRUCTION

P:\13655\13655-002\DWG\13655-002_C-501_Erosion and Sedimentation Control Details.dwg, STANDARD SHEET, 1/31/2025 3:27:57 PM, Bennett, Joel

DRILLER INFORMATION
DATE COMPLETED: _____.
TYPE: DRILLED / DRIVEN

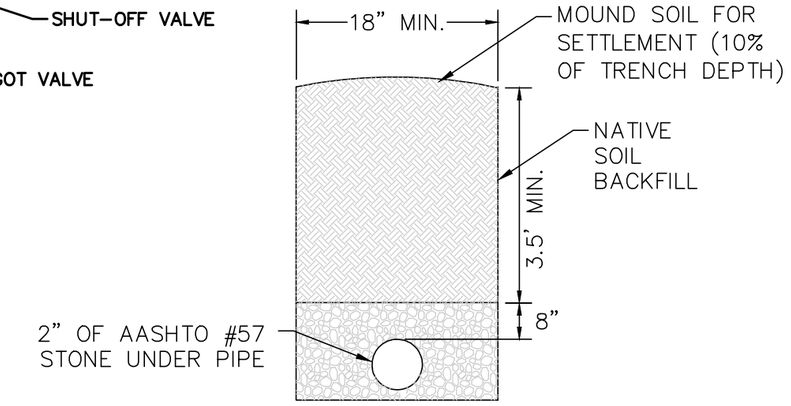


PUMP INFORMATION
MAKE: _____
MODEL: _____
HP: _____

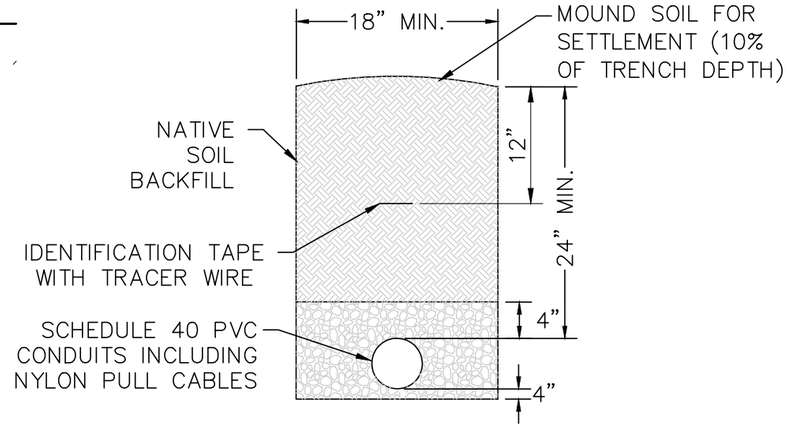
SYSTEM DATA:
1. TOTAL OPERATING HEAD __ FT.
2. OPERATING VOLUME __ GALLONS PER MINUTE
3. OPERATING PRESSURE (AT PUMP) __ PSI
4. SUPPLY LINE SIZE LENGTH

1 WATER WELL
SCALE: N.T.S

CONSTRUCTION NOTES:
1. SYSTEM SHOWN IS A REPRESENTATION. MODIFICATIONS OR ADDITIONS SHOULD BE MADE AS APPROVED BY NRCS REPRESENTATIVE.
2. ANTI-SIPHON VALVE IS REQUIRED FOR ALL SYSTEMS. ANTI-SIPHON VALVE SHALL BE WATTS 9-D OR EQUIVALENT.
3. GROUT SEAL REQUIRED FOR ALL SYSTEMS
4. A CONCRETE COLLAR IS REQUIRED.
5. GROUT SEAL LENGTH SHALL AT A MINIMUM EXTEND 10 FT. ABOVE THE BEDROCK IN ADDITION TO 10 FT. BELOW THE GROUND SURFACE. THE AREA IN BETWEEN MAY BE FILLED WITH FINES OBTAINED FROM THE DRILLING PROCESS BUT IT IS RECOMMENDED TO GROUT ALONG THE ENTIRE LENGTH OF CASING.
6. THE PRESSURE TANK AND CONTROL BOX SHALL BE INSTALLED INSIDE AN INSULATED SHED KEPT ABOVE FREEZING.
7. THE PUMP, PRESSURE TANK, AND PIPELINE WILL BE IS NOT INCLUDED IN THIS WELL DESIGN BUT WILL BE IN THE IRRIGATION DESIGN.



2 WATER TRENCH
SCALE: N.T.S



3 ELECTRIC TRENCH
SCALE: N.T.S

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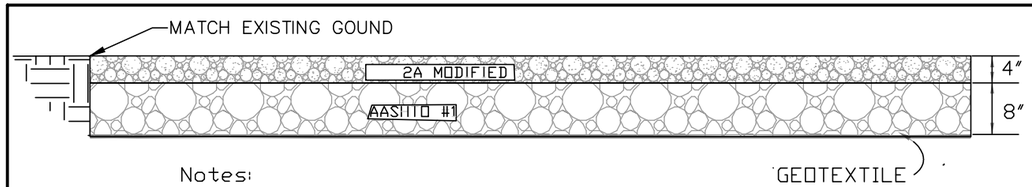
SITE DETAILS
BID SET

Date: 2025-01-31
Project No.: 13655-002
Sheet No.: C-502

NOT FOR CONSTRUCTION

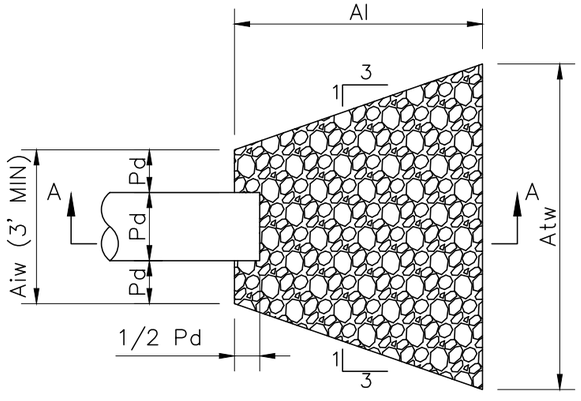


Notes:

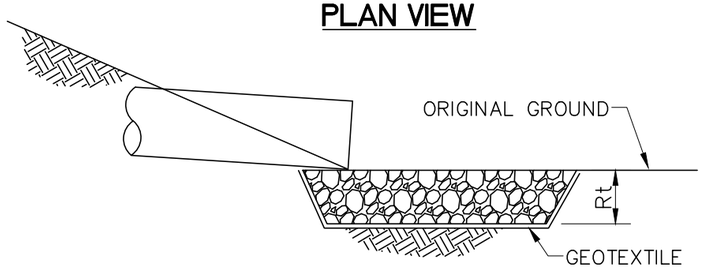
1. Geotextile shall be as per General Notes drawing. Placement shall provide a one-foot (1') overlap between adjacent panels.
2. Stone depth shall be measured after compaction.
3. All stone shall be compacted with a smooth drum, vibratory roller.

1 ACCESS ROAD

SCALE: N.T.S



PLAN VIEW



SECTION A-A

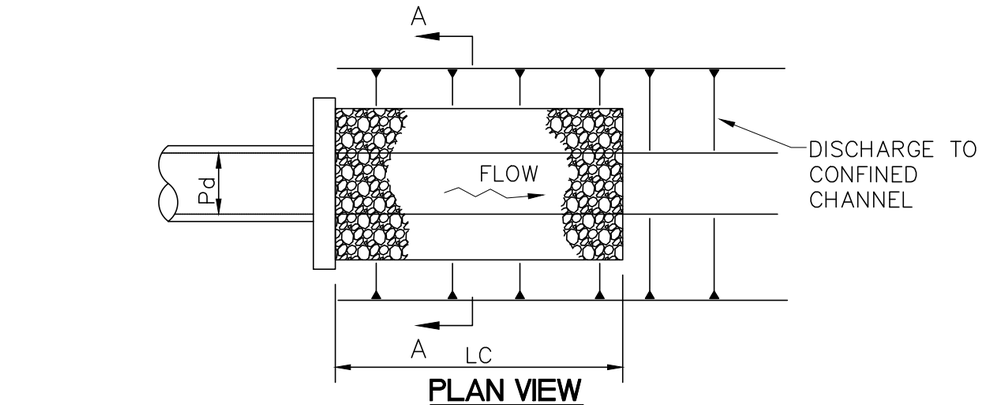
PIPE DIA Pd (IN)	RIPRAP		APRON		
	SIZE R-_	THICK. Rt, (IN)	LENGTH Al, (FT)	INITIAL WIDTH Aiw, (FT)	TERMINAL WIDTH Atw, (FT)
4" & 6"	4	12	5	3	6.33

NOTES:

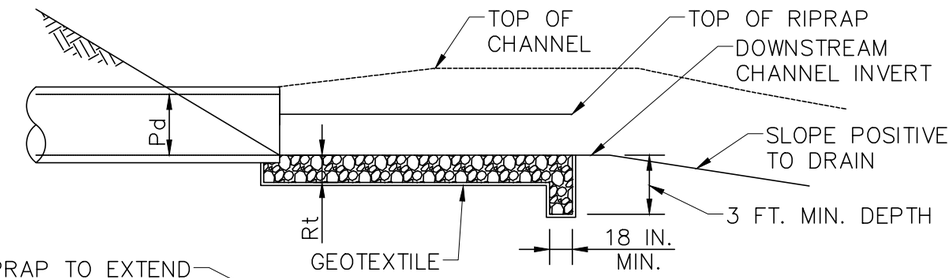
1. ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.
2. ALL APRONS SHALL BE INSPECTED AND AFTER EACH RUNOFF EVENT. DISPLACED RIP-RAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.
3. EXTEND RIP-RAP ON BACK SIDE OF APRON TO AT LEAST 1/2 DEPTH OF PIPE ON BOTH SIDES TO PREVENT SCOUR AROUND THE PIPE.

2 RIP RAP APRON AT PIPE OUTLET NO FLARED ENDWALL

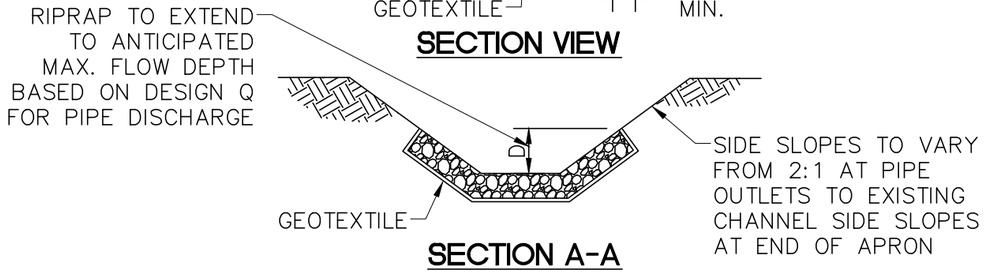
SCALE: N.T.S



PLAN VIEW



SECTION VIEW



SECTION A-A

PIPE DIA Pd (IN)	RIPRAP		APRON					
	SIZE R-_	THICK. Rt (IN)	LENGTH LC (FT)	INITIAL BOTTOM WIDTH (AT OUTLET) (FT)	END WIDTH (FT)	INITIAL TOP WIDTH (AT OUTLET) (FT)	END TOP WIDTH (FT)	SIDE SLOPES H:V
36	7	30	20	3	3	9	9	3:1

NOTES:

1. ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.
2. ALL APRONS SHALL BE INSPECTED AFTER EACH RUNOFF EVENT. DISPLACED RIP-RAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

3 RIP RAP APRON AT PIPE OUTLET TO CHANNEL

SCALE: N.T.S

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SHICKSHINNY,PA 18655

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SHICKSHINNY,PA 18655

SITE DETAILS

BID SET

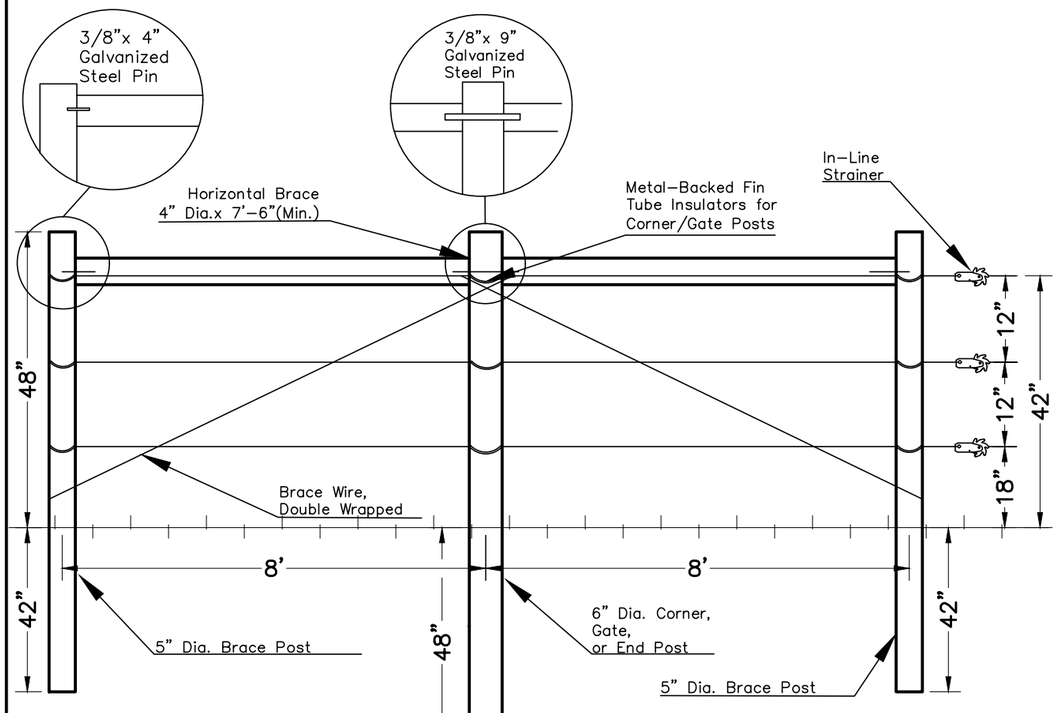
Date: 2025-01-31

Project No.: 13655-002

Sheet No.: C-503

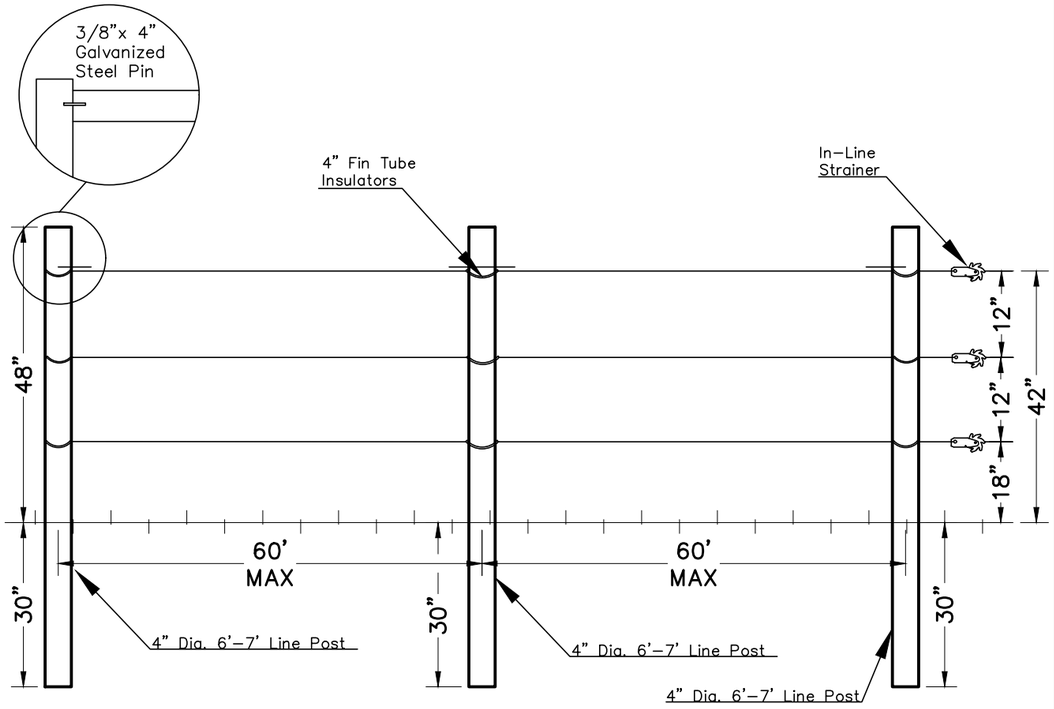
NOT FOR CONSTRUCTION

CORNER POST FENCE DETAIL



APPROXIMATE FENCE LENGTH 660 FEET
FENCE HEIGHT..... 48 INCHES
NUMBER OF FENCE WIRES..... 3 EACH
ARE BATTENS REQUIRED.....YES/(NO)
IS SPECIAL POST ANCHORING REQUIRED.....YES/(NO)

LINE POST FENCE DETAIL



1. Fence Posts Shall be pressure treated southern yellow pine, locust, or cedar

It Shall be the Contractor's Responsibility to Comply with PA ACT 287 (1974) As Ammended by ACT 199 (2004) Before Doing any Excavation Work or Driving any Fence Posts.

PA One Call completed
/ /
Ref#

BILL OF MATERIALS

ITEM	UNIT	DIA./SIZE	LENGTH	QUANTITY
CORNER, GATE, OR END POST	EACH	6" MIN.	8'–8 1/2'	9 est.
BRACE POSTS	EACH	5" MIN.	7 1/2'–8'	16 est.
LINE POSTS	EACH	4" MIN.	6 1/2' MIN.	12 est.
HORIZONTAL BRACE	EACH	4" MIN.	7 1/2'–8'	16 est.
TENSION SPRINGS	EACH	–	–	3 est.
GALV. HIGH–TENSILE WIRE	LIN. FT.	–	–	2,000 est.
ELECTRIC FENCE CHARGER	EACH	–	–	PER MANUFACTURER REQMTS.
GROUND RODS	EACH		3 1/2' MIN.	PER MANUFACTURER REQMTS.
LIGHTNING ARRESTORS	EACH	–	–	1 PER CHARGER CONNECTION
SLINKY GATES	EACH	–	–	2
LIVESTOCK GATES (12')	EACH	–	12'	0
LIVESTOCK GATES (10')	EACH	–	10'	0
ELECTRIC FENCE WARNING SIGNS	EACH	–	–	1 est.

		DIMENSIONS	INSTALLATION
POSTS	CORNER OR GATE POSTS	6" – 7" DIA. x 8' MIN. LENGTH	SET 4' DEEP
	LINE POSTS	4" DIA. x 6 1/2' MIN. LENGTH	SET 2 1/2' DEEP, SPACE 50' OR LESS
BRACING	BRACE POSTS	5"–6" DIA. x 7 1/2' – 8' LONG	SET 3 1/2' – 4' DEEP
	HORIZONTAL BRACE	4"–5" DIA. x 7 1/2' – 8' LONG	PLACE NEAR POST TOPS
	BRACE POST PINS	3/8" x 9" & 3/8" x 4" GALV. STEEL PINS	
	BRACE WIRE	12 1/2 GAUGE HIGH–TENSILE WIRE, CLASS 3 GALVANIZED	HORIZONTAL BRACE DOUBLE–WRAP, TIGHTEN WITH 1 1/2" x 2" x 2' HARDWOOD TWIST ROD

WIRE	TYPE:	12 1/2 GAUGE HIGH–TENSILE, CLASS 3, GALVANIZED, MINIMUM 200,000 PSI BREAKING STRENGTH
	SPACING: 3 Strand	FROM GROUND TO BOTTOM WIRE 18" FROM BOTTOM WIRE TO SECOND WIRE 12" FROM SECOND WIRE TO THIRD WIRE 12"
	TENSION:	250 – 300 POUNDS EACH WIRE. TENSION WITH IN–LINE STRAINERS. INSTALL A TENSION INDICATOR SPRING ON AT LEAST ONE WIRE TO GAUGE WIRE TENSION.
	FASTENING:	AT GATE, CORNER, AND END BRACES, USE APPROPRIATE KNOTS OR CRIMPING SLEEVES OR WIRE ANCHOR THROUGH POSTS. STAPLE WIRES TO POSTS WITH 1 3/4" 9 GAUGE GALVANIZED STAPLES WITH SLASH CUT POINTS. DO NOT DRIVE STAPLES TIGHT IN LINE POSTS. ANGLE STAPLES TO PREVENT POST SPLITS. DRIVE INTO POST AT DOWNWARD ANGLE ON KNOLLS AND AT AN UPWARD ANGLE IN DEPRESSIONS.

1 3 STRAND HIGH TENSILE ELECTRIC FENCE

SCALE: N.T.S

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0	2024-12-16	REVIEW SET

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SITE DETAILS
BID SET

Date: 2025-01-31
Project No.: 13655-002
Sheet No.: C-504

NOT FOR CONSTRUCTION

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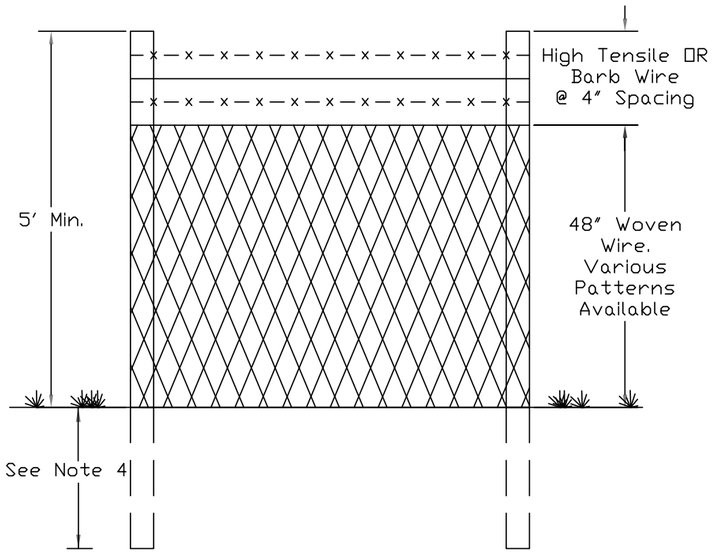
SAFETY FENCE OPTIONS

Adjacent to Waste Storage Facilities, Waste Transfer Systems, or Heavy Use Areas with drops exceeding 3.5'



1 SAFETY FENCE OPTION #1

SCALE: N.T.S

FOR OPTIONS #1 AND #2:

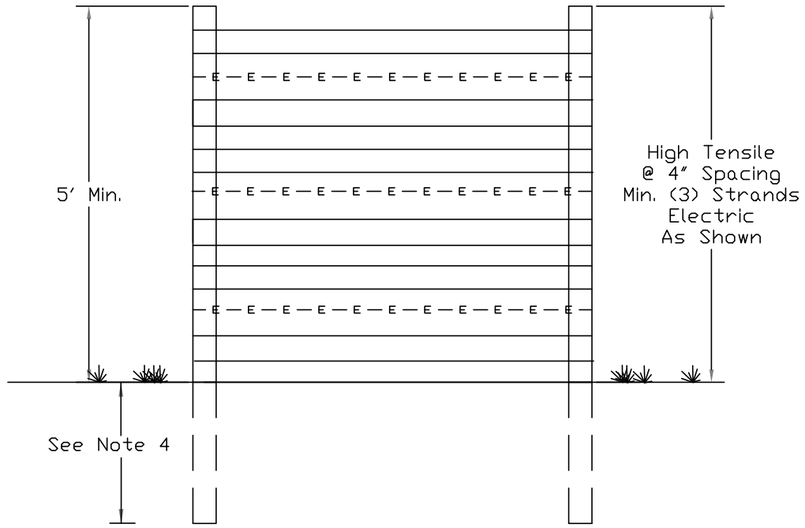
Woven Wire, 12.5 gauge min. openings not to exceed 6"x6". (welded wire not allowed)

PLUS one of the following:

(1) Barbed wire @ 4" Max. Spacing to Achieve Minimum Fence Height.

OR

(2) High Tensile Wire @ 4'' Max. Spacing to Achieve Minimum Fence Height. If using high tensile, at least one strand must be electrified and if more than 2 stands are used then every other strand must be electrified.



2 SAFETY FENCE OPTION #2

SCALE: N.T.S

CONSTRUCTION NOTES
(APPLY TO BOTH OPTIONS):

1. Gates shall be commercially available metal model approved by NRCS representative prior to installation. Spacing in gate members may not exceed 4" vertically OR individual openings should not exceed 6" x 6". This may be accomplished by attaching woven wire to a standard gate.
2. Any woven wire fence types shall be 12-1/2 gauge min. and galvanized.
3. High tensile or barbed wire shall be 12-1/2 gauge. Min. 180,000 psi for electrified wire. Min. 200,000 psi for non-electrified wire.
4. Line Posts: 4" min. diameter, and 2½ft min. embedment. Corner/Gate Posts: 6" min. diameter, 3½ft min. embedment.
5. Maximum line post spacing is 8' o-c.
6. Fence must be grounded accordingly.
7. Two-stage latches must be installed at all access points. Two stage latches require (2) actions prior to opening the gate.
8. Fence posts must be either Locust or Pressure-Treated Soft Wood.
9. Must be in accordance with Township and Local ordinances.
10. See Specification 382 Exhibit 3 for additional requirements for bracing and materials.
11. Warning signs required on fencing around manure storages and/or around electric fences as specified in Additional Conditions for project.

NOTE: CHAIN LINK FENCE IS ALSO AN ACCEPTABLE SAFETY FENCE OPTION.

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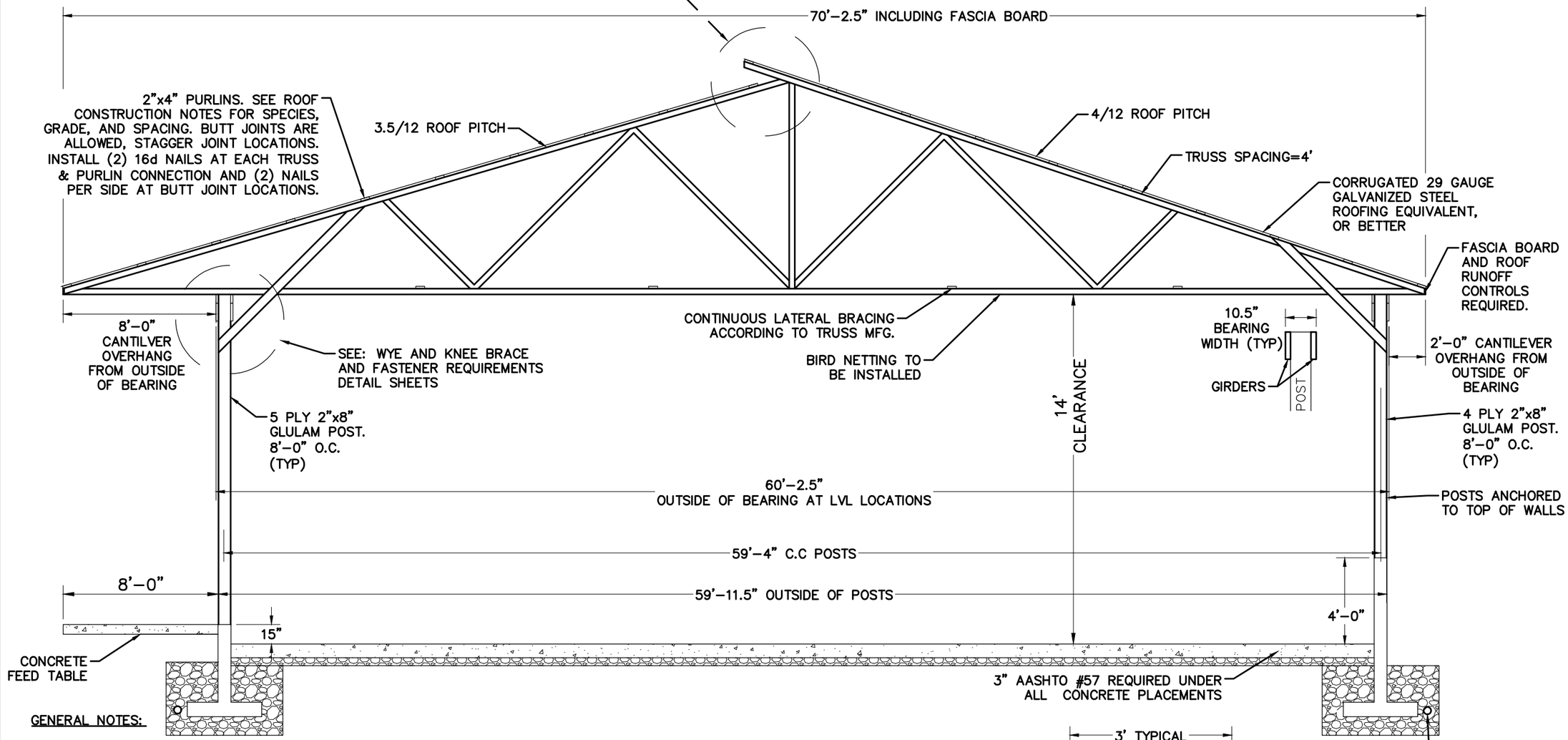
SITE DETAILS
BID SET

Date: 2025-01-31
Project No.: 13655-002
Sheet No.: C-505

NOT FOR CONSTRUCTION

*TRUSS DRAWING IS A REPRESENTATION ONLY; NRCS DOES NOT DESIGN TRUSSES.

VENTILATION PROVIDED THROUGH OVERSHOT STYLE ROOF. OVERSHOT TO FACE FEED TABLE. OPENING TO PROVIDE 2" PER 10' OF ROOF WIDTH. 14" OPENING IS REQUIRED.



GENERAL NOTES:

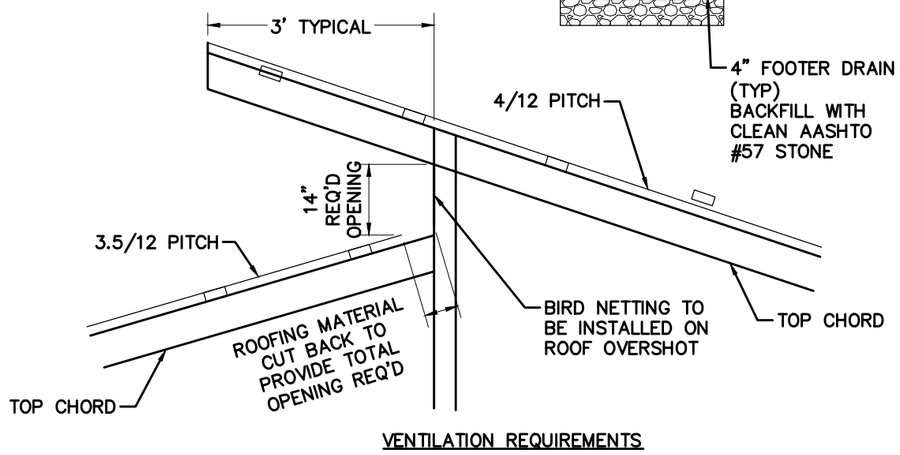
1) TRUSS SHOP DRAWINGS SHALL BE PROVIDED TO THE NRCS DESIGN ENGINEER FOR APROVAL PRIOR TO THE TRUSSES BEING MADE.

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

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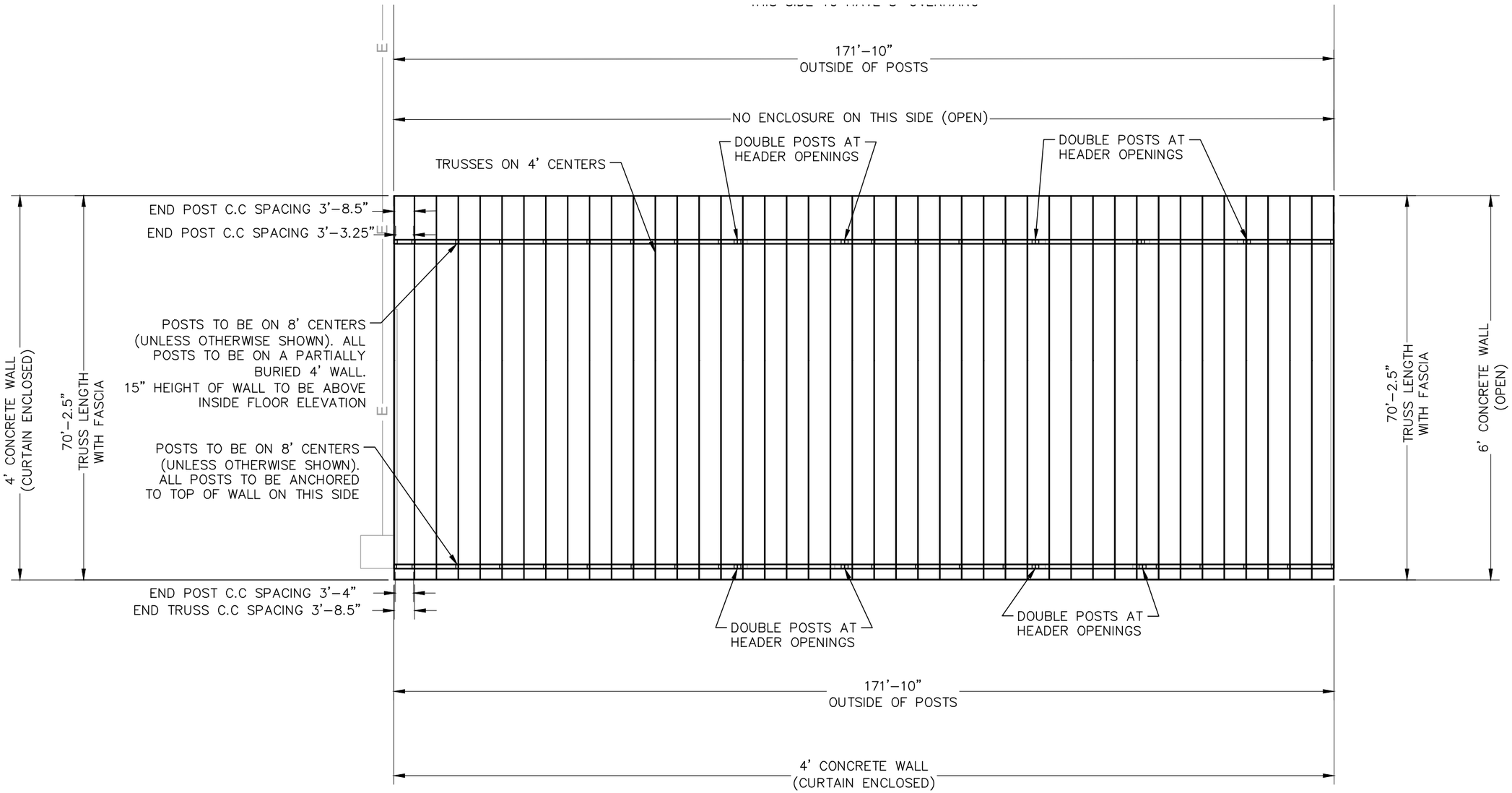

POSTS ON 2' OVERHANG SIDE (18 COUNT): 4 PLY 2X8 GLU–LAM
POSTS ON 8' OVERHANG SIDE/MONO AND GABLE ROOF CONNECTION (15 COUNT): 5 PLY 2X8 GLU–LAM
DOUBLE POSTS ON HEADER OPENINGS (18 COUNT): 5 PLY 2X8 LVL
- PLYS TO BE INSTALLED PARALLEL WITH THE TRUSSES
- ALL POSTS TO BE INSTALLED IN THE CENTER OF WALLS, NOT OFFSET
- ALL POSTS TO BE NOTCHED 1.5" ONLY, FOR THE TRUSSES

1 POST, GIRDER, TRUSS LAYOUT

SCALE: N.T.S

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BUILDING DETAILS

BID SET

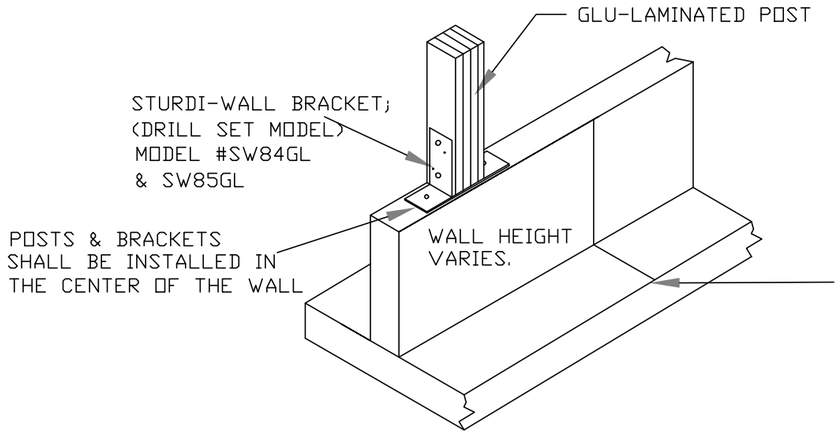
Date: 2025-01-31

Project No.: 13655-002

Sheet No.: **C-507**

NOT FOR CONSTRUCTION

POST ON WALL INSTALLATION
ALL SINGLE SPAN LOCATIONS



POST PLY'S TO BE PARALLEL
TO THE TRUSSES.

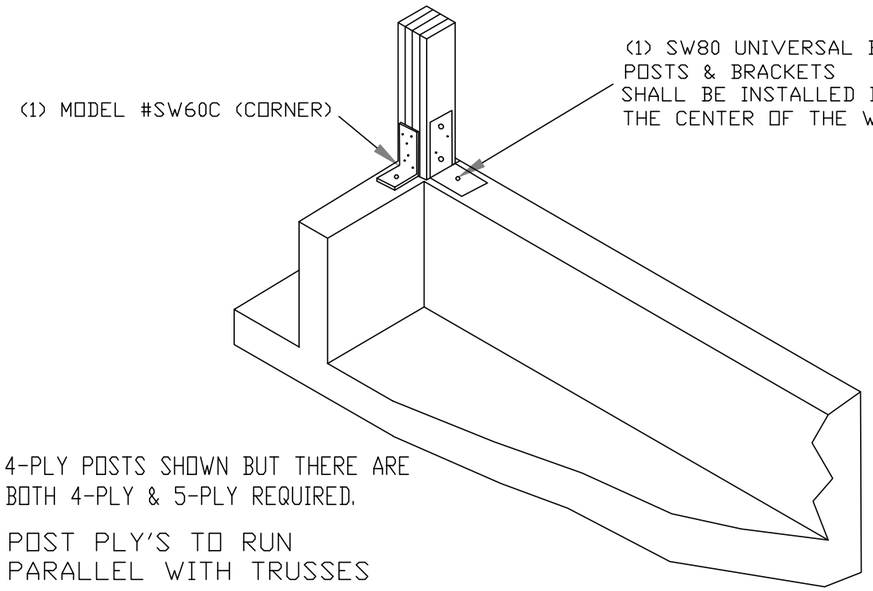
WALL/FLOOR CONTROL
JOINTS MAY LINE UP
WITH EACH OTHER.

WALL CONTROL JOINTS
SHALL NOT BE INSTALLED
AT POST LOCATIONS.

BRACKETS CAN BE PURCHASED
FROM: PERMA COLUMN EAST LLC
888-699-8875

WALLS SHALL BE ALLOWED TO
CURE FOR A MINIMUM OF 7 DAYS
BEFORE INSTALLING SCREW
ANCHORS
ALL ANCHORS INTO CONCRETE SHALL BE SCREW
-TYPE, OR EPOXY; NO EXPANSION OR WEDGE
ANCHORS SHALL BE USED.

POST ON WALL INSTALLATION
CORNER POST LOCATIONS



4-PLY POSTS SHOWN BUT THERE ARE
BOTH 4-PLY & 5-PLY REQUIRED.

POST PLY'S TO RUN
PARALLEL WITH TRUSSES

1 POST ON WALL
SCALE: N.T.S

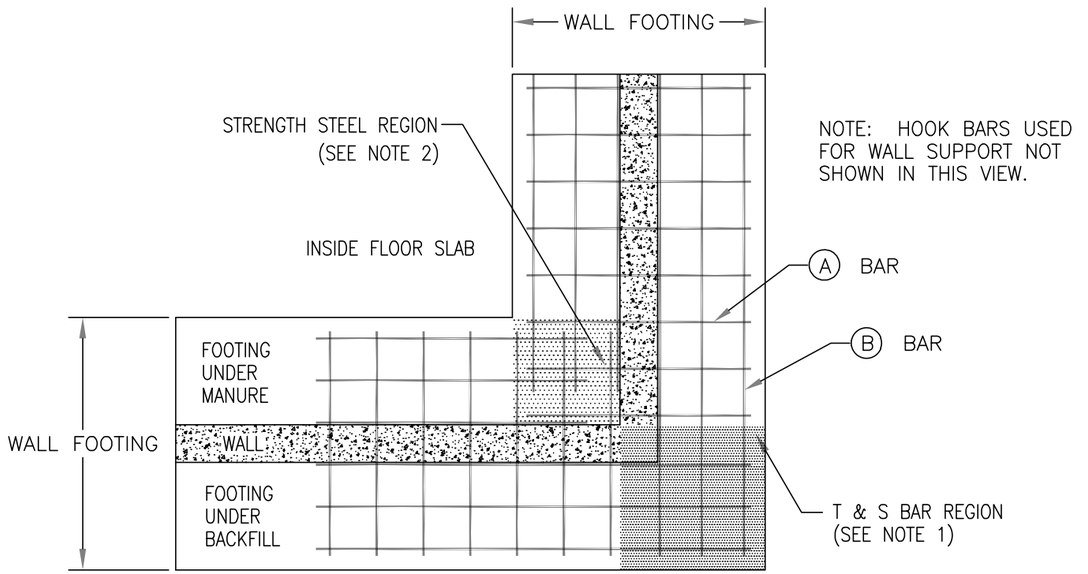
ADAPTED AND MODIFIED FROM STANDARD DRAWING # PA-023

NOTES FOR FOOTING STEEL PLACEMENT

1.) FOOTING TEMPERATURE AND SHRINKAGE STEEL (T&S) TO BE EXTENDED INTO THIS REGION FROM BOTH SIDES OF CORNER. REGION IS OUTSIDE EXTENSION OF WALLS INCLUDING WALL THICKNESS.

2.) STRENGTH STEEL IS EXTENDED INTO THIS REGION FROM BOTH SIDES OF CORNER. REGION IS INSIDE EXTENSION OF THE WALLS. FOOTING SLAB T&S STEEL OUTSIDE THE CORNER REGION TO LAP SPLICE WITH THE STRENGTH STEEL 16 INCHES.

3.) IN BOTH CORNER REGIONS, STRENGTH STEEL AND T&S STEEL WILL REQUIRE SWITCHING POSITIONS FROM TOP TO BOTTOM AND VICE VERSA.



2 SLAB FOOTING CORNER
SCALE: N.T.S

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3000 WESTINGHOUSE DRIVE
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MARK	DATE	COMMENTS
0	2024-12-16	REVIEW SET

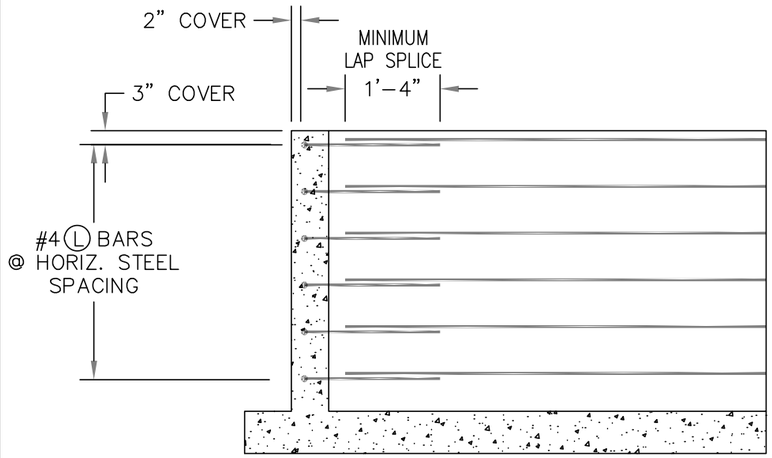
Eric Stevens
685 WATERTON ROAD
SHICKSHINNY,PA 18655

STEVENS FARM PROJECT
685 WATERTON ROAD
SHICKSHINNY,PA 18655

BUILDING DETAILS
BID SET

Date: 2025-01-31
Project No.: 13655-002
Sheet No.: C-508

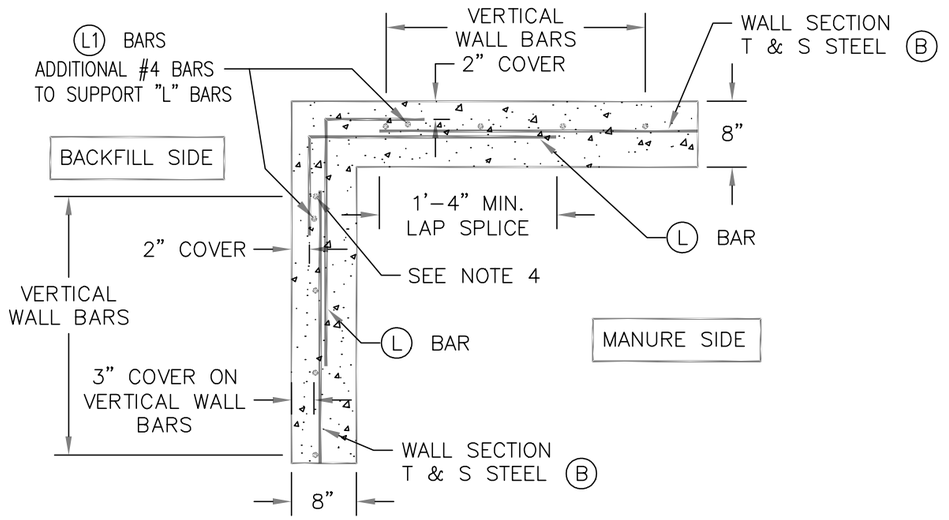
NOT FOR CONSTRUCTION



NOTES:

1. TIE LONG LEG OF MARK (L) CORNER BAR TO WALL SECTION T&S MARK (B) BAR AS SHOWN.
2. SHORT LEG OF MARK (L) BARS SHALL BE SUPPORTED WITH VERTICAL WALL SUPPORT BAR (L1).
3. 12 MARK (L) BARS PER CORNER. SEE APPROPRIATE WALL DRAWING FOR BAR DIMENSIONS AND QUANTITIES.
4. PLACE FIRST VERTICAL BAR (SEE PLAN VIEW) AT WALL CORNER, OR NO FARTHER THAN ONE-HALF THE VERTICAL BAR SPACING FROM THE CORNER.

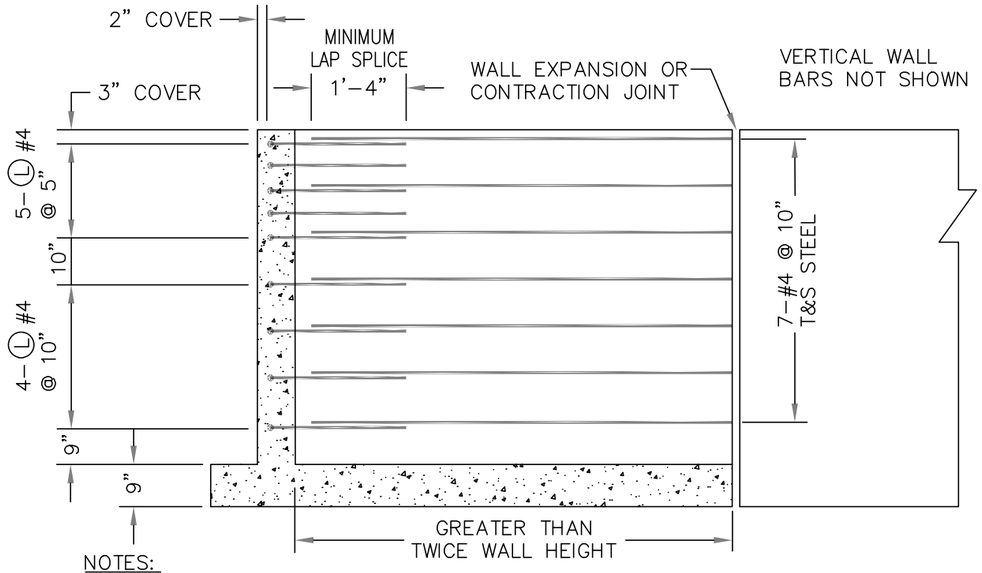
ADAPTED AND MODIFIED FROM STANDARD DRAWING # PA-025



1 4' WALL CORNER

SCALE: N.T.S

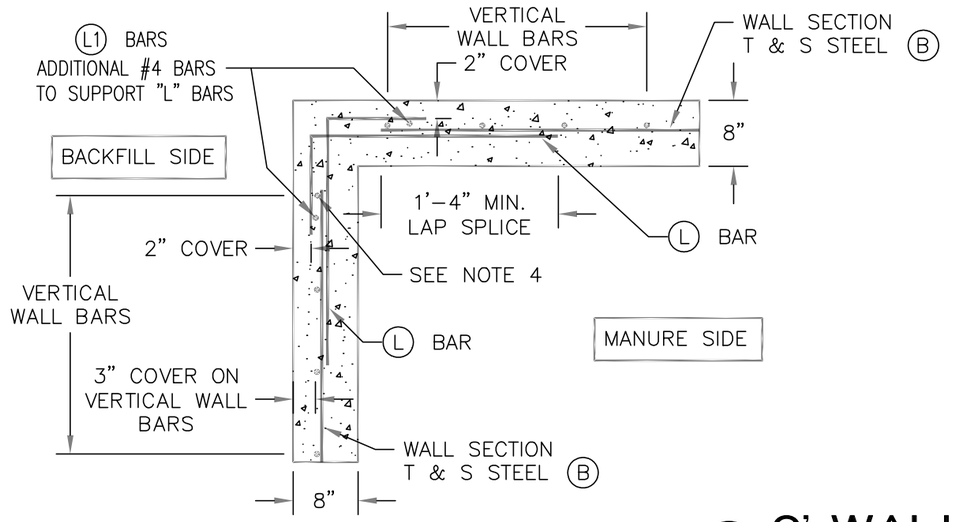
PLAN VIEW



NOTES:

1. TIE LONG LEG OF MARK (L) CORNER BAR TO WALL SECTION T&S STEEL WHERE THE SPACING MATCHES
2. SHORT LEG OF MARK (L) BARS SHALL BE SUPPORTED WITH VERTICAL WALL SUPPORT BAR (L1).
3. 18 MARK (L) BARS PER CORNER
4. PLACE FIRST VERTICAL BAR (SEE PLAN VIEW) AT WALL CORNER, OR NO FARTHER THAT ONE-HALF THE VERTICAL BAR SPACING FROM THE CORNER

ADAPTED AND MODIFIED FROM STANDARD DRAWING # PA-027A



PLAN VIEW

2 6' WALL CORNER

SCALE: N.T.S

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0	2024-12-16	REVIEW SET

Eric Stevens
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685 WATERTON ROAD
SHICKSHINNY,PA 18655

BUILDING DETAILS

BID SET

Date: 2025-01-31

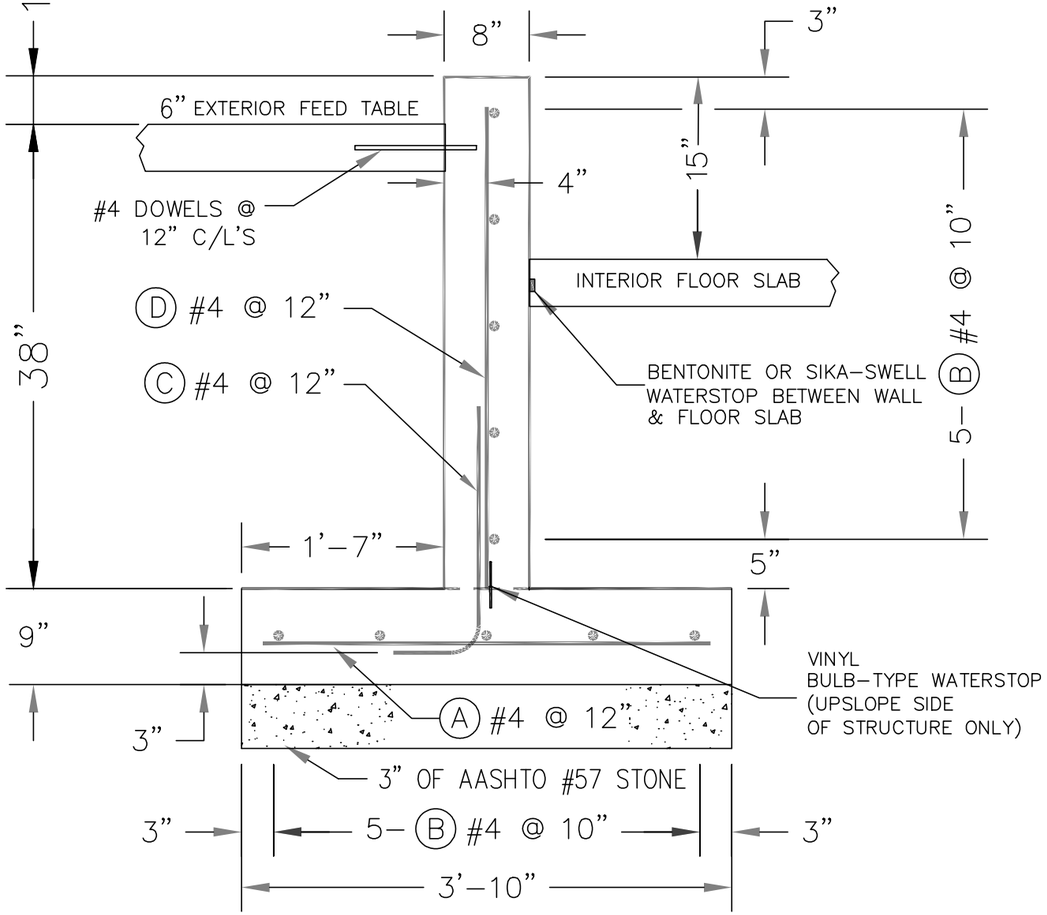
Project No.: 13655-002

Sheet No.: **C-509**

NOT FOR CONSTRUCTION

4' WALL IS TO BE BURIED 3', LEAVING 1' OF CURB HT ABOVE INTERIOR FLOOR SLAB.

ROOF SUPPORT POSTS TO BE ANCHORED TO TOP OF WALL



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.

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 = 24,000 psi (GRADE 60)

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

TYPE 2 BAR

STEEL SCHEDULE

MARK	SIZE	TYPE	R	S	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"

* 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.

ADAPTED AND MODIFIED FROM STANDARD DRAWING # PA-020D

(1) 4' T-WALL WITHOUT SURCHARGE

SCALE: N.T.S

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MARK	DATE	COMMENTS
0	2024-12-16	REVIEW SET

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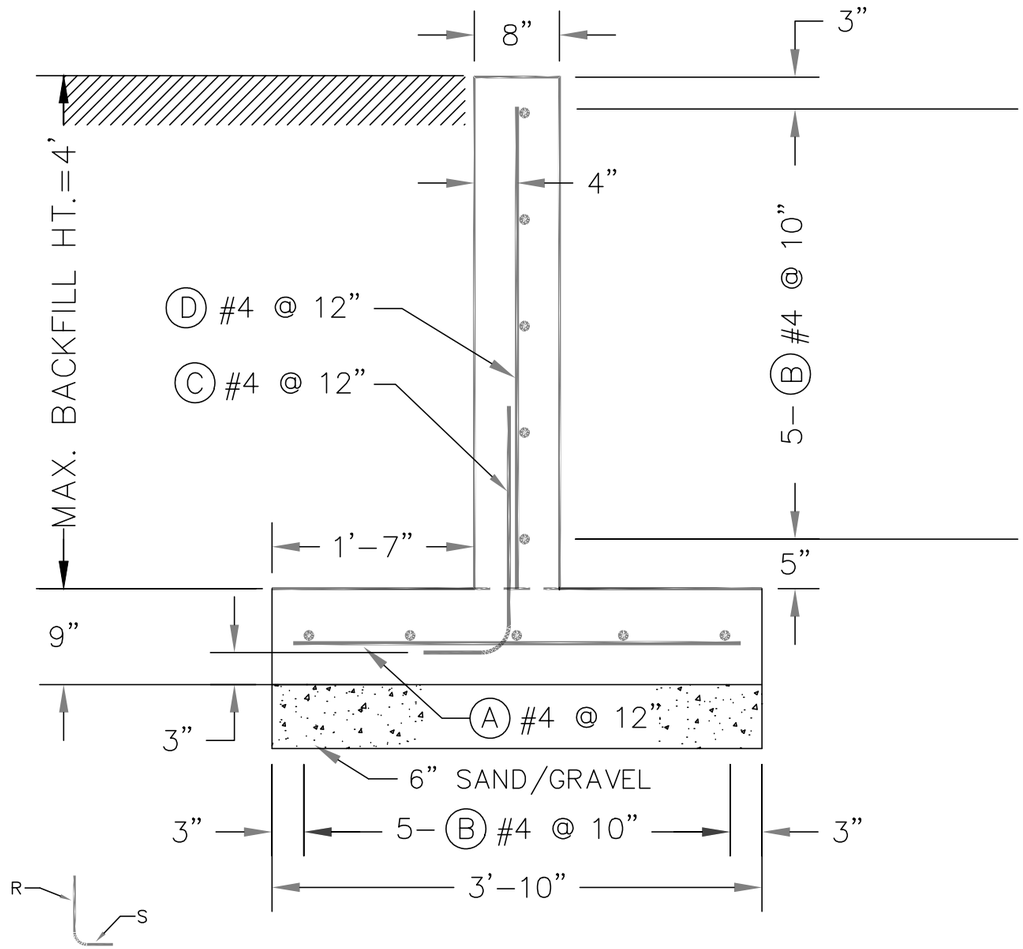
SHICKSHINNY,PA 18655

BUILDING DETAILS
BID SET

Date: 2025-01-31
Project No.: 13655-002
Sheet No.: C-510

NOT FOR CONSTRUCTION

P:\13655\13655-002\DWG\13655-002_C-510_Building Details - 4'-T wall with Feed Table.dwg, STANDARD SHEET, 1/31/2025 3:29:52 PM, Bennett, Joel



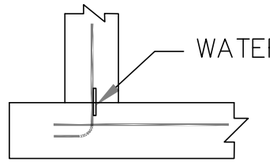
TYPE 2 BAR

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.

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

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MARK	DATE	COMMENTS
0	2024-12-16	REVIEW SET

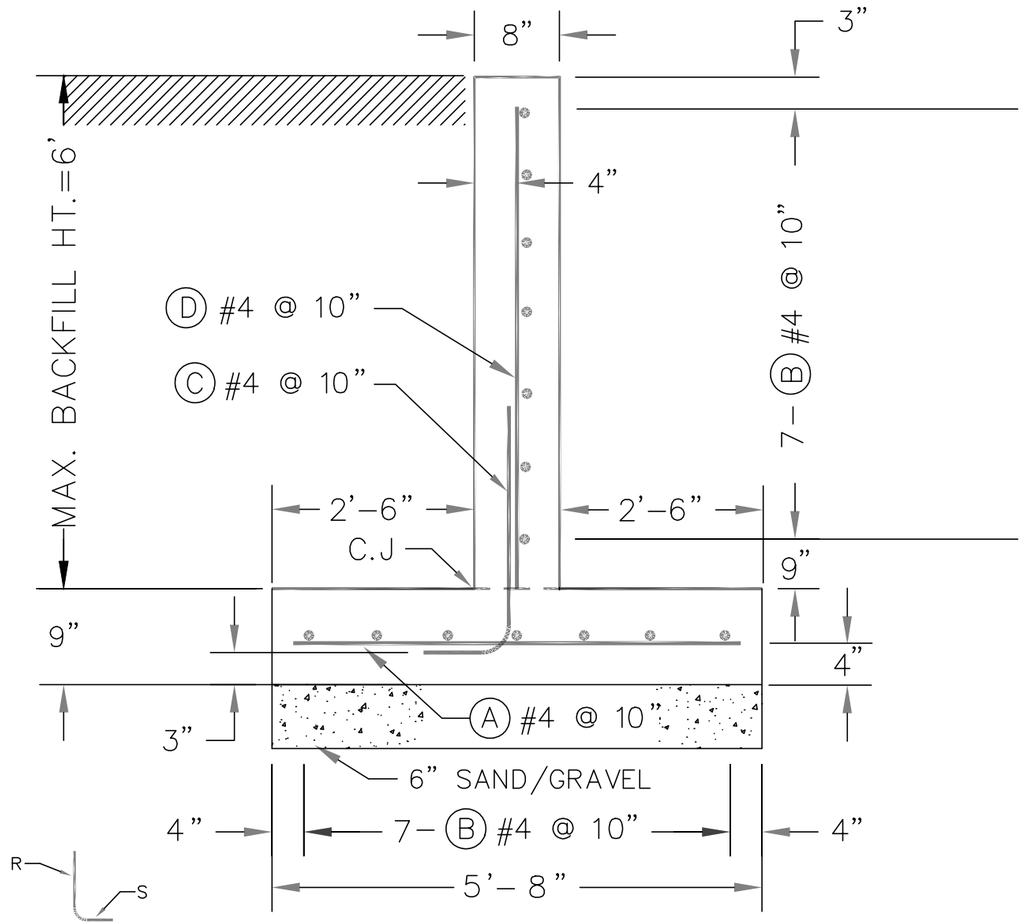
Eric Stevens
685 WATERTON ROAD
SHICKSHINNY,PA 18655

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

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.

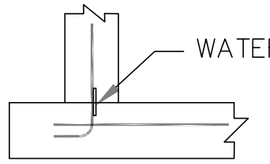
NOTES:
1. FOR FROST PROTECTION, A 2–FOOT BACKFILL IS REQUIRED.
2. DIMENSIONS ARE TO THE REINFORCING BAR SURFACE.

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

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

1 6' T–WALL WITHOUT SURCHARGE
SCALE: N.T.S

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MARK	DATE	COMMENTS
0	2024-12-16	REVIEW SET

Eric Stevens
685 WATERTON ROAD
SHICKSHINNY,PA 18655

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685 WATERTON ROAD
SHICKSHINNY,PA 18655

BUILDING DETAILS
BID SET

Date: 2025-01-31
Project No.: 13655-002
Sheet No.: C-512

NOT FOR CONSTRUCTION

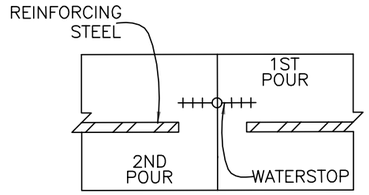
LIQUID TIGHT SLAB/FLOOR JOINTS

GENERAL NOTES:

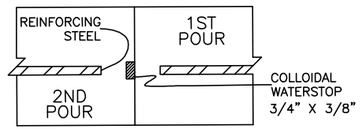
1. BACKER ROD SHALL BE A LARGER WIDTH THAN THE WIDTH OF THE SAW CUT.
2. SAW CUT OR JOINT FORMER IS ACCEPTABLE FOR JOINT 2.
3. SEALANT DEPTH SHALL BE 1/4" OR SLIGHTLY. LESS THAN JOINT WIDTH, WHICHEVER IS LESS
4. CUT 50% OF THE REINFORCING STEEL DIRECTLY UNDER THE JOINT.

USE JOINT 1 OR 2 FOR TWO POURS AND JOINT 3 FOR CONTINUOUS POURS.

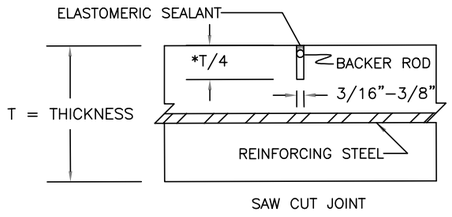
JOINT 1



JOINT 2



JOINT 3



CONSTRUCTION CONTROL

1 LIQUID TIGHT SLAB JOINTS

SCALE: N.T.S

LIQUID TIGHT WALL JOINTS

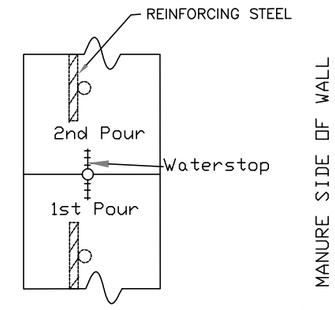
GENERAL NOTES:

1. BE SURE TO CUT EVERY OTHER HORIZONTAL REINFORCING STEEL REBAR DIRECTLY AT THE JOINT.
2. SEALANT DEPTH SHALL BE 1/4" OR SLIGHTLY LESS THAN JOINT WIDTH, WHICHEVER IS LESS.
3. USE JOINT 4 FOR TWO POURS AND JOINTS 5 OR 6 FOR CONTINUOUS POURS.

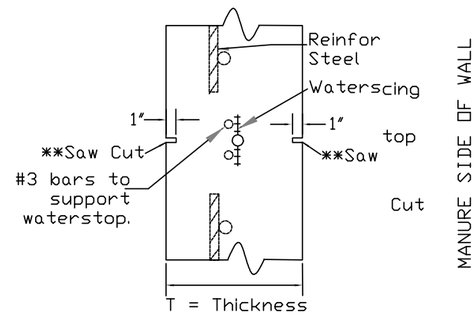
* Saw cut need not be greater than 1" for walls thicker than 8".

** Joint former or chamfer strip optional, Backer Rod and Elastomeric sealant needed in a saw cut joint or if a joint former is used.. Elastomeric sealant needed if a chamfer strip is used. Cut and/or joint former or chamfer shall be on both sides of wall and across the top.

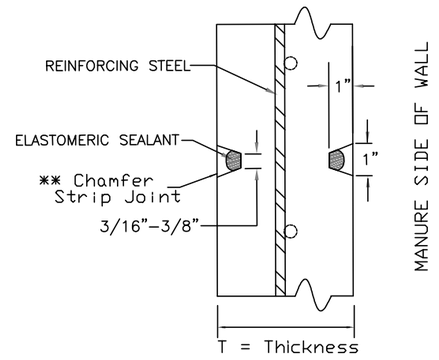
JOINT 4



JOINT 5

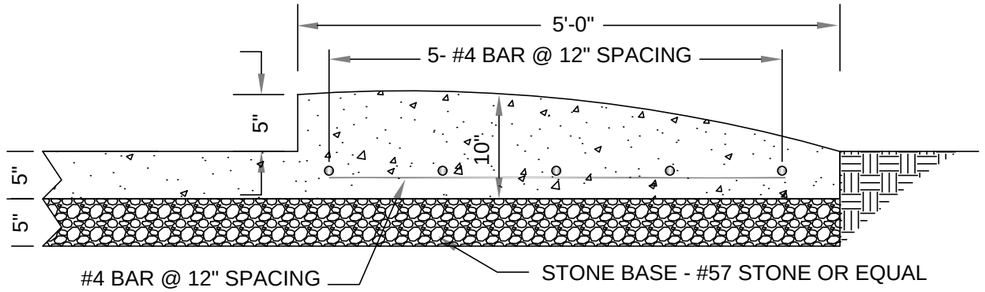


JOINT 6



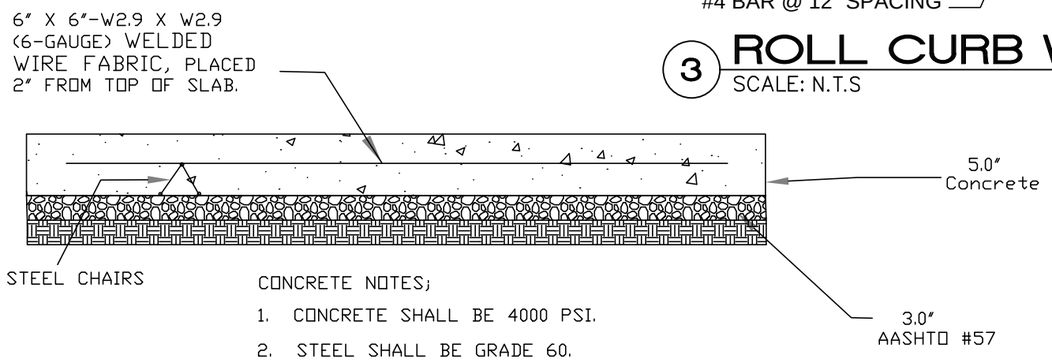
2 LIQUID TIGHT WALL JOINTS

SCALE: N.T.S



3 ROLL CURB W/ SCRAPE EDGE

SCALE: N.T.S

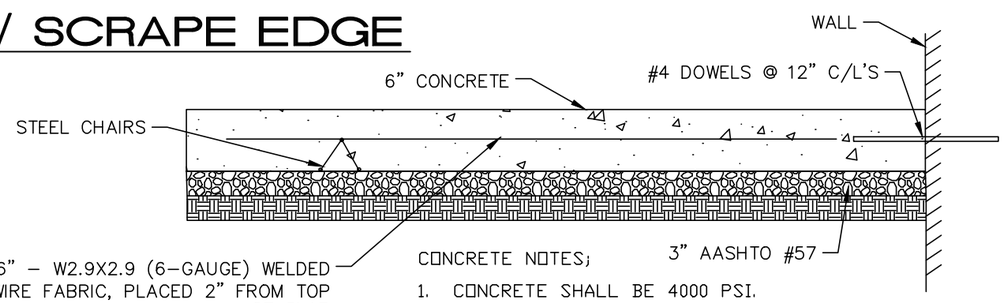


CONCRETE NOTES;

1. CONCRETE SHALL BE 4000 PSI.
2. STEEL SHALL BE GRADE 60.

4 REINFORCED CONCRETE

SCALE: N.T.S



CONCRETE NOTES;

1. CONCRETE SHALL BE 4000 PSI.
2. STEEL SHALL BE GRADE 60.

5 FEED TABLE

SCALE: N.T.S

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SHICKSHINNY,PA 18655

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685 WATERTON ROAD
SHICKSHINNY,PA 18655

BUILDING DETAILS

BID SET

Date: 2025-01-31

Project No.: 13655-002

Sheet No.: C-513

NOT FOR CONSTRUCTION

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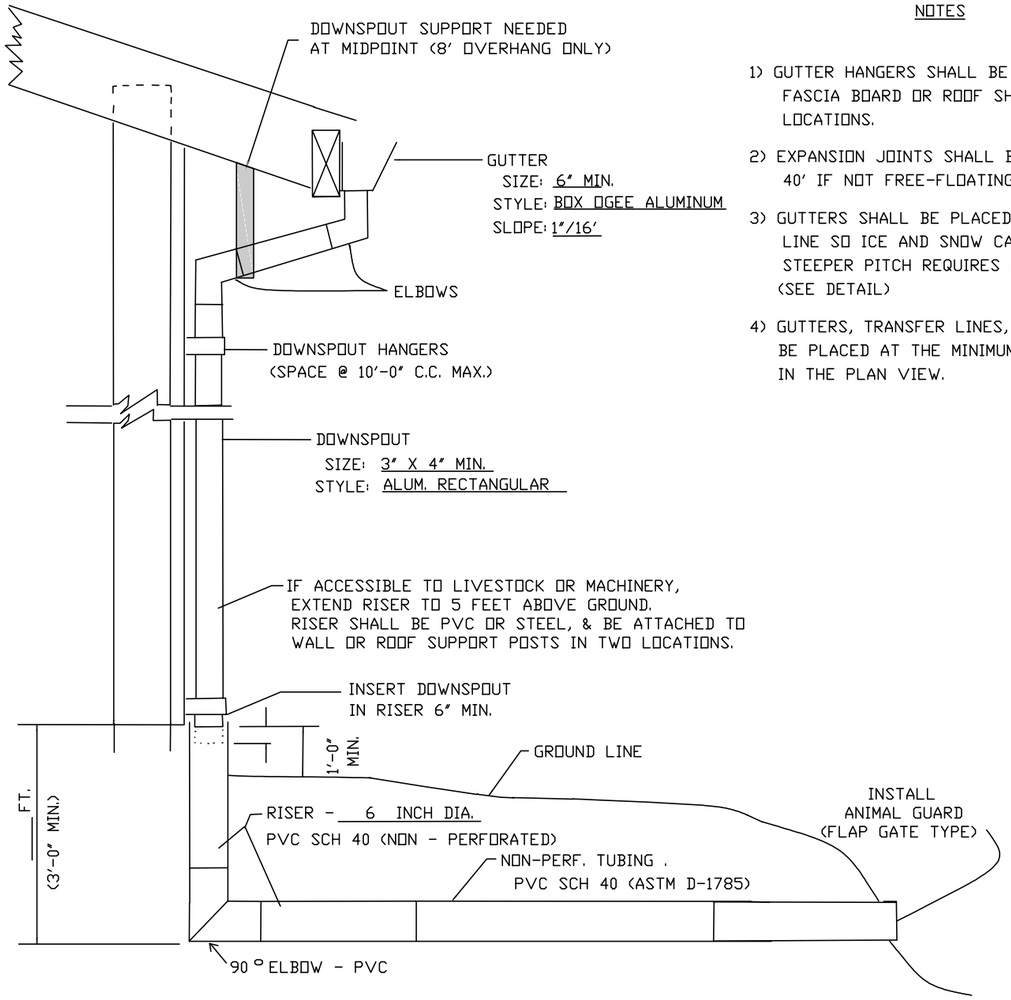


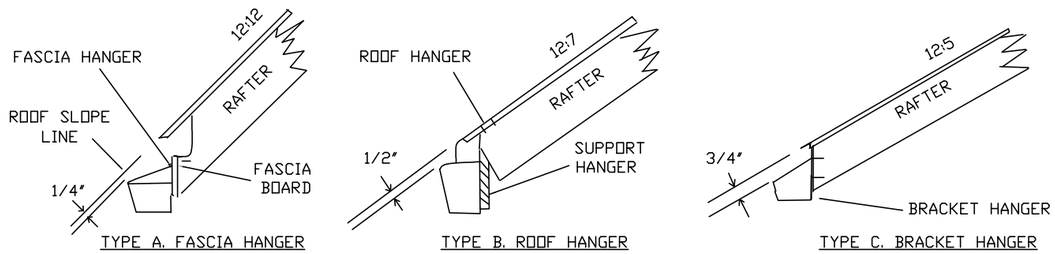
NOTES

1) GUTTER HANGERS SHALL BE NAILED TO FASCIA BOARD OR ROOF SHEATHING AT RAFTER LOCATIONS.

2) EXPANSION JOINTS SHALL BE INSTALLED EVERY 40' IF NOT FREE-FLOATING.

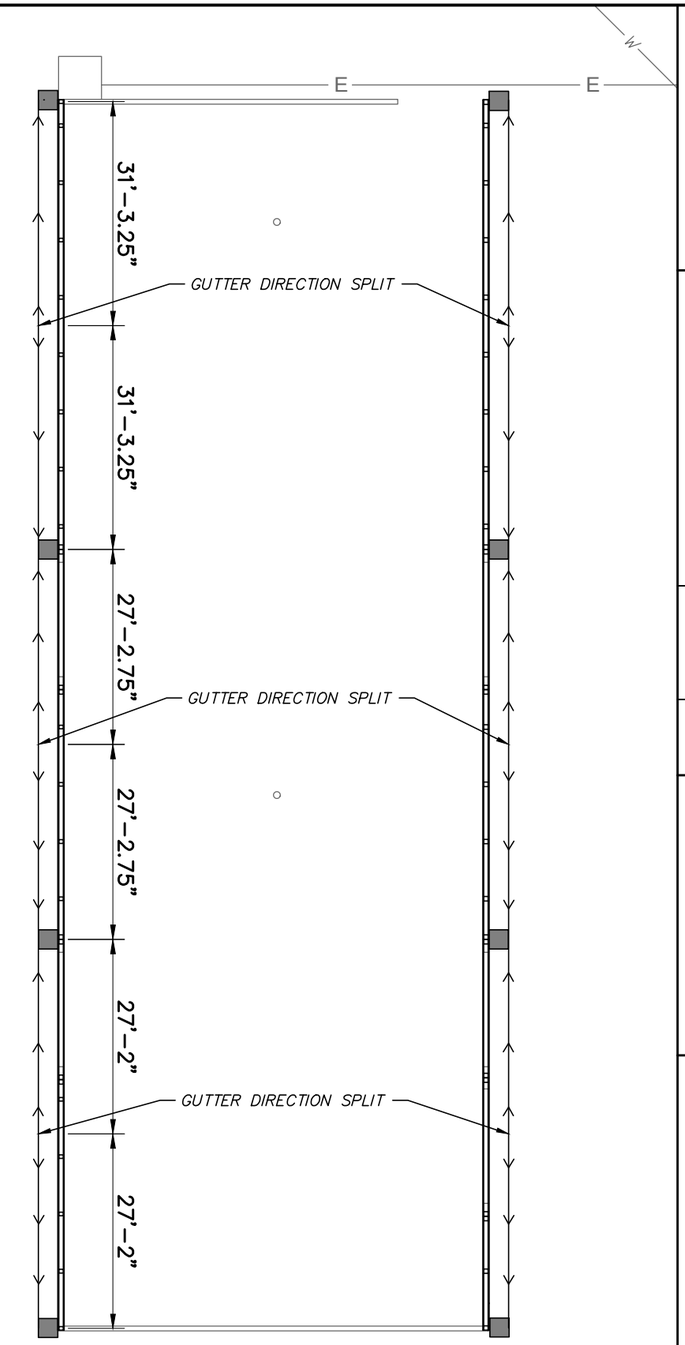
3) GUTTERS SHALL BE PLACED BELOW ROOF SLOPE LINE SO ICE AND SNOW CAN SLIDE CLEAR. STEEPER PITCH REQUIRES LESS CLEARANCE. (SEE DETAIL)

4) GUTTERS, TRANSFER LINES, AND OUTLETS SHALL BE PLACED AT THE MINIMUM SLOPES INDICATED IN THE PLAN VIEW.



GUTTER HANGING DETAILS

(Clearances shown are guides for typical roof slopes,) (regardless of hanger type.)



DOWNSPOUT LOCATION
(ALL DOWNSPOUTS TO BE MOUNTED TO A ROOF SUPPORT POST)

GUTTER LOCATION AND SLOPE DIRECTION

1 GUTTER AND DOWNSPOUT

SCALE: N.T.S

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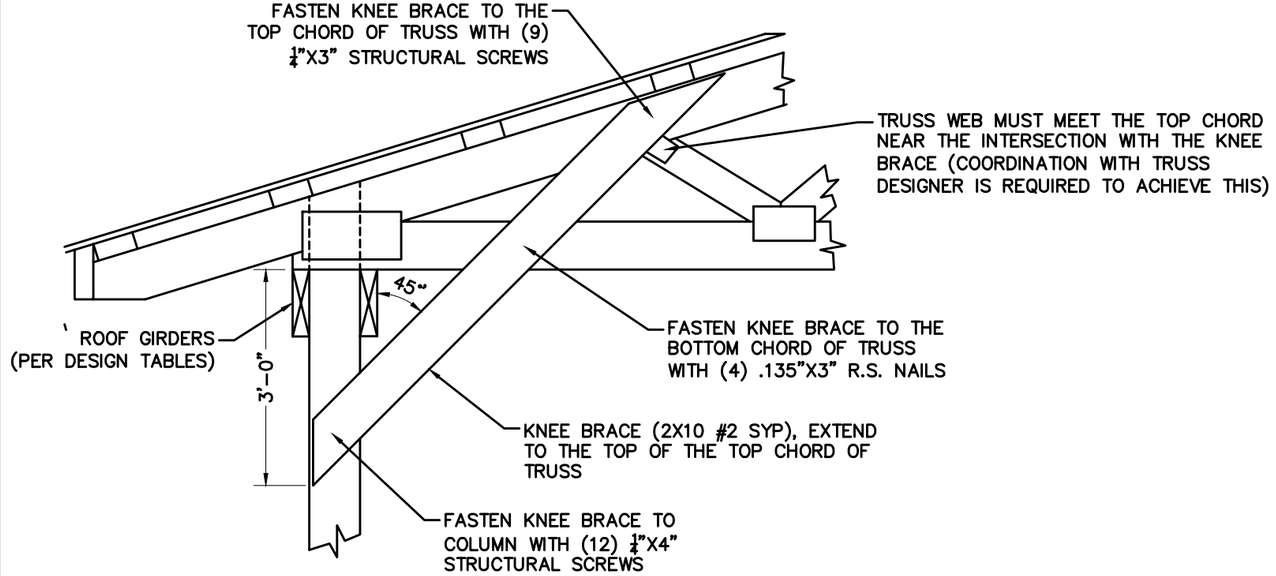
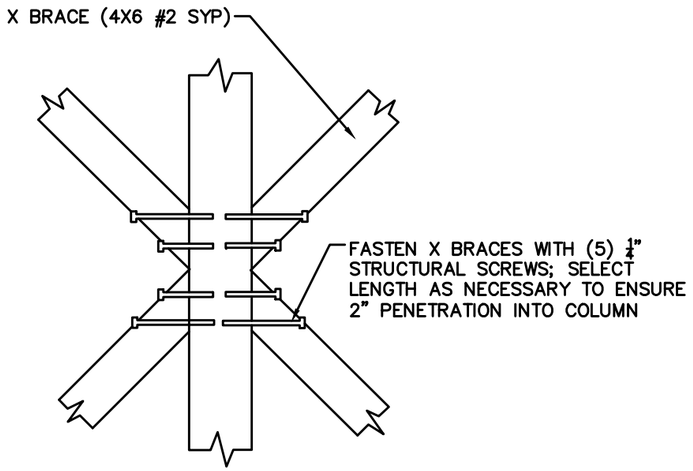
Project No.: 13655-002
Sheet No.: C-514

NOT FOR CONSTRUCTION

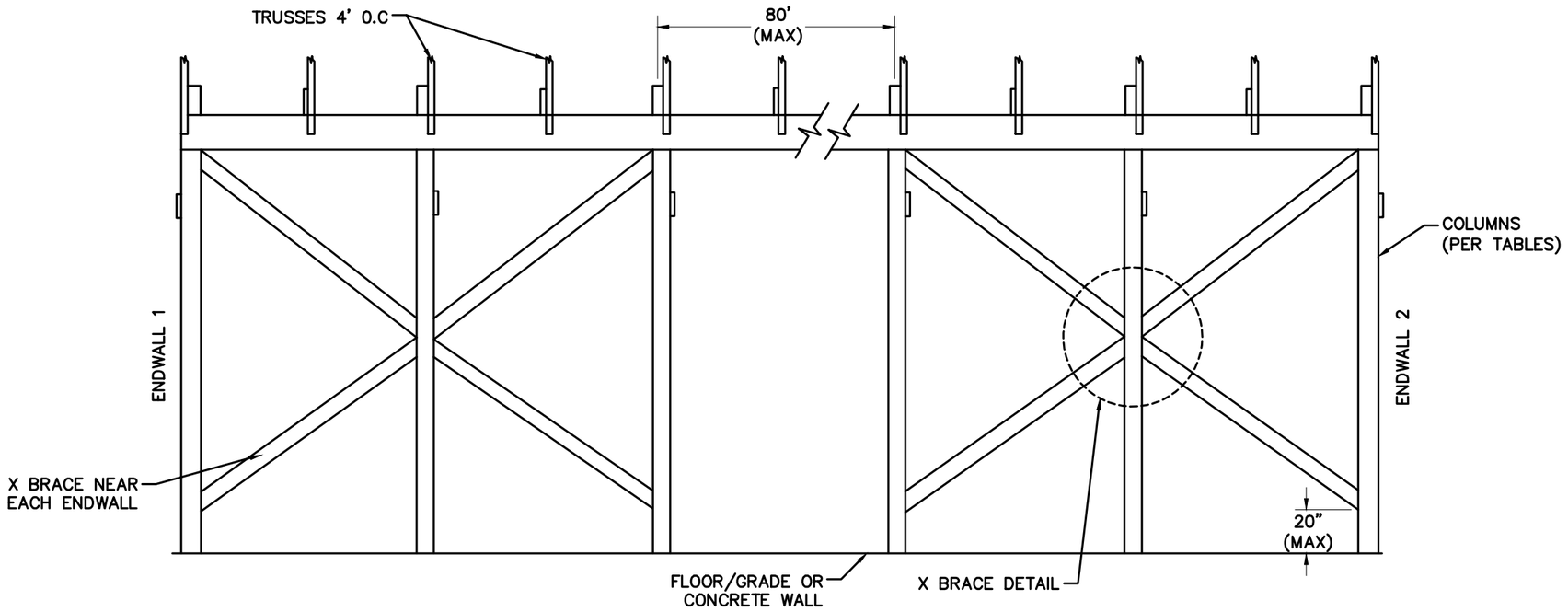


1 STANDARD KNEE BRACE
SCALE: N.T.S



NOTES:
1. X BRACES ARE REQUIRED AT EACH END OF EACH SIDEWALL; SPACING BETWEEN BRACING MAY NOT EXCEED 80FT; LONGER WALLS MAY REQUIRE ADDITIONAL/INTERMEDIATE X BRACING TO COMPLY WITH THIS REQUIREMENT
2. KNEE BRACES ARE NOT REQUIRED AT CORNER COLUMNS THAT WILL RECEIVE ENDWALL SHEATHING

3 X BRACE CONNECTION
SCALE: N.T.S



2 SIDEWALL FRAMING WITH X BRACE
SCALE: N.T.S

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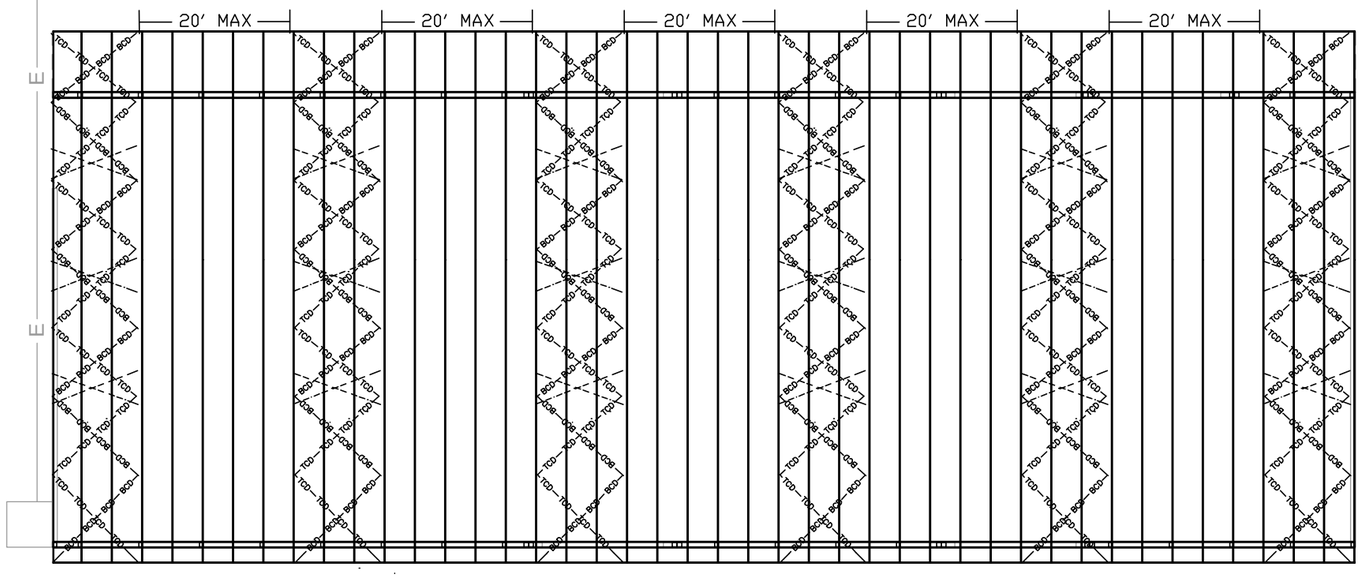
NOT FOR CONSTRUCTION



— — — CONTINUOUS LATERAL BRACING AS PER TRUSS MFG. RECOMMENDATIONS

—TCD—TCD—TCD— TOP CHORD DIAGONAL BRACING

—BCD—BCD—BCD— BOTTOM CHORD DIAGONAL BRACING

WEB MEMBER CROSS BRACING

NOTES:

1. CONTINUOUS LATERAL BRACING SHOWN IS FOR A VISUAL REPRESENTATION ONLY; CONTINUOUS LATERAL BRACING LOCATIONS & SPACING ARE REQUIRED BY THE TRUSS MFG & SHOWN ON THE TRUSS DESIGN DRAWING.
2. ALL BRACING IS 2" X 4" GRADE MARKED LUMBER.
3. ALL CONNECTIONS SHOULD BE MADE WITH 2 - 16d NAILS. 2-16d NAILS. NO BUTT JOINTS.

1 TRUSS BRACING

SCALE: N.T.S

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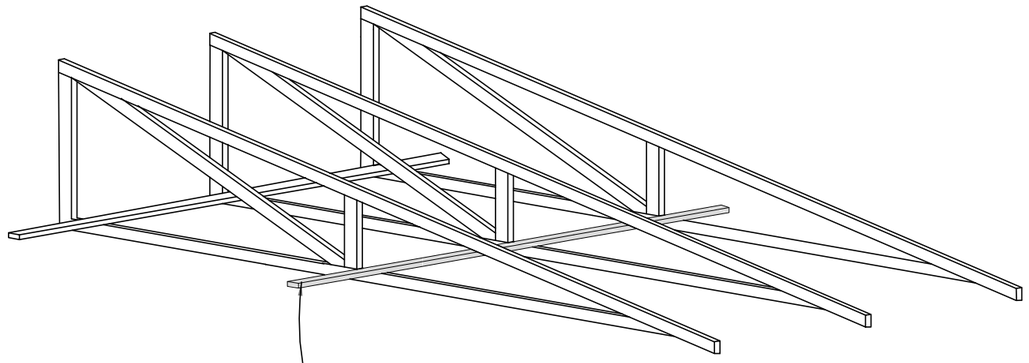
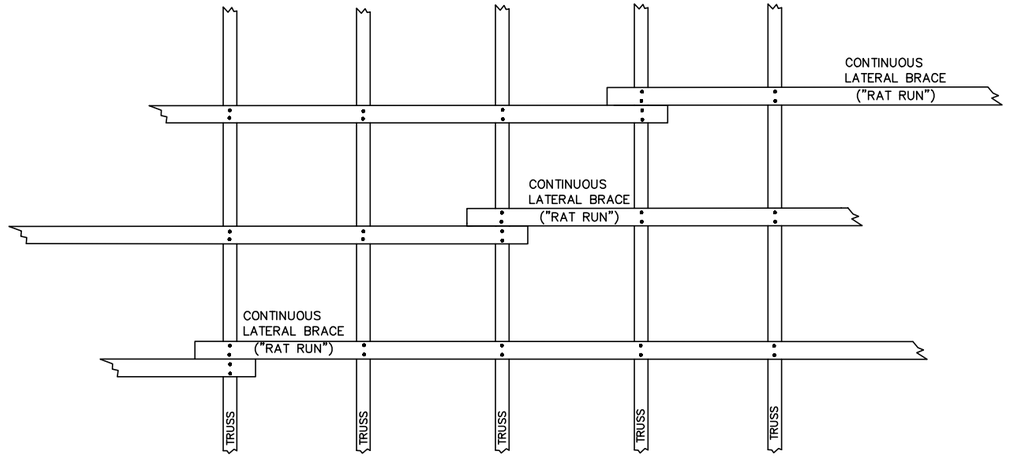
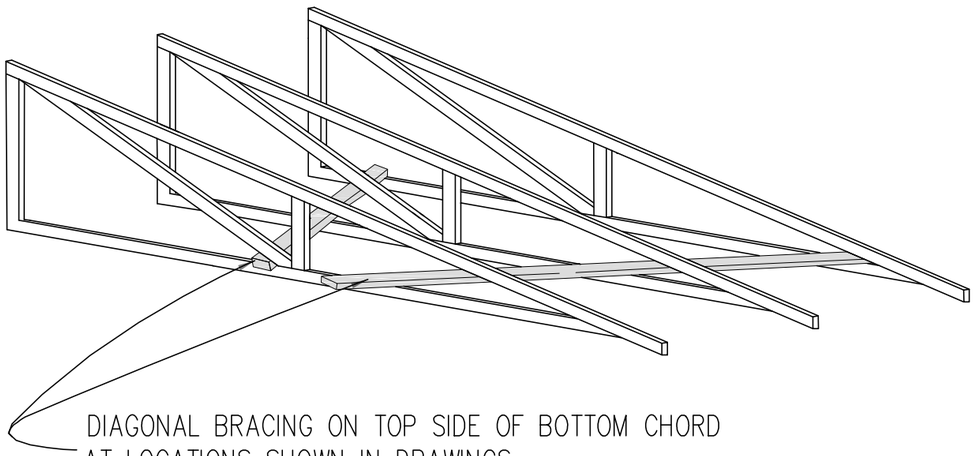


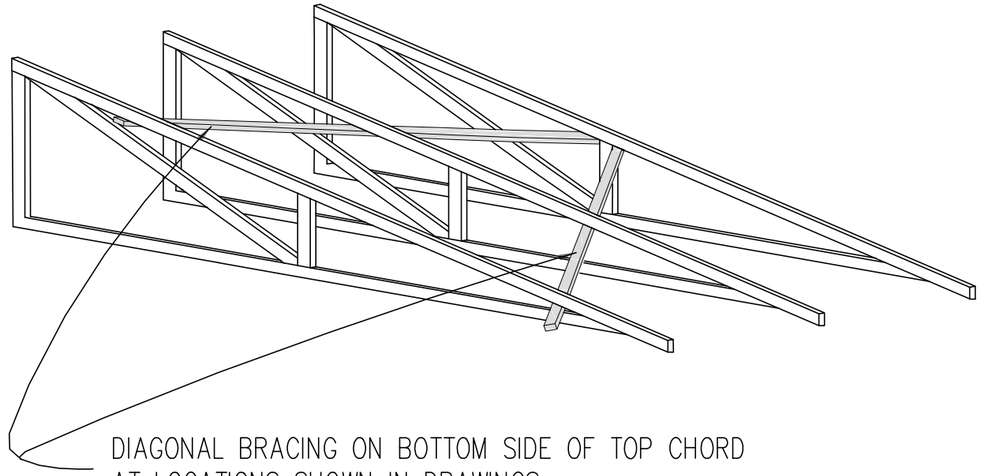
CONTINUOUS LATERAL BRACING ("RAT RUNS")
(2-16d NAILS @ EACH BRACE / TRUSS CONNECTION)



JOINTS IN CONTINUOUS LATERAL BRACES SHALL BE STAGGERED,
SO THEY DO NOT LINE UP WITH THE NEXT TRUSS.
AT A JOINT, EACH BOARD SHALL EXTEND FULLY PAST THE TRUSS,
TO ALLOW FOR A TWO NAIL CONNECTION.
THESE BRACES ARE AS PER TRUSS MFG. REQUIREMENTS,
SHOWN ON THE TRUSS DESIGN.



DIAGONAL BRACING ON TOP SIDE OF BOTTOM CHORD
AT LOCATIONS SHOWN IN DRAWINGS
(2-16d NAILS @ EACH BRACE TRUSS CONNECTION)



DIAGONAL BRACING ON BOTTOM SIDE OF TOP CHORD
AT LOCATIONS SHOWN IN DRAWINGS
(2-16d NAILS @ EACH BRACE TRUSS CONNECTION)

1 CORD AND DIAGONAL BRACING
SCALE: N.T.S

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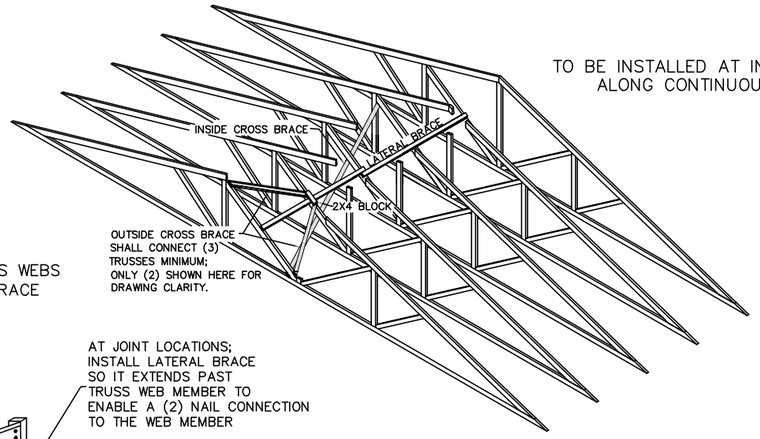
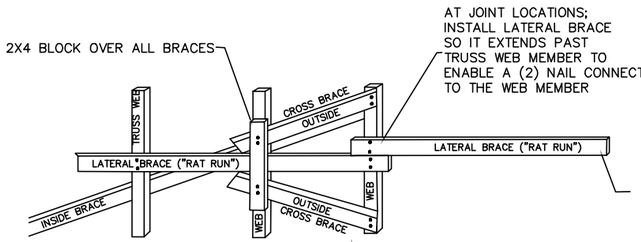
NOT FOR CONSTRUCTION



TO BE INSTALLED AT INTERVALS NOT TO EXCEED 20'
ALONG CONTINUOUS LATERAL BRACING

CROSS BRACING IS REQUIRED ON TRUSS WEBS
THAT HAVE A CONTINUOUS LATERAL BRACE

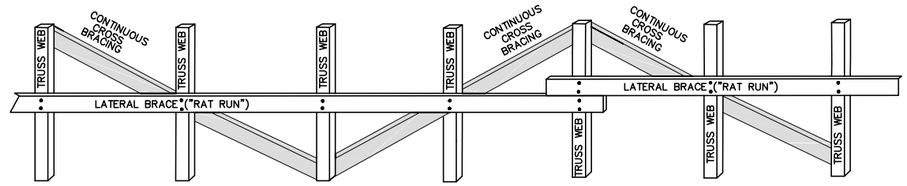
OPTION #1



* ALL CROSS BRACES SHALL BE INSTALLED AT LESS THAN OR EQUAL TO 45 DEGREE ANGLES

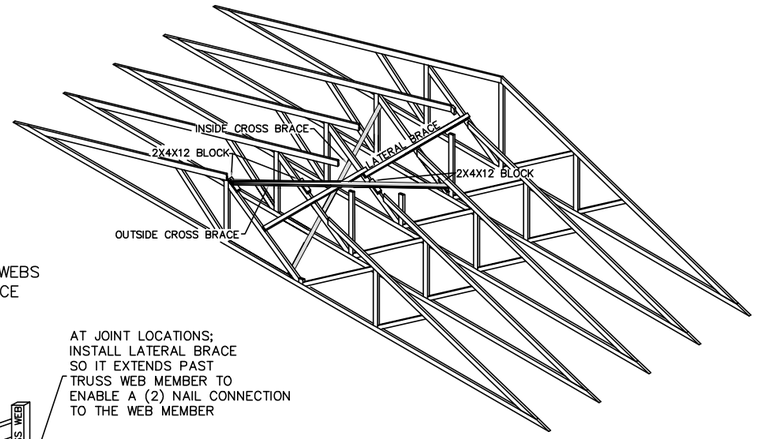
CROSS BRACING IS REQUIRED ON TRUSS WEBS
THAT HAVE A CONTIINUOUS LATERAL BRACE

OPTION #3



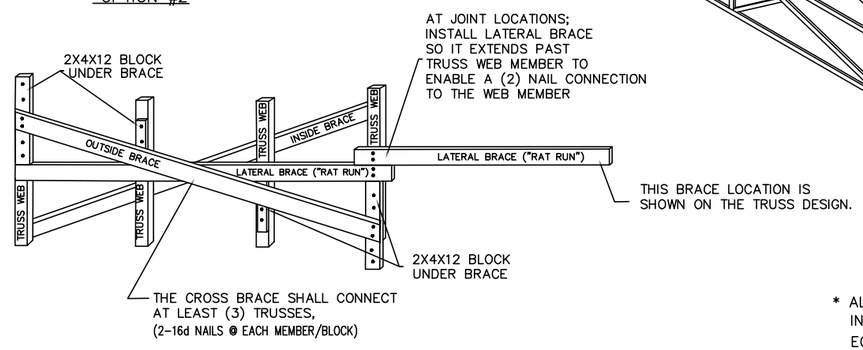
INSTALL "CONTINUOUS" CROSS BRACING ON THE OPPOSITE SIDE OF THE TRUSS WEB MEMBER AS THE LATERAL BRACE. THE CROSS BRACING MUST RUN THE ENTIRE LENGTH OF THE BUILDING ON THOSE WEB MEMBERS WITH LATERAL BRACING SPECIFIED IN THE TRUSS DESIGN AND AT OTHER LOCATIONS DICTATED BY THE BUILDING DESIGN ENGINEER.
(2-16d NAILS @ EACH MEMBER)

* ALL CROSS BRACES SHALL BE INSTALLED AT LESS THAN OR EQUAL TO 45 DEGREE ANGLES



CROSS BRACING IS REQUIRED ON TRUSS WEBS
THAT HAVE A CONTINUOUS LATERAL BRACE

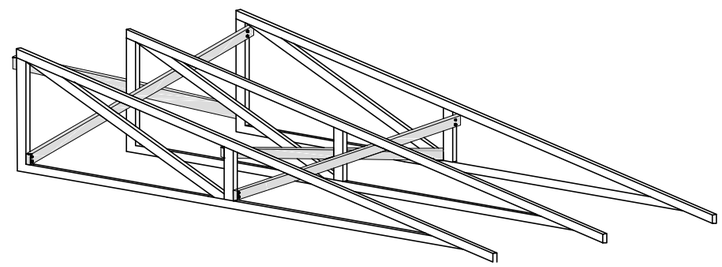
OPTION #2



* ALL CROSS BRACES SHALL BE INSTALLED AT LESS THAN OR EQUAL TO 45 DEGREE ANGLES

CROSS BRACING IS REQUIRED ON TRUSS WEBS
THAT DO NOT HAVE A CONTINUOUS LATERAL BRACE;
AT LOCATIONS SHOWN IN THE DRAWINGS.

OPTION #4



CROSS BRACING ON BOTH SIDES OF TRUSS WEBS AT LOCATIONS SHOWN WHERE THERE IS NOT A LATERAL BRACE ("RAT RUN") LOCATED ON A TRUSS WEB MEMBER, DICTATED BY THE BUILDING DESIGN ENGINEER.
THE CROSS BRACE SHALL CONNECT AT LEAST (3) TRUSSES,
(2-16d NAILS @ EACH MEMBER/BLOCK)

* ALL CROSS BRACES SHALL BE INSTALLED AT LESS THAN OR EQUAL TO 45 DEGREE ANGLES

1 CROSS BRACING
SCALE: N.T.S

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BUILDING DETAILS
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Project No.: 13655-002
Sheet No.: **C-518**

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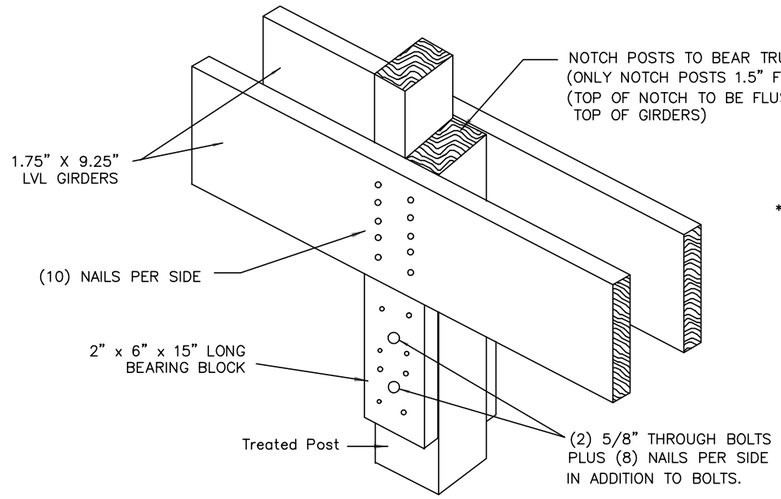
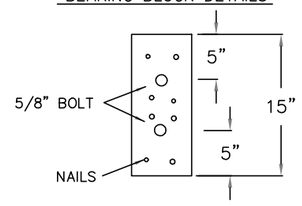
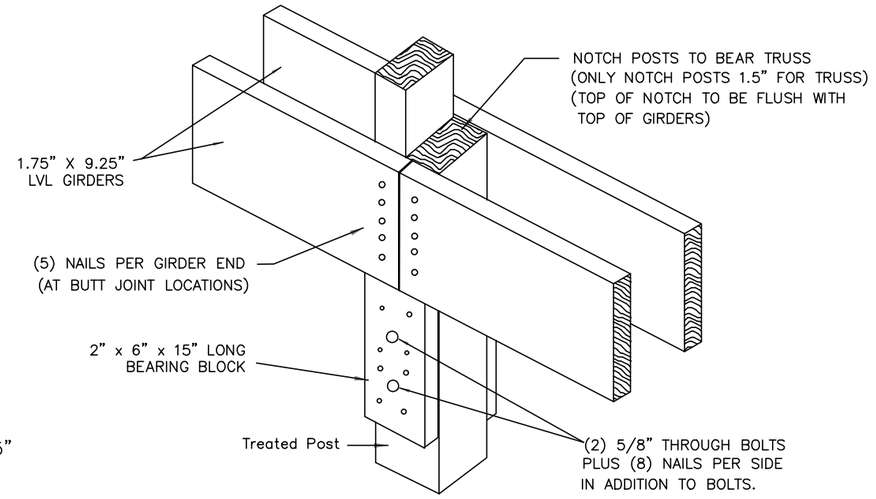


CONTINUOUS SPAN

* NO POST SHALL HAVE A GIRDER BUTT JOINT ON BOTH SIDES

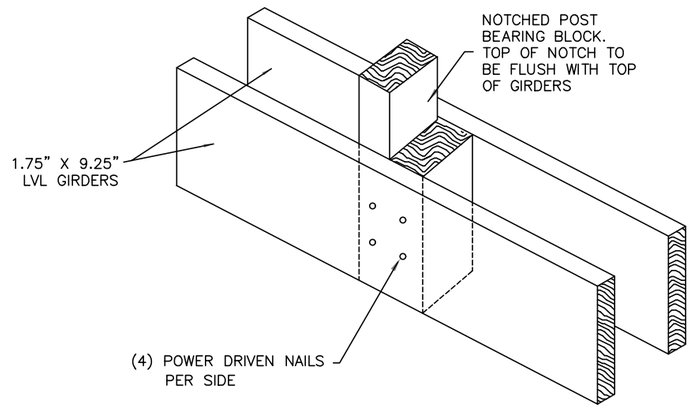
BEARING BLOCK DETAILS

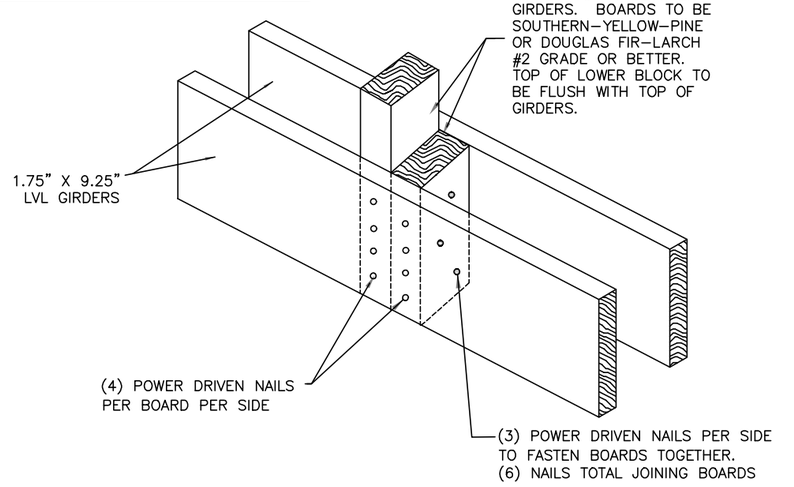




NON–CONTINUOUS SPAN

OPTIONS FOR TRUSS CONNECTION BETWEEN POSTS





CONSTRUCTION NOTES

1. Bolts shall be installed in the middle of the girder and support block.
2. All nails shall be power driven: .131" Diameter x 3.25" Long (Min.).
3. LVL's need to be supported every 2' as per the LVL Manufacturer;
   A single block, ripped to fit, between the LVL's will suffice.
   Install (4) power driven nails per side from LVL into the blocking.

1 FASTENER REQUIREMENTS AT GIRDER AND POST CONNECTIONS

SCALE: N.T.S

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BUILDING DETAILS

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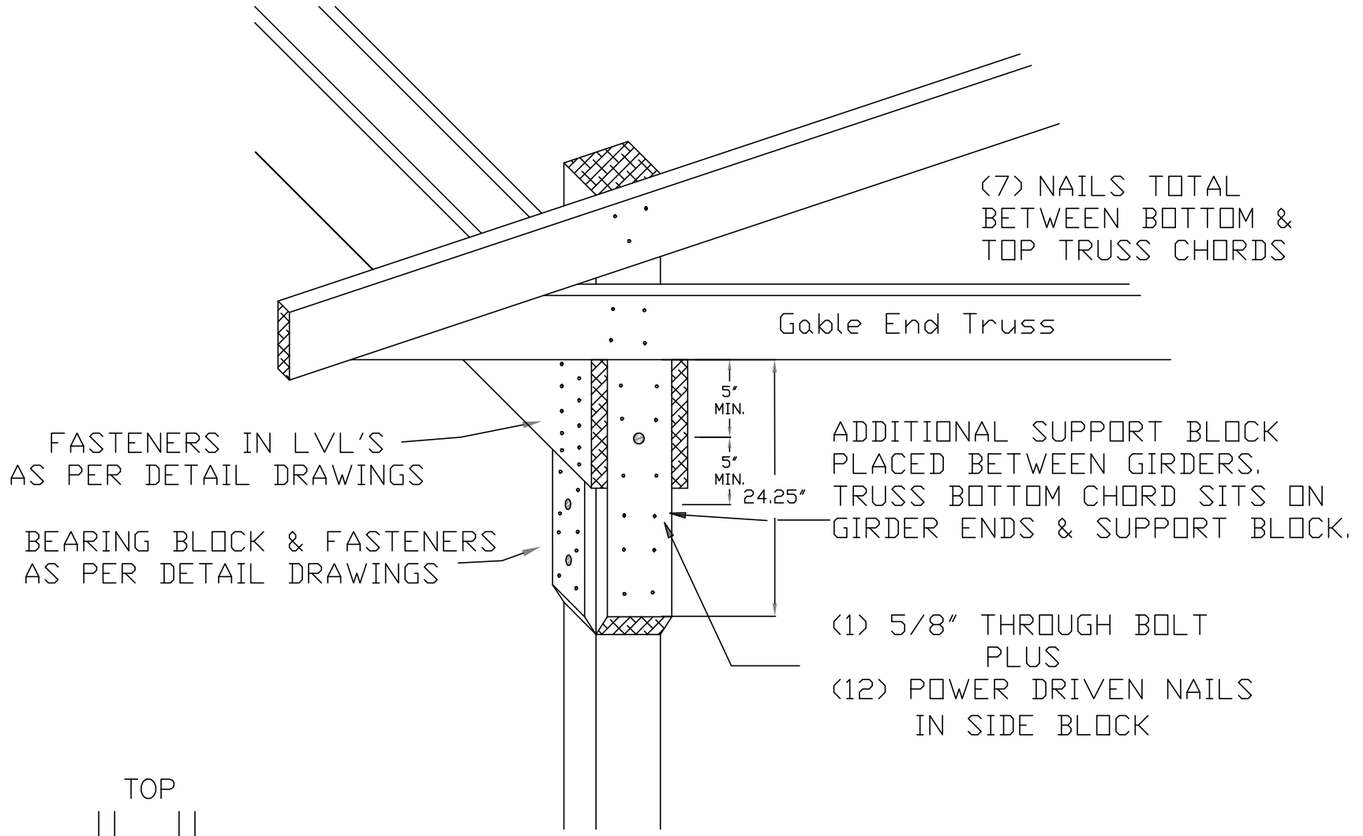
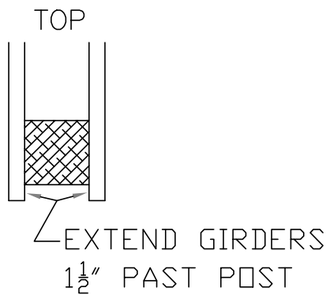
NOT FOR CONSTRUCTION





1. NAILS TO BE .131" X 3.25" LONG

2. BOLTS TO BE GALVANIZED OR STAINLESS STEEL.
   BOLT TO BE INSTALLED IN THE MIDDLE OF THE SUPPORT BLOCK.

3. SUPPORT BLOCK TO BE:
   SYP (SOUTHERN YELLOW PINE)
   OR DF (DOUGLAS FIR-LARCH).

1 GIRDERS AT END POSTS

SCALE: N.T.S

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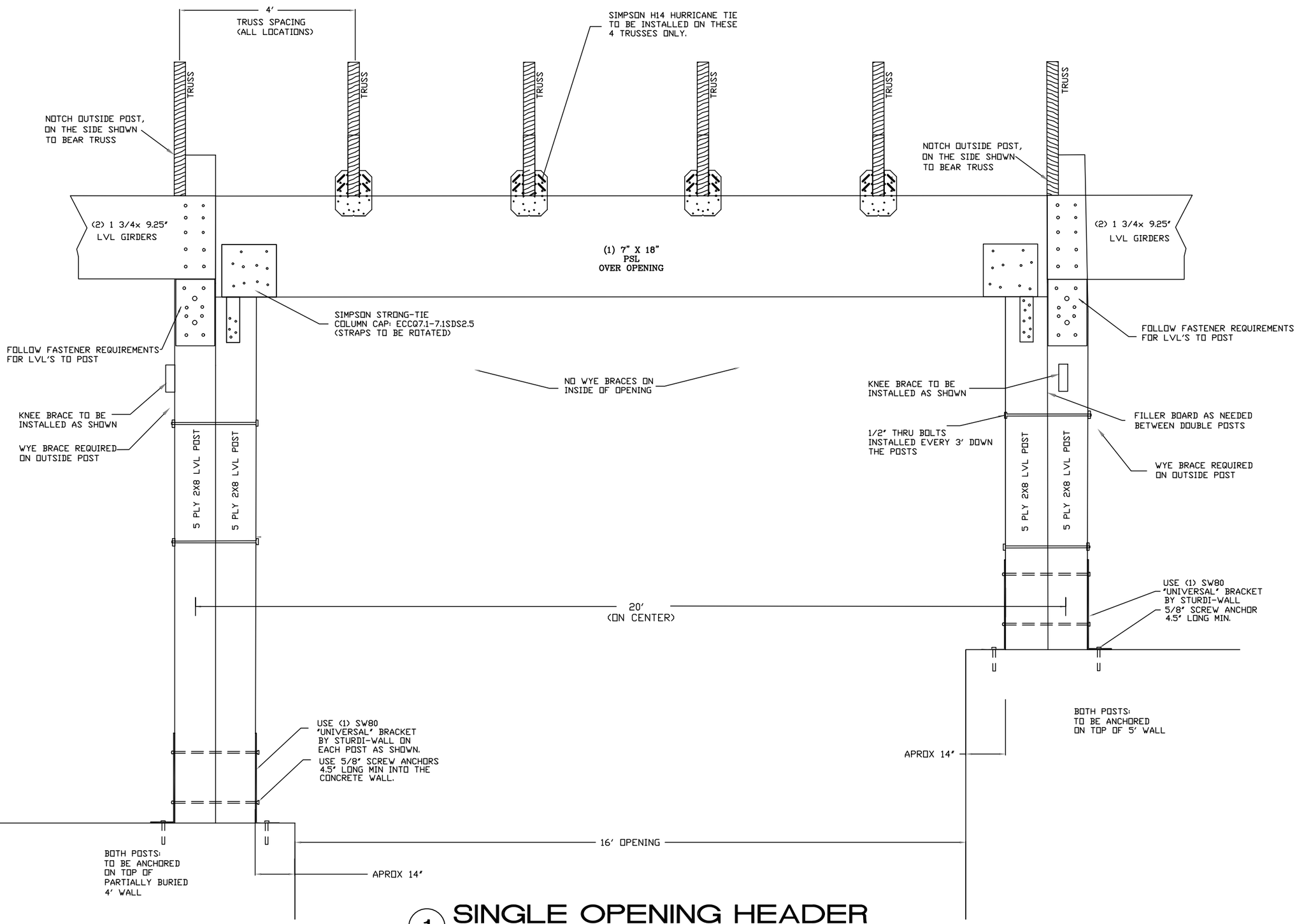
FASTENER REQUIREMENTS AT SIDE ENTRANCE LOCATION



1 SINGLE OPENING HEADER

SCALE: N.T.S

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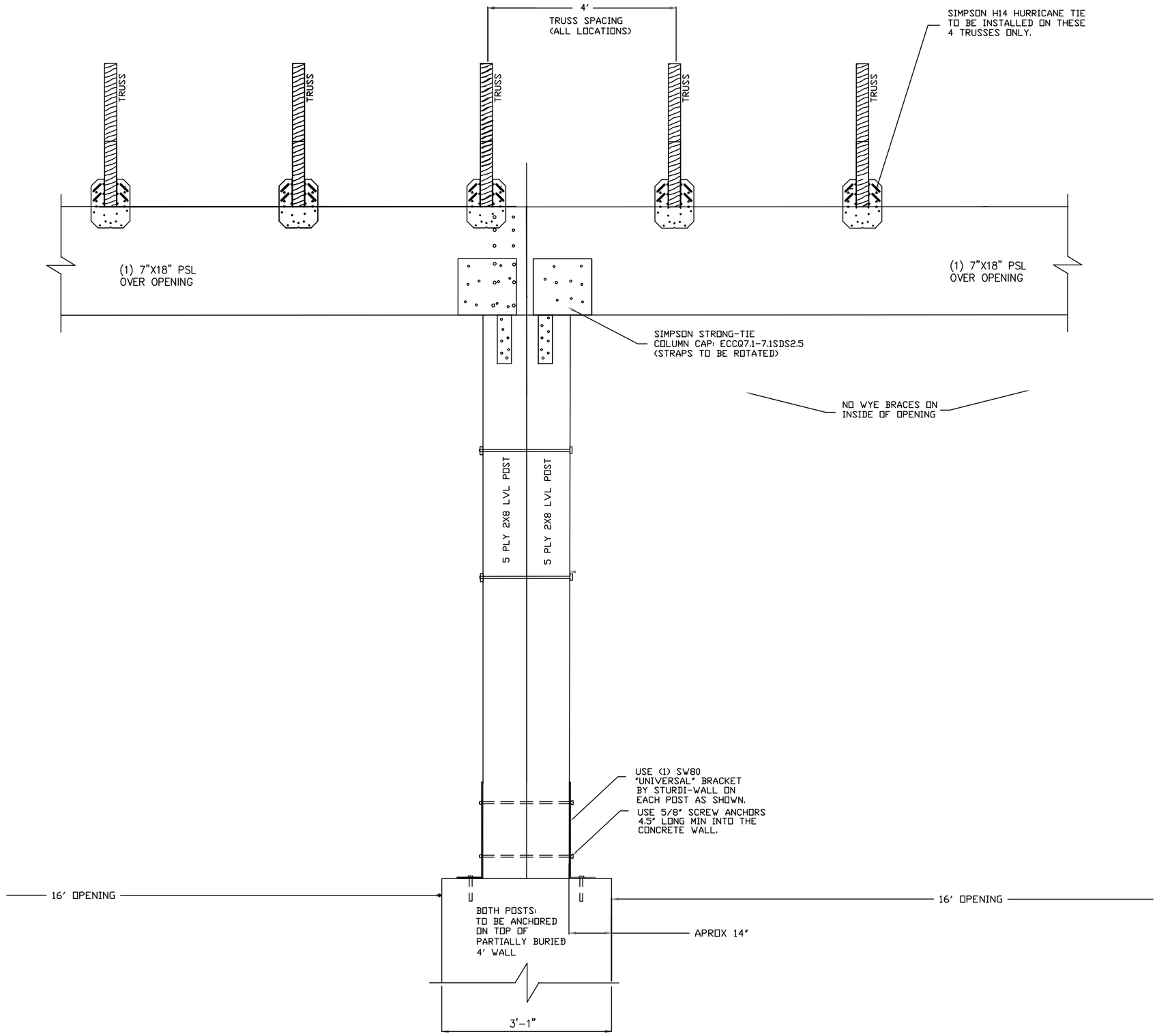

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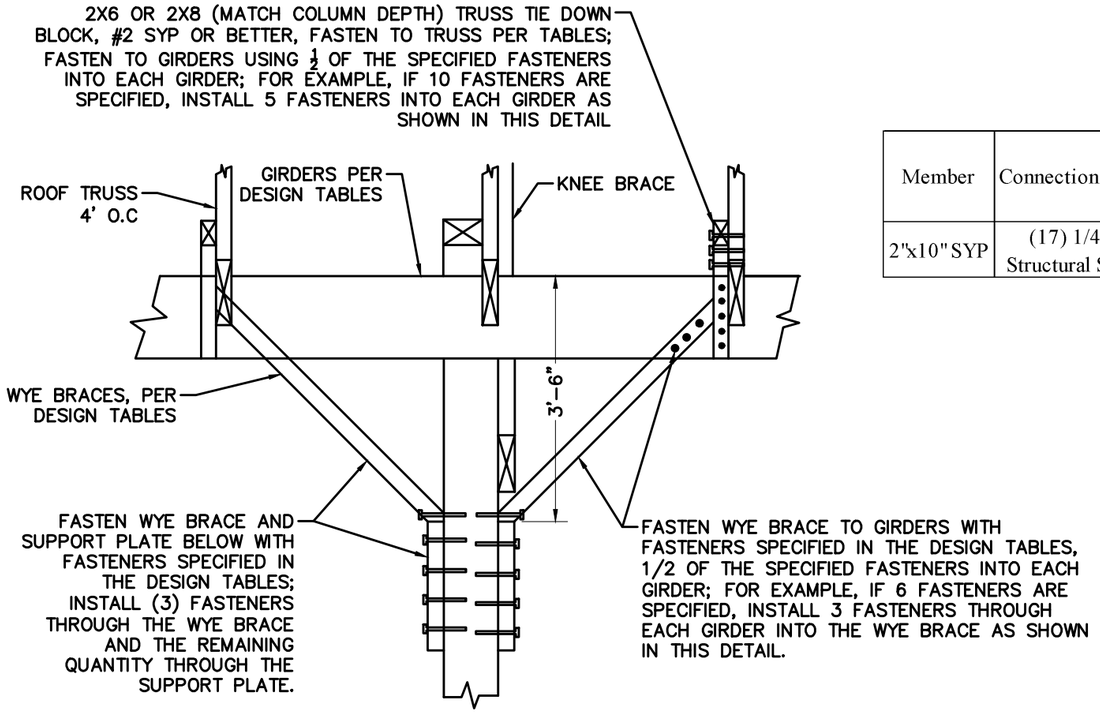
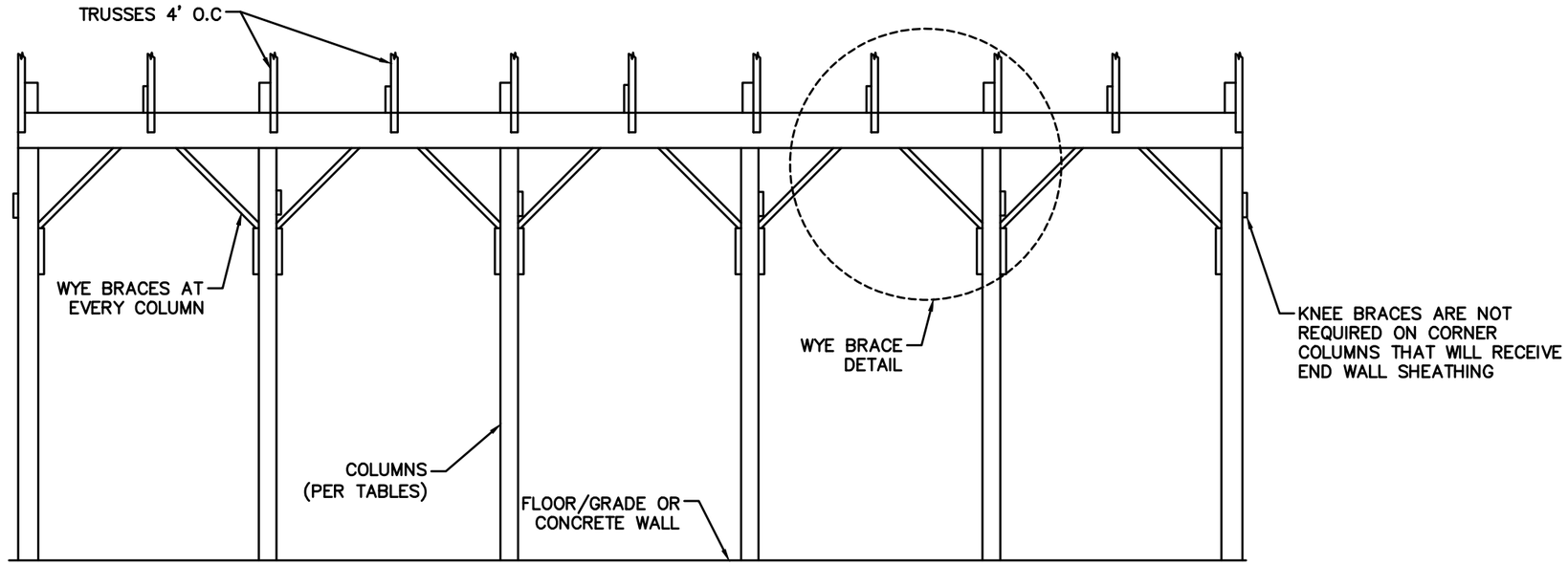


1 WYE BRACE CONNECTION

SCALE: N.T.S

Knee Brace Design per Table 7.3 of the Pennsylvania Design Guide 12

Member	Connection to Post	Connection to Top Chord of Truss	Max. Axial Force (lb)	Left Brace		Right Brace		Left Brace		Right Brace	
				X (lb)	Y(lb)	X (lb)	Y(lb)	X (lb)	Y(lb)	X (lb)	Y(lb)
2"x10" SYP	(17) 1/4"x4" Structural Screws	(12) 1/4"x3" Structural Screws	4,500	-2,500	-2,500	-3,550	3,550	1,350	1,350	4,050	-4,050



2 SIDEWALL FRAMING WITH WYE BRACE

SCALE: N.T.S

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