HOLDING TANK AND APPURTENANCES

CONSTRUCTION NOTES

BASIS OF DESIGN

HOLDING TANK CAPACITY

1 BEDROOM COTTAGE 1,000 GALLONS CAPACITY
2 BEDROOM COTTAGE 2,000 GALLONS CAPACITY
3 BEDROOM COTTAGE 3,000 GALLONS CAPACITY

PROVIDE TANK CLEAN OUT MANHOLE FRAME AND COVER TO GRADE FOR PUMPOUT ACCESS.

PROVIDE TANK LIQUID LEVEL SENSOR AND CONTROL PANEL FOR MID-LEVEL INDICATOR AND HIGH-LEVEL ALARM.

GENERAL NOTES

1. A PERMIT SHALL BE OBTAINED FROM THE LOCAL DEPARTMENT OF HEALTH AND LOCAL BUILDING OFFICIAL FOR ALL WORK RELATED TO INSTALLATION OF THE HOLDING TANK, PIPING, CONTROL PANEL, ELECTRICAL, BUILDING DWV SEWER AND APPURTENANCES.
2. THE MINIMUM SEPARATING DISTANCE BETWEEN A HOLDING TANK AND A WATER SUPPLY WELL SHALL BE 75 FEET.
3. NO DEVIATIONS FROM THE APPROVED DESIGN PLAN SHALL BE PERMITTED WITHOUT THE PRIOR WRITTEN APPROVAL OF THE ENGINEER.
4. NO PORTION OF THE HOLDING TANK OR BUILDING SEWER INSTALLATION SHALL BE BACKFILLED UNTIL MEASUREMENTS FOR RECORD DRAWINGS HAVE BEEN OBTAINED AND THE INSTALLATION HAS BEEN INSPECTED AND APPROVED BY THE SANITARIAN AND ENGINEER.
5. THE CONTRACTOR SHALL PREPARE RECORD DRAWINGS OF THE COMPLETED HOLDING TANK INSTALLATION SHOWING THE LOCATION, ELEVATION AND SWING TIE MEASUREMENTS FROM PERMANENT SITE FEATURES FOR ALL SYSTEM COMPONENTS INCLUDING TANK, PIPING AND CONDUIT. RECORD DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
6. PROVIDE SUBMITTALS FOR ALL MATERIALS TO ENGINEER FOR APPROVAL.

MATERIALS

1. THE BUILDING SEWER PIPE AND FITTINGS BETWEEN THE BUILDING AND HOLDING TANK AND INSIDE THE HOLDING TANK SHALL BE FOUR (4) INCH DIAMETER SCHEDULE 40 PVC, ASTM 1785, WITH PRIMER AND GLUED SOLVENT WELDED JOINTS. ELECTRICAL CONDUIT SHALL BE SCHEDULE 40 PVC. USE SAND BEDDING FOR PIPE INSTALLATION. CURTAIN DRAIN PIPE - PERFORATED SDR35 PVC ASTM 3034. CURTAIN DRAIN OUTFALL PIPE SDR35 PVC, ASTM 3034 SOLID WALL.
2. HOLDING TANK MATERIALS AND CONSTRUCTION SHALL CONFORM TO ASTM C1227 AND DETAILS SHOWN ON THE DRAWINGS. HOLDING TANK SHALL BE H-20 LOAD CAPACITY OR AS INDICATED ON THE DRAWINGS. PROVIDE BUTYL RUBBER GASKET FOR TANK TOP JOINT. HOLDING TANK INLET PIPE SHALL BE SEALED WITH A "KOR-N-SEAL" FLEXIBLE CONNECTOR WITH STAINLESS STEEL BAND AND CLAMP. PROVIDE WATERPROOF NON-SHRINK MORTAR, "SIKASET PLUS PORTLAND CEMENT WATER STOP" TO SEAL EXTERIOR AND INTERIOR ANNULUS BETWEEN INLET/OUTLET PIPE AND TANK WALL. COAT SURFACES OF WATERPROOF MORTAR WITH TNEMEC ELASTO-SHIELD TG SERIES 265 MODIFIED POLYURETHANE COATING. APPLY COATING TO CLEAN, DRY, DUST FREE SURFACE, IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
3. PROVIDE CAST IRON FRAME AND COVER, PRECAST CONCRETE RISER, BUTYL RUBBER GASKET, HYDRAULIC CEMENT AND TNEMEC COATING, AS INDICATED ON THE DRAWINGS. PROVIDE WATERPROOF NON-SHRINK MORTAR, "SIKASET PLUG PORTLAND CEVENT WATER STOP" TO SEAL RISER BASE AND INTERMEDIATE JOINTS AND BASE OF CAST IRON FRAME. COAT SURFACES OF WATERPROOF MORTAR WITH TNEMEC ELASTO-SHIELD TG SERIES 265 MODIFIED POLYURETHANE COATING. APPLY COATING TO CLEAN, DRY, DUST FREE SURFACE, IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
4. CAST IN PLACE CONCRETE FOR ANTI-FLOTATION COLLAR - CONNECTICUT DOT STANDARD SPECIFICATIONS, FORM 817, CLASS C.
5. DEFORMED STEEL BARS - CONFORM TO SECTION M.06, ARTICLE M.06.01 OF DOT STANDARD SPECIFICATIONS.
6. CHEMICAL ANCHOR FOR STEEL BARS - HIGH STRENGTH ANCHORING EPOXY, DATON SUPERIOR CHEMICAL DIVISION, FOSROC INC., HILTI, INC. KELKEN CONSTRUCTION SYSTEMS, OR ACCEPTED SUBSTITUTION.
7. LIQUID LEVEL INDICATOR AND HIGH-LEVEL ALARM - PROVIDE LIQUID LEVEL MONITORING SYSTEM TO INDICATE MEDIA IN LIQUID LEVEL AND HIGH-LEVEL ALARM LEVEL. PROVIDE NEMA 4X POLYCARBONATE CONTROL PANEL WITH 115 VOLT AMBER (MID-LEVEL) AND RED (HIGH-LEVEL) INDICATOR LIGHTS ON FRONT OF PANEL. PROVIDE STAINLESS STEEL FLOAT BRACKET AND 2 NON-MERCURY TYPE FLOAT SWITCHES WITH CABLES OF ADEQUATE LENGTH TO REACH FROM THE HOLDING TANK TO THE CONTROL PANEL WITH NO SPLICES. USE SCHEDULE 40 PVC ELECTRICAL CONDUIT. LOCATE PANEL ON FRONT OF BUILDING VISIBLE FROM MAIN ACCESS ROAD.
8. SAND BEDDING FOR PIPES AND CONDUIT SHALL BE THOROUGHLY COMPACTED BELOW AND AROUND THE PIPE AND CONDUIT AND CONFORM TO THE FOLLOWING SPECIFICATIONS, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

SQUARE MESH SIEVES	PERCENT PASSING BY WEIGHT
3/8"	100%
NO. 50	30% MAX.
NO. 200	5% MAX

9. MAGNETIC TRACER TAPE - POLYETHYLENE WITH A METALLIC FOIL CORE. TAPE TO BE BRIGHTLY COLORED, 2 INCHES WIDE, AND LABELED "CAUTION BURIED PIPE LINE BELOW".
10. GRANULAR FILL - CONNECTICUT DOT STANDARD SPECIFICATIONS, SECTION M.02, ARTICLE M.02.01, ARTICLE M.02.06 GRADING A GRADATION.
11. CRUSHED STONE - CONNECTICUT DOT STANDARD SPECIFICATIONS, SECTION M.01, ARTICLE M.01.01, SIZE AS INDICATED ON THE DRAWINGS.
12. GEOTEXTILE - MIRAFI 140N, OR ACCEPTED SUBSTITUTION.
13. TOPSOIL - CONFORM TO CTDOT STANDARD SPECIFICATIONS, SUBARTICLE M.13.01, MAXIMUM STONE SIZE 1".
14. SEED MIXTURE TO BE AS FOLLOWS, OR APPROVED EQUAL:

A. BLUE GRASS 20%
B. CREEPING RED FESCUE 50%
C. PERENNIAL RYE 20%
D. ANNUAL RYE 10%

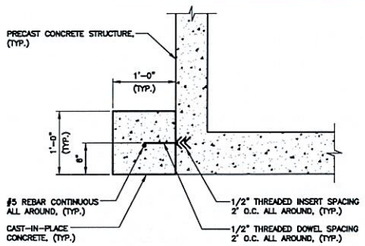
MINIMUM GERMINATION 85%

CONSTRUCTION

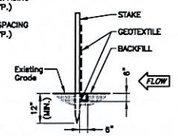
1. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION METHODS, MEANS, TECHNIQUES, AND FOR CONSTRUCTION SITE SAFETY PRECAUTIONS, CONDUCT CONSTRUCTION OPERATIONS IN CONFORMANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL SAFETY LAWS, RULES, REGULATIONS AND CODES.
2. ALL EXCAVATIONS ARE TO BE PROPERLY SHORED AND BARRICADED TO PROTECT WORKERS, VEHICLES AND PEDESTRIANS DURING CONSTRUCTION.
3. DURING CONSTRUCTION, THE EXCAVATION SHALL BE PROTECTED FROM SURFACE WATER RUNOFF AT ALL TIMES BY THE USE OF APPROPRIATE BERMING AND SWALES.
4. EXCAVATIONS SHALL BE DEWATERED DURING INSTALLATION OF THE HOLDING TANK, PIPING AND CONDUIT. THE HOLDING TANK SHALL NOT BE PLACED IN STANDING WATER. THE EXCAVATION SHALL BE DEWATERED UNTIL BACKFILLING OF THE TANK IS COMPLETE.
5. THE HOLDING TANK SHALL BE SEALED WATERTIGHT. CLEAN TANK TOP JOINT BEFORE PLACING BUTYL RUBBER GASKET AND SETTING TOP SECTION. THE TANK SHALL BE INSPECTED BY THE ENGINEER AFTER BACKFILLING AND NO INFILTRATION SHALL BE EVIDENT. ALL VISUAL LEAKAGE AND INFILTRATION SHALL BE LOCATED AND ELIMINATED. REPAIRS SHALL BE MADE IN A FIRST CLASS WORKMANLIKE MANNER.
6. FOLLOWING INSTALLATION OF THE HOLDING TANK, CONDUCT LEAK TEST BY FILLING THE TANK WITH CLEAN WATER AND MONITOR THE WATER LEVEL OVER A 24 HOUR PERIOD WITH NO DROP IN WATER LEVEL. ANY LEAKAGE SHALL BE LOCATED AND ELIMINATED, FOLLOWED BY A RE-TEST.
7. COVER ALL DRAINAGE LAYER CRUSHED STONE WITH NON-WOVEN GEOTEXTILE PRIOR TO TANK BACKFILL.
8. SET TOP ELEVATION OF HOLDING TANK MANHOLE FRAME TO DRAIN SURFACE WATER AWAY FROM THE COVER AT A MINIMUM SLOPE 1/2 INCH/FT.
9. REMOVE ANY UNSUITABLE MATERIALS AS ORDERED BY THE ENGINEER AND REPLACE WITH GRANULAR FILL. COMPACT GRANULAR FILL IN 12" LIFTS TO 90% OF MAXIMUM MODIFIED PROCTOR DENSITY.
10. PROVIDE SAND BEDDING FOR PIPE AND CONDUIT AND PROVIDE MARKING TAPE 12" ABOVE PIPE AND CONDUIT.
11. IN ALL NON-PAVED AREAS DISTURBED BY CONSTRUCTION, PLACE 4 INCHES OF TOPSOIL, FINE GRADE AND REMOVE ALL STONES OVER 1" DIAMETER. FERTILIZE, LIME SEED AND MULCH TO ESTABLISH A FULL PERENNIAL GRASS COVER. USE EROSION CONTROL BLANKET ON ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL.
12. REMOVE ALL STUMPS, STONES, EXCESS EXCAVATED MATERIAL AND CONSTRUCTION DEBRIS FROM THE SITE AND DISPOSE OFF-SITE IN A LEGAL MANNER.
13. MOUNT LIQUID LEVEL CONTROL PANEL ON EXTERIOR OF COTTAGE IN A LOCATION VISIBLE FROM THE COMMON ACCESS DRIVEWAY, AS SHOWN ON THE DRAWINGS. RECEIVE APPROVAL OF PANEL LOCATION BY THE COTTAGE OWNER AND ENGINEER PRIOR TO MOUNTING PANEL. PROVIDE "EY" SEAL FITTING AT CONTROL PANEL ON CONDUIT LEADING FROM CONTROL PANEL TO THE HOLDING TANK. PROVIDE ELECTRICAL POWER TO CONTROL PANEL FROM COTTAGE ELECTRICAL DISTRIBUTION PANEL. A BUILDING PERMIT IS REQUIRED FOR ELECTRICAL WORK. CONFORM TO CONNECTICUT BUILDING CODE REQUIREMENTS FOR ALL ELECTRICAL WORK.
14. MODIFICATIONS WILL BE REQUIRED TO INTERNAL DWV PLUMBING IN THE COTTAGE TO DIRECT WASTE PIPING TO THE BUILDING SEWER LEADING TO THE HOLDING TANK. A BUILDING PERMIT IS REQUIRED FOR PLUMBING WORK. CONFORM TO CONNECTICUT BUILDING CODE REQUIREMENTS FOR ALL PLUMBING WORK.

EROSION AND SEDIMENT CONTROL NOTES

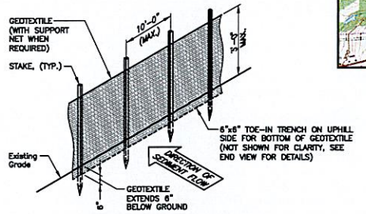
1. PRIOR TO CONSTRUCTION, THE NAME, ADDRESS AND TELEPHONE NUMBER OF THE PERSON RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF ALL SOIL EROSION AND SEDIMENT CONTROL SHALL BE PROVIDED TO THE TOWN WETLANDS ENFORCEMENT OFFICER.
2. ALL CONSTRUCTION ACTIVITIES INVOLVING THE REMOVAL, DISTURBANCE OR DEPOSITION OF SOILS ARE TO BE PROVIDED WITH APPROPRIATE PROTECTIVE MEASURES TO MINIMIZE EROSION OF SOIL AND CONTAIN SEDIMENT DEPOSITION WITHIN THE AREA UNDER CONSTRUCTION (REFER TO 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, Bulletin 34).
3. WHEREVER FEASIBLE, NATURAL VEGETATION SHALL BE RETAINED AND PROTECTED.
4. ONLY THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME DURING CONSTRUCTION.
5. PRIOR TO THE START OF CONSTRUCTION, TEMPORARY BALED HAY EROSION CHECKS, SEDIMENTATION FENCE AND OTHER APPROVED SEDIMENT CONTROL MEASURES SHALL BE INSTALLED WHERE SHOWN ON THE DRAWINGS AND AT OTHER LOCATIONS WHERE DEEMED NECESSARY BY THE AUTHORIZED INSPECTOR AND ENGINEER.
6. EXCAVATION DEWATERING SHALL BE DISCHARGED TO A DEWATERING "DIRT BAG" TO RETAIN SEDIMENT SOLIDS.
7. WHEN LAND IS EXPOSED DURING CONSTRUCTION, THE PERIOD OF EXPOSURE SHALL BE KEPT TO A MINIMUM. INSTALLING PERMANENT VEGETATION, PAVING, STRUCTURES, ETC. AT THE EARLIEST POSSIBLE OPPORTUNITY.
8. ALL EROSION AND SEDIMENT CONTROLS SHALL REMAIN PLACE AND BE MAINTAINED REGULARLY IN PROPERLY FUNCTIONING CONDITION UNTIL ALL AREAS EXPOSED DURING SITE CONSTRUCTION HAVE BEEN FULLY STABILIZED WITH VEGETATION.
9. AFTER THE SITE IS STABILIZED WITH A FULL GROWTH OF VEGETATION, REMOVE ALL EROSION AND SEDIMENT CONTROL MEASURES, SEED AND MULCH AREAS DISTURBED DURING SEDIMENT CONTROL MEASURE REMOVAL AND DISPOSE OF MATERIALS OFF SITE IN A LEGAL MANNER.



ANTI-FLOTATION COLLAR DETAIL
N.T.S.



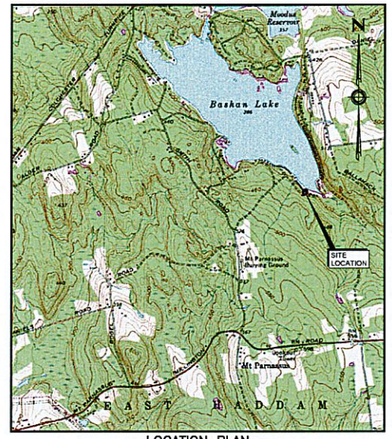
END VIEW



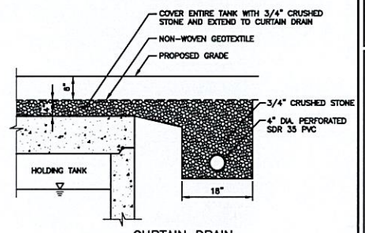
SEDIMENTATION FENCE (GSF)
N.T.S.

NOTES:

1. AS AN ALTERNATE TO THE TRENCHING METHOD FOR BURYING THE BOTTOM 6" FLAP OF GEOTEXTILE, IT MAY BE LAID HORIZONTALLY ON THE GROUND AND BURIED BY RAMPING SOIL UP TO THE SEDIMENTATION FENCE AS SPECIFIED IN SECTION 2.19.03 OF THE STATE OF CT, DEPT. OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, AND INCIDENTAL CONSTRUCTION, FORM 816, 2004, AS AMENDED TO DATE.



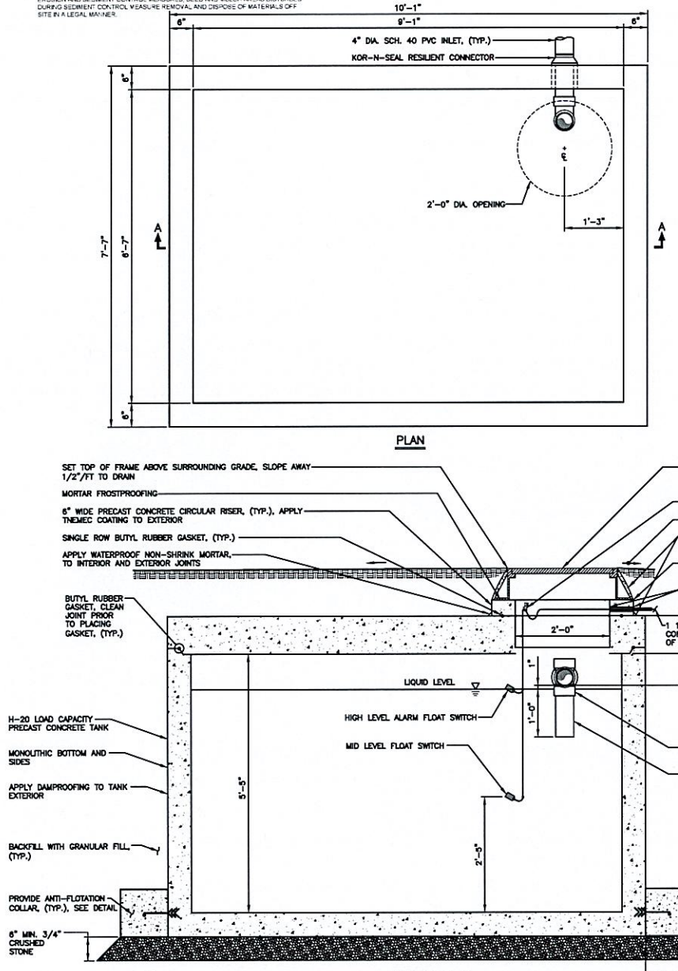
LOCATION PLAN
SCALE: 1"=2,000'



CURTAIN DRAIN
N.T.S.

NOTES:

1. SEE SITE PLAN FOR INVERT ELEVATIONS.



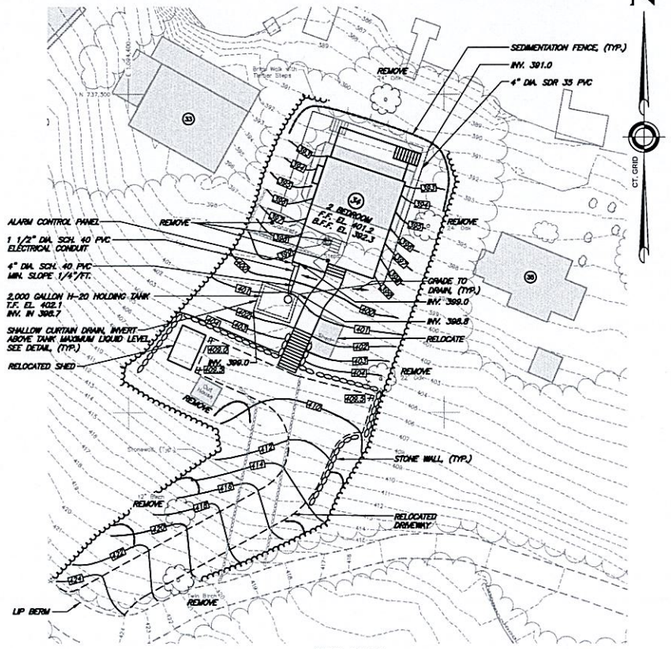
PLAN

SECTION A-A

2,000 GALLON PRECAST CONCRETE HOLDING TANK, H-20
SCALE: 3/4"=1'-0"

NOTES:

1. TANK DESIGN SHALL CONFORM TO ASTM C913.
2. JOINT SEALANT BUTYL RUBBER CONFORMING TO AASHTO SPECIFICATION M-198.
3. COAT TANK EXTERIOR WITH DAMPPROOFING, BAY OIL, "EBONY", OR EQUAL.
4. REINFORCING STEEL DEFORMED BARS CONFORM TO ASTM A615.
5. CONCRETE COMPRESSIVE STRENGTH 4000 PSI AT 28 DAYS.
6. BASE AND WALL SECTION SHALL BE MONOLITHIC.
7. TANK LOAD CAPACITY AASHTO HS-20 LOADING WITH 12" OF SOIL COVER.
8. BACKFILL IN 1 FT. LIFTS COMPACTED TO MIN. 90% MODIFIED PROCTOR DENSITY.
9. INLET PIPE LOCATED AT END OF TANK.
10. WATERPROOF NON-SHRINK MORTAR - "SIKASET PLUG" PORTLAND CEMENT WATER STOP
10. MODIFIED POLYURETHANE COATING - "TNEMEC ELASTO-SHIELD TG SERIES 265"



SITE PLAN
SCALE: 1"=20'

NOTES:

1. In General, Lower Case Text Identifies Existing Features/Conditions.
2. IN GENERAL, *UPPER CASE TEXT IDENTIFIES PROPOSED FEATURES/CONDITIONS* UNLESS OTHERWISE SPECIFIED.
3. FOR LOCATION OF UNDERGROUND ELECTRIC, TELEPHONE, GAS, CABLE TV AND OTHER FACILITIES OF PUBLIC UTILITY COMPANIES, INQUIRE OF "CALL BEFORE YOU DIG, INC." AT 1-800-922-4455.

WILDWOOD, INC.
74 SMITH ROAD
EAST HADDAM, CONNECTICUT

COTTAGE #34
LOU AND MICHELE SANTORO

SITE, GRADING AND CIVIL UTILITIES PLAN, DETAILS AND NOTES

ISSUED FOR PERMITTING

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NOT VALID WITHOUT ORIGINAL SEAL

BRIAN C. CURTIS, P.E.
CT REGISTRATION No. 12550

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REVISIONS

No.	DESCRIPTION	DATE

DATE:	SEPTEMBER 2026
SCALE:	AS NOTED
PROJECT No.:	09370005
CADD FILE:	09370004SP
DESIGNED:	BCC
DRAWN:	CEB
CHECKED:	BCC

SHEET No.: 1 OF 1

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