

GENERAL

- G.001 TITLE PAGE
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- G.003 YARD PIPING AND UNIT LOCATION
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PLAN, SCHEDULES & SECTIONS
- S.002 WWTP -- BLOWER/CONTROL BUILDING
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- M.002 WWTP -- EQUALIZATION TANKS
- M.003 WWTP -- AERATION TANKS
- M.004 WWTP -- AERATION TANKS
- M.005 WWTP -- AERATION & CLARIFIER TANKS
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- M.007 WWTP -- BLOWER/CONTROL BUILDING EQUIPMENT LAYOUT (NOT INCLUDED IN THIS SET)
- M.008 WWTP -- MECHANICAL DETAILS (NOT INCLUDED IN THIS SET)

DEMOLITION

- D.001 WWTP -- DEMOLITION PLAN

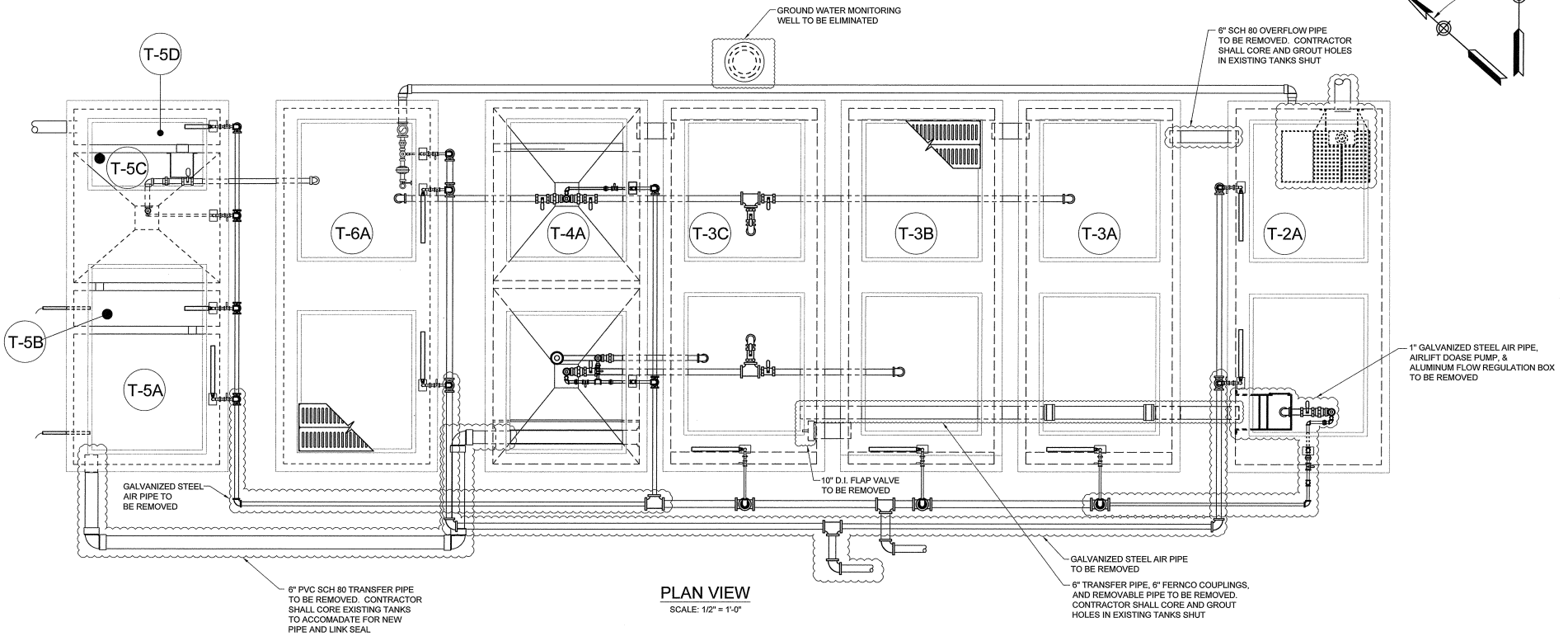
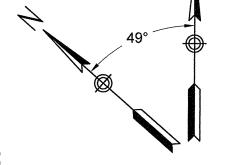
ELECTRICAL

- E.001 SINGLE LINE DIAGRAM (NOT INCLUDED IN THIS SET)

E&S

- ES.001 WWTP -- GRADING PLAN
- ES.002 DETAILS/NOTES

PLANT NORTH



PLAN VIEW
SCALE: 1/2" = 1'-0"

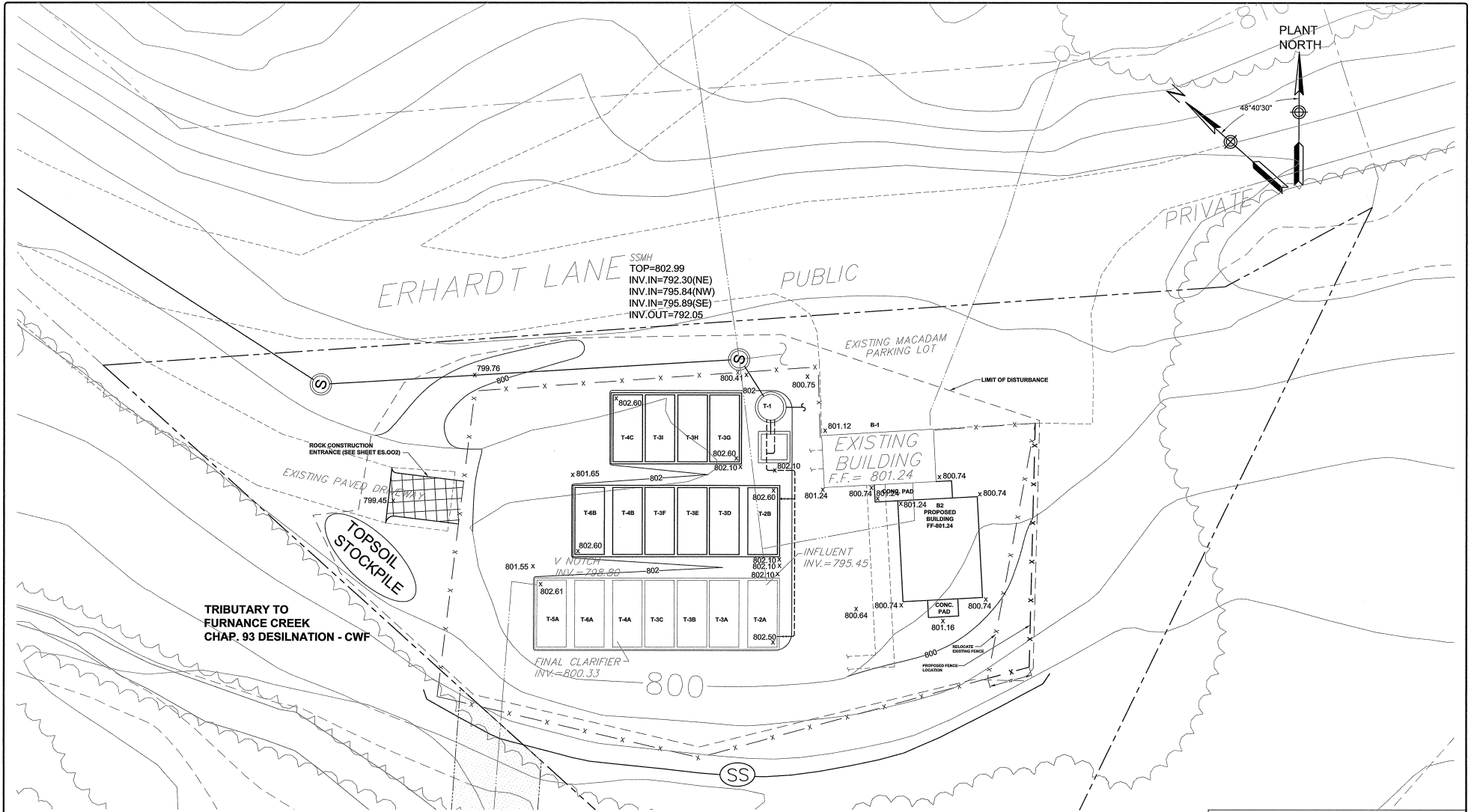
SHEET TITLE:
WWTP - DEMOLITION PLAN

PROJECT:		GOLDEN OAKS WWTP EXPANSION	
PROJECT LOCATION:		RUSCOMBMANOR TOWNSHIP	PROJECT NO.: 0502-0703
DRAWN BY:	APPROVED BY:	SCALE:	DATE:
APC	CMH	AS SHOWN	07/08



SHEET NO.:
D.001

NO.	DESCRIPTION	DATE	BY



EXISTING FACILITY

- T-2A EQUALIZATION TANK
- T-3A, 3B, 3C AERATION TANKS
- T-4A CLARIFIER
- T-5A COT/POST AERATION/DECHLORINATION
- T-6A SLUDGE HOLDING TANK
- B-1 BLOWER/CONTROL BUILDING

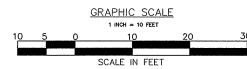
PROPOSED FACILITY

- T-2B EQUALIZATION TANK
- T-3D, 3E, 3F, 3G, 3H, 3I AERATION TANKS
- T-4B, 4C CLARIFIERS
- T-5B SLUDGE HOLDING TANK
- B-2 BLOWER/CONTROL BUILDING

LEGEND

- PROPOSED FACILITY
- EXISTING FACILITY
- EXISTING FENCE
- PROPERTY LINE
- COMPOST SILT SOCK

GeB - GLADSTONE GRAVELLY SILT LOAM, 3 TO 8 PERCENT SLOPES



NO.	DESCRIPTION	DATE	BY

SHEET TITLE:
WWTP - GRADING PLAN

PROJECT:
GOLDEN OAKS
WWTP EXPANSION

PROJECT LOCATION:
RUSCOMBMANOR TOWNSHIP

PROJECT NO.:
0502-0703

DRAWN BY:
AFC

APPROVED BY:
CMH

SCALE:
AS SHOWN

DATE:
07/08

SHEET NO.:
ES.001

LTI CONSULTANTS, LTD.
ENGINEERS & C/D/E OFFICIALS
INC. REG. # 016 10009 CONTRACTORS
JULY 19, 1997

SOIL LIMITATIONS

SOILS WITHIN THE PROJECT AREA ARE SOMEWHAT LIMITED, DUE TO SHRINK-SWELL POTENTIAL.

SOIL ASSUMPTIONS

FRON TO FINAL STABILIZATION, SOIL TESTS SHALL BE TAKEN TO DETERMINE THE OPTIMUM LIMES AND FERTILIZER RATES. THE RATES GIVEN ON THE PLAN AND NARRATIVE ARE ONLY MINIMUM GUIDELINES.
IF GROUNDWATER IS ENCOUNTERED DURING CONSTRUCTION, THE AREA WILL BE DE-WATERED BY PUMPING THE GROUNDWATER INTO A TRENCH, PUMPED INTO CONTROL SYSTEMS.
IF WINTER DRAINING IS UNAVAILABLE, EXCAVATION SHALL ONLY TAKE PLACE WHEN THE TEMPERATURE IS ABOVE FREEZING AND THE SOIL IS DRY.

WHERE TOPSOIL IS REPROD SOIL SHALL BE SCREENED TO REMOVE STONES OR IMPORTED FROM OPPOSITE.

HYDRIC SOILS

NOISE OF THE SOILS PRESENT WITHIN THE PROJECT ARE HYDRIC.

GENERAL NOTES

- ONLY LIMITED DISTURBANCE WILL BE PERMITTED TO PROVIDE ACCESS TO CONSTRUCT SELF FENCE.
- EROSION AND SEDIMENTATION CONTROLS MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE WITHIN THE TEMPORARY AREAS OF THOSE CONTROLS.
- AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENTATION CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE CONTROLS MUST BE STABILIZED IMMEDIATELY.
- AT THE END OF EACH WORKING DAY, ANY SEDIMENT TRAPPED OR CONVEYED ONTO A PUBLIC ROADWAY WILL BE REMOVED AND REPOSITED ONTO THE CONSTRUCTION SITE. REMOVAL CAN BE COMPLETED THROUGH USE OF MECHANICAL OR HAND TOOLS, BUT MUST NEVER BE WASHED OFF THE ROAD BY USE OF WATER.
- SEDIMENT REMOVED FROM BASIC CONTROLS & FACILITIES SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAIN OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN STOCKPILES.
- ALL PUMPING OF SEDIMENT LAGOON WATER SHALL BE THROUGH A DIKE AND FILTRATION DEVICE, OR INVOLENT SEDIMENT REMOVAL FACILITY, OVER NON-VEGETATED AREAS. EXCESSIVE DISCHARGE POINTS SHOULD BE ESTABLISHED TO PROVIDE FOR MAXIMUM DRAINAGE TO ACTIVE WATERWAYS.
- ALL EXCAVATION FOR UTILITY LINE INSTALLATION SHALL BE LIMITED TO THE AMOUNT THAT CAN BE EXCAVATED, INSTALLED, BACKFILLED AND STABILIZED WITHIN ONE WORKING DAY. ALL EXCAVATED MATERIAL SHALL BE DEPOSITED ON THE UP-DRAIN SIDE OF THE TRENCH.
- SOILS IN NON-ERODIBLE CONDITIONS DEVELOP DURING CONSTRUCTION. THE CONTRACTOR SHALL TAKE ACTION TO REMEDY SUCH CONDITIONS AND TO PREVENT DAMAGE TO ADJACENT PROPERTIES AS A RESULT OF EXCESSIVE EROSION AND/OR SEDIMENT ACCUMULATION. EXCESSIVE EROSION, BARRIERS, EXCESSIVE STONE AND OTHER MATERIALS SHALL BE HELD IN READINESS TO DEAL IMMEDIATELY WITH EMERGENCY PROBLEMS OF EROSION.
- THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF THE APPENDIX 6B (EROSION CONTROL) RULES AND REGULATIONS, TITLE 26, PART 1. SEDIMENTATION CONTROL, EROSION CONTROL, PROTECTION, SUBPART C, PROTECTION OF NATURAL RESOURCES, ARTICLE III, WATER RESOURCES, CHAPTER 16B, EROSION CONTROL.
- A COPY OF THIS EROSION AND SEDIMENTATION CONTROL REPORT AND PLANS MUST BE POSTED AT THE CONSTRUCTION SITE.

STABILIZATION NOTES

- STOCKPILE HEIGHTS MUST NOT EXCEED 30'. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
- UPON COMPLETION OF AN EARTH DISTURBANCE ACTIVITY OF ANY STAGE OR PHASE OF AN ACTIVITY, THE OPERATOR SHALL STABILIZE IMMEDIATELY THE DISTURBED AREAS TO PROTECT FROM ACCELERATED EROSION. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATE. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE RESTORED WITHIN 1 YEAR MAY BE STABILIZED IN ACCORDANCE WITH TEMPORARY SEEDING SPECIFICATIONS. DISTURBED AREAS, WHICH ARE NOT AT FINISHED GRADE OR WILL NOT BE RESTORED WITHIN 1 YEAR, MUST BE STABILIZED IN ACCORDANCE WITH PERMANENT SEEDING SPECIFICATIONS.
- DIVERSION CHANNELS AND STOCKPILES MUST BE STABILIZED IMMEDIATELY.
- WAY OR STRAIN MULCH SHALL BE APPLIED AT RATES OF AT LEAST 4 TONS PER ACRE.
- WAY OR STRAIN MULCH SHALL BE APPLIED TO THE ENTIRE SURFACE OF THE DISTURBED AREA. THE MULCH SHALL BE PROPERLY PLACED, DEPOSITED AND MAINTAIN ALL THE BEST MANAGEMENT PRACTICES. MULCH APPLICATION SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION CONTROL FACILITIES AFTER EACH WORKING DAY. MULCH SHALL BE APPLIED TO ALL PREVIOUSLY TREATED AREAS. MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REEVALUATING, AND REFINISHING, MUST BE PERFORMED IMMEDIATELY.
- AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM OF 75% INDIAN FERN PERMANENT VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SURFACE CHARACTERISTICS SUFFICIENT TO RESIST RUNOFF OR OTHER MOVEMENTS.
- MULCH WITH MULCH CONTROL NETTING OR EROSION CONTROL, BARRIERS MUST BE INSTALLED ON ALL SLOPES GREATER THAN 3:1.

UTILITY LINE TRENCH EXCAVATION NOTES

- LIMIT ADVANCED CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.
- WORK, CLEANING AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, FILL CONSTRUCTION AND BACKFILLING WILL BE SELF CONTAINED AND REMOVED FROM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS.
- ALL EXCAVATION SHALL BE PROTECTED FROM THE TRENCH BY THE PLACEMENT OF THE TRENCH.
- LIMIT SHALL BE LIMITED TO THE LENGTH OF PIPE ALIGNED. MULCH INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY. NO MORE THAN 50 LINEAL FEET OF OPEN TRENCH SHOULD EXIST WITHIN PRELIMINARY INSTALLATION CYCLES AT THE END OF THE WORKING DAY.
- WATER THAT ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING BEFORE PIPE PLACEMENT AND/OR BACKFILLING BEGINS. WATER REMOVED FROM THE TRENCH SHALL BE PUMPED THROUGH A FILTRATION DEVICE.
- ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND IMMEDIATELY STABILIZED.

CONSTRUCTION SEQUENCE

- ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED IN COMPLIANCE WITH CHAPTER 16B REGULATIONS BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE.
- AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL NOTIFY ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE EROSION AND SEDIMENTATION CONTROL PLAN PREPARED, AND THE BERKS COUNTY CONSERVATION DISTRICT TO AN ON-SITE MEETING. ALSO, AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE-CALL SYSTEM INCORPORATED AT 800-442-1776 FOR SUBURB UTILITIES LOCATIONS.
- BEFORE INITIATING ANY REVISIONS TO THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN OR REVISIONS TO OTHER PLANS THAT MAY AFFECT THE EFFECTIVENESS OF THE APPROVED EROSION CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE BERKS COUNTY CONSERVATION DISTRICT.
- THE OPERATOR SHALL REMOVE FROM THIS SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE REQUIREMENTS OF THE WATER MANAGEMENT REGULATIONS AT 26 PA CODE 28.101, 27.1, 27.11, 27.12, 27.13, 27.14, 27.15, 27.16, 27.17, 27.18, 27.19, 27.20, 27.21, 27.22, 27.23, 27.24, 27.25, 27.26, 27.27, 27.28, 27.29, 27.30, 27.31, 27.32, 27.33, 27.34, 27.35, 27.36, 27.37, 27.38, 27.39, 27.40, 27.41, 27.42, 27.43, 27.44, 27.45, 27.46, 27.47, 27.48, 27.49, 27.50, 27.51, 27.52, 27.53, 27.54, 27.55, 27.56, 27.57, 27.58, 27.59, 27.60, 27.61, 27.62, 27.63, 27.64, 27.65, 27.66, 27.67, 27.68, 27.69, 27.70, 27.71, 27.72, 27.73, 27.74, 27.75, 27.76, 27.77, 27.78, 27.79, 27.80, 27.81, 27.82, 27.83, 27.84, 27.85, 27.86, 27.87, 27.88, 27.89, 27.90, 27.91, 27.92, 27.93, 27.94, 27.95, 27.96, 27.97, 27.98, 27.99, 27.100.
- BEFORE DISPOSING OF SOIL OR RECEIVING BORROW FOR THE SITE, THE OPERATOR MUST ASSURE THAT EACH SHOOL OR BORROW AREA HAS AN EROSION PLAN APPROVED BY THE BERKS COUNTY CONSERVATION DISTRICT, AND WHICH IS BEING IMPLEMENTED AND MAINTAINED ACCORDING TO CHAPTER 16B REGULATIONS. THE OPERATOR SHALL ALSO NOTIFY THE BERKS COUNTY CONSERVATION DISTRICT IN WRITING OF ALL RECEIVING AREAS, AND BORROW AREAS WHICH THEY HAVE BEEN IDENTIFIED.
- ROCK CONSTRUCTION ENTRANCE SHALL BE INSTALLED OFF OF THE DRIVEWAY AS SHOWN ON THE PLAN.
- INSTALL COMPOST SILT SOCK AS SHOWN ON THE EROSION PLAN.
- INITIATE STRIPPING AND STOCKILING OF TOPSOIL FOR THE PLANT EXPANSION AS SHOWN ON THE EROSION PLANS.
- BEGIN CONSTRUCTION OF PLANT EXPANSION.
- COMMENCE AND COMPLETE PERMANENT VEGETATIVE STABILIZATION OF ALL DISTURBED AREAS THAT ARE AT FINAL GRADE.
- UPON STABILIZATION OF ALL DISTURBED AREAS, REMOVE EROSION FACILITIES AND REGRADING COMPOST SILT SOCK TO REMAIN IN PLACE. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM OF 75% INDIAN FERN PERMANENT VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SURFACE CHARACTERISTICS SUFFICIENT TO RESIST RUNOFF OR OTHER MOVEMENTS.

AT FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENTATION CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF CONTROLS MUST BE STABILIZED IMMEDIATELY.

GENERAL SEEDING AND SURFACE STABILIZATION CRITERIA

DISTURBED AREAS ON WHICH ACTIVITIES HAVE CEASED MUST BE STABILIZED IMMEDIATELY. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED TO THE ENTIRE SURFACE OF THE DISTURBED AREA. THE MULCH SHALL BE PROPERLY PLACED, DEPOSITED AND MAINTAINED ACCORDING TO CHAPTER 16B REGULATIONS. THE OPERATOR SHALL ALSO NOTIFY THE BERKS COUNTY CONSERVATION DISTRICT IN WRITING OF ALL RECEIVING AREAS, AND BORROW AREAS WHICH THEY HAVE BEEN IDENTIFIED.

TEMPORARY VEGETATIVE SURFACE STABILIZATION

THE FOLLOWING ACTIVITIES SHALL BE UNDERTAKEN TO ACHIEVE TEMPORARY STABILIZATION OF ALL EXPOSED AND DISTURBED SOIL AREAS AS REQUIRED OR DIRECTED.

- TILLING - UPON SUSPENSION OF GRADING ACTIVITIES IN DISTURBED AREAS, SURFACE SOIL SHALL BE TILLED AND LOOSENEED. TILLING MAY BE OMITTED IF SOIL IS SUFFICIENTLY LOOSE TO PERMIT SEEDING ACTIVITIES.
- LIME APPLICATION - GROUND LIMESTONE SHALL BE APPLIED TO THE LOOSENEED SOIL AT A UNIFORM RATE OF 40 POUNDS PER 1000 SQUARE FEET. THIS RATE IS IN POUNDS OF AGRICULTURAL GRADE LIMESTONE PER 1000 SQUARE FEET. (1 TON/ACRE * 2000 LBS/TON = 2000 POUNDS PER 1000 SQUARE FEET)
- FERTILIZER APPLICATION - 5-5-5 FERTILIZER SHALL BE APPLIED TO THE LOOSENEED SOIL AT A UNIFORM RATE OF 5 POUNDS PER 1000 SQUARE FEET.
- TEMPORARY SEEDING - THE FOLLOWING SEED MIXTURE SHALL BE APPLIED TO THE PREPARED SOIL SURFACE BY BROADCAST SPREADERS OR FERTILIZERS ACCORDING TO THE FOLLOWING RATES OF APPLICATION:
1. PERMANENT VEGETATIVE SURFACE STABILIZATION - ANNUAL RYS GRASS SHALL BE APPLIED AT A RATE OF FOUR POUNDS PURE LIVE SEED PER 1000 SQUARE FEET.
- AFTER MECHANICAL SEEDING, SEED SHALL BE COVERED BY MEANS OF LIGHT RAKING TO A DEPTH OF ONE-QUARTER INCH OF SOIL.
- HAY OR STRAW MULCH SHALL BE APPLIED AT A RATE OF 3 TONS/ACRE.

STABILIZATION DURING NON-GERMINATION PERIODS

DURING NON-GERMINATION PERIODS, MULCH MUST BE APPLIED TO DISTURBED AREAS AT A RATE OF 3 TONS/ACRE. THE NON-GERMINATION PERIOD SHALL BE DETERMINED BASED ON CURRENT WEATHER CONDITIONS. IT IS USUALLY THE PERIOD FROM OCTOBER 15 TO MARCH 15. AREAS MULCHED DURING NON-GERMINATION PERIODS MUST BE LIMED, FERTILIZED, SEEDED AND MULCHED IMMEDIATELY.

PERMANENT VEGETATIVE SURFACE STABILIZATION

- TILLING - UPON COMPLETION OF GRADING ACTIVITIES, SURFACE SOIL SHALL BE TILLED AND LOOSENEED. TILLING MAY BE OMITTED IF SOIL IS SUFFICIENTLY LOOSENEED FOLLOWING THE FINAL GRADING ACTIVITIES.
- LIME APPLICATION - GROUND LIMESTONE SHALL BE APPLIED TO THE LOOSENEED SOIL AT A UNIFORM RATE OF 100 POUNDS PER 1000 SQUARE FEET. THIS RATE IS IN POUNDS OF AGRICULTURAL GRADE LIMESTONE PER 100 SQUARE FEET.
- BASE FERTILIZER APPLICATION - FERTILIZER SHALL BE APPLIED TO THE SOIL AT THE RATE ESTABLISHED BY THE SOIL TESTING, AS REQUIRED TO ACCOMMODATE PROPER GROWTH OF THE SEED MIXTURE.

THE FOLLOWING BASE FERTILIZER APPLICATION RATE SHALL BE EMPLOYED:

- AS A MINIMUM, IN 20-20 FERTILIZER SHALL BE APPLIED AT A UNIFORM RATE OF 20 POUNDS PER 1000 SQUARE FEET.
- MIXING - GROUND LIMESTONE AND FERTILIZER SHALL BE MIXED WITH THE SOIL TO A DEPTH OF FOUR INCHES THROUGH USE OF SUITABLE EQUIPMENT.
- SEEDING - SEED MIXTURE SHALL BE APPLIED TO THE PREPARED SOIL SURFACE BY BROADCAST SPREADERS OR HYDRAULIC APPLICATION ACCORDING TO THE FOLLOWING RATES OF APPLICATION:
1. PERMANENT VEGETATIVE SURFACE STABILIZATION - ANNUAL RYS GRASS SHALL BE APPLIED AT A RATE OF FOUR POUNDS PURE LIVE SEED PER 1000 SQUARE FEET. AFTER SEEDING, SEED SHALL BE COVERED BY MEANS OF LIGHT RAKING TO A DEPTH OF ONE-QUARTER INCH OF SOIL.
- HAY OR STRAW MULCH SHALL BE APPLIED AT A RATE OF 3 TONS/ACRE.

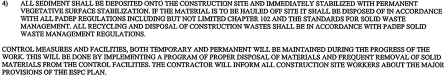
NO AVOIDANCE MAINTENANCE PROGRAM WHICH PROVIDES FOR INSPECTION OF BMPs ON A WEEKLY BASIS AND AFTER EACH MEASURABLE RAINFALL EVENT, INCLUDING THE REPAIR OF THE BMPs TO ENSURE EFFECTIVE AND EFFICIENT OPERATION.

- UNTIL THE SITE IS STABILIZED, THE OWNER AND/OR CONTRACTOR SHALL PROPERLY IMPLEMENT, OPERATE AND MAINTAIN ALL EROSION AND THE BEST MANAGEMENT PRACTICES (BMPs). MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION BMPs AFTER EACH RAINFALL EVENT AND ON A WEEKLY BASIS. ALL SITE INSPECTIONS WILL BE DOCUMENTED IN AN INSPECTION LOG. THE LOG WILL CONTAIN THE COMPLIANCE ACTIONS AND THE DATE, TIME, AND NAME OF THE PERSON CONDUCTING THE INSPECTION. THE INSPECTION LOG WILL BE KEPT ON SITE AT ALL TIMES AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST.
- ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, RE-EVALUATING, AND REFINISHING, MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENTATION BMPs FAIL TO PERFORM AS DESCRIBED, REPLACEMENT BMPs OR MODIFICATION OF THOSE INSTALLED WILL BE NEEDED.
- WHERE BMPs ARE FOUND TO FAIL TO ALLEViate EROSION OR SEDIMENT POLLUTION, THE PERMITTEE OR CO-PERMITTEE SHALL INCLUDE THE FOLLOWING INFORMATION:
1. THE LOCATION AND SEVERITY OF THE BMP FAILURE AND ANY POLLUTION EVENTS.
2. ALL STEPS TAKEN TO REDUCE ELIMINATE AND PREVENT THE REOCCURRENCE OF THE NONCOMPLIANCE.
3. THE TIME TO CORRECT THE NON-COMPLIANCE, INCLUDING THE EXACT DATES WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE.

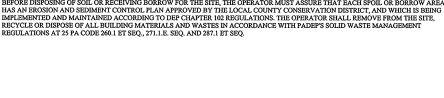
- BEFORE INITIATING ANY REVISIONS TO THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN OR REVISIONS TO OTHER PLANS THAT MAY AFFECT THE EFFECTIVENESS OF THE APPROVED EROSION CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE BERKS COUNTY CONSERVATION DISTRICT.
- THE SEDIMENT TRAPPED BEHIND THE COMPOST SILT SOCK MUST BE REMOVED AT THE PROPER TIME IN ORDER FOR THE BARRIERS TO BE EFFECTIVE. THEY WILL BE CLEANED WHEN THE SEDIMENT LEVEL REACHES ONE-HALF THE HEIGHT OF THE SOCK.
- SEEDED AREA WILL BE RESTORED, RESEEDED AND MULCHED IMMEDIATELY SHOULD ANY DAMAGES OR DISTURBANCES OCCUR. THE TEMPORARY CONTROL FACILITIES SHALL BE PROPERLY MAINTAINED UNTIL FINAL STABILIZATION OF THE CONSTRUCTION AREA IS COMPLETE.
- ALL SEDIMENT SHALL BE DEPOSITED ONTO THE CONSTRUCTION SITE AND IMMEDIATELY STABILIZED WITH PERMANENT VEGETATIVE SURFACE STABILIZATION. IF THE MATERIAL IS TO BE HAZARDOUS OR SITE SHALL BE DISPOSING OF IN ACCORDANCE WITH ALL PAIRP REGULATIONS INCLUDING BUT NOT LIMITED CHAPTER 102 AND THE STANDARDS FOR SOLID WASTE MANAGEMENT. ALL RECYCLING AND DISPOSAL OF CONSTRUCTION WASTES SHALL BE IN ACCORDANCE WITH PAIRP SOLID WASTE MANAGEMENT REGULATIONS.

CONTROL MEASURES AND FACILITIES, BOTH TEMPORARY AND PERMANENT WILL BE MAINTAINED DURING THE PROGRESS OF THE WORK. THIS WILL BE DONE BY IMPLEMENTING A PROGRAM OF PROPER DISPOSAL OF MATERIALS AND PREVENT REMOVAL OF SOLID MATERIALS FROM THE CONTROL FACILITIES. THE CONTRACTOR WILL INFORM ALL CONTRACTORS AND WORKERS ABOUT THE MAJOR PROVISIONS OF THE EROSION PLAN.

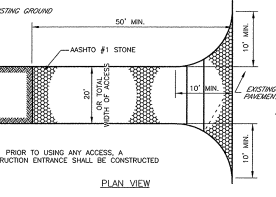
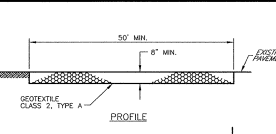
BEFORE DISPOSING OF SOIL OR RECEIVING BORROW FOR THE SITE, THE OPERATOR MUST ASSURE THAT EACH SHOOL OR BORROW AREA HAS AN EROSION AND SEDIMENTATION CONTROL PLAN APPROVED BY THE LOCAL COUNTY CONSERVATION DISTRICT, AND WHICH IS BEING IMPLEMENTED AND MAINTAINED ACCORDING TO CHAPTER 16B REGULATIONS. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE OR DISPOSAL OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH PAIRP SOLID WASTE MANAGEMENT REGULATIONS AT 26 PA CODE 28.101, 27.1, 27.11, 27.12, 27.13, 27.14, 27.15, 27.16, 27.17, 27.18, 27.19, 27.20, 27.21, 27.22, 27.23, 27.24, 27.25, 27.26, 27.27, 27.28, 27.29, 27.30, 27.31, 27.32, 27.33, 27.34, 27.35, 27.36, 27.37, 27.38, 27.39, 27.40, 27.41, 27.42, 27.43, 27.44, 27.45, 27.46, 27.47, 27.48, 27.49, 27.50, 27.51, 27.52, 27.53, 27.54, 27.55, 27.56, 27.57, 27.58, 27.59, 27.60, 27.61, 27.62, 27.63, 27.64, 27.65, 27.66, 27.67, 27.68, 27.69, 27.70, 27.71, 27.72, 27.73, 27.74, 27.75, 27.76, 27.77, 27.78, 27.79, 27.80, 27.81, 27.82, 27.83, 27.84, 27.85, 27.86, 27.87, 27.88, 27.89, 27.90, 27.91, 27.92, 27.93, 27.94, 27.95, 27.96, 27.97, 27.98, 27.99, 27.100.



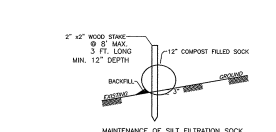
PUMPED WATER FILTER BAG
N.T.S.



STREAM CROSSING DETAIL
N.T.S.



STABILIZED CONSTRUCTION ENTRANCE
N.T.S.

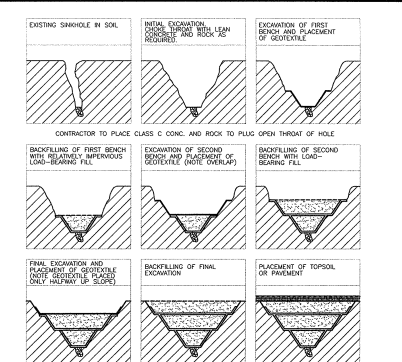


SILT FILTRATION SOCK
SCALE: N.T.S.

MAINTENANCE OF SILT FILTRATION SOCK
SILT FILTRATION SOCKS MUST BE PLACED AT LEVEL GRADE. BOTH ENDS OF THE MAIN BARRIERS ALIGNMENT.
SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH 1/2 OF THE EFFECTIVE HEIGHT OF THE SOCK. WORK WITH CARE!
ANY SECTION OF FILTER SILT FILTRATION SOCK WHICH HAS BEEN DAMAGED MUST BE IMMEDIATELY REPAIRED BY PLACING A NEW SOCK ON THE UP-DRAIN SIDE. COMPOST MATERIAL TO BE DISPERSED ON SITE AS DETERMINED BY THE ENGINEER.

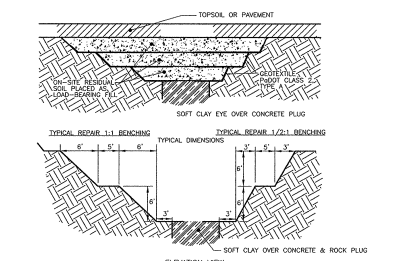
ROCK CONSTRUCTION ENTRANCE SPECIFICATIONS

- STONE SIZE - USE AASHO #1 OR RECYCLED CONCRETE EQUIVALENT. LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET. THICKNESS - NOT LESS THAN EIGHT (8) INCHES. WIDTH - THIRTY (30) FEET OR TOTAL WIDTH OF ACCESS, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INCREASE OR DECREASE OCCURS. IF IT IS DIFFICULT TO PLACE, A MOUNTABLE BEAM WITH 5:1 SLOPES WILL BE PERMITTED.
- FILTER CLOTH - WILL SURFACE OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
- SPRING WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCE SHALL BE PASSED ACROSS ENTRANCE. IF SPRING IS UNPRACTICAL, A MOUNTABLE BEAM WITH 5:1 SLOPES WILL BE PERMITTED.
- MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT FLOWING OR DIVERTING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS REQUIRES PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND TO MAINTAIN 8\"/>
- WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON STABILIZED STONE WHICH DRAINS INTO AN AREA WITH AN APPROVED SEDIMENT TRAPPING DEVICE. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAINFALL EVENT.
- ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE.



TYPICAL SINKHOLE REPAIR DETAILS

IF AN OPEN THROAT IS OBSERVED, PLACE CLASS C CONCRETE AND ROCK TO PUMP AS NOTED TO THE LEVEL OF THE PRESENT EXCAVATION. CONTINUE AS NOTED.



TYPICAL REPAIR

PUMPED WATER FILTER BAG NOTES

- FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 50 MICRONS.
- A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES MUST BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED.
- BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREAS AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE FLOW PATH SHALL BE PROVIDED. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 2:1.
- THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED.
- THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP KINKERS SHOULD BE FLUATING AND SCREENED.

EROSION & SEDIMENTATION CONTROL DETAILS/NOTES

GOLDEN OAKS WWTP EXPANSION

PROJECT LOCATION:	RUSCOMBMANOR TOWNSHIP	PROJECT NO.:	0502-0703
DRAWN BY:	AFC	APPROVED BY:	CMH
SCALE:	AS SHOWN	DATE:	07/08

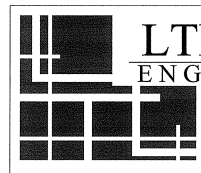
LTL CONSULTANTS, LTD.
ENGINEERS & CODE OFFICIALS
1000 N. MARKET STREET, SUITE 100
PHILADELPHIA, PA 19107

SHEET NO.: ES.002

NO.	DESCRIPTION	DATE	BY

RUSCOMBMANOR TOWNSHIP BERKS COUNTY, PA GOLDEN OAKS WASTEWATER TREATMENT PLANT EXPANSION AUGUST 2008

PREPARED BY:

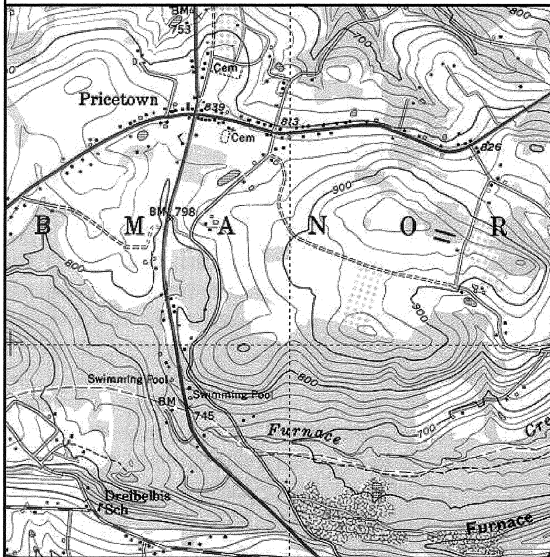


LTL CONSULTANTS, LTD.
ENGINEERS & CODE OFFICIALS

P O BOX 241
ONE TOWN CENTRE DRIVE OLEY, PA 19547

PROJECT LOCATION

SCALE: 1" = 1000 FEET



INDEX TO DRAWINGS

GENERAL

- G.001 TITLE PAGE
- G.002 PROCESS AND INSTRUMENTATION DIAGRAM
- G.003 YARD PIPING AND UNIT LOCATION
- G.004 HYDRAULIC PROFILE (NOT INCLUDED IN THIS SET)

STRUCTURAL

- S.001 WWTP - BLOWER/CONTROL BUILDING PLAN, SCHEDULES & SECTIONS
- S.002 WWTP - BLOWER/CONTROL BUILDING ELEVATIONS

MECHANICAL

- M.001 WWTP - PLAN VIEW
- M.002 WWTP - EQUALIZATION TANKS
- M.003 WWTP - AERATION TANKS
- M.004 WWTP - AERATION TANKS
- M.005 WWTP - AERATION & CLARIFIER TANKS
- M.006 WWTP - CHLORINATION & SLUDGE HOLDING TANKS
- M.007 WWTP - BLOWER/CONTROL BUILDING EQUIPMENT LAYOUT (NOT INCLUDED IN THIS SET)
- M.008 WWTP - MECHANICAL DETAILS (NOT INCLUDED IN THIS SET)

DEMOLITION

- D.001 WWTP - DEMOLITION PLAN

ELECTRICAL

- E.001 SINGLE LINE DIAGRAM (NOT INCLUDED IN THIS SET)

E&S

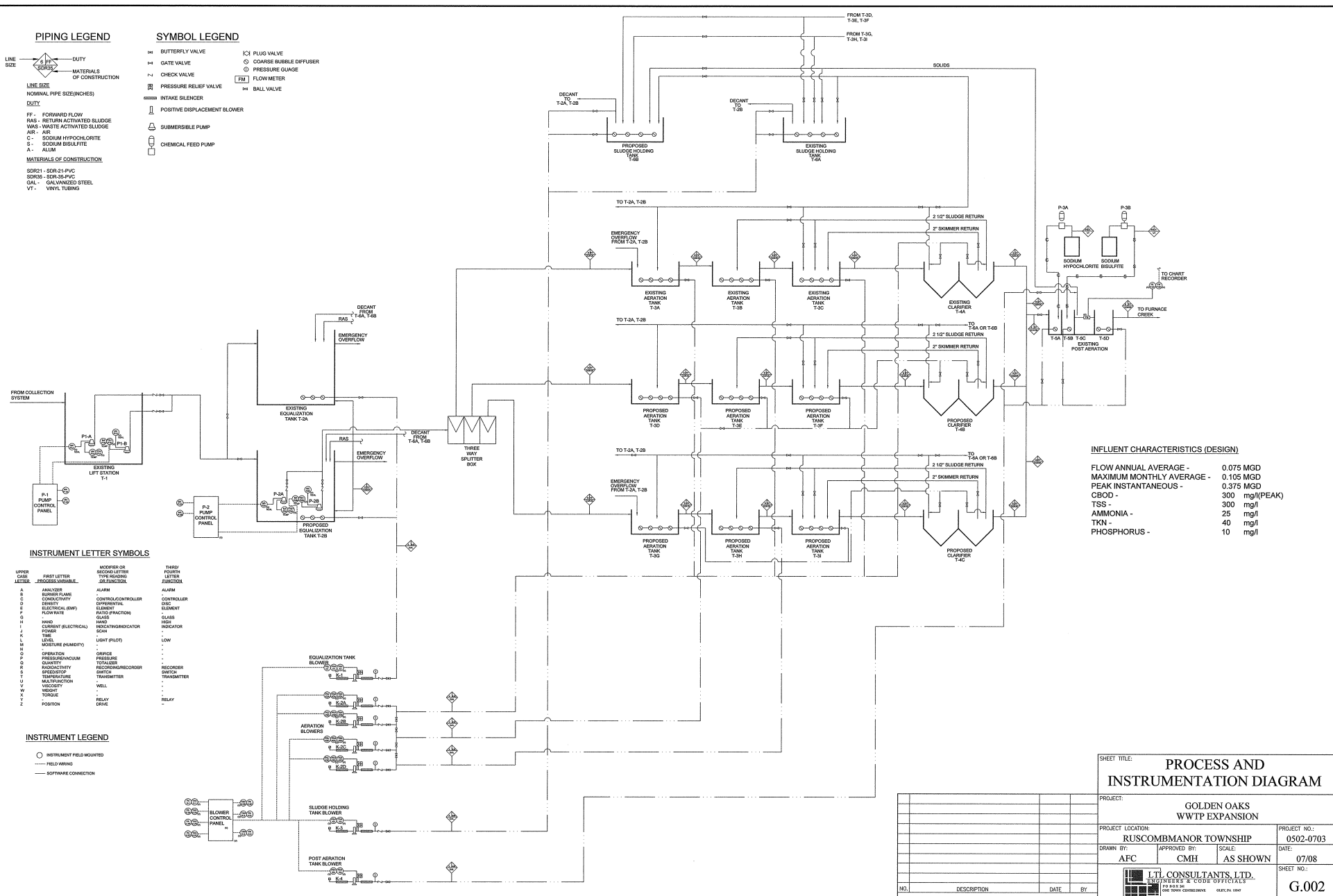
- ES.001 WWTP - GRADING PLAN
- ES.002 DETAILS/NOTES

PIPING LEGEND

- LINE SIZE: 6" 8" 10" 12" 14" 16" 18" 20" 24" 30" 36" 42" 48" 60" 72" 84" 96" 108" 120"
- MATERIALS OF CONSTRUCTION:
 DUTY: FF - FORWARD FLOW
 RAS - RETURN ACTIVATED SLUDGE
 WAS - WASTE ACTIVATED SLUDGE
 AIR - AIR
 C - SODIUM HYPOCHLORITE
 S - SODIUM BISULFITE
 A - ALUM
- MATERIALS OF CONSTRUCTION:
 SDR21 - SDR 21 PVC
 SDR35 - SDR 35 PVC
 GAL - GALVANIZED STEEL
 VT - VINYL TUBING

SYMBOL LEGEND

- BT BUTTERFLY VALVE
 GV GATE VALVE
 CV CHECK VALVE
 PRV PRESSURE RELIEF VALVE
 ISB INTAKE BLENDER
 PDB POSITIVE DISPLACEMENT BLOWER
>
 SP SUBMERSIBLE PUMP
 CFP CHEMICAL FEED PUMP
 PV PLUG VALVE
 CBD COARSE BUBBLE DIFFUSER
 PG PRESSURE GAUGE
 FM FLOW METER
 BV BALL VALVE



INFLUENT CHARACTERISTICS (DESIGN)

FLOW ANNUAL AVERAGE -	0.075 MGD
MAXIMUM MONTHLY AVERAGE -	0.105 MGD
PEAK INSTANTANEOUS -	0.375 MGD
CBOD -	300 mg/l (PEAK)
TSS -	300 mg/l
AMMONIA -	25 mg/l
TKN -	40 mg/l
PHOSPHORUS -	10 mg/l

INSTRUMENT LETTER SYMBOLS

UPPER CASE LETTER	FIRST LETTER - PROCESS VARIABLE	MODIFIER OR SECOND LETTER - INSTRUMENT FUNCTION	THIRD LETTER - INSTRUMENT FUNCTION
A	ANALYZER	ALARM	ALARM
B	BLOWER/BLOWER	BLOWER/BLOWER	BLOWER/BLOWER
C	CONDUCTIVITY	CONTROLLER	CONTROLLER
D	DENSITY	DIFFERENTIAL	DIFFERENTIAL
E	ELECTRICAL (EMP)	ELEMENT	ELEMENT
F	FLOW RATE	RATIO/FRACTION	GLASS
G	GAUGE	GLASS	GLASS
H	HAND CURRENT (ELECTRICAL)	INDICATOR/INDICATOR	INDICATOR
I	INDICATOR	INDICATOR	INDICATOR
J	JUNCTION	LOW	LOW
K	LEVEL	LOW	LOW
L	MOISTURE (HUMIDITY)	LOW	LOW
M	MIXER	LOW	LOW
N	OPERATION	OFFICE	OFFICE
O	OPERATION	OFFICE	OFFICE
P	PRESSURE/QUANTITY	PRESSURE	PRESSURE
Q	QUANTITY	TOP/FASE	TOP/FASE
R	RADIOACTIVITY	RECORDER/RECORDER	RECORDER
S	SENSOR	RECORDER/RECORDER	RECORDER
T	TEMPERATURE	RECORDER/RECORDER	RECORDER
U	ULTRASONIC	RECORDER/RECORDER	RECORDER
V	VELOCITY	RECORDER/RECORDER	RECORDER
W	WEIGHT	RECORDER/RECORDER	RECORDER
X	WELL	RECORDER/RECORDER	RECORDER
Y	YIELD	RECORDER/RECORDER	RECORDER
Z	POSITION	RECORDER/RECORDER	RECORDER

INSTRUMENT LEGEND

- INSTRUMENT FIELD MOUNTED
 --- FIELD WIRING
 --- SOFTWARE CONNECTION

NO.	DESCRIPTION	DATE	BY

SHEET TITLE: PROCESS AND INSTRUMENTATION DIAGRAM

PROJECT: GOLDEN OAKS WWTP EXPANSION

PROJECT LOCATION: RUSCOMBANOR TOWNSHIP

PROJECT NO.: 0502-0703

DRAWN BY: AFC

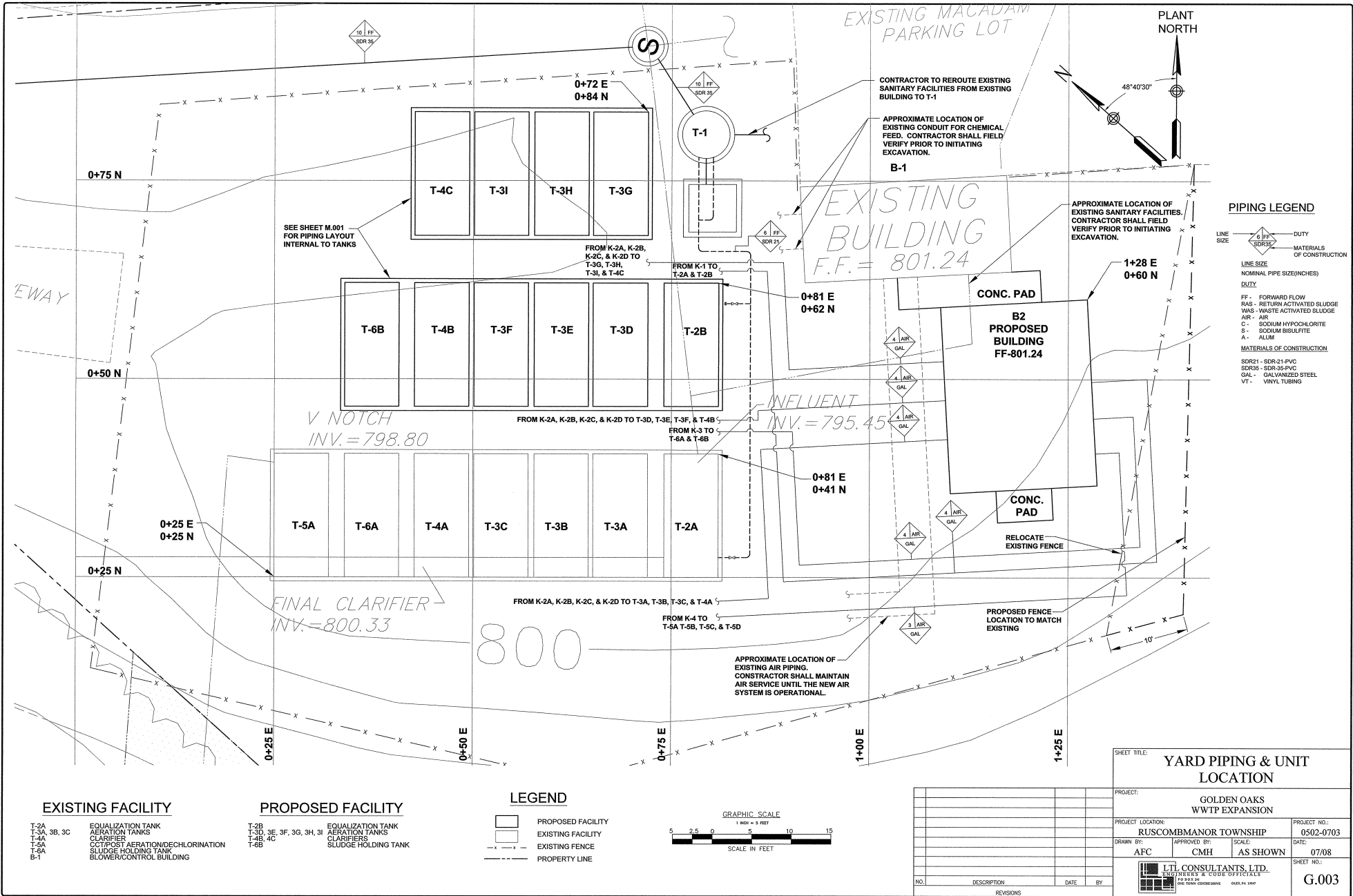
APPROVED BY: CMH

SCALE: AS SHOWN

DATE: 07/08

SHEET NO.: G.002

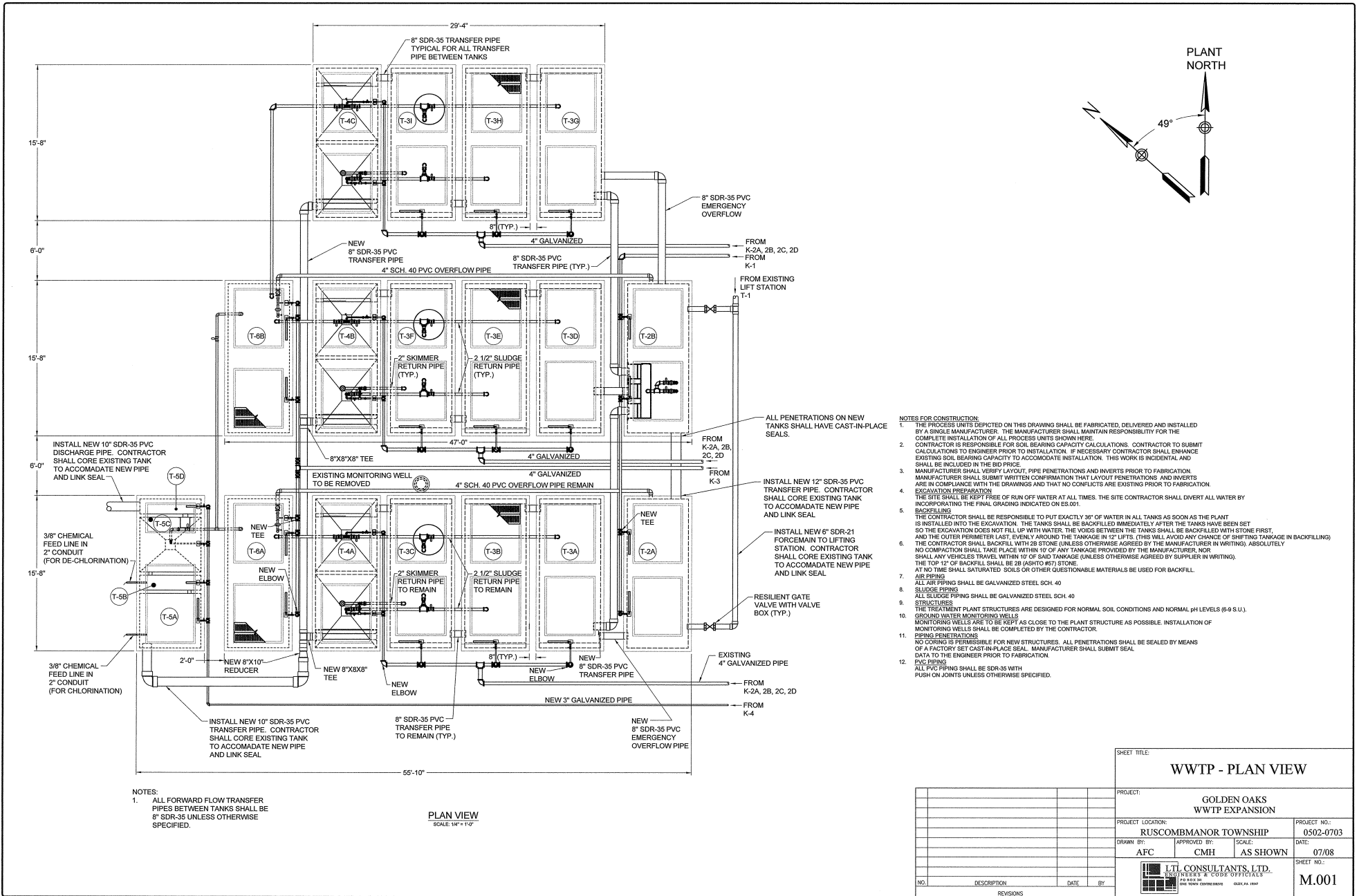
I.T.I. CONSULTANTS, LTD.
 ENGINEERS & CODE OFFICIALS
 100 YORK CENTENNIAL
 GUELPH, ONT. N1P 2K5



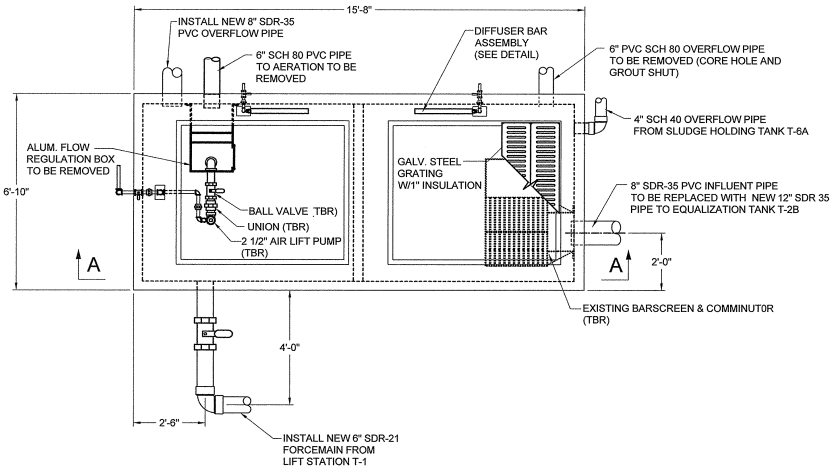
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PROJECT: GOLDEN OAKS TREATMENT PLANT EXPANSION (0502-0703 - C003) - Yard Piping & Unit Location.dwg, 6/7/2008 8:11:52 AM	
PROJECT LOCATION: RUSCOMBANOR TOWNSHIP	
PROJECT NO.:	0502-0703
DRAWN BY:	AFC
APPROVED BY:	CMH
SCALE:	AS SHOWN
DATE:	07/08
SHEET NO.:	G.003
I.T.I. CONSULTANTS, LTD. ENGINEERS & CODE OFFICIALS 100 TOWN CENTER DRIVE QUELLEN, ONT.	

NO.	DESCRIPTION	DATE	BY

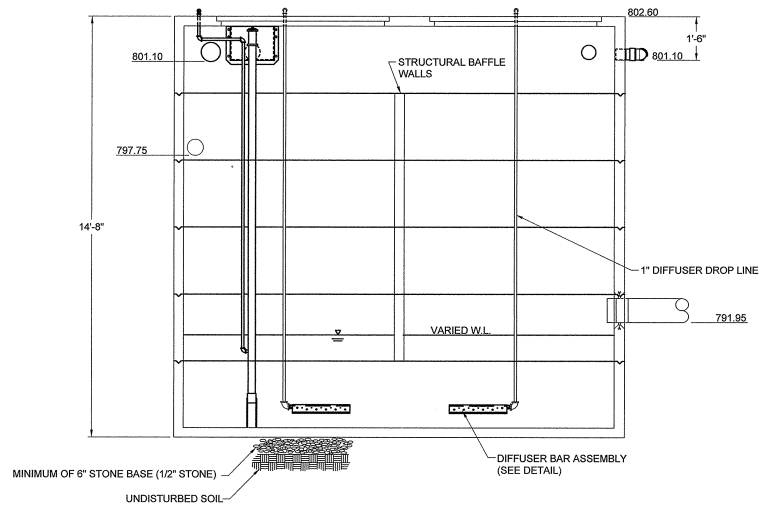
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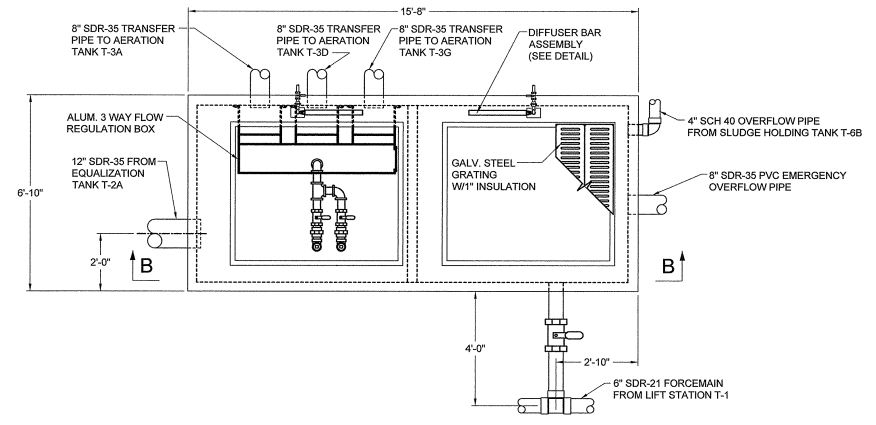
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PROJECT:		GOLDEN OAKS WWTP EXPANSION	
PROJECT LOCATION:		RUSCOMBANOR TOWNSHIP	
PROJECT NO.:	0502-0703	DATE:	07/08
DRAWN BY:	AFC	APPROVED BY:	CMH
SCALE:	AS SHOWN	SHEET NO.:	
		M.001	
NO.	DESCRIPTION	DATE	BY
REVISIONS			



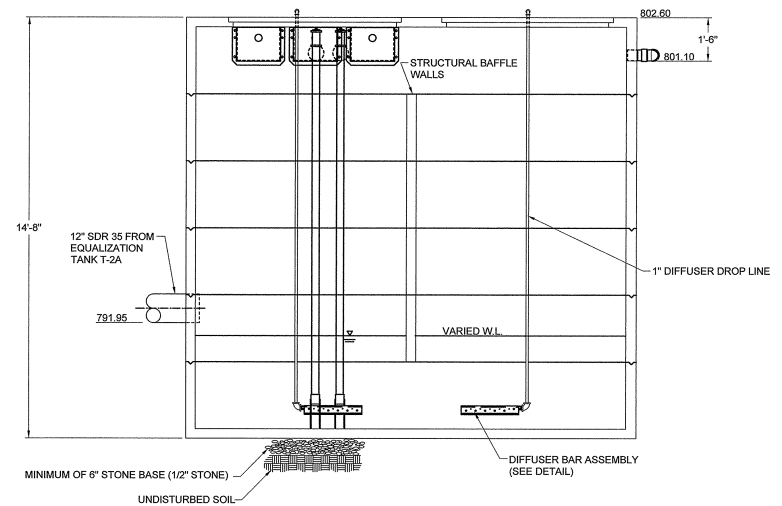
EXISTING EQUALIZATION TANK T-2A PLAN
SCALE: 1/2" = 1'-0"



EXISTING EQUALIZATION TANK SECTION A-A (T-2A)
SCALE: 1/2" = 1'-0"



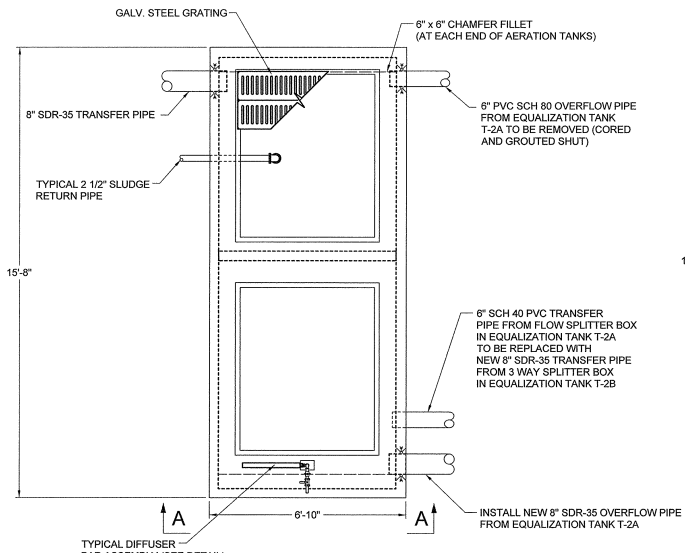
PROPOSED EQUALIZATION TANK T-2B PLAN
SCALE: 1/2" = 1'-0"



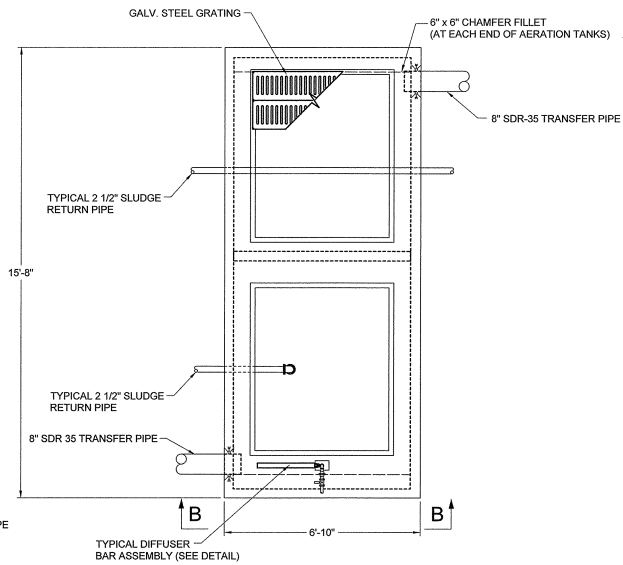
PROPOSED EQUALIZATION TANK SECTION B-B (T-2B)
SCALE: 1/2" = 1'-0"

SHEET TITLE: WWTP - EQUALIZATION TANK			
PROJECT: GOLDEN OAKS WWTP EXPANSION			
PROJECT LOCATION: RUSCOMBMANOR TOWNSHIP		PROJECT NO.: 0502-0703	
DRAWN BY: AFC	APPROVED BY: CMH	SCALE: AS SHOWN	DATE: 07/08
			SHEET NO.: M.002
NO.	DESCRIPTION	DATE	BY
REVISIONS			

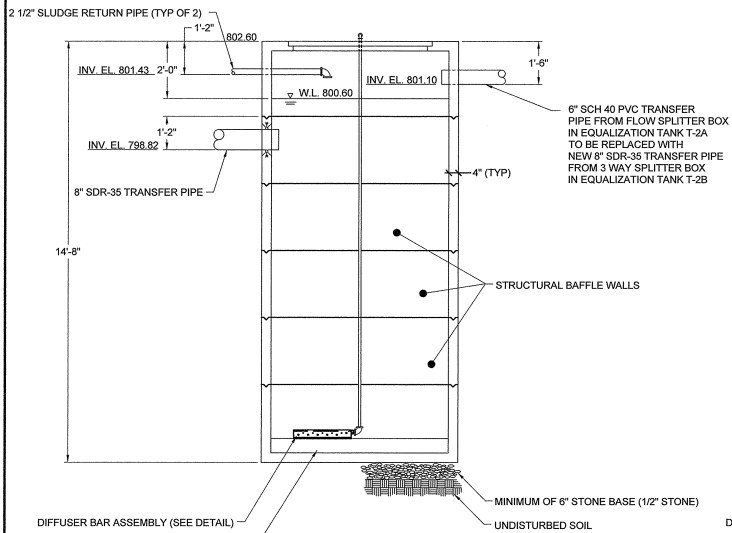
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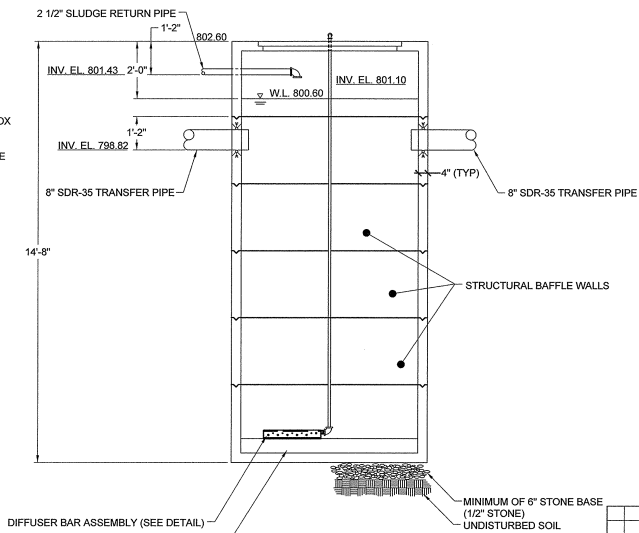
EXISTING AERATION TANK PLAN (T-3A)
SCALE: 1/2" = 1'-0"



PROPOSED AERATION TANK PLAN (EXISTING T-3B, T-3E, & T-3H)
SCALE: 1/2" = 1'-0"



EXISTING AERATION TANK SECTION A-A (T-3A)
SCALE: 1/2" = 1'-0"



PROPOSED AERATION TANK SECTION B-B (EXISTING T-3B, T-3E, & T-3H)
SCALE: 1/2" = 1'-0"

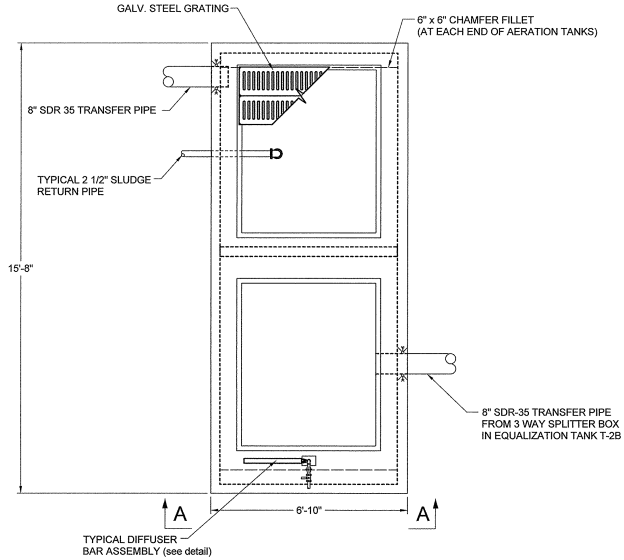
WWTP - AERATION TANKS

PROJECT: GOLDEN OAKS WWTP EXPANSION		PROJECT NO.: 0502-0703
PROJECT LOCATION: RUSCOMBMANOR TOWNSHIP		DATE: 07/08
DRAWN BY: APC	APPROVED BY: CMH	SCALE: AS SHOWN

I.T.I. CONSULTANTS, LTD.
ENGINEERS & CODE OFFICIALS
INCORPORATED
ONE YORK SQUARE DRIVE
GLEN PLAZA 1100

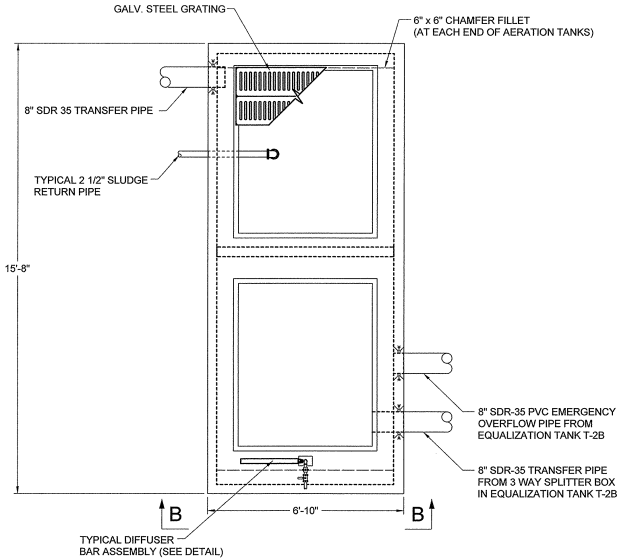
SHEET NO.: **M.003**

NO.	DESCRIPTION	DATE	BY



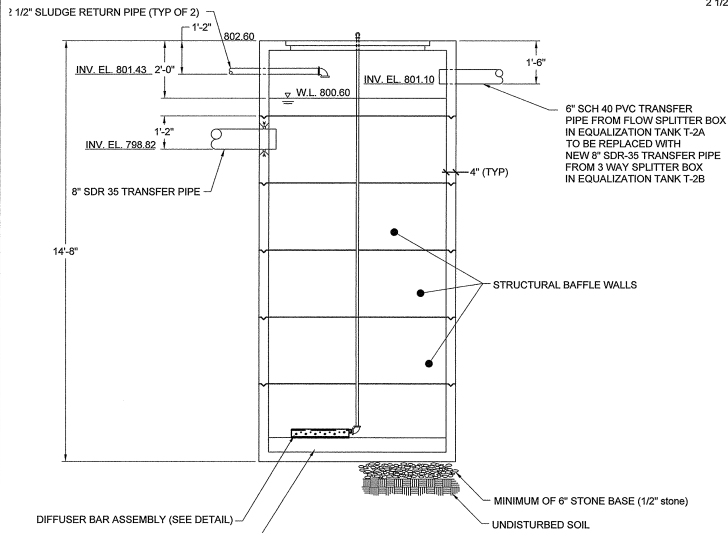
PROPOSED AERATION TANK PLAN (T-3D)

SCALE: 1/2" = 1'-0"



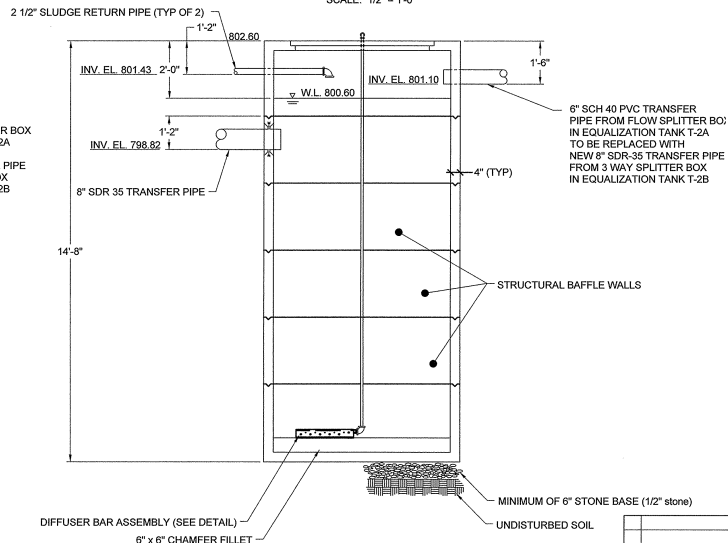
PROPOSED AERATION TANK PLAN (T-3G)

SCALE: 1/2" = 1'-0"



PROPOSED AERATION TANK SECTION A-A (T-3D)

SCALE: 1/2" = 1'-0"

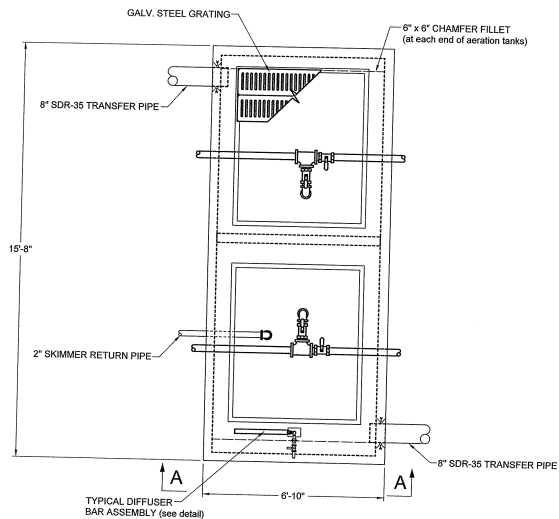


PROPOSED AERATION TANK SECTION B-B (T-3G)

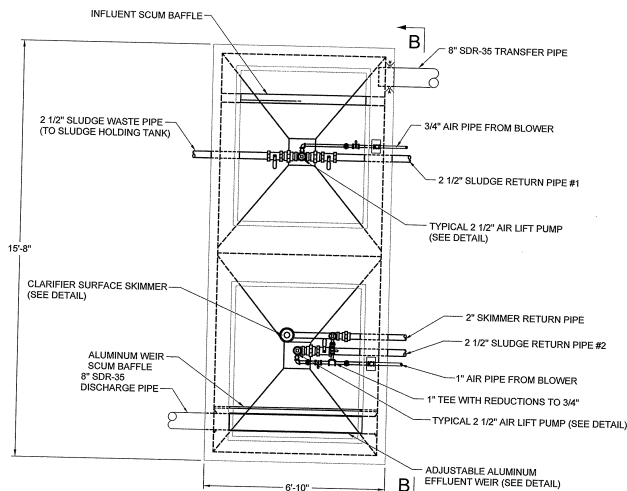
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NO.	DESCRIPTION	DATE	BY

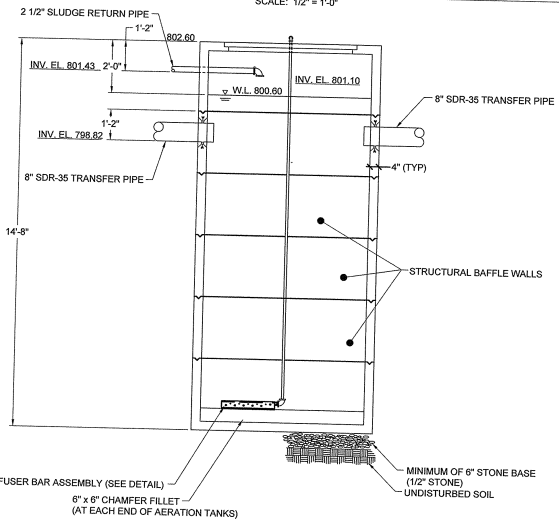
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PROJECT: GOLDEN OAKS WWTP EXPANSION			
PROJECT LOCATION: RUSCOMBMANOR TOWNSHIP		PROJECT NO.: 0502-0703	
DRAWN BY: AFC	APPROVED BY: CMH	SCALE: AS SHOWN	DATE: 07/08
			SHEET NO.: M.004



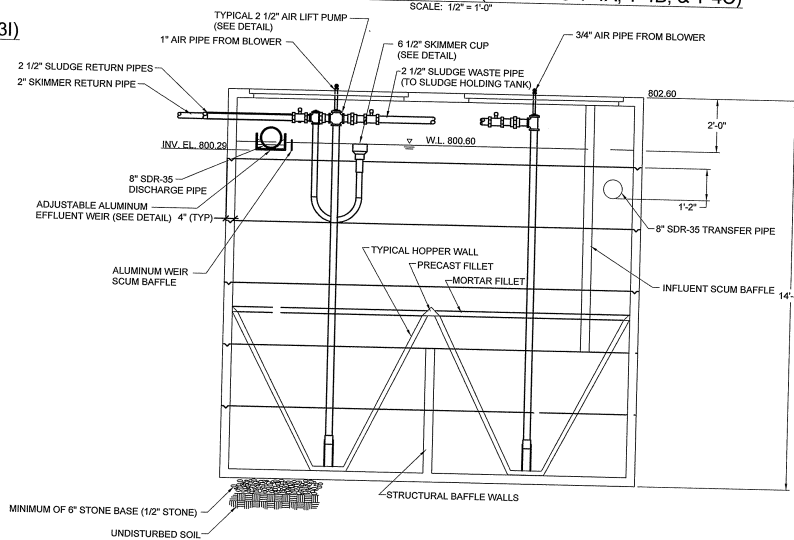
PROPOSED AERATION TANK PLAN (EXISTING T-3C, T-3F, & T-3I)
SCALE: 1/2" = 1'-0"



PROPOSED CLARIFIER TANK PLAN (EXISTING T-4A, T-4B, & T-4C)
SCALE: 1/2" = 1'-0"



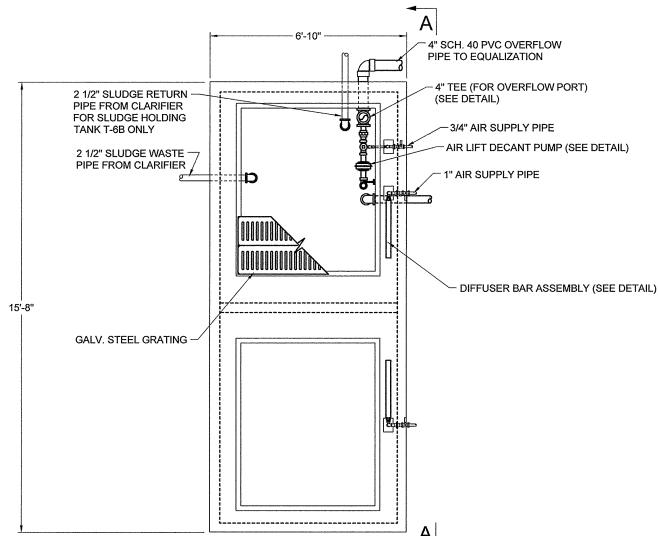
PROPOSED AERATION TANK SECTION A-A (EXISTING T-3C, T-3F, & T-3I)
SCALE: 1/2" = 1'-0"



PROPOSED CLARIFIER TANK SECTION B-B (EXISTING T-4A, T-4B, & T-4C)
SCALE: 1/2" = 1'-0"

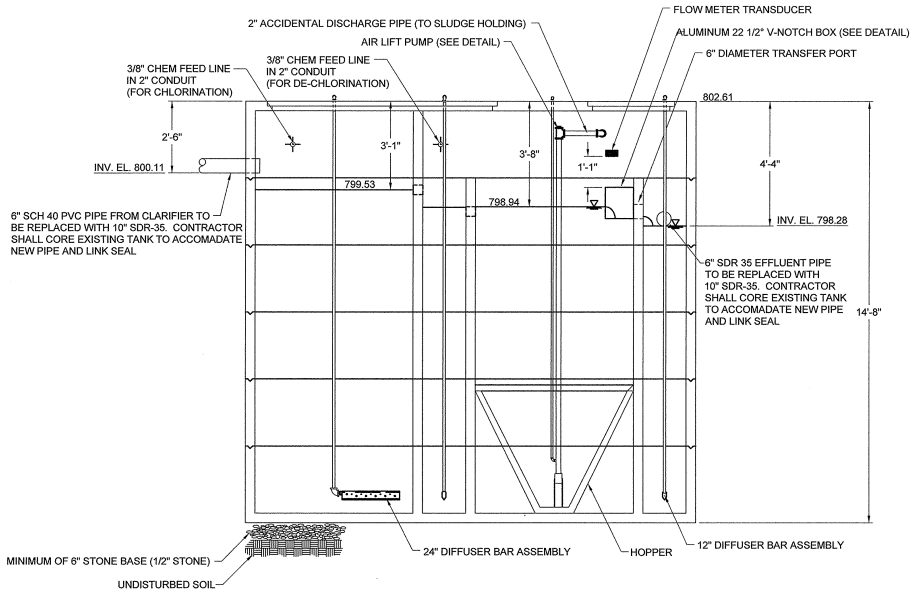
NO.	DESCRIPTION	DATE	BY

SHEET TITLE: WWTP - AERATION & CLARIFIER TANKS			
PROJECT: GOLDEN OAKS WWTP EXPANSION		PROJECT NO.: 0502-0703	
PROJECT LOCATION: RUSCOMBMANOR TOWNSHIP			
DRAWN BY: AFC	APPROVED BY: CMH	SCALE: AS SHOWN	DATE: 07/08
LTL CONSULTANTS, LTD. ENGINEERS & CODE OFFICIALS 15 HURON ST. PO BOX 301 300 WYOMING DRIVE GUELPH, ONT. N1G 5S6			SHEET NO.: M.005



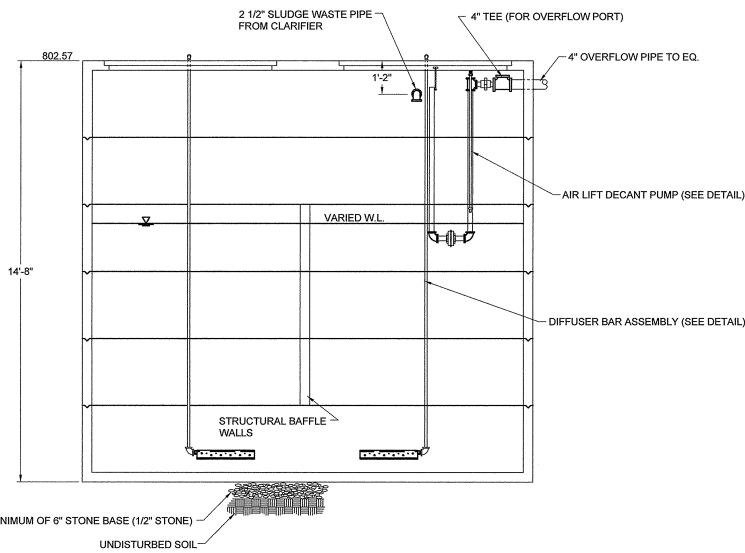
PROPOSED SLUDGE HOLDING TANK PLAN (EXISTING T-6A & T-6B)

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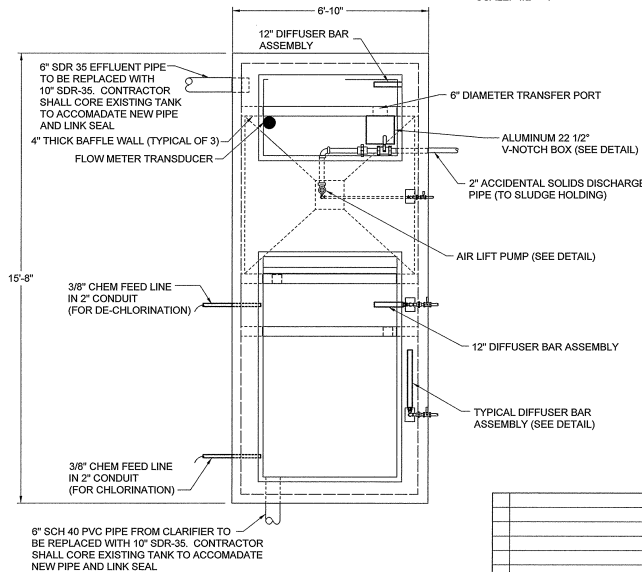
EXISTING CHLORINE CONTACT/DE-CHLORINATION/FLOW METERING/POST AERATION TANK SECTION

SCALE: 1/2" = 1'



EXISTING SLUDGE HOLDING TANK SECTION A-A (EXISTING T-6A & T-6B)

SCALE: 1/2" = 1'



EXISTING CHLORINE CONTACT/DE-CHLORINATION/FLOW METERING/POST AERATION TANK PLAN

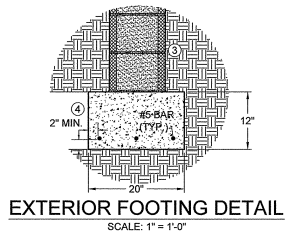
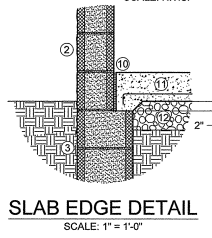
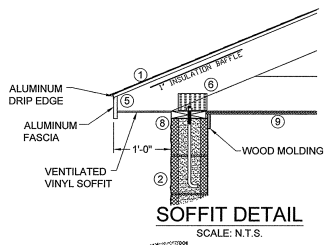
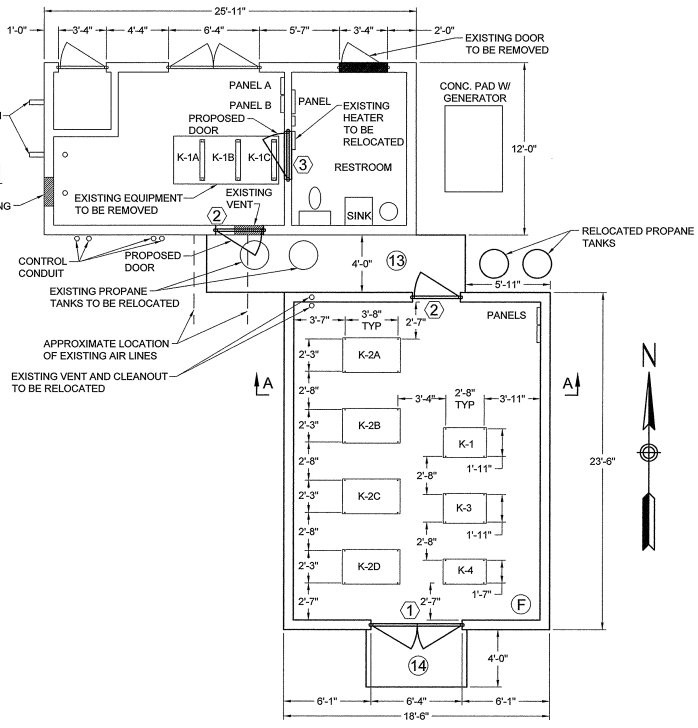
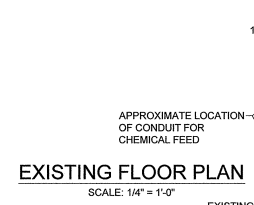
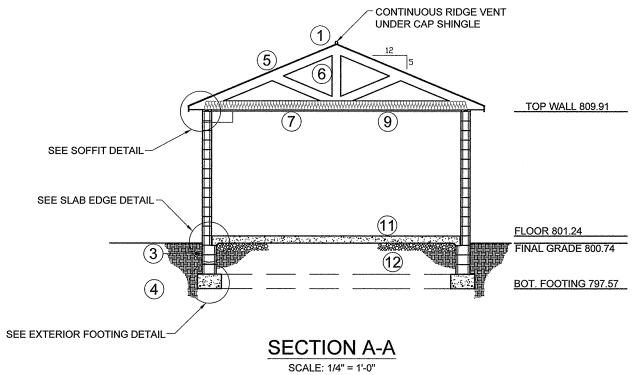
SCALE: 1/2" = 1'

NO.	DESCRIPTION	DATE	BY

SHEET TITLE: WWTP - SLUDGE HOLDING & CHLORINATION TANKS			
PROJECT: GOLDEN OAKS WWTP EXPANSION		PROJECT NO.: 0502-0703	
PROJECT LOCATION: RUSCOMBMANOR TOWNSHIP			
DRAWN BY: AFC	APPROVED BY: CMH	SCALE: AS SHOWN	DATE: 07/08
			SHEET NO.: M.006

DOOR & WINDOW SCHEDULE

LABEL	TYPE	NOM. SIZE	MASONRY OPENING	LINTEL REINF.	NOTES	LINTEL DETAIL
①	EXTERIOR STEEL DOUBLE DOOR	6'-0" x 6'-8"	6'-4" x 7'-4"	2 - #4 BARS	INSULATED, 1-3/4" THICK, 2" HEAD AND JAMB. GLASS TO BE CLEAR, WIRE GLASS. HARDWARE TO INCLUDE LOCKSET, HEAD & FOOT BOLTS, 3 PAIR BUTTS, ASTRAGAL, THRESHOLD, CLOSERS AND WEATHERSTRIPPING.	
②	EXTERIOR STEEL SINGLE DOOR	3'-0" x 6'-8"	3'-4" x 7'-4"	2 - #4 BARS	ONE-LITE INSULATED, 1-3/4" THICK, 2" HEAD AND JAMB. GLASS TO BE CLEAR, WIRE GLASS. HARDWARE TO INCLUDE LOCKSET, 3 PAIR BUTTS, ASTRAGAL, THRESHOLD, CLOSERS AND WEATHERSTRIPPING.	
③	INTERIOR STEEL SINGLE DOOR	3'-0" x 6'-8"	3'-4" x 7'-4"	2 - #4 BARS	1-3/4" THICK, 2" HEAD AND JAMB. HARDWARE TO INCLUDE PRIVACY LOCKSET, 3 PAIR BUTTS, ASTRAGAL, THRESHOLD, CLOSERS.	



- ① ASPHALT-FIBERGLASS ROOF SHINGLES LAID OVER 30 LB. FELT.
- ② 8"x8"x16" SPLIT-FACE CONCRETE MASONRY UNITS. ROCK FACE COLOR TO MATCH EXISTING BUILDING. PROVIDE SAMPLE TO ENGINEER. #4 VERTICAL REINF. @ 48" O.C. AND EACH SIDE OF OPENING. SOUND ABSORBING TYPE SHALL SURROUND BLOWER UNIT ROOM.
- ③ 12" CMU FOUNDATION WALL. APPLY DAMPPROOFING BELOW GRADE. TOP COURSE GROUTED SOLID.
- ④ CONTINUOUS 12"x20" CONCRETE FOOTING. REINFORCE WITH 3-#5 BARS. 3000 PSI, SOIL BEARING CAPACITY ASSUMED TO BE 2500 PSF CONTRACTOR TO VERIFY AND IF NECESSARY, CONTRACTOR SHALL ENHANCE EXISTING SOIL BEARING CAPACITY TO ACCOMMODATE INSTALLATION. THIS WORK IS INCIDENTAL AND SHALL BE INCLUDED IN THE BID PRICE.
- ⑤ 5/8" THICK PLYWOOD ROOF DECKING
- ⑥ PREFAB TRUSSES SPACED @ 24" O.C. CHORD SIZES, BRACING AND UPLIFT BRACKETS AS REQUIRED BY TRUSS MANUFACTURER. DESIGNED FOR 30 PSF ROOF SNOW LOAD.
- ⑦ R-38 BATT INSULATION ABOVE CEILING
- ⑧ CONTINUOUS 2x8 PRESSURE TREATED TOP PLATE WITH 5/8" x 16" LONG ANCHOR BOLTS AT EACH GROUTED CELL
- ⑨ 5/8" THICK EXTERIOR PAINT GRADE PLYWOOD CEILING WITH TWO COATS EPOXY PAINT. CEILING SHALL BE SEALED AND MADE VAPOR TIGHT.
- ⑩ 1/2" THICK PRE-MOLDED EXPANSION JOINT MATERIAL TYPICAL AT PERIMETER OF FLOOR SLAB.
- ⑪ 6" THICK CONCRETE SLAB ON GRADE. REINFORCE SLAB WITH 6x6 1.4x1.4 WWF. 4000 PSI, 6% AIR, WHITE CURING COMPOUND.
- ⑫ PROVIDE 8" CRUSHED 28 STONE FILL AND 6 MIL POLYETHYLENE VAPOR BARRIER UNDER SLAB.
- ⑬ CONCRETE PAD 48"x216"x5" THK. WITH PERIMETER TURNED DOWN TO 12" BELOW GRADE. PAD TO BE REINFORCED WITH 6x6 W1.4xW1.4 WWF, OVER 8" COMPACTED 28 STONE. 4000 PSI, 6% AIR, WHITE CURING COMPOUND.
- ⑭ CONCRETE PAD 48"x84"x5" THK. WITH PERIMETER TURNED DOWN TO 12" BELOW GRADE. PAD TO BE REINFORCED WITH 6x6 W1.4xW1.4 WWF, OVER 8" COMPACTED 28 STONE. 4000 PSI, 6% AIR, WHITE CURING COMPOUND.
- F FIRE EXTINGUISHER

SHEET TITLE: WWTP - BLOWER/CONTROL BUILDING PLAN, SCHEDULES & SECTIONS

PROJECT: GOLDEN OAKS WWTP EXPANSION

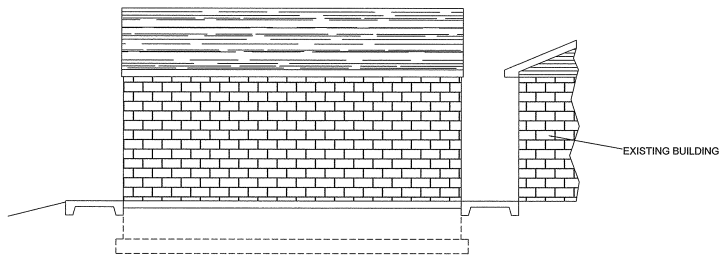
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DRAWN BY: AFC APPROVED BY: CMH SCALE: AS SHOWN DATE: 07/08

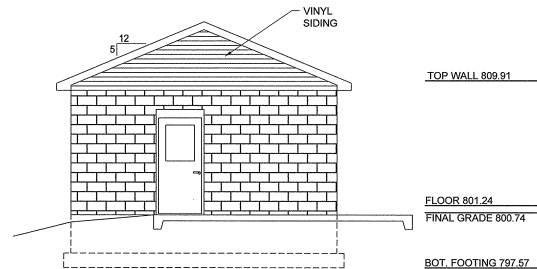
I.T.I. CONSULTANTS, LTD.
ENGINEERS & CODE OFFICIALS
208 YORK STREET SUITE 200
GLENDALE, IL 60131

SHEET NO.: S.001

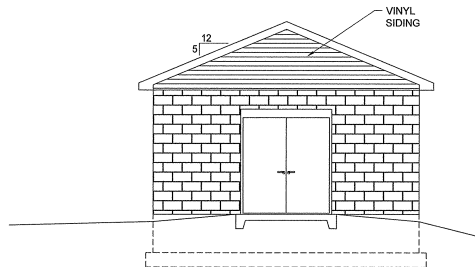
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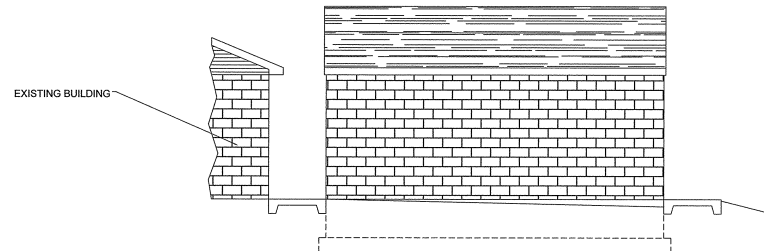
EAST ELEVATION
SCALE: 1/4" = 1'-0"



NORTH ELEVATION
SCALE: 1/4" = 1'-0"



SOUTH ELEVATION
SCALE: 1/4" = 1'-0"



WEST ELEVATION
SCALE: 1/4" = 1'-0"

SHEET TITLE: WWTP - BLOWER/ CONTROL BUILDING ELEVATIONS									
PROJECT: GOLDEN OAKS WWTP EXPANSION									
PROJECT LOCATION: RUSCOMBANOR TOWNSHIP	PROJECT NO.: 0502-0703								
DRAWN BY: AFC	APPROVED BY: CMH								
SCALE: AS SHOWN	DATE: 07/08								
SHEET NO.: S.002									
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