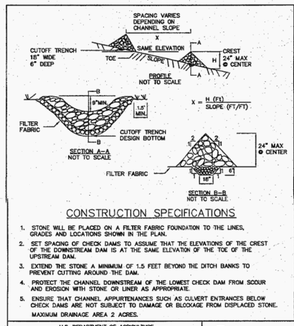


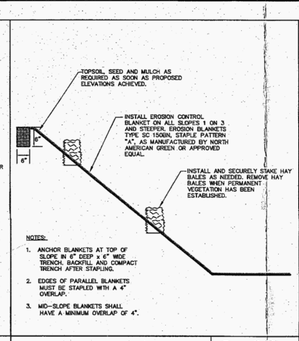
CONSTRUCTION SPECIFICATIONS

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
2. SET SPACING OF CHECK DAMS TO ASSURE THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.

MAXIMUM DRAINAGE AREA 2 ACRES.

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

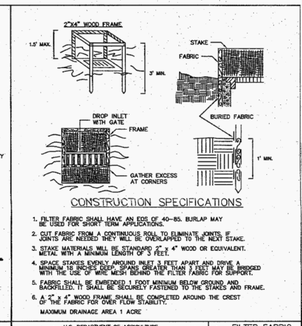
CHECK DAM



NOTES:

1. ANCHOR BLANKETS AT TOP OF SLOPE IN 6" DEEP x 6" WIDE TRENCH. BACKFILL AND COMPACT TRENCH AFTER STAPLING.
2. EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH A 4" OVERLAP.
3. MID-SLOPE BLANKETS SHALL HAVE A MINIMUM OVERLAP OF 4".

SLOPE STABILIZATION



CONSTRUCTION SPECIFICATIONS

1. FILTER FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
2. CUT FABRIC FROM A SINGLE ROLL TO ELIMINATE JOINTS IF POSSIBLE AND NECESSARY JOINTS WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE SUBSTITUTED FOR 4" WOOD OR EQUIVALENT. MINIMUM LENGTH WILL BE 16 INCHES OR 1 FEET.
4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE THEM FIRMLY INTO THE GROUND. FASTEN FABRIC TO STAKES AS FOLLOWS: BEGIN WITH THE TOP OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 4" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.

MAXIMUM DRAINAGE AREA 1 ACRE

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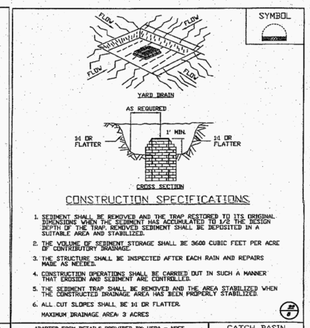
FILTER FABRIC DROP INLET PROTECTION



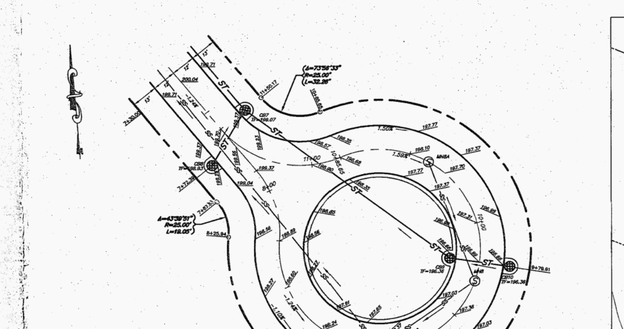
CONSTRUCTION SPECIFICATIONS

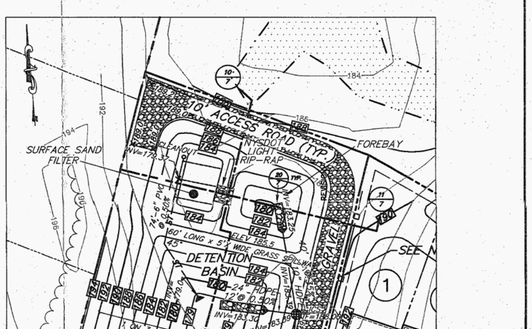
1. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
2. THE VOLUME OF SEDIMENT STORAGE SHALL BE 3600 CUBIC FEET PER ACRE OF CONTRIBUTORY DRAINAGE.
3. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
4. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND SEDIMENT ARE CONTROLLED.
5. THE SEDIMENT TRAP SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE CONTRIBUTED DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
6. ALL CUT SLOPES SHALL BE 3:1 OR FLATTER.

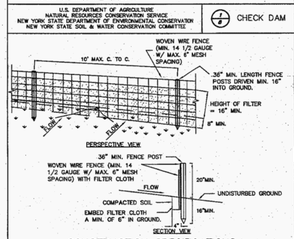
MAXIMUM DRAINAGE AREA 3 ACRES

ADAPTED FROM DETAILS PROVIDED BY: USDA - NRCS.
NEW YORK STATE DEPARTMENT OF TRANSPORTATION.
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION.
NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

CATCH BASIN SEDIMENT TRAP ST-III





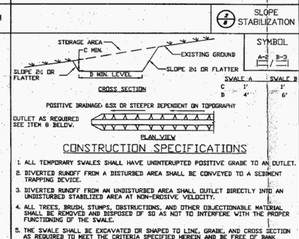


CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. THE LOWER 36" OF THE FENCE SHALL BE WOVEN WIRE, 12 1/2 GAUGE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROTENZ, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

SILT FENCE



CONSTRUCTION SPECIFICATIONS

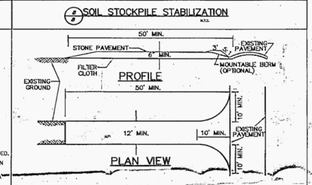
1. ALL TEMPORARY SWALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
2. DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
3. DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL DUMP DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITY.
4. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.
5. THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF SMAN PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
6. FILLS SHALL BE COMPACTED BY EARTH MOVING EQUIPMENT.
7. ALL EARTH REMOVED AND NOT NEEDED FOR CONSTRUCTION SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE SWALE.
8. STABILIZATION SHALL BE AS PER THE FLOW CHANNEL STABILIZATION CHART BELOW

TYPE OF DRAINAGE	CHANNEL GRADE	AS AC OR LESS	OVER AC
1	0.5-3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.0%	SEED AND STRAW MULCH	SEED AND COVER USING NCEP
3	5.1-8.0%	SEED AND COVER WITH NCEP	LINED WITH 4-6" RIP-RAP OR GEOTEXTILE
4	8.1-25%	LINED WITH 4-6" RIP-RAP OR GEOTEXTILE	ENGINEERED DESIGN

9. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

ADAPTED FROM DETAILS PROVIDED BY: USDA - NRCS.
NEW YORK STATE DEPARTMENT OF TRANSPORTATION.
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION.
NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

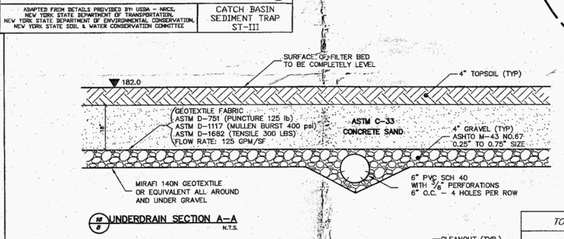
TEMPORARY SWALE



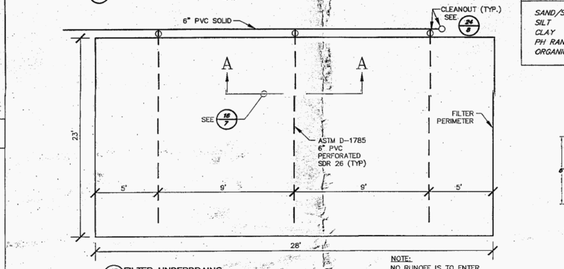
STABILIZED CONSTRUCTION ENTRANCE

CONSTRUCTION SPECIFICATIONS

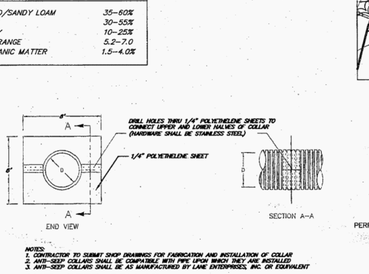
1. STONE SIZE - USE 1-4 INCH STONE OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS - NOT LESS THAN 6 INCHES.
4. WIDTH - 12 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24 FOOT IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONT ONE PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAINFALL EVENT.

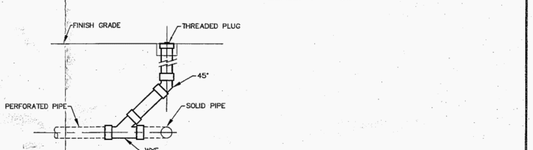


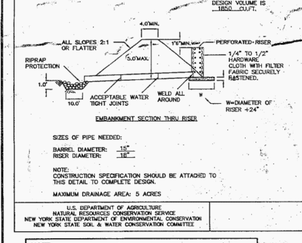
TOPSOIL CHARACTERISTICS	
SAND/SANDY LOAM	35-60%
SILT	30-55%
CLAY	10-25%
PH RANGE	5.2-7.0
ORGANIC MATTER	1.5-4.0%



NOTE:
NO RUNOFF IS TO ENTER THE FILTER UNTIL ALL CONTRIBUTING DRAINAGE AREAS ARE STABALIZED







SIZES OF PIPE NEEDED:
BARREL DIAMETER: 15"
RISER DIAMETER: 18"

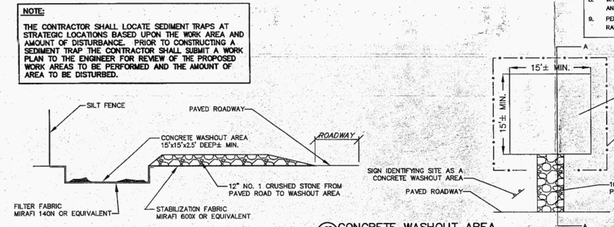
NOTE:
CONSTRUCTION SPECIFICATION SHOULD BE ATTACHED TO THIS DETAIL TO COMPLETE DESIGN.

MAXIMUM DRAINAGE AREA: 5 ACRES

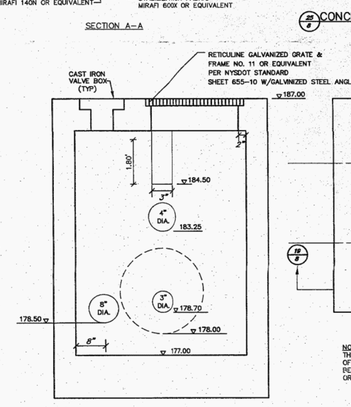
U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

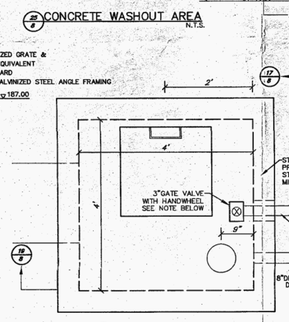
PIPE OUTLET SEDIMENT TRAP ST-I

NOTE:
THE CONTRACTOR SHALL LOCATE SEDIMENT TRAPS AT STRATEGIC LOCATIONS BASED UPON THE WORK AREA AND AMOUNT OF DISTURBANCE. PRIOR TO CONSTRUCTING A SEDIMENT TRAP THE CONTRACTOR SHALL SUBMIT A WORK PLAN TO THE ENGINEER FOR REVIEW OF THE PROPOSED WORK AREAS TO BE PERFORMED AND THE AMOUNT OF AREA TO BE DISTURBED.

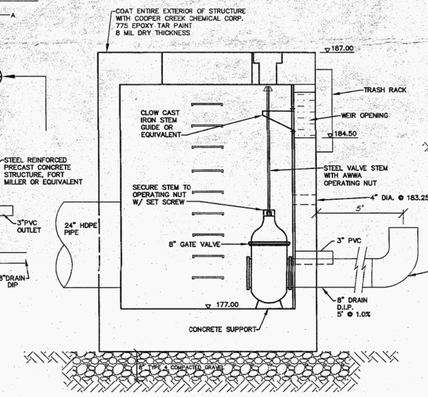


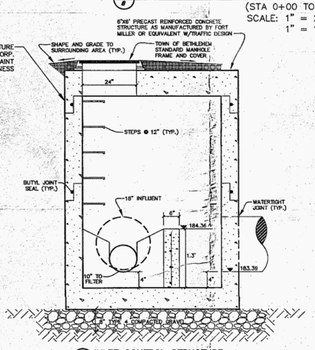
CONCRETE WASHOUT AREA
N.T.S.

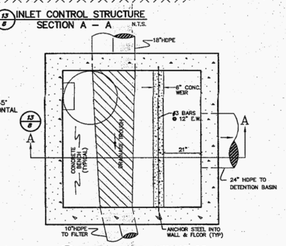


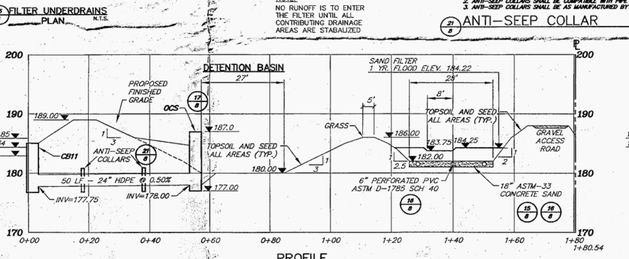


NOTE:
THE 3" GATE VALVE BODY SHALL BE CONSTRUCTED OF PVC SCH40. ALL INTERNAL MOVING PARTS SHALL BE CONSTRUCTED OF STAINLESS STEEL AGRIDRAIN OR EQUIVALENT.



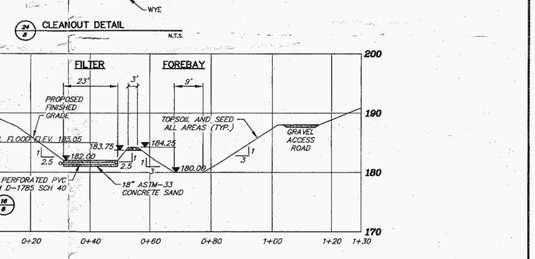






PROFILE

DETENTION BASIN - CROSS SECTION
(STA 0+00 TO 1+80.54)
SCALE: 1" = 20' HORIZ.
1" = 10' VERT.



DETENTION BASIN FOREBAY - CROSS SECTION
PROFILE

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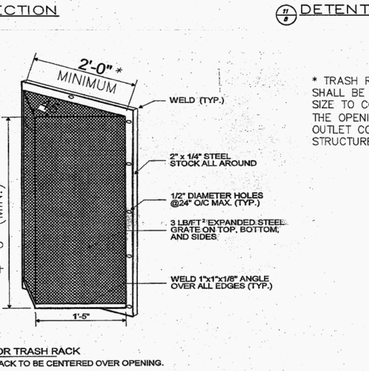
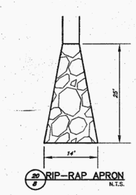


NOTES FOR TRASH RACK
1. TRASH RACK TO BE CENTERED OVER OPENING.
2. STEEL TO CONFORM TO ASTM A-36.
3. ALL SURFACES TO BE COATED WITH ZRC COLD GALVANIZING COMPOUND AFTER WELDING.

TRASH RACK DETAIL
N.T.S.

* TRASH RACK DIMENSIONS SHALL BE OF SUFFICIENT SIZE TO COMPLETELY COVER THE OPENING(S) IN THE OUTLET CONTROL STRUCTURE.



RIP-RAP APRON
N.T.S.

TOWN OF BETHLEHEM, NEW YORK
PLANNING DEPT. ORIGINAL
- SCANNED -
0 1 INCHES 2

ALBANY COUNTY DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL HEALTH SERVICES

By direction of the Commissioner of Health, these plans are hereby approved. See first sheet for date and signature.

Town of Bethlehem Planning Board
By direction of the Chairman
these plans are hereby Approved.
See sheet for date & signature.

NO.	REVISION	BY	APPRO.	DATE
A	ISSUED FOR REVIEW	JPP	NC	12/16/13
B	REVISED PER TOWN COMMENTS DATED 2/11/14	JPP	NC	3/13/14
C	REVISED PER TOWN COMMENTS DATED 5/8/14	JPP	NC	5/24/14
D	REVISED PER TOWN COMMENTS DATED 6/13/14	JPP	NC	7/24/14

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11 HERBERT DRIVE, LATHAM, NEW YORK 12110
PHONE: (518) 698-0772 E-MAIL: aseallc@gmail.com
NICHOLAS COSTA, P.E.

TRINITY MANOR SUBDIVISION
PHASE 5 - RESUBDIVISION 1
FINAL PLAT - DETAILS

COUNTY OF ALBANY
TOWN OF BETHLEHEM
STATE OF NEW YORK

DATE: NOVEMBER, 2013
SCALE: AS SHOWN
SHEET 8 OF 8

SHEET NO.
DTLS
8 OF 8

SUB 261