

**ADDENDUM NUMBER TWO
TO
THE TOWN OF MARS HILL WATER TRANSMISSION LINE REPLACEMENT
MADISON COUNTY, NORTH CAROLINA**

This Addendum Number Two (#2) is issued this 15st day of February, 2012 to all parties who hold a set of Bid Documents for the project entitled “**Town of Mars Hill Water Transmission Line Replacement**”. This Addendum #2 shall become part of the Contract Documents and its receipt shall be acknowledged on the bid documents at the time of bidding. The following changes to the contract documents shall be made:

General Electrical Requirements:

- 1) All work shall comply with the current edition of the North Carolina Electrical Code.
- 2) Obtain electrical permits from the authority having jurisdiction prior to commencing the work.
- 3) All underground branch circuits shall be Type UF cable with copper conductors and integral grounding conductor.
 - a. The UF cable shall be #8 for all dwelling units except the following three dwelling units shall be #10:
 - i. Fisher.
 - ii. Rose.
 - iii. Williams.

Specifications

1. The Bid Form has been revised to reflect several modifications. The attached bid form shall replace that originally issued. 8-1/2” x 11” attachments are hereby provided for some of these changes/additions.
2. Section 01300 – Sections that have changed will be reflected below and will replace items previously submitted:

a. Item 19-21 – Horizontal Directional Drill - This item of work shall include furnishing and installing horizontal directionally drilled water line of the sizes and materials shown on the plans at the locations shown. The unit price bid shall include cost for excavation, materials, installation, backfill and compaction, and site restoration.

Horizontal Directionally Drilled Water Line shall be paid for at the unit price bid for each size pipe material as measured in place from end to end of completed drill with pipe installed to grade and alignment per plan details. Contractor shall assume rock. The Engineer shall meet with the drilling sub to demonstrate qualifications and use of state of the art equipment. If it is determined that a good faith effort was made, the owner will pay the contractor for failed attempts.

b. Item 22- Bore and Encasement - This item of work shall include furnishing and installing steel encasement pipe of the sizes shown on the plans by the bore and jack method at the locations shown on the Plans. Steel encasement pipe shall include as a minimum the steel encasement pipe, DIP carrier pipe, and steel support spiders or other approved supports as shown on the drawings. The unit price bid shall include cost for excavation, materials, installation, backfill and compaction, and site restoration. Steel encasement pipe shall be paid for at the unit price bid for each size encasement pipe as measured in place from end to end of completed encasement with carrier pipe installed to grade and alignment per plan details. Contractor shall assume rock. The Engineer shall meet with the drilling sub to demonstrate qualifications and state of the equipment. If it is determined that a good faith effort was made, compensation for the failed attempt will be paid for using the linear footage of steel encasement pipe installed from starting point to the point of refusal at the contract unit price. The maximum compensation for a failed attempt will be held at 50% of the bore length at each individual location on the plans. Unit price shall include proper abandonment per NCDOT.

c. Item 40 – Individual VFD Booster Pump Station, including Pressure Tank and Electrical Supply Connection - The work covered under this item includes the complete construction of individual water booster pump station of the size and location as indicated on the drawings and as specified. Work shall include all items shown on the drawings and described in the specifications to make a functional individual water booster pumping station. Items covered in this section shall include, but are not limited to, new pump station, housing construction, electrical system (hooking the electrical line to the pump station, controls, all valves and fittings within 5 feet of the pump, site work, surface restoration and landscaping and related appurtenances as shown on the plans and described in the technical specifications, including all labor, equipment, materials, excavation and other incidental costs related to the pump station.

d. Item 41 – Individual Electric for Eight Individual Pump Stations (Wiring from 5' Outside Of House To Circuit Box)

The following work shall be included in the allowance associated with Item 41 in the Bid Schedule:

- 1) The work associated with the allowance shall begin at a point located five feet from the associated dwelling unit.
- 2) Investigate the existing conditions of each dwelling unit's electrical service to determine adequacy for providing power to the Pump Station.
- 3) Minimal work shall take place within the dwelling unit. As much as possible, work shall be performed on the exterior of the dwelling unit.
- 4) All work around the dwelling unit shall be done in a neat and workmanlike fashion to the satisfaction of the Owner of the dwelling unit. Consult with the Owner and obtain their written approval of the proposed work prior to commencing any work.
- 5) Any required routing of circuits below sidewalks, patios, driveways, planting beds or similar landscaping features shall be accomplished using directional drilling. Do not disturb landscaped areas any more than necessary to accomplish the work. Restore any disturbed areas to their original condition to the satisfaction of the dwelling unit Owner.
- 6) Protect any exposed cable by routing in Schedule 40 rigid nonmetallic conduit. Where subject to damage by vehicular or other similar equipment, use galvanized rigid metallic conduit.
- 7) At the dwelling unit, provide a 2-pole, 30 A, circuit breaker to supply the Pump Station.
- 8) The branch circuit for the Pump Station shall originate from either an existing exterior electrical panel or from a new meter/main breaker style loadcenter.
 - a. Supply from an existing exterior electrical panel, if available and adequately sized for the additional load.
 - b. For existing exterior fuse panels, replace the panel with an adequately sized loadcenter to supply the existing load and the Pump Station.
 - c. Where there is no existing exterior panel, replace the existing meter with an adequately sized meter/main breaker style loadcenter. Provide a feeder breaker to supply the existing service conductors to the existing interior electrical panel. Supply the Pump Station from the new loadcenter. Relocate the system bonding jumper to the new service equipment. Relocate the grounding electrode system connections to the new service equipment. Provide an equipment grounding conductor from the service equipment to the existing interior electrical panel.
 - d. Any new loadcenters or meter/main breaker style loadcenters shall be as manufactured by Cutler-Hammer, GE or Square-D and shall be NEMA 3R.

- 9) Where service sizes are increased due to the added load, provide new service conductors to match.
- 10) Test the functionality of the electrical system to ensure that all systems that were functioning prior to the commencement of work are still functioning.

e. Item 42 – 2#10 with Ground CU Type UF Cable – Work associated with this line item shall include the installation of electrical cable for the VFD pump stations. These lines shall be placed in the same trench as the water service line from the new pump station to the circuit box in the house as directed by the Engineer.

This item of work shall include the furnishing of all materials, equipment and labor to construct 2#10 with Ground CU Type UR Cable service line from the VFD pump to the circuit box in the house. Service cable shall be paid for at the contract unit price bid for every wire size shown on the plans and specifications. Note that the unit price bid shall include all costs for material and installation only as the trench will already be constructed for the water service line.

f. Item 43 – 2#8 with Ground CU Type UF Cable – Work associated with this line item shall include the installation of electrical cable for the VFD pump stations. These lines shall be placed in the same trench as the water service line from the new pump station to the circuit box in the house as directed by the Engineer.

This item of work shall include the furnishing of all materials, equipment and labor to construct 2#8 with Ground CU Type UR Cable service line from the VFD pump to the circuit box in the house. Service lines shall be paid for at the contract unit price bid for every wire size shown on the plans and specifications. Note that the unit price bid shall include all costs for material and installation only as the trench will already be constructed for the water service line.

g. Deduct Alternate Bid #1 - Item 20A – Has been deleted from the bid schedule and section 01300.

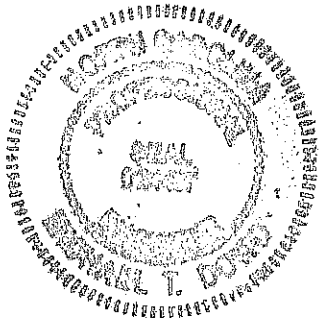
3. Section 11310.2.01A has been revised to reflect: “ The pumps shall be of the Horizontal End Suction Multi Stage Centrifugal Auquaboost-VS Pump model FG 1A30BF-VS, as manufactured by ITT Goulds or approved equal. The pump shall be coupled to a 2-HP, 230Volt, 1-Phase, TEFC, Closed Coupled Motor”.

Addendum Number Two (#2)
Town of Mars Hill Water Transmission Line Replacement
Madison County, North Carolina
February 15, 2012
Page 5 of 5

Drawings

1. Please see the attached 11x17 drawing that reflects and extension of the 4" water line along Chandler Creek Road Sheet C-120). The additional quantities are reflected in the revised attached bid schedule. The extension begins at station 18+00.

This Addendum #2 is issued this the 15th day of February 2012.



McGILL ASSOCIATES, P.A.

A handwritten signature in black ink, appearing to read "Michael T. Dowd".

MICHAEL T. DOWD, P.E.

Attachments

- cc: Darhyl Boone, Town of Mars Hill (w/ enclosure)
Robert Sams, Town of Mars Hill (w/enclosure)
Keith Webb, McGill Associates

**TOWN OF MARS HILL
WATER TRANSMISSION LINE REPLACEMENT
MADISON COUNTY, NORTH CAROLINA**

BID SCHEDULE

2/15/2012 Revised - ADDENDUM #2

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	EXTENSION
1	Mobilization (max. 3% of bid)	1	LS		
2	8-inch Ductile Iron (CL350) Water Line	26,600	LF		
3	6-inch Ductile Iron (CL350) Water Line	250	LF		
4	4-inch Ductile Iron (CL350) Water Line	1,450	LF		
5	Aerial Pipe Crossing	1	LS		
6	2" HDPE DR 9 Service Line	3,150	LF		
7	1" HDPE DR 9 Service Line	800	LF		
8	Dry Bore 2" HDPE Service Line	35	LF		
9	3/4" HDPE DR 9 Service Line	3,500	LF		
10	6-inch Pressure Sustaining Valve in Manhole	1	EA		
11	3/4-inch Residential Pressure Reducing Valves	14	EA		
12	2" Residential Pressure Reducing Valve	1	EA		
13	8-inch Gate Valve & Box	26	EA		
14	6-inch Gate Valve & Box	2	EA		
15	4-inch Gate Valve & Box	1	EA		
16	2-inch Gate Valve & Box	4	EA		
17	Fire Hydrant Assembly, Complete with 6" Gate Valve & Box and All Required Fittings	9	EA		
18	Blow Off Assembly	3	EA		
19	Horizontal Directional Drill 10" (DR9 HDPE)	800	LF		
20	Horizontal Directional Drill 8" (DR9 HDPE)	100	LF		
21	Horizontal Directional Drill 6" (DR9 HDPE)	100	LF		
22	18" Dia. x 0.25" Wall Thickness Steel Encasement Pipe, Bored and Jacked Complete with 8" Carrier Pipe	120	LF		
23	Connect to Existing Water Line	4	EA		
24	Compact Ductile Iron Fittings	12,000	LBS		
25	NCDOT Pavement Repair including Milling	800	LF		
26	2-inch Asphalt Overlay	900	SY		
27	Miscellaneous Clearing and Grubbing for Water Service	1	LS		
28	Miscellaneous Grading at Station 15+00 (Approximately 50 CY)	1	LS		
29	Gravel Road Repair from Sta 10+00 to 19+00	900	LF		
30	Gravel Drive Repair	3,500	LF		
31	Asphalt Drive Repair	500	LF		
32	Concrete Drive Repair	120	LF		
33	Erosion Control Measures	1	LS		
34	Rock Excavation	3,500	CY		
35	Select Backfill	1,500	CY		
36	Washed Stone	1,000	TN		
37	Miscellaneous Concrete	150	CY		
38	Domestic Water Service including 3/4" Service Saddle, Radio Read Water Meter Assembly & Box and Connection to Existing Home	33	EA		
39	Domestic Water Service including 2" Service Saddle, Radio Read Water Meter Assembly & Box	1	EA		
40	Individual VFD Booster Pump Station, including Pressure Tank, and Electrical Supply Connection	8	EA		
41	Individual Electric for eight individual pump stations (wiring from 5' outside of house to circuit box)	1	LS	ALLOWANCE	\$24,000
42	2#10 with Ground Wire, CU Type UF Cable (from VFD to circuit box)	600	LF		
43	2#8 with Ground Wire, CU Type UC Cable (from VFD to circuit box)	1700	LF		
44	Well Drilling and Development	1	EA	ALLOWANCE	\$7,500
BASE BID AMOUNT					

DEDUCT ALTERNATIVE NO.1 (ALL 6" DIP WATER LINE INSTALLATION)				
2A	6-inch Ductile Iron (CL350) Water Line	Deduct \$		Per LF
13A	6-inch Gate Valve & Box	Deduct \$		Per Unit
22A	16" Dia. x 0.25" Wall Thickness Steel Encasement Pipe, Bored and Jacked Complete with 6" Carrier Pipe	Deduct \$		Per LF
DEDUCT ALTERNATIVE 1 TOTAL				

ALTERNATIVE NO.2 (PVC C-900 DR 18)				
2B	8-inch PVC (C-900 DR 18) Water Line, per detail	26,600	LF	
3B	6-inch PVC (C-900 DR 18) Water Line, per detail	250	LF	
4B	4-inch PVC (C-900 DR 18) Water Line, per detail	850	LF	
ALTERNATIVE 2 SUBTOTAL				

Bidder understands that the Owner reserves the right to reject any or all bids and to waive any informalities in the bidding. The Owner reserves the right to evaluate all bids based on the base bid amounts and any combination of alternates.

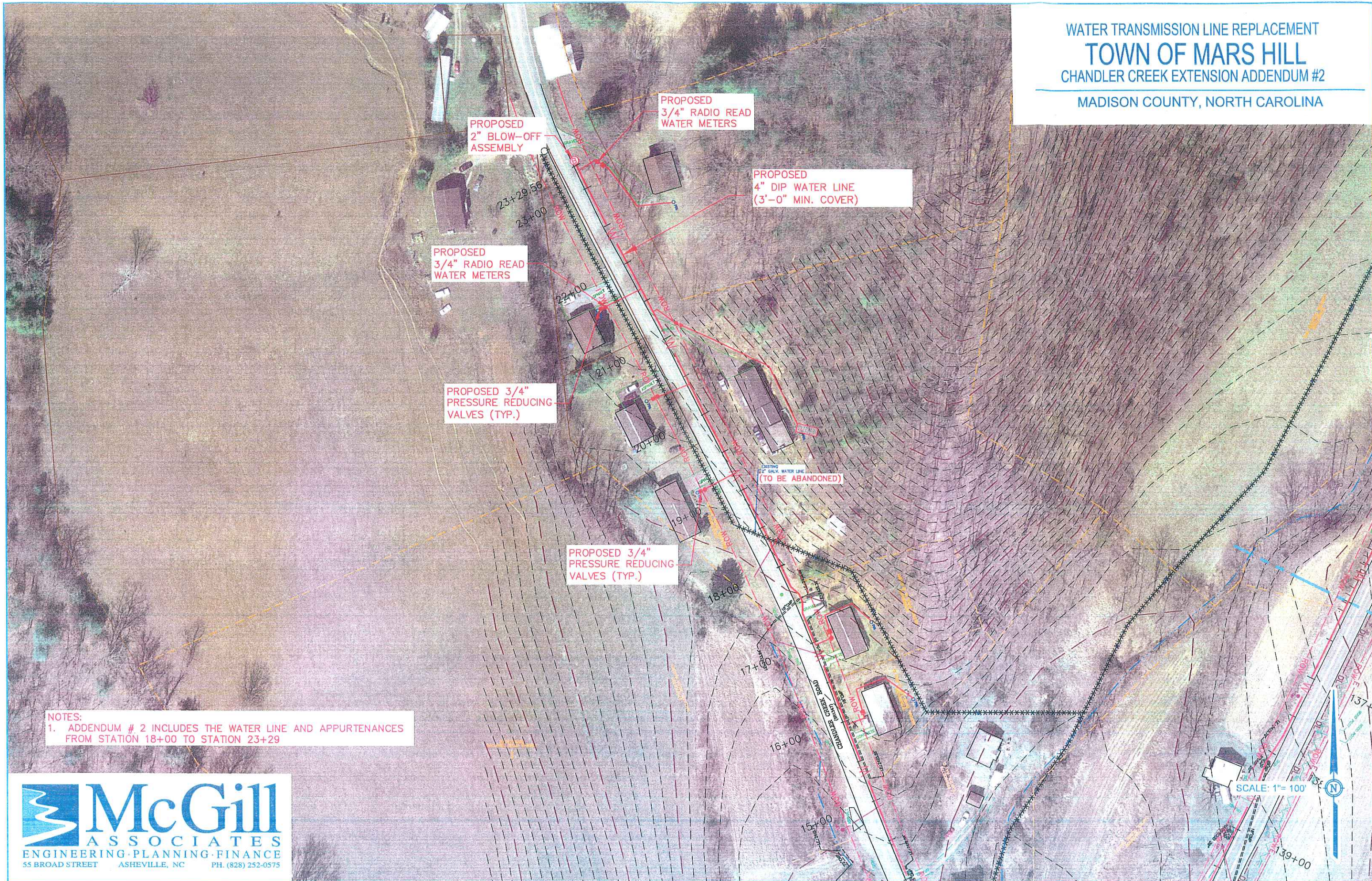
Attendance Sheet

Town of Mars Hill

Water Transmission Line Replacement
Pre-Bid Conference Date: February 3, 2012

Name & Company	Email & Phone
Brian Hahn Carolina Specialties	bhahn@carspecconst.com 828 697-7184
DENNIS GREEN T&K UTILITIES	828-299-8205
	828. 298-1686
HUNTLEY CONST.	HUNTLEY CONST @ Bellsouth.NET
Danny Dash Cooper Construction	828-692-7288
WARREN STILLWELL	STILLWELL ENT, INC 828-586-6424
MYRON STEPE	STEPPE Const. 828. 625-4722
	steepon @ Bellsouth.NET
	828-648-0511
BLAKE HYATT	BLAKEH@BCCI CANTON .COM 828-665-9374 FAX
MIKE DOWD - MCGILL ASSOC	MIKE.DOWD@MCGILLENGINTEERS.COM
MIKE CLARK - MCGILL ASSOC	MIKE.CLARK@MCGILLENGINTEERS.COM
KETH WEBB - MCGILL ASSOC.	KETH.WEBB@MCGILLENGINTEERS
DARHYL BOVE - TOWN OF MARS HILL	

WATER TRANSMISSION LINE REPLACEMENT
TOWN OF MARS HILL
CHANDLER CREEK EXTENSION ADDENDUM #2
MADISON COUNTY, NORTH CAROLINA



NOTES:
1. ADDENDUM # 2 INCLUDES THE WATER LINE AND APPURTENANCES FROM STATION 18+00 TO STATION 23+29