

PRODUCT INFORMATION

PRODUCTS

- A. THE CEMENTITIOUS MORTAR LINING (CML) FOR MANHOLE REHABILITATION UNDER THIS SPECIFICATION SHALL MEET THE FOLLOWING REQUIREMENTS:
- QUICK SETTING, HIGH STRENGTH, CORROSION RESISTANT CEMENTITIOUS MATERIAL.
 - SUITABLE FOR LOW PRESSURE, WET ROTARY SPRAY APPLICATION TO THE INSIDE OF MANHOLE SURFACE.
 - USE ADDITIVES TO INCREASE CORROSION RESISTANCE OR BOND STRENGTH AT MANUFACTURER'S DIRECTION AND WITH ENGINEERS APPROVAL.
 - INITIAL SET TIME PER MANUFACTURER'S RECOMMENDATION AND PER PROJECT CONDITIONS; CURING SHOULD BEGIN WITHIN 1 HOUR.
 - DENSITY WHEN APPLIED: 148– 155 LB/FT³.
 - COMPRESSIVE STRENGTH AT 1 DAY:
 - PER MANUFACTURER'S RECOMMENDATION.
 - MINIMUM FOR "OR EQUAL" PRODUCTS: 8,000 PSI.
 - COMPRESSIVE STRENGTH AT 28 DAYS:
 - PER MANUFACTURER'S RECOMMENDATION.
 - MINIMUM ACCEPTABLE FOR "OR EQUAL" PRODUCTS: 10,000 PSI.

B. THE MORTAR MIX FOR MANHOLE REHABILITATION UNDER THIS SPECIFICATION SHALL MEET THE FOLLOWING REQUIREMENTS:

- MORTAR MIX SHALL BE 2,000 PSI AT 28 DAY CURE TIME.

APPROVED MANUFACTURERS

THE FOLLOWING IS AN APPROVED LIST OF MANUFACTURERS:

- KERNEOS (SEWPERCOAT)
- THE STRONG COMPANY (STRONG–SEAL).
- OR EQUAL.

KERNEOS PRODUCTS (SEWPERCOAT) MANUFACTURER'S DESIGNATIONS ARE THE REFERENCE STANDARD FOR PRODUCTS USED HEREIN. REQUIREMENTS FOR AN APPROVED EQUAL PRODUCT ARE LISTED BELOW:

- FOR APPROVAL OF AN EQUAL MANUFACTURER, THE CONTRACTOR SHALL PROVIDE TO THE OWNER IN WRITING A DETAILED SIDE-BY-SIDE COMPARISON OF THE PROPOSED EQUAL PRODUCTS CHARACTERISTICS, PERFORMANCE CHARACTERISTICS, AND APPLICATION CONDITIONS FOR THE KERNEOS COATING SPECIFIED IN THIS SPECIFICATION. FOR CONSIDERATION FOR APPROVAL THIS WRITTEN COMPARISON SHALL BE CERTIFIED AND NOTARIZED BY AN OFFICER OF THE PROPOSED MANUFACTURER AS TRUE AND CORRECT.
- AS A MINIMUM STANDARD ANY EQUAL COATING SYSTEM SHALL HAVE A 5-YEAR SERVICE HISTORY ON ITS COATING SYSTEM.

EXECUTION

GENERAL:

IT IS THE INTENT OF THESE SPECIFICATIONS THAT MATERIALS AND WORKMANSHIP BE PROVIDED SUCH THAT THE HIGHEST QUALITY JOB IS OBTAINED. THE COMPLETED WORK, PRIOR TO ACCEPTANCE, MUST BE FREE FROM RUNS, SKIPS, WARS AND ANY OTHER DISFIGURING MARK DUE TO FAULTY WORKMANSHIP OR CARE OF THE COMPLETED WORK.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL SURFACES ARE PREPARED IN ACCORDANCE WITH THE WRITTEN RECOMMENDATIONS AND DIRECTIONS OF THE COATING MANUFACTURER WHOSE COATING IS APPLIED.

APPROVAL OF CONDITIONS SHALL BE OBTAINED FROM THE ENGINEER PRIOR TO APPLYING COATING; HOWEVER, SUCH APPROVAL SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY OF CONFORMANCE WITH THESE SPECIFICATIONS AND CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PREVENT SETTLING OF DUST OR THE OCCURRENCE OF OTHER CONDITIONS DETRIMENTAL TO THE FINISHED QUALITY OF THE JOB AND TO REPAIR ANY DAMAGED COATING AT NO ADDITIONAL COST TO THE OWNER.

THE CONTRACTOR SHALL APPLY EACH COATING AT THE RATE AND IN THE MANNER SPECIFIED BY THE COATING MANUFACTURER. IF MATERIAL HAS THICKENED OR MUST BE DILUTED FOR APPLICATION BY SPRAY GUN, THE COATING SHALL BE BUILT–UP TO THE SAME THICKNESS ACHIEVED WITH UNDILUTED MATERIAL. DEFICIENCIES IN FILM THICKNESS SHALL BE CORRECTED BY THE APPLICATION OF ADDITIONAL LAYERS OF COATING. FILM THICKNESS SHALL BE DETERMINED WHEN DRY BY THE ENGINEER WITH A MAGNETIC DRY FILM THICKNESS GAUGE. THE THICKNESS GAUGE SHALL BE CALIBRATED WITH TEST SHIMS.

MANUFACTURER'S RECOMMENDED DRYING TIME SHALL BE CONSTRUED TO MEAN "UNDER NORMAL CONDITIONS." WHERE CONDITIONS ARE OTHER THAN NORMAL BECAUSE OF THE WEATHER OR BECAUSE PAINTING MUST BE DONE IN CONFINED SPACES, LONGER DRYING TIMES SHALL BE NECESSARY. THE MANUFACTURER'S RECOMMENDATIONS FOR RECOATING TIME INTERVALS SHALL BE STRICTLY ADHERED TO.

MANHOLE PREPARATION:

CLEAN INTERIOR SURFACES OF MANHOLE OF DEBRIS, DIRT, OIL GREASE, REMAINS OF OLD COATING MATERIALS, AND ANY OTHER EXTRANEOUS SURFACES PRIOR TO FOLLOWING MANUFACTURER'S RECOMMENDATIONS FOR PREPARATION OF SURFACE ON APPROVED SUBMITTALS FOR REHABILITATION PRODUCTS USED.

ALL INTERNAL DEBRIS FROM CLEANING AND ANY CLEANING WATER SHALL BE REMOVED FROM THE MANHOLE AND DISPOSED OF BY THE CONTRACTOR.

REPAIR IRREGULARITIES AND LEAKAGE IN MANHOLE (BENCHES, WALLS AND FLOORS), AND TRIM AND FILL VOIDS AT INCOMING PENETRATIONS WITH MORTAR PRIOR TO APPLICATION OF CML SYSTEM.

APPLICATION OF MATERIALS:

APPLY COATING MATERIAL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS:

- A. DO NOT BLOCK PIPES, ENTERING OR EXITING MANHOLE AND CONFIRM THROUGH VISUAL INSPECTION THAT PIPES ARE NOT BLOCKED.

APPLY THICKNESS FOLLOWING APPROVED SUBMITTALS; MINIMUM OF 1/2 INCH FOR CEMENTITIOUS MOTOR LINING UNLESS GREATER THICKNESS IS RECOMMENDED BY MANUFACTURER.

CURING:

CURING SHOULD BE IMPLEMENTED AS SOON AS THE SURFACE BEGINS TO HARDEN AND DRY (AS EARLY AS ONE HOUR AFTER APPLICATION). CURING FOR CML SHALL BE DONE IN ACCORDANCE WITH GOOD CONCRETE CURING PRACTICES AS OUTLINED IN ACI 308 AND IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS TO OBTAIN THE BEST QUALITY INSTALLATION IN TERMS OF MECHANICAL STRENGTH AND CORROSION RESISTANCE. EQUIPMENT USED MUST ALWAYS BE CLEAN AND FREE OF BUILDUP TO AVOID ACCELERATED SET.

TESTING:

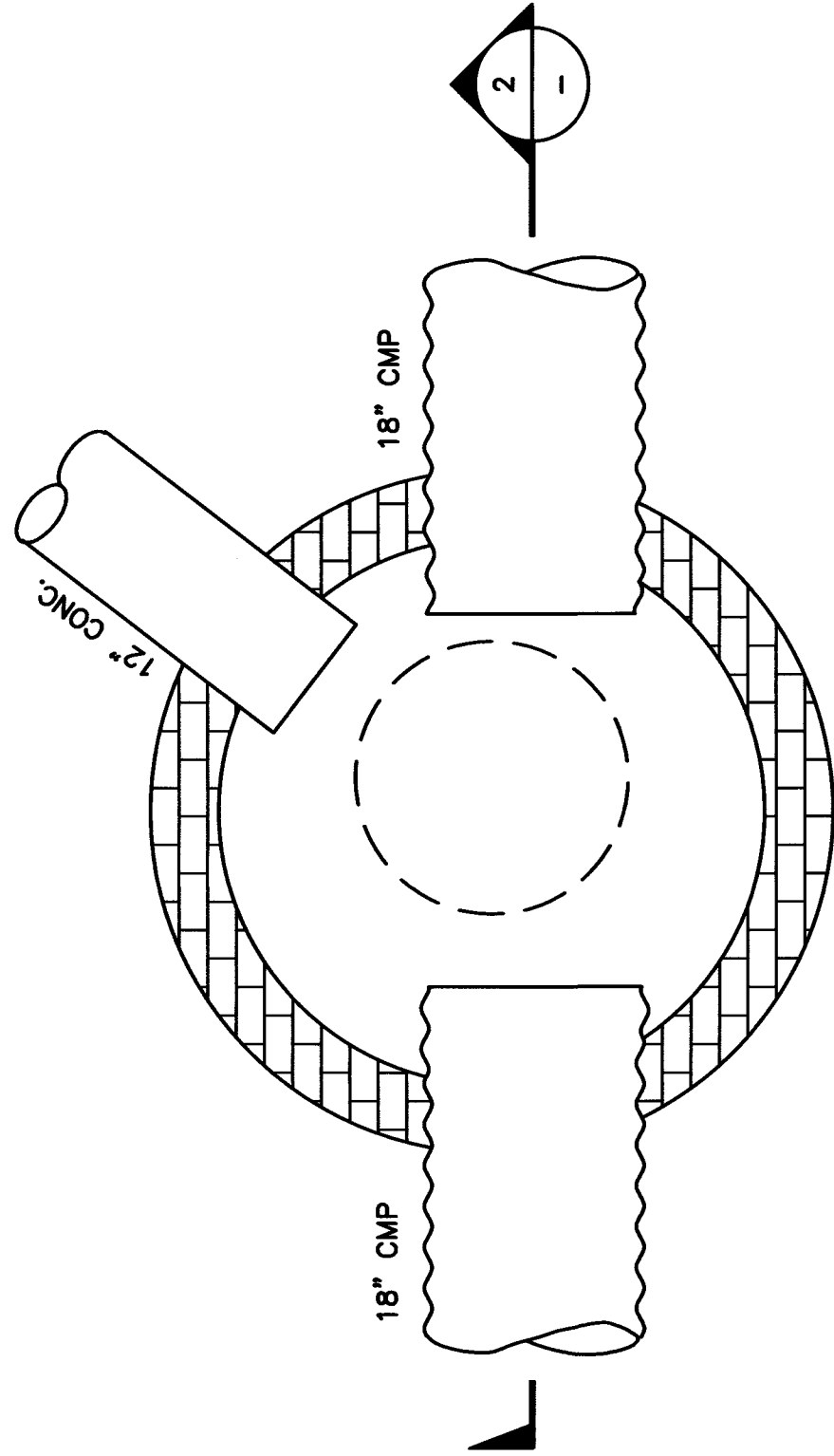
A RECOGNIZED INDEPENDENT TESTING LABORATORY SHALL TEST MORTAR MATERIALS USED ON THE PROJECT. THE MANUFACTURER, INSTEAD OF AN INDEPENDENT LABORATORY, MAY TEST PROJECT SAMPLE SPECIMENS, PROVIDED THE OWNER, ENGINEER AND MANUFACTURER ARE IN AGREEMENT OF THIS TESTING METHOD PRIOR TO PROJECT COMMENCEMENT. SPECIAL MATERIALS RECOMMENDED BY THE ENGINEER SHALL THEN BE TESTED.

THE COST OF SAMPLING AND TESTING OF THE MORTAR MIX DURING PLACEMENT AND THE SURFACE TO WHICH IT IS APPLIED SHALL BE BORN BY THE CONTRACTOR. OTHER TESTING REQUIRED SHOWING CONFORMANCE WITH THESE SPECIFICATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CERTIFIED TEST REPORTS AND CERTIFICATES, WHEN SO DIRECTED, SHALL BE SUBMITTED IN DUPLICATE TO THE ENGINEER AND TO SUCH OTHER AGENCIES OR PERSONS THE ENGINEER MAY DESIGNATE.

ANY MATERIALS FAILING TO MEET THE REQUIREMENTS OF THESE SPECIFICATIONS SHALL NOT BE INCORPORATED INTO THE WORK PLAN.

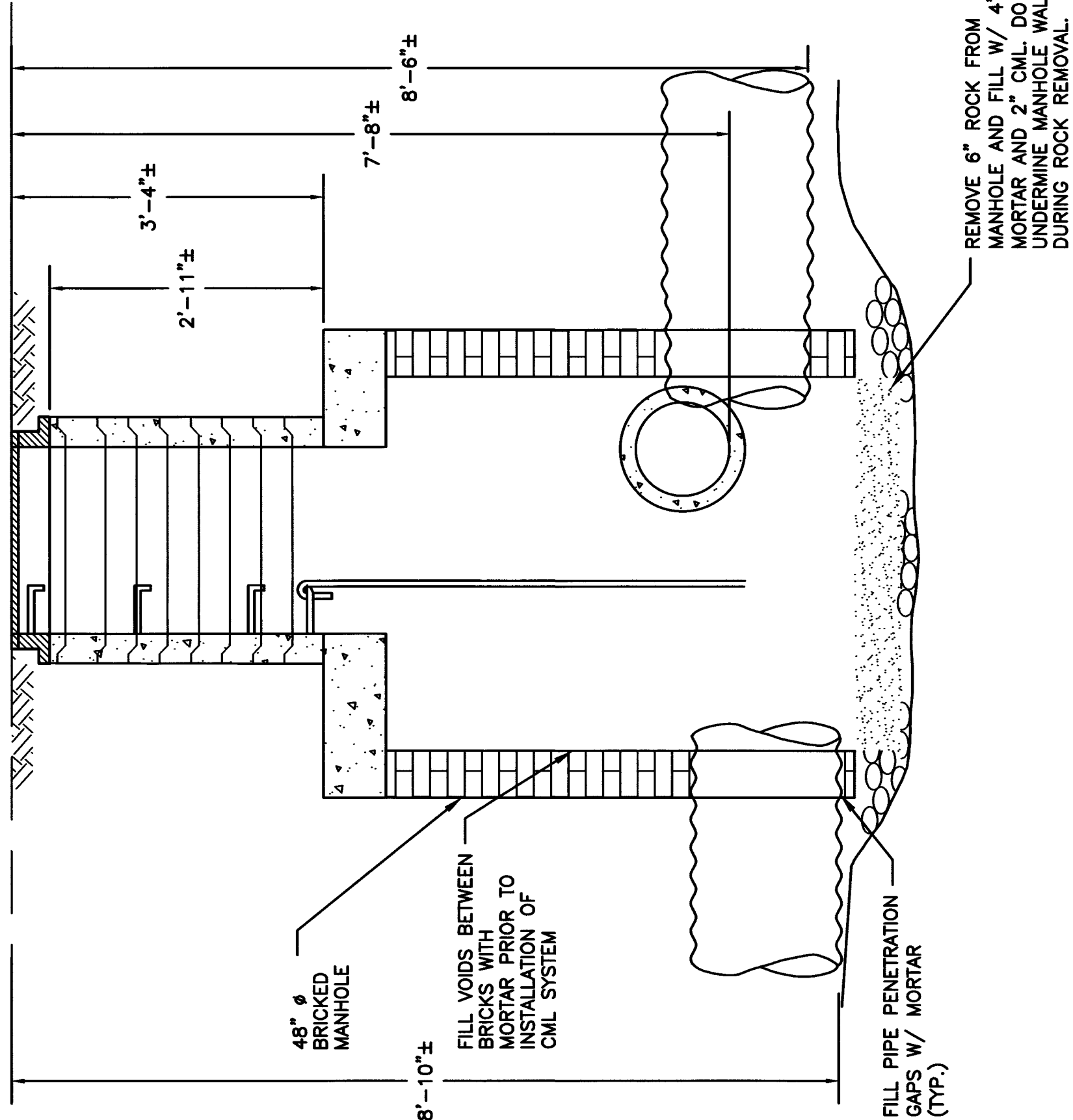
WARRANTY:

THE APPROVED APPLICATOR AND REPAIR MANUFACTURER SHALL PROVIDE A 3-YEAR WARRANTY ON MATERIALS AND WORKMANSHIP. MATERIALS AND WORKMANSHIP SHALL BE WARRANTED TO BE FREE OF DEFECTS, TO PREVENT INFILTRATION, PROHIBIT ROOT INTRUSION AND PROVIDE A SURFACE COATING RESISTANT TO CORROSION.



1 STORM MANHOLE REHAB PLAN

SCALE: NOT TO SCALE



2 STORM MANHOLE REHAB SECTION

SCALE: NOT TO SCALE

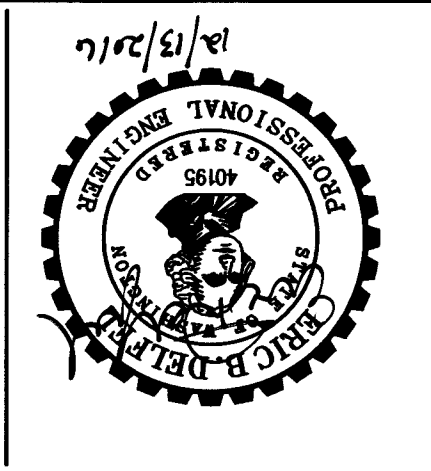
#	DATE	DESCRIPTION
1	12/13/2016	ADDENDUM NO. 1

DRAWING VERSION / REVISION LOG

CITY OF
Federal Way

33325 8TH AVE. SOUTH
FEDERAL WAY
WASHINGTON 98003

PHONE: (253) 835-7000
FAX: (253) 833-7209
www.cityoffederalway.com



PROJECT TITLE:	MARINE HILLS STORMWATER CONVEYANCE SYSTEM REPAIR PHASE II
SHEET NAME:	SCHEDULE B - CATCHBASIN REHABILITATION DETAILS
PROJECT ENG:	ERIC DEFEL
PHONE #:	206-284-0860
EMAIL:	DEFEL@G-O-COM

RF# #:

16-011

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