ASME Standards Technology, LLC

REQUEST FOR PROPOSALS

RFP No. 21-01

Project Number:	**STIN-0178**
Project Title:	**Stress Intensification Factor, k-factor, and Sustained Stress Index Development – Phase II**
Solicitation Date:	**11 January 2021**
Proposal Due Date:	**26 February 2021**

1 Summary

ASME Standards Technology, LLC (ASME ST-LLC) is soliciting proposals for the referenced project. The project results will be used in investigating deficiencies in the existing data sets identified during data collection effort from ST_LLC Publication STP-PT-073.

This Request-for-Proposal ("RFP") and all open RFPs are posted on the ASME ST-LLC webpage: (http://asmestllc.org/ST-LLC_RequestsProposals.html)

2 Background

In support of recently issued ASME B31J standard, physical testing for stress intensification factors (SIFs), flexibility factors (k-Factors), and sustained stress indices (SSIs) are required to confirm differences between the Markl and Hinnant curves in the low-cycle ranges and finite element predictions of fatigue, stiffness, and collapse.

Improvement in analytical capability since the 1950s (when Markl developed the basic rules in the B31 piping codes used today) has improved the ability to numerically predict stress states. Unfortunately, not all piping branch connection components are well defined geometrically in ASME dimensional standards, and large D/T (ratio of header diameter to header thickness) and d/D (ratio of branch diameter to header diameter) failures involve nonlinear characteristics that may not be well represented by elastic analyses currently used. In these cases, verification by test is considered essential, especially since the majority of SIFs and k-Factors in use today have been developed principally from test results.

The purpose of this project is to investigate deficiencies in the existing test data sets identified during the data collection effort from ST-LLC Publication STP-PT-073. The overall project is planned to be executed in two phases. The first phase of the scope has been completed. See Attachment 1 for phase 1 scope of work.

3 Scope of Work

The Independent Consultant may complete the entire Scope of Work in-house or subcontract portions of the Scope of Work. If any portion of the Scope of Work is to be subcontracted by the Independent Consultant, the Independent Consultant shall be responsible for managing all subcontractors.

3.1 Summary

The scope of phase two is to perform four (4) additional tests recommended by phase one analysis. See Attachment 2 for details on these tests.

The Independent Consultant should gather all material and testing equipment. ASME ST-LLC will not provide any material or equipment.

3.2 Deliverables

The project deliverable shall be a test plan, interim test report and comprehensive final report providing data and results for four (4) tests identified in Section 3.1 preceding. The Independent Consultant shall submit all data prior to comprehensive report submittal. The comprehensive report shall include excel spreadsheets with actual test data, analysis, conclusion, MTRs, calibration certificates as applicable, summary of finite element results and other calculations.

The comprehensive report shall be provided initially as a draft report or multiple draft reports and subsequently as a final report that incorporates the comments of ASME ST-LLC or applicable ASME review committees, such as an ASME Peer Review Group (PRG). One peer review cycle is anticipated and modifications required to the draft, as a result of the review cycle, are the responsibility of the respondent awarded the contract.

All written deliverables shall be provided as an MS Word file that is formatted in accordance with the ASME Style Guide.

3.3 Schedule

The Independent Consultant shall provide a schedule for completion of the Scope of Work identified herein.

3.4 Progress Reporting

The Independent Consultant shall provide a brief status report on a monthly basis, via email, to the ASME ST-LLC project manager identified herein. The initial status report shall be provided within 30 days of contract execution date. The status report shall identify activities underway, planed and completed, and shall also identify any anticipated delays to the project schedule.

4 Respondent Eligibility Requirements

ASME ST-LLC is seeking proposals from all qualified organizations including, but not limited to, engineering firms, independent consultants, academic institutions, and federally funded research and development centers. In addition to relevant technical qualifications and experience, respondents must possess an understanding of relevant ASME codes and standards.

5 Basis for Selection and Award

ASME ST-LLC will select a winning proposals by evaluating and comparing the merits of each respondent's complete proposal. This process reflects ASME ST-LLC's desire to select a proposal based on its potential to achieve program objectives, rather than solely on evaluated technical merit or cost. Evaluation criteria include, but are not limited to, the following:

- Respondent's technical capabilities, including that of all subcontractors.
- Respondent's applicable experience, including that of all subcontractors.
- Proposal price.
- Project schedule.
- Any exceptions to ASME ST-LLC's standard agreement.

ASME ST-LLC reserves the right to award, in whole or in part, any, all, or none of the proposals/respondents answering this solicitation.

6 Contract Terms and Conditions

The contract to perform the Scope of Work shall be fixed price. A form of ASME ST-LLC's standard agreement applicable to this Scope of Work is attached as Attachment 3 to this RFP.

ASME ST-LLC will provide access to applicable codes, standards, and other technical references as needed to perform the Scope of Work.

7 Submission Requirements

7.1 Proposal Due Date

Proposals must be submitted by ***26 February 2021***. Respondents are encouraged to transmit its proposal well before this deadline. Requests for extra time must be sent by ***29 January 2021*** to the contact listed in Section 8 of this RFP.

ASME ST-LLC intends to select the winning proposal within three weeks of the proposal deadline.

7.2 Proposal Preparation Costs

Proposal costs shall be borne by the respondent. This solicitation does not obligate ASME ST-LLC to pay any costs incurred in the preparation and submission of the proposal, in making necessary studies or designs for the preparation thereof, or to acquire or contract for any services.

7.3 Proposal Clarification

ASME ST-LLC reserves the right to request clarification of any proposal and supplemental information. Selection of the winning proposal may be made after few or no exchanges, discussions, or negotiations; therefore, all respondents are advised to submit its most favorable application to ASME ST-LLC. ASME ST-LLC reserves the right, without qualification, to reject any or all proposals received in response to this solicitation and to select any proposal, in whole or in part, as a basis for negotiation and award. ASME ST-LLC reserves the right to modify or cancel this solicitation. All questions relating to this solicitation must be submitted to the contact listed in Section 8 of this RFP. Any amendments to this solicitation will be posted at the ASME ST-LLC website previously referenced.

7.4 Treatment of Proprietary Information

A proposal may include technical and other data, including trade secrets and privileged, confidential commercial, or financial information that the respondent does not want disclosed to the public or used by ASME ST-LLC for any purpose other than proposal evaluation. To protect such data, the respondent should specifically identify the data or information to be protected.

7.5 Proposal Preparation and Submittal Instructions

ASME ST-LLC may form a committee of subject matter experts to evaluate the technical qualifications of respondents. To help facilitate this evaluation, proposals should be separated into two separate documents: (1) a Technical Proposal; and (2) a Financial Proposal.

7.5.1 Technical Proposal contents must include:

- Organization name and contact information.
- Evidence of technical capabilities: credentials, qualifications, capabilities, and experience of individuals and the organization.
- An approach to accomplish the Scope of Work (refer to Section 3).
- Demonstrate agreement with the Scope of Work (refer to Section 3).

7.5.2 Financial Proposal contents must include:

- A fixed-price quotation to complete the Scope of Work.
- Confirm agreement with the form of agreement attached herein or state any requested exceptions to same.

7.5.3 The respondent shall submit the Technical and Financial Proposals files via e-mail to the ASME ST-LLC contact identified in Section 8 of this RFP. Responses must be received on or before the proposal due date identified in Section 7.1 of this RFP.

8 ASME Standards Technology, LLC Contact Information

All correspondence regarding this RFP is to be directed to the following person:

Ms. Selin Sahici, PMP
Project Manager
ASME Standards Technology, LLC
Two Park Avenue
New York, NY 10016
Telephone: 212-591-7046
E-mail: sahicis@asme.org

ATTACHMENT 1: SCOPE OF WORK – PHASE 1 **(COMPLETED)**

Scope Description

The purpose of this project is to investigate deficiencies in the existing test data sets identified during the data collection effort from ST-LLC Publication STP-PT-073. The overall project is planned to be executed in two phases. The scope of work defined herein is for the first phase of the project, Phase One.

Abbreviations and Acronyms

d = mean diameter of branch pipe, inches (mm)

D = mean diameter of run pipe, inches (mm).

IRWO = integrally reinforced weld-on

k = flexibility factor with respect to the plane and component indicated.

SIF = stress intensification factor.

SSI = sustained stress index.

t = nominal wall thickness of branch pipe, in. (mm).

T = nominal wall thickness of the run pipe, in. (mm).

Details

The Independent Consultant shall perform necessary physical testing and investigation to address $t/T < 1$, and $t/T >> 1$ branch connections, trends in IRWO fittings, and the effect of differing materials on the burst strength of contoured tees. The Independent Consultant shall involve Markl Fatigue tests of various t/T geometries for reduced branch connections based on guidance in the current draft version of B31J (currently available for public review). The Independent Consultant shall complete two Markl Fatigue Tests (including k-factor and twice elastic slope (TES) tests where possible) for each Test identified in Table 1 below.

Table 1 Summary of Markl Fatigue Tests		
Test		**Details**
2x4 Bar Fatigue Test (t/T>1)	Inplane	Branch: 2" Solid Bar Run: 4" Standard Wall Pipe
2x4 Bar Fatigue Test (t/T>1)	Outplane	Branch: 2" Solid Bar Run: 4" Standard Wall Pipe
2x4 Pipe Intersection Fatigue Test (t/T<1)	Inplane	1.5" Pipe (1.9" OD) Standard Wall (.145)
2x4 Pipe Intersection Fatigue Test (t/T<1)	Outplane	1.5" Pipe (1.9" OD) Standard Wall (.145)
2x4 Pipe Intersection Fatigue Test (t/T≈1)	Inplane	1.5" Pipe (1.9" OD) XS (0.2")
2x4 Pipe Intersection Fatigue Test (t/T≈1)	Outplane	1.5" Pipe (1.9" OD) XS (0.2")

For the tests identified in Table 1 above, if SIF, k-Factor, and sustained load factors follow anticipated trends, only a single test of each specimen will be required. Where two tests are performed, it is anticipated that either an identical displacement range would be used in the fatigue test or that a displacement range would be selected to attempt to verify the slope of the fatigue curve.

Additionally, the Independent Consultant shall perform burst tests on identical stainless and carbon steel B16.9 welding tee specimens, as identified in Table 2 below, and analyze the differences between the results.

Table 2 Summary of Burst Tests	
Specimen	**Number of pieces to be tested**
4x4 Carbon Steel Standard Wall Tee[1]	2
4x4 Stainless Steel Standard Wall Tee[1]	2
4" Carbon Steel Standard Wall Straight Pipe[2]	2
4" Stainless Steel Standard Wall Straight Pipe[2]	2

Notes:
[1]The manufacturing process for each tee shall be identical so that tee geometry and contours are identical.
[2]Lengths shall be approximately 3 diameters of pipe

The Independent Consultant shall conduct several small-scale model tests using tube, and replicating the original Markl 4-inch cantilever tests in an attempt to verify the continued use of tube geometries for Markl-type SIF verification in large D/T geometries. Once the smaller specimen results are verified, the Independent Consultant shall conduct tests on the 4-inch by 6-inch specimens to validate the d/D and t/T maximums identified in the out-of-plane expressions in STP PT-073 (B31J), and in WRC 297. The Independent Consultant shall complete these out of-plane SIF tests on 19 gauge 4-inch tube with 0.0625" 6-inch tube, using material yield and tensile properties selected to match ASTM A106 Grade B. The Independent Consultant shall fabricate and test three (3) 4-inch by 6-inch intersection scale model components.

ATTACHMENT 2: SCOPE OF WORK – PHASE 2

Independent Consultant to perform below described four (4) tests and provide reporting on these tests.

Test 1: Markl Fatigue Tests of 4x4 Commercial Welding Tees

Purchase twenty five (25) 4x4 standard wall ASTM A105 tees, fully compliant to ASME B16.9, with certified material test reports, from different vendors with the intention of finding the lowest quality product. Select the five tees that have the most undesirable qualities. The selection of the lowest quality is to be documented based on workmanship (visual inspection) and volumetric non-destructive examination (such as ultrasonic inspection) of the wall thickness around the intersection and in the three straights. In order to reduce costs, the bidder may propose fewer than 25 specimens, with a technical basis to justify achieving the same project objectives with a smaller number of specimens.

Perform fatigue test on three of these tees and burst test on two of these tees. Other tees shall be sectioned and checked for hardness and thickness variations. Undesirable qualities include:

a) Waviness/no symmetry in formed shape
b) Extensive surface roughness
c) Compression waves along the inside
d) Clear longitudinal weld seam
e) Thickness on the sidewall approaching or equal to 87.5% of nominal
f) Thin crotch regions with large crotch radii (bad for burst)
g) Thing crotch region with small crotch radii (bad for fatigue)

Test 2: Burst Test of Seam Welded Pipe

Bursting of longitudinally seam welded straight pipe should be conducted. Typical pipe from a variety of informally branded suppliers should be purchased and burst tested. The pipe should be same size and wall thickness as the carbon steel and stainless steel reported in Phase I. Purchase approximately 200 ft. of longitudinally seam welded pipe of the lowest quality considered available. Buy the pipe in the shortest lengths commercially available so that a wide variety of pipe from different manufacturers can be obtained. This would likely be A53 Grs A or B. API 5Lx52 pipe can also be purchased in electric resistance welded (ERW) or in other seam welded types. Inspect the thickness and quality of the pipe.

The thickness measurement steps and finite element calculations shall be included in the report. Strain measurement shall be visited to determine if large strain gages can be more effectively employed. Review the MTRs values for yield and tensile strength and perform hardness tests on polished sections. Charpy values shall be produced for the material and micro hardness readings shall be recorded at the surface and in the vicinity of the longitudinal weld. In particular extract Vickers readings in the vicinity of the seam weld. Show if these specimens will fail at pressures considerably lower than $f_m 2St/D$. Select straight pipe for the burst tests. Three or more burst test specimens at 20” long each shall be selected. Thickness profiles shall be established and the most likely failure location due to thickness shall be identified. Run the burst tests and given the variation in materials and testing, decide if additional tests

should be run. Depending how poorly the pipe performs, new guidelines for the design pressure of straight pipe should be considered.

Test 3: Rotating Bar Test

This test shall be conducted after the pipe sample and tee tests above have been conducted or are underway. A survey shall be conducted that describes the condition of the material received and of material that should be investigated/tested. These are simple tests that should be fabricated from a variety of selected straight pipe.

First part of this test shall be conducted with polished bar specimens. If consistent results (similar to Markl's) can be produced then second part of this test shall be conducted with welded specimens. If consistent results are not obtained during first part of the test (i.e. if A106B pipe material from three different vendors has considerably different fatigue strengths), then second part of the test shall involve determining why the materials are different and what effect this might have on the predicted cyclic capacity of piping systems. Later in the test, one can begin to answer the question about if high strength low allow steels (HSLA) have same, better, or worse fatigue strength than carbon steels. The code presently is moving into stating that they have the same fatigue strength as carbon steel (in the high cycle range one can imagine this being the case, in the low cycle range one can imagine that they do not have the same fatigue strength).

Rotating bar specimens can be purchased in a semi-polished state. It is preferable that pipe material is used. To replicate the polished bar test, could polish the bar surface to 0.3 micron with silicon paste. Silicon paste is used for the last two polishing stages. The test shall run without interaction of the operator and it generally runs for a few hours to a day or two depending on the load. OES to be done and Charpy samples to be cut. Micrographs shall be prepared and inspection of the failure surface shall be performed using an optical microscopy. Vickers micro hardness readings and Charpy test shall be conducted. Independent Consultant shall manage running of the rotating bar tested, polish specimens and conduct post-failure analysis to determine if the specimens fail as expected and if the failure indicates some irregular metallurgical property that significantly reduces the fatigue strength.

Test 4: Sustained Stress Test

Modifications for sustained stress indices for carbon steel branch connections with d/t>50 that are in ASME Section III were not permitted to be added to B31J. Testing of the existing high d/t specimens shall be used to verify that the modifications in ASME Section III shall also be used in B31J.

The Independent Consultant shall make a survey of the test pieces that could be used for a collapse test. The Independent Consultant shall simulate the collapse test using FEA and determine how the test should be loaded and whether or not the test should be pressurized. The Independent Consultant shall evaluate the pieces using the existing B31J sustained stress rules and the ASME Section III rules, then run the test and compare the results. Large diameter bend specimens shall be used for ratcheting determinations for large d/t geometries, but with some assembly, bend collapse test for large d/t specimens could also be run along with the straight pipe specimens.

The ASME Section III collapse criteria is the twice elastic slope test (TES), per ASME Section III Appendices – II. Stress indices in Section III are historically based on lower bound limit load theories,

where a true quantitative evaluation of the primary strength is not effectively made. These loads however, as confirmed by Phase I Independent Consultant's testing, do quantifiably compare to the TES load limit consistently within a safety factor of 2 or 1.4 (1.4 for straight pipe and 2 for all other components).

Independent Consultant shall:

1) Gather and/or survey parts. Determine what would be required to run TES tests on specimens, collect all MTRs, and if applicable previous test results.
2) Take most effective parts and compare against B31J and ASME Section III.
3) Perform at least one large (d/t>50) d/t test for bends and for straight pipe.
4) Perform finite element collapse analysis of each specimen.
5) Arrange for TIG welding of pressure nipples, repair of fatigue cracks, or mounting of flanges for the load platen, or loading.
6) Perform safety analysis for any pressurized test.
7) Run the collapse test (non-pressurized and pressurized)

ASME Standards Technology, LLC

Nonexclusive Independent Consultant Agreement

Standard Terms and Conditions

[Project Number: Title]

This Agreement, dated as of [_____], is made between ASME Standards Technology, LLC ("STLLC"), a New York not-for-profit corporation with its principal office at Two Park Avenue, New York, New York 10016 and [Insert Consultant Name and Address, spelled out completely] (the "Independent Consultant").

W I T N E S S E T H:

WHEREAS STLLC desires to engage the Independent Consultant to perform [insert scope description]; and

WHEREAS the Independent Consultant agrees to accept such engagement and to perform the services hereinafter specified;

NOW, THEREFORE, in consideration of the foregoing and the mutual agreements of the parties contained in this Agreement, it is agreed as follows:

1. Engagement. STLLC hereby engages the Independent Consultant, on an as needed and nonexclusive basis, to perform the services defined in Annex 1 to this Agreement (the "Work").

2. Performance. The Independent Consultant agrees to perform the services set forth above. The Independent Consultant agrees to perform such services professionally and to the best of its ability, to provide the services in an ethical manner, and to avoid conflicts of interest and any appearance thereof. It is understood that the Independent Consultant may obtain other consulting work and, as a result, may be unavailable, from time to time, to perform consulting services for STLLC, but the Independent Consultant agrees to adhere to the ASME Policies on Conflicts of Interest and Ethics. STLLC will not set specific daily schedules. STLLC will not provide tools, materials, supplies or equipment necessary for the Independent Consultant to perform the Work except for the necessary codes, standards, and procedures. Neither will STLLC reimburse the Independent Consultant for the use of its tools, materials, supplies or equipment. The Independent Consultant shall not engage subcontractors to perform

any portion of the Work without the written approval of STLLC. If Independent Consultant services require access to STLLC or ASME systems or their internal networks, that access must conform with ASME and STLLC use policies.

3. Fees. For all services to be rendered by the Independent Consultant to STLLC, as required by STLLC, the Independent Consultant will receive fees as specified in Annex 2 to this Agreement. It is understood and agreed that the Independent Consultant is performing services as an independent contractor. As a result, STLLC will not withhold any tax, of whatever nature, from payments made by STLLC to the Independent Consultant. The Independent Consultant is solely responsible for meeting federal, state, or local income tax liabilities. The total charges for all fees and expenses shall not exceed the contract value specified in Annex 2 to this Agreement.

4. Expenses. Expenses incurred by the Independent Consultant in connection with the Work shall be borne by the Independent Consultant as part of the total compensation for the Work.

5. Terms of Payment. The Independent Consultant shall submit associated invoices for acceptance by STLLC prior to payment. Invoices shall be submitted following achievement of milestones specified in Annex 2 to this Agreement. Payment shall be 100 percent net due 30 days after receipt of an acceptable invoice from the Independent Consultant.

6. Benefits. The Independent Consultant is not eligible for, and will not receive, any benefits from STLLC based on services performed under this Agreement.

7. Copyright and Ownership. The Independent Consultant agrees that STLLC specially ordered and commissioned the Work as "work made for hire" as that term is defined in the United States Copyright Act (17 U.S.C. §101), and that for purposes of the copyright laws, STLLC shall be deemed the "author" of the Work. If it is determined that the Work is not a work made for hire under the U.S. Copyright laws, then, as of the creation of the Work, the Independent Consultant hereby assigns exclusively and irrevocably to STLLC all worldwide, present and future right, title and interest in the Work, including the copyrights and other proprietary rights existing in the Work (including all United States and foreign copyrights, all copyrights under any treaties, conventions, proclamations, or the like, and all extensions of

such copyrights; all artistic and literary property rights; all moral rights; all rights to apply for or obtain any registrations for copyright in the Independent Consultant's name; and the right to sue and recover for any infringement of the Work). The Independent Consultant may not reproduce the Work in any form without STLLC's prior written permission.

8. Indemnification and Hold Harmless.

a. Obligation of the Independent Consultant – The Independent Consultant shall indemnify, defend and hold harmless STLLC and its officers, directors, employees and agents and each of them from any and all claims, actions, causes of action, demands, liabilities of whatsoever kind and nature including judgments, interest, attorney's fees, and all other costs, fees, expenses and charges which STLLC, its officers, directors, employees, agents and each of them, may incur arising out of the negligence, gross negligence or willful or wanton misconduct of the Independent Consultant, its officers, directors, employees or agents.

b. Obligation of STLLC – STLLC shall indemnify, defend and hold harmless the Independent Consultant and its officers, directors, employees and agents and each of them from any and all claims, actions, causes of action, demands, liabilities of whatsoever kind and nature including judgments, interest, attorney's fees, and all other costs, fees, expenses and charges which the Independent Consultant, its officers, directors, employees, agents and each of them, may incur arising out of the negligence, gross negligence or willful or wanton misconduct of STLLC, its officers, directors, employees or agents.

9. Term. It is mutually agreed that the Independent Consultant will commence work on this project immediately upon execution of this Agreement, and continue until completion, estimated as on or about [Contract End Date]. This termination date may be extended by mutual agreement, which must be confirmed in writing.

10. Termination. STLLC shall have the right to terminate this agreement upon 14 days notice in writing to the Independent Consultant at any time that STLLC shall in its judgment decide that such termination is in the best interests of STLLC. Conversely, the Independent Consultant shall have the right to terminate this agreement upon 14 days' notice in writing to STLLC at any time that the Independent Consultant shall in its judgment decide that such termination is in the best interests of the engineering profession. In the event of such termination, STLLC shall pay the Independent Consultant on a pro rata basis for percent of work

completed as determined by mutual agreement subject to the provisions of Sections 3 and 4 of this Agreement.

11. Force Majeure. The parties' performance under this contract is subject to acts of God, war, government regulation, terrorism, disaster, strikes, civil disorder, curtailment of transportation facilities, or any other emergency beyond the parties' control, making it inadvisable, illegal or which materially affects a party's ability to perform its obligations under this contract. Either party may terminate this contract for any one or more of such reasons upon written notice to the other party.

12. Trademark Usage. Independent Consultant may not use any of STLLC's trademarks or other identifiers (including the STLLC logo) in any manner without STLLC's prior written approval or consent. STLLC reserves the right to review any approved use of its trademarks and to require changes in any further use, and Independent Consultant agrees to comply with those requirements.

13. Publicity Release and Public Affairs. The Independent Consultant shall not make without prior review and approval of STLLC, any publicity release of any nature of general, non-technical information in connection with this Agreement. For purposes of this Agreement, general, non-technical information means any information concerning the existence of the Agreement, the identity of the parties, and the scope and general character of the research or technical activity**.**

14. Entire Agreement. This Agreement entirely supersedes, terminates, and replaces any and all prior agreements between the parties relating to the subject matter hereof and may not be amended except by an instrument in writing signed by both parties to this Agreement.

15. Notices. Any notices hereunder shall be given to the parties at their respective addresses set forth above by registered mail until a new and different address shall be established for either party on the basis of notice given to the other party.

16. Governing Law. This Agreement shall be subject to and governed by the substantive laws of the State of New York (without regard to its conflict of laws rules).

IN WITNESS WHEREOF, STLLC has caused this Agreement to be executed on its behalf by its officer thereunto duly authorized and the Independent Consultant has executed this Agreement as of the day and year first above written.

ASME STANDARDS TECHNOLOGY, LLC

By: _____
Name: Steven Ferguson
Title: President

INDEPENDENT CONSULTANT

By: _____
Name:
Title:
[Federal Tax ID number] | [Social Security] | [Other]

Annex 1 – Statement of Work

Background

Scope of Work

General

Deliverables

Schedule

Status Reporting

Annex 2 – Financial Terms

Fees and Expenses

Invoicing & Payment