

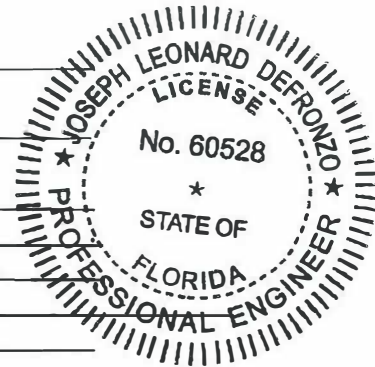


SPECIFICATIONS PACKAGE  
Contract Number: \_\_\_\_\_  
FINANCIAL PROJECT ID(S): 444707-1-58-01  
FEDERAL No (FAIN) D422-071-B  
CITY OF PORT ST. LUCIE  
ST. LUCIE COUNTY

The July 2022 Edition of the Florida Department of Transportation Standard Specifications is revised as follows:

*I hereby certify that this specifications package has been properly prepared by me, or under my responsible charge, in accordance with procedures adopted by the Florida Department of Transportation.*

Signature and Seal: Joseph DeFronzo, P.E.  
Date: August 25, 2022  
State of Florida,  
Professional Engineer, License No.: 60528  
Firm/Agency Name: City of Port St. Lucie  
Firm/Agency Address: 121 S.W. Port St. Lucie Blvd.  
City, State, Zip Code: Port St. Lucie, FL 34984  
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# **SPECIAL PROVISIONS**

**SCOPE OF WORK – INTENT OF CONTRACT.**

**(REV 10-25-21) (FA 1-26-22) (7-22)**

ARTICLE 4-1 is expanded by the following:

The Improvements under this Contract consist of installation of traffic cameras at signalized intersections, optimization of green time, and addition of adaptive traffic signal control along Gatlin Boulevard within the City of Port St. Lucie.

**LEGAL REQUIREMENTS AND RESPONSIBILITY TO THE PUBLIC – LAWS TO BE OBSERVED – GENERAL (COMPLIANCE WITH FHWA 1273).**

**(REV 1-2-14) (FA 1-16-14) (7-22)**

SUBARTICLE 7-1.1 is expanded by the following:

The FHWA-1273 Electronic version, dated May 1, 2012 is posted on the Department’s website at the following URL address

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/implemented/urlinspecs/files/fhwa1273.pdf?sfvrsn=a8c7d8c8\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/implemented/urlinspecs/files/fhwa1273.pdf?sfvrsn=a8c7d8c8_2)

Take responsibility to obtain this information and comply with all requirements posted on this website up through five calendar days before the opening of bids.

Comply with the provisions contained in FHWA-1273.

If the Department’s website cannot be accessed, contact the Department’s Specifications Office Web Coordinator at (850) 414-4101.

**LEGAL REQUIREMENTS AND RESPONSIBILITY TO THE PUBLIC - EQUAL EMPLOYMENT OPPORTUNITY REQUIREMENTS.**

**(REV 4-25-02) (FA 7-17-02) (7-22)**

SECTION 7 is expanded by the following:

**7-27 Equal Employment Opportunity Requirements.**

**7-27.1 Equal Employment Opportunity Policy:** Accept as the operating policy, the following statement which is designed to further the provision of equal employment opportunity to all persons without regard to their age, race, color, religion, national origin, sex, or disability and to promote the full realization of equal employment opportunity through a positive continuing program:

“It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their age, race, religion, color, national origin, sex, or disability. Such action must include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job training.”

**7-27.2 Equal Employment Opportunity Officer:** Designate and make known to the Department's contracting officers an equal employment opportunity officer (hereinafter referred to as the EEO Officer) who must be capable of effectively administering and promoting an active Contractor program employment opportunity and who must be assigned adequate authority and responsibility to do so.

**7-27.3 Dissemination of Policy:** All members of the Contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the Contractor's equal employment opportunity policy and contractual responsibilities.

**7-27.4 Recruitment:** When advertising for employees, include in all advertisements for employees the notation "An Equal Opportunity Employer".

**7-27.5 Personnel Actions:** Establish and administer wages, working conditions, employee benefits, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination without regard to age, race, color, religion, national origin, sex, or disability.

Follow the following procedures:

1. Conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

2. Periodically evaluate the spread of wages paid with each classification to determine any evidence of discriminatory wage practices.

3. Periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action must include all affected persons.

4. Investigate all complaints of alleged discrimination made in connection with obligations under this Contract, attempt to resolve such complaints, and take appropriate corrective action. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action must include such other persons. Upon completion of each investigation inform every complainant of all of the avenues of appeal.

**7-27.6 Subcontracting:** Use the best efforts to ensure subcontractor compliance with their equal employment opportunity policy.

**7-27.7 Records and Reports:** Keep such records as are necessary to determine compliance with the equal employment opportunity obligations. The records kept will be designed to indicate the following:

1. The number of minority and nonminority group members employed in each work classification on the project.

2. The progress and efforts being made in cooperation with unions to increase minority group employment opportunities (applicable only to Contractors who rely in whole or in part on unions as a source of their work force).

3. The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority group employees as deemed appropriate to comply with their Equal Employment Opportunity Policy.

4. The progress and efforts being made in securing the services of minority group subcontractors or subcontractors with meaningful minority group representation among their employees as deemed appropriate to comply with their Equal Employment Opportunity Policy.

All such records must be retained for a period of three years following completion of the contract work and be available at reasonable times and places for inspection by authorized representatives to the Department and the Federal Highway Administration.

Upon request, submit to the Department a report of the number of minority and nonminority group employees currently engaged in each work classification required by the Contract work.

## **LEGAL REQUIREMENTS AND RESPONSIBILITY TO THE PUBLIC – PREFERENCE TO STATE RESIDENTS.**

**(REV 1-13-12) (7-22)**

SECTION 7 is expanded by the following new Article:

### **7-28 Preference to State Residents.**

Florida Statutes 255.099 (Chapter 2010-147, Section 50, Laws of Florida), providing for preference to residents of the State of Florida, is hereby made a part of this Contract:

Each contract that is funded by state funds must contain a provision requiring the Contractor to give preference to the employment of state residents in the performance of the work on the project if state residents have substantially equal qualifications to those of nonresidents.

As used in this Section, the term “substantially equal qualifications” means the qualification of two or more persons among whom the employer cannot make a reasonable determination that the qualifications held by one person are better suited for the position than the qualifications held by the other person or persons.

## **LEGAL REQUIREMENTS AND RESPONSIBILITY TO THE PUBLIC – E-VERIFY.**

**(REV 6-13-11) (FA 6-16-11) (7-22)**

SECTION 7 is expanded by the following new Article:

### **7-29 E-Verify.**

The Contractor shall utilize the U.S. Department of Homeland Security’s E-Verify system to verify the employment eligibility of all new employees hired by the Contractor during the term of the Contract and shall expressly require any subcontractors performing work or providing services pursuant to the Contract to likewise utilize the U.S. Department of Homeland

Security's E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the Contract term.

**LEGAL REQUIREMENTS AND RESPONSIBILITY TO THE PUBLIC –  
SCRUTINIZED COMPANIES.**

**(REV 3-22-18) (7-22)**

SECTION 7 is expanded by the following new Article:

**7-30 Scrutinized Companies.**

For Contracts of any amount, if the Department determines the Contractor submitted a false certification under Section 287.135(5) of the Florida Statutes, or if the Contractor has been placed on the Scrutinized Companies that Boycott Israel List, or is engaged in a boycott of Israel, the Department shall either terminate the Contract after it has given the Contractor notice and an opportunity to demonstrate the Department's determination of false certification was in error pursuant to Section 287.135(5)(a) of the Florida Statutes, or maintain the Contract if the conditions of Section 287.135(4) of the Florida Statutes are met.

For Contracts \$1,000,000 and greater, if the Department determines the Contractor submitted a false certification under Section 287.135(5) of the Florida Statutes, or if the Contractor has been placed on the Scrutinized Companies with Activities in the Sudan List, or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, the Department shall either terminate the Contract after it has given the Contractor notice and an opportunity to demonstrate the Department's determination of false certification was in error pursuant to Section 287.135(5)(a) of the Florida Statutes, or maintain the Contract if the conditions of Section 287.135(4) of the Florida Statutes are met.

**PROSECUTION AND PROGRESS - PROSECUTION OF WORK – REGIONAL  
DISPUTES REVIEW BOARD.**

**(REV 2-8-21) (FA 2-18-21) (7-22)**

ARTICLE 8-3 is expanded by the following new Subarticle:

**8-3.7 Regional Disputes Review Board:** For this Contract, a Disputes Review Board (Board) will be available to assist in the resolution of disputes and claims arising out of the work on the Contract.

**8-3.7.1 Purpose:** The Board will provide special expertise to assist in and facilitate the timely and equitable resolution of disputes and claims between the Department and the Contractor (Parties) in an effort to avoid construction delay and future claims.

It is not intended that the Parties default on their normal responsibility to cooperatively and fairly settle their differences by indiscriminately assigning them to the Board. It is intended that the Board encourage the Parties to resolve potential disputes or claims without resorting to this alternative resolution procedure.

**8-3.7.2 Disputes Resolution:** The Board will be used when normal dispute or claim resolution is not succeeding. It is a condition of this Contract that the Parties shall use the

Board. Either Party may refer a dispute or claim to the Board for a disputes review hearing. Disputes and claims will be considered as quickly as possible, taking into consideration the particular circumstances and the time required to prepare detailed documentation. Steps may be omitted as agreed by the Parties and the time periods stated below may be shortened in order to hasten resolution.

If the Contractor objects to any decision, action or order of the Engineer, the Contractor may file a written protest with the Engineer, stating clearly and in detail the basis for the objection, within 15 calendar days after the event. The Engineer will consider the written protest and make his decision on the basis of the pertinent contract provisions, together with the facts and circumstances involved in the dispute or claim. The Engineer's decision will be furnished in writing to the Contractor within 15 calendar days after receipt of the Contractor's written protest. This decision will be final and conclusive on the subject, unless a written appeal to the Engineer is filed by the Contractor within 15 calendar days of receiving the decision.

**8-3.7.2.1 Disputes Review Hearings:** Only disputes or claims that have been duly preserved under the terms of the Contract as determined by the Board will be eligible to be heard by the Board. Disputes or claims shall be referred to the Board by providing a position paper outlining the nature and scope of the dispute or claim and describing the basis for entitlement to the dispute or claim. Claims that are referred to the Board must be in compliance with 5-12. Requests for equitable adjustment must be certified as required by 4-3.2.

Either Party furnishing any written evidence or documentation to the Board must do so a minimum of 15 calendar days prior to the date of the hearing for the dispute, and will at the same time furnish copies of such information to the other Party. Additionally, either party furnishing any written evidence or documentation to the Board must do so a minimum of 15 calendar days prior to the date of the hearing for the dispute, and will at the same time furnish copies of such information to the other Party. If the Board requests any additional documentation or evidence prior to, during, or after the hearing, the Party will provide the requested information to the Board and to the other Party.

Both Parties will each be afforded an opportunity to be heard by the Board and to offer evidence. Neither Party may present information at the hearing that was not previously distributed to both the Board and the other Party.

The Board will fairly and impartially consider disputes or claims referred to it and will provide written recommendations to the Parties within 15 calendar days of completion of the hearing to assist in the resolution of these disputes or claims. The Board will focus its attention in the written report to matters of entitlement and allow the parties to determine the monetary damages. In cases of extreme complexity, both Parties may agree to allow additional time for the Board to formulate its recommendations.

Recommendations provided by the Board will not be binding on either Party.

Within 15 calendar days of receiving the Board's recommendations, both Parties will accept or reject the recommendations by responding to the other and to the Board in writing. The failure of either Party to reject within the 15-day period will be deemed an acceptance of the Board's recommendations by that Party and shall preclude any further pursuit of this issue before this Board or any successive Board.

For disputes involving non-compensable time extensions, the Department will resolve the dispute in a good-faith manner regardless of its acceptance or



rejection of the Board's recommendations.

If Entitlement is determined by the Board, the Parties should proceed to negotiate monetary changes within 60 calendar days. If both Parties are unable to successfully negotiate monetary changes within 60 calendar days, the Board shall be notified of the impasse, and upon the request of both Parties shall then proceed to schedule a hearing to make a recommendation as to monetary damages.

If the Parties resolve the dispute with or without the aid of the Board's recommendations, the Department will promptly process any required changes to the Contract.

Requests for reconsideration of a Board recommendation may only be made when there is new evidence to present. The completed hearing of any unresolved dispute or claims is a condition precedent to a Party having the right to initiate arbitration, other alternative resolution procedures, or to file a lawsuit, as provided by law, on such unresolved disputes or claims. In addition, all written recommendations of the Board will be admissible as evidence in any subsequent arbitration, or circuit proceedings, as provided by law.

**8-3.7.3 Contractor Responsibility:** The Contractor shall furnish to each Board member a set of all pertinent documents which are or may become necessary for the Board, except documents furnished by Department, to perform their function. Pertinent documents are any drawings or sketches, calculations, procedures, schedules, estimates, or other documents which are used in the performance of the work or in justifying or substantiating the Contractor's position. A copy of such pertinent documents must also be furnished to the Department.

Except for its participation in the Board's activities as provided in the construction Contract and in this Agreement, the Contractor will not solicit advice or consultation from the Board or any of its members on matters dealing in any way with the project, the conduct of the work or resolution of problems.

**8-3.7.4 Department Responsibilities:** Except for its participation in the Board's activities as provided in the Contract and in this Three Party Agreement, the Department will not solicit advice or consultation from the Board or any of its members on matters dealing in any way with the project, the conduct of the work or resolution of problems.

The Department shall furnish the following services and items:

a. **Contract Related Documents:** The Department shall furnish each Board member a copy of all Contract Documents, supplemental agreements, written instructions issued by the Department to the Contractor, or other documents pertinent to the performance of the Contract and necessary for the Board to perform their function. A copy of such pertinent documents must also be furnished to the Contractor.

b. **Coordination and Services:** The Department, in cooperation with the Contractor, will coordinate the operations of the Board. The Department, through the Project Engineer, will arrange or provide conference facilities at or near the Contract site and provide secretarial and copying services.

**8-3.7.5 Continuance of Work:** During the course of the Board's process, the Contractor will continue with the work as directed by the Engineer in a diligent manner and without delay or otherwise conform to the Engineer's decision or order, and will be governed by all applicable provisions of the Contract. Throughout any protested work, the Contractor will keep complete records of extra costs and time incurred. The Contractor will permit the Engineer and Board access to these and any other records needed for evaluating the disputes or claims.

**8-3.7.6 Membership:** The Board will consist of members pre-selected by the Engineer and the President of the Florida Transportation Builders' Association (FTBA), and posted on the Department's Website.

If during the life of the contract, a Board member has a discussion regarding employment or entered into any agreement for employment after completion of the contract with the Department, the Contractor or any subcontractor or supplier on the project, he/she shall immediately disclose this to the Contractor and the Department and shall be disqualified from serving on the Board.

Once established, the Board will remain active and in full force and effect. If, after the Department has made final acceptance of the project, there are unresolved disputes and claims remaining, the Board shall remain active and in full force and effect until the project is otherwise administratively closed by the Department following final payment so that the Board may continue in operation until all unresolved disputes and claims are resolved.

**8-3.7.7 Limitation for Referral of Disputes or Claims to the Board:** Any disputes or claims that were not resolved prior to Final Acceptance of the project pursuant to 5-11 must be referred to the Board within 90 calendar days after Final Acceptance for projects with an original Contract amount of \$3,000,000 or less, and within 180 calendar days after Final Acceptance on projects with an original Contract amount greater than \$3,000,000. Only duly preserved disputes or claims will be eligible to be heard by the Board. Failure to submit all disputes or claims to the Board within aforementioned timeframe after Final Acceptance constitutes an irrevocable waiver of the Contractor's dispute or claim.

**8-3.7.8 Basis of Payment:** A per hearing cost of \$9,000 for the Contract has been established by the Department for providing compensation for all members of the Board for participation in an actual hearing. The Board chairman will receive \$3,500 for participation in the hearing while the remaining two members will receive \$2,750 each. The Parties will equally provide compensation to the Board for participation in an actual hearing. The Department will compensate the Contractor \$4,500 as its contribution to the hearing cost. Such payment will be full and complete compensation to the Board members for all expenses related to the hearing. This includes travel, accommodations, meals, pre- and post- hearing work, review of position papers and any rebuttals, conducting the hearing, drafting and issuance of recommendations, readdressing any requests for clarification. It is not intended for hearings to last longer than a single day, however, in some cases they may. Any additional time and/or compensation for a hearing would only be allowed upon prior written approval of the Parties. If an additional day(s) is granted for the hearing, it will be at \$3,900 per day, payment of which is equally split between the Parties. Payment shall be made by issuing a work order against contingency funds set aside for this Contract.

The Department will prepare and mail minutes and progress reports, will provide administrative services, such as conference facilities and secretarial services, and will bear the cost of these services. If the Board desires special services, such as legal consultation, accounting, data research, and the like, both parties must agree, and the costs will be shared by them as mutually agreed.

# **TECHNICAL SPECIAL PROVISIONS**

**TECHNICAL SPECIAL PROVISIONS.**

The following Technical Special Provisions are individually signed and sealed but are included as part of this Specifications Package.

**TECHNICAL SPECIAL PROVISION FOR**

**T633 - MULTI-CONDUCTOR COMMUNICATION CABLE**

**FINANCIAL PROJECT NO.: 444707-1-58-01**

**FEDERAL No (FAIN) D422-071-B**

The official record of this Technical Special Provision has been manually signed and sealed by Joseph DeFronzo on the date adjacent to the seal.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Firm Name:	<u>The City of Port Saint Lucie</u>
Firm Address:	<u>121 SW Port Saint Lucie Blvd</u>
City, State, Zip code:	<u>Port Saint Lucie, FL 34984</u>
Certificate of Authorization Number:	<u></u>
Pages(s):	<u>1 - 3</u>

## I.1.A. T633 – MULTI-CONDUCTOR COMMUNICATION CABLE

### T633-1 Description.

Furnish and install multi-conductor communication cable for ITS field devices as shown in the Plans. Multi-conductor communication cable is used to carry communication signals between ITS equipment, via communication protocols such as Ethernet and RS-485 serial or is used to energize signaling equipment as part of signaling circuits.

### T633-2 Materials.

**T633-2.1 General:** Use only new materials meeting the requirements of this Technical Special Provision.

**T633-2.2 CAT-6 Cable:** Use polyethylene jacketed CAT-6 cable conforming to the requirements of TIA 568 C.2 with ETL verification. Cable which is ran outside of equipment enclosures must be shielded twisted pair Ethernet cable (FTP) using an aluminum foil shield with drain wire, include solid copper conductors, and be terminated with shielded RJ-45 connectors. Cable which remains within the equipment enclosure where it originates may be un-shielded twisted pair (UTP), include stranded copper conductors, and be terminated with un-shielded RJ-45 connectors. Use straight-through cables when connecting data terminating equipment (DTE) to data communications equipment (DCE), and cross-over cables when connecting DTE to DTE or DCE to DCE. For RJ-45 connector color coding: use TIA T-568B connectors as the standard configuration for straight-through cables and use TIA T-568B on one end and TIA T-568A on the other end for cross-over cables.

**T633-2.4 IMSA 20-1 Cable:** Use cabling compliant with IMSA 20-1 specifications that provides three individually insulated #14 AWG stranded copper conductors.

**T633-2.5 Ethernet Repeaters:** Use data only forwarding Ethernet repeaters that are Power Over Ethernet (POE) powered. Repeaters must include two independently auto-configuring 10BASE-T/100BASE-TX, half/full duplex ports.

**T633-2.5.1 POE Standards:** Repeaters must be compatible with the following POE standards: IEEE 802.3af and IEEE 802.3at.

**T633-2.5.2 Power Requirements:** Ensure that repeaters are POE powered and consume no more than 2 watts of power.

**T633-2.5.3 Environmental Requirements:** Repeaters must be capable of operating in a temperature range of -40°F to 140°F and with relative humidity of up to 85%, non-condensing. Ensure that the repeater enclosure is IP66 rated and includes cable sealing glands that seal around cabling entering the enclosure.

**T633-2.6 Power Over Ethernet (PoE) Injectors:** Use injectors with two RJ-45 interface ports, with one port being the data input port and the other being the data plus power output port. Each RJ-45 interface must be an auto-configuring 10BASE-T/100BASE-TX/1000BASE-T half/full duplex port. Ensure that the injector includes provisions for DIN rail mounting.

**T633-2.6.1 PoE Standards:** Injectors must be compatible with the following POE standards: IEEE 802.3af and IEEE 802.3at.

**T633-2.6.2 Power Requirements:** Ensure that injectors are 120VAC powered or include any power conversion equipment required to enable 120VAC power compatibility. Ensure that the injector can supply up to 30 watts of PoE power at 56VDC.

**T633-2.6.3 Environmental Requirements:** Injectors must be capable of operating in a temperature range of -40°F to 140°F and with relative humidity of up to 95%, non-condensing. Ensure that the repeater enclosure is IP30 rated.

### **T633-3 Installation Requirements.**

Install multi-conductor communication cable in continuous lengths from ITS or signal cabinets to the appropriate ITS device. Separate multi-conductor communication cables from high voltage conductors: do not install multi-conductor communication cabling in the same conduit or pull boxes, as cable carrying current in excess of 1.5 amps or energized to a voltage in excess of 24 VDC/VAC to ground or between conductors. Keep cable on the unprotected side of surge suppression devices separate from cable on the protected side to prevent induction of lightning and other high voltage transient currents.

**T633-3.1 Protection of Cable:** Ensure cable drawn through conduit, ducts, drilled holes protected by a rubber grommet, or support structures is installed in such a manner as to prevent damage to conductors or insulation.

**T633-3.2 Surge Protective Devices:** Install surge protective devices, meeting the requirements of Section 620, on cable when entering traffic signals and ITS cabinets or enclosures, and as indicated in the Plans, prior to connection to Ethernet switches, PoE injectors, device servers, and other terminal devices.

**T633-3.3 Outdoor Connections:** Cable connections to equipment located outdoors must be provided with a means to prevent water intrusion at the equipment connection or cable entrance to the equipment housing.

**T633-3.4 Repeaters:** Install and mount repeaters as indicated in the Plans. Do not install repeaters in pull boxes or other underground enclosures. Only install repeaters in above ground enclosures, junction boxes, or cabinets. Install repeaters when Ethernet cable distance exceeds 300 feet. Ensure a watertight seal is achieved between the cable glands and all cabling entering the injector's enclosure.

**T633-3.5 Injectors:** Install injectors inside of traffic signal controller or ITS cabinets. Mount to DIN rails unless otherwise depicted in the Plans. Bond the injector to the cabinet grounding system in accordance with the manufacturer's instructions.

### **T633-4 Method of Measurement.**

The Contract unit price for multi-conductor communication cable, furnished and installed, will include furnishing all material, terminal connectors, surge suppression devices, repeaters, injectors, cable shield grounding, and labor necessary for a complete and accepted installation. Payment will be based on the linear feet of multi-conductor cable installed between end points of the cable run, independent of the number of conductors or individually jacketed cables constituting the multi-conductor cable run.

**T633-5 Basis of Payment**

Price and payment will be full compensation for all work specified in this Technical Special Provision.

Payment will be made under:

Item No. 633-8-1      Multi-Conductor Communication Cable, Furnish & Install

-  
per linear foot.



**THIS COMPLETES  
THIS  
SPECIFICATIONS  
PACKAGE**