# ffic Planning and Design, Inc.

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# TRAFFIC PLANNING AND DESIGN, INC. PROFESSIONAL SERVICES AGREEMENT

Date: At	oril 14, 2014	
Client: Sp	ringfield School District	
Client Address: 11	111 West Leamy Avenue	
Sp	ringfield, PA 19064	
Client Contact: M	r. Don Mooney, Executive Director of Operations	
Project Name:	Springfield High School Master-Plan	
Municipality/County/State	: Springfield Township, Delaware County, PA	
TPD Project Manager:	Guido W. DiMartino, P.B.	
IPD Project No.:	SDSD,A.00001	

Traffic Planning and Design, Inc. (TPD) is pleased to submit this Professional Services Agreement ("Agreement") regarding the above-referenced project (the "Project"). Included in this Agreement are sections regarding Assumptions, Scope of Services, Schedule, Fee Estimate and Standard Terms and Conditions.

This Agreement will be between TPD and Springfield School District ("Client").

In order for TPD to begin our services, we request that Client review this Agreement and return a signed authorization to our office. We appreciate the opportunity to be of service on this Project.

#### ASSUMPTIONS

This Agreement has been prepared under the following assumptions, which reflect TPD's current understanding of the Project:

- The scope of the study was based on the March 31, 2014 RFP email.
- Development The proposed development will consist of a new High School on the existing site. The Saxer Ayenue site identified in the January 23, 2014 Master Plan status Update presentation will be evaluated.
- Student Enrollment The High School currently has ~1,210 students. The new High School will be able to accommodate a maximum of 1,450 students.

- Existing Access The site is currently served by will be served by four driveway locations, one to Rolling Road, one to West Learny Avenue, one to Orchard Road, and one to Johnston Road. In addition, there is on-street parking and a drop-off area along West Learny Avenue.
- Proposed Access In conjunction with the Saxer Avenue site, Rolling Road, between West Learny Avenue and Saxer Avenue will no longer function as a public road. This section of Rolling Road will be converted to an internal road with a parking lot, drop-off/pick-up area, and will still connect to Saxer Avenue and West Learny Avenue (opposite western leg of Rolling Road). In addition, there will be modifications to the parking lots along Orchard Road and Johnston Road; however the access for these lots will remain in their existing locations.
- Highway Occupancy Permit (HOP) Since West Learney Avenue and Rolling Road are not state-maintained roadways, an HOP will not be required for access for this project. However, depending on the results of the study off-site roadway improvements may be identified at state-maintained roadways, which would require an HOP. This proposal does not include an HOP plan submission.
- Study Year Although the proposed access does not require PennDOT involvement, it is
  anticipated that PennDOT approval may be necessary for this project (e.g. HOP or signal
  adjustments). Therefore, TPD assumed PennDOT guidelines regarding the TIS are
  applicable to this project and will evaluate the design year. PennDOT guidelines define the
  design year as five (5) years after the development is fully built and occupied. Assuming
  the development will open in 2018, the design year for this project would be 2023. TPD
  will coordinate the opening/design year with the School District.
- Study Times TPD recommends that the following time periods be studied: weekday A.M. peak hour and afternoon peak hour. For the weekday A.M. peak hour, TPD will evaluate the peak hour of each individual intersection as the school peak and commuter peak generally coincide. For the afternoon peak, TPD will determine the peak hour of the High School based on counts at the driveways and parking area along West Learny Avenue and determine the afternoon school peak hour. This afternoon school peak hour will be evaluated at all intersections listed in Task II.1.
- Study Area It is anticipated that the study area will consist of the site driveway
  intersections with the external roads, and all of the intersections listed in Task II.1. It should
  be noted that these intersections are subject to change based upon input from the Township
  and PennDOT.
- Base (finture "no-build") Conditions TPD will assume a background growth factor based on PennDOT statistics.
- Trip Generation The trip generation analysis for this study will be conducted utilizing the higher of either, (1) <u>Trip Generation Manual</u>, 9<sup>th</sup> Edition, 2012, from the Institute of Transportation Engineers (ITE), or (2) a rate developed per student based on the counts at the existing High School.
- Crash Data TPD will request crash data from PennDOT and the municipality for roadway segments between the intersections listed in Task II.1 for the past five (5) years.



- Submissions This proposal covers the following: one preliminary traffic study submission to the Client and attendance to two (2) meetings. There are no provisions for response letters or subsequent submissions. TPD will correct any mathematical, analytical, or typographical errors in the study without further cost to the client. Any changes due to enlarged or changed scope, reviewer preference, or client preference will be performed on an out-of-scope basis.
- This cost is provided for budgetary purposes only and should not be viewed as a total cost or not to exceed price, unless otherwise stated.

Note: See "Project Cost" Section.

If you disagree with any of these assumptions, please notify us at the time you authorize the study. Otherwise, we will proceed with the study using the assumptions listed above. Any items added, which are not contained within this proposal will be completed on an out of scope basis.

#### Construction Cost

Evaluation of Client's or owner's Project budget, and/or estimates of construction cost, if included in TPD's Scope of Services, represent TPD's best judgment as a design professional familiar with the construction industry. It is recognized, however, that TPD does not have control over the cost of labor, materials, or equipment, over the contractor's methods of determining bid prices, or over competitive bidding, market, or negotiating conditions. Accordingly, TPD cannot and does not warrant or represent that bids or negotiated prices will not vary from the project budget proposed, established or approved by the Client or owner, if any, or from any statement of probable construction cost or other cost estimate or evaluation prepared by TPD.

### Out of Scope or Additional Services

Any service requested that is not described in the above Scope of Services section will be billed on an hourly basis according to the current fee schedule, plus expenses. Before proceeding with such services, TPD will inform Client of the need for additional services.

If Client disagrees with any of these assumptions, please notify TPD at your earliest convenience, so that revisions to this Agreement document can be made accordingly. Otherwise, upon authorization, we will proceed using the assumptions listed above.

#### SCOPE OF SERVICES

TPD's Scope of Services under this Agreement shall include the following tasks:

#### TASK I, PRELIMINARY INVESTIGATION

- 1. Obtain information from PennDOT and the Township regarding any planned roadway improvements in the study area.
- 2. Obtain a copy of the PennDOT-approved traffic signal permit plan for the intersections listed in Task II.1, which are currently signalized.



3. Request crash data from PennDOT for the study area intersection listed in Task II.1.

#### TASK II. FIELD DATA COLLECTION

- 1. Conduct manual counts for the weekday morning (6:30-9:00 A.M.) and weekday afternoon (2:00-6:00 P.M.) peak time periods at the following intersections:
  - Orchard Road and High School Driveway;
  - West Leamy Avenue and High School Driveway;
  - Rolling Road and High School Driveway;
  - Johnston Road and Lownes Lane;
  - West Leamey Avenue and Orchard Road;
  - West Learney Avenue and Rolling Road (eastern leg);
  - West Leamey Avenue and Rolling Road (western leg);
  - West Learny Avenue and Powell Road;
  - Woodland Avenue (Route 420) and Orchard Road;
  - Woodland Avenue (Route 420) and Rolling Road/Middle School Access;
  - Saxer Avenue and Johnston Road;
  - Saxer Avenue and Rolling Road (eastern leg);
  - Saxer Avenue and Rolling Road (western leg);
  - Saxer Avenue and Powell Road.

Note: See "Traffic Counts" section of Data Collection.

- 2. Conduct manual counts/observations for the weekday morning (6:30-9:00 A.M.) and weekday afternoon (2:00-6:00 P.M.) peak time periods at the following locations:
  - · On-street parking and drop-offs along West Leamy Avenue;
  - Observe vehicles/passengers traveling along Rolling Road, between West Learny Avenue and Saxer Avenue to estimate the number of vehicles which are High School related.
- 3. Determine the existing traffic volumes and patterns on a 24-hour weekday basis on the following road segments:
  - Rolling Road, between West Learny Avenue and Saxer Avenue.
- 4. Describe the external road system in the study area as defined by the intersections listed in Task II.1.
- 5. Measure the existing sight distances at the proposed access drive locations in accordance with PennDOT sight distance measurement methodology (10 feet back for driveways at a driver's eye height of 3.5 feet above the proposed elevation at this point per the site plan). Confirm the access drive meets PennDOT's desirable sight distance values for the posted speed limit, the grade of the road per the site plan and the type of vehicle utilizing the access point if truck percentages at the access drive exceed 5%.

Note: See "Sight Distance Analysis" section of Data Collection

6. Conduct pedestrian counts at the intersections listed in Task II, 1.



# TASK III. EXISTING & BASE YEAR VOLUME DEVELOPMENT

- 1. Determine the weekday A.M. and afternoon peak hour traffic volumes for the intersections listed in Task II.1.
- 2. Determine the projected increase in traffic at the study area intersections due to background growth, based on the methodology outlined in the Assumptions section of this proposal and supplied by the PennDOT Bureau of Planning and Research (BPR).
- 3. Develop Design Year Base (No-Build) Condition traffic volumes for the intersections listed in Task II.1.

# TASK IV. TRIP GENERATION/DISTRIBUTION & PROJECTED VOLUME DEVELOPMENT

- 1. Determine the trip generation of the proposed development on a daily and peak highway hours basis utilizing the Institute of Transportation Engineers <u>Trip Generation Manual</u>.
- 2. Compare the peak hour trip generation rates from Task IV.1 to the trip generation rates developed by TPD based on actual counts at the existing High School. Use whichever trip generation estimate is higher for the remaining analyses,
- 3. Redistribute traffic to the surrounding study area intersections to account for the Rolling Road "closure".
- 4. Using trip distribution rates developed from an analysis of existing traffic patterns in the study area, distribute and assign the site-generated traffic to the driveways and the intersections on the local road network identified in Task II.1.
- 5. Determine Design Year Projected (Build) Condition traffic volumes for the intersections listed in Task II.1.

### TASK V. ANALYSES

- 1. Based on counts completed in Task II, estimate the number of vehicles using Rolling Road along the school which are non-High School related and will be diverted.
- 2. Based on counts completed in Task II, determine the projected increase in traffic Powell Road and Orchard Road due to the Rolling Road modification.
- 3. Conduct capacity analyses at the intersections identified in Task II.1 for Existing, Base, and Projected Conditions, and at the driveway intersections for Projected Conditions.
- 4. Compare Base Condition and Projected Condition LOS to determine the traffic impact at the study area intersections attributable to the site.
- 5. For roadways and intersections within the study area, determine roadway improvements necessary to mitigate the traffic impacts (if any) attributable to the site.
- 6. Conduct traffic signal warrant analyses based on peak hour and four-hour traffic volumes at any deficient unsignalized intersections identified in Task V.1 for Base and Projected Conditions. It should be noted that PennDOT requires that other warrants be satisfied prior



to approving a traffic signal, however, peak and four hour warrants provide a basis for evaluating the need to investigate further warrants. If required by PennDOT and directed to do so by the client, TPD will complete the additional data collection and perform the additional studies as a separate task on an out-of-scope basis.

7. For each proposed driveway location, conduct analyses to compare the existing (measured) sight distances to the applicable sight distance standards (Note: See "Sight Distance Analysis" section of Special Provisions).

#### TASK VI. REPORT PREPARATION

- 1. Prepare schematic figures illustrating the results of Tasks I-V.
- 2. Prepare a preliminary report of findings discussing the results of Tasks I-V.

#### TASK VII. MEETING ATTANEDANCE

1. Prepare for and attend two (2) meetings with the District Facility Committee.

## PROJECT SCHEDULE

It is estimated that the traffic counts will be completed by the end of the School year if TPD receives authorization to proceed by May 16, 2014. The draft traffic study will be completed weeks after the counts are complete.

In the event that TPD is delayed in the performance of the Services, through no fault of its own, then TPD shall be entitled to an equitable adjustment of the schedule.

#### FEES AND EXPENSES

## Policy Regarding Fee Estimates

As a general policy, TPD will not provide a not-to-exceed ("NTE") price regarding the estimated fee for <u>project approvals</u>, because the scope of services may change or increase based on changes by the project team, or based on reviewer preference. Also, the complexity of the project may not be fully apparent at the outset when the Agreement is prepared. In the same way, the degree to which the reviewing agencies, the municipality, and local stakeholders will facilitate the project, or fight it, has a definite impact on the project cost. If the Client requests TPD to prepare a budgetary estimate of the necessary transportation engineering fees for a project, then any such budgetary estimate provided by TPD shall be based upon past experiences with similar projects, and shall, by no means whatsoever, be interpreted as a firm fee quotation for the subject project.

# Professional Services

The not-to-exceed time and materials fee for TPD's performance of the tasks listed in the Scope of Services is \$26,500.00.



#### Expenses .

Expenses such as copies, prints, postage, mileage, next-day mail, and hand-delivery of materials are included in the estimated fee for professional services, assuming typical deliveries and reproduction of the report, etc.

Based on applicability, TPD employs various methods of Data Collection and TPD reserves the right to substitute ATC (automated traffic counter) charges for man hour labor where a benefit to the project can be realized. The costs associated with ATC counts are not included in the expenses, but will be billed as man hour labor as appropriate. The professional service cost estimate will not change if ATC counts are substituted for manual counts.

#### Meetings

The costs for attending meetings are <u>not</u> included in the fee estimate for professional services, unless such meetings are specifically included in the Scope of Services. All meetings not specifically covered in the Scope of Services will be attended at Client's request (or at Client's attorney's request) and will be billed hourly using TPD's applicable fee schedule at the time of the meeting. TPD will provide our current fee schedule for relevant personnel upon Client request,

# Special Cost Provision

If, as part of any legal proceeding associated with this project, any TPD employee is subpoenaed for deposition or testimony purposes, Client will be billed at TPD's hourly rate (in effect at the time of deposition) for those services plus any related expenses.

#### DATA COLLECTION

#### Traffic Counts

If it is necessary to conduct traffic counts from June 20 to Labor Day, during a school in-service day, a minor holiday, inclement weather, etc., it may be necessary to conduct supplemental counts later to confirm that those counts are accurate and reflect average conditions. If it is found that the counts do not accurately represent average conditions, it may be necessary to adjust the entire study to reflect average conditions. Any work that is required to adjust the study as a result of such traffic counts being conducted, will be billed as described in the "Out of Scope Work" section of this proposal.

#### Sight Distance Analysis

It is assumed that any on-site feature can be eliminated in order to attempt to meet PennDOT's Desirable sight distance standard and TPD will generally identify which such features need to be eliminated. PennDOT values will be used for this initial test since they are generally greater than municipal requirements and usually supersede municipal requirements when the municipal



traffic consultant reviews projects. The results of the sight distance measurements will be furnished to the site engineer to compare against municipal standards.

If PennDOT's desirable sight distance standards are not met for the posted speed limit, a study option will be investigated on a time and materials basis. TPD may compare the existing sight distance measurement to AASHTO and PennDOT safe stopping sight distance (SSSD) requirements for the 85th percentile speed, a perception/reaction time of 2.5 seconds, a wet coefficient of friction of 0.30 and the grade taken from the site plan. During this analysis, a radar speed study may be required to determine the existing 85th percentile speed of off-peak traffic in both directions at the site access point. After completing this initial study, it may be necessary to perform additional speed studies to determine the 85th percentile speed at the point when the brakes will be applied after completing the perception/reaction time and to utilize a different grade over the actual braking distance in order to recalculate the existing sight distance on a time and materials basis.

If this study option doesn't work (existing sight distance is still less than required [acceptable] sight distance), several design options exist including relocating the driveway, re-grading the access point, re-grading the existing road from which access is being taken, eliminating sight distance obstructions on adjacent properties, etc. Other design alternatives that could be investigated for an existing intersection is the installation of multi-way stop signs, or for roads not maintained by PennDOT, the installation of flashing signals with battery back-up installed on "INTERSECTION AHEAD" signs to lower the reaction time although approval of either of these last two design options is typically unlikely. If we identify a problem that cannot be solved utilizing the study options above, and need to investigate design options, we will notify you in writing and proceed if requested on a time and materials basis.

{Continue to next Page for TPD Standard Terms and Conditions}



# TPD STANDARD TERMS AND CONDITIONS

#### 1. Payment Terms

- a. Invoices will be issued by Traffic Planning and Design, Inc. (TPD) as work proceeds. Payment is due within the invoice due date or where otherwise specified by this Agreement. Interest equal to 1.5% per month (18% per year) will be applied to unpaid invoices. Payments will be credited first to interest and then to principal.
- b. If fees are not paid in full within the due date, without liability, TPD reserves the right to pursue all appropriate remedies, including stopping work on five (5) days' notice and retaining all documents without recourse until the account is brought current.

#### 2. Instruments of Service

- a. All Documents are Instruments of Service. TPD shall retain the copyright thereto, and an ownership and property interest therein whether or not the project is completed.
- b. TPD grants Client a non-exclusive license to use the Instruments of Service solely and exclusively for the purpose of constructing, using, maintaining, altering and adding to the Project, provided that the Client substantially performs its obligations, including prompt payment of all sums when due, under this Agreement. Client may make and retain copies of documents for information and reference in connection with use on the project by Client. Such documents are not intended or represented to be suitable for reuse by Client or others on extensions of the specific project for which they were prepared or on any other project. Any such reuse or modification without written verification or adaptation by TPD, as appropriate for the specific purpose intended, will be at Client's sole risk and without liability or legal exposure to TPD or to TPD's Consultants. Client shall defend, indemnify and hold harmless TPD and TPD's Consultants from all claims, damages, losses, economic damages and expenses, including attorneys' fees arising out of or resulting from such reuse or modification.

# 3. Standard of Care

TPD will strive to perform services under this Agreement in a manner consistent with that level of care and skill ordinarily used by members of the subject profession currently practicing in the same locality under similar conditions. No other representation and no warranty or guarantee, express or implied, is included or intended in this Agreement, or in any report, opinion, document, or otherwise.

#### 4. Limitation of Liability

- a. To the fullest extent permitted by law, the total liability in the aggregate, of TPD and TPD's officers, directors, employees, agents, and independent professional associates, and any of them, to Client and anyone claiming by, through or under Client, for any and all injuries, claims, losses, expenses, or damages whatsoever arising out of or in any way related to TPD's services, the project, or this Agreement, from any cause or causes whatsoever, including but not limited to, the negligence, errors, omissions, strict liability, breach of this Agreement, misrepresentation, or breach of warranty of TPD or TPD's officers, directors, employees, agents or independent professional associates, or any of them, shall not exceed the total compensation received by TPD under this Agreement or \$50,000 whichever is greater.
- b. Client and TPD agree to a mutual waiver of special, incidental, indirect, or consequential damages including but not limited to loss of profits, loss of use arising out of, resulting from, or in any way related to the project or this Agreement.



c. TPD shall not be responsible for any acts or omissions, or accuracy of data and or information supplied upon which TPD may rely, of any Client, contractor, subcontractor, or supplier, or any agents or employees or any other persons acting on behalf of Client, contractor, subcontractor, or supplier; or for any decision made on interpretations or clarifications of information supplied by Client, contractor, subcontractor, or supplier without consultation and advice of TPD.

#### 5. Termination

- a. The obligation to provide further services under this Agreement may be terminated:
  - For cause, by either party upon 30 days written notice in the event of substantial failure
    by the other party to perform in accordance with the Agreement's terms through no fault
    of the terminating party.
  - ii. By TPD
    - (1) upon seven days written notice if TPD believes that it is being requested by Client to furnish or perform services contrary to TPD's responsibilities as a licensed professional; or
    - (2) upon seven days written notice if TPD's services for the Project are delayed or suspended for more than 60 days for reasons beyond TPD's control.
    - (3) TPD shall have no liability to Owner on account of such termination.
- b. TPD shall not be obligated to resume services under the Agreement until Client has paid all sums previously due and owed by Client.

# 6. Successors and Beneficiaries

TPD and Client each is hereby bound and the partners, successors, executors, administrators, and legal representatives of TPD and Client are hereby bound to the other party to this Agreement and to the partners, successors, executors, administrators, and legal representatives (and said assigns) of such other party, in respect of all covenants, agreements, and obligations of this Agreement.

# 7. Mediation

Prior to the initiation of any legal proceedings, the parties to this Agreement agree to submit all claims, disputes or controversies arising out of or in relation to the interpretation, application or enforcement of this Agreement to non-binding mediation. Such mediation shall be conducted under the auspices of the American Arbitration Association or such other mediation service or mediator upon which the parties agree. The Party seeking to initiate mediation shall do so by submitting a formal, written request to the other party to this Agreement. This section shall survive completion or termination of this Agreement, but under no circumstances shall either party call for mediation of any claim or dispute arising out of this Agreement after such period of time as would normally bar the initiation of legal proceedings to litigate such claim or dispute under the laws of the Commonwealth of Pennsylvania.



# 8. Invalidity of Provisions

If any term or provision of this Agreement shall be held to be invalid or illegal, such term or provision shall not affect the validity or enforceability of the remaining terms and provisions of this Agreement.

#### 9. Controlling Law

This Agreement is to be governed by the law of the state in which the project is located.

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# 10. Total Agreement

- a. This Agreement (together with any expressly incorporated appendix), constitutes the entire agreement between TPD and Client and supersedes all prior written or oral understandings. This Agreement may only be amended or modified by a TPD representative.
- b. Signatures transmitted via facsimile or in PDF format by electronic mail shall be binding upon the parties hereto with the same force and effect as original signatures.

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# **AUTHORIZATION PAGE**

#### Confidentiality

Client agrees that the Scope of Services and rolated provisions included in this Agreement represent a valuable and unique work product developed by TPD specifically for this Project, which may not be used or disclosed by Client for any purpose without TPD's express consent in writing. This specifically precludes Client from utilizing the enclosed Scope of Services for the purpose of soliciting competitive bids from other engineering companies, unless TPD has been compensated for our services in developing the Scope of Services and related provisions. Client also agrees to keep the terms of this Agreement confidential, and that any unauthorized use or disclosure of TPD's Agreement, Standard Terms and Conditions, or related rate schedule constitutes a violation of applicable state laws, regarding, without limitation, unfair competition, misappropriation, and trade scerets.

#### Client Acceptance of Services Agreement

TPD's offer of services under this Agreement shall remain valid for thirty (30) calendar days from the date of this Agreement. Acceptance of the Agreement after the end of the thirty (30) day period shall be valid only if TPD elects, in writing, to reaffirm the Agreement, and waives its right to re-evaluate and resubmit the Agreement. In order for TPD to begin our services, we request that Client review this Agreement and return the signed authorization to our office.

Inis Services Agreement prepared by:	This Services Agreement approved by:
Traffic Planning and Design, Inc. (TPD)	Traffic Planning and Design, Inc. (TPD)
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Guido W. DiMartino, P.B., Project Manager	Bric Ostimchuk, P.E., PTOB, Principal
Client Authorization	·
Client authorizes TPD to proceed with the services as	described within this Agreement:
Signature;	Date:
Name (Please Print):	
Position:	<del></del>
Pirm:	
E-mail Address;	
Phone Number:	·
Please retain one copy for your file and forward an ex	ecuted copy to TPD.
Hendquarters for Traffic Plauning and Design, Inc. 2500 East High Street, Suite 650 Pottstown, PA 19464 Phone 610.326.3100 www.trafficpd.com	(TPD)

