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CITY OF PHILADELPHIA OFFICE OF THE INSPECTOR GENERAL



Audit Report *L+I Demolition Inspection Activity*

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I. EXECUTIVE SUMMARY

On October 25, 2015, *The Philadelphia Inquirer* published an article titled “What new building inspection guidelines?” that reported deficiencies in the demolition inspection process at the Department of Licenses + Inspections (L+I). According to the article, several anonymous L+I building inspectors reviewed a selection of demolition permit information from HANSEN, the department’s central database. The inspectors’ analysis resulted in two primary conclusions. First, L+I “failed to follow new inspection guidelines in more than 80 percent of private demolitions” performed between January 1 and October 8, 2015. Second, “the agency’s database appears to have been altered to show that demolition inspections occurred when they had not.” The article also referenced high numbers of: (i) permits with no recorded inspections during demolition; (ii) work that began prior to a recorded initial inspection; and (iii) permits with several “passed” inspection entries on the same day.

In response to these claims, the Mayor directed the Office of the Inspector General (OIG) to audit and review L+I’s inspection activity. The OIG was tasked with addressing the merits of the anonymous inspectors’ conclusions, as presented in the *Inquirer* article. The OIG audit was also focused on clarifying L+I’s administration of the inspection process and identifying potential opportunities for improvement.

The OIG audit proceeded in two phases. Phase 1 was focused on assembling the relevant background information and understanding how L+I’s fundamental guidance on demolition inspections was operationally applied to the process in the field. Phase 1 included interviews of relevant L+I supervisors, managers and administrators. In Phase 2, the OIG obtained every private demolition permit that L+I issued and closed between January 1 and October 8, 2015.¹ The OIG collected all HANSEN data associated with these permits, including the recorded inspection outcomes and corresponding comments.² Then, OIG personnel interviewed every available inspector who made a permit inspection entry in HANSEN.³ Each inspector was questioned about each entry, as well as any underlying departmental issues that may have impacted the demolition inspection process.

This audit determined that the first of the article’s conclusions – that L+I is not following its own inspection guidelines – is generally correct. According to the OIG’s analysis, L+I properly administered the demolition inspection process in approximately 22% of sampled permits. The remaining 78% displayed one or more of the following characteristics: (i) at least one improperly “passed” inspection entry; (ii) no recorded inspections during demolition; and/or (iii) demolition that began before the initial inspection without a corresponding enforcement action or sufficient emergency justification.

The second of the article’s conclusions – that HANSEN was somehow altered to show that demolition inspections occurred when they had not – is incorrect. The OIG uncovered no evidence of intentional misrepresentations, data manipulation or attempts to conceal inspection activity on the part of anyone at the Department of Licenses + Inspections.

The article’s unfounded claim about HANSEN is most likely the result of the inspectors’ widespread misunderstanding and misapplication of the “passed” designation for inspection entries. In 57% of the

¹ This set of exactly 100 permits included the full set of permits analyzed in the *Philadelphia Inquirer* article.

² The OIG also requested the inspectors’ route sheets and any available photographs. L+I, however, does not reliably maintain these records, so they are not directly addressed in this report.

³ Two out of 19 inspectors were not available.

sampled permits, the assigned inspector improperly “passed” at least one inspection that should have been “waived.” Most of these “pass” errors were due to inconsistent guidance about how to record impossible and/or inapplicable inspections that could not be performed as a result of the building type or problems with inspection scheduling. Rather than waive these inspection entries in HANSEN, most inspectors passed them in an effort to administratively close the permit.

In addition to these findings, the OIG identified a number of other informative trends that are presented in the table below. Later sections address these trends in greater detail.

Inspection Trends – OIG Analysis

Inspection Trend	Number of Permits (%)
HANSEN Entries for All Work Instruction Inspections	3(%)
No Recorded Inspections During Demolition	55(%)
Demolition Started Before Initial Inspection	53(%)
Reported Inspections Not Entered in HANSEN	24(%)
Two or More Inspections Passed Same Day	72(%)
Three or More Inspections Passed Same Day	45(%)
Inspections by 2 or More CSU Inspectors	35(%)
Inspections by 3 or More CSU Inspectors	5(%)
One or More Improperly “Passed” Inspections	57(%)
Citation / Violation Issued	23(%)
No Inspection Issues	22(%)

Overall, this review determined that deficiencies in the demolition inspection process are the apparent result of: (i) misaligned internal standards; (ii) an inadequate method of scheduling inspections; (iii) poor distribution of work; and (iv) inconsistent and faulty use of HANSEN.

Part II of this report presents necessary background information on the demolition process and the department’s general inspection practice. Part II also identifies a series of issues that help frame the statistical findings and provide important context. Part III presents the specific data and statistical trends, along with applicable examples of permit inspection records from HANSEN. Part IV outlines the OIG’s recommendations to improve the demolition inspection process: (i) a revised Work Instruction; (ii) programming changes to HANSEN; (iii) guidelines and training for the inspectors on the appropriate use of HANSEN; (iv) an enhanced inspection-scheduling mechanism; and (v) more organizational stability within the unit that inspects private demolition permits. Part V concludes.

the 1990s, the number of people with a mental health problem has increased in the UK. The prevalence of mental health problems has risen from 10% in 1986 to 15% in 1999 (Mental Health Act 2003). The prevalence of mental health problems has also increased in the USA, from 10% in 1986 to 15% in 1999 (Mental Health Act 2003).

There is a growing awareness of the need to address the needs of people with mental health problems. The UK government has set a target of reducing the number of people with a mental health problem by 20% by 2010 (Mental Health Act 2003). The USA government has set a target of reducing the number of people with a mental health problem by 20% by 2010 (Mental Health Act 2003).

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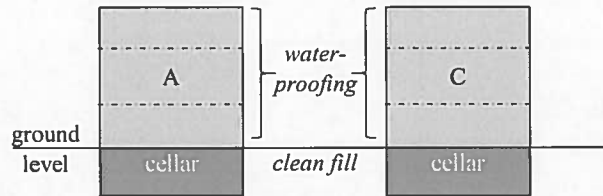
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Figure 2: Residential Row After Demolition of Center Building

A qualified and experienced contractor could complete a typical demolition like this in a matter of days – sometimes in a single day. In fact, safe demolitions should move quite swiftly because the process itself compromises structural integrity. Partially demolished buildings are generally more at risk of collapse, making efficiency one of the most important safety considerations. Unlike construction, where the project can be postponed to wait for inspections, delaying a demolition in-progress can be quite risky.

As demolition moves forward, L+I inspectors should visit the site at different times, looking for some of the issues described in the above example and generally checking that the contractor is following the building-specific site safety plan that was approved with the permit. Timing is of the essence, because all evidence of the demolition process is quickly erased as the building comes down.

In a typical rowhome demolition like the example here, the application of waterproofing sealant, often stucco, to the adjoining walls is obviously a crucial measure of protection for the neighboring properties. Also, the cellar cavity must be carefully addressed – improper fill material and/or a failure to allow drainage could cause serious structural issues for the adjoining buildings.

But, with some slight variations to the example, these otherwise critical steps in demolition safety become unnecessary and/or impossible. For example, if the property to be demolished is wholly unattached to any other building, there would be no need for the contractor to waterproof party walls. And, many buildings are not constructed on below-ground foundations,⁶ eliminating the backfill process altogether. Similarly, if the contractor is planning to build a new building at the same site, he or she will likely use the same cellar cavity or base, again eliminating the need to backfill an open hole.

These are only some of the basic deviations that can greatly affect the scope of the contractor's work and L+I's corresponding inspection duties. Because of the variety and complexity in the demolition process, L+I inspections should appropriately be focused on different things, depending on the type and condition of the building to be demolished as well as the contractor's timing. The department's written procedure, therefore, must be equally flexible to account for the different situations that an inspector could encounter in the field.

B. Applicable L+I Regulations – *Work Instruction CS 1314*

Following the Market Street building collapse in June 2013, the City's demolition inspection process dramatically changed. In accordance with Executive Order 4-13, L+I immediately enacted Code Bulletin of Information B-1302,⁷ "Demolition Standards and Activity Controls" (Code Bulletin) and Work

⁶ L+I inspectors and demolition professionals refer to this construction feature as "slab-on-grade."

⁷ Now Code Bulletin of Information B-1302R, after subsequent revisions in April 2015.

Instruction CS 1314, “Demolition Permit Inspections” (Work Instruction).⁸ These two documents outline a robust series of demolition inspections, which the City has largely codified in The Philadelphia Code, Title 4, Subcode A.⁹

The Code Bulletin was intended for the private contracting community, while the Work Instruction was written for internal L+I personnel – the inspectors themselves. To date, these sources remain the controlling authority for L+I’s demolition inspection process. Although there are some slight differences,¹⁰ both the Code Bulletin and Work Instruction consistently describe a series of five (5) categorical inspections to be conducted for each permitted demolition, summarized below.

Table 1: Demolition Inspections by Type – Work Instruction CS 1314

<i>Inspection Title</i>	<i>Description</i>
Initial	Before the start of demolition, the inspector is to visit the site and review the site safety plan with the contractor. The inspector will verify: (i) the contractor has taken the appropriate steps to protect pedestrians and adjoining structures; and (ii) the contractor has adequate technical plans to demolish the building in accordance with the Building Code.
Under-Slab / Floor	After demolition begins, the inspector is to visit the site and ensure that the contractor is progressing in a safe manner and following the site safety plan. According to the Work Instruction, one of these inspections is to be performed for each floor of the building, with a minimum of two (2) per permit – and/or one to ensure proper cracking of the cellar floor.
Framing / Close-In	Prior to backfilling the cellar cavity, the inspector is to visit the site and confirm that an application of parging and waterproofing is applied to adjacent foundation walls. The inspector is also to ensure that the contractor has sealed any openings in exposed party walls and capped chimneys.
Prefinal / Wallboard	Also prior to backfilling, the inspector is to verify: (i) any/all improper fill has been removed from the cellar cavity; and (ii) the site is generally ready for the final inspection.
Final	After demolition is fully completed, the inspector is to confirm that the contractor has followed all steps, removed debris and properly graded the site.

As evident above, the detailed series of inspections in the Work Instruction closely tracks the basic demolition model for a multi-story attached rowhome. There are clear and specific instructions for inspections that examine waterproofing/parging of party walls and the proper backfilling of cellar cavities. The concept of specific under-slab or floor-by-floor inspections is also well suited to multi-story buildings that must proceed from the roof down in a segmented fashion.

But, the language of the instruction is also very narrow. As demolitions deviate from the traditional rowhome model, the Work Instruction becomes less relevant. Without alternatives and more flexible guidance on the inspectors’ use of discretion, it is difficult for inspectors to interpret the strict series of inspections.

⁸ Work Instruction CS 1314 was first issued on June 12, 2013 and has not yet been revised.

⁹ Philadelphia Administrative Code § A-402.10.6 sets forth the specific inspections required of every permitted demolition, “as applicable to the scope of work.” The Code provisions generally mirror the Work Instruction, but they are not identical.

¹⁰ Because the Work Instruction is an internal document, it contains slightly different language directed toward the L+I inspectors. For example, the Work Instruction states, “At a MINIMUM, two (2) under-slab/floor inspections shall be performed on each demolition permit,” and it directs the inspectors to photograph every inspection.

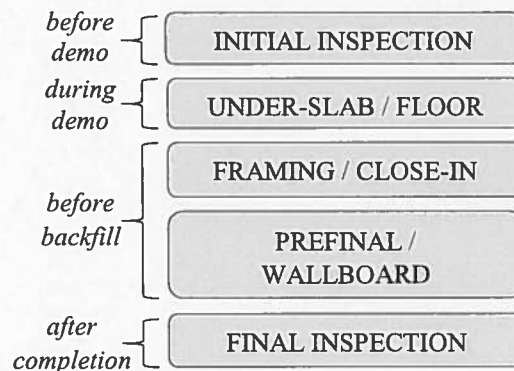
ISSUE 1: Lack of Clear Guidance

At the outset, it is clear that the precise series of inspections in the Work Instruction cannot be conducted uniformly in the field. Except for the initial and final inspections, which should always be applicable to demolition in any context, the remaining three inspections are very specific to certain types of projects. If there are no adjoining buildings, and/or if there is no backfilling of a cellar cavity, the framing/close-in and prefinal/wallboard inspections have limited utility. Furthermore, the Work Instruction is very clear that, “At a MINIMUM, two (2) under-slab/floor inspections shall be performed on each demolition permit.” But, inspectors cannot follow this firm directive in demolitions of one or two story buildings where the project ceaselessly progresses to the ground-level.

C. Inspection Scheduling & Contractor Violations

The legal structure of this series of inspections places some requirements on L+I inspectors and some requirements on the demolition contractors – both parties share responsibility to ensure that the required inspections are performed for each project. L+I is required to conduct final inspections in every case, regardless of the specific demolition project.¹¹ But, the contracting community is responsible for all of the remaining inspections. The demolition contractor must “provide for” these inspections during the project and make the site available for L+I inspectors to view.¹² Failure to do so could result in a Code Violation Notice (CVN) and \$500 fine.¹³ This is the inspectors’ primary tool to enforce compliance with inspection requirements.¹⁴

Each of the Work Instruction inspections is designed to take place at different points in the demolition process: the initial inspection must occur prior to any work; the under-slab/floor inspections are to be conducted as demolition progresses from the roof down; the framing/close-in and prefinal/wallboard inspections are to be conducted prior to backfilling the cellar cavity; and the final inspection takes place after all other steps have been completed and the site has been successfully graded.

Figure 3: Timing of Work Instruction Inspections

Because it is the contractor’s responsibility to call L+I and schedule the different inspections at the appropriate times during the project,¹⁵ the entire process is dependent on closely coordinated timing. If

¹¹ PA Uniform Construction Code §§ 403.45, 403.64.

¹² See Philadelphia Administrative Code §§ A-402.1, A-402.8.

¹³ Philadelphia Administrative Code §§ A-506.1, A-506.2.

¹⁴ Of course, inspectors can cite the contractor for a variety of other violations related to the condition of the property and manner/means of demolition. However, this CVN and corresponding fine are the only violations directly applicable to the contractor’s compliance with the inspection process.

¹⁵ See Philadelphia Administrative Code §§ A-402.1, A-402.8.

the contractor fails to schedule an inspection and continues the project without notifying the assigned inspector, demolition work could progress to a point when certain inspections become impossible for the inspector to perform.

For example, if the contractor removes all floors of the building in a matter of hours after the initial inspection, without sufficient notice the inspector cannot complete the floor-by-floor inspections that the Work Instruction requires. Or, if the contractor backfills the cellar cavity before the inspector has an opportunity to examine the fill, there is no way to complete the framing/close-in or prefinal inspections in the manner that the Work Instruction describes.¹⁶

Ideally, at the initial inspection, the contractor and the inspector will go through the site safety plan and the schedule of demolition. At that time, the inspector should have a basic understanding of the timing of subsequent inspections. But, the inspector must still rely on the contractor to adhere to that schedule and contact him or her directly. And, the department has no specific inspection-scheduling system or automated feature that assists with this task. Currently, contractors and inspectors must reach one-another by phone and work through their respective schedules.

ISSUE 2: Inadequate Process for Scheduling Inspections

More than anything else, the ability for inspectors to properly review demolition work depends heavily on timing. Inspectors carry significant City-wide workloads and they must closely coordinate their own schedules with many different contractors and projects. Although this is not an impossible task, there are many factors that could severely hamper an inspector's ability to manage this process on his own. Missed calls, days away from work, reassignments, rogue contractors, emergency and complaint-response responsibilities could easily cause an inspector to miss a very small window in any given private demolition job. And if the inspector misses that window, key inspections could be lost because there is no way to revisit prior steps in the demolition process.

D. Other Demolition Inspections

In addition to the five Work Instruction inspections, there are several other types of inspections that L-I inspectors can perform. There is no written guidance on these inspections and they do not appear in the Work Instruction, but inspectors frequently use these different designations when addressing private demolition permits. Table 2, below, presents some of the alternative demolition inspections:

¹⁶ If the contractor fails to notify the inspector, as described in these examples, the inspector may issue a Code Violation Notice and fine the contractor \$500 per occurrence. Philadelphia Administrative Code § A-506.2 ("failure to provide for required demolition inspections"). In the narrow context of demolition inspections, this citation is the primary enforcement method for L-I inspectors. Without corresponding Code Violation Notices, there is no clear way for inspectors to exercise control over the private demolition sector.

Table 2: Other Demolition Inspections by Type

<i>Inspection Title</i>	<i>Description</i>
Construction Site Task Force (CSTF)	L+I's Construction Site Task Force visits demolition sites and inspects for safety issues unrelated to the technical manner and means of demolition. These inspections typically focus on: (i) proper posting of permits; (ii) adequate up-to-date contractor insurance; (iii) garbage and/or construction debris; and/or (iv) other non-structural issues related to the project that relate to site safety.
Test Pit	After the contractor has backfilled an exposed cavity, the inspector may require a partial excavation of the site in order to determine if the contractor buried any improper fill material.
Discretionary	Inspectors may visit the demolition site at any other time and make corresponding entries in HANEN using this inspection code.

After the Market Street collapse, L+I created the Construction Site Task Force (CSTF) – a specialized group of inspectors who conduct spot-checks at all demolition sites throughout the City. These inspections are critical to site safety, but they are not typically focused on technical or structural issues related to the manner and means of demolition.

Test pit inspections are widely used by the inspectors. In the event that the inspector was not present to view the exposed cellar cavity and/or the actual backfilling process, the inspector will require the contractor to dig one or more pits at the demolition site. This technique allows the inspector to verify that the contractor backfilled the cavity in accordance with the Building Code. And, unlike the categorical framing and wallboard inspections from the Work Instruction, test pit inspections do not require precise coordination between the inspector and the contractor – they can be performed at any point after backfilling. Of course, like all inspections that address backfilling, test pits are often inapplicable. They would not be necessary if the building has no below-ground foundation or if new construction is planned at the site.

Lastly, discretionary inspections have no specified categorical rules or regulations. Inspectors can perform these inspections at any point during the project and for any reason associated with their official responsibilities.

E. Departmental Organization

Until April 2014, two divisions of L+I shared the responsibilities of demolition inspections: the Construction Services Division (Construction Services) and the Contractual Services Unit (CSU). Construction Services has approximately 40 inspectors, divided between five (5) different geographical districts of the City. These inspectors used to perform the bulk of L+I's inspection work associated with private permits – both construction and demolition.

CSU has a wide variety of duties. The unit is basically responsible for all decayed/damaged properties that have been classified "Imminently Dangerous" (ID) or "Unsafe." CSU administers the City's Master

Demo Program and performs the associated inspections with these so-called “public” demolitions.¹⁷ CSU also inspects private-permitted demolitions of ID and Unsafe properties.¹⁸

In April 2014, L+I changed this bifurcated approach and assigned *all* demolition inspections to CSU. L+I leadership believed that CSU inspectors had far more experience with demolition because of their work with the Master Demo Program and ID properties. So, centralizing all demolition inspections – both public and private – within CSU would theoretically take advantage of these inspectors’ expertise.

At that time, however, CSU only had approximately six (6) inspectors. And, there were approximately 200 open private demolition permits that CSU immediately assumed. This City-wide work, previously spread between the 40 district inspectors, was now assigned to only six people.

Since April 2014, CSU has grown significantly, with approximately 20 inspectors currently assigned to the unit. But the unit was still understaffed for a significant period of time, and most of the inspectors were hired within the last year. There were also significant reassignments within the unit in the last year, due to lapses in inspector certifications and training duties.¹⁹ CSU has also lacked continuity in the supervisor ranks; the unit’s had four (4) different supervisors between January and October 2015.

Furthermore, there was a significant amount of discord between Construction Services and CSU about the relevant Work Instruction and the use of HANSEN. Because CSU primarily worked on public-side demolitions, the inspectors had a very different practice. Technically, these demolition jobs had no issued permit, so CSU inspection activity was much more informal and unregulated.²⁰ The Construction Services group of inspectors, however, followed the more formal Work Instruction. Both groups, CSU and Construction Services, felt that their respective inspection process was superior.

When CSU took over all private demolition inspections, the Work Instruction was provided to the six CSU inspectors. But, according to those in the unit at the time, there was never any training or thorough explanation of the Work Instruction’s series of inspections. Many supervisors felt strongly that the Work Instruction was too cumbersome and unsuited for demolition, so they placed very little emphasis on this document.

Most of the CSU inspectors also reported significant confusion about the Work Instruction²¹ – mainly because they received no explanation and the titles of the inspections in the Work Instruction were

¹⁷ Some ID and/or Unsafe properties are at severe risk of collapse and require demolition as a matter of public safety. If the owner is either unavailable or unwilling to perform a needed demolition, the City will hire its own contractor to conduct the demolition in the interest of protecting the community. Because these demolitions are performed by City contractors, L+I has taken the position that they do not require actual permits. These demolitions are, however, still inspected by L+I personnel assigned to CSU.

¹⁸ In addition, CSU inspectors have emergency and complaint response duties, and they are responsible for all “Make Safe” permits.

¹⁹ Many CSU inspectors had inactive or absent UCC certifications. Before April 2014, CSU conducted relatively few inspections associated with open permits. Because the CSU inspectors were not working on permit matters prior to April 2014, L+I asserted that UCC certifications were not required for this group of inspectors.

²⁰ This is not to say that CSU inspections of public demos were insufficient and/or less thorough. Rather, L+I took the position that, because there were no permits, the technical demolition inspection regulations were not strictly applicable in the context of the Master Demo Program.

²¹ During OIG interviews for this audit, some CSU inspectors stated that they never read and/or saw the Work Instruction at any time prior.

somewhat misleading.²² As a result, CSU inspectors and supervisors generally continued to inspect private-permitted demolitions in the same manner that they did for public demolitions, disregarding the Work Instruction's rigid approach.

ISSUE 3: Detrimental Changes to Organizational Structure

There was an apparently sound substantive rationale to centralize all demolition inspections within CSU – the inspectors in that unit had more relevant experience in the field. But, there were at least two operational issues that had negative effects on the demolition inspection process overall. First, CSU was not in a position to assume the additional workload at that time. There were too few inspectors to cover the new permit work, and the current CSU inspectors had unanticipated UCC certification issues. The influx of new inspectors helped, but it also eradicated the policy rationale behind the change in the first place. Second, because Construction Services had different inspection practices than CSU, the Work Instruction was devalued to such an extent that it became almost irrelevant to fieldwork. There was no apparent explanation, no training and no attempt to ensure consistency as the private demolition work transferred from Construction Services to CSU.

F. HANSEN & Inspection Entries

Finally, no analysis of L+I's inspection activity can be complete without a thorough discussion of HANSEN, the department's central database. L+I employees use this system to issue permits and licenses, monitor individual cases, issue violations and track a wide variety of departmental data. Essentially, all L+I activity requires HANSEN and should be documented in the system.

With regard to demolition permitting and inspection, HANSEN operates along a specific thread. When a contractor is granted a demolition permit for a private project, L+I Plans Examiners create a permit thread in HANSEN associated with the address of the property. Automatically, HANSEN generates different inspection entries that are tied to the permit. The permit is assigned to an inspector in CSU, who then must address each of the different pre-generated inspection entries.

Initially, for all demolition permits, HANSEN automatically generated entries for the exact Work Instruction inspections: initial; under-slab/floor; framing/close-in; prefinal/wallboard; and final. When the Work Instruction was first issued, HANSEN was programmed in precise alignment.²³

After the reassignment of all demolition inspections to CSU in April 2014, HANSEN was apparently re-programmed.²⁴ Now, for some private demolition permits, HANSEN generates a series of inspection entries that is quite different from the Work Instruction: "initial, prefinal, test-pit, final."

²² For example, there are no technical "framing", "under-slab" or "wallboard" processes in demolition.

²³ This is the reason for the misleading titles of the Work Instruction inspections. After the Market Street collapse, HANSEN had to be re-programmed to match the new demolition inspection process. The programmers borrowed titles from existing HANSEN inspection entries used in the construction context: "under-slab;" "framing;" etc.

²⁴ It is unclear who initiated this change, but it is most likely related to CSU's rejection of the Work Instruction.

Strangely, for some demolition permits associated with “Imminently Dangerous” or “Unsafe” buildings, the Work Instruction inspection entries appear. But for others, HANSEN generates different inspections altogether, as shown in Table 3.

This idiosyncrasy is extremely important when evaluating the inspectors’ activity in the field because HANSEN is the inspectors’ primary source of direction with regard to the particular set of inspections that are “required” for each permit.

Table 3: HANSEN-Generated Demo Permit Inspections by Building Type

<i>Select ID/Unsafe Properties²⁵</i>	<i>Other Properties</i>
CSU_INITIA	PRI_INITIA
CSU_SLAB	PRI_PREFIN
CSU_FRAME	PRI_TSTPIT
CSU_PREFIN	PRI_FINAL
CSU_FINAL	

Inspectors can add their own inspection entries, like discretionary inspections, as the project progresses. But they generally follow the pre-generated series tied to the permit in HANSEN. The way the system operates, the inspectors are tasked with *responding* to the inspection entries that HANSEN calls for. Before the permit can be closed or “finalized,” each of these pre-generated inspections must be resolved in HANSEN. Otherwise, the permit will remain open and impact other threads or workflows associated with the same property address.²⁶

For each inspection entry on the permit, the inspector can select one of the following resolutions: passed, failed, waived, or closed. Generally, a “passed” or “failed” entry reflects that the inspection was performed with the corresponding outcome. A “waived” entry can be used to reflect that the inspection was not performed because it was not necessary or impossible. And, a “closed” entry is intended to reflect that the inspection was scheduled but never performed. In addition to the resolution, inspectors can enter text comments to provide a specific narrative for any given inspection entry.

Unfortunately, there has been significant confusion about the proper use of these designations – particularly with regard to difference between a “passed” and “waived” inspection entry. Most of the inspectors reported that, at some point, L+I supervision instructed them to avoid “waived” entries altogether.²⁷ Inspectors, then, would simply mark “passed” for a wide variety of HANSEN inspection entries that never actually took place, either because they were impossible to perform or inapplicable to the project.²⁸

For example, if the permit called for the demolition of a small, freestanding one-story garage with no underground foundation, the inspector would “pass” all of the inspections that were inapplicable to the project, like those associated with an unnecessary backfilling process (test-pit and/or prefinal).

²⁵ These inspection entries do not appear for all ID or Unsafe properties.

²⁶ For example, HANSEN will not allow Certificates of Occupancy to be issued for new construction unless all of the other open permits – like demolition – have been properly completed and closed.

²⁷ This was apparently the department’s response to a number of public reports that were critical of the high percentage of “waived” inspection entries. See, e.g., Office of the Controller, *L+I Performance Audit of Oversight for Private Property Demolitions* (May 2014).

²⁸ Some inspectors would add substantive comments to clarify.

This practice, known as “stacking inspections,” also makes it appear as if many inspections were conducted on the same day. HANSEN records the date that the inspector entered a resolution in the system, not necessarily the date the inspection was performed.

In recent months, new CSU supervision has made an attempt to gain consistency in the inspectors’ use of HANSEN. But, as demonstrated in later sections of this report, it is clear that the inspectors have had very little uniform guidance on the proper use of the system.

ISSUE 4: Inconsistent Use of the HANSEN Database

Without question, HANSEN is an older system that is rather complicated and difficult to use. HANSEN’s functionality also obscures the analysis of L+I’s actual inspection activity. But, it must be used consistently across the department, otherwise the demolition inspection process is compromised. Right now, there are two serious issues with the department’s use of HANSEN: (i) it is misaligned with L+I’s underlying guidance on demolition inspections; and (ii) the inspectors are not using the system in a standardized manner. HANSEN erratically populates inspection entries, which the inspectors incorrectly address.

the 1990s, the number of people in the world who are under 15 years of age is expected to increase from 1.1 billion to 1.5 billion.

There are a number of reasons why the world's population is growing so rapidly. One of the main reasons is that the number of children born to each woman has increased. This is due to a number of factors, including the fact that women are now having children at a younger age, and that there is a higher birth rate in developing countries.

Another reason why the world's population is growing so rapidly is that the number of people who are surviving to old age has increased. This is due to a number of factors, including the fact that people are now living longer, and that there is a higher death rate in developing countries.

There are a number of other reasons why the world's population is growing so rapidly, including the fact that there is a higher birth rate in developing countries, and that there is a higher death rate in developing countries.

The world's population is growing so rapidly that it is expected to reach 8 billion by the year 2025. This is a significant increase from the 5 billion people who lived in the world in 1987.

The rapid growth of the world's population is a cause for concern, as it is expected to lead to a number of problems, including a shortage of food, a shortage of water, and a shortage of jobs.

There are a number of ways in which the world's population can be controlled, including the use of family planning, and the use of contraception.

It is important that we take action now to control the world's population, as it is expected to reach 8 billion by the year 2025.

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III. FINDINGS

The OIG examined all private demolition permits²⁹ that L+I issued and closed between January 1, 2015 and October 8, 2015. According to HANSEN, exactly 100 demolition permits fit this criteria.³⁰ For each of the 100 permits, the OIG obtained all HANSEN records,³¹ including the inspection details and comments. OIG personnel assembled this information and then interviewed the available CSU inspectors who made entries.³² Each inspector was questioned about every inspection entry that he made.

This section presents the findings of the OIG's review in two parts. Part A outlines the overall inspection data, noting the numbers, types and outcomes of all inspections conducted. Part B presents ten (10) trends that emerged from the data and the inspectors' statements, including high numbers of permits with: (i) no recorded inspections during demolition (55%); (ii) work that began prior to the initial inspection (53%); and (iii) one or more improperly passed entries (57%). Ultimately, this audit determined that L+I properly administered the inspection process in a total of 22 out of 100 permits.

A. Overall Inspection Data

In total, L+I inspectors recorded 585 inspections³³ across the set of 100 permits – an average of 5.85 inspection entries per demolition. Table 4, below, presents the inspectors' collective activity by inspection type and outcome.

Table 4: Inspection Outcome by Type

Inspection Type ³⁴	Count	Passed ³⁵	Failed	Waived	Closed ³⁶	No Comments
Initial	115	113	2	0	0	36
Under-Slab/Floor	3	3	0	0	0	1
Framing/Close-In	5	5	0	0	0	1
Prefinal	116	105	2	9	0	34
Test Pit	76	68	0	8	0	21
CSTF	145	105	10	3	27	21
Discretionary	22	21	0	1	0	4
Final	103	103	0	0	0	41
Total	585	523 (89.4%)	14 (2.4%)	21 (3.6%)	27 (4.6%)	159 (27.2%)

Before moving on to a more detailed analysis, the simple snapshot data in Table 4 is illustrative of at least three noteworthy issues in L+I's inspection practice.

²⁹ For complete demolition, not partial or interior demolition.

³⁰ All of the demolition permits referenced in the *Philadelphia Inquirer* article were included in this set.

³¹ This review did not include HANSEN data from other threads associated with the same address, such as case (ID) activity and/or service requests, etc. The OIG limited its inquiry to demolition permit inspections only.

³² The OIG interviewed 17 of the 19 CSU inspectors who made entries – two were unavailable for interviews.

³³ This figure is limited to inspection activity associated with the HANSEN demolition permit thread. It does not include inspections and/or site visits that may have been recorded under alternate threads for the same property, such as violations/cases, service requests, etc. Also, the total number of inspection entries does not include demo-posting or permit expiration reminders recorded in HANSEN.

³⁴ According to HANSEN's categorization.

³⁵ And/or partially passed inspections.

³⁶ And/or no entry.

First, there are strikingly few under-slab/floor and framing/close-in inspections (3 and 5 respectively). Without any deeper analysis, these figures clearly show that the department's general practice is not fully consistent with the Work Instruction's series of demolition inspections. HANSEN is generating these inspection entries for a very small subset of permits and inspectors are, therefore, conducting a different process in the field. This fact is further evidenced by the relatively high numbers of test pit, CSTF and discretionary inspections – all of which are not addressed in the department's formal guidance on demolition inspections.

Second, over 27% of the inspection entries did not have corresponding comments in the HANSEN database. Although inspectors are not required to enter a narrative for every inspection, comments are essential to protect the integrity of the official record. Without corresponding comments, it is very difficult for supervisors, administrators and others who review this data to get a complete picture of the inspector's activity. A very brief substantive explanation in HANSEN can eliminate confusion and any suggestion of error or wrongdoing.

Third, the overall rate of passed inspections (89.4%) is very high. The following subsection addresses this issue in greater detail, but after speaking with the inspectors it is clear that this figure is not reflective of the actual percentage of inspections that were performed in the field with positive results. The disproportionate number of passed inspections is mostly due to inconsistent guidance and the inspectors' widespread misunderstanding of the designation. For a large number of properties, inspectors passed inspections that should have been waived or failed.

B. Inspection Trends & Issues

This audit identified a set of ten (10) different characteristics, trends and/or issues associated with the inspectors' activity. All of these trends are not necessarily negative, but they are included to provide clear context and an accurate picture of L+I's true inspection practice. Table 5 presents each trend and the corresponding number (%) of permits that displayed that trend.

Table 5: Inspection Trends

Inspection Trend	Number of Permits (%) ³⁷
All Work Instruction Inspections ³⁸	3(%)
No Recorded Inspections During Demolition ³⁹	55(%)
Demolition Started Before Initial Inspection	53(%)
Reported Inspections Not Entered in HANSEN ⁴⁰	24(%)
Two or More Inspections Passed Same Day ⁴¹	72(%)
Three or More Inspections Passed Same Day ⁴²	45(%)
Inspections by 2 or More CSU Inspectors	35(%)
Inspections by 3 or More CSU Inspectors	5(%)
One or More Improperly "Passed" Inspections	57(%)
Citation / Violation Issued ⁴³	23(%)
No Inspection Issues	22(%)

³⁷ Any given permit could fall into one or more of the categories.

³⁸ Initial, Under-Slab/Floor, Framing/Close-In, Prefinal, Final.

³⁹ CSU demolition inspections only, not including CSTF.

⁴⁰ Inspector reported visiting the demolition site without making a corresponding entry in HANSEN.

⁴¹ CSU demolition inspections only, not including CSTF.

⁴² CSU demolition inspections only, not including CSTF.

⁴³ Including failed demolition permit inspections, CSTF citations/violations and other Building Code violations.

For selected statistics, the following subsections address: (i) the basic method of calculation; (ii) other statistics that may impact or help frame interpretation; (iii) the general significance; and (iv) potential causes. Some related statistics are grouped together, and where helpful, specific examples are also included.

1. Permits with All Work Instruction Inspections: 3%

Only three of the 100 permits had completed HANSEN entries for all five Work Instruction inspections: initial; under-slab/floor; framing/close-in; prefinal; and final. Of these three demolitions, two were previously classified as “Unsafe” and one was classified as “Imminently Dangerous” (249 S. 52nd Street, “The Ice House”).

As noted earlier, HANSEN only generates these inspection entries in a very small number of demolition permits. Therefore, this statistic is only a measure of HANSEN’s inconsistent instructions to the inspectors – it is not necessarily indicative of permits that had no inspection issues whatsoever.⁴⁴ The low number of Work Instruction inspections is important to demonstrate a severe misalignment in the inspection process overall. The Work Instruction is the department’s only formal guidance on the demolition inspection process. In fact, each and every demolition permit specifically references these inspections as “required.” But as demonstrated here, L+I is following the precise letter of that instruction in an astoundingly low percentage of private demolitions.

This is consistent with the inspectors’ OIG statements. Very few CSU inspectors conveyed a clear understanding of the Work Instruction, and some even stated that they had never read or seen the document prior to this inquiry. The few inspectors who were assigned to CSU in April 2014, when the unit assumed all private demolition permits, reported that the department never held any substantive training and never explained the underlying process. As a result, CSU’s general inspection practice is very different.

Most inspectors described their process as follows: an initial inspection prior to demolition to go through the site safety plan; then one or more unstructured and often undocumented site visits to check on the project; then a final visit to view waterproofing measures, perform a test pit (if applicable) and ensure proper grading – all at the same time. Inspectors would sporadically update HANSEN and often finalize all entries after everything was completed – “passing” inapplicable or impossible inspections as an administrative step just to close the permit.

The data trends in Tables 4 and 5 confirm this general practice. Test pit inspections were performed at a significant rate, despite their absence from the Work Instruction. In 24% of permits, the inspectors reported site visits that were not recorded in HANSEN. Most permits had two or more inspection entries completed on the same day (72%) and many had three or more completed on the same day (45%).⁴⁵ And, over half of the permits (57%) had at least one inspection entry that was mischaracterized as “passed.”

⁴⁴ In fact, the two “Unsafe” properties had significant other inspection issues, including one or more improperly passed inspections.

⁴⁵ These figures are not necessarily indicative of a problem, it is certainly possible to conduct more than one inspection in a single day. This data is significant, however, to the extent that it demonstrates how the inspectors actually use HANSEN to complete inspection entries.

2. *Permits with No Recorded Inspections During Demolition: 55%*

In 55 of the 100 demolition permits CSU inspectors recorded no HANSEN entries simultaneous to the contractor's work. For each of these properties, the contractor completed full demolition of the building between L+I's recorded site visits or prior to the assigned inspector's first inspection.

It is important to note that for at least 20 of these demolitions, there was nothing that the inspector could have done to be present during the project. These demolitions were conducted prior, or simultaneous, to the issuance of the permit, including five emergency demolitions of "Imminently Dangerous" or "Unsafe" properties. And, in 18 out of these 55 buildings (33%), inspectors reportedly conducted site visits without making official entries in HANSEN. Many of these inspectors claimed to have observed significant portions of demolition without documenting their actions in the system.

This statistic is still, however, indicative of a larger problem – poor timing. If the inspector and contractor are not closely coordinated, it is very difficult for the inspector to actually observe the contractor at work, especially if the building is relatively small and the demolition can be completed in a day or less. CSU's heavy workload and the high number of reassignments (35%) further impede the inspectors' ability to observe every private demolition in progress, as shown in the examples below.

Example 1 – Permit No. 586372

Inspector	Date of Entry	Inspection Type	Outcome	Comments
INS 1	3/10/2015	PRI_INITIA	Passed	[N/A]
INS 2	9/14/2015	PRI_TSTPIT	Passed	The property is slab on grade, no fill was used. There is no basement.
INS 2	9/14/2015	PRI_FINAL	Passed	Demolition complete prior to permit being assigned to me
INS 2	9/15/2015	PRI_PREFIN	Passed	Demolition complete prior to permit being assigned to me

In Example 1, the permit was initially assigned to Inspector 1, who conducted an initial inspection on 3/10/2015. At that time, the contractor had not yet started demolition of the property. Then, after the permit was reassigned to Inspector 2, there was no recorded inspection until six months later. By that time, the project was fully completed. Inspector 2 performed the final inspection and passed the remaining HANSEN entries in order to close the permit.⁴⁶

Example 2 – Permit No. 595186

Inspector	Date of Entry	Inspection Type	Outcome	Comments
INS 1	5/18/2015	PRI_INITIA	Passed	site safety plan meeting[...]
INS 2	7/8/2015	PRI_TSTPIT	Passed	Test pit dug. Located sewer lateral. Notified contractor to cement and cap.
INS 2	7/30/2015	PRI_FINAL	Passed	[N/A]
INS 2	7/30/2015	PRI_PREFIN	Passed	Demolition completed and lot graded[...]

⁴⁶ Notably, Inspector 2 also passed a test pit inspection that was never performed, commenting that the property was "slab on grade." And, Inspector 2 also disposed of the prefinal inspection, which was impossible to perform at that time, *after* the recorded final inspection.

Again, in Example 2 the reassignment of the permit to Inspector 2 hampered L+I's ability to view demolition in progress. By the time Inspector 2 arrived at the site, demolition was already completed and there was no opportunity to observe previous steps. Given the scheduling problem, this example shows the importance of test pit inspections. Test pits do not depend as heavily on timing; they can be performed after demolition to verify that the contractor used appropriate fill material. After the test pit, Inspector 2 passed the remaining inspections to finalize and close the permit.

3. *Permits with Demolition Started Before Initial Inspection: 53%*

In 53 of the 100 permits, the OIG analysis determined that the contractor began demolition prior to the initial inspection. Again, there were a significant number of demolitions that were conducted prior, or simultaneous, to the issuance of the permit, including several emergency demolitions that demanded immediate action.

In the remaining cases, the contractor did not wait for an initial inspection with L+I before beginning work. In 17 of these, L+I issued some form of a citation/violation to the contractor for doing so, including 9 cases where the contractor was suspended. Still, there were a significant number of demolitions (at least 15) where the project began without an appropriate inspection and the contractor was not held accountable. This is a problem if L+I is to exercise control over the private demolition sector.

When questioned about this issue, most of the inspectors pointed to internal reassignment as the primary reason that the contractor was not cited for failure to schedule an initial inspection.⁴⁷ In several cases, demolition permits were reassigned to new inspectors who had very little familiarity with the specific project. So, when they learned that the contractor began demolition before the initial inspection, they were uncertain if the prior inspector had been notified. Example 3, below, is one such case.

Example 3 – Permit No. 576535

Inspector	Date of Entry	Inspection Type	Outcome	Comments
INS 1	4/16/2015	PRI_POSTDE	Passed	[N/A]
INS 2	5/13/2015	PRI_INITIA	Passed	Site is fenced and secure. Demo is under way[...] Appears work is being completed in a workmanlike manner.
INS 2	5/21/2015	PRI_PREFIN	Passed	[N/A]
INS 2	5/26/2015	PRI_TSTPIT	Passed	[N/A]
INS 2	5/26/2015	PRI_FINAL	Passed	[N/A]

In Example 3, Inspector 1 was initially assigned the permit and visited the site on 4/16/2015 to post the required notices of demolition. One month later, after the permit was reassigned to Inspector 2, he passed the initial inspection even though the contractor was already in the process of demolishing the building. Inspector 2 chose not to cite the contractor because he was unsure if Inspector 1 permitted work to proceed. Inspector 2 saw the job in progress and believed it to be in accordance with the site safety plan, so he took no enforcement action.

⁴⁷ In five cases the inspector gave the contractor permission to begin prior to a formal initial inspection. The projects were small and the inspector was familiar with both the site and the contractor. In an effort to save time, the inspector allowed the contractor to begin work until he/she could arrive for a walk-through at the site.

4. *Permits with Citations / Violations Issued: 23%*

Closely related to the previous statistic, in 23 out of 100 permits inspectors issued at least one citation. Interestingly, however, CSU inspectors failed only four (4) inspections out of the total 585 conducted.⁴⁸ This is not necessarily a problem, as long as all violations of the Building Code are addressed. But, given the number of other citations, it seems that the rate of failed inspections is disproportionately low.

As it is currently designed, the demolition contractors carry the bulk of the responsibility to ensure that the inspection process is conducted properly.⁴⁹ Timing is important, and if contractors fail to alert L+I as their projects progress, many inspections will be missed. This is true even if the contractor is professional, upright and in complete compliance with the Building Code. With such dependence on inspection scheduling, failed inspections are an important enforcement tool to ensure that contractors are actually respecting the inspectors' need to view the project at different stages.

Most of the inspectors were somewhat reluctant to fail an inspection, citing problems with the scheduling mechanism and a certain level of comfort with the project and the contractor.⁵⁰ In cases where an inspector identified an issue with the project, he generally chose to issue an independent citation but pass the demolition permit inspection, as in Example 4.

Example 4 – Permit No. 603397

Inspector	Date of Entry	Inspection Type	Outcome	Comments
INS 1	4/28/2015	PRI_INITIA	Passed	[N/A]
INS 2	5/26/2015	PRI_PREFIN	Passed	Site is secure and joist pockets are filled but slab must [be] broken, water proofing [must be] completed along with stucco and barge board
INS 2	6/11/2015	PRI_TSTPIT	Passed	Site has been left as request by owner[...] I am closing demolition permit
INS 2	6/11/2015	PRI_FINAL	Passed	[N/A]

In Example 4, Inspector 2 passed three different inspections but noted that the site was not properly waterproofed. Rather than fail one or more inspections until the appropriate steps were taken, the inspector chose to write an independent "Unsafe" violation for the property to account for the lack of waterproofing/stucco. Then, he passed all of the inspections associated with the demolition permit thread in HANSEN. Ultimately, the issue was addressed, but the permit record was inconsistent with other HANSEN threads.

5. *Permits with One or More Improperly Passed Inspections: 57%*

In 57 out of 100 permits, the assigned inspector improperly passed at least one inspection that should have been either waived or failed. This is by far the most significant finding of this audit, and this discrepancy is likely the underlying cause of any suggestion of wrongdoing on the part of L+I personnel.

⁴⁸ This figure does not include the 10 failed CSTF inspections. See Table 4, p. 11.

⁴⁹ See Philadelphia Administrative Code §§ A-402.1, A-402.8.

⁵⁰ In the City of Philadelphia, there are relatively few demolition contractors. CSU inspectors quickly become familiar with the different companies and their reputations for safe workmanship.

Example 4, above, is one such case. When Inspector 2 conducted his prefinal inspection, the necessary waterproofing was not in place. The “Unsafe” violation may have been appropriate, but at least one demolition permit inspection should have been failed as well because the building was not in compliance.

Most of the “pass” errors, however, were due to impossible and/or inapplicable inspections that the inspector could not perform as a result of the building type or timing problems. Rather than waive these inspections, most inspectors passed them in an effort to move the permit forward. Some used comments to clarify their decisions, others did not.

Example 5 – Permit No. 573349

Inspector	Date of Entry	Inspection Type	Outcome	Comments
INS 1	1/21/2015	PRI_INITIA	Passed	
INS 1	2/5/2015	PRI_TSTPIT	Passed	slab no test required
INS 1	2/9/2015	PRI_PREFIN	Passed	
INS 2	5/11/2015	PRI_FINAL	Passed	[N/A]

Inspector 1 in the above example passed the test pit inspection on 2/5/2015. But, he also noted that the building had no below-ground foundation (“slab”). A test pit would be wholly inapplicable to such a project, where the contractor did not backfill an exposed cellar cavity. Rather than pass the entry, which would indicate that a test pit was actually performed with acceptable results, Inspector 1 should have waived this inspection entry in HANSEN to properly document that it was not necessary.

Example 6 – Permit No. 578676

Inspector	Date of Entry	Inspection Type	Outcome	Comments
INS 1	5/12/2015	PRI_INITIA	Passed	All demolition work completed by a licensed and insured contractor in compliance with all codes and regulations. New Construction is underway.
INS 1	5/12/2015	PRI_PREFIN	Passed	[same comment]
INS 1	5/12/2015	PRI_TSTPIT	Passed	[same comment]
INS 1	5/12/2015	PRI_FINAL	Passed	[same comment]

In Example 6, the assigned inspector passed all inspections, noting that demolition was already complete upon his arrival. During his interview, Inspector 1 stated that by the time he was able to first visit the property, the contractor had already completed the entire demolition project.⁵¹ Because of this poor timing, the inspector was unable to conduct any inspections other than the final.⁵² But, he had to address the remaining HANSEN entries and chose to use the pass designation for each.

⁵¹ This inspector further stated that he was unable to address this permit in a timely manner because he was assigned to court duties shortly after the permit was issued.

⁵² The final inspection – to ensure proper grading at the site – is always applicable and always able to be completed regardless of inspection scheduling.

The bulk of these inspections should have been waived – they were impossible to conduct given the inspector’s timing. The “passed” entries may be misleading, but there is no apparent intent to conceal anything given Inspector 1’s comments and CSU’s general practice at the time.

Example 6 also demonstrates why there was such a high rate of permits with multiple inspection entries completed on the same day (72%). Inspectors generally address multiple HANSEN entries all at once. And, when inspections were inapplicable, the inspectors simply passed or “stacked” the remaining inspections. This practice gives the outward impression that multiple inspections were performed at the same time.

Example 7 – Permit No. 579918

Inspector	Date of Entry	Inspection Type	Outcome	Comments
INS 1	5/12/2015	PRI_INITIA	Passed	All demolition work complete.
INS 1	5/12/2015	PRI_PREFIN	Passed	[same]
INS 1	5/12/2015	PRI_TSTPIT	Passed	[same]
INS 1	5/12/2015	PRI_FINAL	Passed	[same]

In Example 7, the demolition contractor completed all the work without a permit. The contractor was cited and later suspended as a result. But, Inspector 1 still had to address the HANSEN entries associated with a retroactively-issued permit. So, he “stacked” all of his entries – passing everything on the same day. Without additional context, an examination of HANSEN’s permit thread suggests error or wrongdoing – it would be impossible to actually perform all of these demolitions in one day. But other than the final, none of these inspections actually took place in the field. Inspector 1 should have used the waived designation and added more clarifying comments about the project.

When OIG personnel questioned CSU inspectors about the proper use of the “passed” and “waived” designations, most reported inconsistent guidance from supervisors and managers at L+I. In fact, a significant number of CSU inspectors stated that, at one time, they were given specific instructions “never to waive anything.” Apparently, this was the department’s reaction to some negative reports about high rates of waived inspections.⁵³

Furthermore, between January and October 2015 CSU had four different supervisors. Each had a different position on the use of “pass” and/or “waive,” so the inspectors were highly inconsistent across the unit. In recent months, the current CSU supervisor has addressed this practice and attempted to clarify the appropriate use of HANSEN.

6. Permits with No Inspection Issues: 22%

With all of the different issues and discrepancies uncovered in this review, it is very difficult to gain an accurate picture of the inspectors’ collective activity in the field. First, HANSEN does not properly track the Work Instruction, so the department’s formal guidance on the so-called “required” inspections cannot be effectively applied to this sample. Second, the inspectors’ widespread misuse of the “passed” designation makes it very difficult to determine what inspection steps were actually performed. Third,

⁵³ See, e.g., Office of the Controller, *L+I Performance Audit of Oversight for Private Property Demolitions* (May 2014).

proper administration of the demolition process depends heavily on close timing and the inspection scheduling mechanism. With so many personnel shifts and inaccurate records, it is not possible to determine which scheduling problems were due to L+I's personnel decisions and which were due to the contractor's failure to schedule an inspection.

But, in an effort to provide clarity to a muddled problem, this audit has determined that the overall rate of properly inspected private demolition permits is roughly **22%**.

To calculate this figure, a qualifying permit must have had no improperly passed inspection entries, leaving a possible 43. Then a qualifying permit must have fallen into one of the following two sub-categories: (i) at least one inspection was conducted during demolition and demolition did not begin prior to the initial inspection (12 permits); or (ii) demolition began prior to the initial inspection but the contractor was appropriately cited or it was an emergency demolition of an ID or Unsafe building (10 permits).

22 % Total Percentage of Demolition Permits with
a Properly Administered Inspection Process

The remaining 78% of permits, therefore, displayed one or more of the following characteristics: (i) at least one misclassified inspection entry; (ii) no recorded inspections during demolition; and/or (iii) demolition that began before the initial inspection without a corresponding enforcement action or sufficient emergency justification.

It is important to note that this figure is not evidence of any misconduct or wrongdoing on the part of anyone at the Department of Licenses + Inspections. This audit did not uncover any suggestion of intentional misrepresentations or altered information, as the *Philadelphia Inquirer* article inferred.

Rather, this low percentage of properly administered demolition inspections is more indicative of a failure to meet the organizational challenges presented by the demolition inspection task. It is the apparent result of: (i) misaligned internal standards; (ii) an inadequate method of scheduling inspections; (iii) poor distribution of work; and (iv) inconsistent and faulty use of HANSEN. These issues must be addressed before the department can effectively use the new inspection process to better control the private demolition sector.

IV. RECOMMENDATIONS

Moving forward, to be in a stronger position to administer the demolition inspection process, L+I must retrace the sequence of events that caused the current deficiencies.

First, the Work Instruction is not cleanly suited to *all* demolition inspections. It is rigorous and well-conceived in certain contexts, but it leaves too many facets unaddressed and open to interpretation. Specifically, it is not flexible enough to account for the great variety in demolition and the unique timing challenges that inspections present. This confuses those who are tasked with carrying out the process – the inspectors need more standardized guidance and training on what to do when the Work Instruction does not fit.

Second, HANSEN is not programmed to be consistent with official guidance, likely because of infighting between CSU and Construction Services. Even if the Work Instruction has interpretive questions, it makes little sense to have any formal guidance on the “required” demolition inspections if HANSEN itself is going to deviate. By pre-generating a different set of inspection entries, HANSEN virtually ensures capricious application of the inspection process. Thus, anyone who attempts to take the Work Instruction and apply it to the data in HANSEN will be severely deceived.

Then, when this information is filtered down to the CSU inspectors through HANSEN, they use the system incorrectly. The inspectors misclassify inspections as “passed” at a troubling rate, often do not enter substantive comments, fail to document inspection activity and complete most of their HANSEN entries after-the-fact. From inspector to inspector, HANSEN practices are wildly inconsistent as a result of disjointed supervision and no apparent emphasis on standardized record-keeping.

Finally, the CSU inspectors are left on their own to manage a heavy workload and inspection scheduling that requires intricate coordination. The unit was severely understaffed when it first assumed all private demolition permits, and it underwent several personnel shifts in the inspector and supervisor ranks during the time period at issue in this audit. Obviously, some demolition permit inspections were going to suffer as a result.

Together, these factors created the current inspection environment at L+I – a low rate of acceptable permit inspections (22%), and high rates of pass/waive errors (57%) and missed demolitions (55%). To reverse this trend, the department must: (i) update the Work Instruction; (ii) re-program HANSEN to align with the revised regulations; (iii) standardize the inspectors’ use of HANSEN; (iv) improve the inspection-scheduling mechanism; and (v) evaluate the current workload and available personnel in order to gain organizational consistency.

RECOMMENDATION 1: **Revise the Work Instruction and Align HANSEN.**

It is important to note that Work Instruction CS 1314 was issued immediately following the Market Street collapse and has not been updated since. Without a doubt, it has made the demolition landscape far safer, but it must evolve as the department learns more about its application in practice. In general, the department’s written procedure should be revised to provide L+I personnel with more specific guidance about how demolition inspection duties may change depending on the type of structure, the condition of the structure and the contractor’s project timing. At a minimum, inspectors should have clear instructions on how to conduct the inspection process for: (i) small one-story buildings; (ii) unattached structures;

(iii) buildings with no below-ground foundation; (iv) planned new construction; and (v) projects where the inspector may have missed certain steps in the contractor's work. A revised Work Instruction can be flexible enough to help inspectors apply the process to a larger set of demolitions, while still being consistent with the underlying provisions of The Philadelphia Code.

Once the department has a process that can be more widely applied, HANSEN should be programmed to mirror that process. For each and every demolition, both public and private, HANSEN should call for the exact same set of inspections in accordance with the revised Work Instruction. Of course, inspectors will still have to waive certain entries at times, but HANSEN should offer the same underlying framework for every project. Then, inspectors can address HANSEN in a more uniform manner.

RECOMMENDATION 2: Standardize the Inspectors' Use of HANSEN.

The inspectors' highly inconsistent use of HANSEN is one of the most significant problems with the inspection process at this time. As a group, they do not document their activity in a standardized manner. This audit has shown that many inspectors misapply the "passed" designation, fail to enter narrative comments, "stack" inspection entries and do not update the system to accurately reflect field activity. These issues make it extremely difficult to interpret the information in HANSEN without additional context.

The department must gain consistency in this area. L+I supervisors and managers should issue formal guidance on the use of HANSEN and thoroughly train all inspectors to use the system in the same way. This training should include specific instructions on the different inspection designations (passed, failed, waived, closed). The department should also emphasize the importance of comments and the inspectors' need to regularly update the system (for *all* field activity) in a timely manner as demolition projects progress.

RECOMMENDATION 3: Improve the Inspection Scheduling Mechanism.

Even with more robust guidelines in place, L+I's ability to execute demolition inspections is still heavily dependent on the scheduling process. Unlike construction, demolitions present a unique timing challenge. CSU inspectors must, therefore, be extremely organized and closely coordinated with the contracting community. It is somewhat ambitious to expect individual inspectors with City-wide workloads to manage this delicate process on their own.

Understanding that L+I has limited resources, the department needs to address this issue in some manner. An automated or online scheduling tool would be ideal – contractors could use the site to "call" for inspections. The new eClipse system, which is planned to replace HANSEN in the coming year, apparently has such a mechanism. But in the interim, the department should explore other suitable options to help normalize inspection scheduling. With better control over scheduling, the inspectors can use Code Violation Notices more aggressively to enforce compliance with the entire demolition inspection procedure.

RECOMMENDATION 4: Evaluate the Workload and Assign Consistent Personnel.

The decision to reassign all private demolition permits from Construction Services to CSU in April 2014 had a profound impact on the department's inspection practice. The Work Instruction clearly did not

survive this organizational move, and the unit's instability had negative effects on the department's administration of the inspection process.

Now, CSU may be in a far better position to administer all private demolition permits, with many newly hired inspectors. But, this audit has highlighted a clear need for more permanency in personnel and supervision. Given CSU's additional responsibilities, like emergency response duty and the Master Demo Program, L+I should evaluate the unit's ability to effectively perform inspections for private demolitions as well. After such an evaluation, it may prove sensible to move the private demolition permits back to Construction Services where the work can be spread across a greater number of inspectors with smaller geographical territories.

V. CONCLUSION

The *Philadelphia Inquirer* article reported some significant findings about L+I's inspection of private demolitions. According to the OIG audit, it is true that the department is not closely following its own guidelines – only 22% of sampled private demolition permits had an inspection process that was administered in accordance with L+I's internal written procedure. Importantly, however, this is not due to intentional wrongdoing on the part of L+I personnel. The OIG uncovered no evidence of altered data or deliberate misrepresentations. Rather, despite HANSEN's problems, the department-wide use of the system has proven to be erratic and unreliable.

The conclusions of the anonymous building inspectors who were interviewed for the *Inquirer* article, however, also demonstrate a misunderstanding of L+I's role in the overall demolition landscape. One cannot simply look at the Work Instruction's set of "required" inspections, compare that to the inspectors' recorded activity in HANSEN, and expect to see the same exact series of inspections performed in the field without variation. The demolition inspection process is the department's method of policing the private demolition sector – it is an enforcement scheme that is designed to identify and deter wrongdoing on the contractors' part. L+I's execution of this scheme is, therefore, only one half of the broader picture. The independent actions of demolition contractors have a profound impact on L+I's ability to actually carry out some inspections.

Certainly, the OIG audit has shown that the department must be far more consistent in its administration of the inspection scheme. L+I has to implement a more standardized system that the inspectors can execute in the field with greater uniformity, and this report has identified some of the necessary steps to make this improvement. But moving forward, the City of Philadelphia also has to focus more attention on the other half of the inquiry – the resultant *effect* on the private demolition community. Hopefully, the media, L+I and our City at-large can address this issue as well, in an effort to more broadly evaluate the state of demolition in Philadelphia. Understanding the complete environment is the only way to correct deficiencies and move forward.

It should be noted that the entire Department of Licenses + Inspections was extremely cooperative and committed to an honest and independent OIG review process. This audit would not have been possible without such a resolute effort. L+I is constantly working to improve the quality of services that it provides to the City of Philadelphia, and the OIG will remain available to assist the department in any way possible.

APPENDIX**Table A1: Documents & Legal Authority**

- Lubrano, Alfred, “What new building inspection guidelines?” *Philadelphia Inquirer*, October 25, 2015
- PA Uniform Construction Code §§ 403.45, 403.64
- The Philadelphia Code, Title 4, Subcode “A”, Chapter 4 – Inspections
- The Philadelphia Code, Title 4, Subcode “A”, Chapter 5 – Violations
- The Philadelphia Code, Title 4, Subcode “B” §§ B-3303, B-3307
- Executive Order 4-13 (June 7, 2013)
- L+I Code Bulletin B-1302R (June 10, 2013; April 1, 2015)
- L+I Work Instruction CS 1314 (June 12, 2013)
- OIG Excel Spreadsheet No. 1 – Permit Detail
- OIG Excel Spreadsheet No. 2 – Analysis of Inspection Activity by Permit